VIII. INTERNATIONAL HALICH CONGRESS ON MULTIDISCIPLINARY SCIENTIFIC RESEARCH

December 3-5, 2024, ISTANBUL

THE BOOK OF ABSTRACTS

Edited by
Dr. Subhashish DEY
Gulnaz GAFUROVA

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CONGRESS ID

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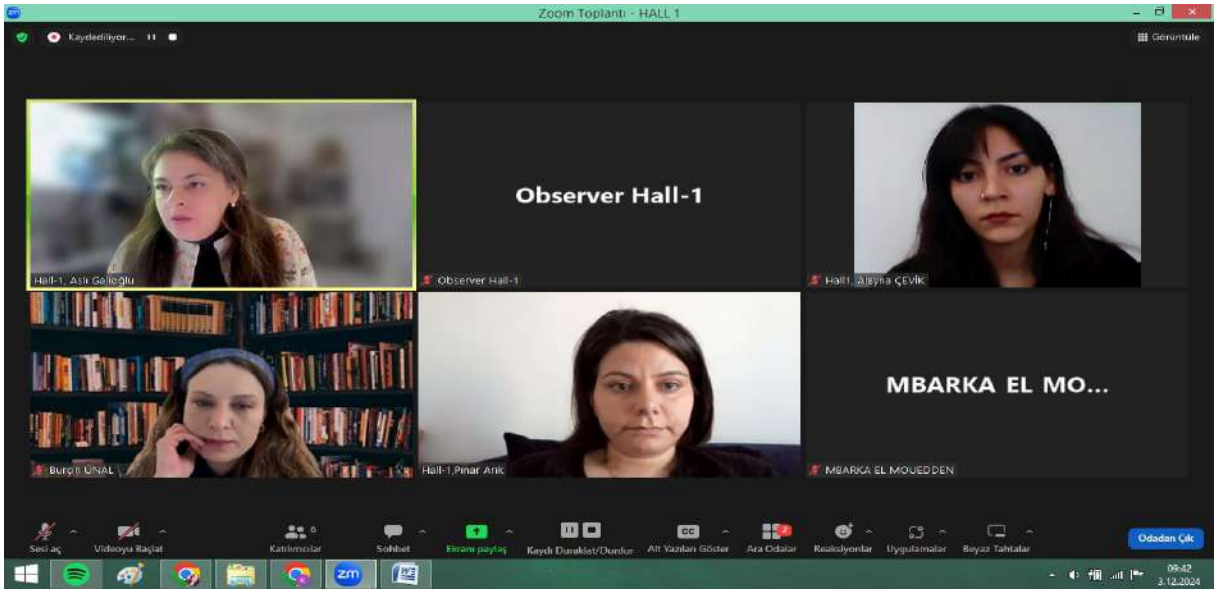

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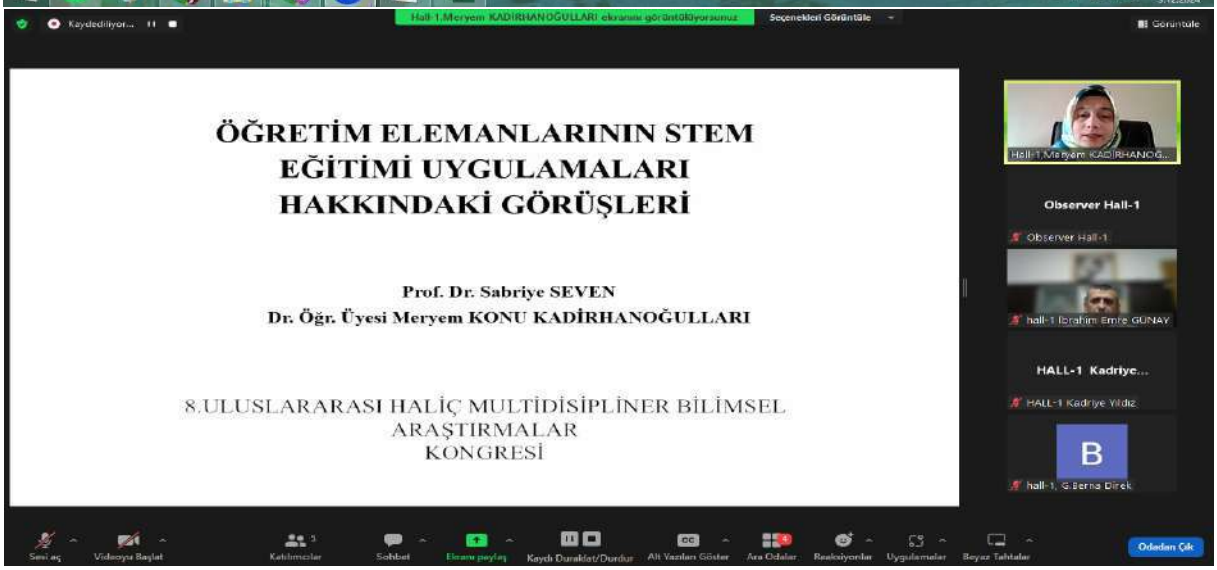

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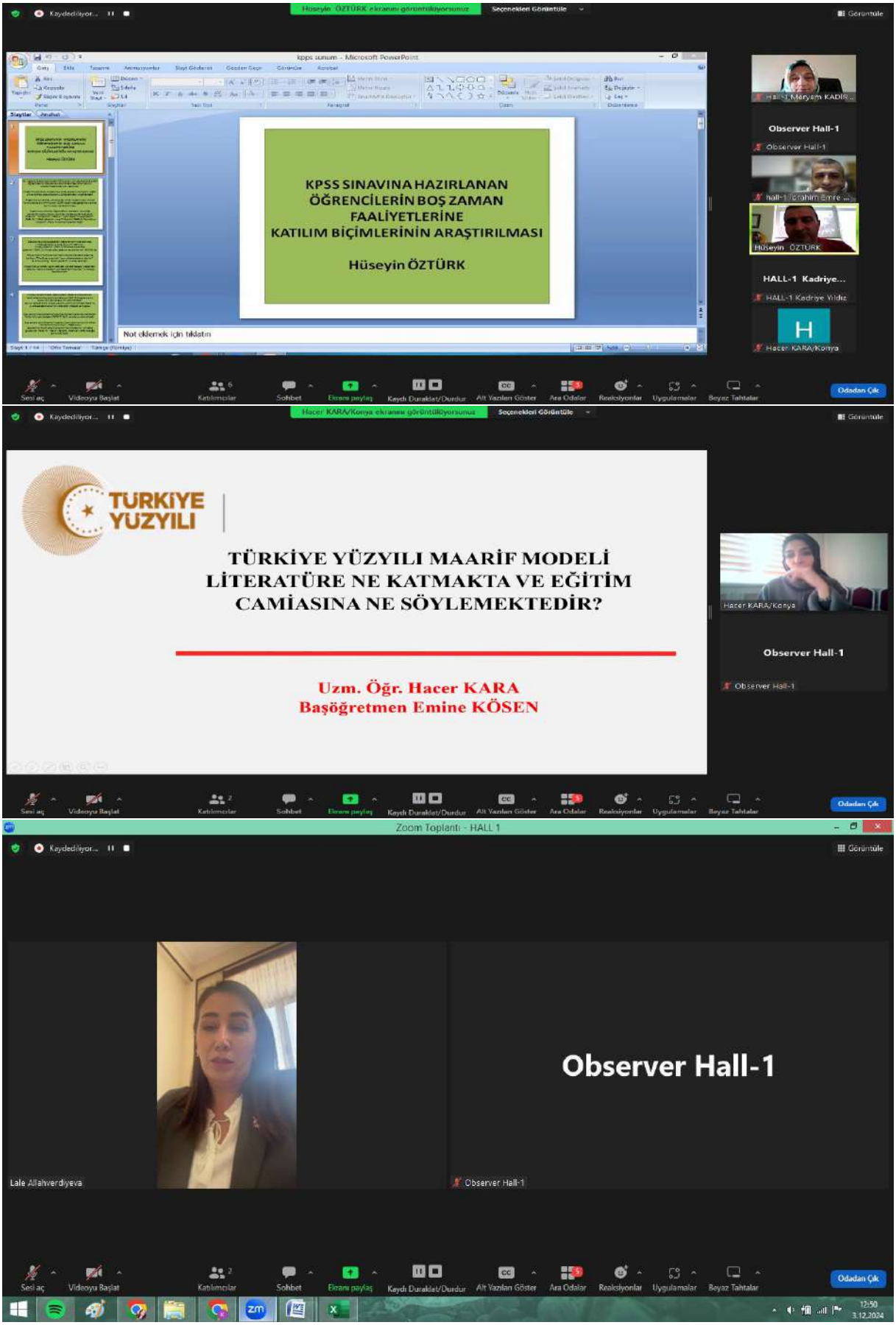

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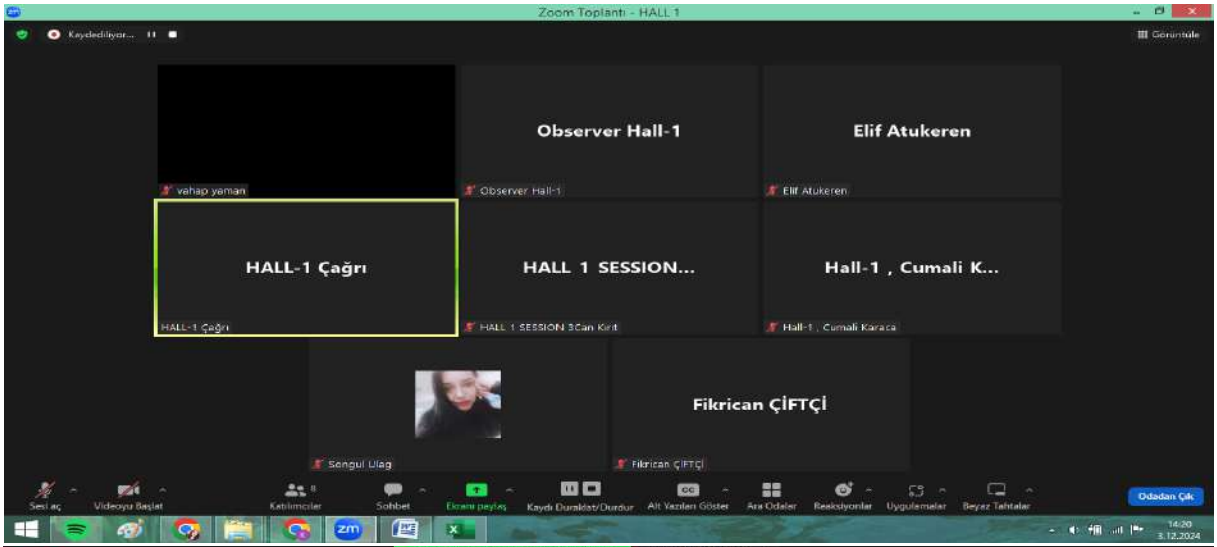

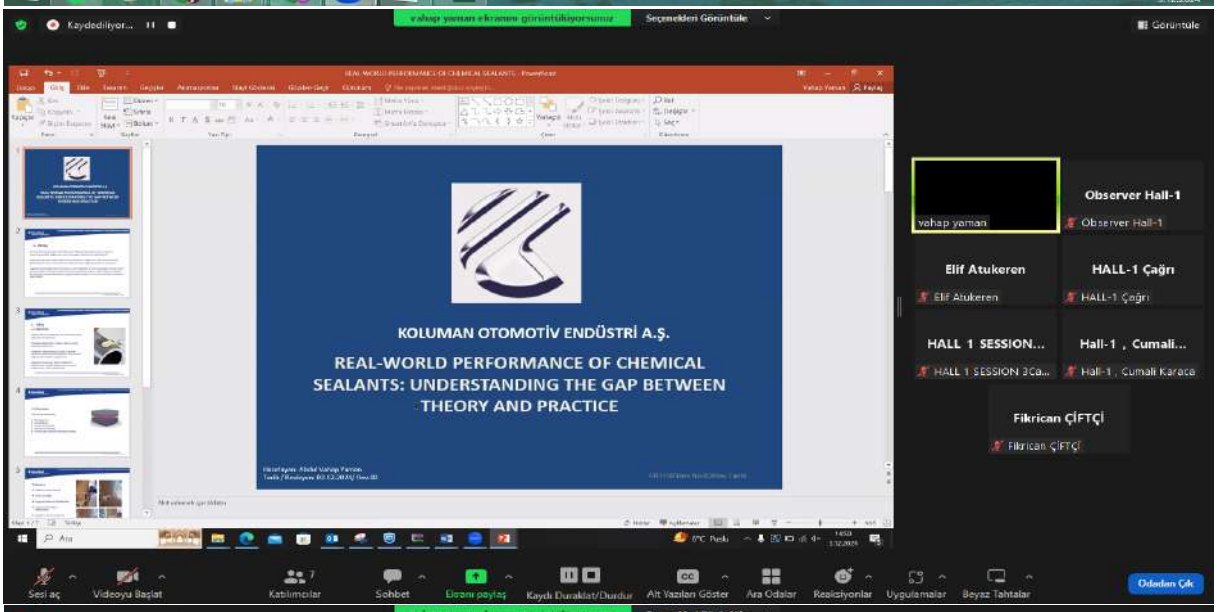

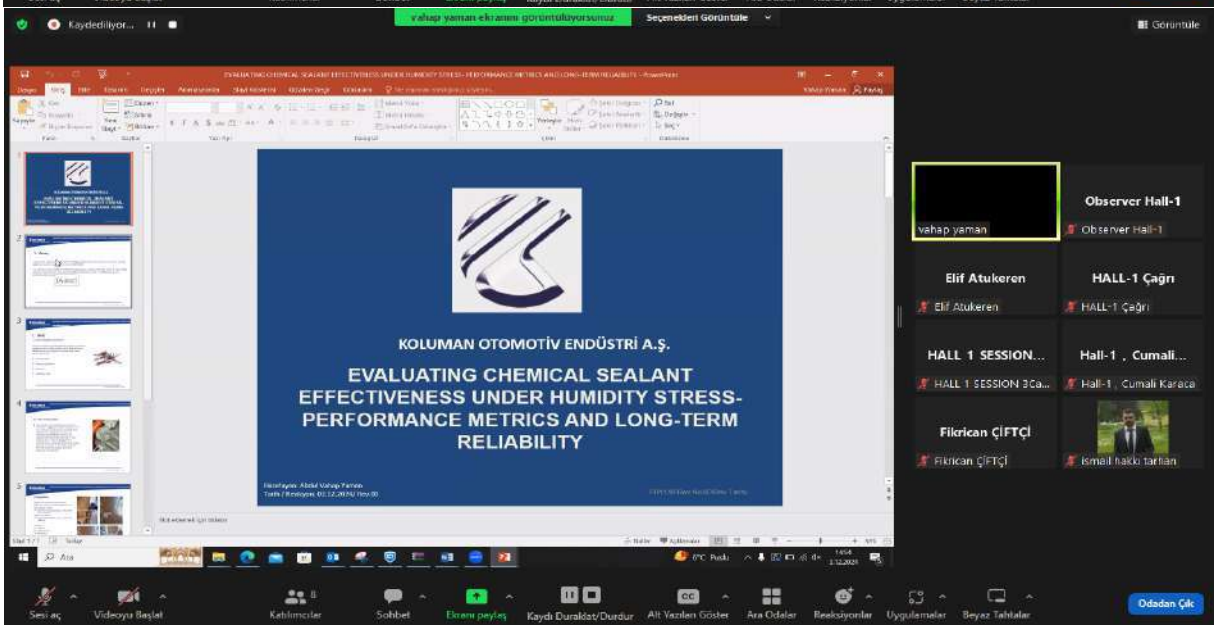

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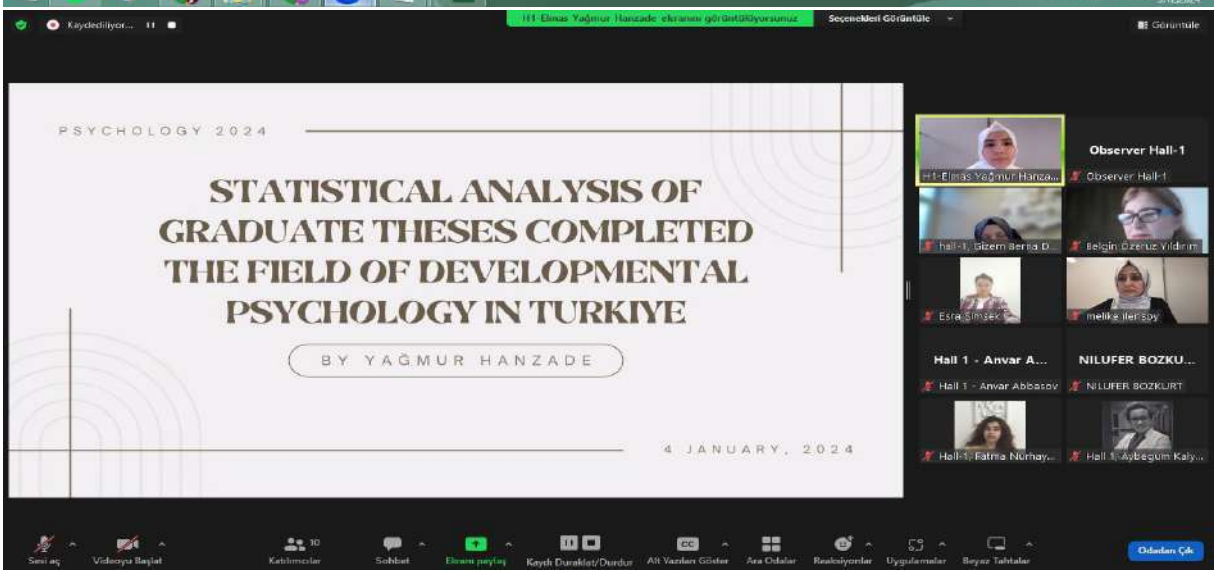

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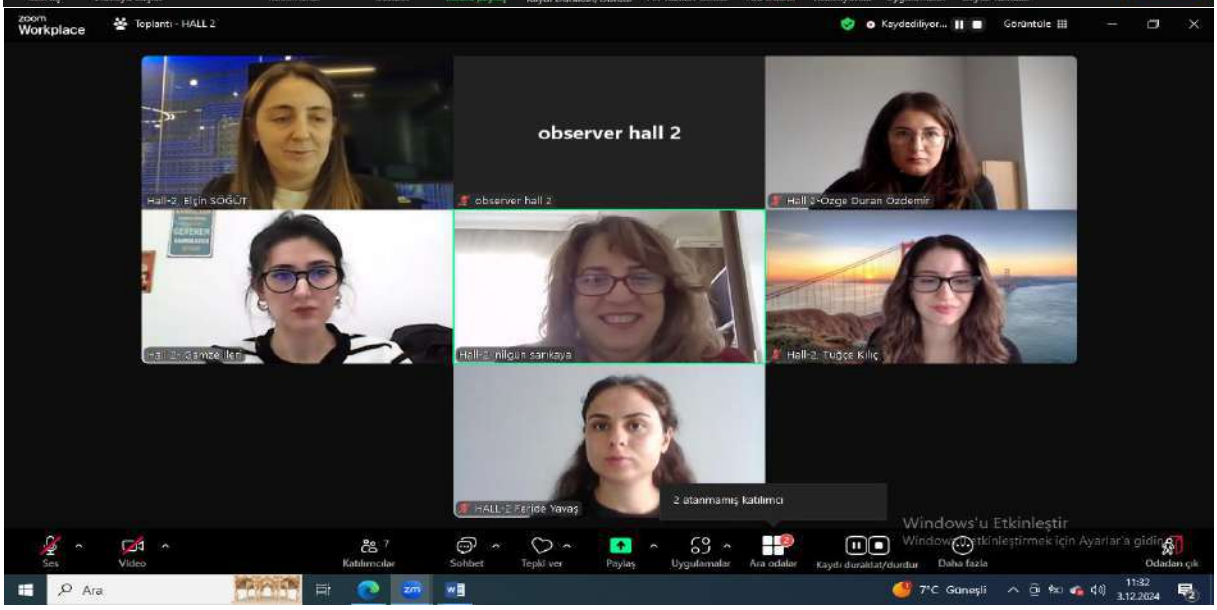

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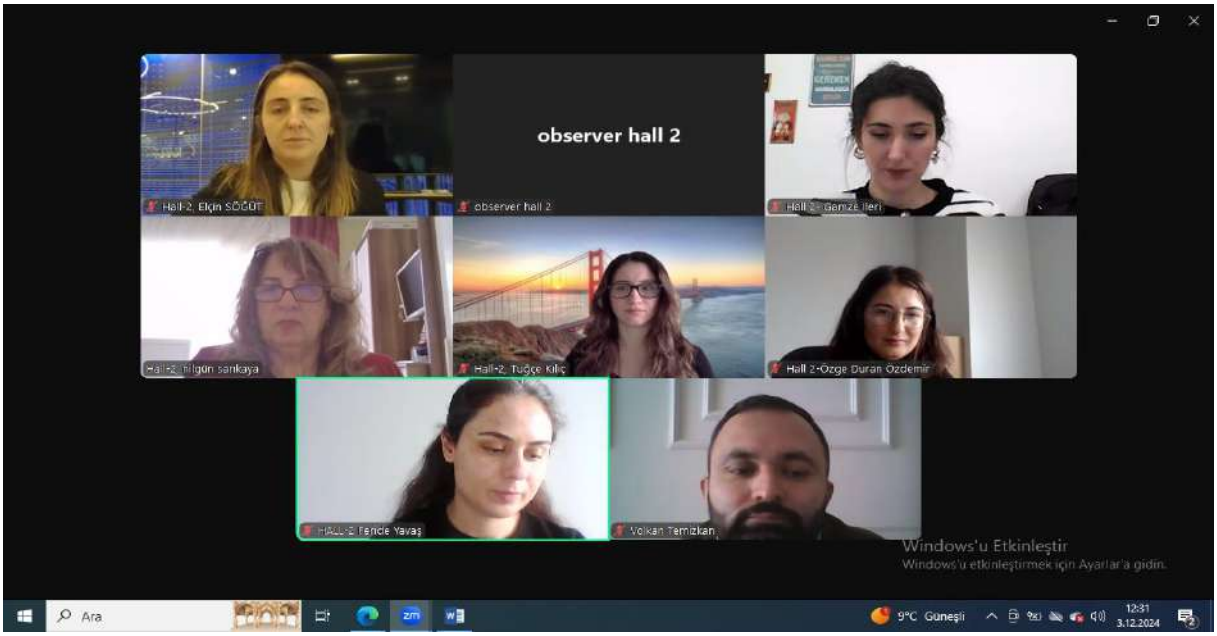

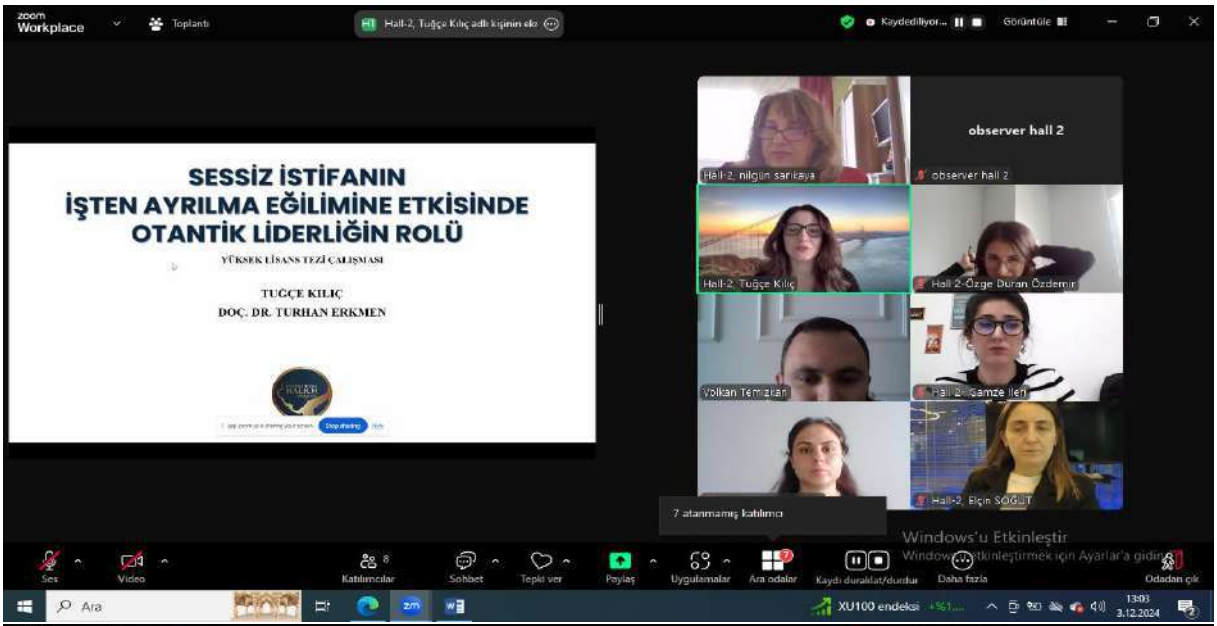

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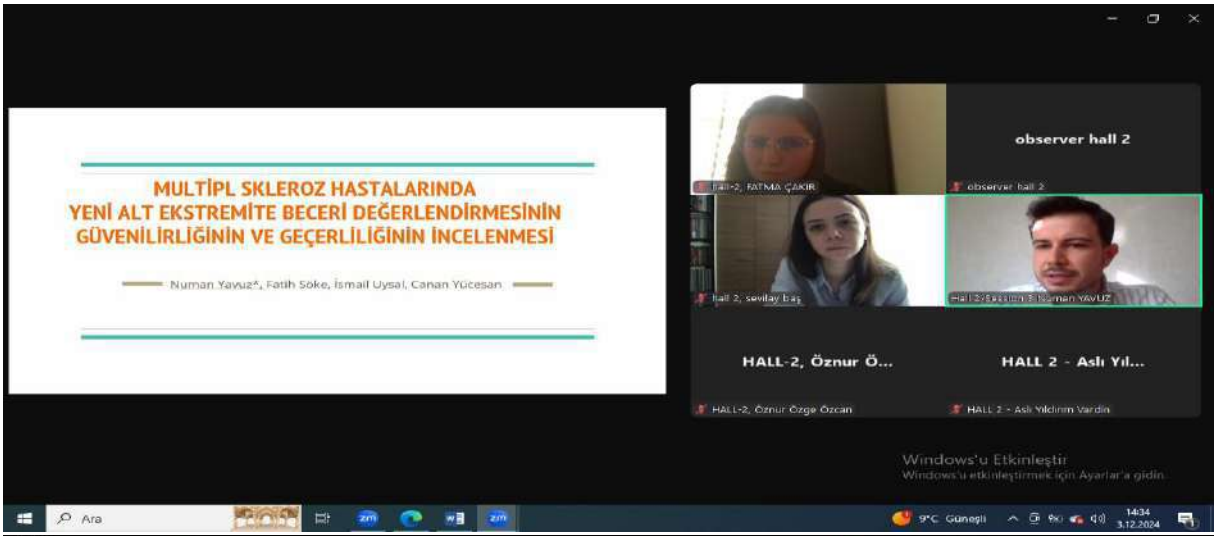

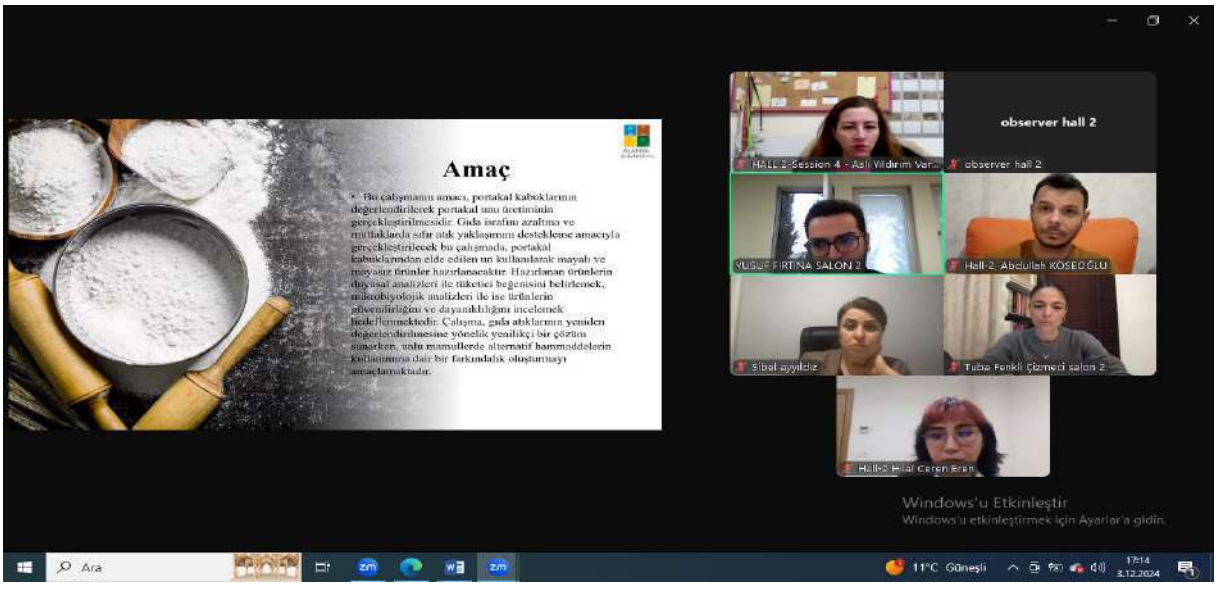

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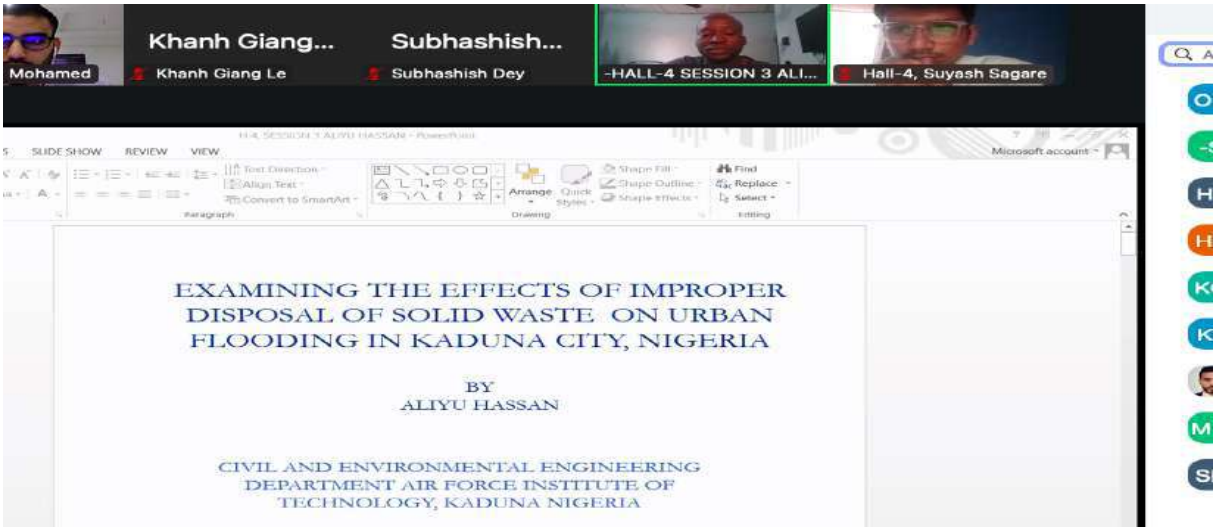

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EFFECTS OF PHENOLIC CONTENTS FROM THE RHIZOMES OF *CURCUMA LONGA* AND STALKS OF *SOGHUM BICOLOR* ON TEXTILES

By

OLADEJI, Abdulhakeem Olajuwon

DEPARTEMENT OF CHEMISTRY
FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

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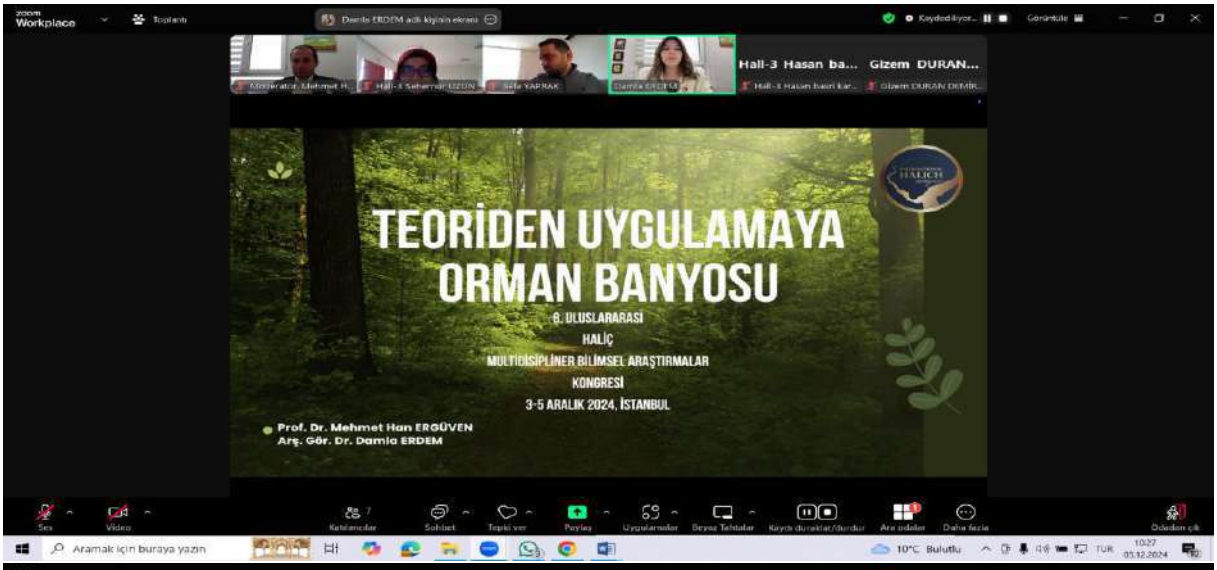

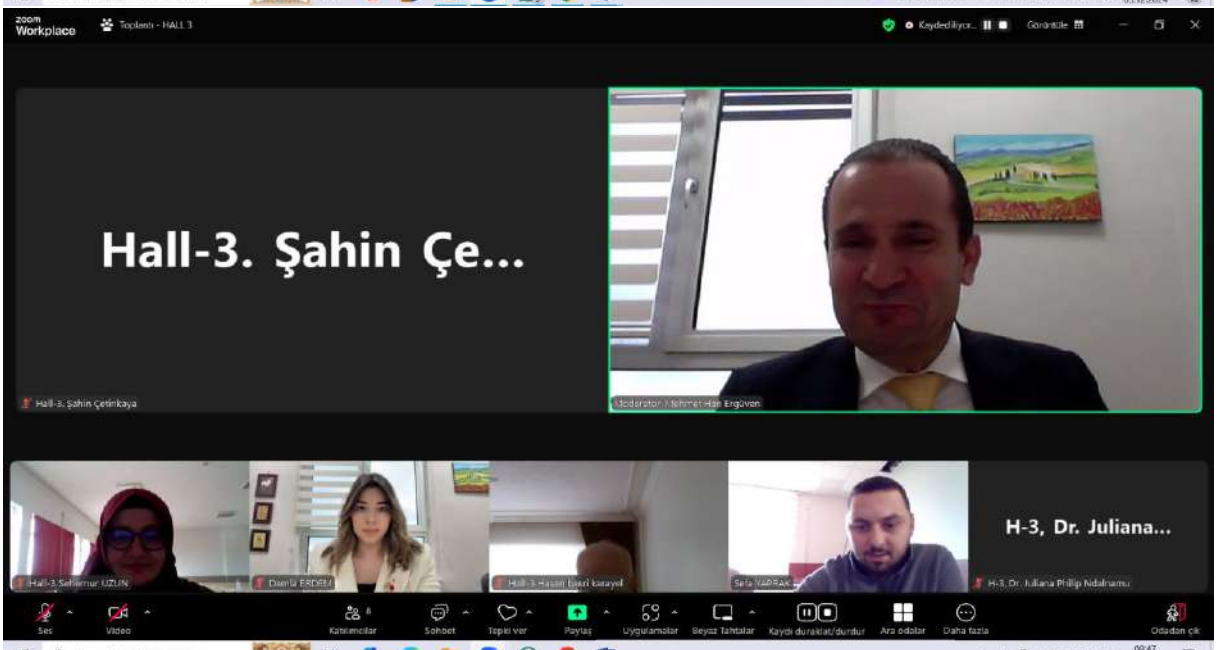

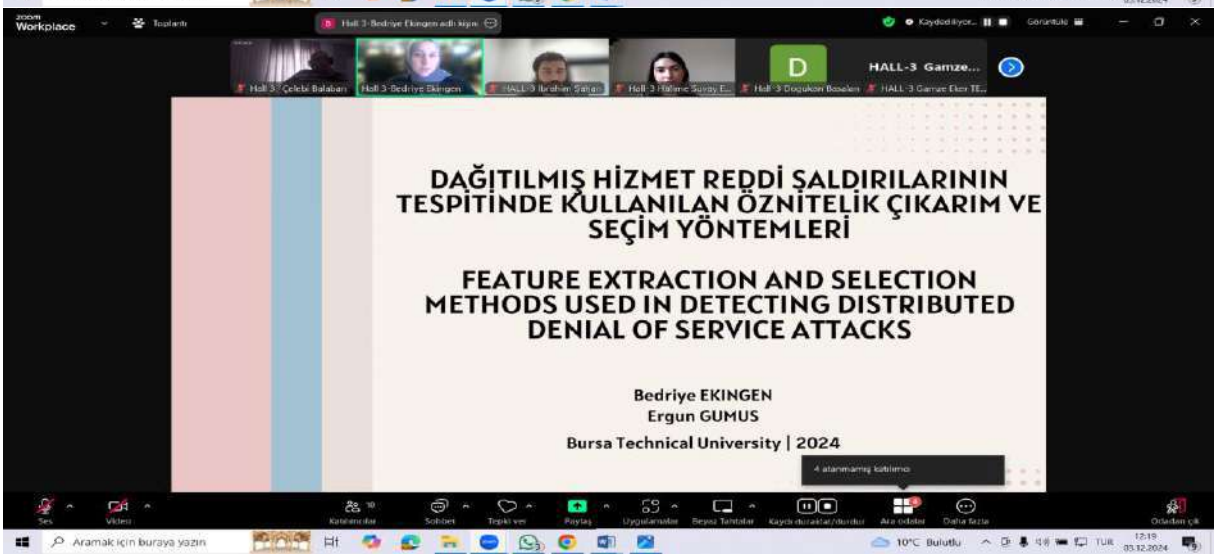

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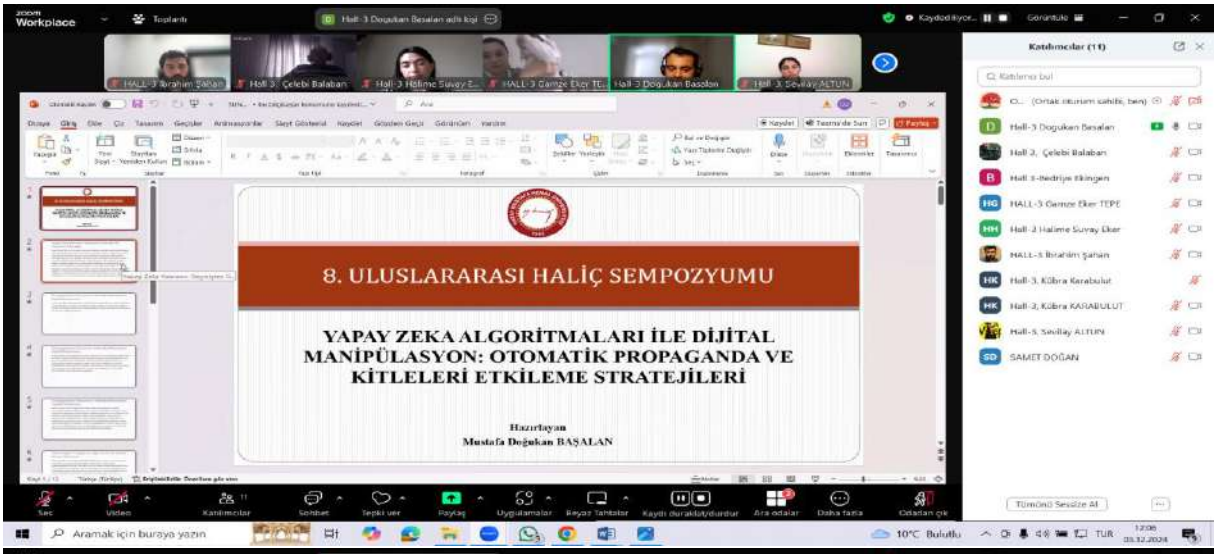

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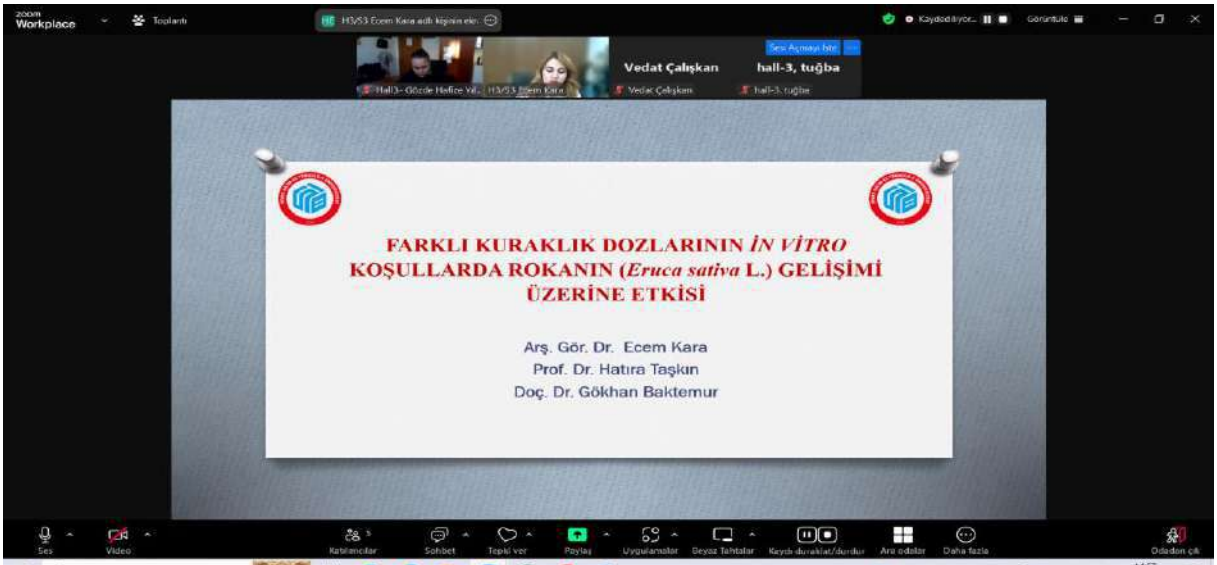

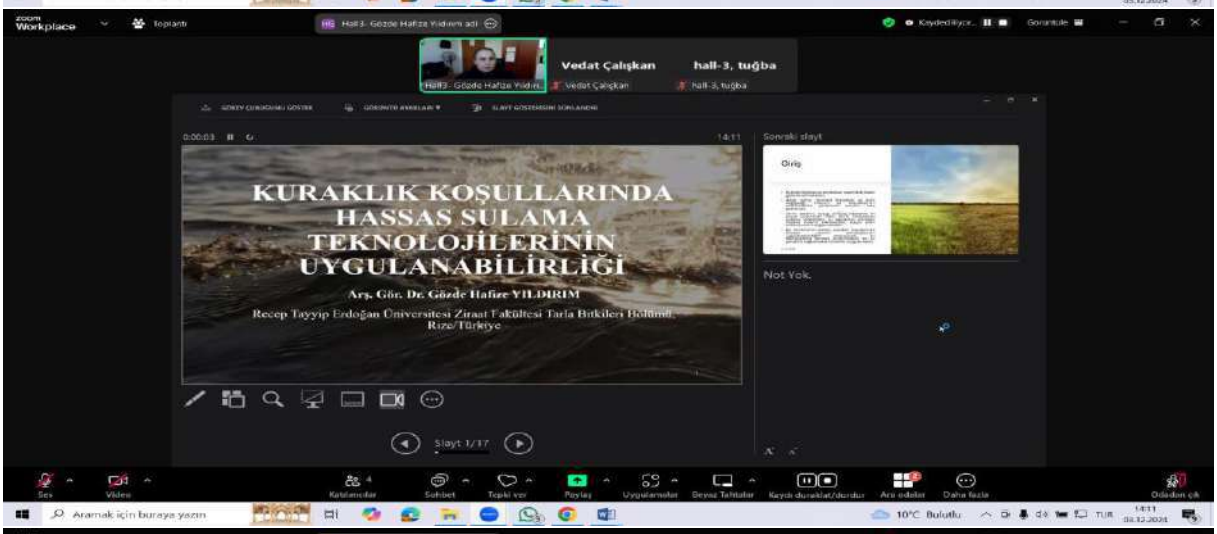

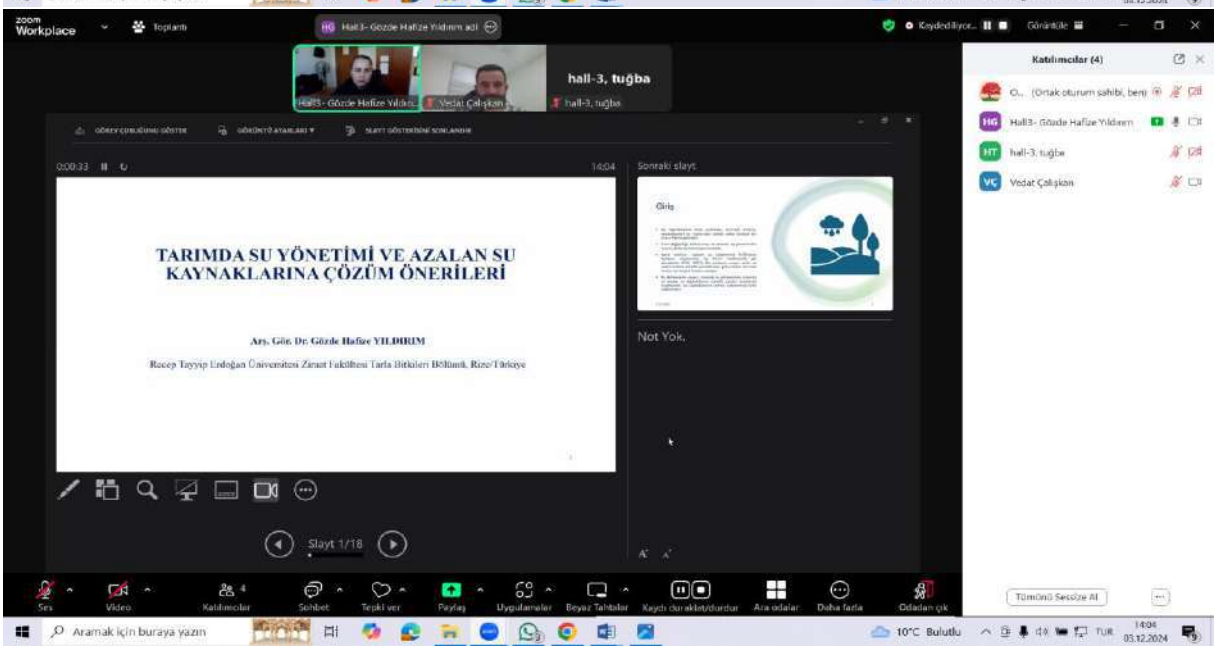

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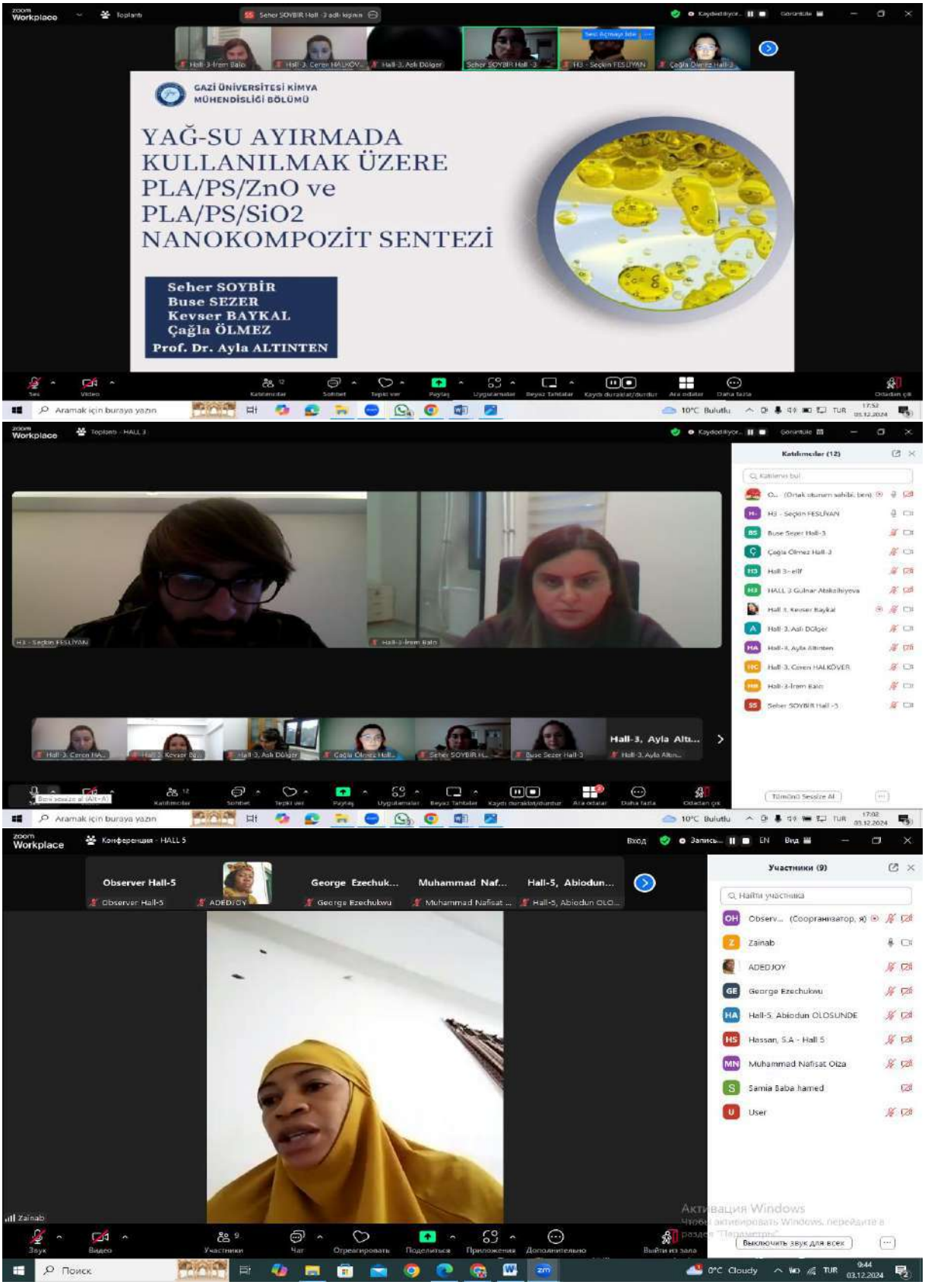

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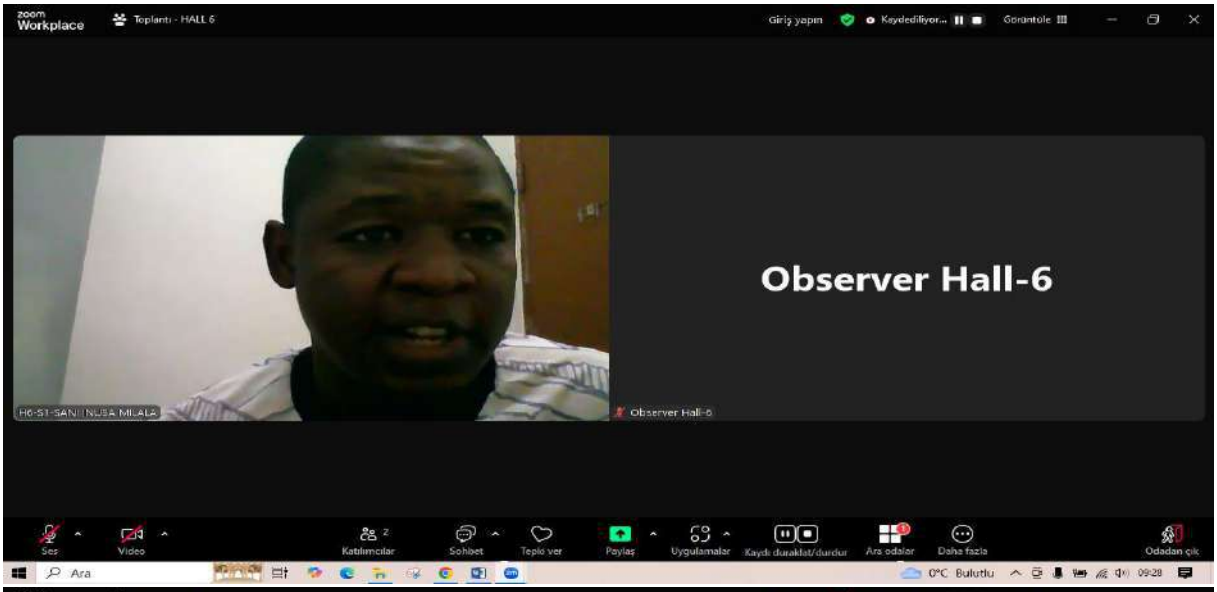

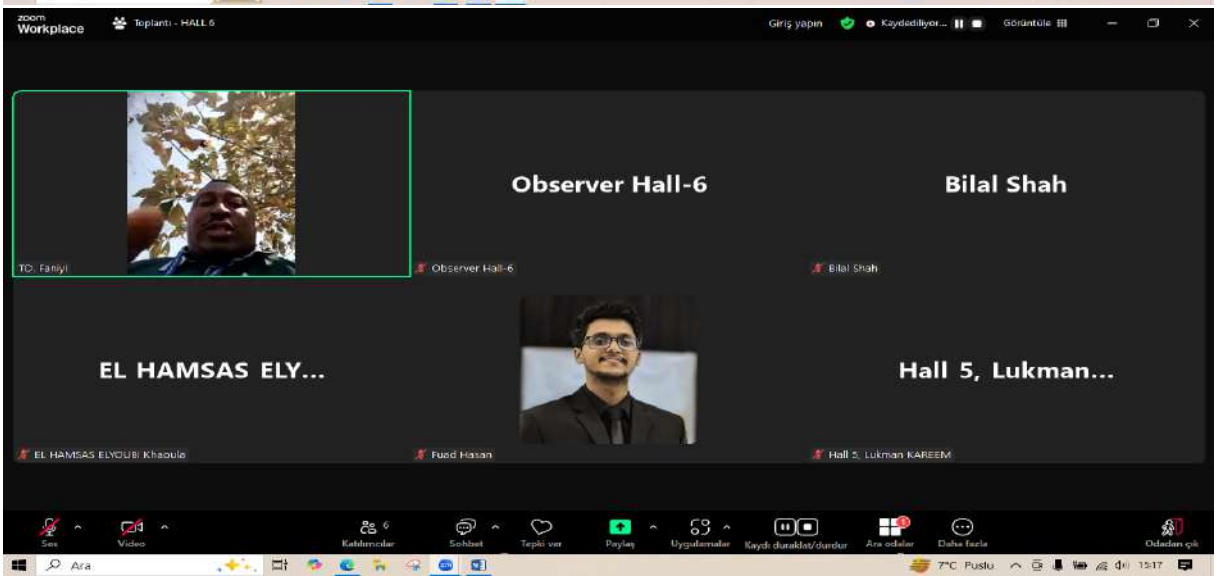

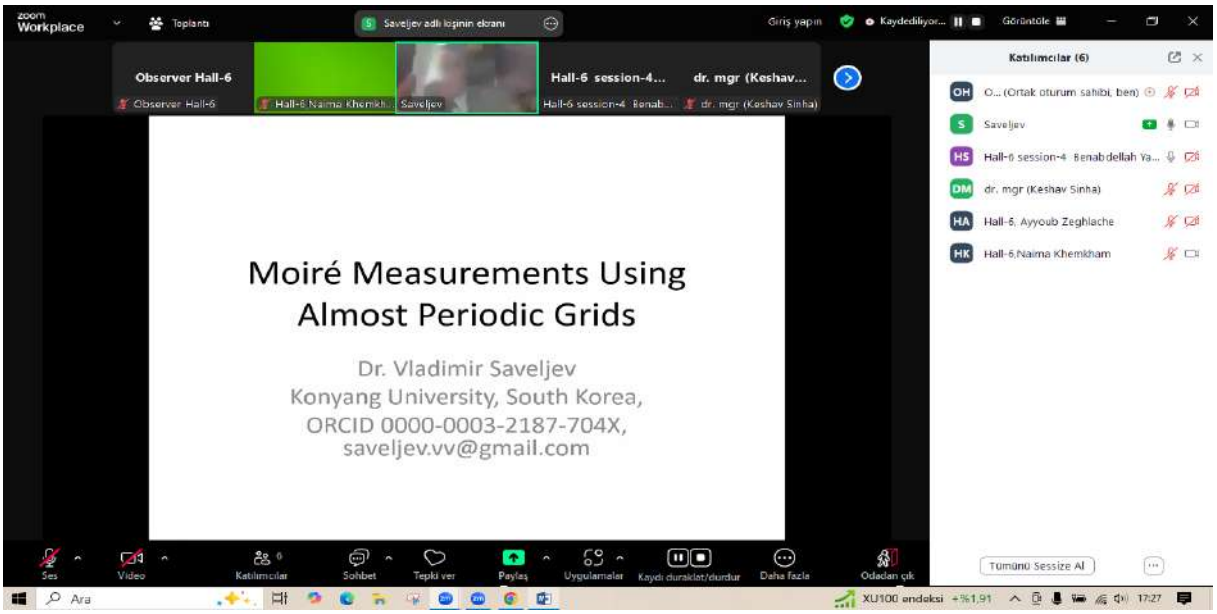

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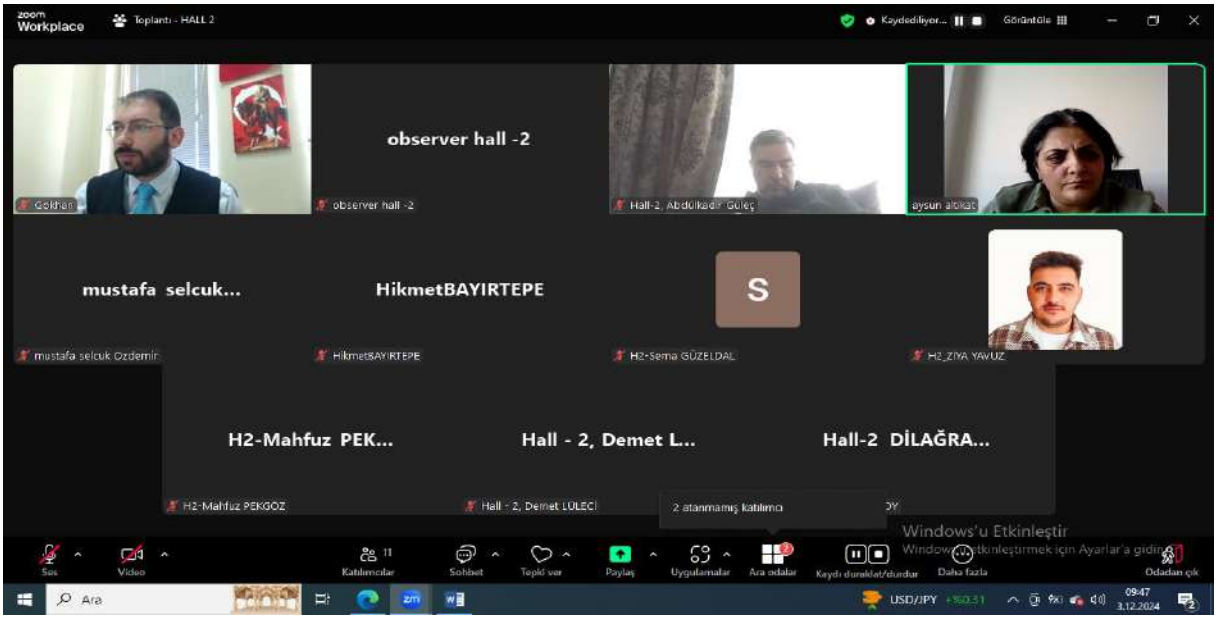

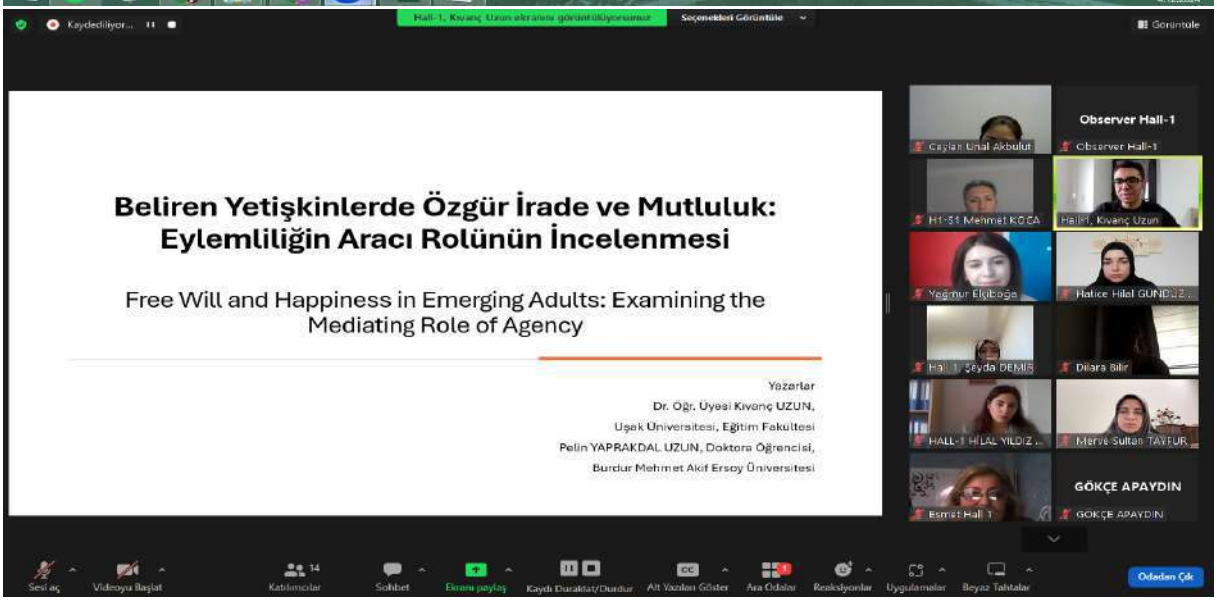

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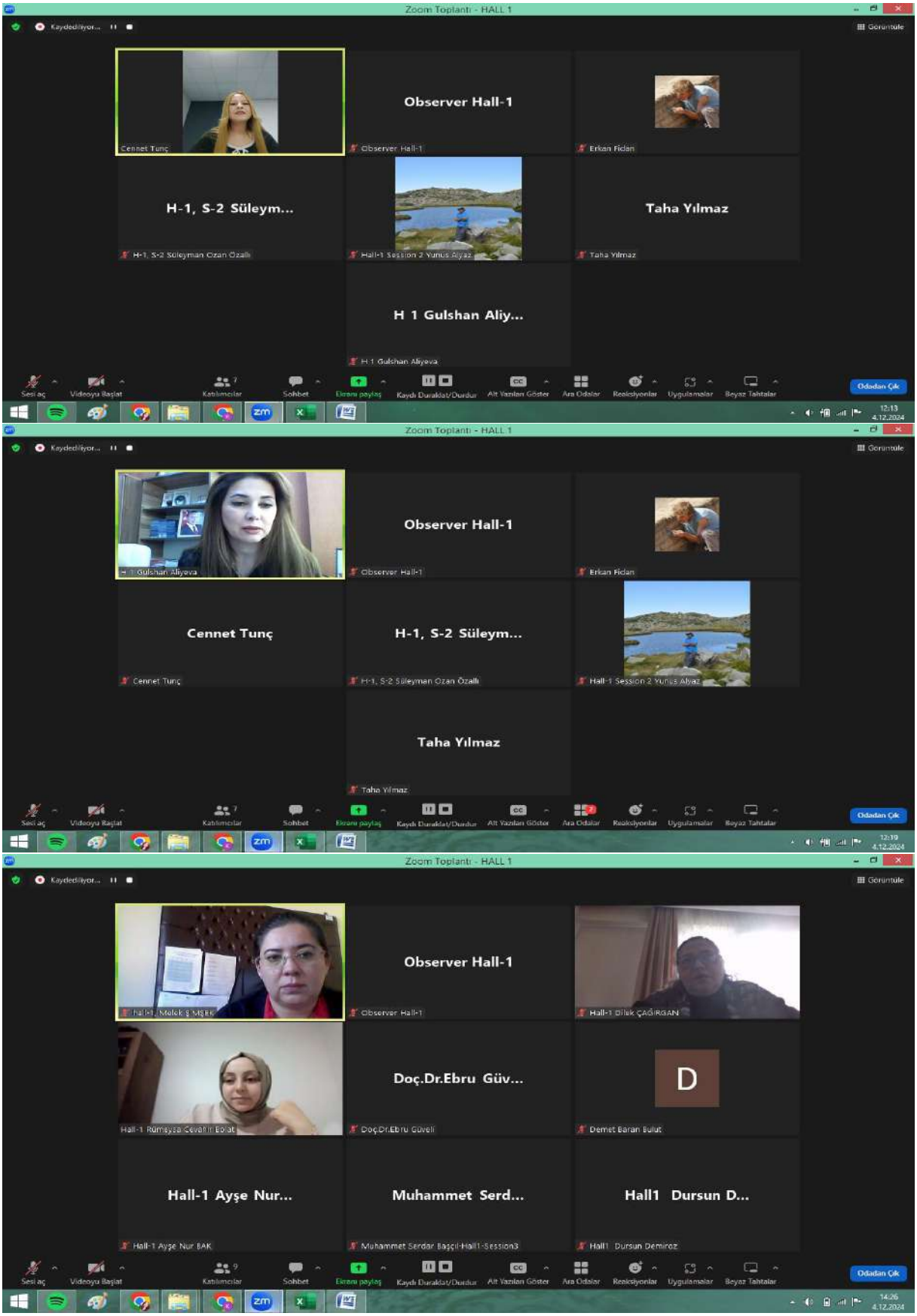

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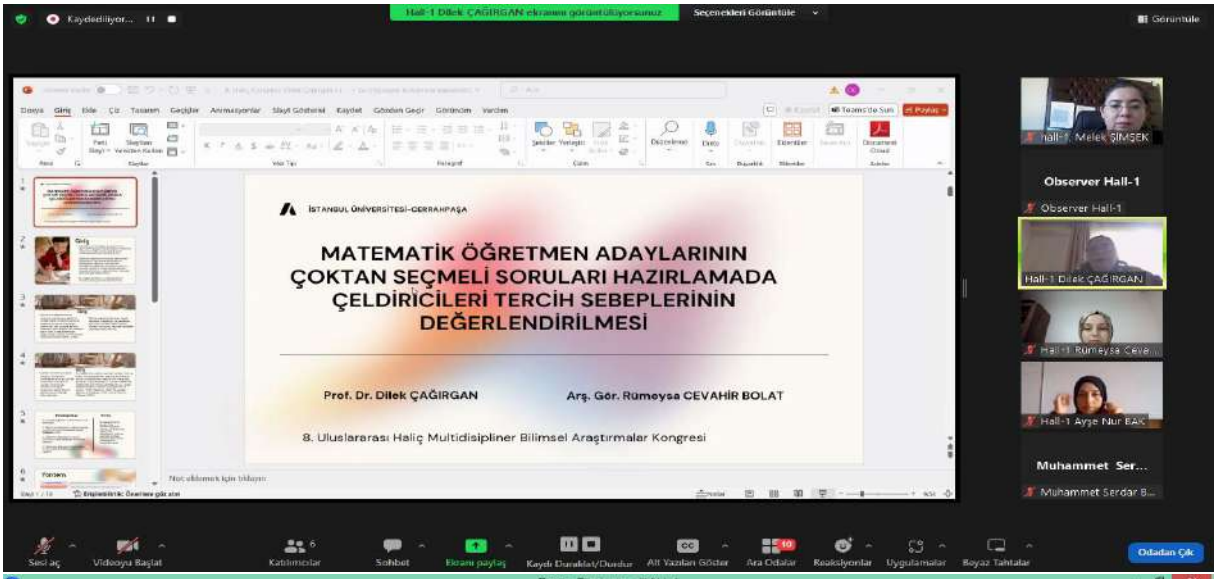

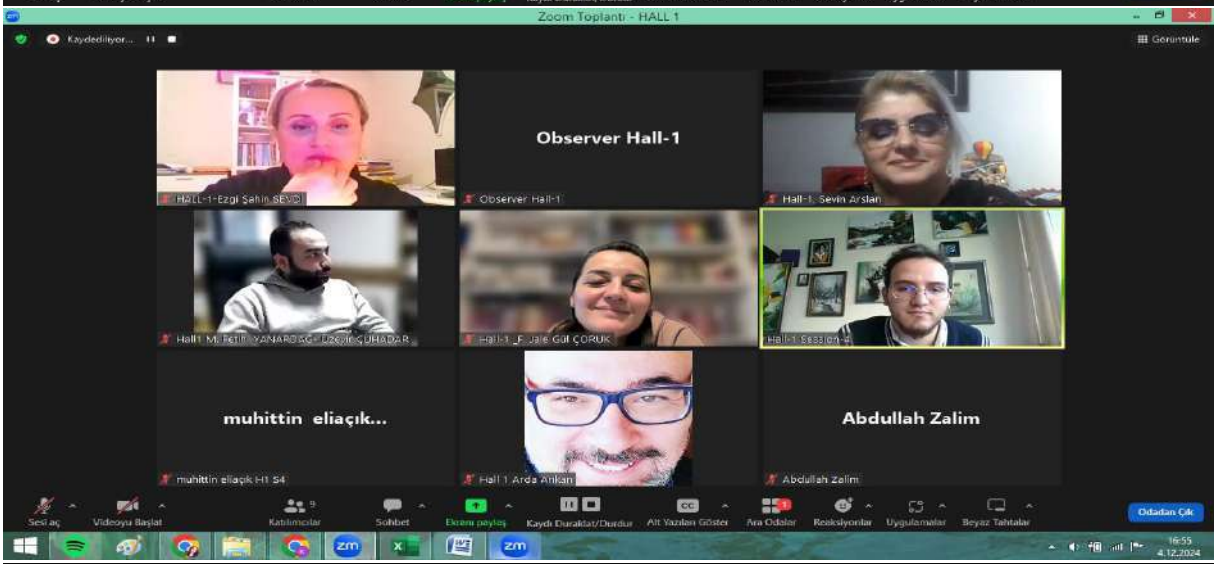

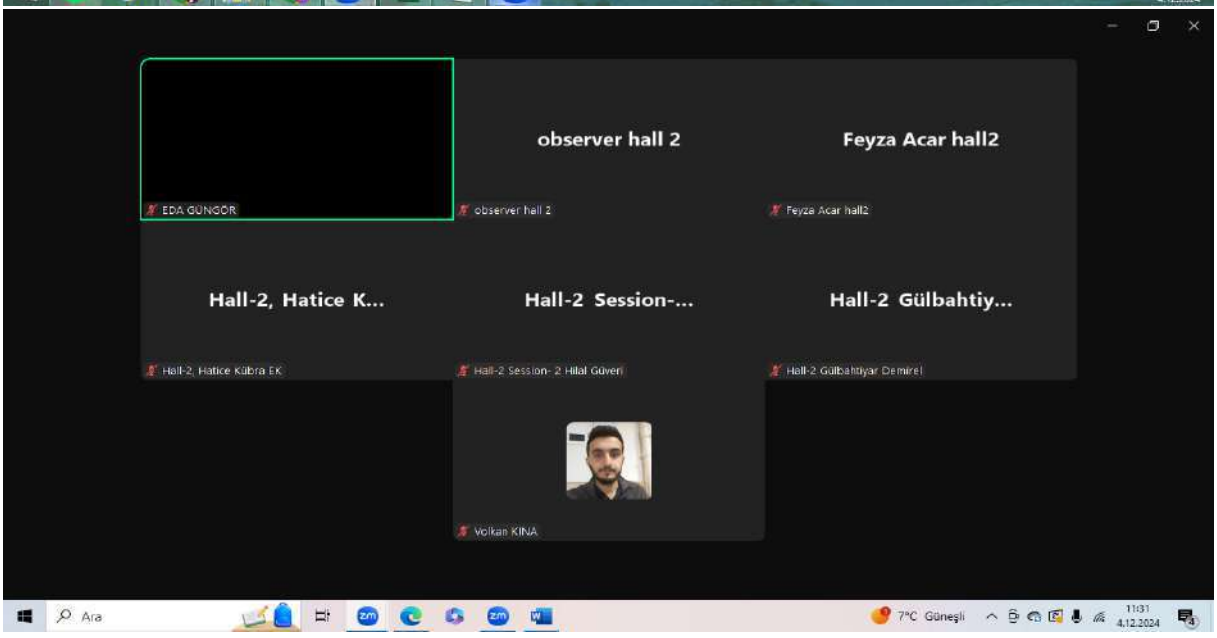

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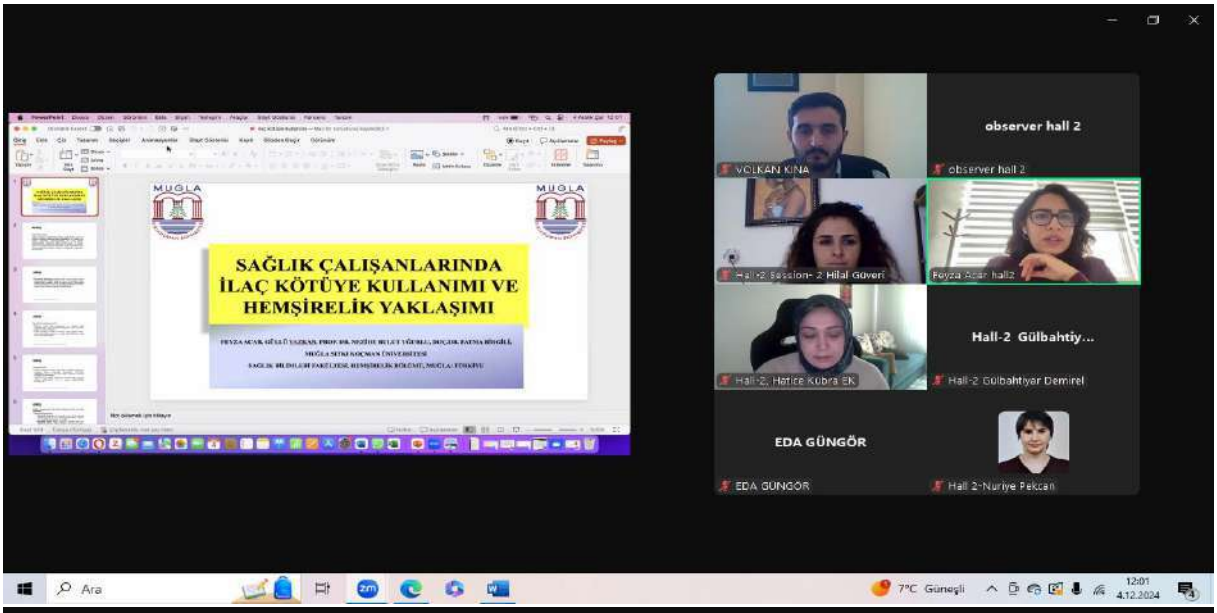

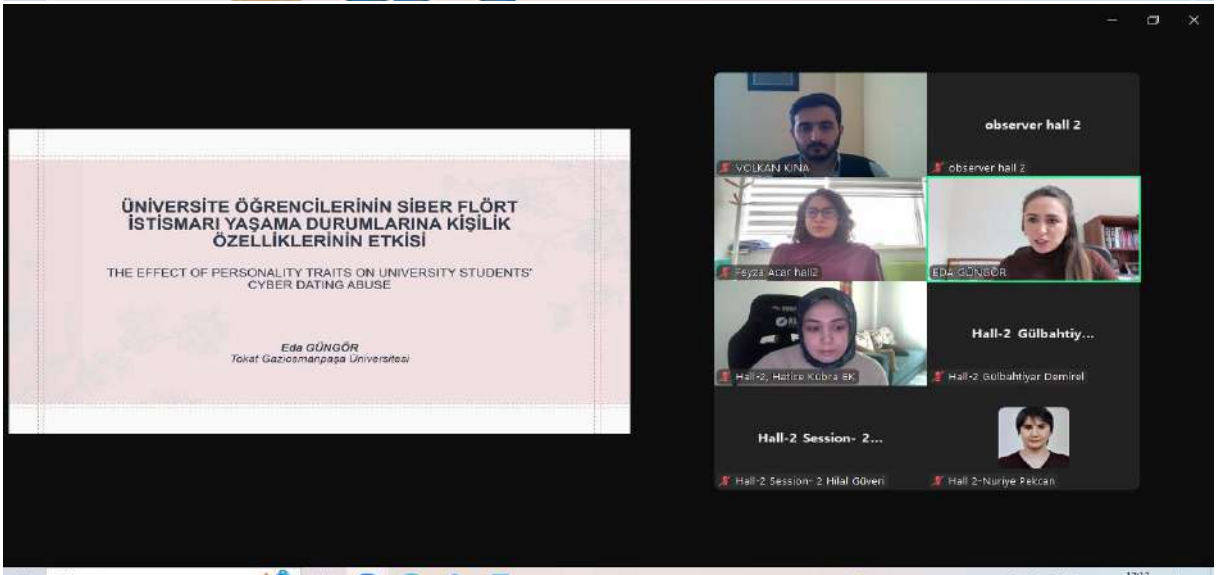

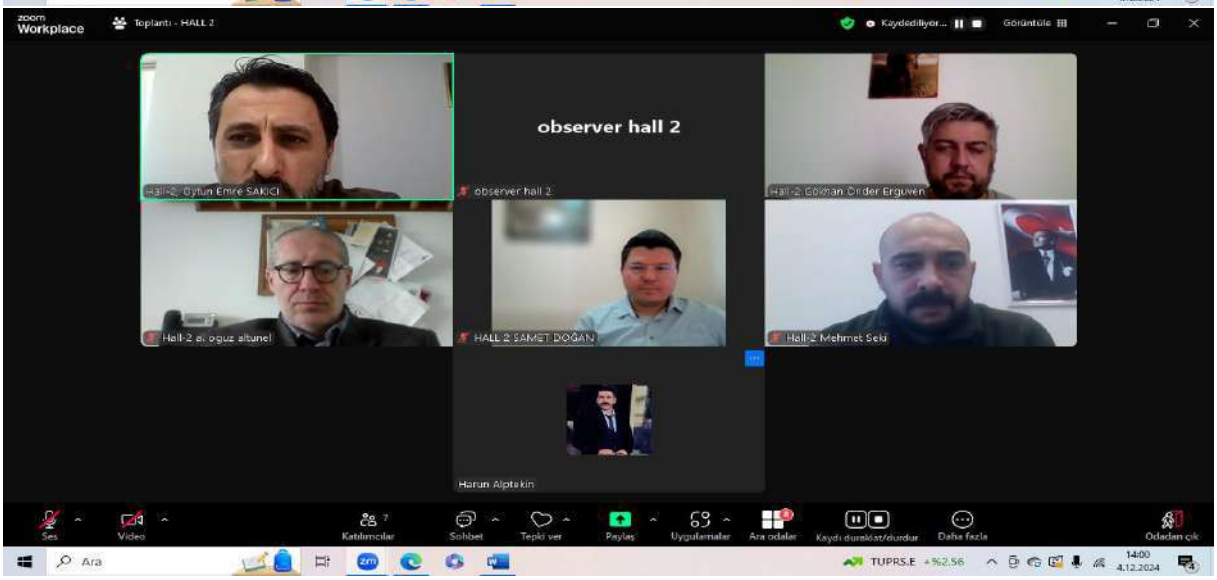

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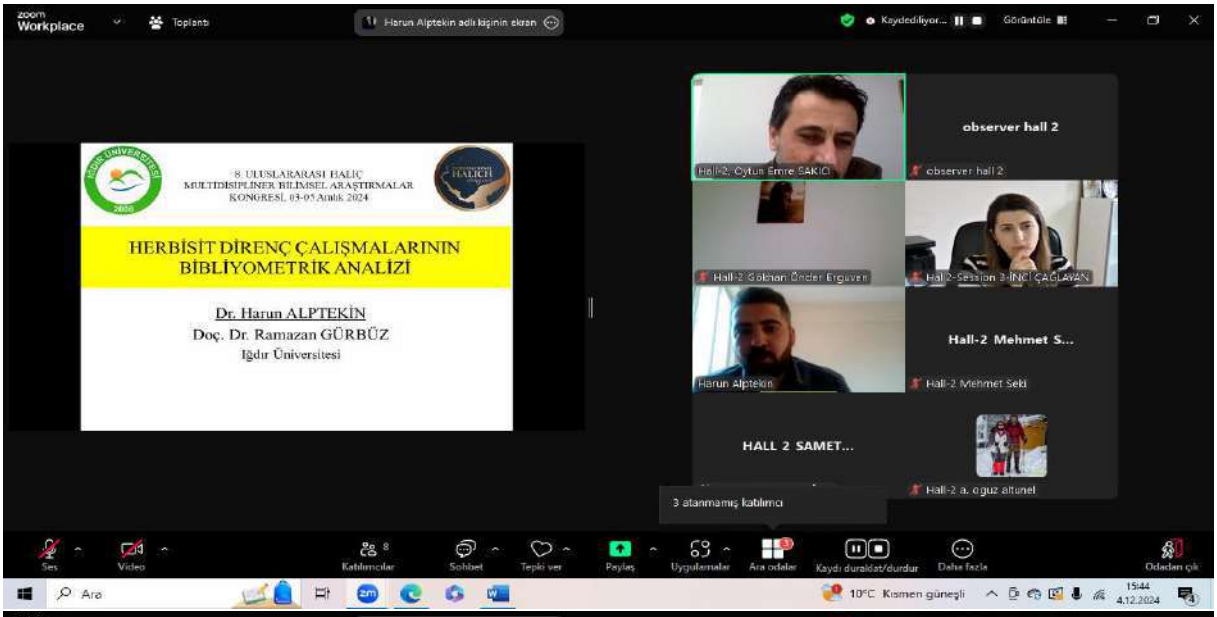

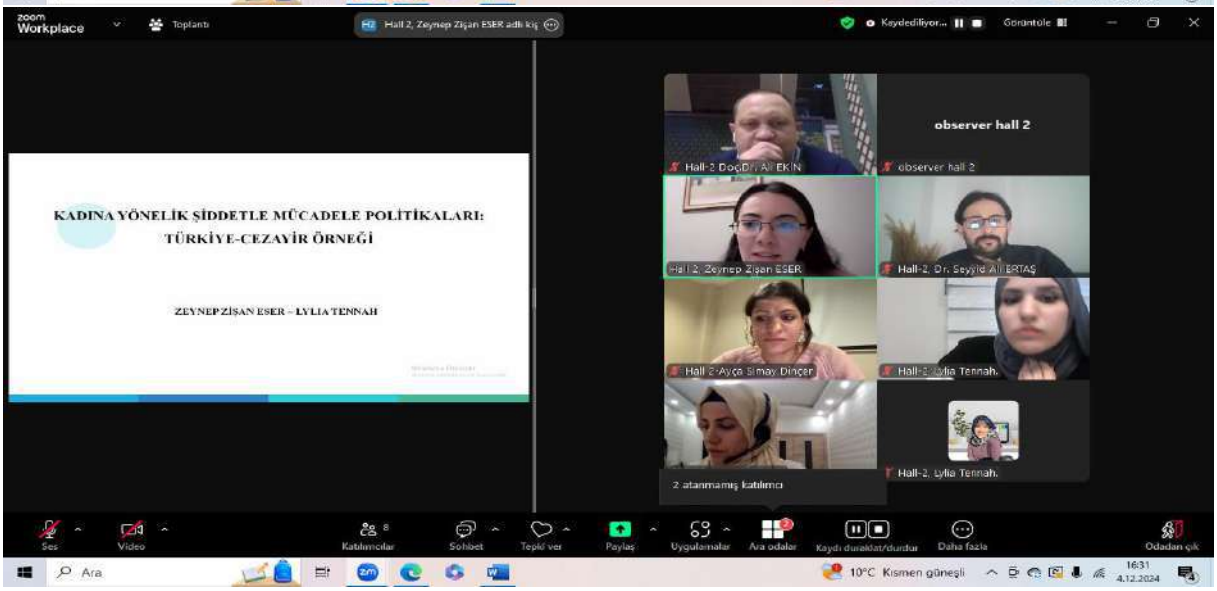

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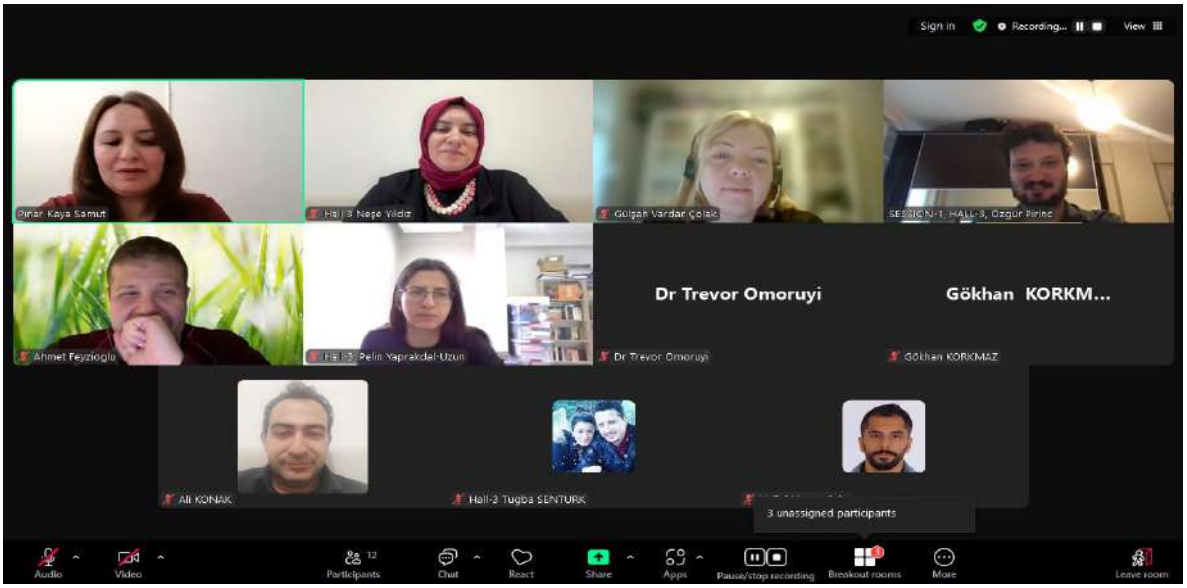

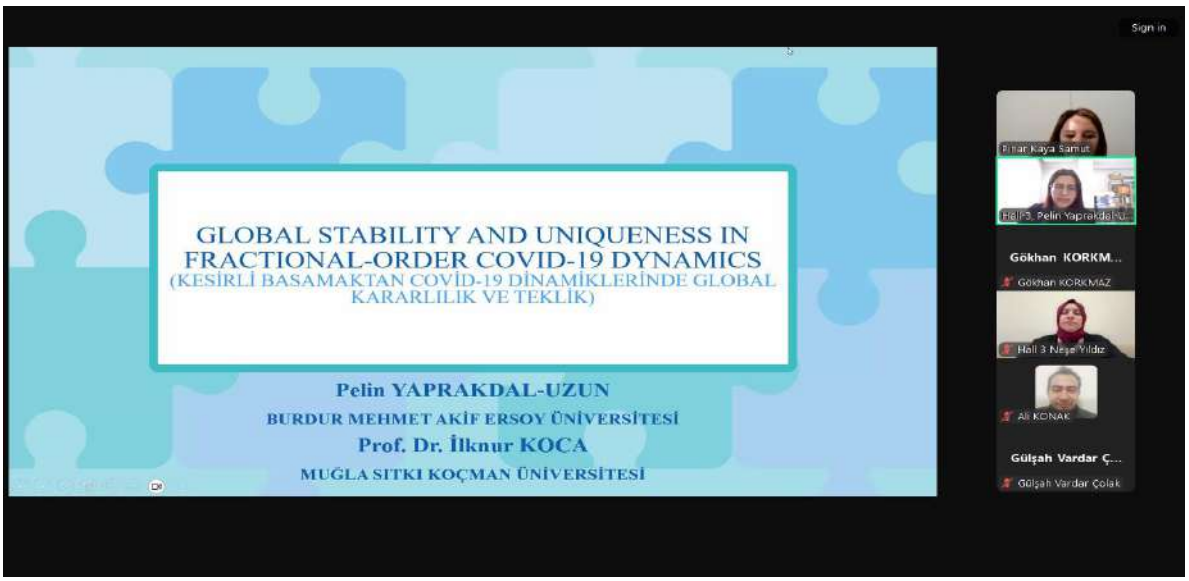

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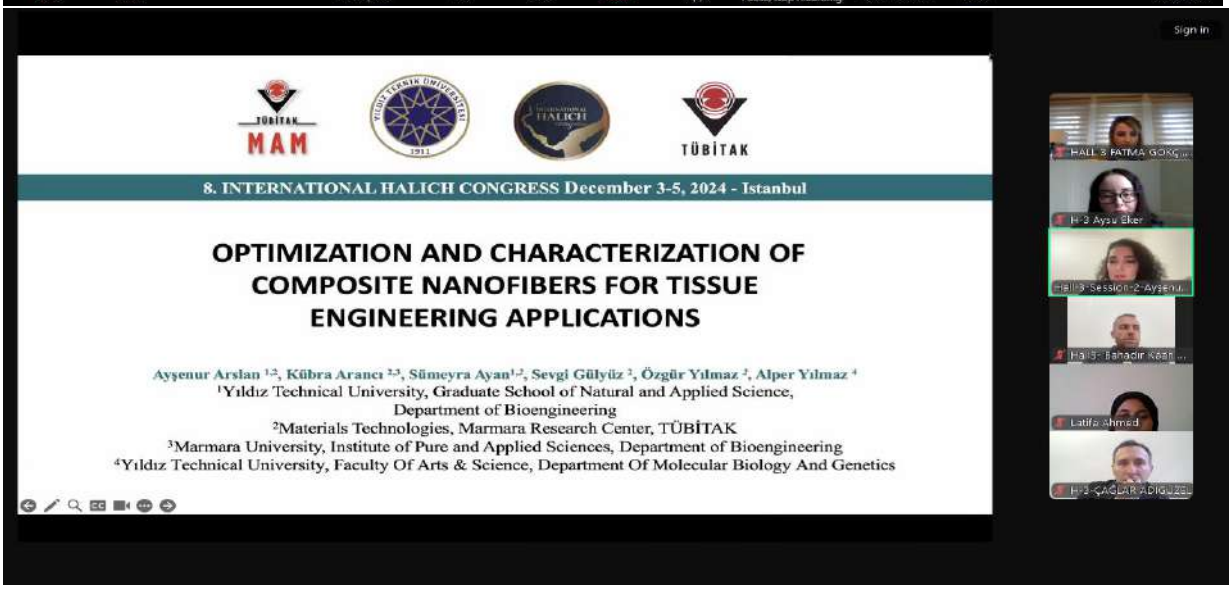

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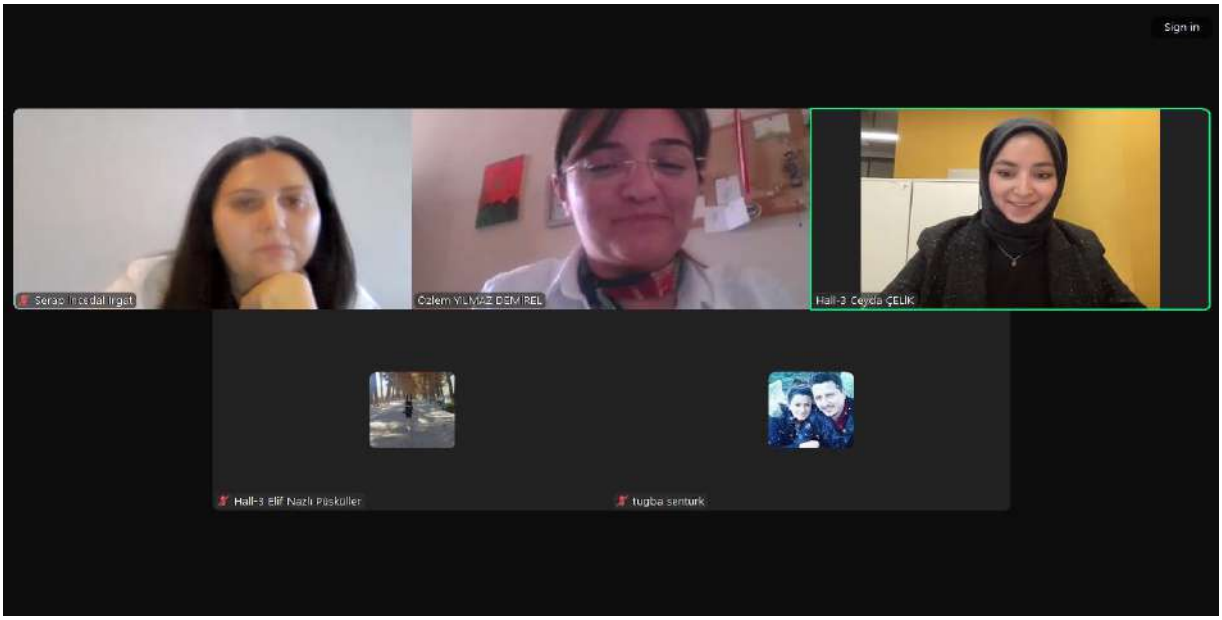

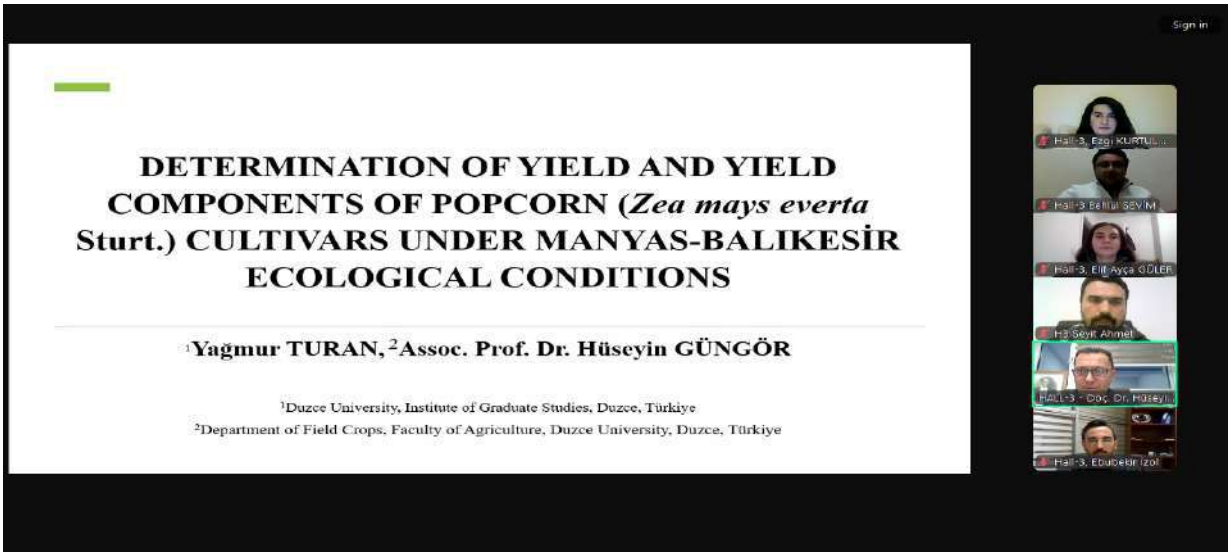

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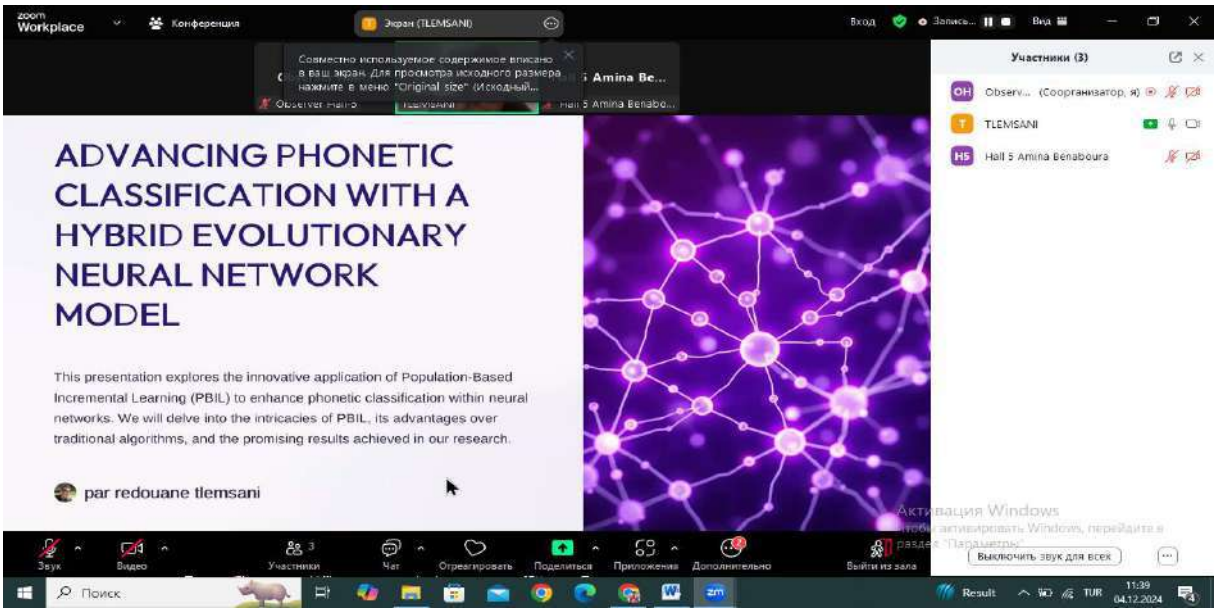

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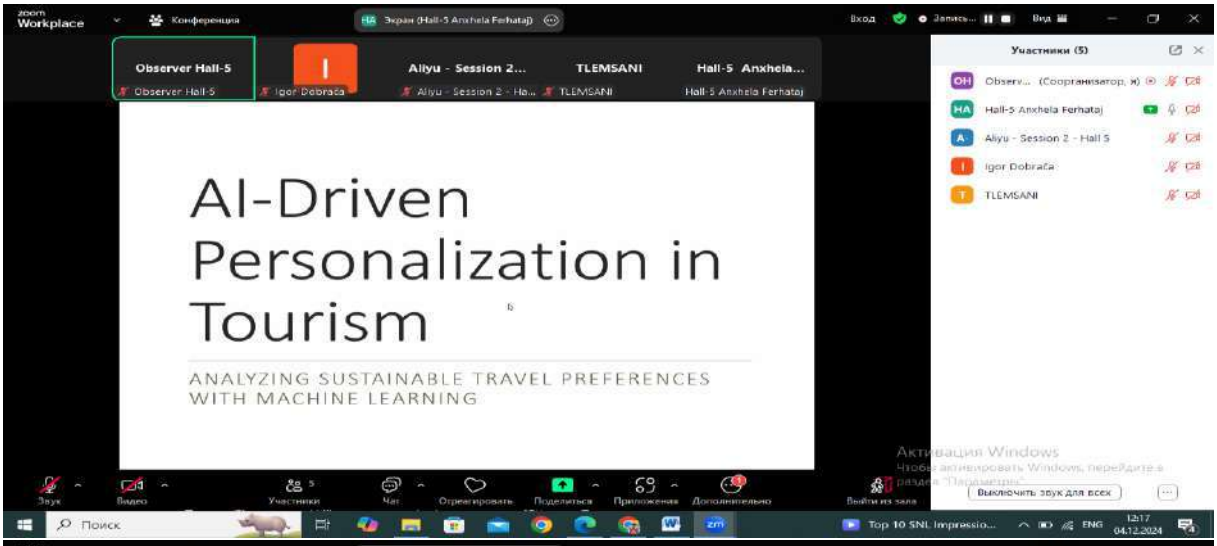

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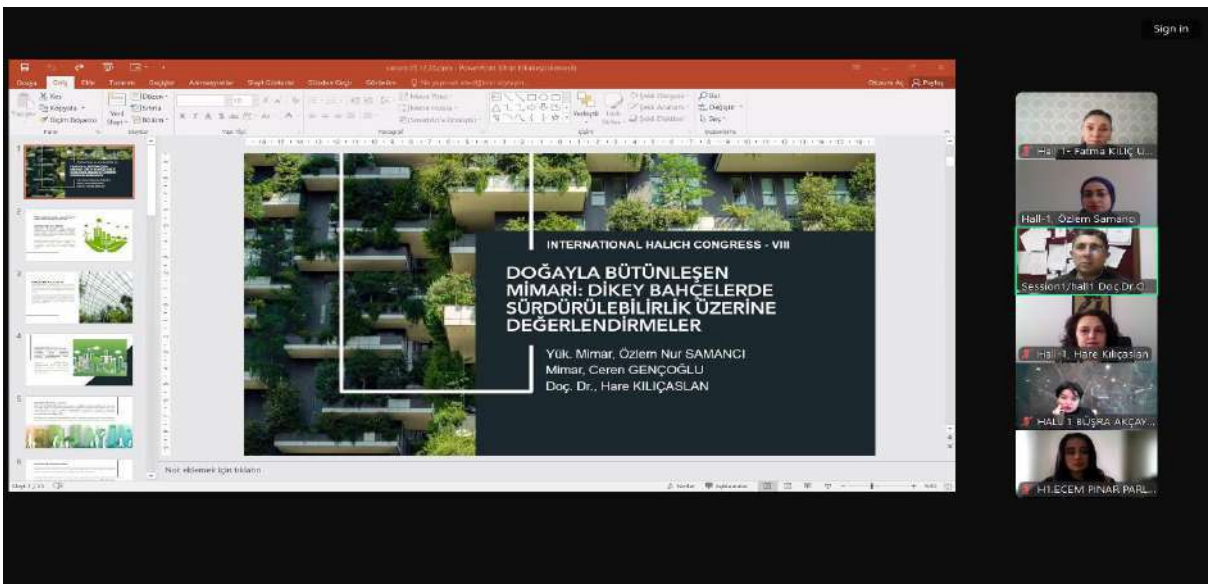

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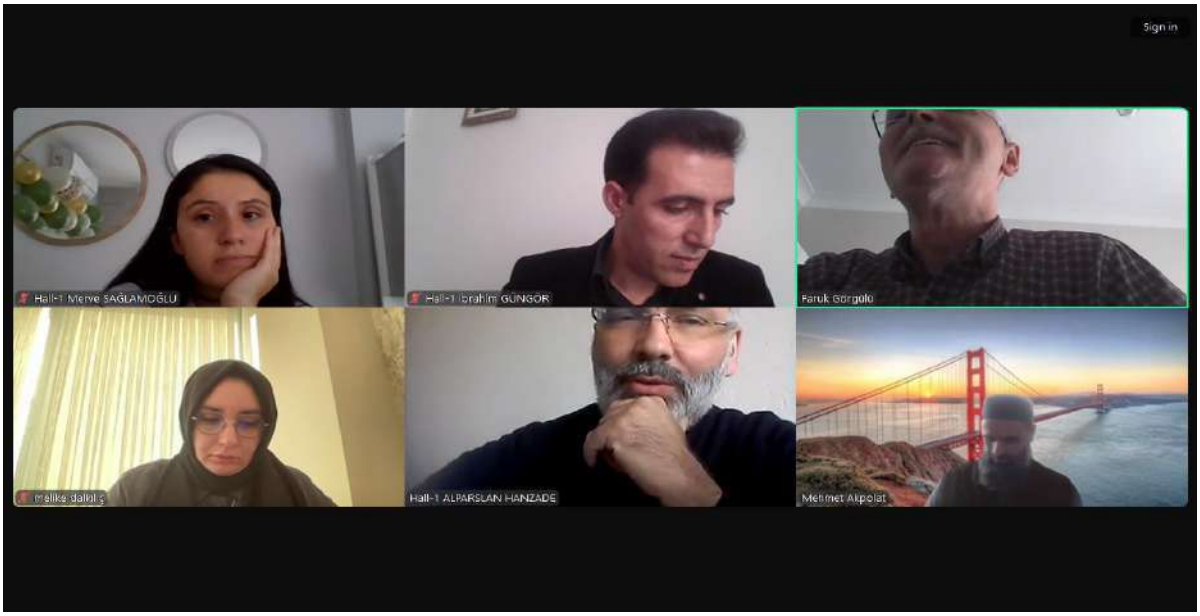

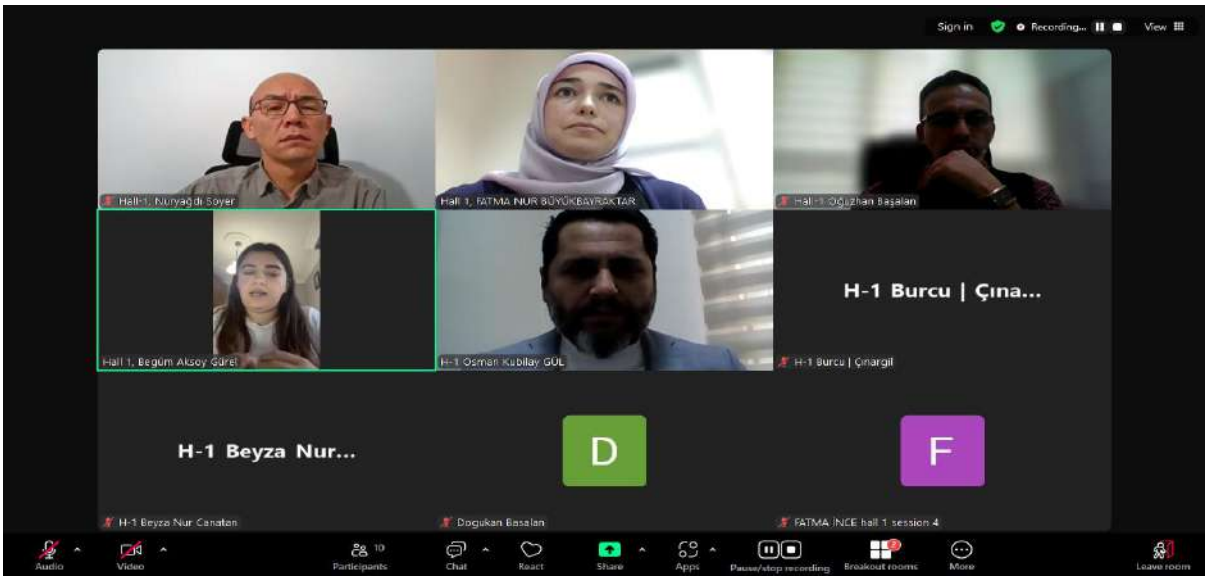

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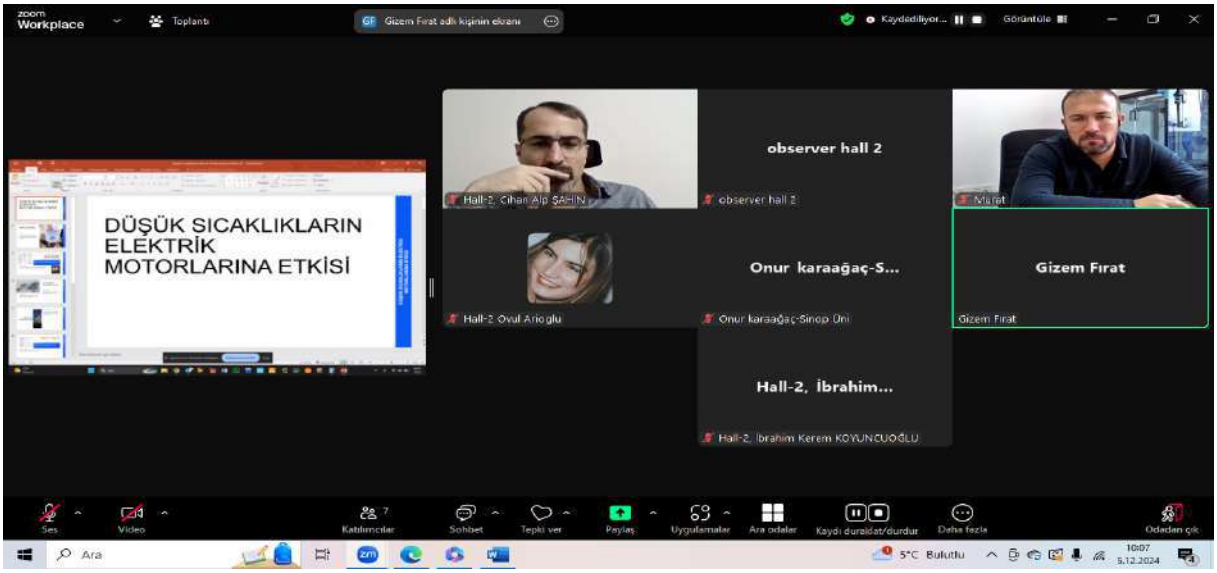

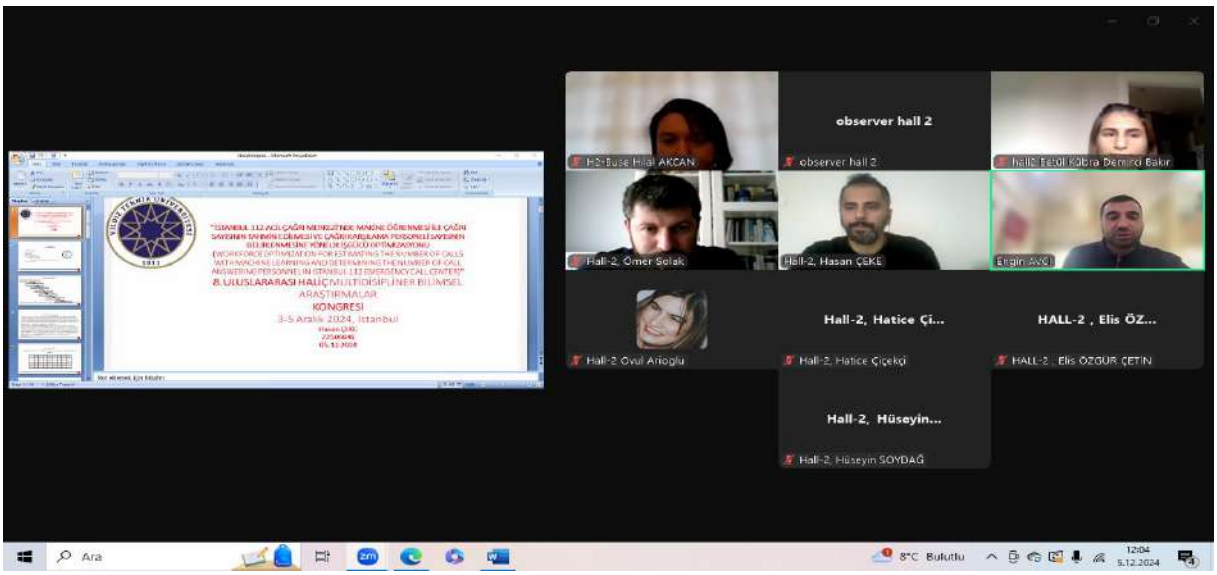

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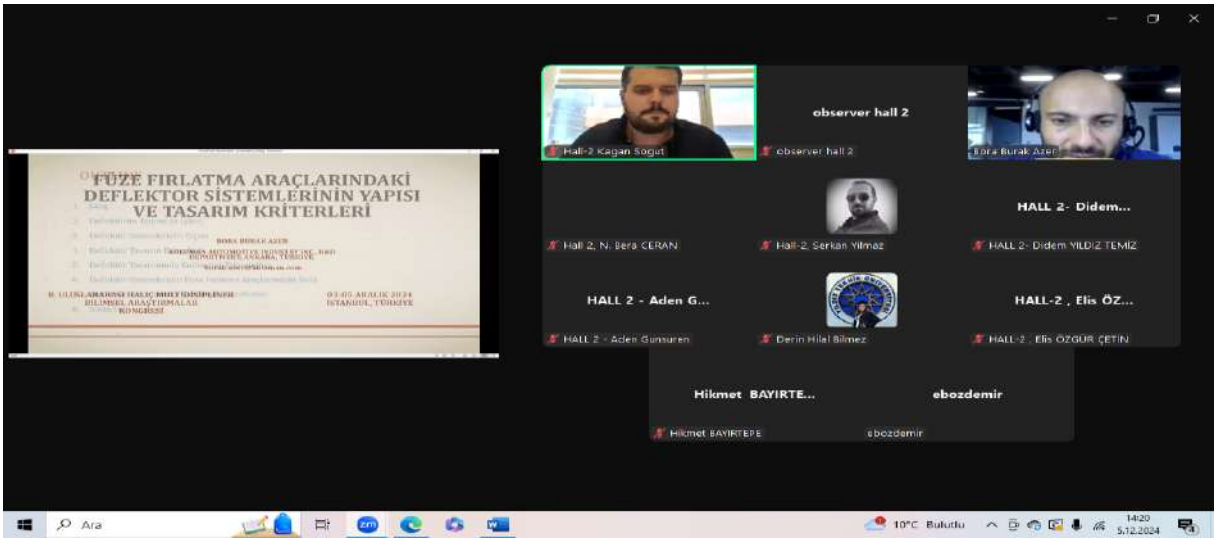

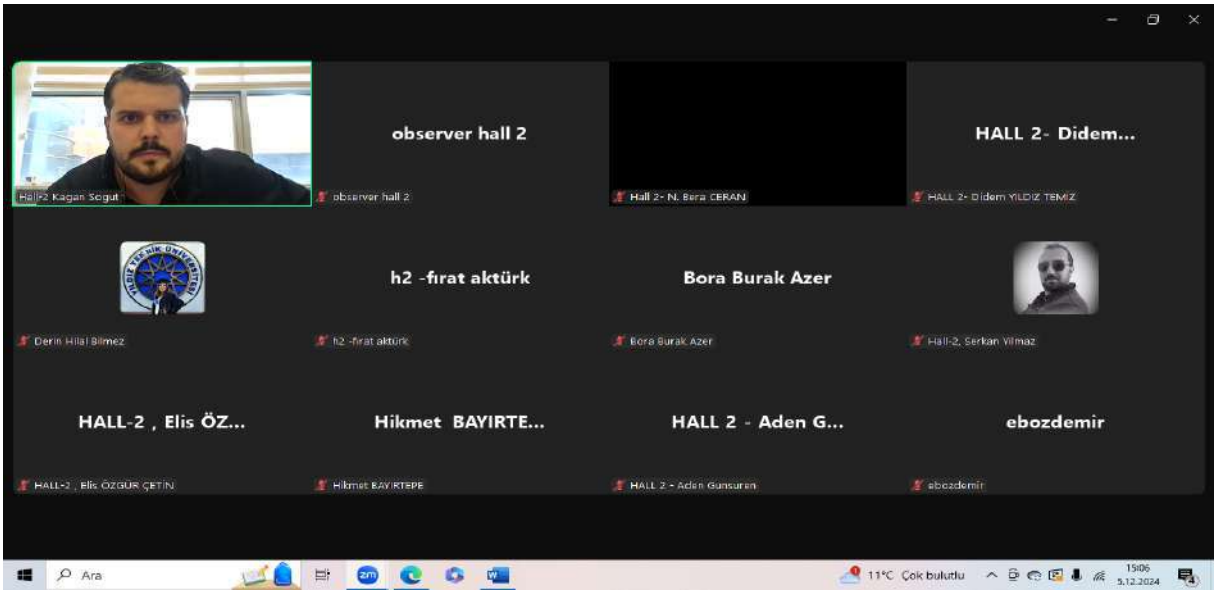

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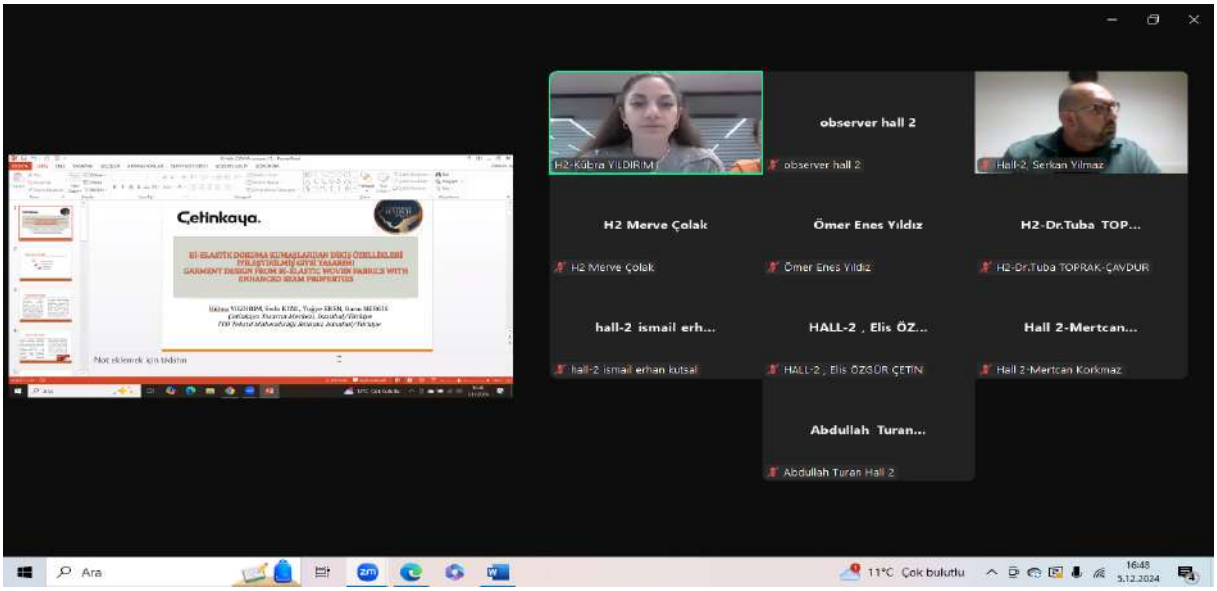

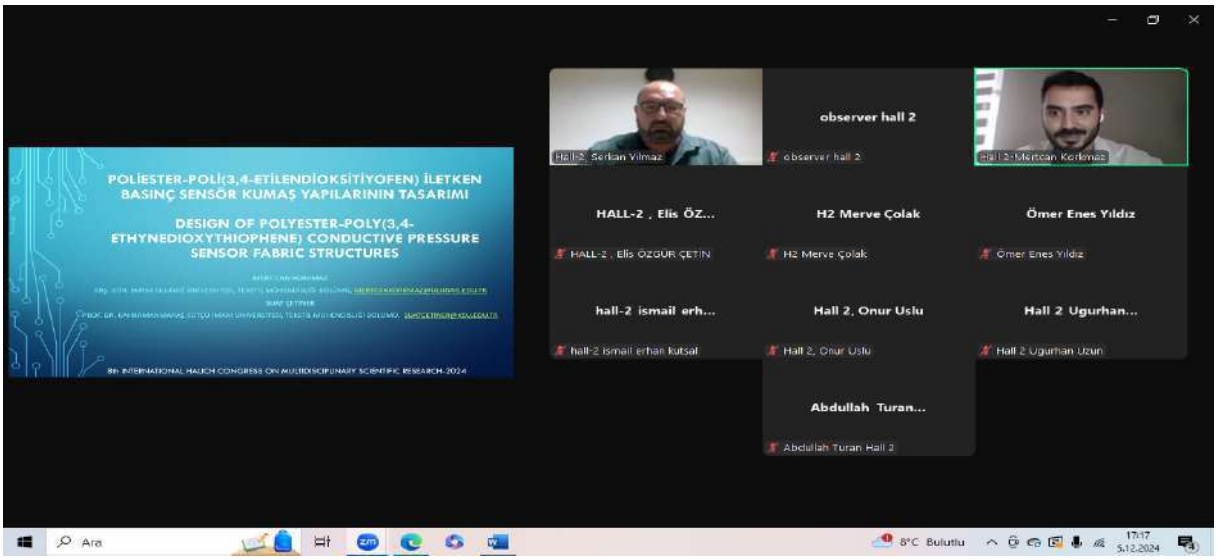

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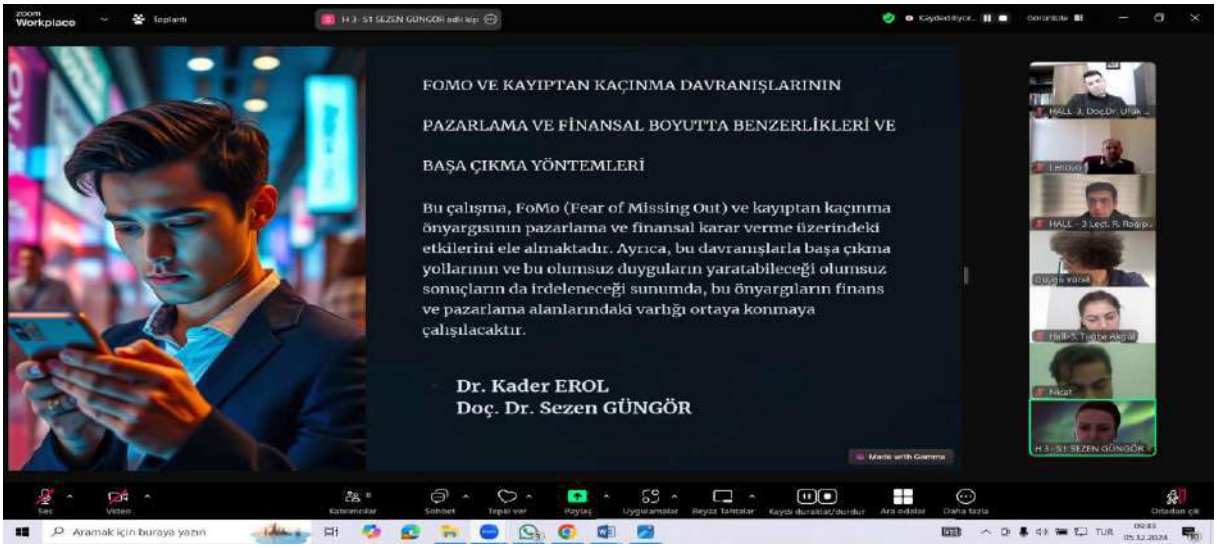

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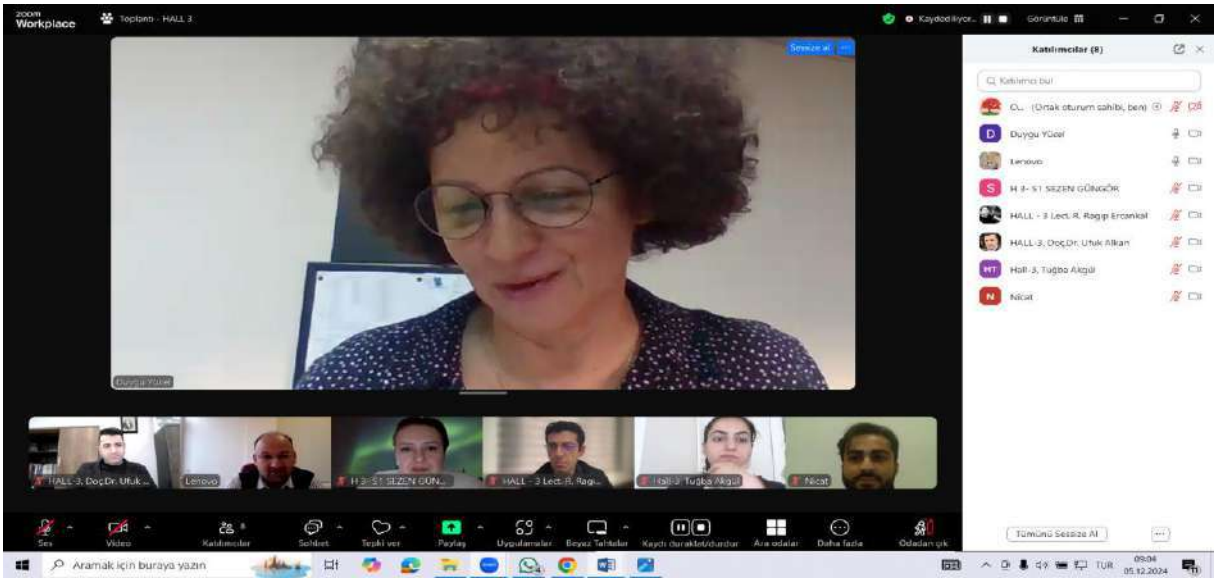

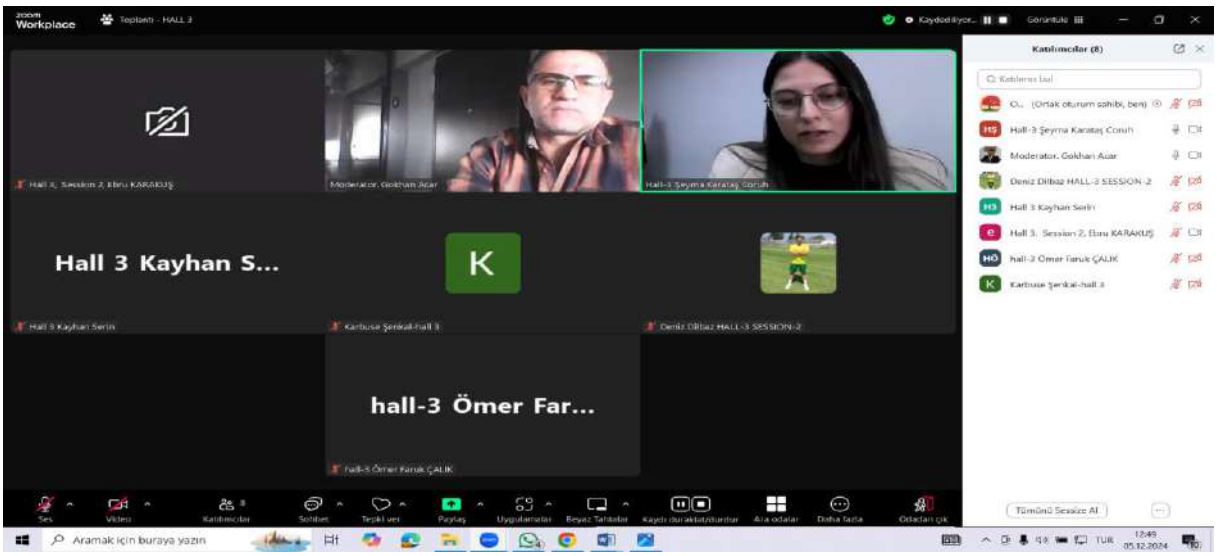

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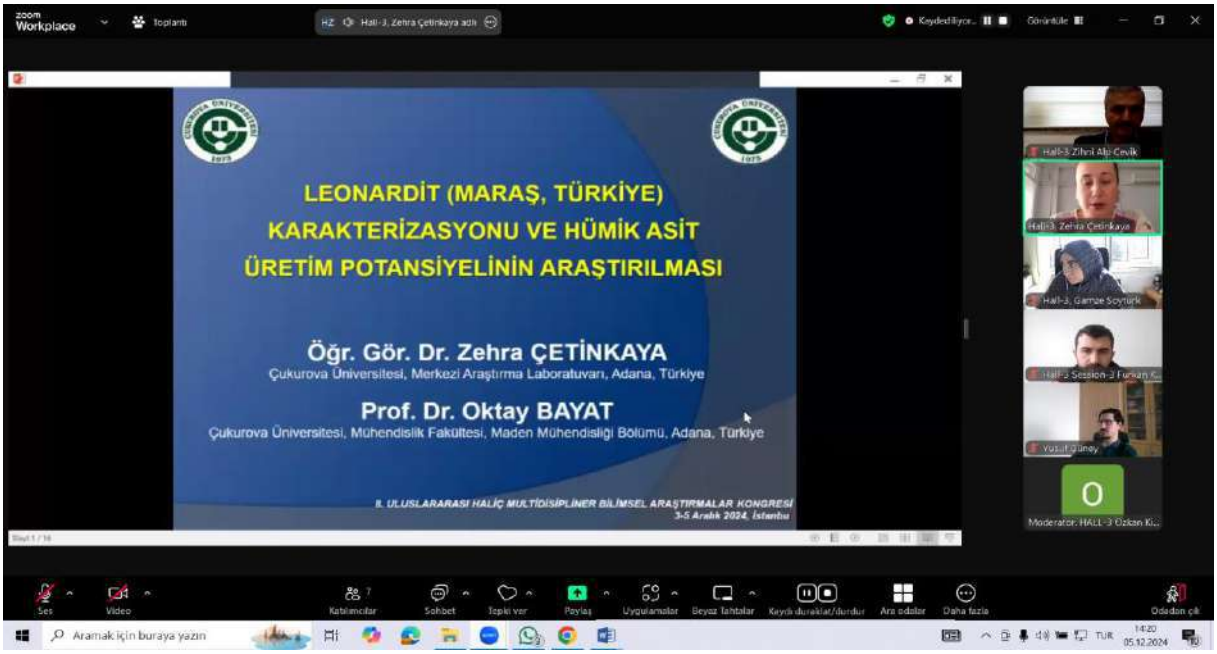

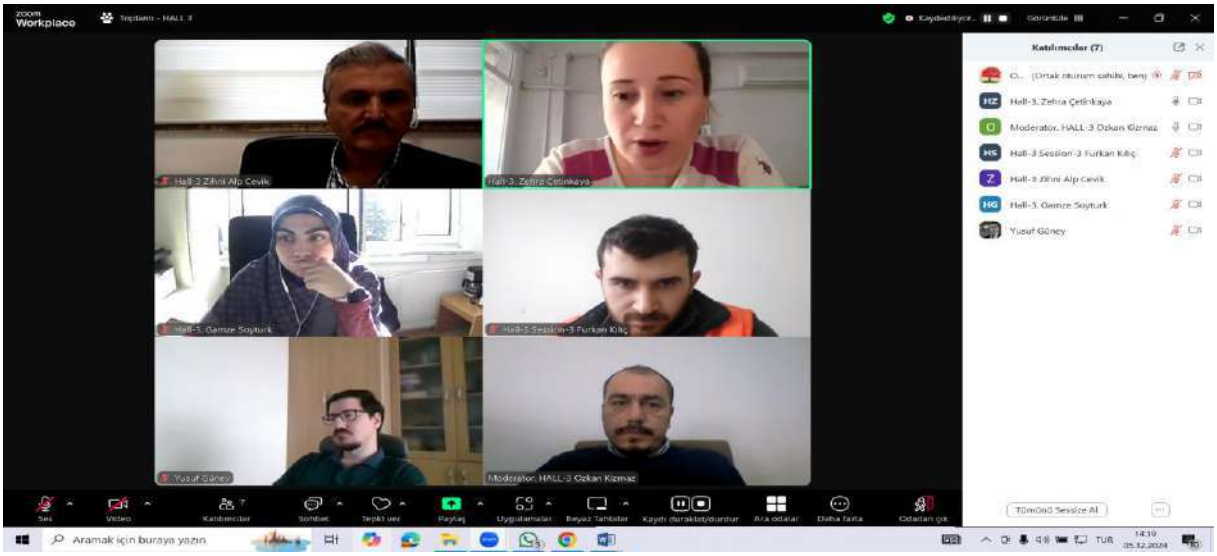

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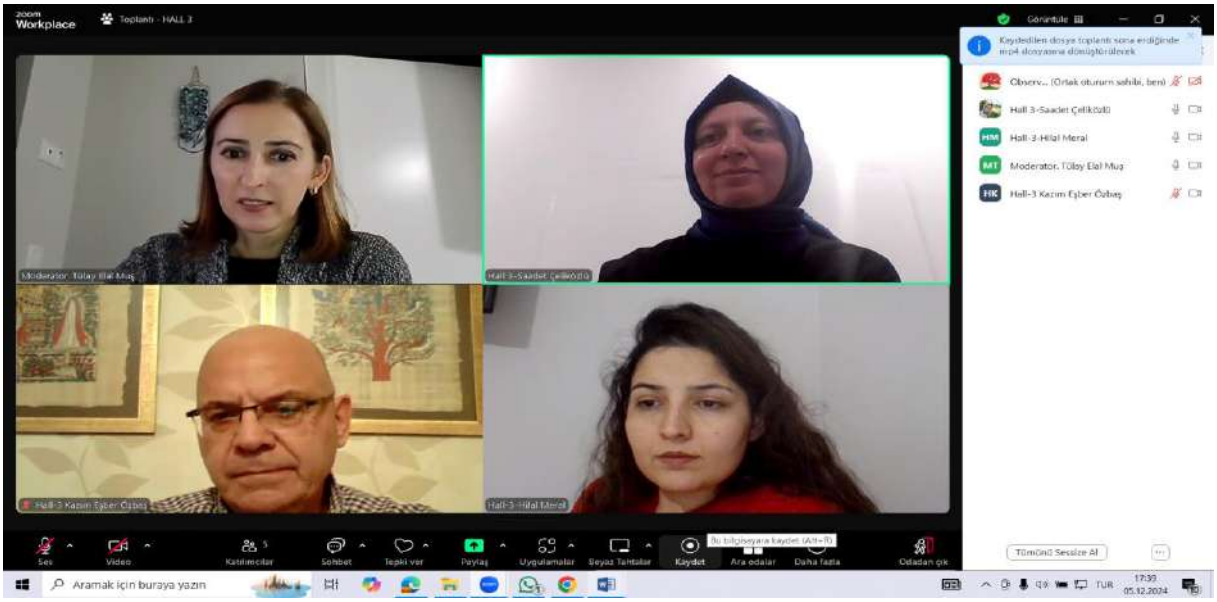

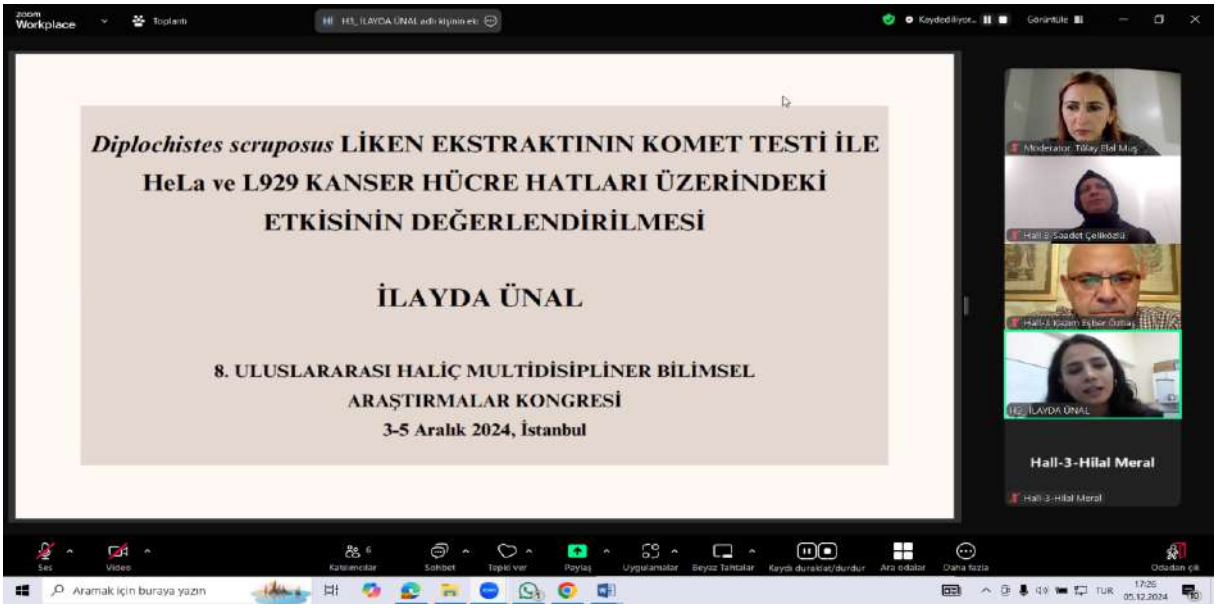

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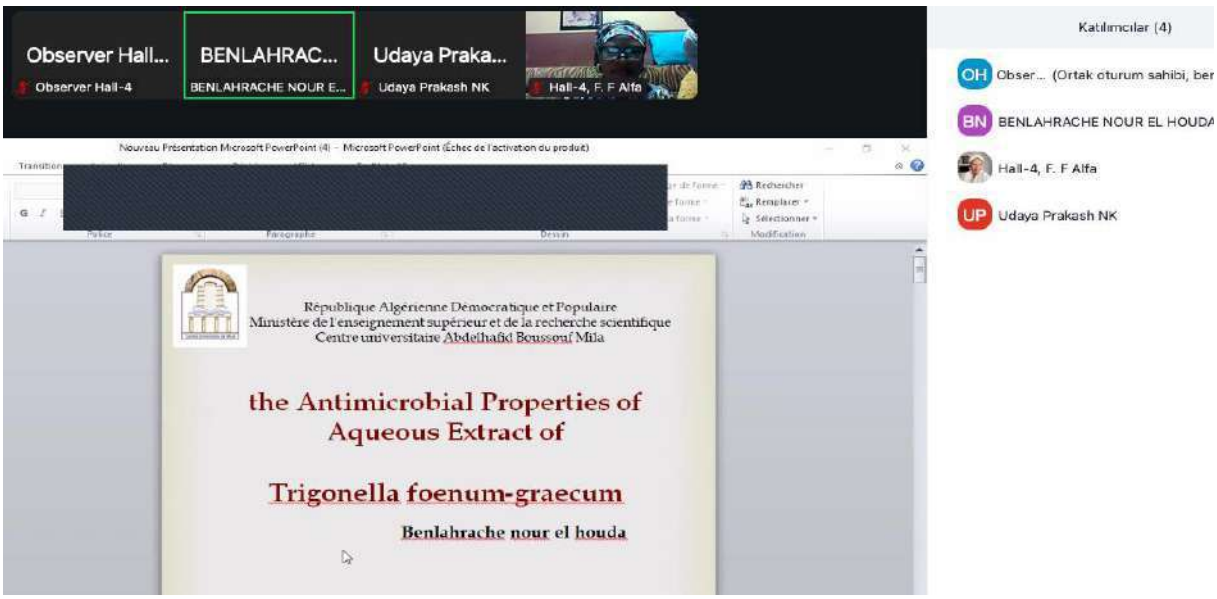

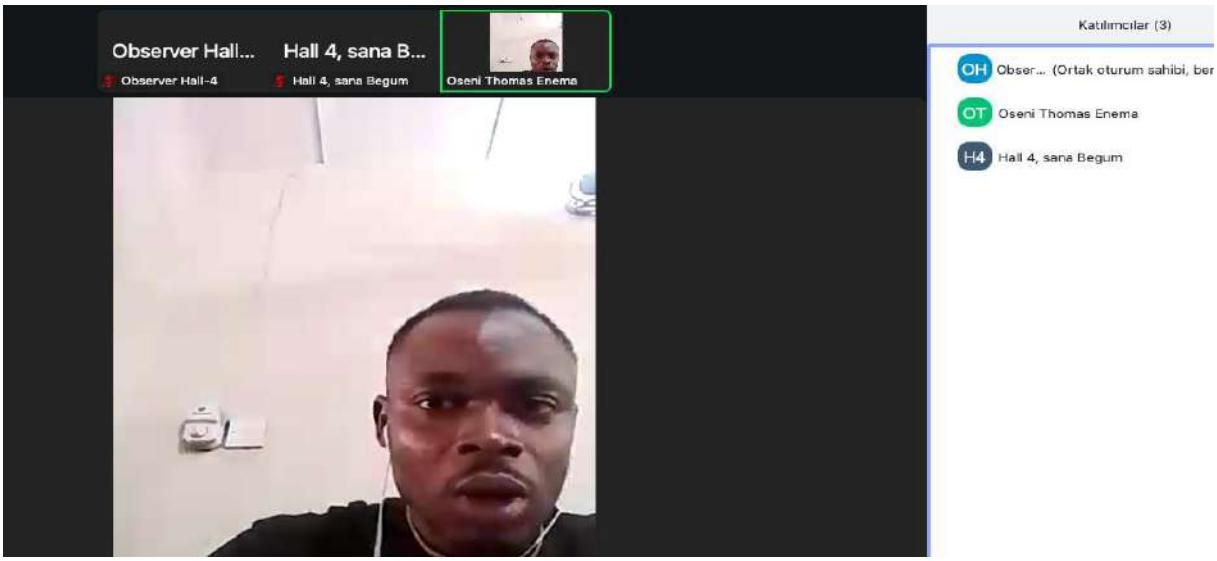

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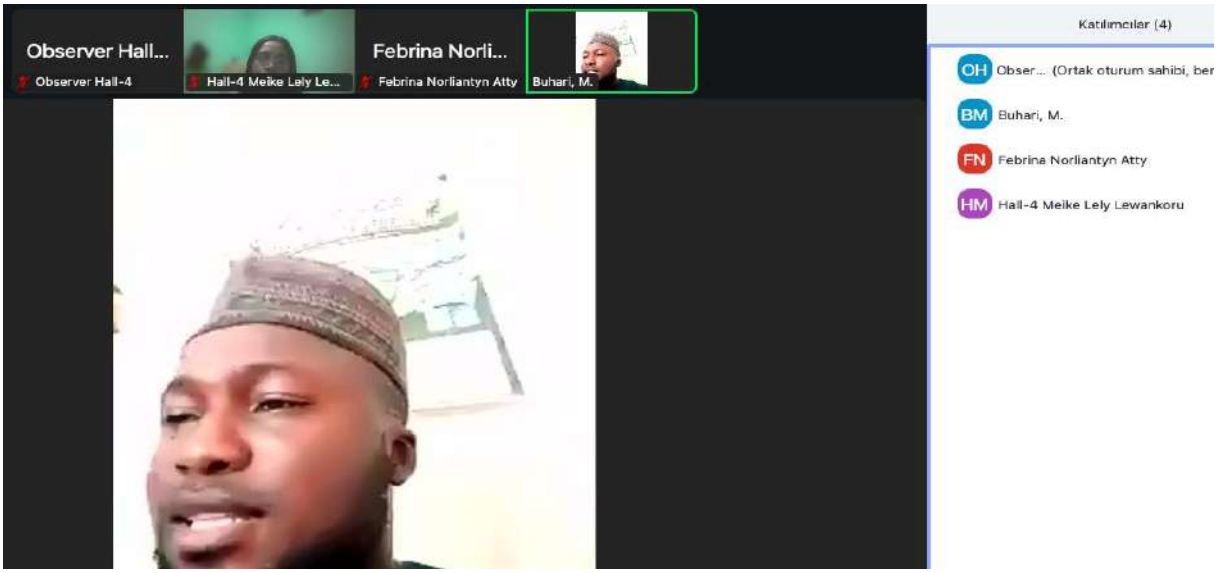

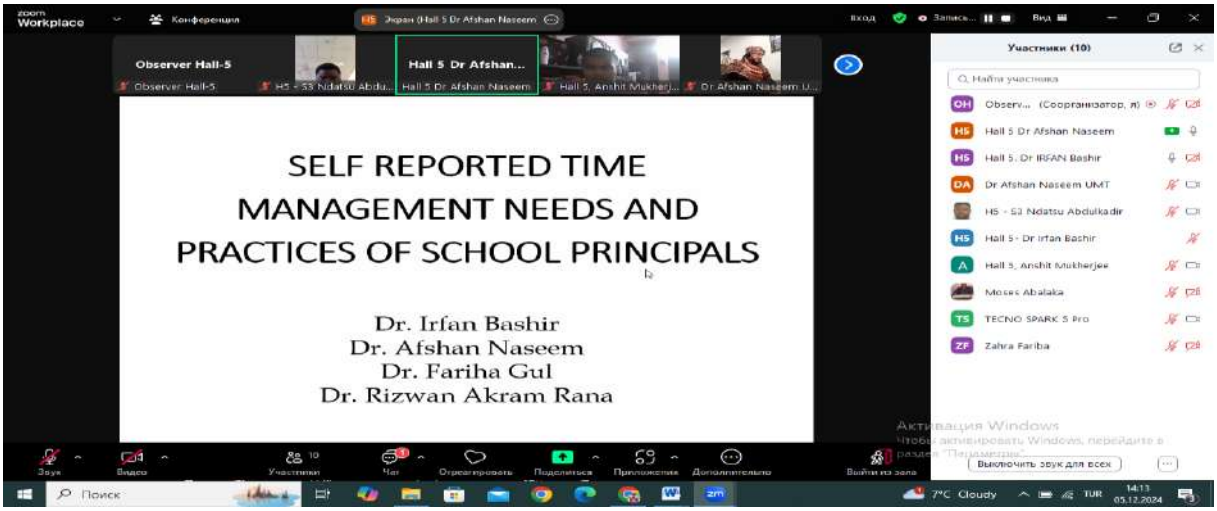

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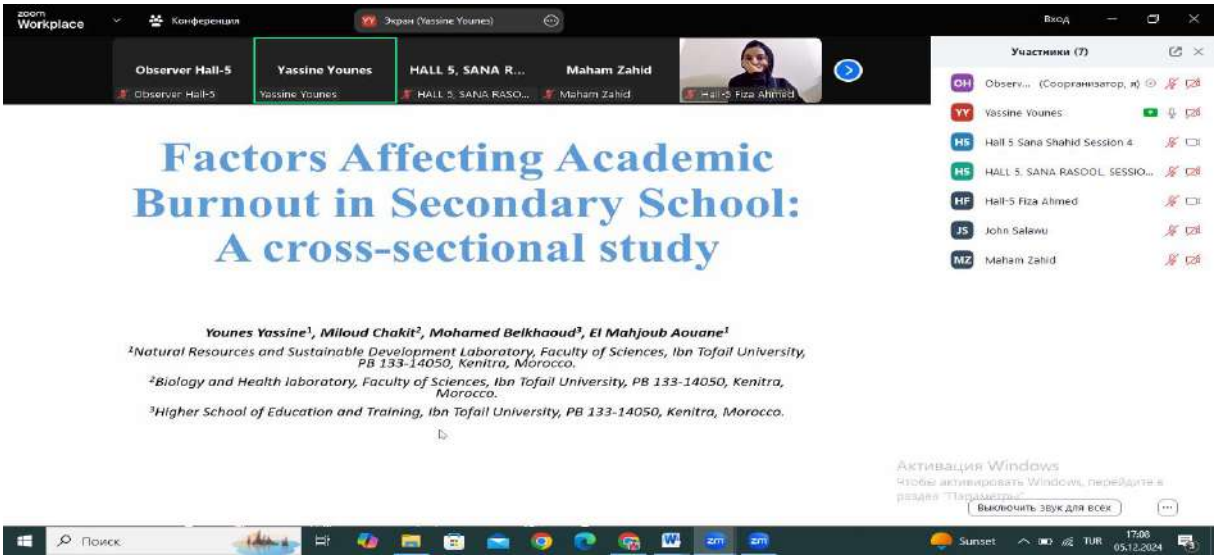

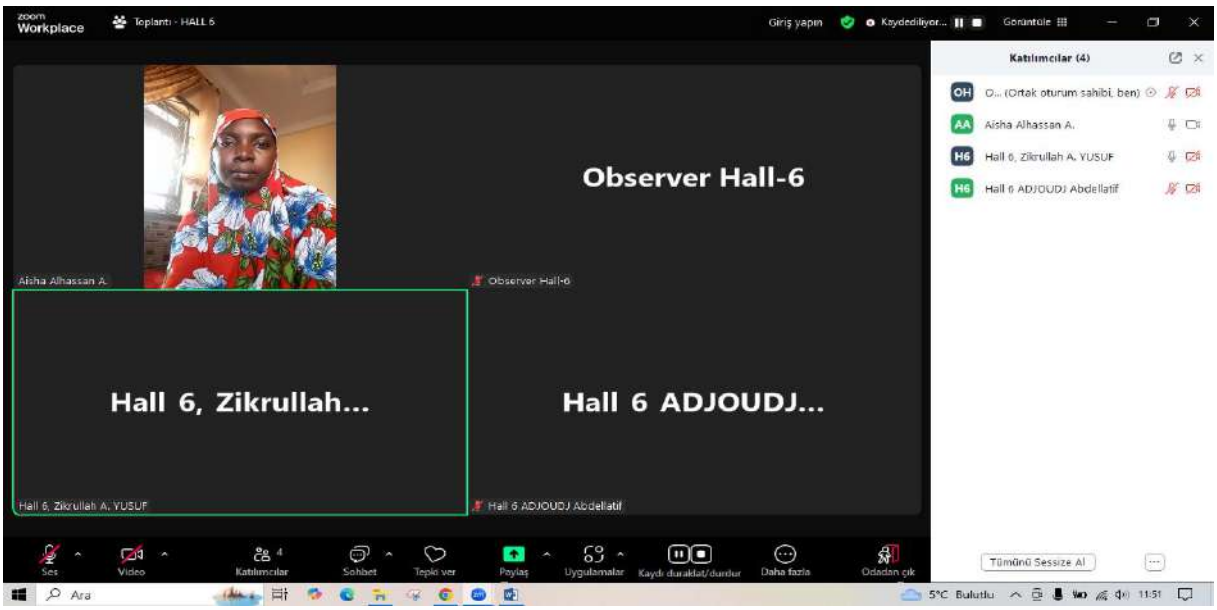

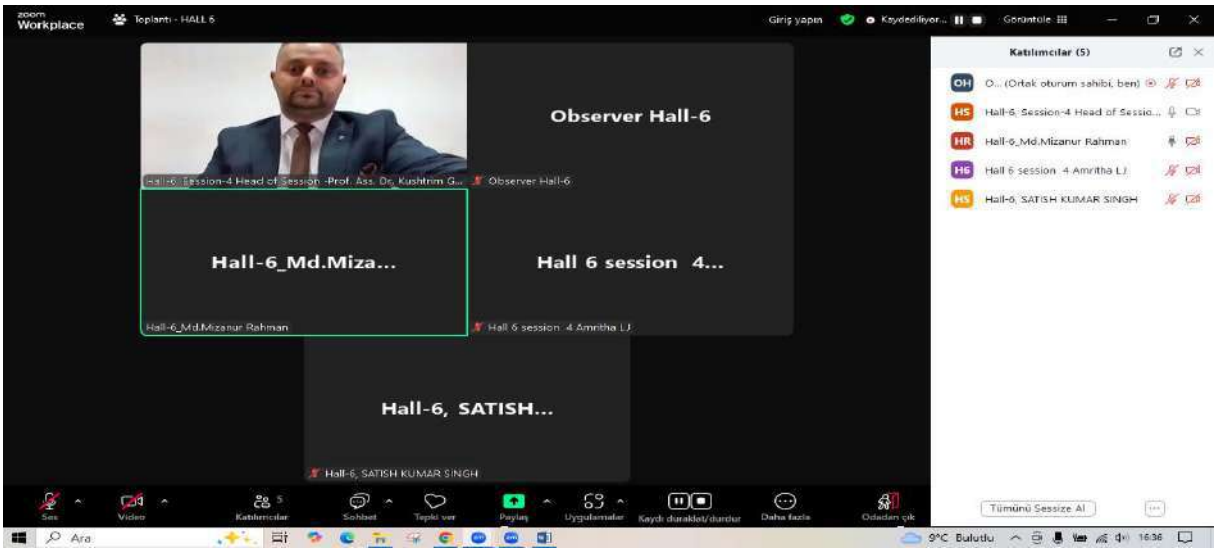

8th INTERNATIONAL HALICH CONGRESS ON MULTIDISCIPLINARY SCIENTIFIC RESEARCH

December 3-5, 2024 / Istanbul

CONGRESS PROGRAM

Online (with ZOOM Conference)

Meeting ID: 860 5266 6988

Passcode: 030405

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HEAD OF SESSION: Asst. Prof. Dr. Aslı GALİOĞLU		
Aleyna ÇEVİK Prof. Melihat TÜZÜN	Tekirdağ Namık Kemal University	EXPRESSIVE APPROACHES IN PORTRAIT PAINTINGS; THE EXAMPLE OF RICHARD GERSTL
Suzanna Juma gizi Osmanova	Azerbaijan State University of Culture and Arts	THE ROLE OF SAMAD VURGUN'S HOME MUSEUM IN INTRODUCING HIS PERSONALITY
Suzanna Juma gizi Osmanova	Azerbaijan State University of Culture and Arts	SCIENTIFIC CLASSIFICATION OF THE EXHIBITION AT THE SAMAD VURGHUN HOUSE MUSEUM
Assoc. Prof. Burçin Ünal	Ankara Hacı Bayram Veli University	NEW APPEARANCES OF MELANCHOLIC EXPRESSION IN CONTEMPORARY ART
Asst. Prof. Dr. Aslı GALİOĞLU	Sinop University	THE ROLE OF MUSIC IN SOCIAL MOVEMENTS: 'BARAYE' AND THE IRANIAN PROTESTS
Asst. Prof. Dr. Leyla KADERLİ Pınar ARIK	Erciyes University	THE DIGITAL TWIN AND 3D REPLICA PRODUCTION OF HASAN BEY FOUNTAIN IN ERKİLET NEIGHBORHOOD, KAYSERİ
Pınar ARIK Prof. Dr. Gonca BÜYÜKMIHÇI	Erciyes University	THE POWER OF MATERIALS IN REVITALIZING ARCHITECTURAL HERITAGE: THE CASE OF 461 POWERHOUSE ARTS
Turushan KAYSERİ Prof.Dr. Gamze SÜPÜREN MENGÜÇ	Ege University	MOISTURE TRANSMISSION IN FABRICS: COMPARISON OF THE RESULTS MEAUSURED BY VERTICAL WICKING TEST AND DROP TEST

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DATE	TIME	SESSION
• 03.12.2024	• 09^{00}–11^{00} • Turkiye Time	• HALL-2 • SESSION-1

HEAD OF SESSION: Assoc. Prof. Dr. Gökhan KÜLEKÇİ		
Res. Asst. Mahfuz PEKGÖZ Prof. Dr., İlker TEKİN Sema GÜZELDAL	Karabuk University	INVESTIGATION OF PHYSICAL AND MECHANICAL PROPERTIES OF GEOPOLYMER COMPOSITES PRODUCED WITH IRON AND STEEL INDUSTRY WASTES
Res. Asst. Mahfuz PEKGÖZ Prof. Dr., İlker TEKİN Ziya YAVUZ	Karabuk University	INVESTIGATION OF PHYSICAL AND MECHANICAL PROPERTIES OF GEOPOLYMER COMPOSITES PRODUCED FROM IRON AND STEEL INDUSTRY WASTE AND GLASS INDUSTRY WASTE
Abdülkadir GÜLEÇ	Kahramanmaras Sutcu İmam University	INVESTIGATION OF THE EFFECT OF DIFFERENT AGGREGATE AND FLY ASH RATIOS ON THE MECHANICAL PROPERTIES OF CALCIUM ALUMINATE CEMENT CONCRETE
Asst. Prof. Dr. Hikmet Bayırtepe Mustafa Selçuk Özdemir	Gazi University	INVESTIGATION OF DIRECTION, LANE AND VEHICLE TYPE BASED MICROSCOPIC TRAFFIC FLOW PARAMETERS IN RURAL STATE HIGHWAY: POLATLI-SİVRİHİSAR CASE
Assoc. Prof. Dr. Aysun ALTIKAT	Igdır University	SMALL FORM AND BIG PROBLEM OF PLASTIC: MICROPLASTICS AND ECOSYSTEM DAMAGE
Assoc. Prof. Dr. Gökhan KÜLEKÇİ Dilağra ÖZSOY	Gumushane University	STATISTICAL INVESTIGATION OF SUBWAY FIRES IN THE WORLD IN TERMS OF OCCUPATIONAL HEALTH AND SAFETY
Assoc. Prof. Dr. Gökhan KÜLEKÇİ Demet LÜLECİ	Gumushane University	OCCUPATIONAL HEALTH AND SAFETY IN HISTORICAL BUILDING FIRES IN TURKEY

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DATE	TIME	SESSION
• 03.12.2024	• 09^{00}–11^{00} • Turkiye Time	• HALL-3 • SESSION-1

HEAD OF SESSION: Prof. Dr. Mehmet Han ERGÜVEN		
Prof. Dr. Mehmet Han ERGÜVEN	Kırklareli University	GERMAN MODEL DESTINATION MANAGEMENT IN HEALTH BASED RURAL DEVELOPMENT: THE CASE OF BAVARIA
Prof. Dr. Mehmet HAN ERGÜVEN Res. Asst. Dr. Damla ERDEM	Kırklareli University	TEORİDEN UYGULAMAYA ORMAN BANYOSU
Assoc. Prof. Dr. Fatih BUDAK Sehernur UZUN	Karamanoğlu Mehmetbey University	AN EVALUATION OF PALESTINIAN HEALTHCARE SERVICES BEFORE AND AFTER THE AL-AQSA FLOOD
Assoc. Prof. Dr. Şahin ÇETİNKAYA	Aksaray University	TWIN DEFICIT HYPOTHESIS AND STUDY ON TURKEY
Assoc. Prof. Dr. Şahin ÇETİNKAYA	Aksaray University	AN ECONOMIC ANALYSIS ON DIGITAL HEALTH IN TURKEY
Gizem KABAN Sefa YAPRAK	Sakarya University of Applied Sciences	MODERN MANAGEMENT APPROACHES: TOTAL QUALITY MANAGEMENT IN HEALTH CARE
Assoc. Prof. Dr. Hasan Basri Karayel	Kütahya Dumlupınar University	HERBS OF MEDICINAL VALUE USED IN THE CORONAVIRUS PANDEMIC IN KÜTAHYA AND ITS SURROUNDINGS
Assoc. Prof. Dr. Hasan Basri Karayel	Kütahya Dumlupınar University	INVESTIGATION OF SOME BIOLOGICAL AND PHYTOCHEMICAL PROPERTIES OF CISTUS LAURIFOLIUS L. HERB (MDA-MB231; Breast Cancer Epithelium)
Asst. Prof. Dr. Aybegum KALYONCU AYCENK Asst. Prof. Dr. Onur YALCIN	Ordu University	TWO RARE CASES OF NEWBORN UMBLICAL ANOMALLY; MECKEL'S DIVERTICULUM AND URACHAL CYST ANOMALLY İN UMBLICAL CORD HERNIA

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HEAD OF SESSION: **Assist Prof. Hawkar Omar Ali**		
Juraj Dobrila University of Pula	Nada Poropat Jeletić	EXPLORING MULTILINGUAL DYNAMICS IN THE ISTRIAN BILINGUAL DISCOURSE
Abubakar Saddeeq Aliyu Ajibogun Samuel Umar Ibrahim Abdullahi Mohammed Shu'aibu Tanko, Linus	Kaduna State College of Education Federal University of Education	THE ROLE OF MOTHER TONGUE EDUCATION IN THE ACHIEVEMENT OF SUSTAINABLE DEVELOPMENT GOALS IN NIGERIA
Abbas Dakhil Abd	Jamia Millia Islamia University	LANGUAGE AS A TOOL OF COLONIAL POWER: ANALYZİNG FANON'S PERSPECTIVE ON LINGUISTIC ALIENATION
Research Assistant Dr. Graziella MASINDRAZANA	University of Antananarivo	DIALECTICAL DISCOURSE FOR CONFLICT RESOLUTION AND PEACE BUILDING
Assist Prof. Hawkar Omar Ali	Koya University	MAJOR CHALLENGES CONFRONTING EFL HIGH SCHOOL TEACHERS
Dott.ssa Giulia PERFETTO Professoressa Maria Annarumma	Università degli Studi di Salerno	LINGUISTIC COMMUNICATION IN SPECIAL EDUCATION
Harold Jan R. Terano, PhD	Camarines Sur Polytechnic Colleges	THE RESEARCH PRODUCTIVITY AND PROSPECTIVE RESEARCH PATHWAYS: A CASE OF CAMARINES SUR POLYTECHNIC COLLEGES, PHILIPPINES
Nusirat B. YUSUF Saheed O. YAHYA Yekeen I. JIMOH	Kwara State College of Education (Technical)	ASSESSMENT OF SCIENCE TEACHERS' KNOWLEDGE AND USE OF INFORMATION AND COMMUNICATION TECHNOLOGY FOR TEACHING IN KWARA STATE SECONDARY SCHOOLS

DATE	TIME	SESSION
• 03.12.2024	• 09^{00}–11^{00} • Turkiye Time	• HALL-5 • SESSION-1

HEAD OF SESSION: GEORGE CHINYEAKA EZECHUKWU

ZAINAB ABUBAKAR IBRAHIM	National Biotechnology Resource and Development agency	EVALUATING THE CONCENTRATION OF HEAVY METALS IN EFFLUENT IRRIGATED VEGETABLES AROUND INDUSTRIAL AREA OF ABUJA
BABA HAMED Samia	Higher School of Biological Sciences in Oran	ISOLATION AND STRUCTURAL ANALYSIS OF ALGINATES FROM LAMINARIA USING FTIR AND NMR
Assistant Professor K.R.Padma K.R.Don	Sri Padmavati Mahila Visvavidyalayam (Women's) University Bharath University	BIOETHICAL CONSIDERATIONS IN MEDICAL BIOTECHNOLOGY: CHALLENGES AND THEIR PERSPECTIVES
Tripti Sharma Afroz Alam	Banasthali Vidyapith	BRYOPHYTES- A PROMISING SOURCE OF HERBAL MEDICINE DUE TO THEIR VAST POOL OF PHYTOCHEMICAL COMPOUNDS
Neveen S. Geweely	Cairo University	THE ROLE OF SUSTAINABLE ECO-FRIENDLY CINNAMALDEHYDE FOR THE CONSERVATION OF CULTURAL HERITAGE
Afrah Mahdi Aldhalimi Kawther Kadhem Abd-Alrudhe Hassan Hawraa Ghassan Hussein Salim	University of Kufa	PHYSIOLOGICAL AND ANATOMICAL STUDY OF THE ROLE OF PHYTOREMEDIATION OF MUSTARD PLANT IN REDUCING POLLUTANTS IN NAJAF GOVERNORATE/IRAQ
Hassan, S.A Abdul-Hadi J.S Iweajunwa, S.O Onwuzuluike, A.N Odii - Akpa C. 1 V Salith, H .S. Ezeofor A. O.	National Biotechnology Development Agency (NABDA)	THE IMPACT OF WATER EFFLUENT ON THE WATER QUALITY OF RECIPIENT COMMUNITIES AROUND FCT, NIGERIA
GEORGE CHINYEAKA EZECHUKWU	National Biotechnology Research and Development Agency (Nbrda)	ANTI-SALMONELLA ACTIVITY OF NAUCLEA LATIFOLIA LEAF ETHYL ACETATE FRACTION AGAINST SALMONELLA ENTERICA TYPHI

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HEAD OF SESSION: **Sani Inusa Milala**		
Sajjad Haider Khan DR Waseem Bari Dr Yasir Tanveer Dr Bashir Umehani	Government College University Faisalabad	REDUCING RESISTANCE TO CHANGE THROUGH LONG TERM ORIENTATION: A TPB APPROACH WITH AUTHENTIC LEADERSHIP AND ORGANIZATIONAL JUSTICE
Ibe, Phibian E Ikegwu, Emmanuel M. Akinbo, Oyeronke O Fadiji, Patience O. Udofia, Ima-Obong E.	Yaba College of Technology	ASSESSMENT OF CONSUMERS AWARENESS AND PREFERENCE FOR MEAT (STEAK) COOKERY SPICES IN SELECTED CATERING OPERATIONS IN YABA LGA, LAGOS STATE
DR CHUKWUEMEKA G. EME PROF NNABUIFE, E. K. N	National Open University of Nigeria Nnamdi Azikiwe University	DYNAMIC CAPABILITIES AND FIRM PERFORMANCE OF SELECTED QUOTED FOOD AND BEVERAGES COMPANIES IN EUROPE
DR CHUKWUEMEKA G. EME (PhD)	National Open University of Nigeria (NOUN)	FACTORS INFLUENCING RURAL-URBAN MIGRATION OF YOUTHS IN ABIA STATE, NIGERIA
DR. CHUKWUEMEKA G. EME (PhD)	National Open University of Nigeria (NOUN)	APPLICATIONS OF ARTIFICIAL INTELLIGENCE IN THE 21 ST CENTURY MANUFACTURING INDUSTRY IN NIGERIA: INSIGHT FROM SELECTED MANUFACTURING COMPANIES IN ABIA STATE, NIGERIA
Musbahu Abdulkadir Falaki Sani Inusa Milala	Federal Polytechnic Kabo Universiti Tun Hussein Onn Malaysia	FRAMEWORK FOR ESG INTEGRATION IN THE NIGERIAN REAL ESTATE MARKET: EXPLORING THE INTERPLAY OF INTERNAL FORCES AND CLIMATE CHANGE DYNAMICS
Musa Mustapha Babayo Sani Inusa Milala	Federal Polytechnic Kabo Universiti Tun Hussein Onn Malaysia	THE NEXUS BETWEEN TELECOMMUNICATION POLICIES AND REAL ESTATE SUSTAINABILITY: A CASE STUDY OF NITDA NIGERIA
Musa Mustapha Babayo Sani Inusa Milala	Federal Polytechnic Kabo Universiti Tun Hussein Onn Malaysia	INTEGRATING TELECOMMUNICATION INFRASTRUCTURE IN REAL ESTATE AND FACILITIES MANAGEMENT: ANALYZING NITDA'S ROLE IN NIGERIA'S SMART CITY DEVELOPMENT

DATE	TIME	SESSION
• 03.12.2024	• 11^{30}–13^{30} • Turkiye Time	• HALL-1 • SESSION-2

HEAD OF SESSION:

Lec. Dr. Kadriye YILDIZ	Cyprus International University	A RESEARCH METHOD PARADIGM: THE USE OF QUALITATIVE RESEARCH IN SPECIAL EDUCATION
Prof. Dr. Sabriye SEVEN Asst. Prof. Dr. Meryem KONU KADİRHANOĞULLARI	Atatürk University Kafkas University	INSTRUCTORS' VIEWS ON STEM EDUCATION PRACTICES
Prof.Dr. Mehmet Arif ÖZERBAŞ AYTURGAN KASIMALİEVA	Kyrgyzstan-Turkiye Manas University	INVESTIGATION OF PSYCHOLOGICAL CHARACTERISTICS OF ADOLESCENTS AND ADULTS WITH ATTENTION DEFICIT AND HYPERACTIVITY DISORDER (KYRGYZSTAN SAMPLE)
Aycan ŞERMAMATOVA Prof.Dr. Mehmet Arif ÖZERBAŞ	Kyrgyzstan-Turkiye Manas University	EXAMINING UNIVERSITY STUDENTS' ALEXITHYMIA LEVELS IN TERMS OF DIFFERENT VARIABLES (Case of Kyrgyzstan)
Lalə Allahverdiyeva	Nahchivan State University	ON THE FORMATION OF ORGANIZATIONAL SKILLS OF MASTER'S EDUCATORS
Prof. Dr, Hüseyin ÖZTÜRK	Gaziantep University	FREE TIME ACTIVITIES OF STUDENTS PREPARING FOR THE KPSS EXAM RESEARCH OF PARTICIPATION FORMS
Dr. Lec. İbrahim Emre GÜNAY	Yıldız Technical University	AN EVALUATION ON JOURNALIST ALI SUAVI IN THE LATE OTTOMAN PERIOD
Hacer KARA Emine KÖSEN	Karatay Akabe Elementary School Selcuk Public Education Center	WHAT DOES THE TURKISH CENTURY EDUCATION MODEL ADD TO THE LITERATURE AND WHAT DOES IT SAY TO THE EDUCATION COMMUNITY?

HEAD OF SESSION: **Prof. Dr. Nilgün SARIKAYA**		
Res. Asst. Gamze İLERİ	İstanbul Beykent University	IN THE SHADOW OF ALGORITHMS: ARTIFICIAL INTELLIGENCE AND ETHICAL DILEMMAS IN MARKETING
Elçin SÖĞÜT Assoc. Prof. Dr. Vildan ATEŞ	Ankara Yıldırım Beyazıt University	DETERMINING THE FACTORS AFFECTING USERS' ACCEPTANCE OF GENERATIVE ARTIFICIAL INTELLIGENCE
Özge DURAN ÖZDEMİR Assoc. Prof. Dr. Farıd HUSEYNOV	Gebze Technical University	THE IMPACT OF CHATBOTS ON CUSTOMER SATISFACTION IN E-COMMERCE: A LITERATURE REVIEW
Asst. Prof. Dr. Hasan Selçuk ETİ	Tekirdağ Namık Kemal University	A LITERATURE REVIEW ON COMPULSIVE BUYING BEHAVIOUR
Feride YAVAŞ Asst. Prof. Dr. Hasan Selçuk ETİ	Tekirdağ Namık Kemal University	EVALUATION OF E-COMPLAINTS ABOUT ONLINE SHOPPING APPLICATIONS: A QUALITATIVE STUDY
Prof. Dr. Remzi ALTUNIŞIK Prof. Dr. Nilgün SARIKAYA	Sakarya University	CURRENT CHANGES IN MARKETING RESEARCH DUE TO THE INFLUENCE OF ARTIFICIAL INTELLIGENCE (AI) AND SOME FUTURE PREDICTIONS
Assoc. Prof. Dr. Volkan TEMİZKAN	Karabuk University	EFFECTIVE HEALTH TOURISM MARKETING STRATEGIES IN HEALTH MANAGEMENT
Assoc. Prof. Dr. Turhan ERKMEN Tuğçe KILIÇ	Yıldız Technical University	THE ROLE OF AUTHENTIC LEADERSHIP, IN THE EFFECT OF QUITTING QUIET ON EMPLOYEE TURNOVER INTENTION

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DATE	TIME	SESSION
• 03.12.2024	• 11^{30}–13^{30} • Turkiye Time	• HALL-3 • SESSION-2

HEAD OF SESSION:		
Çelebi Balaban Prof. Dr., Erman Yükseltürk	Kırıkkale University	USING MINECRAFT AS AN EDUCATIONAL AND SCIENTIFIC LEARNING TOOL
Gamze Eker Tepe Prof. Dr., Erman Yükseltürk	Kırıkkale University	USE OF MICRO: BIT CARDS IN PROGRAMMING EDUCATION
Asst. Prof. Dr. Halime SUVAY EKER	İstanbul Gedik University	CATEGORICAL REGRESSION ANALYSIS OF THE EFFECT OF REGION AND INCOME GROUP VARIABLES ON INFORMATION AND COMMUNICATION TECHNOLOGY DEVELOPMENT INDEX OF COUNTRIES
Mustafa Doğukan BAŞALAN	Hatay Mustafa Kemal University	DIGITAL MANIPULATION WITH ARTIFICIAL INTELLIGENCE ALGORITHMS: AUTOMATED PROPAGANDA AND AUDIENCE INFLUENCE STRATEGIES
Bedriye Ekingen Ergün GÜMÜŞ	Bursa Technical University	FEATURE EXTRACTION AND SELECTION METHODS USED IN DETECTING DISTRIBUTED DENIAL OF SERVICE ATTACKS
Sevilay ALTUN Prof. Dr. Bilal ATASOY	Gazi University	INFORMATION TECHNOLOGY TEACHERS' PERSPECTIVES ON DATA SCIENCE EDUCATION FOR MIDDLE SCHOOL STUDENTS
Kübra KARABULUT Asst. Prof. Dr. Ebubekir SEYYARER Asst. Prof. Dr. Murat KOCA	Van Yüzüncü Yıl University	INTEGRATION OF RANDOM FOREST REGRESSION WITH ATOMIC SEARCH OPTIMIZATION: A STUDY ON IRIS AND NHANES DATASETS
İbrahim Şahan Suhap Şahin Samet Diri Furkan Türkoğlu Bedirhan Meğer Yiğit Ünal Çiğdem Bebek	Kocaeli University Pronet Security Inc.	CAMERA TAMPERING DETECTION FOR SURVEILLANCE SYSTEMS: PRONET COMPANY APPLICATION

Online (with ZOOM Conference)

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DATE	TIME	SESSION
• 03.12.2024	• 11^{30}–13^{30} • Turkiye Time	• HALL-4 • SESSION-2

HEAD OF SESSION: **Dr. Haruna Karamba**		
Dr. Chokri BAYOUDH Mrs Afifa MAJDOUB Pr. Taoufik BETTAIEB	Regional Research Centre on Horticulture and Organic Agriculture University of Carthage	PRELIMINARY IN VITRO PROPAGATION TRIALS OF CACTUS Opuntia robusta
Dahmardeh Mehdi Sarabandi Masomeh Seyedabadi Esmaeil	Zabol University	ECONOMIC AND EMERGY ANALYSIS OF LOCAL MUNG BEAN AND COWPEA PRODUCTION SYSTEMS IN HIRMAND CITY
Paul Abiodun Babarinde Adetunji Olusegun Adeyinka Olusegun Adetokunbo Adekunle Amao Oyetoun Dunmola Aishatu Shettima Atibioke Oluwatoyin Adeola Makinde Olufunmilola Olawunmi Adetoro Gbenga Opeyemi Ayodele Tajudeen Justice	National Biotechnology Research and Development Agency university of Ilorin Nigeria stored products Research Institute	ECONIMIC ANALYSIS OF OIL PALM FRUITS PRODUCTION AMONG WOMEN IN EDO STATE, NIGERIA
Ogungbemi Kunle Alejo Ayokunle O Adeniyi Boluwaji M. Ayangbemi Busola T. Popoola Samuel T. Solomon-Ibuwunwa Oluwakemi M.	Nigerian Stored Products Research Institute	IMPACT OF BEESWAX AND ESSENTIAL OIL COATINGS ON SHELF LIFE AND QUALITY OF MANGO FRUITS
Haruna Karamba Zainab Umar Zandam Usaini Aliyu	Hussaini Adamu Federal Polytechnic Kazaure	ISOLATION AND IDENTIFICATION OF BACTERIA IN RETAILED SMOKED FISH SOLD IN KAZAURE MARKET
Sadiq, M.S Singh, I.P Ahmad, M.M Adamu, M.Y	FUD SKRAU BUK MAUTECH	FINGER MILLET: A RESILIENT FAMINE CROP FOR MARGINAL FARMING HOUSEHOLDS
Sadiq, M.S Singh, I.P 2 Ahmad, M.M Sani, B.S	FUD SKRAU BUK	MUSHROOM FARMING FOR YOUTH EMPOWERMENT: A HIGH-VALUE CROP WITH MINIMAL LAND REQUIREMENTS
Bouaaza Ghizlane Chetto Ouiam Beniken Lhou Benkirane Rachid Benyahia Hamid	---	EFFECT OF EXPLANT TYPE AND PLANT GROWTH REGULATORS ON MICROPROPAGATION OF STEVIA REBAUDIANA TROUGH CALLOGENESIS AND INDIRECT ORGANOGENESIS

DATE	TIME	SESSION
• 03.12.2024	• 11^{30}–13^{30} • Turkiye Time	• HALL-5 • SESSION-2

HEAD OF SESSION: Prof. Dr. Marina Todor STOJANOVA

Dr. Tajudeen Ogunkunle Prof. Olumuyiwa Akin Olaniyi Mr. Oladipo, Isaiah Fisayo Dr. Rahman Saheed Bayonle	National Biotechnology Research and Development Agency University of Eswatini Ladoke Akintola University of Technology Cocao Research Institute of Nigeria (CRIN)	RICE (Oryza sativa. L) PRODUCTION TECHNOLOGIES (RPTs) ACCESSIBILITY: THE PREFEERED INFORMATION AND COMMUNICATION TECHNOLOGIES (ICTs) TOOLS AMONG WOMEN IN OGUN STATE, NIGERIA
Prof. Dr. Marina Todor STOJANOVA Acad. Prof. Dr. Dragutin A. DJUKIC Dr. Monika STOJANOVA	University of Ss. Cyril and Methodius University of Kragujevac Association for Scientific-research, Educational and Cultural Activities “Open Science”	IMPROVING BUDS’ WINTER RESISTANCE AND CLUSTERS’ CHEMICAL COMPOSITION OF 'CABERNET SAUVIGNON' GRAPEVINE THROUGH SOIL AND FOLIAR FERTILIZATION
Mbarka El Mouedden Jamal Mabrouki Driss Azdem Souad El Hajjaji	Mohammed V University in Rabat	SMART SENSORS FOR EFFICIENT IRRIGATION
Dr.Faiz Muhammad Shaikh Rasool Bux Junejo Saeed Ahmed Muhammadi Muhammad Zafar Wassan Syed Mujeeb Hyder Shah Muhammad Saeed Muhammadi Syed Mehtab Ali Shah	University of Larkano Quaid Awam Institute	IMPACT OF CLIMATE CHANGE RELATED SHIFTS IN THE AGRICULTURAL SYSTEM SPECIAL FOOD SECURITY AND LIVELIHOOD OF THE FARMING COMMUNITY IN SUKKUR SINDH-PAKISTAN
Ogbu Onyinye Christiana Oguebiri, E. Freeman, L.L. Mbonu, P.C. Mmoba, C. Igwudu, O.M.	Federal Polytechnic Oko Anambra	ODOUR CONTROLLED POULTRY MANURE; EFFECT ON OKRA (ABELMOSCNUS ESCLENTUS) PRODUCTION
YISA, E.N. Muhammad, H.U. Tsado, J.H. Ajayi, O.J. Shuaibu, U.	Federal University of Technology	EFFECT OF INPUT SUBSIDIES ON LIVELIHOOD ACTIVITIES OF RICE FARMERS UNDER VALUE CHAIN DEVELOPMENT PROGRAMME IN NIGER STATE, NIGERIA
Ajiwe, S. T Taiwo, B. F	Ajayi Crowther University Federal University of Agriculture	EFFICACY OF SOIL AMENDMENTS WITH BIO-FUMIGANT CROPS AND ANIMAL MANURE ON THE GROWTH AND FRUIT YIELD OF FUSARIUM WILT-INFECTED TOMATOES
Usman ABDULLAHI Abba GAMBO Emmanuel Hamawa ANDREW	LAKE CHAD RESEARCH INSTITUTE MAIDUGURI	ROLE OF AGRICULTURAL EXTENSION SERVICES AN ENTREPRENEURSHIP INNOVATION IN PROMOTING COOPERATIVE AMONG RURAL FARMERS IN BIU LOCAL GOVERNMENT AREA

Online (with ZOOM Conference)

Meeting ID: 860 5266 6988 / Passcode: 030405

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DATE	TIME	SESSION
• 03.12.2024	• 11^{30}–13^{30} • Turkiye Time	• HALL-6 • SESSION-2

HEAD OF SESSION:

Dr., Ellada HUSEYNOVA Dr., Farah MAMMADOVA Dr. Sabina GULIYEVA Dr. Nigar MALIKOVA	Azerbaijan Medical University	THE ROLE OF ANTIOXIDANTS IN CELLULAR DEFENSE MECHANISMS
Khaoula Mkhayar Kaouakeb Elkhattabi Samir Chtita Souad Elkhattabi	Sidi Mohamed Ben Abdellah-Fez University Mohammed V University Hassan II University of Casablanca	RATIONAL DESIGN OF NOVEL AGENTS FOR SLEEP DISORDERS: INSIGHTS FROM DRUG-LIKENESS, ADMET, AND MOLECULAR DOCKING DYNAMICS
Tabassum Bashir Dr. Deoshree Akhouri	Aligarh Muslim University	POST-COVID IMPACT ON SEVERITY OF SYMPTOMS AND EFFICACY OF MINDFULNESS-BASED COGNITIVE BEHAVIOR THERAPY FOR OBSESSIVE COMPULSIVE DISORDER WITH DEPRESSION: HOSPITAL-BASED INTERVENTIONAL STUDY
Professor Najim A. Yassin Lecturer Noor M. Qadri Oumeri	Duhok University University of Zakho	IDENTIFICATION OF FUNGI IN BURN WOUNDS USING CONVENTIONAL AND VITEK SYSTEM IN DUHOK CITY, IRAQ
Major Gheorghe GIURGIU Prof dr med Manole COJOCARU	Deniplant-Aide Sante Medical Center Titu Maiorescu University	THE THERAPEUTIC EFFECTS OF DENIPLANT NUTRACEUTICALS ON THE GUT MICROBIOME IN PATIENTS WITH PSORIASIS
Eman Atiq Neelam Bibi Umm Eman Syed Dr Anam Khan	Rawalpindi Women University	RELATIONSHIP BETWEEN SELF EFFICACY AND OCCUPATIONAL BURNOUT AMONG NURSING STAFF IN PAKISTAN: COPING STRATEGIES AS A FACILITATOR
Aloui Mourad Menana Elhalaoui	Sidi Mohamed Ben Abdellah University	NOVEL MX-106 HYDROXYQUINOLINE DERIVATIVES: 2D-QSAR MODELING, MOLECULAR DOCKING, MOLECULAR DYNAMICS SIMULATIONS, AND ADMET PREDICTIONS FOR POTENT SELECTIVE SURVIVIN INHIBITORS
EL ASLANI Malika OMARI Lhaj El Hachemi mhiliss imane Sebihi Rajaa	LPMAT	CLASSIFICATION OF GLIOMAS, MENINGIOMAS, AND PITUITARY TUMORS USING CONVOLUTIONAL NEURAL NETWORKS (CNN)

Online (with ZOOM Conference)

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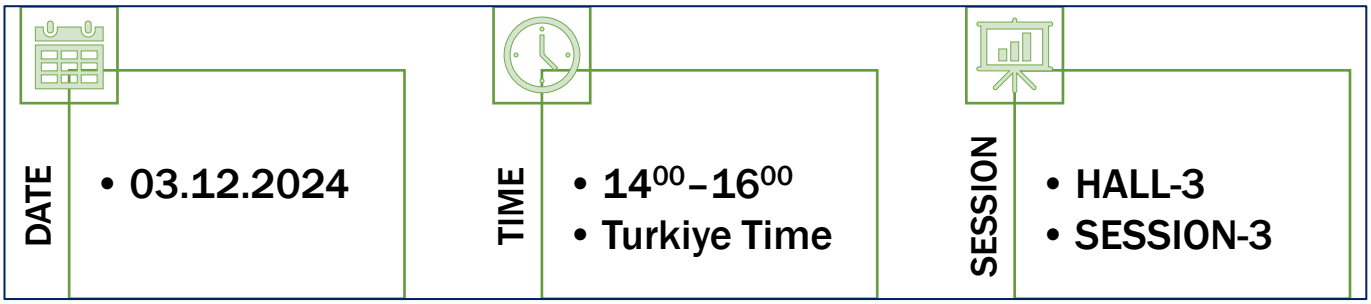
DATE	TIME	SESSION
• 03.12.2024	• 14^{00}–16^{00} • Turkiye Time	• HALL-1 • SESSION-3

HEAD OF SESSION: Ahmet Çağrı YÜZER

Cumali KARACA Assoc. Prof. Dr. Rıdvan GECÜ	Yıldız Technical University	PRODUCTION AND COMPARISON OF PROPERTIES OF ORGANIC-FILLED PLASTIC COMPOSITES FOR REDUCING PLASTIC USE IN INDUSTRY
Elif Zehra ATUKEREN Ayşegül TİRYAKİ Asst. Prof. Dr. Songül ULAĞ Rabia YILMAZ ÖZTÜRK	Turkish Biotechnology Institute, Presidency of Turkish Health Institutes Marmara University	PRODUCTION AND CHARACTERIZATION OF POLYURETHANE FILM LAYER FOR SKIN DISEASES
Ahmet Çağrı YÜZER Assoc. Prof. Dr. Kürşad Oğuz OSKAY	Cumhuriyet University	INVESTIGATION OF THE OPTIMUM PRODUCTION CONDITIONS FOR ANODIZING COATINGS APPLIED TO ALUMINUM ALLOYS AND TESTING FOR DEFENSE INDUSTRY APPLICATIONS
Fikrican ÇİFTÇİ	Koluman Automotive Industry Inc.	MECHANISMS OF POST-WELD DISTORTION AND SHAPE CHANGES IN METAL STRUCTURES
Fikrican ÇİFTÇİ	Koluman Automotive Industry Inc.	A REVIEW OF WELDING METHODS FOR CYLINDRICAL PIPES- TIG, MIG, AND LASER WELDING
Yasin KIZILGÜN Mehmet Ali KURGUN Onur Can KIRIT	Koluman Automotive Industry Inc.	WELDED and BOLTED COMPACT TYPE BUMPER DESIGN FOR ALL-TERRAINIAN TRUCKS COMPLIANT WITH R58.03 REGULATION
A. Vahap YAMAN	Koluman Automotive Industry Inc.	REAL-WORLD PERFORMANCE OF CHEMICAL SEALANTS: UNDERSTANDING THE GAP BETWEEN THEORY AND PRACTICE
A. Vahap YAMAN	Koluman Automotive Industry Inc.	EVALUATING CHEMICAL SEALANT EFFECTIVENESS UNDER HUMIDITY STRESS- PERFORMANCE METRICS AND LONG-TERM RELIABILITY
Asst. Prof. Dr. İsmail Hakkı TARHAN Asst. Prof. Dr. Yeşim TARHAN	Tokat Gaziosmanpaşa University Ardahan University	OPTIMAL INFILL DESIGN FOR 3D-PRINTED STRUCTURAL CONCRETE BEAMS AND WALLS

DATE	TIME	SESSION
• 03.12.2024	• 14^{00}–16^{00} • Turkiye Time	• HALL-2 • SESSION-3

HEAD OF SESSION: Dr. Fatma ÇAKIR		
Fzt., Mehmet KAMALI Asst. Prof. Dr. Öznur Özge ÖZCAN Prof. Dr. Mesut KARAHAN	Uskudar University	INVESTIGATION OF RELATIONSHIPS BETWEEN ATTENTION, EXECUTIVE FUNCTION, BALANCE AND POSTURAL CONTROL IN CHILDREN DIAGNOSED WITH AUTISM SPECTRUM DISORDER
Res. Asst. Dr. Sevilay Seda BAŞ Assoc. Prof. Dr. Bahar ANAFOROĞLU Assoc. Prof. Dr. Sadettin Volkan KOPAR Assoc. Prof. Dr. Serbülend ARPA Berranaz TURAL Yağmur KARABELA	Ankara Yıldırım Beyazıt University	COMPARISON OF TRUNK POSITION SENSE AND MUSCULOSKELETAL PROBLEMS IN MUSICIANS AND NON-MUSICIANS: A CROSS-SECTIONAL STUDY
Numan YAVUZ Assoc. Prof. Dr. Fatih SÖKE Lec. Dr. İsmail UYSAL Prof. Dr. Canan YÜCESAN	University of Health Sciences Mugla Sıtkı Kocman University Ankara University	THE RELIABILITY AND VALIDITY OF THE NOVEL LOWER-EXTREMITY DEXTERITY ASSESSMENT IN PATIENTS WITH MULTIPLE SCLEROSIS
Dr. Fatma ÇAKIR Prof. Dr. Gülbahtiyar DEMİREL	Sivas Cumhuriyet University	ALTERNATIVE AND COMPLEMENTARY THERAPIES USED BY WOMEN DIAGNOSED WITH BREAST CANCER FOR TREATMENT



HEAD OF SESSION:		
Res. Asst. Dr. Gözde Hafize YILDIRIM	Recep Tayyip Erdoğan University	WATER MANAGEMENT IN AGRICULTURE AND SOLUTIONS FOR DIMINISHING WATER RESOURCES
Res. Asst. Dr. Gözde Hafize YILDIRIM	Recep Tayyip Erdoğan University	APPLICABILITY OF PRECISION IRRIGATION TECHNOLOGIES UNDER DROUGHT CONDITIONS
Vedat ÇALIŞKAN Assoc. Prof. Dr. Mehmet Settar ÜNAL	Sırnak University	INVESTIGATING THE SUITABILITY OF GRAPE VARIETY LEAVES FOR PICKLING IN ULUDERE AND BEYTÜŞŞEBAP DISTRICTS OF ŞIRNAK PROVINCE
Vedat ÇALIŞKAN Assoc. Prof. Dr. Mehmet Settar ÜNAL	Sırnak University	A LITTLE KNOWN BERRY FRUIT: Jackal Plum
Res. Asst. Dr. Gözde Hafize YILDIRIM	Recep Tayyip Erdoğan University	IMPACT OF POTASSIUM FERTILIZERS ON PLANT RESILIENCE AND CROP QUALITY
Res. Asst. Dr. Gözde Hafize YILDIRIM	Recep Tayyip Erdoğan University	SEAWEED-BASED FERTILIZERS: BIOLOGICAL CONTENT AND AGRICULTURAL ADVANTAGES
Mutlu UÇAR Res. Asst. Dr. Ecem KARA Assoc. Prof. Dr. Gökhan BAKTEMUR	Sivas University of Science and Technology	IMPACT OF SODIUM CHLORIDE-CONTAINING NUTRIENT MEDIA ON THE GROWTH OF SPINACH (Spinacia oleracea L.) VARIETIES
Res. Asst. Dr. Ecem KARA Prof. Dr. Hatıra TAŞKIN Assoc. Prof. Dr. Gökhan BAKTEMUR	Sivas University of Science and Technology Cukurova University	EFFECT OF DIFFERENT DROUGHT DOSES ON THE DEVELOPMENT OF ARUGULA (Erucasativa L.) UNDER IN VITRO CONDITIONS

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DATE	TIME	SESSION
• 03.12.2024	• 14^{00}–16^{00} • Turkiye Time	• HALL-4 • SESSION-3

HEAD OF SESSION: Dr. Khanh Giang Le		
Dr. Khanh Giang Le MSc. Vu Ngoc Phuong	University of Transport and Communications	DEVELOPING AN INTEGRATED BIM AND GIS MODEL TO SUPPORT THE IMPLEMENTATION OF INFRASTRUCTURE PROJECTS
Subhashish Dey	Seshadri Rao Gudlavalleru Engineering College	EXPERIMENTAL STUDY ON PARTIAL REPLACEMENT OF CEMENT WITH FLY ASH AND FINE AGGREGATE WITH ROBO SAND
Suyash Sagare Kirthiga.R Elavenil.S	Vellore Institute of Technology	MITIGATING LATERAL FORCES: AN ANALYTICAL STUDY OF COMPOSITE OUTRIGGER SYSTEMS IN HIGH-RISE CONSTRUCTION
MOUHINE Mohamed DERIFE Mina ABOUMDIAN Said TBATOU Taoufik	Ibn Tofail University Hassan 2 University	ENHANCING SEISMIC RESILIENCE OF IRREGULAR BUILDING STRUCTURES THROUGH THE INTEGRATION OF SHEAR WALLS
Aliyu Hassan	Air Force Institute of Technology	EXAMINING THE EFFECTS OF IMPROPER DISPOSAL OF SOLID WASTE ON URBAN FLOODING IN KADUNA CITY, NIGERIA
Mohammed Ouali Mahfoud Touhari	Djilali Bounaama University Acoustics and Civil Engineering Laboratory	ANALYSE THE BEHAVIOUR OF AN 11-STOREY HOUSE STRUCTURE IN ALGERIA USING NON-LINEAR STATIC ANALYSIS (PUSHOVER)
Nashin Saiyara Teothy Md Abid Alam Md Omik Hasan Nusaiba Binte Mamun	Rajshahi University of Engineering & Technology	IMPACT ANALYSIS OF URBAN RENEWAL AND COMPACT DEVELOPMENT PROGRAM IN HARIPUR, RAJSHAHI
Tran Kim Anh Nguyen Thanh Huong Quoc Minh	Vietnam Academy of Science and Technology	NANOMATERIALS CONTAINING RARE EARTH IONS AND APPLICATIONS

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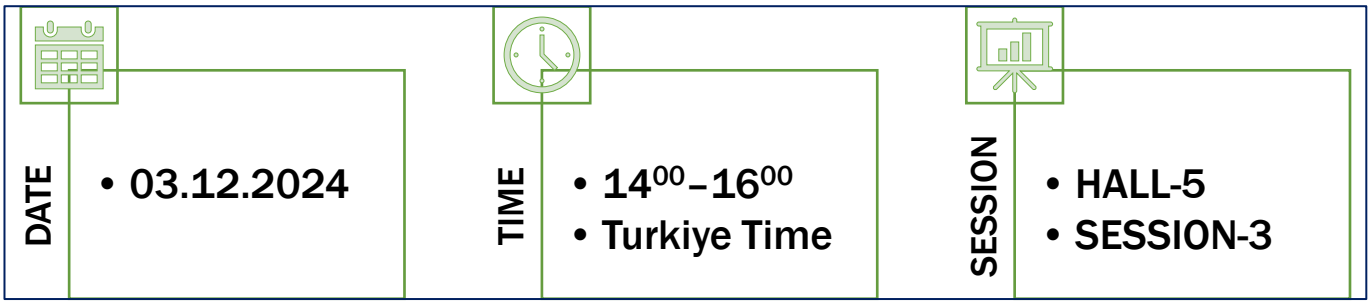
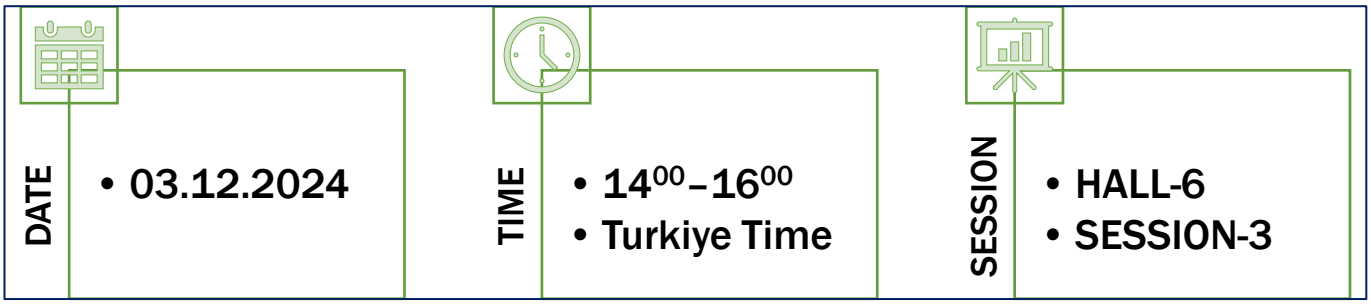


HEAD OF SESSION:		
Safiya Balarabe Aliyu Bala Sidi Aminu Abubakar Nafisa Muhammad Abdullahi	Federal University of Education Kano Bayero University Sa'adatu Rimi Collage of Education	SYNERGISTIC PHYTOCHEMICAL AND TOXICITY STUDIES OF ANOGEISSUS LEIOCARPUS (DC.) STEM BARK AND ACACIA ATAXACANTHA (LINN) LEAVES EXTRACTS
Pratishtha Thakur Vinod Kumar	Sushant University G D Goenka University	ANIMAL SCIENCE
Idris H. Y. Muhammad A. A. Aminu A. Rufai. F. A. Atikat U. Zakari A. I. Musayyiba S. Almu,S.U. Abdulsalam,J. Minkailu,C.E.	Nigeria Institute for Trypanosomiasis (and Onchocerciasis) Research, Bayero University Kano	KNOWLEDGE, ATTITUDE AND PRACTICES OF AFRICAN ANIMAL TRYPANOSOMOSIS AMONG FULANI CATTLE REARERS IN LAMBU OF TOFA LOCAL GOVERNMENT AREA KANO STATE NIGERIA
Muhammad Amjad Syed Makhdoom Hussain Muhammad Mahmood Danish Riaz Nisar Ahmad	Government College University	EFFECTIVENESS OF FEEDING DIFFERENT BIOCHARS ON GROWTH, DIGESTIBILITY, BODY COMPOSITION, HEMATOLOGY AND MINERAL STATUS OF THE NILE TILAPIA, OREOCHROMIS NILOTICUS
FANIYI, Tolulope Oreoluwa	Ajayi Crowther University	ADOPTION OF BIOSECURITY PRACTICES AMONG RUMINANT FARMERS AND HERDERS
FANIYI, Tolulope Oreoluwa SOYELU, Oluseyi Temitope AYOOLA, Mathew Oluwaseyi AKINMOLADUN, Oluwakamisi Festus	Ajayi Crowther University College of Agriculture Engineering and Science Bowen University Adekunle Ajasin University	EXPLORING THE IMPACT OF GRAZING AND FEEDLOT SYSTEMS ON RUMINANT ANIMAL PRODUCTION: ASSESSING EFFICIENCY AND EFFECTIVENESS
Kareem, L.O. Suleiman, I.O. Inusa, S.K. Usman, A.M. Zubair J.I.	National Biotechnology Research and Development Agency Bayero University	EVALUATION OF GENETIC DISTANCE AND SIMILARITIES AMONG THREE INDIGENOUS SHEEP POPULATIONS IN SEMI ARID KANO
Shanza Khanum Muhammad Asad Tehseen Fatima	University of Education	THERAPEUTIC POTENTIAL OF SAREEHN (ALBIZIA LEBBECK) SEEDS EXTRACT AGAINST TOXIC EFFECTS OF GRAPHENE NANOSHEETS IN MORI (CIRRHINUS MRIGALA)



HEAD OF SESSION: Khaoula El Hamsas Elyoubi		
Khaoula El Hamsas Elyoubi Mohamed El Basri Hasnaa Harmouzi Khalil El-Hami	Mohammed V University in Rabat Moulay Ismail University	EXTRACTION AND ANALYSIS OF LINEAMENT IN THE MIDDLE MOULOUYA WATERSHED USING REMOTE SENSING SOFTWARE
Khaoula El Hamsas Elyoubi Mohamed El Basri Hasnaa Harmouzi Khalil El-Hami	Mohammed V University in Rabat Moulay Ismail University	ARTIFICIAL INTELLIGENCE WATER EXPLORATION OF MIDDLE MOULOUYA BASIN, (EAST OF MOROCCO)
Adama SANGARE Lahsen ACHKOUCH Ahmed ATTOU Ahmed RACHID Younesse El CHEIKH Daouda DIAKITE	Hassan First University of Settat Ministry of Mines and Geology	APPLICATION OF GEOMETRIC AVERAGE MODEL FOR IDENTIFYING HIGH MINERALIZATION ZONES USING GAMMA-RAY SPECTROMETRY DATA IN THE BOKE BAUXITE DISTRICT, REPUBLIC OF GUINEA
Bashir Tanimu Muhammad Mujahid Muhammad Ala'min Danladi Bello Aliyu Usman Bamaiyi Nura Idris Abdullahi Khalid Sulemain	Ahmadu Bello University	STUDY OF ENERGY DISSIPATION LOSSES ON STEPPED SPILLWAY OF DIFFERENT GEOMETRIES
Mohamed Mastir Ali Dahbi Khalil El-Hami	Mohammed V University in Rabat	DEEP REINFORCEMENT LEARNING IN NATURAL DISASTER MANAGEMENT: ADDRESSING OVERFITTING TO IMPROVE GENERALIZATION
Bilal Shah Dicky Muslim Raden Irvan Sophian	Padjadjaran University	PETROLOGICAL INSIGHTS INTO LANDSLIDE PREVENTION: A CASE STUDY OF INDONESIA'S VOLCANIC, SEDIMENTARY, AND METAMORPHIC TERRAINS
Fowotade, Sulayman. A. Umar Adamu A. Haruna Danyaya Mustapha Basiru Ahmad Fadhila. Hafsat Usman K Bashari Hamisu	Hussaini Adamu Federal Polytechnic	NEEM BARK MEDIATED - BIOSYNTHESIS AND CHARACTERISATION OF SILVER NANOPARTİCLES
FUAD HASAN MAKSUD	University of Dhaka	RECENT INNOVATIONS IN SOLID WASTE MANAGEMENT: INTERNET OF THINGS AND ARTIFICIAL INTELLIGENCE TOWARS SMART MANAGEMENT SYSTEM

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HEAD OF SESSION: **Assoc. Prof. Dr. Belgin YILDIRIM**		
Asst. Prof. Dr. Melike İLERİSOY Fatma Nurhayat KAYAŞ	İstanbul Ticaret University	EXAMINING ADOLESCENTS' ADMIRATION BEHAVIOR IN THE CONTEXT OF PARASOCIAL RELATIONSHIPS
Nilüfer BOZKURT Asst. Prof. Dr. Hande TASA	İstanbul Aydın University	THE RELATIONSHIP BETWEEN PERCEPTION OF DIGITAL LEADERSHIP AND JOB INSECURITY
ELMAS YAĞMUR HANZADE	Abdullah Gul University	STATISTICAL ANALYSIS OF GRADUATE THESES COMPLETED THE FIELD OF DEVELOPMENTAL PSYCHOLOGY IN TÜRKİYE
Gizem Berna DİREK Asst. Prof. Dr. Ramazan Çağlar ERCEN	İstanbul Arel University	INVESTIGATION OF THE RELATIONSHIP BETWEEN SELF-CONTROL, PHUBBING AND PROBLEMATIC SMARTPHONE USE IN ADULTS
Assoc. Prof. Dr. Anvar Abbasov	Baku Slavic University	ABOUT THE CURRICULUM OF HIGH SCHOOL TEACHERS
Assoc. Prof. Dr. Belgin YILDIRIM Esra MENGİOĞLU ŞİMŞEK	Aydın Adnan Menderes University	RETROSPECTIVE INVESTIGATION OF THESES THEMED 'NOISE' AT THE NATIONAL THESIS CENTER
Lec. Dr. Gülşah KAYSERİLİOĞLU Asst. Prof. Dr. Sema KOÇAŞLI Assoc. Prof. Dr. Gökçen Aydın AKBUĞA	Çankırı Karatekin University Ankara Yıldırım Beyazıt University Yozgat Bozok University	EFFECT OF PREOPERATIVE ANXIETY LEVELS OF DAY SURGERY PATIENTS ON POSTOPERATIVE PAIN AND QUALITY OF RECOVERY
Assoc. Prof. Dr. Belgin YILDIRIM Esra MENGİOĞLU ŞİMŞEK	Aydın Adnan Menderes University	DEPRESSION, ANXIETY AND STRESS IN HEALTH CARE WORKERS DURING THE COVID-19 PANDEMIC

DATE	TIME	SESSION
• 03.12.2024	• 16^{30}–18^{30} • Turkiye Time	• HALL-2 • SESSION-4

HEAD OF SESSION: Lec. Dr. Abdullah KÖSEOĞLU		
Asst. Prof. Sibel AYYILDIZ Zeynep POLAT	Karabuk University	THE EFFECT OF GEOGRAPHICAL AND SOCIOLOGICAL CHARACTERISTICS ON CULINARY CULTURE; A QUALITATIVE RESEARCH IN THE CASE OF GIRESUN
Res. Asst. Dr. Aslı YILDIRIM VARDİN Asst. Prof. Dr. Ali GÖNCÜ	Aydın Adnan Menderes University	THE PRESENCE OF POLYCYCLIC AROMATIC HYDROCARBONS (PAHs) IN BAKERY PRODUCTS AND REDUCTION METHODS
Lec. Dr. Abdullah KÖSEOĞLU Lec. Halil SUNAR Assoc. Prof. Dr. Alper ATEŞ	Bitlis Eren University Giresun University Selçuk University	STREET FOOT IN GASTRONOMY TOURISM: AN EVALUATION WITH A REVIEW APPROACH
Lec. Dr. Abdullah KÖSEOĞLU Lec. Halil SUNAR Assoc. Prof. Dr. Alper ATEŞ	Bitlis Eren University Giresun University Selçuk University	THE ROLE OF ZERO-WASTE RESTAURANTS IN GASTRONOMY TOURISM
Hilal Ceren Eren	Alanya University	CONTEMPORARY CULINARY TRENDS IN THE FUTURE GASTRONOMY: A REVIEW ABOUT LIVING CUISINE
Tuba FENKLİ ÇİZMECİ	Alanya University	IDENTIFICATION, HEALTH BENEFITS, AND CULINARY USES OF SOME EDIBLE WILD PLANTS GROWING IN THE ALANYA DISTRICT
Yusuf FIRTINA	Alanya University	INVESTIGATION OF THE USE OF ORANGE PEEL WASTES IN FERMENTED AND UNFERMENTED PRODUCTS

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DATE	TIME	SESSION
• 03.12.2024	• 16^{30}–18^{30} • Turkiye Time	• HALL-3 • SESSION-4

HEAD OF SESSION:

Ayten Qacar Gulnar Atakishiyeva Sevinç Muhtarova Associate Prof. Shukufa Eyvazova Associate Prof. Naila Veysova Professor Namiq Shikhaliyev	Baku State University Azerbaijan Technical University Baku Engineering University	METHANOLYSIS OF DICHLORODIAZADIENES SYNTHESIZED BASED ON 4-METHYLBENZALDEHYDE
Gulnar Atakishiyeva Sevinç Muhtarova Associate Prof. Sima Musayeva Associate Prof. Ilhama Hamdullayeva Associate Prof. Gulnara Babayeva Nigar Ahmedova	Baku State University Azerbaijan Technical University Azerbaijan State Pedagogical University	INSILICO STUDY OF 4-AZIDO-2-(4-METHOXYPHENYL)-5-(2-NITROPHENYL)-2H-1,2,3-TRIAZOLE AS A DRUG
İrem BALCI Assoc. Prof. Dr. Murat BİLEN	Gazi University University of Health Sciences	COATING WITH BORON COMPOUNDS OF TI6AL4V AND COCR ALLOYS SHAPED BY LASER MELTING IN 3D PRINTERS AND CHARACTERIZATION
Adil Elik Nail Altunay Seçkin Fesliyan	Sivas Cumhuriyet University	AN OVERVIEW OF MICROEXTRACTION TECHNIQUES
Aslı DÜLGER Assoc. Prof. Dr. Murat BİLEN	Gazi University Turkish Coal Enterprises General	BRINGING TÜRKİYE'S COAL INTO THE ECONOMY BASED ON ANALYSIS
Prof. Dr. Adil ELİK Prof. Dr. Nail ALTUNAY Res. Asst. Seçkin FESLİYAN	Sivas Cumhuriyet University	MODERN STRATEGY FOR TRACE ANALYSIS OF HEAVY METALS: GREEN PROCEDURES WITH MAGNETIC DEEP EUTECTIC SOLVENTS
Ceren HALKÖVER Assoc. Prof. Dr. Cansel TUNCER	Eskişehir Osmangazi University	SYNTHESIS AND APPLICATION STUDIES OF POLYMERIC DISPERSANTS FOR WATER BASED PAINTS
Seher SOYBİR Buse SEZER Çağla ÖLMEZ Kevser BAYKAL Ayla ALTINTEN	Gazi University	PLA/PS/ZnO AND PLA/PS/SiO 2 NANOCOMPOSITE SYNTHESIS FOR USE IN OIL-WATER SEPARATION

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DATE	TIME	SESSION
• 03.12.2024	• 16^{30}–18^{30} • Turkiye Time	• HALL-4 • SESSION-4

HEAD OF SESSION:

A. Attahiru B. Attahiru	Kebbi State University of Science and Technology	ASSESSMENT OF QUALITATIVE AND QUANTITATIVE PHYTOCHEMICALS OF PARKIA BIGLOBOSA AQUEUOS LEAVES EXTRACT
Javid Ahmadzada Hajibalaa Jiani Wang	Shanghai University	ENERGY DIPLOMACY IN THE CASPIAN REGION: A NEW ERA OF COOPERATION AND COMPETITION
Neda Tabassum Qazi Inamur Rahman	Integral University	g-C 3 N 4 /TiO 2 : A NOVEL APPROACH FOR VİSİBLE LİGHT PHOTOCATALYSİS
Rabab Allili Jamal Mabrouki Miloudia SLAOUI	Mohammed V University of Rabat	CHEMICAL AND BIOLOGICAL SENSORS FOR CONTAMINANT MONITORING
Abdulhakeem Olajuwon Oladeji Prof. Labake Ajoke Fadipe Prof. Lafia-Araga Ruth Anayimi	Federal University of Technology	EFFECTS OF PHENOLIC CONTENTS FROM THE RHIZOMES OF CURCUMA LONGA AND STALKS OF SOGHUM BICOLOR ON TEXTILES
Sulaiman, Z. Fadipe, L. A. Shaba, E. Y.	Federal University of Technology	EXPLORING ANTIOXIDANT CAPACITY AND PHYTOCHEMICAL COMPOSITION IN THREE MEDICINAL PLANTS FOR HEALTH APPLICATIONS
Ganesh Kumar Prof. RY Hiranmai Ajay Neeraj	Central University of Gujarat	BIOREMEDIATION STRATEGIES TO ALLEVIATE HEAVY METALS FOR SOIL QUALITY MANAGEMENT AND SUSTAINABLE AGRICULTURE
Fatima Akram	Government College University	COMPUTATIONAL INSIGHTS OF GEOMETRIC AND ELECTRONIC PROPERTIES OF PYROVANADATES

DATE	TIME	SESSION
• 03.12.2024	• 16^{30}–18^{30} • Turkiye Time	• HALL-5 • SESSION-4

HEAD OF SESSION: **Dr. Mark Anthony N. Polinar**		
Kinga Galewska	The John Paul II Catholic University of Lublin	THE RELATIONSHIPS BETWEEN CO_2 EMISSIONS, ECONOMIC GROWTH, AND ENERGY CONSUMPTION. AN ANALYSIS FROM THE PERSPECTIVE OF ENVIRONMENTAL ECONOMICS
Garayeva Lamiya Natiq	Azerbaijan State University of Economics	INTEGRATION OF DIGITAL TECHNOLOGIES IN INTERNAL CONTROL AND AUDIT
Manuel TOLOTTO Mattia CORAZZA Associate professor Eva Reka KERESZTES	Budapest Business University	BLOOMBERG GPT: REVOLUTIONIZING AI IN FINANCIAL ANALYSIS
Marcella ILON Associate professor Eva Reka KERESZTES	Budapest Business University	THE ROLE OF ARTIFICIAL INTELLIGENCE IN REVOLUTIONIZING THE FASHION INDUSTRY
Yousif Mohammed Osamah Mohammed Ali Raad	Jamia Millia Islamia university	INNOVATIVE APPROACHES TO ENHANCING ISLAMIC PORTFOLIO MANAGEMENT: LEVERAGING TECHNOLOGY FOR ETHICAL AND FINANCIAL SUSTAINABILITY
PhD. Habil. Cristina Raluca Gh. Popescu	The Bucharest University of Economic Studies	TURKEY'S SUSTAINABILITY TRANSFORMATION: ADOPTING CIRCULAR ECONOMY PRINCIPLES
Leona Jane P. Simbajon Dr. Mark Anthony N. Polinar	Mabolo National High School	BUILDING A SUSTAINABLE FUTURE: A SYSTEMATIC REVIEW OF MARKETING STRATEGIES FOR MICRO, SMALL, AND MEDIUM ENTERPRISES
Muhammad Umer Quddoos Danish Alam Amir Rafique Muhammad Adeel Arslan Ahmad Siddiqi Muhammad Sajid Amin Muhammad Abdul Basit Ur Rahim	COMSATS University Government College University Institute of Industrial and Control System The Islamia University of Bahawalpur California State University Long Beach	INVESTIGATING THE ROLE OF TANGIBLE ATTRIBUTES OF SMARTPHONES IN DEVELOPING BRAND ASSOCIATION- EMERGıNG TRENDS IN AN EMERGING ECONOMY

DATE	TIME	SESSION
• 03.12.2024	• 16^{30}–18^{30} • Turkiye Time	• HALL-6 • SESSION-4

HEAD OF SESSION: Dr. Vladimir Saveljev		
Houcine MİLOUDİ Mohamed MİLOUDİ Mohammed Hamza BERMAKI Abdelber BENDAOUD Abdelkader GOURBI	UDLUniversity AZUR University Ahmed Ben Bella University	PREDICTION OF CONDUCTED ELECTROMAGNETIC INTERFERANCES GENERATED BY TWO VARIABLE SPEED DRIVES
Keshav Sinha P.Krishna Priya M.Chakresh Varman K. Sujatha	Dr. M.G. R. Educational and Research Institute	ENHANCING ELECTRIC VEHICLE RANGE WITH SOLAR INTEGRATION AND WIRELESS CHARGING TECHNOLOGY
BENABDELLAH YAGOUBI	Mostaganem University	OBSERVATION OF THE INSTANTANEOUS POWER SPECTRAL DENSITY
Ayyoub Zeghlache Abdelmoumin Ouali	University of M'sila University of Biskra	SUPER-TWISTNG SLIDING MODE-BASED FAULT TOLERANCE IN PMSM CONTROL SYSTEMS
Naima Khamkham Karim NEGADI Abderrahmane BERKANI	University of Tiaret	ADVANCES IN VIRTUAL SYNCHRONOUS GENERATOR CONTROL FOR STABILIZING LOW-INERTIA POWER SYSTEMS
Sanjeev Kumar Sowmya Anand	SSIT BIET	MODELLING OF HYBRID AC/DC MICROGRID AND POWER FLOW ANALYSIS
Dr. Vladimir Saveljev	Konyang University	MOIRÉ MEASUREMENTS USING ALMOST PERIODIC GRIDS

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DATE	TIME	SESSION
• 04.12.2024	• 09^{00}–11^{00} • Turkiye Time	• HALL-1 • SESSION-1

HEAD OF SESSION: Assoc. Prof. Dr. Emine Ceylan ÜNAL AKBULUT

Lec. Dr. Şeyda DEMİR	Yalova University	A SUGGESTED DEFINITION OF THE CONCEPT OF SOCIALIZATION IN OLD AGE IN THE CONTEXT OF SOCIAL WORK THEORIES
Asst. Prof. Dr. Mehmet KOCA Assoc. Prof. Dr. Serdar DENİZ	Malatya Turgut Özal University	EVALUATION OF RATES OF CHANGE OF DEPARTMENT AND LEAVING FROM THE INSTITUTION AFTER AN EARTHQUAKE AMONG HEALTH CARE WORKERS: THE EXAMPLE OF A TRAINING AND RESEARCH HOSPITAL
Asst. Prof. Dr. Kıvanç UZUN Pelin YAPRAKDAL UZUN	Uşak University Burdur Mehmet Akif Ersoy University	FREE WILL AND HAPPINESS IN EMERGING ADULTS: EXAMINING THE MEDIATING ROLE OF AGENCY
Hatice Hilal GÜNDÜZ	Yalova University	AN EXAMINATION OF THE BURNOUT EXPERIENCES OF INDIVIDUALS WITH CONGENITAL DISABILITIES AND INDIVIDUALS WITH ACQUIRED DISABILITIES
Yağmur ELÇİBOĞA	Yalova University	QUALITY OF LIFE AND LIFE SATISFACTION IN OLD AGE: PSYCHOSOCIAL NEEDS AND SUPPORT APPROACHES FROM A SOCIAL WORK PERSPECTIVE
Hilal YILDIZ BALABAN	Yalova University	AFET BÖLGESİNDE GÖREV ALAN KADIN ÇALIŞANLARIN İKİNCİL TRAVMA İLE BAŞA ÇIKMA BECERİLERİ: MARAŞ-ANTEP DEPREMİ ÖRNEĞİ
Assoc. Prof. Asmet Idris-gizi Ismayilkhanov	Azerbaijan State Pedagogical University	ORGANISATION OF THE SPIRITUAL-PSYCHOLOGICAL ENVIRONMENT IN THE FAMILY
Assoc. Prof. Dr. Emine Ceylan ÜNAL AKBULUT Enes KARADUMAN Dilara BİLİR	Yıldız Technical University	THE EFFECT OF MUSIC THERAPY ON SLEEP QUALITY IN ELDERLY INDIVIDUALS
Assoc. Prof. Dr. Emine Ceylan ÜNAL AKBULUT Merve Sultan TAYFUR Güneş ASLIHAN	Yıldız Technical University	MUSIC THERAPY APPROACHES APPLIED TO CHILDREN IN OUR COUNTRY AND THEIR COMPARISON

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DATE	TIME	SESSION
• 04.12.2024	• 09^{00}–11^{00} • Turkiye Time	• HALL-2 • SESSION-1

HEAD OF SESSION: Prof. Dr. Emine ALDIRMAZ		
Assoc. Prof. Dr. Irmak KARADUMAN ER Asst. Prof. Dr. Sezen TEKİN Prof. Dr. Selim ACAR	Çankırı Karatekin University Gazi University	ROOM TEMPERATURE NH 3 GAS SENSOR BASED ON ZnO THIN FILM PREPARED BY SILAR TECHNIQUE
Asst. Prof. Dr. Elanur DİKİCİOĞLU Prof. Dr. Elif ORHAN	Yuksek İhitisas University Gazi University	INVESTIGATION OF THE ELECTRICAL PARAMETERS OF GRAPHENE-BASED AND GRAPHENE QUANTUM DOT-BASED SCHOTTKY DIODES
Prof. Dr. Emine ALDIRMAZ Prof. Dr. Meryem EVECEN	Amasya University	EFFECTS OF NICKEL AND ZINC ON PHASES FORMING IN COPPER-BASED ALLOYS
Prof. Dr. Emine ALDIRMAZ Prof. Dr. Meryem EVECEN	Amasya University	DIFFERENTIAL SCANNING CALORIMETRY AND SCANNING ELECTRON MICROSCOPE STUDIES IN CU-ZN-AL AND CU-ZN-NI ALLOYS
Prof. Dr. Meryem EVECEN Prof. Dr. Emine ALDIRMAZ	Amasya University	NONLINEAR OPTIC (NLO) ANALYSIS OF [XCl 2 (C 11 H 10 N 2)](X=Zn, Cu and Ni) COMPOUNDS
Prof. Dr. Meryem EVECEN Prof. Dr. Emine ALDIRMAZ	Amasya University	ELECTRONIC PROPERTIES (MEP, FMO, NBO AND MULLIKEN CHARGES) OF SCHIFF BASE ZINC AND NICKEL COMPLEXES
Serhat ÇİNDEMİR Assoc. Prof. Dr. Abdurrahman GÜNDAY	Bursa Uludag University	INVESTIGATION OF FACTORS AFFECTING THE MEASUREMENT ACCURACY OF A 2D LiDAR DEVICE UNDER EXPERIMENTAL CONDITIONS
F.Sh.Ahmadova L.A.Balayeva Di Sun Xiaozhou T.A. Mamedova	Baku State University	InSe SEMİCONDUCTOR CRYSTAL

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DATE	TIME	SESSION
• 04.12.2024	• 09^{00}–11^{00} • Turkiye Time	• HALL-3 • SESSION-1

HEAD OF SESSION: Prof.Dr. Pınar KAYA SAMUT		
Res. Asst. Dr. NURAN AKDAĞ Asst. Prof. Dr. DUYGU KALKAY	İstanbul Gelisim University Bandırma Onyedi Eylul University	THE IMPACT OF E-COMMERCE AND DIGITAL TRANSFORMATION ON ECONOMIC GROWTH: THE CASE OF TÜRKİYE
Prof.Dr. Pınar KAYA SAMUT	Akdeniz University	INVESTIGATION OF GREEN LOGISTICS PERFORMANCE ON A GLOBAL SCALE FOR THE YEARS 2007-2023
Asst. Prof. Dr. Gökhan KORKMAZ	Sırnak University	LOGARITHMIC LOSS FUNCTION
Pelin YAPRAKDAL UZUN Prof. Dr. İlknur KOCA	Burdur Mehmet Akif Ersoy University Mugla Sıtkı Kocman University	GLOBAL STABILITY AND UNIQUENESS IN FRACTIONAL-ORDER COVID-19 DYNAMICS
Assoc. Prof. Dr. Ali KONAK Asst. Prof. Dr. Neşe YILDIZ	Karabuk University Toshkent Amaliy Fanlar University	EFFECTS OF GLOBALIZATION ON POVERTY AND INCOME DISTRIBUTION: THE CASE OF UZBEKISTAN
Asst. Prof. Dr. Neşe YILDIZ Assoc. Prof. Dr. Ali KONAK	Karabuk University Toshkent Amaliy Fanlar University	MIGRATION POLICIES OF INTERNATIONAL ORGANIZATIONS: THE UN EXAMPLE
Özgür PİRİNÇ Assoc. Prof. Dr. Ahmet FEYZİOĞLU Dr. Trevor Uyi OMORUYİ	Telcoset University of Chester Chester Business School, the University of Chester	INTEGRATION OF DYNAMIC DATA FROM DIFFERENT SENSORS USING DECISION SUPPORT SYSTEMS FOR LONG RANGE IOT SYSTEM
Gülşah VARDAR ÇOLAK Prof. Dr. Seyhun DOĞAN	İstanbul University	DIGITALIZATION AND INDUSTRY 4.0
Gülşah VARDAR ÇOLAK Prof. Dr. Seyhun DOĞAN	İstanbul University	THE ROLE OF BLOCKCHAIN AND FINTECH IN DIGITAL TRANSFORMATION

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DATE	TIME	SESSION
• 04.12.2024	• 09^{00}–11^{00} • Turkiye Time	• HALL-4 • SESSION-1

HEAD OF SESSION:

Jamila Rahmani Binazir Mubariz	ahlul- bayet international university	EXAMINING THE SITUATION OF AFGHAN MIGRANT WOMEN IN IRAN, ESPECIALLY DIFFICULT WORKING CONDITIONS AND LOW WAGES
Adesanmi, Moses Ademola Adesiyan, Oyinade Funke	Federal Polytechnic Osun State Polytechnic	BARRIERS TO WOMEN'S ECONOMIC EMPOWERMENT IN RURAL NIGERIA: A STUDY OF CULTURAL PRACTICES IN 'LONELY DAYS'
Ayesha Batool Dr. Farkhanda Anjum Hafsa Naeem Rimsha Anwar Zainab Fatima Hina Shahid	University of Agriculture	ASSESSING THE IMPACT OF SOCIAL AND NUTRITIONAL DETERMINANTS ON MATERNAL AND CHILD HEALTH IN RURAL AND URBAN PUNJAB
THOMAS, EKAOBONG AKAN	AKWA IBOM STATE POLYTECHNIC	ASSESSING THE ROLE OF CONSUMER ORGANISATIONS & NON-GOVERNMENTAL ORGANISATIONS IN ENSURING CONSUMER PROTECTION IN NIGERIA
Asma Akram Samrah Masud	Institute of Zoology Bahauddin Zakariya University	A REVIEW ON: FEMALE AS SCIENTIST/ WOMEN IN FIELD OF SCIENCE
Zahra Sahil Anisa Faizi	Ahl albayt University	EMPOWERING AFGHAN WOMEN THROUGH ECONOMIC PARTICIPATION
Tsiry ANDRIANISA RAMBEL	University of Antananarivo Madagascar	WOMEN'S ECONOMIC PARTICIPATION FOR RECOGNITION OF THEIR ENTREPRENEURSHIP
Dr. Neha	Swami Vivekanand Subharti University	GENDER EQUALITY AND WOMEN EMPOWERMENT TARGET OF UNITED NATIONS & ITS SUSTAINABLE DEVELOPMENT GOAL (SDG-5)

HEAD OF SESSION:		
Enkelejda Koka	University of Tirana	ITALIAN ADMINISTRATIVE MEASURES TARGETING NGO RESCUE VESSELS IN THE CENTRAL MEDITERRANEAN SEA: IN VIOLATION OF UN AND EU FACILITATION OF SMUGGLING AND TRAFFICKING NETWORKS
Irina-Ana DROBOT	Technical University of Civil Engineering	HOW AND WHY THE EUROPEAN UNION ENCOURAGES FICTION WRITING
Professor Akeem Adekunle AMODU Olalekan Eyitayo AJIBADE	Lead City University	THE IMPACT OF DIGITAL TRANSFORMATION ON GREEN GOVERNANCE IN NIGERIA
Dr. Priti Rana	University of Delhi	INDIA'S ADOPTION OF ELECTRIC VEHICLE POLICY: A STEP TOWARDS SUSTAINABILITY
MD ASHRAFUL AMIN AZIZUR RAHMAN FAHIM	TOKYO INTERNATIONAL UNIVERSITY	SHAPING GLOBAL ENERGY FUTURES: THE U.S. PRESIDENTIAL ELECTION AND BRICS IN A NEW WORLD ORDER
MD ASHRAFUL AMIN AZIZUR RAHMAN FAHIM	TOKYO INTERNATIONAL UNIVERSITY	THE GEOPOLITICS OF CRITICAL MINERALS: CHINA, RESOURCE NATIONALISM, AND BATTERY INNOVATİON
Babaei. Mohaddeseh	AhlulBayt International University	A RESEARCH ON THE CONCEPT OF MOTHERHOOD İN ISLAMİC FEMİNİST DİSCOURSE
Evghenia GUGULAN GHERMAN-GRIMAILO Ana-Maria	„Stefan cel Mare" Academy of the Ministry of Internal Affairs	LEGAL REFLECTIONS ON THE EUROPEAN ARREST WARRANT IN THE CONTEXT OF CROSS – BORDER AND TRANSNATIONAL COOPERATION

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DATE	TIME	SESSION
• 04.12.2024	• 09^{00}–11^{00} • Turkiye Time	• HALL-6 • SESSION-1

HEAD OF SESSION:

Dr.P.K.Chidambaram	New Prince Shri Bhavani College of Engineering and Technology	POWER GENERATION FROM WATER FLOW
Muralidhar MANAPURAM	North Eastern Regional Institute of Science and Technology	THE SCIENCE OF BIO-DIESEL PRODUCTION FROM JATROPHA OIL SEEDS AND ITS APPLICATION DOMAINS: A STUDY
Merzaka Dahmani Fouad Khaldi Driss Stitou Hamza Semmari	University of Batna 1 Higher National School of Renewable Energy & Environment and Sustainable Development PROMES Laboratory National Polytechnic School of Constantine	DYNAMIC MODELLING OF AN EFFICIENT HYDRAULIC BASED AIR CONDITIONER USING GIBBS SYSTEMS DYNAMIC
Oussama Ferfari Ines Chabani	University 20 August 1955-21000	THERMOKINETIC ANALYSIS OF SYAGRUS ROMANZOFFIANA FIBERS FOR SUSTAINABLE BIOENERGY APPLICATIONS
Ines Chabani Oussama Ferfari	University of 20 August 1955, 21000	HEAT TRANSFER OF A HYBRID NANOFLUID IN A POROUS HEAT EXCHANGER
Payam Tarighi Mehdi Shalchi Tousi	Ahlul Bayt International University	DIRECT TENSION INDICATOR WASHERS (DTI)
Abdelwaheb Hadou Imen Lalaymia	University 20 August 1955-21000	COMPREHENSIVE ANALYSIS OF DRACAENA DRACO FIBER PYROLYSIS: KINETICS, THERMODYNAMICS, AND RENEWABLE ENERGY POTENTIAL USING THERMOGRAVIMETRIC TECHNIQUES
Alexandrov V.S.	Kazan National Research Technical University named after A.N. Tupolev	APPLICATION OF A NEW APPROACH TO THE ANALYSIS OF THE TECHNICAL CONDITION OF SENSOR DEVICES BASED ON THEIR NOISE CHARACTERISTICS

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DATE	TIME	SESSION
• 04.12.2024	• 11^{30}–13^{30} • Turkiye Time	• HALL-1 • SESSION-2

HEAD OF SESSION: Prof. Dr. Erkan FİDAN		
Asst. Prof. Dr. Özge BOŞNAK Prof. Dr. Yunus ALYAZ Yusuf AKYILDIZ	Bursa Uludag University	3D MODELS AS COURSE MATERIAL
Prof. Dr. Erkan FİDAN	Bilecik Seyh Edebali University	SPHERE HEAD NON-HOLE METAL NEEDLES (INLAND WESTERN ANATOLIA EXAMPLES)
Prof. Dr. Erkan FİDAN	Bilecik Seyh Edebali University	CYCLADIC ARCHITECTURE IN THE BRONZE AGE: KASTRI AND PALAMARI SETTLEMENTS
Süleyman Ozan ÖZALLI Prof. Dr. Gökhan COŞKUN	Kutahya Dumlupınar University	HADRIAN PERIOD IONIC COLUMN CAPITALS OF THE ANCIENT CITY OF AIZANOI
Assoc. Prof. Dr. Yunus Emre TANSÜ Cennet TUNÇ	Gaziantep University	20 YANVAR: THE GLORY RESISTANCE OF THE AZERBAIJANI PEOPLE FROM MASSACRE TO INDEPENDENCE
Gulshan Aliyeva Fazil	Baku State University	POLITICAL INSTITUTIONS AND POLICY RESPONSE TO CLIMATE CHANGE
Asst. Prof. Dr. TAHA YILMAZ	Ardahan University	THE EMERGENCE OF TAX IN THE ISLAMIC SOCIETY AND ITS LEGAL BASIS
Asst. Prof. Dr. TAHA YILMAZ	Ardahan University	MEASURES TAKEN IN ISLAMIC LAW TO PROTECT PROPERTY IN TERMS OF ECONOMIC LIFE

DATE	TIME	SESSION
• 04.12.2024	• 11^{30}–13^{30} • Turkiye Time	• HALL-2 • SESSION-2

HEAD OF SESSION: Prof. Dr. Gülbahtiyar DEMİREL		
Hatice Kübra EK Assoc. Prof. Dr. Büşra ALTINEL	Selcuk University	OBESITY AND INTERNET ADDICTION
Feyza ACAR Nezihe BULUT UĞURLU Güllü YAZKAN Fatma BİRGİLİ	Mugla Training and Research Hospital Mugla Sıtkı Kocman University	CAFFEINE ADDICTION: PREVALENCE, EFFECTS, AND MANAGEMENT STRATEGIES
Feyza ACAR Nezihe BULUT UĞURLU Güllü YAZKAN Fatma BİRGİLİ	Mugla Training and Research Hospital Mugla Sıtkı Kocman University	SUBSTANCE MISUSE AMONG HEALTHCARE PROFESSIONALS AND THE NURSING APPROACH
Lec. Eda GÜNGÖR	Tokat Gaziosmanpaşa University	THE EFFECT OF PERSONALITY TRAITS ON UNIVERSITY STUDENTS' CYBER DATING ABUSE
Lec. Eda GÜNGÖR Assoc. Prof. Dr. Oya Sevcan ORAK	Tokat Gaziosmanpaşa University Ondokuz Mayıs University	ACCEPTANCE AND COMMITMENT THERAPY IN CARDIOVASCULAR DISEASES
Lec. Volkan KINA Assoc. Prof. Dr. Zümrüt AKGÜN ŞAHİN	Ardahan University Kafkas University	USE OF SU JOK METHOD IN NURSING
Assoc. Prof. Dr. Zümrüt AKGÜN ŞAHİN Lec. Volkan KINA	Kafkas University Ardahan University	THE CONCEPT OF DISCOURSE IN THE NURSING PROFESSION
Melike TÜRKMEN Asst. Prof. Dr. Nuriye PEKCAN	Üsküdar University	DETERMINATION OF THE STATUS OF RECEIVING PRENATAL CARE OF PRIMIPAROUS PREGNANT WOMEN
Dr. Hilal GÜVERİ Prof. Dr. Gülbahtiyar DEMİREL	Sivas Numune Hospital Sivas Cumhuriyet University	EFFECT OF VAGINAL EXAMINATION EXPERIENCE ON WOMEN'S HEALTH DURING NORMAL VAGINAL LABOR

DATE	TIME	SESSION
• 04.12.2024	• 11^{30}–13^{30} • Turkiye Time	• HALL-3 • SESSION-2

HEAD OF SESSION: Prof. Dr. Fatma Gökçe APAYDIN

Asst. Prof. Dr. Tuğba ŞENTÜRK	Manisa Celal Bayar University	DECOLORIZATION OF MALACHITE GREEN BY SPIRULINA PLATENSIS EXPOSED TO MICROPLASTIC STRESS
Mehtap BOZKURT Dr. Fırat HACIOĞLU Dr. Berna KANKILIÇ Ayşe Tuğçe GÜLEÇ Assoc. Prof. Dr. Emre DURMAZ	Gazi University Turkish Standards Institution	DEVELOPMENT OF A GC-MS METHOD FOR THE QUANTIFICATION OF PHTHALATES IN MEDICAL DEVICE SAMPLES AND CHEMICAL CHARACTERIZATION
Aysu EKER Res. Asst. Burcu TÜRKOĞLU Prof.Dr. Banu MANSUROĞLU	Yıldız Technical University	EVALUATION OF ACTIVE INGREDIENT WITH THERAPEUTIC POTENTIAL IN OVARIAN CANCER TYPES
Ayşenur Arslan Kübra Arancı Sümeyra Ayan Sevgi Gülyüz Alper Yılmaz Özgür Yılmaz	Yıldız Technical University TÜBİTAK Marmara Research Center Marmara University Istanbul University	OPTIMIZATION AND CHARACTERIZATION OF COMPOSITE NANOFIBERS FOR TISSUE ENGINEERING APPLICATIONS
Çetin TÖREMEN Özge KARATAŞ Şeyma YEŞİLADA İrem ÇEYİZ	VIKING Cleaning and Cosmetics	DEVELOPMENT OF A WASHING PROCESS FOR SUN CREAM STAINS
Latifa Abdulatif Ahmed Ayla Arslan	Uskudar University	ASSESSING THE PREDICTIVE ACCURACY OF FOUR IN SILICO TOOLS AND TWO ENSEMBLE MODELS FOR CLASSIFYING SCN1A VARIANTS LINKED TO DRAVET SYNDROME
Lec. BAHADIR KAAN UTLU Asst. Prof. Dr. CENGİZ ŞAHİN	Ankara Yıldırım Beyazıt University	EFFECTS OF VISUAL PROPAGANDA APPLICATIONS IN EQUESTRIAN SPORTS
Asst. Prof. Dr. Çağlar ADIGÜZEL Asst. Prof. Dr. Hatice KARABODUK Prof. Dr. Meltem UZUNHİSARCIKLI Prof. Dr. Fatma Gökçe APAYDIN Prof. Dr. Yusuf KALENDER	Gazi University	ABAMECTIN-INDUCED PANCREATIC TOXICITY IN RATS AND THE EFFECTS OF MELATONIN

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HEAD OF SESSION:		
Farha Shakeel (Research Scholar)	Aligarh Muslim University	HINDU INFLUENCE ON ISLAMIC SOCIETY AND CULTURE IN GUJARAT DURING 16 TH AND 17 TH CENTURY
Ananda Majumdar	University of Alberta	EXPLORING THE PROFOUND INTERCULTURAL LEGACY OF THE VIKINGS: A THOUGHT-PROVOKING JOURNEY INTO HERITAGE AND HISTORICAL MEMORY, INCLUDING THE CONCEPT OF 'OTHER THINGS'
Vitalii Andreiko Anatolii Myshko	Uzhhorod National University	THE FORMATION OF CZECH-SLOVAK INTERSTATE RELATIONS IN THE EARLY 1990s: EXPERIENCE FOR UKRAINE
Svitlana Myshko Katalin Lizák	Uzhhorod National University Ferenc Rákóczi II Transcarpathian Hungarian College of Higher Education	MULTICULTURALISM IN TRAINING FUTURE INTERNATIONAL RELATIONS SPECIALISTS AND TRANSLATORS
Svitlana LIUBYMENKO	Kherson State Agrarian and Economic University	LIBRARY AS A SCIENTIFIC AND INFORMATION CENTER OF EDUCATION
Svitlana TRYBUKH	Kherson State Agrarian and Economic University	STRATEGIC PUBLISHING: CHOOSING A JOURNAL TO INCREASE RESEARCH VISIBILITY
Victoria BUTREY	Kherson State Agrarian and Economic University	THE HISTORICAL PATH AND DEVELOPMENT OF THE SCIENTIFIC LIBRARY OF THE KHERSON STATE AGRARIAN AND ECONOMIC UNIVERSITY AS AN INTEGRAL PART OF THE EDUCATIONAL INSTITUTION
Oksana TOKOVYLO	Kherson State Agrarian and Economic University	NATIONAL HISTORY MUSEUMS: FROM A LOOK INTO THE PAST—ON THE WAY TO THE FUTURE

Online (with ZOOM Conference)

Meeting ID: 860 5266 6988 / Passcode: 030405

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DATE	TIME	SESSION
• 04.12.2024	• 11^{30}–13^{30} • Turkiye Time	• HALL-5 • SESSION-2

HEAD OF SESSION:

Lamia AZIB Redouane TLEMSANI Khadidja BELBACHIR Asmaa OURADIGHI	University of Science and Technologies of Oran Mohamed Boudiaf	ADVANCING PHONETIC CLASSIFICATION WITH A HYBRID EVOLUTIONARY NEURAL NETWORK MODEL
Ume Hani Rahat	Government College University Faisalabad	MITIGATING THE EFFECTS OF WORKPLACE OSTRACISM ON TURNOVER INTENTIONS IN THE IT SECTOR: THE ROLE OF EMOTIONAL EXHAUSTION AND TRANSFORMATIONAL LEADERSHIP
Amina Benaboura Rachid Bechar Walid Kadri	Hassiba Benbouali University	ENHANCING SECURITY AND EFFICIENCY IN IOT-FOG-CLOUD COMPUTING: A SURVEY ON TASK OFFLOADING STRATEGIES
Bahijjah Abdallah	Federal Polytechnic Kabo	HYBRID BLOCKCHAIN SOLUTIONS FOR SUPPLY CHAIN MANAGEMENT: ENHANCING SECURE AND TRANSPARENT TRACEABILITY WITH ADVANCED PRIVACY MEASURES
Anxhela Ferhataj	European University of Tirana	AI-DRIVEN PERSONALIZATION IN TOURISM: ANALYZING SUSTAINABLE TRAVEL PREFERENCES WITH MACHINE LEARNING
Igor Dobrača Tomislava Žajgar	Juraj Dobrila University of Pula (Croatia)	APPLICATION OF THE CODERUNNER PLUGIN IN PROGRAMMING LESSONS AT THE PRIMARY SCHOOL LEVEL
HASSAN ALIYU ASSOC. PROF. DR.CORRIENNA ABDUL TALIB BILAL ABDULLAHI USMAN	Sokoto State University University Teknologi Malaysia (UTM)	IMPACT OF EMERGING TECHNOLOGIES ON SERVICE-LEARNING EXPERIENCES FOR PRESERVICE UNDERGRADUATE TEACHERS AT SOKOTO STATE UNIVERSITY
Dr.Jogendra Kumar	G.B.Pant Institute of Engineering and Technology	REAL-TIME ANOMALY DETECTION IN VANET COMMUNICATION USING SUMO SIMULATOR

DATE	TIME	SESSION
• 04.12.2024	• 11^{30}–13^{30} • Turkiye Time	• HALL-6 • SESSION-2

HEAD OF SESSION: Dr Daniel Marcel

Nasrin Karami Shahryar Ahmadi	Kermanshah University of Medical Sciences Ahvaz Jndishapur University of Medical Sciences	NATURAL FOOD COLORS AND THEIR IMPORTANCE ON HEALTH
Muhammad Bilal Hussain Marwa Waheed Farhan Saeed Muhammad Afzaal Bushra Niaz	Government College University Riphah International University	NUTRITIONAL AND PHARMACOLOGICAL PROPERTIES OF CANTALOUPE PEEL: AN OVERVIEW
Mohammed, U. Umar, I.S. Ubandoma, G.A. Ahmad, B.S.	Ibrahim Badamasi Babangida University Federal University of Technology National Cereal Research Institute Badeggi	ANALYSIS AND LIVELIHOOD BENEFITS OF BEANS CAKE (AKARA) PROCESSING IN OFFA LGA OF KWARA STATE. NIGERIA
Lyuba Glogova Viliana Vasileva Emil Vasilev Sonya Goranovska Petyo Dauldzhiev	Maize Research Institute	EFFECT OF MINERAL NITROGEN FERTILIZATION ON THE PRODUCTIVITY OF SWEET CORN HYBRIDS
Fatemeh Golriz	Hamadan University of Medical Sciences	THE USE OF ARTIFICIAL INTELLIGENCE IN ENSURING FOOD SECURITY
Giacomo Gotti Carla Morrone Salvatore Ferri	Sapienza university of Rome	INVESTIGATING THE IMPACT OF HOTELS SUSTAINABILITY SCORE ON DEFAULT PROBABILITY IN ITALY
Tamara LUKIĆ Milka BUBALO ŽIVKOVIĆ Ivana BLEŠIĆ Bojan ĐERČAN	University of Novi Sad	SUSTAINABILITY OF TOWNS OF THE VOJVODINA REGION
Dr Daniel Marcel Dr. Juliana Philip Ndalnamu	Mudiame University Federal Polytechnic Mubi	MEDIATING EFFECT CUSTOMER SATISFACTION IN THE RELATIONSHIP BETWEEN DIGITAL MARKETING ON PERFORMANCE OF HOSPITALITY AND TOURISM INDUSTRY IN NORTH EAST, NIGERIA
Katayoun Fekripour, Associate Professor	Research Institute of Cultural Heritage and Tourism	BELIEF IN THE THERAPEUTIC PROPERTIES OF THE HOLY WORDS (MANTRA) IN ANCIENT IRAN AND MESOPOTAMIA AND COMPARING IT WITH THE PRESENT ERA

Online (with ZOOM Conference)

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DATE	TIME	SESSION
• 04.12.2024	• 14^{00}–16^{00} • Turkiye Time	• HALL-1 • SESSION-3

HEAD OF SESSION: Prof. Dr. Dilek ÇAĞIRGAN

Prof. Dr. Dilek ÇAĞIRGAN Res. Asst. Rümeysa CEVAHİR BOLAT	İstanbul University -Cerrahpaşa	AN EVALUATION OF PROSPECTIVE MATHEMATICS TEACHERS' REASONS FOR CHOOSING DISTRACTORS WHEN PREPARING MULTIPLE-CHOICE QUESTIONS
Res. Asst. Rümeysa CEVAHİR BOLAT Prof. Dr. Dilek ÇAĞIRGAN	İstanbul University -Cerrahpaşa	AN EXAMINATION OF OPEN-ENDED EXAM QUESTIONS PREPARED BY PROSPECTIVE MATHEMATICS TEACHERS ACCORDING TO REVISED BLOOM TAXONOMY
Melek ŞİMŞEK Prof. Dr. Huriye DENİŞ ÇELİKER	Burdur Mehmet Akif Ersoy University	EXAMINATION OF THESIS STUDIES APPLYING THE CREATIVE DRAMA METHOD IN SCIENCE LESSONS
Toykan GÜLMEN Assoc. Prof. Dr. Arif GÜRSOY	Ege University	ON VERTEX COVER POLYNOMIAL IN ZERO DIVISOR GRAPHS
Dursun DEMİROZ Necla KIRCALI GÜRSOY	Ege University	SUSTAINABLE SOLID WASTE MANAGEMENT WITH ARTIFICIAL INTELLIGENCE: COMPARISON BETWEEN EUROPE AND TÜRKİYE
Assoc. Prof. Dr. Ebru GÜVELİ Assoc. Prof. Dr. Demet BARAN BULUT	Recep Tayyip Erdoğan University	EXAMINATION OF PRE-SERVICE TEACHERS' MATHEMATICAL MODELING SELF-EFFICACY
Assoc. Prof. Dr. Muhammet Serdar BAŞÇIL Ayşe Nur BAK	Selcuk University	COMPARISON OF QUESTION DIFFICULTY BY CLASSIFYING PHYSIOLOGICAL PARAMETERS RECORDED DURING THE 9TH GRADE MATHEMATICS EXAM WITH MACHINE LEARNING ALGORITHMS

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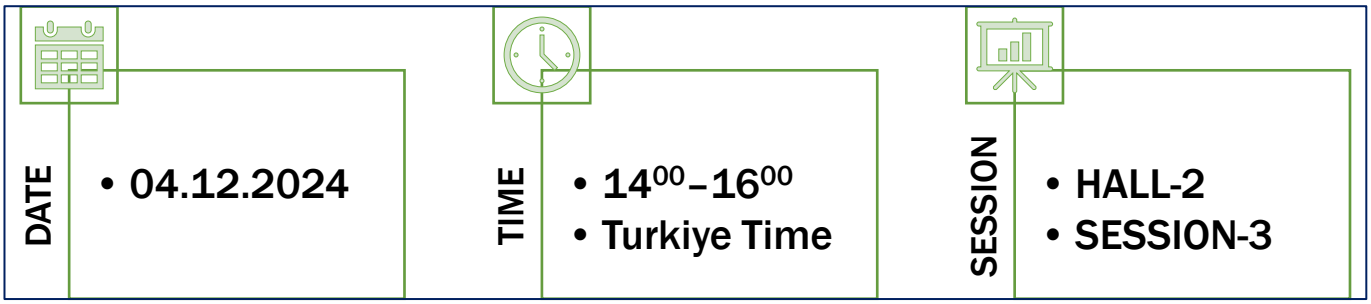

HEAD OF SESSION: Assoc. Prof. Dr. Oytun Emre SAKICI		
Gokhan Onder ERGUVEN Numan YILDIRIM	Munzur University	RECYCLING OF ORGANIC WASTE: COMPOSTING
Gokhan Onder ERGUVEN Numan YILDIRIM	Munzur University	SOIL BIOREMEDIATION: BIOACCUMULATOR PLANTS
Assoc. Prof. Dr. Arif Oğuz ALTUNEL Assoc. Prof. Dr. Oytun Emre SAKICI Lecturer Samet DOĞAN	Kastamonu University	POSSIBILITIES OF UTILIZING NEW VERY HIGH RESOLUTION DEM IN TURKISH FORESTRY
Assoc. Prof. Dr. Oytun Emre SAKICI Assoc. Prof. Dr. Mehmet SEKİ Assist. Prof. Dr. Fadime SAĞLAM	Kastamonu University	WOOD DENSITY BASED ABOVE-GROUND TOTAL BIOMASS EQUATION FOR BLACK PINE STANDS IN KASTAMONU, TÜRKİYE
Asst. Prof. Dr. İnci ÇAĞLAYAN	İstanbul University-Cerrahpaşa	EVALUATION OF RECREATIONAL SUITABILITY USING THE SIMPLE WEIGHTED AVERAGE METHOD: A CASE STUDY OF SAHILKÖY FOREST MANAGEMENT UNIT
Dr. Harun ALPTEKİN Assoc. Prof. Dr. Ramazan GÜRBÜZ	Igdır University	THE ROLE of TECHNOLOGY IN INTEGRATED WEED MANAGEMENT: A GLOBAL BIBLIOMETRIC ANALYSIS
Dr. Harun ALPTEKİN Assoc. Prof. Dr. Ramazan GÜRBÜZ	Igdır University	A BIBLIOMETRIC ANALYSIS of HERBICIDE RESISTANCE STUDIES

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DATE	TIME	SESSION
• 04.12.2024	• 14^{00}–16^{00} • Turkiye Time	• HALL-3 • SESSION-3

HEAD OF SESSION: Asst. Prof. Dr. Özlem YILMAZ DEMİREL

Asst. Prof. Dr. Özlem YILMAZ DEMİREL	Karamanoglu Mehmetbey University	FATHER-INFANT ATTACHMENT
Asst. Prof. Dr. Özlem YILMAZ DEMİREL	Karamanoglu Mehmetbey University	POSTPARTUM DEPRESSION AND ITS EFFECTS ON THE NEWBORN
Elif Nazlı PÜSKÜLLER Prof. Dr. Nurper ÜLKÜER	Üsküdar University	A STUDY ON PERSONAL EMOTION REGULATION STRATEGIES OF PRESCHOOL TEACHERS IN EARTHQUAKE ZONE
Ceyda ÇELİK Asst. Prof. Dr. Wida SİMZARİ	İstanbul Nişantaşı University	THALASSEMIA AND DIETARY THERAPY: THE ROLE OF NUTRITIONAL SUPPLEMENTS IN DISEASE MANAGEMENT
Res. Asst. Dr. Yunus Emre BAKIRHAN Assoc. Prof. Dr. Hande BAKIRHAN Asst. Prof. Dr. Serap İNCEDAL IRGAT	İzmir Katip Çelebi University Kahramanmaraş İstiklal University Karamanoğlu Mehmetbey University	ANALYSIS OF FOOD INSECURITY AND SUSTAINABLE AND HEALTHY NUTRITION BEHAVIORS IN TURKIYE BY GEOGRAPHICAL REGIONS
Asst. Prof. Dr. Serap İNCEDAL IRGAT Assoc. Prof. Dr. Hande BAKIRHAN Res. Asst. Doktor Yunus Emre BAKIRHAN	Karamanoğlu Mehmetbey University Kahramanmaraş İstiklal University İzmir Katip Çelebi University	ANALYSIS OF ECOLOGICAL FOOTPRINT AWARENESS LEVELS IN TURKIYE ACCORDING TO GEOGRAPHICAL REGIONS

DATE	TIME	SESSION
• 04.12.2024	• 14^{00}–16^{00} • Turkiye Time	• HALL-4 • SESSION-3

HEAD OF SESSION:		
Gupta Swati Sanjaykumar Divya Gupta	Sigma University	RISING INVESTMENTS IN GENE AND CELL THERAPIES
Gupta Swati Sanjaykumar Divya Gupta	Sigma University	ARTIFICIAL INTELLIGENCE REVOLUTIONIZING GENE EDITING TOOLS
Dr.R. Sundhararajan Mrs.R. Jothilakshmi Mr.S.G.Raman Mrs.K.Suganya Sri	Mohamed Sathak AJ College of Pharmacy	PHYTOCHEMICAL SCREENING USING NATURAL INDICATORS IN HERBAL MEDICINE
Nihal S. Mulani Firoj A.Tamboli Rutuja V. Chhatre Divya S. Koli	Bharati Vidyapeeth College of Pharmacy	NATURAL POLYMERS AS SUSTAINABLE EXCIPIENTS IN MODERN PHARMACEUTICALS
Midhat Rehman Saba Sohail Dr. Fakhar ud Din	Quaid i Azam university	METFORMIN HCL-LOADED TRANSETHOSOMAL GEL; DEVELOPMENT, CHARACTERIZATION, AND ANTIDIABETIC POTENTIAL EVALUATION IN THE DIABETES-INDUCED RAT MODEL
Tasawar IQBAL Nadeem AHMED Sidra ALTAF	University of Agriculture	ONE HEALTH PERSPECTIVE: THE ROLE OF VETERINARIANS IN ZOONOTIC DISEASE PREVENTION
R.VIDHYALAKSHMI K.RAJAGANAPATHY	BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH	UNDERSTANDING THE MECHANISM OF ANTIBIOTICS RESISTANCE: PHARMACOLOGICAL PERSPECTIVE
V.Ranjani Dr.W. Helen	Bharath Institute of Higher Education and Research	ROLE OF POLYMERS IN ADVANCED DRUG DELIVERY SYSTEMS: A REVIEW
Angela Merici Giannetta Surya Felicia Austin Arli Aditya Parikesit	Indonesia International Institute for Life Sciences	IN SILICO COMPARISON OF NOVEL PROTEINS FROM PLASMODIUM FALCIPARUM AS CANDIDATE DRUG TARGETS AGAINST MALARIA

DATE	TIME	SESSION
• 04.12.2024	• 14^{00}–16^{00} • Turkiye Time	• HALL-5 • SESSION-3

HEAD OF SESSION:

Mariia Rusakova Sergey Gushcha Khrystyna Koieva	Ukrainian Research Institute of Medical Rehabilitation and Resort Therapy of the Ministry of Health of Ukraine I. I. Mechnikov Odesa National University	THE MINERAL WATER ANTIMICROBIAL POTENTIAL AS A COMPONENT OF ELIMINATION IRRIGATION THERAPY FOR THE UPPER RESPIRATORY TRACT MUCOSE MICROBIOTA TREATMENT
Alexander Plakida Natalia Stepanova Sergey Gushcha Boris Nasibullin	Ukrainian Research Institute of Medical Rehabilitation and Resort Therapy of Ministry of Health of Ukraine	EXACERBATION OF CLIMACTERIC SYNDROME IN WOMEN AFTER COVID-19
Asst.Professor S.Lakshmi	SRM Institute of Science and Technology	PREDICTIVE ANALYTICS IN MENTAL HEALTHCARE USING MACHINE LEARNING
Saloni Sharma Suhani Sharma	Manav Rachna International Institute of Research Studies Jamia Hamdard University	NAVIGATING THE INVISIBLE BURDEN: CHALLENGES FACED BY WOMEN WITH CELIAC DISEASE IN HEALTH, SOCIETY, AND LIFESTYLE
Debismita Nayak T S L Radhika	BITS-PILANI HYDERABAD CAMPUS	ARTERIAL BLOOD FLOW SIMULATION IN COMSOL EMPHASIZING MESH OPTIMIZATION
Wiaam Ahmed Al-Amili Samar Ali Enad	University of Baghdad	IMPACT OF RS1800871, RS1800872 AND RS1800896 IL-10 PROMOTER POLYMORPHISMS AND AND IL-10 SERUM LEVELS ON ACUTE LYMPHOBLASTİC LEUKEMIA İN IRAQİ PATİENTS
Professor Shalva Zarnadze Professor Irine Zarnadze Ana BochoriSvili Tinatin Gambashidze	Tbilisi State Medical University	THE IMPACT OF SOCIAL ENVIRONMENT ON THE DIETARY BEHAVIOR OF YOUNG PEOPLE
DR. MEHWASH KASHIF DR. AMAN ASHAR SYEDA NIMRA QADRI M. ASFAHAN SHAH	Karachi Medical & Dental College	EFFECTS OF PROBIOTICS ON ORAL MICROBIOLOGICAL ENVIRONMENT, GINGIVAL HEALTH AND DENTAL PLAQUE; A META-ANALYSIS

Online (with ZOOM Conference)

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DATE	TIME	SESSION
• 04.12.2024	• 14^{00}–16^{00} • Turkiye Time	• HALL-6 • SESSION-3

HEAD OF SESSION:		
LUTOVAC JELENA	Megatrend University	DETERMINING THE EFFICIENCY OF BUSINESS OF HETEROGENEOUS LEGAL ENTITIES IN IN RELATION TO THE ANALYSIS OF THE USE OF THE TYPE OF CREDIT, THE EXAMPLE OF THE REPUBLIC OF SERBIA
Associate Professor, Snježana Đokić Assistant Professor, Srđan Jovanović	Independent University Banja Luka	MARKET RESEARCH RELATED TO THE PROMOTION AND SALES OF GOODS AS A MARKETING SPHERE INFLUENCES THE BUSINESS OF NUMEROUS COMPANIES IN TRANSITION COUNTRIES SUCH AS THE REPUBLIC OF SERBIA
Assistant Professor, Srđan Jovanović Associate Professor, Snježana Đokić	Independent University Banja Luka	MARKETING ACTIVITIES AND MARKET RESEARCH RELATED TO THE PROMOTION AND SALES OF HETEROGENEOUS GOODS BASED ON MANAGEMENT DECISIONS MADE BY THE COMPANY'S TOP MANAGEMENT
Marijana Zimonjić	Megatrend University	DIGITALISATION IN THE CONTEXT OF REAL BUSINESS DEVELOPMENT IN TRANSITION ECONOMIES EVALUATED THROUGH THE BALANCE SHEET OF COMPANIES
Marijana Zimonjić	Megatrend University	DIGITALISATION AS A FACTOR AND DRIVER OF THE DEVELOPMENT OF ALL DEVELOPMENT SECTORS IN COMPANIES THAT ARE PART OF THE OVERALL BUSINESS OF ECONOMIC DEVELOPMENT, EXAMPLE OF THE REPUBLIC OF SERBIA
Marijana Zimonjić	Megatrend University	THE IMPORTANCE OF SOCIAL MEDIA-BASED BUSINESS AND THEIR IMPACT IN PROMOTING THE BASIS FOR THE OPERATION OF NUMEROUS ECONOMIC ACTIVITIES IN TRANSITION ECONOMIES
Abdulgaffar Muhammad Halima Abdulaziz Anthony Kolade Adesugba Ibrahim Mallam Fali Anthony Unyime Abasido	Ahmadu BelloUniversity University of Calabar	THE FINANCIAL AND ENERGY SECURITY IMPLICATIONS OF IRAN'S MISSILE DEVELOPMENT ON REGIONAL ECONOMIC STABILITY IN THE MIDDLE EAST
Deepak Bansal	Indian Institute of Finance	DESIGN AND DEVELOPMENT OF NOVEL APPORACH FOR FILE SHARING FOR SECURITY USING BLOCKCHAIN TECHNOLOGY

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DATE	TIME	SESSION
• 04.12.2024	• 16^{30}–18^{30} • Turkiye Time	• HALL-1 • SESSION-4

HEAD OF SESSION: Prof.Dr. Muhittin Eliaçık		
Assist. Prof. Dr. Mehmet Fetih YANARDAĞ Üzeyir Bayram ÇUHADAR	Kahramanmaraş Sütçü İmam University	THE PERCEPTION OF CULTURE AND CIVILIZATION IN MEHMET KAPLAN'S ESSAYS
Prof. Dr. Arda ARIKAN Abdullah ZALİM	Akdeniz University	THE MIDDLE AGES IN HISTORY COURSEBOOKS: 1941-2024
Prof. Dr. Arda ARIKAN Tayfur CİHANTİMUR	Akdeniz University	ON DISABILITY THEORY AND ITS USES IN LITERARY STUDIES
Res. Asst. Dr. Fatma Jale Gül ÇORUK	Ankara University	A STUDY ON THE TURKISH COPY WITH ARMENIAN LETTERS OF THE STORY OF ASHIK GARİP
Prof. Dr. Sevin Arslan	Çağ University	THE FORMAL EVOLUTION OF THE CONCEPT OF "HONOR" IN TURKISH LITERARY WORKS
Prof.Dr. Muhittin Eliaçık	Kırıkkale University	YAHYA EFENDI'S MEDICAL ADVICE IN VERSE
Prof.Dr. Muhittin Eliaçık	Kırıkkale University	ON THE RELATIONSHIP OF VENERAL DISEASES WITH THE STAR VENUS
Ezgi ŞAHİN SEVDİ	Bursa Uludag University	ANALYSIS OF SOME NARRATIVES AND RITUEL FOLK SONGS COMPILED FROM THE VILLAGE OF KIRANIŞIKLAR IN THE KELES DISTRICT OF BURSA

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HEAD OF SESSION: Assoc. Prof. Dr. Ali EKİN		
Zeynep Zişan ESER Lylia TENNAH	Gendarmerie and Coast Guard Academy Hacettepe University	POLICIES ON COMBATING VIOLENCE AGAINST WOMEN: THE CASE OF TURKEY AND ALGERIA
AYÇA SİMAY DİNÇER	Baskent University	EVOLUTION OF OTTOMAN DIPLOMACY: FROM TRADITION TO MODERN STATESMANSHIP
Prof. Süreyya Yiğit	New Vision University	EUROPEAN SMALL STATES
Asst. Prof. Dr. Seyyid Ali ERTAŞ	Yozgat Bozok University	STATISTICAL INVESTIGATION OF EMPLOYMENT QUALITY IN EUROPEAN UNION COUNTRIES: CLUSTER ANALYSIS
Asst. Prof. Dr. Seyyid Ali ERTAŞ	Yozgat Bozok University	THE RELATIONSHIP BETWEEN ARTIFICIAL INTELLIGENCE, ENERGY, AND THE ENVIRONMENT
Nesrin KAYA	Gaziantep University	A GENERAL OVERVIEW OF CIVIL SOCIETY ORGANIZATIONS WORKING FOR WOMEN IN TURKEY
Assoc. Prof. Dr. Ali EKİN Asst. Prof. Dr. Ayşegül EKİN	Recep Tayyip Erdoğan University	PROTECTION OF WORKERS PERSONAL DATA
Assoc. Prof. Dr. Ali EKİN Asst. Prof. Dr. Ayşegül EKİN	Recep Tayyip Erdoğan University	THE PROCESS OF DETERMINING MINIMUM WAGE

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DATE	TIME	SESSION
• 04.12.2024	• 16^{30}–18^{30} • Turkiye Time	• HALL-3 • SESSION-4

HEAD OF SESSION: Assoc. Prof. Dr. Hüseyin GÜNGÖR

Elif Ayça GÜLER ELİF ÖZBEY	Malatya Turgut Özal University	ASPİR (CARTHAMUS TİNCTORİUS L.) ÇİÇEK VE YAPRAK ÖZÜTLERİNİN ANTİMİKROBİYAL AKTİVİTELERİNİN KARŞILAŞTIRILMASI
Assoc. Prof. Dr. Esra KAYA Assoc. Prof. Dr. Behlül SEVİM Prof. Dr. Tugay AYAŞAN	Agrı İbrahim Cecen College, Celal Oruc Animal Production College Aksaray University Osmaniye Korkut Ata University	ORGANIC FORAGE CROPS CULTIVATION
Asst. Prof. Dr. Ezgi KURTULMUŞ	Bursa Uludag University	THE IMPORTANCE OF WATER FOOTPRINT FOR SUSTAINABLE AGRICULTURE
Asst. Prof. Dr. Ezgi KURTULMUŞ	Bursa Uludag University	DRAINAGE IN RICE FARMING
Lec. Dr. Seyit Ahmet GÖKMEN Prof. Dr. Yusuf CUFADAR Res. Asst. Dr. Esra Tuğçe GÜL Prof. Dr. Osman OLGUN Assoc. Prof. Dr. Behlül SEVİM	Ondokuz Mayıs University Selcuk University Aksaray University	EFFECT OF DIETARY SUNFLOWER MEAL WITH PROBIOTICS (BACILLUS VELEZENSIS) ON PERFORMANCE AND SLAUGHTERING CHARACTERISTICS OF BROILERS
Yağmur TURAN Assoc. Prof. Dr. Hüseyin GÜNGÖR	Duzce University	DETERMINATION OF YIELD AND YIELD COMPONENTS OF POPCORN (Zea mays everta Sturt.) CULTIVARS UNDER MANYAS-BALIKESİR ECOLOGICAL CONDITIONS
Dr. Ebubekir İZOL Dr. Abbas TARHAN	Bingol University Dicle University	AMINO ACID CONTENT OF BEE PRODUCTS AND THEIR RELATIONSHIP WITH ANTIOXIDANT PROPERTIES
Dr. Abbas TARHAN Dr. Ebubekir İZOL	Dicle University Bingol University	SECONDARY METABOLITES OF BEE PRODUCTS RELATED TO ANTIOXIDANT METABOLISM

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HEAD OF SESSION: **Prof.Dr. Okyay UÇAN**		
Assist. Prof. Dr. Gülden POYRAZ Assist. Prof. Dr. Tuğba GÜZ	Bandirma Onyedi Eylul University Istanbul Yeni Yuzyil University	DETERMINANTS OF CO2 EMISSIONS IN LOW AND MIDDLE-INCOME COUNTRIES: A BALANCED PANEL GMM ANALYSIS
Esin Esra ŞAHİN Prof.Dr. Okyay UÇAN	Nigde Omer Halisdemir University	RELATIONSHIP BETWEEN WORKERS' REMITTANCES, CURRENT ACCOUNT DEFICIT AND GROWTH IN BRICS COUNTRIES: PANEL DATA ANALYSIS (2000-2022)
Research Assistant Nurullah TAS Associate Professor Farid HUSEYNOV	Gebze Technical University	DEMOGRAPHIC INFLUENCES ON SMARTPHONE USAGE: UNDERSTANDING BEHAVIOR PATTERNS AND MARKETING IMPLICATIONS
Lec. Bilal COŞKUN Assoc. Prof. Dr. Gökhan AKAR Prof. Dr. Sinem YAPAR SAÇIK	Karamanoğlu Mehmetbey University	THE EFFECTS OF FOSSIL FUEL ENERGY CONSUMPTION ON HEALTH EXPENDITURES: AN EMPIRICAL ANALYSIS FOR TURKEY
Asel Pazylova Selçuk KOÇ	Osh Technological University Kocaeli University	THE INVESTMENT CLIMATE OF KYRGYZSTAN REGIONS
Asel Pazylova Selçuk KOÇ	Osh Technological University Kocaeli University	TRENDS IN FOREIGN DIRECT INVESTMENT FLOWS: ANALYSIS AND PROSPECTS
Asst. Prof. Dr. Gökhan KENEK	Gumushane University	THE ROLE OF ORGANIZATIONAL COMMUNICATION IN ALTRUISM BEHAVIOR
Ayşe Gamze KIZIL Asst. Prof. Ali ÖZCAN	Nişantaşı University	THE MEDIATING ROLE OF EMOTIONAL LABOR IN INTRINSIC MOTIVATION AND JOB SATISFACTION: A STUDY ON AVIATION SECTOR EMPLOYEES

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DATE	TIME	SESSION
• 04.12.2024	• 16^{30}–18^{30} • Turkiye Time	• HALL-5 • SESSION-4

HEAD OF SESSION: Prof. Assoc. Dr. Skender DEMAKU		
Vjollca Berisha Sevdije Govori	University of Pristina	ANTICANCER ACTIVITY OF TITANIUM (III) AND TITANIUM (IV) COMPLEXES WITH PYRIMIDINE SCHIFF BASES: DESIGN, SYNTHESIS AND CHARACTERIZATION
Z. LABBO M.I. ALFRED M.A. ASEKWU S. DANIEL L.I. OGIRIMA	UNIVERSITY OF ABUJA KING DAVID UNIVERSITY OF MEDICAL SCIENCES BAYARO UNIVERSITY KANO	EFFECT OF LABORATORY METHOD AND VEE MAPPING TEACHING STRATEGIES ON STUDENTS' ACHIEVEMENT AND RETENTION IN CHEMISTRY, KADUNA METROPOLIS, KADUNA STATE
Hamiani Zohra Berrichi Amina Abbou Sarra Bachir Redouan	University of Tlemcen University of Ain Temouchent, Science and Technologie	MESOSTRUCTURED TRANSITION METAL PHOSPHATES: SYNTHESIS AND APPLICATIONS
Prof. Assoc. Dr. Skender DEMAKU MSc. Arbnorë ALIU MSc. Donika SYLEJMANI MSc. Bahrije DOBRA	University of Prishtina	DETERMINATION OF HEAVY METAL CONTAMINATION AND POLLUTION INDICES OF ATMOSPHERIC DUST IN TC 'KOSOVA A & B', OBILIÇ - KOSOVO
Diayi V.N. Akinlabi A. K. Falope F.Y. Mosaku A.M. Oladipo G.O Falana B.M.	Federal University of Agriculture National Biotechnology Research and Development Agency Bells University of Technology D.S. Adegbenro ICT Polytechnic	EFFECT OF CARBONIZATION OF WALNUT SHELL ON THE PHYSICO-MECHANICAL PROPERTIES OF NATURAL RUBBER
Meriem FAHEM Hocine ALI-KHOUDJA	University of Frères Mentouri1	HEALTH EFFECTS OF DESERT DUST ON MEN IN CONSTANTINE(CARDIOVASCULAR SYSTEM)
Ayoub Chaoui Salaheddine Farsad Aboubakr ben hamou Yahya Saghir Nisrine Nouj Mohamed Benafqir Ezzahery Mohamed Noureddine El Alem	Université Ibn Zohr	VALORIZATION OF ANAEROBIC DIGESTATE INTO HYDROCHAR FOR ENHANCED ADSORPTION OF METHYLENE BLUE DYE: PROCESS OPTIMIZATION VIA RESPONSE SURFACE METHODOLOGY
Meryem Boutalaka Salma Elbahi Hamid Maghat Mohammed Bouachrine	University of Moulay Ismail	IN SILICO ANALYSIS OF PHENOLIC COMPOUNDS IN CURCUMA LONGA: ANTI-INFLAMMATORY POTENTIAL
Matloob Ahmad Ayesha Rafiq Sana Aslam	Government College University Government College Women University	HETEROCYCLIC MOLECULES: SYNTHESIS AND ANTIDIABETIC ACTIVITY

Online (with ZOOM Conference)

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DATE	TIME	SESSION
• 04.12.2024	• 16^{30}–18^{30} • Turkiye Time	• HALL-6 • SESSION-4

HEAD OF SESSION: **Dr. Violla Makhzoum**		
Arij Bouzelmate Hassane Hjiaj Inssaf Raiss	University of Abdelmalek Essaadi	EXISTENCE OF SOLUTIONS FOR NONLINEAR NEUMANN PROBLEM WITH BOUNDARY CONDITION AND MEASURE DATA
Olojede Abayomi Opeyemi Habeeb Bolaji Onisabi Bello Ibrahim Monday Bankole Mustapha Olatunji Soliu Sulyman	Federal University Lokoja Federal University of Technology	POPULATION GROWTH USING EXPONENTIAL MODELLING (A CASE STUDY OF FEDERAL CAPITAL TERRITORY)
Yogita Rani Indeewar kumar Gitanjali	BPIT, GGSIPU Manipal University Jaipur MSIT, GGSIPU	OPTIMIZING PARALLEL GPS-INS SYSTEM RELIABILITY THROUGH STRATEGIC PRIORITY REPAIR OF GPS SYSTEM
Ayazul Hasan	Jazan University	ON THE THEORY AND GENERALIZATION OF Σ-GROUPS
O. A. Odebiyi J. K. Oladejo A. A. Taiwo Salahu W.O E.O. Elijah	Ladoke Akintola University of Technology Federal University of Technology	GLOBAL STABILITY OF HIV/AIDS DYNAMICS WITH PrEP INTERVENTION
Violla Makhzoum	Saint Joseph University of Beirut	ARTIFICIAL INTELLIGENCE IN EDUCATION: BRIDGING RESEARCH AND APPLICATION
Gana E, Yaki A. A Bello M. R.	Federal University of Technology Minna	TWENTY-FIRST CENTURY PROFESSIONAL CAPACITY TRAINING NEEDS FOR EFFECTIVE TEACHING AND LEARNING AMONG SCIENCE TEACHERS IN NIGER EAST SENATORIAL ZONE, NIGER STATE. NIGERIA
Ephesus O. Fatunmbi Joshua K. Odeyemi	Federal Polytechnic	FLOW AND THERMAL DYNAMICS OF HYDROMAGNETIC HYBRIDIZED WATER-BASED NANOPARTICLES OVER AN UNSTEADY MOVING DISK WITH JOULE-VISCOUS HEATING

DATE	TIME	SESSION
• 05.12.2024	• 09^{00}–11^{00} • Turkiye Time	• HALL-1 • SESSION-1

HEAD OF SESSION: **Assoc. Prof. Dr. Oğuzhan UZUN**		
Fatma KILIÇ URFALI Asst. Prof. Dr. Ayşegül AKŞEHİRLİOĞLU	Erciyes University	ADAPTIVE REUSE OF INDUSTRIAL HERITAGE BUILDINGS FOR CONSERVATION: A CASE STUDY OF SILOS
Özlem Nur SAMANCI Ceren GENÇOĞLU Assoc. Prof. Dr. Hare KILIÇASLAN	Karadeniz Technical University	ARCHITECTURE INTEGRATED WITH NATURE: ASSESSMENTS ON SUSTAINABILITY IN VERTICAL GARDENS
Ecem Pınar PARLAK Assoc. Prof. Dr. Saniye Karaman ÖZTAŞ	Gebze Technical University	KERPİÇ MALZEME ÜZERİNE YENİLİKÇİ YAKLAŞIMLAR VE YAPI UYGULAMALARI
Büşra AKÇAY YILDIZ Assoc. Prof. Dr. Gökçe TUNA TAYGUN	Yıldız Technical University	AN EXAMINATION OF THE REUSE OF INDUSTRIAL BUILDINGS IN BROWNFIELD IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT GOALS
Prof. Dr. Ömür BARKUL Melike VAROL KARATAŞ	Yıldız Technical University	A TYPOLOGICAL REVIEW
Rahime Mert Assoc. Prof. Dr. Saniye Karaman Öztaş Prof. Dr. Nilay Coşgun	Gebze Technical University	A SYSTEMATIC LITERATURE REVIEW ON LIFE CYCLE ASSESSMENT OF CONSTRUCTION AND DEMOLITION WASTE IN TÜRKİYE
Assoc. Prof. Dr. Oğuzhan UZUN Assoc. Prof. Dr. Osman PERÇİN	Çankırı Karatekin University Necmettin Erbakan University	CLASSIFICATION OF CONSUMER COMMENTS IN EVALUATION OF BEHIND-DOOR HANGER PRODUCT FEATURES
Assoc. Prof. Dr. Oğuzhan UZUN Assoc. Prof. Dr. Osman PERÇİN Aslıhan ERGÜN	Çankırı Karatekin University Necmettin Erbakan University	SOME FIXED FURNITURE DESIGNS AND INTERIOR ARRANGEMENTS RESULTING FROM DIFFERENT REQUIREMENTS

HEAD OF SESSION: **Asst. Prof. Dr. Cihan Alp ŞAHİN**		
Asst. Prof. Dr. Cihan Alp ŞAHİN	Manisa Celal Bayar University	DESIGN STAGES OF A MULTI-PURPOSE AUTONOMOUS UNDERWATER VEHICLE
Asst. Prof. Dr. Mehmet Onur KARAAĞAÇ	Sinop University	DESIGN OF A DUAL-STAGE DRYING SYSTEM WITH A CONCENTRATOR SOLAR COLLECTOR AND THERMAL ENERGY STORAGE: INVESTIGATION OF DRYING EFFICIENCY
Asst. Prof. Dr. MURAT KAPUSUZ	Sinop University	SIMPLE ROTARY VISCOMETER ANALYSIS BY OPEN-SOURCE SOFTWARE
İbrahim Kerem KOYUNCUOĞLU	Koluman Automotive Industry Inc.	THE IMPORTANCE AND APPLICATIONS OF IOT TECHNOLOGY IN DIGITAL TWIN SYSTEMS
İbrahim Kerem KOYUNCUOĞLU	Koluman Automotive Industry Inc.	ELECTRIC-DRIVEN SPARE TIRE CARRIER SYSTEMS FOR TACTICAL WHEELED MILITARY LAND VEHICLES
Gizem FIRAT	Koluman Automotive Industry Inc.	INFLUENCE OF LOW TEMPERATURES ON ELECTRIC MOTOR PERFORMANCE AND MATERIAL DURABILITY
Gizem FIRAT	Koluman Automotive Industry Inc.	INSULATION MATERIALS IN ELECTRIC MOTORS: A REVIEW OF TYPES, PERFORMANCE, AND FUTURE TRENDS
Ismayilzade Omer Ismayil	National Aviation Academy	STEPS LEADING THE FUTURE WITH ALTERNATIVE ENERGY: BIOENERGY AND THORIUM

Online (with ZOOM Conference)

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DATE	TIME	SESSION
• 05.12.2024	• 09^{00}–11^{00} • Turkiye Time	• HALL-3 • SESSION-1

HEAD OF SESSION: Asst. Prof. Dr. Duygu YÜCEL

Assoc. Prof. Hünkar GÜLER	Nigde Omer Halisdemir University	EXTRAORDINARY PERIODS EXTRAORDINARY TAXES: 1942's WEALTH TAX IN TÜRKİYE
Bakhshiyev Nijat Telman	Azerbaijan State University of Economics	ORGANIZATION OF ACCOUNTING OF RESERVES IN BUSINESS SUBJECTS
Assoc. Prof. Dr. Ufuk ALKAN M. Murat AYYILDIZ	Marmara University	PERFORMANCE AND RISK MANAGEMENT OF INVESTMENT FUNDS: SHARPE, TREYNOR, AND SORTINO ANALYSES IN THE CASE OF TURKEY (2019-2024)
Lec. Havva ARABACI Asst. Prof. Dr. Duygu YÜCEL	Trakya University	DETERMINANTS OF ECONOMIC DEVELOPMENT IN TURKEY: ECONOMIC AND SOCIAL FACTORS
Lec. Recep Ragıp ERCANKAL	Cukurova University Kozan Vocational School	COMPILATIONS ON EMBEDDED FINANCE AND QUESTIONS TO BE ADDRESSED TO PARTICIPANTS
Assoc. Prof. Dr. SEZEN GÜNGÖR Lec. Dr. KADER EROL	Tekirdağ Namık Kemal University	THE MORAL DIMENSION OF FINANCIAL INVESTMENT CONSULTANCY
Lec. Dr. KADER EROL Assoc. Prof. Dr. SEZEN GÜNGÖR	Tekirdağ Namık Kemal University	SIMILARITY OF FOMO AND LOSS AVOIDANCE BEHAVIORS IN MARKETING AND FINANCIAL DIMENSIONS AND COPING METHODS
Tuğba AKGÜL	Bursa Technical University	CONCEPTS, MODELS AND THE EFFECTS OF GLOBALIZATION AND E- COMMERCE ON TRADE

DATE	TIME	SESSION
• 05.12.2024	• 09^{00}–11^{00} • Turkiye Time	• HALL-4 • SESSION-1

HEAD OF SESSION:

Moses Enemaduku Abalaka	Federal University of Technology	THE PHYTOCHEMICALS AND THERAPEUTIC POTENTIALS OF MORINGA OLEIFERA (MIRACLE TREE) FOR THE TREATMENT OF SOME NEGLECTED TROPICAL BACTERIAL DISEASES
Syeda Sabika Zahra Naqvi Syed Mohsan Raza Shah	University of Education	MORPHO-ANATOMICAL MODIFICATION IN WITHANIA SOMNIFERA (L.) DUNAL FROM PUNJAB,PAKISTAN: INSIGHT INTO ADAPTATION
Benlahrache Nour El Houda Boubendir Abdelhafid	Abdelhafid Boussouf University	TRANSLATION OF THE SUMMARY ON THE ANTIMICROBIAL PROPERTIES OF AQUEOUS EXTRACT OF TRIGONELLA FOENUM-GRAECUM
Siddhant Lavanya Singh Aashi Dhuria Prasiddhi Rai	Durgesh Nandini Degree College Shoolini University	CULTIVATION OF SPECIALTY MUSHROOMS IN AYODHYA (U.P.) INDIA
Omowaye Olaniyi Stephen Oseni Thomas Enema Adejoh Maji Emmanuel Atta Friday Oche Joseph Otorkpa Ocean Helen Ojomachenenwu Veronica Iye Oguche Olubiyo Comfort Kehinde G. Odewale.	Federal University Lokoja Salem University Confluence University of Technology Osara Open University Lokoja Kogi State University	PHYTOCHEMICAL EVALUATION OF PLANT EXTRACTS AND GC-MS ANALYSIS OF N-HEXANE EXTRACTS OF THE LEAVES OF BOERHAVIA DIFFUSA LINN AGAINST SCHISTOSOME SPECIES
F. F. Alfa Dr. A. A. Yaki Dr R. M. Bello	Federal College of Freshwater Fisheries Technology University of Technology	AWARENESS AND UTILISATION OF MODERN TECHNOLOGIES FOR AQUACULTURE INSTRUCTION AMONGST TERTIARY INSTITUTION TEACHERS IN NIGER STATE, NIGERIA
Mr. Ram Prataap Yadav Prof. Veena Batra Kushwaha Prof. Sunil Kumar Srivastav Prof. Ajai Kumar Srivastav	DDU Gorakhpur University	PROTECTIVE EFFECT OF JAMUN SEED (SYZYGIUM CUMINI) EXTRACT AND ORANGE PEEL (CITRUS SINENSIS) EXTRACT AGAINST LEAD INDUCED ALTERATIONS IN TESTES OF RAT
S. Priyanka S. Bhuvaneswari N.K. Udaya Prakash	Vels Institute of Science Bharathi Women's College	COMPARATIVE STUDIES ON THE PHYTOCHEMISTRY AND ANTIOXIDANT ACTIVITY OF BIOSOOT AND BIOASH OF CALOTROPIS GIGANTEA

Online (with ZOOM Conference)

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DATE	TIME	SESSION
• 05.12.2024	• 09^{00}–11^{00} • Turkiye Time	• HALL-5 • SESSION-1

HEAD OF SESSION: Dr. Subhashish Dey		
Melik Sami Khelil Sara Tallal Abdel Karim Bouzir	Mohamed Khider Biskra University Blida University	BEYOND PLAY: THE IMPACT OF ARCHITECTURAL DESIGN ON SOCIAL AND COGNITIVE DEVELOPMENT IN PLAYGROUNDS
Melik Sami Khelil Sara Tallal Abdel Karim Bouzir	Mohamed Khider Biskra University Blida University	REDEFINING STRUCTURAL INTEGRITY: THE ROLE OF THE ARCHITECTURAL COLLAR IN MODERN DESIGN
Melik Sami Khelil Sara Tallal Abdel Karim Bouzir	Mohamed Khider Biskra University Blida University	TECHNOLOGY-DRIVEN PUBLIC SPACES: EXPLORING THE INTERSECTION OF SMART DESIGN AND ARCHITECTURE
Melik Sami Khelil Sara Tallal Abdel Karim Bouzir	Mohamed Khider Biskra University Blida University	BUILDING COMMUNITY BONDS: THE ROLE OF PUBLIC SPACE ARCHITECTURE IN ENHANCING SOCIAL COHESION IN SHARANIEN CITIES OF ALGERIA
Mohamed AIT OUMERACI Tarek BERRAMA Hayet TIZI Feriel SAHOUI	University of Sciences and Technology Houari Boumediene	GREEN SYNTHESIS AND UTILIZATION OF ZINC OXIDE NANOPARTICLES FOR REMOVAL OF TARTRAZINE DYE FROM AQUEOUS SOLUTION: BATCH STUDY
Mohamed AIT OUMERACI Tarek BERRAMA Hayet TIZI Feriel SAHOUI	University of Sciences and Technology Houari Boumediene	EFFICIENT DIRECT RED 227 DYE PHOTOCATALYTIC DEGRADATION IN AQUEUS MEDIA USING NOVEL ZNO NANOMATERIALS SYNTHESISED BY GREEN METHOD
Subhashish Dey G.T.N. Veerendra	Seshadri Rao Gudlavalleru Engineering College	THE STUDY ON BIOSORBENTS FOR THE REMOVAL OF CHLORIDES AND HARDNESS FROM CONTAMINATED WATER
Amoo Afeez Oladeji Adeleye Adeniyi Olarewaju Asaju Catherine Iyabo Amoo Nureni Babatunde Harazimi Abdulbasit	Federal University Dutse Federal Polytechnic Ede Jigawa State Polytechnic Dutse	AWARENESS AND EDUCATION ON DRINKING WATER QUALITY AND ITS HEALTH EFFECTS IMPACTS: A CASE STUDY OF FUD STUDENTS AND THE DUTSE COMMUNITY

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DATE	TIME	SESSION
• 05.12.2024	• 09^{00}–11^{00} • Turkiye Time	• HALL-6 • SESSION-1

HEAD OF SESSION: BRAHMI Zahia

BRAHMI Zahia GHERISSI Djallel Eddine	University of Souk-Ahras	HORMONAL REGULATION OF OVULATION IN FEMALE CAMELS (CAMELUS DROMEDARIUS) : MECHANISMS AND TEMPORAL DYNAMICS
Ibrahim Zulu Olalekan Dr Iyiola O.A Onovo Daniel Okwuchukwu Ikani Hannah Harris Osayi Priscillia Imuetiyan Amlemi Aderewa Olusegun Tawa Omolade	University of Ilorin	MOLECULAR IDENTIFICATION OF CULEX MOSQUITOES IN ILORIN, KWARA STATE, NIGERIA.
Dona Mary Eldhose Jasmine Rani V. Sejian	College of Veterinary and Animal Science Rajiv Gandhi Institute of Veterinary Education and Research	ESSENTIAL MICRONUTRIENTS SIGNIFICANCE FOR HEAT STRESS MANAGEMENT IN LIVESTOCK
Olukotun, G.B. Gidado Rose Suniso Maxwell Ashi, S Jegede, P. Francis, A.K. Peter, D.	National Biotechnology Development Agency (NABDA)	OCCURRENCE OF BACTERIA PATHOGENS IN COWS AND SMALL RUMINANTS FARM ENVIRONMENT AT NBRDA (FCT, NIGERIA), THE HEALTH IMPLICATIONS AND CONTROL
Mmuta, Ebelechukwu C. Ogbuagu, Josephat O. Arinze, RoseMary U. Ogbuagu, Adaora S. Odika, Ifeoma M	National Biotechnology Research And Development Agency Nnamdi Azikiwe University	DETERMINATION OF THE ANTIMICROBIAL ACTIVITY OF A FORMULATED HERBAL SOAP FROM Vigna radiata STEM FLOUR: FROM WASTE TO WEALTH
Omowaye O.S A.A. Abdul-Rahman Adebowale T.	Federal University Lokoja	THERAPEUTIC POTENTIAL OF METHANOLIC AND AQUEOUS EXTRACT OF PSIDIUM GUAJAVA ON MICE INFECTED WITH TRYPANOSOMA EVANSI
Omowaye O.S A.A. Abdul-Rahman Adejo S. I .Oche Josephen Otorkpa Dakun Yacop ,G.I.Ogu G.Odewale Attah Friday Olubiyo C.K E.Okolo	Federal University Lokoja Open University Lokoja Federal University of Technology Kogi State University	ANTI-TRYPANOSOMAL EFFICACY OF Telfairia occidentalis ON Trypanosoma brucei brucei-INFECTED WISTAR RATS
Muhammad Ismaeel Bushra Parveen Sana Shafique Dogar Kiran Aftab Kashif Abbas Khurram Shahzad Munawar	Government College University Faisalabad University of Mianwali University of Sargodha	COMPARING GREEN AND CONVENTIONAL METHODS FOR SCHIFF BASE SYNTHESIS AND UNVEILING ENVIRONMENTAL STABILITY APPLICATIONS: A REVIEW

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HEAD OF SESSION: Asst. Prof. Dr. İbrahim GÜNGÖR		
Ahmet BER	Seyh Edebali University	THE PRACTICAL DIMENSION OF DISBELIEF IN THE CONTEXT OF VERSES 84 AND 85 OF SURAT AL-BAQARAH
Asst. Prof. Dr. İbrahim GÜNGÖR	Van Yüzüncü Yıl University	İBN BÂBEŞÂZ'S ŞERHU'L-MUKADDİMETİ'L-MUHSİBE HIS METHOD IN THE SCIENCE OF NAHIV IN THE CONTEXT OF HIS WORK
Prof. Dr. Alparslan HANZADE Mehmet AKPOLAT	Kayseri University	THE VIEW OF AHL AL-RAYY AND AHL AL-HADITH WITH SPECIAL REFERENCE TO HANAFIS AND SHAFI'IS ON THE HADITHS OF REFULYEDAYN
MELİKE DALKILIÇ	Bursa Uludag University	BİR ÖZGÜRLEŞME PRATİĞİ OLARAK DELEUZE VE GUATTARİ'DE ÖZNENİN ADEMİ MERKEZİLEŞTİRİLMESİ PROBLEMİ
Prof.Dr. Dolunay ŞENOL Merve SAĞLAMOĞLU	Kırıkkale University	CHANGING HABITS OF WOMEN AFTER THE EARTHQUAKE CENTRED IN KAHRAMANMARAS ON 6 FEBRUARY 2023: ANTAKYA CASE
Prof.Dr. Dolunay ŞENOL Merve SAĞLAMOĞLU	Kırıkkale University	AFTER THE 6 FEBRUARY EARTHQUAKE, ECONOMIC CONCERNS OF EARTHQUAKE VICTIM MEN: THE CASE OF ANTAKYA
Assoc. Prof. Dr. Faruk GÖRGÜLÜ	Duzce University	AS A SOURCE OF LEGISLATIVE THE QUR'AN ACCORDING TO ABŪ AL-HASAN AL-ASH'ARĪ

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HEAD OF SESSION: Prof. Dr. Engin AVCI		
Ömer SOLAK Associate Professor Derya Ahmet KOCABAŞ	Istanbul Technical University	A COMPREHENSIVE OPERATIONAL PERFORMANCE COMPARISON FOR DIFFERENT SWITCHES USED IN SOLID STATE POWER CONTROLLERS FOR UAVS
Betül Kübra DEMİRCİ BAKIR Prof. Dr. Fatih ÇAVDUR	Bursa Uludag University	USING MULTI-CRITERIA DECISION MAKING METHODS AND FUZZY MULTI-CRITERIA DECISION MAKING METHODS IN AIRPORT SELECTION
Hasan ÇEKE Asst. Prof. Dr. Özge Nalan Bilişik	Yıldız Technical University	WORKFORCE OPTIMIZATION FOR ESTIMATING THE NUMBER OF CALLS WITH MACHINE LEARNING AND DETERMINING THE NUMBER OF CALL ANSWERING PERSONNEL IN ISTANBUL 112 EMERGENCY CALL CENTER
Buse Hilal AKCAN Prof. Dr. Cevriye GENCER	Gazi University	WEIGHTING OF CRITERIA FOR DETERMINING THE RESPONSE SEQUENCE OF INFORMATION SECURITY AND CYBER SECURITY ATTACKS IN DEFENSE INDUSTRY WITH SWARA METHOD
Pınar ELAGÖZLÜ Asst. Prof. Dr. Mahmure Övül ARIOĞLU	Marmara University	SOCIALLY SUSTAINABLE SUPPLIER SELECTION USING AHP: AN INDUSTRIAL APPLICATION
Hüseyin SOYDAĞ Assoc. Prof. Dr. Dogan Engin ALNAK Assoc. Prof. Dr. Koray KARABULUT	Sivas Cumhuriyet University	EVALUATION OF THE EFFECT OF DIFFERENT DESIGNED BAFFLE VORTEX GENERATORS ON THE HEAT TRANSFER PERFORMANCE OF PLATE HEAT EXCHANGER
Hatice ÇİÇEKÇİ	Epsan Plastic	OTOMOTİV ENDÜSTRİSİNDE KULLANILABİLECEK YÜKSEK SÜRTÜNME DİRENCİNE SAHİP GÜÇLENDİRİLMİŞ PA6.6 KOMPOZİTLERİNİN GELİŞTİRİLMESİ
Prof. Dr. Engin AVCI Gönenç Can DEĞİRMENCİOĞLU Abdulkadir ÖZTÜRK M. Resul AKIN	Fırat University Rönesans Holding	PERFORMANCE COMPARISON OF DEEP LEARNING BASED ARCHITECTURES IN DEVELOPING A NOVEL EMOTION RECOGNITION SYSTEM

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HEAD OF SESSION: Prof. Dr. Gökhan ACAR		
Prof. Dr. Şenay ŞAHİN Deniz DİLBAZ	Bursa Uludag University	THE EFFECT OF DIFFERENT SIZED RESTRICTED FIELD GAMES ON THE TECHNICAL AND TACTICAL DEVELOPMENT OF FOOTBALL PLAYERS
Karbuse ŞENKAL Assoc. Prof. Dr. Turan ÇETİNKAYA	Kırşehir Ahi Evran University	EXAMINATION OF PSYCHOLOGICAL PERFORMANCE OF AMATEUR FOOTBALL PLAYERS IN TERMS OF DIFFERENT VARIABLES
Karbuse ŞENKAL Assoc. Prof. Dr. Turan ÇETİNKAYA	Kırşehir Ahi Evran University	EXAMINATION OF MENTAL ENDURANCE LEVELS OF AMATEUR FOOTBALL PLAYERS IN TERMS OF DIFFERENT VARIABLES
Asst. Prof. Dr. Kaan KARAKUŞ Res. Asst. Ebru KARAKUŞ	Ordu University	EXAMINATION OF FACTORS CAUSING INJURY IN SPORTS IN SPORTS HIGHER EDUCATION INSTITUTION STUDENTS ACCORDING TO SOME VARIABLES: ORDU PROVINCE EXAMPLE
Res. Asst. Ebru KARAKUŞ Asst. Prof. Dr. Kaan KARAKUŞ	Ordu University	EXAMINATION OF CREATIVITY LEVEL IN SPORTS HIGHER EDUCATION INSTITUTION STUDENTS ACCORDING TO SOME VARIABLES: ORDU PROVINCE EXAMPLE
Ömer Faruk ÇALIK Assoc. Prof. Dr. Hacı Ali ÇAKICI Assoc. Prof. Dr. Burkay CEVAHİRCİOĞLU Lec. Hacı Ahmet TAŞPINAR	Ordu University	AN ANALYSIS OF JOB-FINDING ANXIETY AMONG STUDENTS OF THE FACULTY OF SPORTS SCIENCES
Şeyma KARATAŞ ÇORUH Assoc. Prof. Dr. Hacı Ali ÇAKICI	Ordu University	ANALYSIS OF FACULTY OF SPORTS SCIENCES STUDENTS' PERCEPTIONS OF FEMALE PERFORMANCE ATHLETES
Prof. Dr. Gökhan ACAR Kayhan SERİN	Uşak University Burdur Mehmet Akif Ersoy University	THE ROLE OF SPORTS IN DEVELOPING PSYCHOLOGICAL RESILIENCE IN CHILD ATHLETES
Prof. Dr. Gökhan ACAR Kayhan SERİN	Uşak University Burdur Mehmet Akif Ersoy University	THE ROLE OF SPORTS IN REDUCING SOCIOECONOMIC INEQUALITIES

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DATE	TIME	SESSION
• 05.12.2024	• 11^{30}–13^{30} • Turkiye Time	• HALL-4 • SESSION-2

HEAD OF SESSION:		
ANUSHYA S.SHERLIN G.ASMA M.MONICA DR.R SARAVANAN	Bharath Institute of Higher Education and Research	THUTHI LEAF
Rashna Mirza Atif Ullah Khan Kifayat Ullah Shah Noor Ullah Asif Nawaz Shah Faisal Ghani Aqeedat Javed Shefaat Ullah Shah Abdullah F. AlAsmar Metab Alharbi Fawaz Alasmari Zeeshan Hafeez	Quaid-i-Azam University Gomal university College of pharmacy Universite de Lorraine	BRAIN TARGETING OF CEFEPIME LOADED TRANSFERSOMES BASED THERMOSENSITIVE IN SITU GEL VIA INTRANASAL DELIVERY: IN VITRO AND IN VIVO STUDIES
M.Monica D.Anushya Khushi Singh Dr.R.Saravanan Dr.R.Srinivasan	Bharath Institute of Higher Education and Research	ETHNOPHARMACOLOGICAL AND PHYTOCHEMICAL REVIEW ON AN ANTILEPROTIC DRUG HYDNOCARPUS
S. Sherlin sheeba k. Sneha A. Ashwini G.Asma begum D. Anushya.	Bharath Institute of Higher Education and Research	A SHORT REVIEW ON ALOE VERA
T.THIRUMURUGAN PROF.J.JEYARAMAKANI	Bharath Institute of Higher Education and Research	SUSTAINABLE CHEMISTRY AND ENGINEERING IN PHARMA
Pooja Rasal Gaurav Kasar	JES's SND College of Pharmacy Divine College of Pharmacy	AQUASOMES: A NOVEL DRUG CARRIER SYSTEM
Ajit Karthikeyan Vardhana Janakiraman	Vels Institute of Science, Technology and Advanced Studies	EVALUATION OF LEAD ACETATE-INDUCED SH-SY5Y CELL LINE AS A MODEL FOR ALZHEIMER'S DISEASE- AN IN VITRO STUDY
Sana Begum Kanwal shabbir Dr. Fakhar ud Din	Quaid i Azam University Islamabad	NITAZOXANIDE AND QUERCETIN CO-LOADED NANOTRANSFERSOMAL GEL FOR TOPICAL TREATMENT OF CUTANEOUS LEISHMANIASIS WITH MACROPHAGE TARGETING AND ENHANCED ANTI-LEISHMANIAL EFFECT

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DATE	TIME	SESSION
• 05.12.2024	• 11^{30}–13^{30} • Turkiye Time	• HALL-5 • SESSION-2

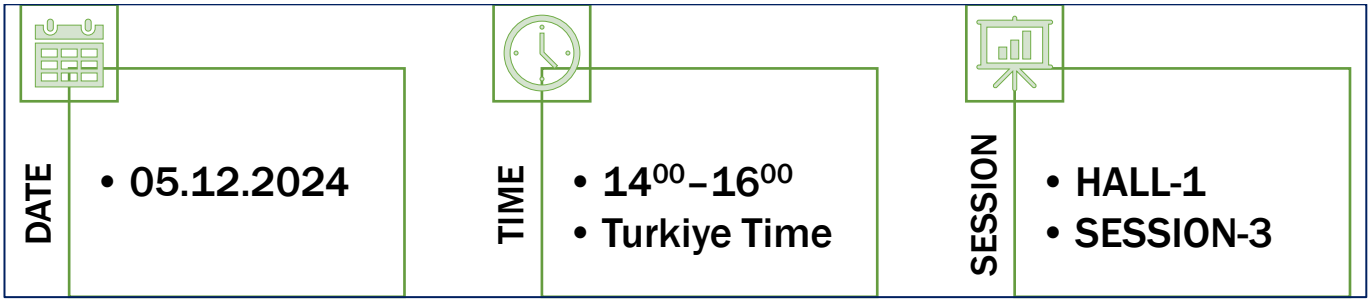
HEAD OF SESSION: Assoc. Prof. Dr. Fatih ADA		
Aslıhan ERKEK Lec. Sibel KAYMAK Assoc. Prof. Dr. Nilüfer VURAL	Ankara Yıldırım Beyazıt University	SYNTHESIS AND CHARACTERIZATION OF APITHERAPEUTIC EDIBLE NANOEMULSIONS
Dilber ÇELİK	University of Health Sciences	RADICULAR CYST WITH PARESTHESIA: CASE REPORT
Dilber ÇELİK	University of Health Sciences	CEMENTO-OSSEOUS DYSPLASIA: CASE REPORT AND LITERATURE REVIEW
Asst. Prof. Dr. Tuğba MERT Exp. Nurse Gamze ÇITIRKI Alev ERKAN	Ardahan University LÖSEV-Losante Children and Adult Hospital 7M Hospital	THE EFFECTS OF WORK ENVIRONMENT AND JOB SATISFACTION OF NURSE MANAGERS ON INTENTION TO LEAVE: A TWO-CENTER STUDY
Asst. Prof. Dr. Tuğba MERT Asst. Prof. Dr. Işıl KIROĞLU ARSLAN Exp. Nurse Gamze ÇITIRKI	Ardahan University LÖSEV-Losante Children and Adult Hospital	DETERMINATION OF VARIABLES AFFECTING INTRINSIC AND EXTRINSIC MOTIVATION OF NURSES
Assoc. Prof. Dr. Fatih ADA	Sivas Cumhuriyet University	RADIOFREQUENCY ABLATION (RFA) TREATMENT IS AN EFFECTIVE METHOD FOR VENOUS STASIS ULCERS
Assoc. Prof. Dr. Elif Fatma TOPKARA Prof. Dr. Ergin ÖZTÜRK	Ondokuz Mayıs University	EFFECTS OF MICROPLASTICS AND NANOPLASTICS ON POULTRY
ZEYNALOVA KHURAMAN AKHUNDOVA NATAVAN ISMAYİLOVA ARZU KHUDİYEVA AYTEN AMİRASLANOVA SHAFA HASANOVA SAMİRA	Azerbaijan Medical University	RELATIONSHIP BETWEEN SPIRITUAL WELL-BEING AND LIFE SATISFACTION IN WOMEN DURING PREGNANCY

DATE	TIME	SESSION
• 05.12.2024	• 11^{30}–13^{30} • Turkiye Time	• HALL-6 • SESSION-2

HEAD OF SESSION: Aisha, A.A.		
Mohammed Roubi Mohammed Dalli Salah-eddine Azizi Youness Mahdi Ayoub Farihi Nadia Gseyra	Mohammed First University Higher Institute of Nursing Professions and Health Techniques	ATRIPLEX HALIMUS : A SOURCE OF PHYTOCHEMICALS AND BIOLOGICAL ACTIVIT
SMAOUNE Ghiles DOUKHANDJI Nassima SAAL Imane ADJOUDJ Abdellatif BOUCHELOUCHE Djaouida	Laboratory of Dynamics and Biodiversity Morsli Abdallah University	ZOOPLANKTON COMPOSITION OF THE GALTAS IN TASSILI (TEMPORARY PONDS), TAMANRASSET, SOUTHERN ALGERIA
SAAL Imane BOUCHELOUCHE Djaouida SMAOUNE Ghiles HAMACHE Ceria ADJOUDJ Abdellatif	Laboratory of Dynamics and Biodiversity University Algiers Morsli Abdallah University	EVALUATION OF WATER QUALITY IN THE KEBIR-RHUMEL BASIN: A PHYSICOCHEMICAL AND BIOLOGICAL APPROACH
Fahima NABI Abderrezak CHAOUCH Meriem CHEBAANI	Université Dr Yahia Farès de Médéa	CHEMICAL AND MICROBIOLOGICAL QUALITY OF DESALINATED WATERS IN BOUSMAIL CITY, ALGERIA
Aisha, A.A.	Federal Polytechnic Bida	ANTIBIOTIC SUSCEPTIBILITY PROFILE OF SALMONELLA SPECIES ISOLATED FROM CHICKEN SOLD IN KURE ULTRA MODERN MARKET MINNA. NIGER STATE. NIGERIA
Danba, E. P. Yusuf, Z. A. Ali, M. E. Barnabas, B. Sani, T. Salisu, A. S.	Taraba State University Federal University of Lafia National Biotechnology Research and Development Agency Federal Polytechnic	COST-BENEFIT ANALYSIS OF CLARIAS GARIEPINUS FINGERLINGS FED DIFFERENT LEVELS OF MACA (LEPIDIUM MEYENII, WALP.) ROOT POWDER AS PHYTO - ADDITIVE
ADJOUDJ Abdellatif SMAOUNE Ghiles SAAL Imane	University Center of Tipaza Laboratory of Dynamics and Biodiversity	VALORIZATION OF THE ALGAL BIOMASS OF DUNALIELLA SALINA FROM THE BETHIOUA SALT FLATS (ALGERIA)
Hadria Boussioud Yassine Benchikh Leonor Maria de Albuquerque Teixeira da Costa Louiza Himed Ana Teresa Serra Maria Rosário Bronze	Université Constantine 1 Frères Mentouri iBET-Instituto de Biologia Experimental e Tecnológica Universidade Nova de Lisboa Universidade de Lisboa	SAFFRON: THE RED-GOLDEN SPICE WITH A PLEASANT AROMA

DATE	TIME	SESSION
• 05.12.2024	• 11^{30}–13^{30} • Turkiye Time	• HALL-7 • SESSION-2

HEAD OF SESSION: Dr. Ahmet ÜNLÜ		
Çağlar SOYLU Emre ALTUNDAĞ	University of Health Sciences Kütahya Dumlupınar University	THE ROLE OF TEMPOROMANDIBULAR JOINT DYSFUNCTION AND INJURY HISTORY IN LOWER EXTREMITY FUNCTIONS
Çağlar SOYLU Emre ALTUNDAĞ	University of Health Sciences Kütahya Dumlupınar University	THE IMMEDIATE EFFECT OF NEUROATHLETIC TRAINING ON POSTERIOR CHAIN MUSCLE ACTIVATION, HAMSTRING FLEXIBILITY, AND ANKLE DORSIFLEXION RANGE OF MOTION
Ahmet ÜNLÜ Hasan ÖZDOĞAN	Antalya Bilim University	CALCULATION OF THE CROSS SECTION OF ELEMENT 64 ZN WITH TALYS CODE AND CALCULATION OF THE AGREEMENT OF THESE RESULTS WITH EXPERIMENTAL MEASUREMENTS
Ahmet ÜNLÜ Hasan ÖZDOĞAN	Antalya Bilim University	INVESTIGATION GAMMA ATTENUATION PROPERTIES OF HYDROXYPROPYL METHYL CELLULOSE POLYMER BY USING MONTE CARLO SIMULATION



HEAD OF SESSION: Dr. Ali Recai ÇELİK		
Asst. Prof. Dr. Zeynep BERKTAŞ Prof. Dr. Elif ORHAN	Ankara Medipol University Gazi University	COMPARISON ON THE ELECTRICAL CHARACTERISATION OF LANTHANIDE DOPED GRAPHENE QUANTUM DOT INTERFACED AND NON-INTERFACED DIODES
Dr. Ali Recai ÇELİK	Dicle University	AN OVERVIEW OF THE ELECTROMAGNETIC INTERFERENCE SHIELDING MATERIALS
Dr. Ali Recai ÇELİK	Dicle University	AN EXAMPLE OF TEXTILE-BASED ELECTROMAGNETIC INTERFERENCE SHIELDING IN SIMULATION ENVIRONMENT
Emre ÇELİK Mehmet KARAYEL	Duzce University Cankırı Karatekin University	PARAMETER IDENTIFICATION IN EQUIVALENT CIRCUIT MODEL OF PHOTOVOLTAIC SOLAR CELL USING REPTILE SEARCH ALGORITHM
Emre ÇELİK Mehmet KARAYEL	Duzce University Cankırı Karatekin University	DESIGN AND OPTIMIZATION OF PD-PID CONTROLLER FOR SECONDARY FREQUENCY MANAGEMENT IN AN INTERCONNECTED POWER SYSTEM
Mehmet KARAYEL Emre ÇELİK	Cankırı Karatekin University Duzce University	REDUCTION OF COMMUTATION TORQUE RIPPLE IN BRUSHLESS DIRECT CURRENT MOTORS USED IN PHOTOVOLTAIC SOLAR ENERGY POWERED IRRIGATION SYSTEMS
Mehmet KARAYEL Emre ÇELİK	Cankırı Karatekin University Duzce University	CUK CONVERTER BASED MPPT INVERTER DESIGN FOR BRUSHLESS DIRECT CURRENT MOTOR IRRIGATION SYSTEM POWERED BY PHOTOVOLTAIC ENERGY

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DATE	TIME	SESSION
• 05.12.2024	• 14^{00}–16^{00} • Turkiye Time	• HALL-2 • SESSION-3

HEAD OF SESSION: Assist. Prof. Kagan SOGUT		
Esra BOZDEMİR N.Bera CERAN Aden GÜNSÜREN	Koluman Automotive Industry Inc.	MODELING FOR PROJECT PERFORMANCE MEASUREMENT
Bora Burak AZER	Koluman Automotive Industry Inc.	A HISTORICAL OVERVIEW OF DEFLECTOR MECHANISMS IN MISSILE LAUNCH VEHICLES
Bora Burak AZER	Koluman Automotive Industry Inc.	STRUCTURE AND DESIGN CRITERIA OF DEFLECTOR SYSTEMS IN MISSILE LAUNCH VEHICLES
Derin Hilal BİLMEZ	Mimar Sinan Fine Arts University	EVALUATION OF SPEECH SOUND AND MUSICAL SOUND IN VOLUME ACOUSTIC DESIGN
Assist. Prof. Kagan SOGUT	Kilis 7 Aralık University	A NUMERICAL STUDY ON SHEAR BEHAVIOUR OF RC T-BEAMS
Hikmet BAYIRTEPE Didem YILDIZ TEMİZ	Gazi University	ANKARA-POLATLI DEVLET YOLU İÇİN MAKRO VE MİKRO TRAFİK KARAKTERLERİ VE ANALİZLERİ
Suleiman Khatrush	Istanbul Gelisim University	SOME COMMENTS ON THE ESTIMATION OF UNDRAINED STRENGTH OF STIFF COHESIVE SOILS
Fırat AKTÜRK Assoc. Prof. Dr. Abdullah Can ZÜLFİKAR Prof. Dr. Ferit ÇAKIR	Gebze Technical University İstanbul Technical University	DECISION-MAKING MECHANISM THROUGH STRUCTURAL HEALTH MONITORING: THE CASE OF ÖŞKİ CHURCH IN ERZURUM

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DATE	TIME	SESSION
• 05.12.2024	• 14^{00}–16^{00} • Turkiye Time	• HALL-3 • SESSION-3

HEAD OF SESSION: Özkan KIZMAZ

Özkan KIZMAZ Research Assistant Ahmet DAYANÇ Prof. Dr. Ramazan KÖSE	Kutahya Porcelain Maintenance Directorate Kutahya Dumlupinar University	THE IMPACT OF MAINTENANCE PROCESSES ON EFFICIENCY IN INDUSTRIAL FACILITIES
Özkan KIZMAZ Prof. Dr. Ramazan KÖSE	Kutahya Porcelain Maintenance Directorate Kutahya Dumlupinar University	REDUCING PRODUCT COSTS IN THE MAINTENANCE MANAGEMENT PROCESS
Lec. Dr. Zehra ÇETİNKAYA Prof. Dr. Oktay BAYAT	Çukurova University	CHARACTERIZATION OF LEONARDITE (MARAŞ, TÜRKİYE) AND INVESTIGATION OF ITS HUMIC ACID PRODUCTION POTENTIAL
Asst. Prof. Dr. Gamze SOYTURK Prof. Dr. Onder KIZILKAN	Isparta University of Applied Sciences	EXAMINATION OF PVT-BASED LOW TEMPERATURE RANKINE CYCLE USING SUPERCRITICAL WORKING FLUIDS FOR LNG COLD ENERGY RECOVERY
Furkan KILIÇ Asst. Prof. Dr. Hasan DEMİRTAŞ Res. Asst. Abdulkadir ÇEBİ	POELSAN Plastik Sanayi ve Ticaret AS, Samsun University	THE EFFECT OF SINKER ELECTRICAL DISCHARGE MACHINING PARAMETERS ON SURFACE QUALITY IN MOLD STEEL
Asst. Prof. Dr. Zihni Alp ÇEVİK Assoc. Prof. Dr. Koray ÖZSOY	Adıyaman University Isparta University of Applied Sciences	A STUDY ON THE EFFECTS OF LASER POLISHING PROCESSES IN ADDITIVE MANUFACTURING METHODS
Asst. Prof. Dr. Zihni Alp ÇEVİK	Adıyaman University	A STUDY ON THE MACHINABILITY OF TITANIUM AND ITS ALLOYS
Yusuf Behauddin GÜNEY Assoc. Prof. Dr. Mehmet Onur GÜLBAHÇE	İstanbul Technical University	DESIGN OF A MODULAR 5 KW LLC RESONANT CONVERTER FOR ELECTRIC VEHICLE FAST CHARGING APPLICATIONS

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DATE	TIME	SESSION
• 05.12.2024	• 14^{00}–16^{00} • Turkiye Time	• HALL-4 • SESSION-3

HEAD OF SESSION: Zohaib Hassan Sain

Saltanat Sharmuhanbet Gulnur Turmuhanova Nurgul Baytemirova Danagul Kudabayeva	Atyrau University named after Kh. Dosmukhamedov	GAMIFICATION IN THE EDUCATIONAL PROCESS
Meike Lely Lewankoru Febrina Norliantyn Atty Edy Junedi Sitindaon	Universitas Kristen Indonesia	THE ROLE OF SUNDAY SCHOOL TEACHERS CREATIVITY THROUGH VISUAL MEDIA IN ENHANCING COGNITIVE DEVELOPMENT OF EARLY CHILDHOOD
Zohaib Hassan Sain	Superior University	EVALUATING THE IMPACT OF THE SINGLE NATIONAL CURRICULUM ON EDUCATIONAL EQUALITY AND TEACHER PREPAREDNESS IN PAKISTAN
Dilafruz Ismoilova Muxlisa baxt	Chirchik State Pedagogical University	FORMATION OF INTELLECTUALLY COMPETENT GENERATION IN THE EDUCATIONAL SYSTEM
Usman, Z.N. Dr Bala, A. S.	Niger State College of Education Minna Abdulkadir Kure University	THE PERCEPTION OF LECTURERS ON ELECTRONIC EXAMINATION IN NIGER STATE COLLEGE OF EDUCATION, MINNA
Irshad Ullah Dr. Aamna Saleem Khan	AbdulWali Khan University	DEVELOPMENT OF CONCEPTS USING CONCEPT FORMATION TEACHING MODEL
Buhari, M. Haneefah, S. N. Usman, A. M.	Kaduna State University Federal University of Education Kontagora	IMPACT OF MOTIVATION ON TEACHERS' PERFORMANCE IN PUBLIC SECONDARY SCHOOLS IN SABONGARI LOCAL GOVERNMENT AREA, KADUNA STATE, NIGERIA
Usman, Z.N. Prof. Tukura, C. S. Kuta I. I. (PhD.) Prof. Yunusa, M. B.	Federal University of Technology	EFFECT OF ANIMOTO-GENERATED INSTRUCTIONAL VIDEOS ON ACHIEVEMENT, RETENTION AND ATTITUDE AMONG PRE-SERVICE GEOGRAPHY TEACHERS IN NORTH CENTRAL, NIGERIA

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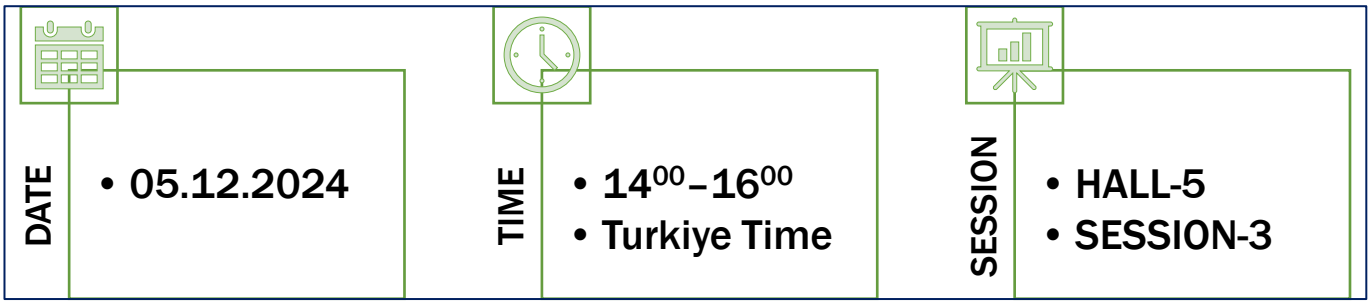

HEAD OF SESSION: Dr Irfan Bashir

SALIHU, Fatima CHADO, A. M. (PhD.) NDATSU, A.	Federal University of Technology	DEVELOPMENT AND VALIDATION OF HAUSA PRACTICAL MODULE FOR INTEGRATING SCIENCE PROCESS SKILLS AMONG SECONDARY SCHOOL STUDENTS IN MINNA, NIGER STATE
Dr.Kalaivazhi Vijayaragavan	Anjalai Ammal Mahalingam Engineering College	TECHNOLOGY INTERACTION USING HAND SIGN USING DEEP LEARNING
Clementina Hashimu Bulus	University of Jos	DIAGNOSTIC ASSESSMENT OF SECONDARY STUDENTS' AREAS OF DIFFICULTIES IN QUANTITATIVE ECONOMICS IN PLATEAU STATE, NIGERIA
Dr Irfan Bashir Dr Afshan Naseem Dr Fariha Gul Dr Rizwan Akram Rana	University of Management and Technology	SELF REPORTED TIME MANAGEMENT NEEDS AND PRACTICES OF SCHOOL PRINCIPALS
Onyia Ethel Chidubem	Kola Daisi university Nigeria	EFFECT OF DEBTS ON ECONOMIC GROWTG IN NIGERIA
Mr. Kerimu Ikazuwagbe Joel Dr. Micheal Gbemisola Aina Prof. Tajudeen Olanrewaju Ibraheem	University of Ilorin	SPORTS GAMBLING: KNOWLEDGE AND PREVALENCE AMONG COLLEGIATE ATHLETE
Hawa Gull hassani Zahra Fribs	AhlulBayt International University	REVIEW OF WOMEN'S EDUCATION IN AFGHANISTAN: TWO DECADES OF REPUBLIC AND BEYOND
Anshit Mukherjee	Abacus Insitute of Engineering and Management	THE IMPACT OF SOCIAL AND EMOTIONAL LEARNING (SEL) PROGRAMS ON CHILDREN IN CONFLICT-AFFECTED AREAS

DATE	TIME	SESSION
• 05.12.2024	• 14^{00}–16^{00} • Turkiye Time	• HALL-6 • SESSION-3

HEAD OF SESSION:

Fatima Ezzahra BOUHOUCH Prof. Saâdia CHABEL	Ibn Zohr University	TRANSFORMING COOPERATIVES THROUGH STRATEGIC LOGISTICS: A PATH TO SUSTAINABILITY AND GROWTH
Adirek Vajrapatkul Boonta Wayupab Pinmanee Vajrapatkul	Sukhothai Thammathirat Open University Central Food Retail Company Limited Srinakharinwirot University	THE EFFECTS BETWEEN NATIONAL INCOME, EDUCATION EXPENDITURE, AND POPULATION GROWTH IN TSLS APPROACH
Adirek Vajrapatkul Boonta Wayupab Pinmanee Vajrapatkul	Sukhothai Thammathirat Open University Central Food Retail Company Limited Srinakharinwirot University	TRADE TERMS INTERACTION AMONG SOUTHEAST ASIAN IN THE BVER FRAMEWORK
Adirek Vajrapatkul Boonta Wayupab Pinmanee Vajrapatkul	Sukhothai Thammathirat Open University Central Food Retail Company Limited Srinakharinwirot University	THE BAYESIAN REGRESSION MODEL OF INFLATION
Adirek Vajrapatkul Boonta Wayupab Pinmanee Vajrapatkul	Sukhothai Thammathirat Open University Central Food Retail Company Limited Srinakharinwirot University	ANALYZING THE ROLE OF AGRICULTURE VALUE ADDED IN THAILAND'S ECONOMIC GROWTH USING A BVAR MODEL
Luminita DIACONU Associate Prof. Grigore ARDELEAN	The Academy of Economic Studies of Moldova The Stefan cel Mare Academy of The Ministry of Internal Affairs	ENVIRONMENTAL CONTROL AND THE PROBLEM REGARDING THE OWNERSHIP OF FOREST RESOURCES RECORD
Alexandra-Ioana Popescu, MHRM Assoc. Prof. Denisa Abrudan, PhD	West University of Timisoara	THE USE OF SOCIAL NETWORKING WEBSITES AS A RECRUITING PRACTICE
Aashish Dhiman	Swami Vivekanand Subharti University	THE ROLE OF LEADING BUSINESS ORGANIZATIONS IN INDIA IN ADVANCING SUSTAINABLE DEVELOPMENT

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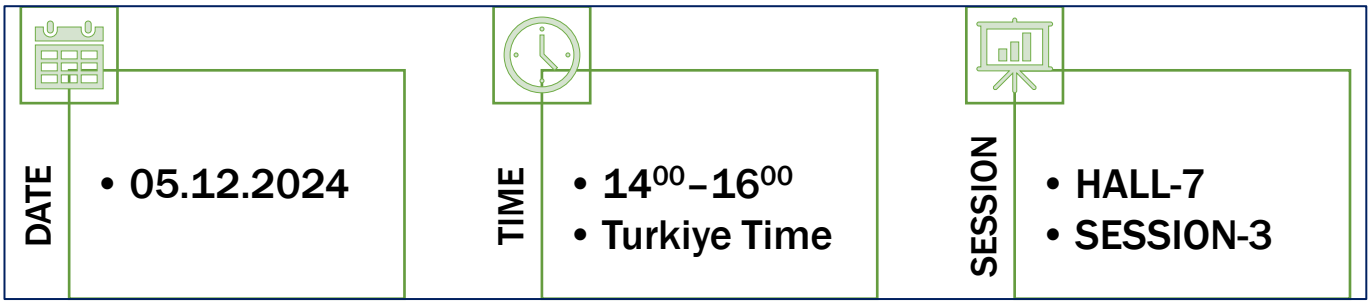

HEAD OF SESSION: **Prof. Dr. Zeynep KARAÇOR**		
Prof. Dr. Zeynep KARAÇOR Prof. Dr. Burcu GÜVENEK	Selçuk University	APPLICATION OF RATIONAL TRANSFORMATION PROGRAMS IN TURKISH ECONOMY AND ITS EFFECTS
Prof. Dr. Zeynep KARAÇOR Prof. Dr. Burcu GÜVENEK	Selçuk University	THE EFFECTIVENESS OF MONETARY POLICY IN THE LEARNING ECONOMY: AN EVALUATION ON THE TURKISH ECONOMY
Fevzi KIRBAŞOĞLU Assoc. Prof. Dr. Ferhat Çağrı ARAS	Karadeniz Technical University	A REGULAR ANALYSIS OF THE DYNAMICS OF CHINA AND INDIA IN BRICS ENERGY SECURITY POLICY BETWEEN 2016 AND 2018
Assoc. Prof. Dr. Ferhat Çağrı ARAS Fevzi KIRBAŞOĞLU	Karadeniz Technical University	INDIA'S RISING GLOBAL POWER: ECONOMIC, POLITICAL AND STRATEGIC DYNAMICS
Prof. Dr. Zeynep KARAÇOR Prof. Dr. Burcu GÜVENEK Saim Mert KALIN	Selçuk University Konya Veterinary Control Institute	EFFECTS OF GREEN ECONOMY AND RESOURCE UTILIZATION
Prof. Dr. Zeynep KARAÇOR Prof. Dr. Burcu GÜVENEK Hümeyra AVCI	Selçuk University	THE RELATIONSHIP BETWEEN GREEN ECONOMY AND SUSTAINABLE GROWTH

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DATE	TIME	SESSION
• 05.12.2024	• 16^{30}–18^{30} • Turkiye Time	• HALL-1 • SESSION-4

HEAD OF SESSION: Prof. Dr. Osman Kubilay GÜL		
Asst. Prof. Dr. Fatma Nur BÜYÜKBAYRAKTAR	Ordu University	COMPARING ELECTRICAL TOPICS IN THE SCIENCE CURRICULA OF 2018 AND 2024
Fatma Nur BÜYÜKBAYRAKTAR Begüm AKSOY GÜREL	Ordu University Ministry of Education	SCIENCE TEACHERS' VIEWS ON THE TEACHING OF THE 6TH GRADE UNIT 'SYSTEMS IN OUR BODY'
Dr. Rana IBRAHIMOVA	Baku State University	FAMILY LIFE AND THE STATUS OF WOMEN IN AZERBAIJANI SOCIETY IN THE 19TH CENTURY
Dr. Nuryağdı SOYER	---	EFFORTS TO BUILD NATIONAL IDENTITY IN AFGHANISTAN AND THE ROLE OF ETHNIC GROUPS
Ökkeş Oğuzhan BAŞALAN	Hatay Mustafa Kemal Üniversitesi	COMBATING FAKE INFORMATION WITH SCIENTIFIC LITERACY
Burcu ÇINARGİL Prof. Dr. Osman Kubilay GÜL	Sivas Cumhuriyet University	AN EVALUATION ON THE QUALIFICATIONS OF TEACHERS IN THE FIRST YEARS OF THE REPUBLIC BASED ON A TEACHER INSPECTION REPORT
Beyza Nur CANATAN Prof. Dr. Osman Kubilay GÜL	Sivas Cumhuriyet University	CHANGES IN EDUCATION IN HAFIK DISTRICT OF SİVAS BETWEEN 1949-1965 ACCORDING TO NATIONAL EDUCATION STATISTICS
Assoc. Dr. Fatma İNCE SANCAKLI	İnönü University	POLITICAL ROLES OF BYZANTINE DYNASTY WOMEN: THE CASE OF EMPRESS THEODORA

DATE	TIME	SESSION
• 05.12.2024	• 16^{30}–18^{30} • Turkiye Time	• HALL-2 • SESSION-4

HEAD OF SESSION: **Serkan YILMAZ**		
Merve Çolak Asst. Prof. Tuba Toprak-Cavdur Prof. Fatih Cavdur	Colin's, İstanbul Bursa Uludag University	DYEING OF POLIAMIDE FABRIC WITH MORUS NIGRA AND OPTIMIZATION USING CENTRAL COMPOSITE DESIGN
Kübra YILDIRIM Seda KIZIL Tuğçe EREN Banu NERGİS	Cetinkaya Giyim Industrial Design Department İstanbul Technical University	GARMENT DESIGN FROM BI-ELASTIC WOVEN FABRICS WITH ENHANCED SEAM PROPERTIES
Serkan YILMAZ Kağan IRMAK Merve GİDEROĞLU	Tayeks Textile Industry Inc.	DENİM EFEKTLENDİRME İŞLEMLERİNDE PONZA TAŞI YERİNE STRAFOR KULLANIMI İLE ASİT YIKAMA EFEKTLERİNİN ELDESİ VE OPTİMUM REÇETE ŞARTLARININ BELİRLENMESİ
Elis Özgür Çetin	Tayeks Textile Industry Inc.	THE USE OF BIODEGRADABLE MATERIALS AND ECO-FRIENDLY APPROACHES IN DENIM DESIGN
Res. Asst. Mert Can KORKMAZ Prof. Dr. Suat ÇETİNER	Bursa Uludag University Kahramanmaraş Sutcu İmam University	DESIGN OF POLYESTER-POLY(3,4-ETHYNEDIOXYTHIOPHENE) CONDUCTIVE PRESSURE SENSOR FABRIC STRUCTURES
Assist. Prof. ABDULLAH TURAN Assist. Prof. HÜSEYİN AGGÜMÜŞ Assoc. Prof. MEHMET HASKUL Assist. İSMAİL ERHAN KUTSAL	Sirnak University	EXPERIMENTAL ANALYSIS OF FREE VIBRATION OF A CIRCULAR CROSS-SECTION CRACKED BEAM
Associate Professor Mammadova Lala Nizami	Azerbaijan State Agrarian University	SYNTHESİS AND STRUCTURAL STUDY OF PARA-NİTROSALİCYLATE Ni(II)
Ömer Enes YILDIZ Prof. Dr. Kenan DANIŞMAN	Erciyes University	DESIGN OF AN OPTICAL MEASUREMENT SYSTEM FOR THE DETECTION OF DIMENSIONAL AND GEOMETRIC DEFECTS IN CYLINDRICAL MATERIALS

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HEAD OF SESSION: Assoc. Prof. Dr. Tülay ELAL MUŞ		
Araştırma Görevlisi Hilal MERAL Profesör Aslıhan DEMİRDÖVEN	Tokat Gaziosmanpasa University	DEVELOPMENT OF NEW FUNCTIONAL FOODS AND NUTRACEUTICAL PRODUCTS
Assoc. Prof. Dr. Tülay ELAL MUŞ	Bursa Uludag University	EFFECTS OF PUNICIC ACID ON HUMAN HEALTH AND ITS STATUS IN FOOD TECHNOLOGY
Assoc. Prof. Dr. Tülay ELAL MUŞ	Bursa Uludag University	EFFECTS OF SEA BUCKTHORN ON HUMAN HEALTH
Assoc. Prof. Dr. Kazım Eşber ÖZBAŞ Prof. Dr. Özen ÖZBOY ÖZBAŞ	Aksaray University	UTILIZATION OF SUGAR BEET PULP AS BIOMASS
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DATE	TIME	SESSION
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DATE	TIME	SESSION
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DATE	TIME	SESSION
• 05.12.2024	• 16^{30}–18^{30} • Turkiye Time	• HALL-6 • SESSION-4

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Mr. Satish Kumar Singh	Central University of Punjab	AN EVALUATION OF AIR POLLUTION CONTROL LAWS IN EMERGING ECONOMIES: EFFECTIVENESS, ENFORCEMENT CHALLENGES, AND PUBLIC HEALTH OUTCOMES
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Waheedullah Zahid	---	MOBILE BANKING: CURRENT CHALLENGES AND OPPORTUNITIES OF M-BANKING IN AFGHANISTAN

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ÜÇ BOYUTLU YAZICILARDA LAZER ERGİTME YÖNTEMİYLE ŞEKİLLENDİRİLMİŞ Ti6Al4V VE CoCr ALAŞIMLARININ BOR BİLEŞİKLERİ İLE KAPLANMASI VE KARAKTERİZASYONU

COATING WITH BORON COMPOUNDS OF TI6AL4V AND COCR ALLOYS SHAPED BY LASER MELTING İN 3D PRINTERS AND CHARACTERIZATION

İrem BALCI
Yüksek Lisans Öğrencisi, Gazi Üniversitesi, Fen Bilimleri Enstitüsü, Kimya Müh. Böl. Ankara, Türkiye
Sağlık Bilimleri Üniversitesi Gülhane Medikal Tasarim Uygulama ve Araş. Merkezi (METÜM), Emrah Mah. Basın Cad. Etlik Keçiören, Ankara
Murat BİLEN
Doç. Dr., Gazi Üniversitesi Mühendislik ve Mimarlık Fakültesi, Kimya Mühendsliği Bölümü

ÖZET

Bilimin ve teknolojinin sürekli ilerlemesi ile her geçen gün yeni gelişmeler yaşanmaktadır. Bu gelişmelerin en önemlilerinden biri ise son yıllarda aşırı talep gören üç boyutlu yazıcı teknolojisidir. Bu teknoloji sayesinde, hayal edilen her ürün tasarlanabilmekte ve geleneksel yöntemle üretilmesi zor olan çok karmaşık şekilli parçalar kolaylıkla üretilebilmektedir. Kalıp gerektirmeden istenilen nihai ürünün üretilebilmesi, atık malzeme ve zaman tasarrufu sağlaması gibi avantajları nedeniyle savunma sanayi, otomotiv, havacılık ve uzay araştırmaları gibi birçok endüstride tercih edilmektedir. Üç boyutlu yazıcı teknolojisi, son yıllarda, sağlık sektöründe kişiye özel implant üretimi, ameliyat öncesi planlama modelleri, tıbbi ekipmanların üretimi gibi alanlarda sıklıkla kullanılmaktadır. Tıpkı anahtar-kilit uyumu içerisinde, kişiye özel implantların tasarım ve üretimlerinin yapılmasına müsaade ettiğinden dolayı kranial implantlar, pelvis ve eklem implantları gibi birçok implantın üretimi son yıllarda metal üç boyutlu yazıcı teknolojisi kullanılarak yapılmaktadır. Üç boyutlu yazıcılarda metal alaşımı tozları kullanılarak üretilecek implantlar değişken mekanik şartlar altında ve korozif ortamda bulunduklarından dolayı biyouyumluluğun yanında üstün korozyon ve aşınma dayanımına sahip olması beklenmektedir. Özellikle temporomandibular eklem implantları gibi eklem bölgelerinde kullanılacak implantların, düşük sürtünme katsayısına ve yüksek mukavemete sahip olması da gerekmektedir. İstenilen bu özelliklerin hepsinin bir arada bulunması çok zor olduğundan, bu özelliklere ulaşabilmek için malzemelere ilave alaşımlama veya yüzey işlemleri yapılmaktadır. Bu çalışmada, Ti6Al4V ve CoCr alaşımlarıyla üç boyutlu yazıcıda lazer ergitme yöntemi ile numuneler üretilerek, mekanik ve yüzey özelliklerinin iyileştirilmesi için bor bileşikleri (BN, TiB_2) ile kaplanmış, daha sonra kaplama yapılan ve yapılmayan numunelerin analizleri ve bazı mekanik testleri yapılarak kaplamaların mekanik özellikler üzerindeki etkileri değerlendirilmiştir. Elde edilen sonuçlar, bor bileşikleri ile kaplanan numunelerin mekanik özelliklerinin kaplanmamış numunelere kıyasla önemli ölçüde iyileştiğini ortaya koymuştur. Bu bulgular, temporomandibular eklem implantları gibi biyomedikal uygulamalarda kullanılacak implant yüzeylerinde bor bileşiklerinin koruyucu kaplama malzemesi olarak değerlendirilmesine olanak tanımaktadır.

Anahtar Kelimeler: Ti6Al4V alaşımı, CoCr alaşımı, bor kaplama (BN, TiB_2), üç boyutlu yazıcı, temporomandibular eklem implantları

ABSTRACT

With the continuous advancement of science and technology, new developments are emerging every day. One of the most significant advancements in recent years is the highly demanded three-dimensional printing technology. This technology allows the design and production of virtually any envisioned product, including highly complex shapes that are challenging to produce using traditional methods. Due to its advantages, such as the ability to produce the final product without requiring molds, reducing material waste, and saving time, it is widely utilized in industries such as defense, automotive, aerospace, and space research. In recent years, 3D printing technology has also been extensively used in the healthcare sector for applications like patient-specific implant production, pre-surgical planning models, and the manufacturing of medical devices. By enabling the design and production of custom implants with a perfect fit, this technology has been employed in the production of many types of implants, such as cranial implants, pelvic implants, and joint implants, especially using metal 3D printing technologies. Implants produced with metal alloy powders in 3D printers are expected to possess superior corrosion and wear resistance in addition to biocompatibility, as they operate under variable mechanical conditions and in corrosive environments. Particularly for implants used in joint areas, such as temporomandibular joint (TMJ) implants, they must also exhibit low friction coefficients and high strength. Since achieving all these desired properties simultaneously is quite challenging, additional alloying or surface treatments are often applied to the materials. In this study, samples were produced using Ti6Al4V and CoCr alloys via the laser melting method in a 3D printer, and their mechanical and surface properties were enhanced by coating them with boron compounds (BN, TiB_2). Subsequently, analyses and mechanical tests were conducted on both coated and uncoated samples to evaluate the effects of the coatings on mechanical properties. The results revealed that the mechanical properties of the samples coated with boron compounds were significantly improved compared to uncoated samples. These findings highlight the potential of boron compounds as protective coating materials for implant surfaces in biomedical applications, such as temporomandibular joint implants.

Keywords: Ti6Al4V alloy, CoCr alloy, boron coating (BN, TiB_2), three-dimensional printing, temporomandibular joint implants

ASSESSMENT OF QUALITATIVE AND QUANTITATIVE PHYTOCHEMICALS OF PARKIA BIGLOBOSA AQUEUOS LEAVES EXTRACT

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Abstract
Parkia biglobosa, commonly known as the "African locust bean tree," and has been used in Nigerian and other West African rural societies to treat a variety of diseases such as malaria, diabetes mellitus, infections, and inflammatory diseases. The efficacy of the various preparations (seeds, leaves, and stem barks) of Parkia biglobosa is widely recommended for the treatment of malaria, diabetes mellitus, and painful conditions. The aim of this research work is to assess the qualitative and quantitative analysis. The sample was collected in Unguwar Amadu, "Aliero." Extraction of plant leaves was done using cold maceration method, with distilled water as solvent for extraction. The standard methods were used in carrying out the qualitative and quantitative phytochemical analysis. The result of qualitative phytochemical investigation revealed the presence of alkaloids, tannins, saponins, glycosides, phenols, flavonoids and terpenoids. The result of quantitative investigation showed the content of alkaloids (13.50±0.50), tannins (11.30± 0.29), saponins (9.39 ± 1.17), glycosides (29.20± 0.45), phenols (7.50± 0.50), flavonoids (6.50± 0.05) and terpenoids (6.50± 1.0). The present of secondary metabolites in the plant leaves extract justified the claims that, this plant contained several bioactive compounds that are responsible for the treatment of various diseases such as antimicrobial, antimalarial, anticancer, anti-inflammatory, antifungal, antihypertension and other pharmacological actions.

Keywords: Parkia biglobosa, Leaves, Qualitative, Quantitative, Diseases, Distilled water.

THE ROLE OF LEADING BUSINESS ORGANIZATIONS IN INDIA IN ADVANCING SUSTAINABLE DEVELOPMENT

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Abstract: Sustainable development has emerged as a critical global agenda, aimed at meeting present needs without compromising the ability of future generations to fulfill theirs. India, with its rapid economic growth, faces unique challenges and opportunities in balancing development with environmental and social responsibility. Business organizations, particularly top companies, play a pivotal role in shaping this balance by integrating sustainable practices into their core operations. This paper explores the role of leading Indian business organizations in driving sustainable development through corporate social responsibility (CSR) initiatives, resource-efficient processes, and innovations aimed at reducing environmental impact. By examining case studies from top Indian companies such as Tata Group, Infosys, and ITC, the paper highlights their efforts in areas such as renewable energy, waste management, water conservation, and sustainable supply chain practices. Furthermore, it delves into the alignment of these efforts with the United Nations' Sustainable Development Goals (SDGs) and the challenges faced by businesses in scaling sustainable practices while maintaining profitability. The research aims to contribute to the broader understanding of how Indian businesses can be drivers of sustainable growth and address critical issues such as climate change, social equity, and resource management. The findings underscore the need for stronger policy frameworks, industry collaborations, and innovative business models to enhance the role of the private sector in India's sustainable development journey.
Keywords: Sustainable development, business organizations, India, corporate social responsibility, environmental impact, United Nations Sustainable Development Goals (SDGs).

COMPREHENSIVE ANALYSIS OF DRACAENA DRACO FIBER PYROLYSIS: KINETICS, THERMODYNAMICS, AND RENEWABLE ENERGY POTENTIAL USING THERMOGRAVIMETRIC TECHNIQUES

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ABSTRACT
This research assessed the thermokinetic and thermodynamic characteristics of *Dracaena draco* fibers (DDFs) via thermogravimetric analysis (TGA). The DDFs were subjected to non-isothermal heating in a nitrogen environment, utilizing heating rates of 5, 10, and 20 °C/min, commencing at 20 °C and culminating at 800 °C. TGA analysis revealed that the pyrolysis of DDFs occurred in three distinct phases: dehydration, devolatilization, and solid biochar formation. The thermokinetic and thermodynamic characteristics were calculated for the devolatilization phase of mass reduction. The Coats-Redfern approach utilized twenty-one distinct kinetic equations derived from four essential solid-state chemical processes. Among all the diffusivity models (DMs), the Ginstlinge-Brounshtein (DM5), Jander (3D diffusion) (DM7), and Ginstling models (DM8) exhibited the most favorable match, as evidenced by their superior coefficient of regression values ($R2 > 0.990$) across all three heating rates. The activation energy values determined by the DM5, DM7, and DM8 models are 76.5, 82.32, and 76.47 kJ/mol, respectively, at a heating rate of 5 °C/min. The thermodynamic variables, such as entropy, free energy, and enthalpy change, were computed from the kinetic data. The study's findings are crucial for assessing the potential of DDFs as an energy source, designing reactors, manufacturing chemicals, and comprehending the characteristics of DDFs for composite synthesis.
Keywords: *Dracaena draco* fibers; Thermogravimetric analysis; pyrolysis; Coats-Redfern method; thermokinetics.

FIRST-PRINCIPLES INVESTIGATION OF THE STRUCTURAL, ELECTRONIC AND OPTICAL PROPERTIES OF SnO_2 SINGLE CRYSTAL USING DFT WITH THE vdW-DF3-OPT1 FUNCTIONAL

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Abstract
An *ab initio* study based on density functional theory (DFT) has been conducted to investigate the structural, electronic, and optical properties of the SnO_2 compound. The structural properties were determined using the vdW-DF3-OPT1 functional, as implemented in Quantum Espresso. The optimized lattice parameters for SnO_2 are found to be a = 4.7981 Å, c = 3.2437 Å, and u = 0.3063. The calculated electronic band structure and density of states (DOS) reveal that SnO_2 is a wide-gap semiconductor with a direct band gap of 3.56 eV. Analysis of the total and partial DOS indicates significant contributions from O-2p orbitals in the valence band, while the conduction band is primarily dominated by Sn-5p states. Additionally, the optical properties, including the dielectric function, refractive index, absorption coefficient, and extinction coefficient, have been calculated and discussed in detail.
Keywords: DFT; DFT+U; Gap; vdW-DF3-OPT1; SnO2

EFFECTS OF PHENOLIC CONTENTS FROM THE RHIZOMES OF *CURCUMA LONGA* AND STALKS OF *SOGHUM BICOLOR* ON TEXTILES

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ABSTRACT
This study investigates the effects of phenolic contents from blends of *Curcuma longa* and *Sorghum bicolor* on textile properties. Phytochemical screening revealed the presence of flavonoids, anthocyanins, coumarins, tannins, carotenoids, and quinones. Three blends (CS_1, CS_2, and CS_3) were evaluated using High-Performance Liquid Chromatography (HPLC) and Gas Chromatography-Mass Spectrometry (GC-MS). The total phenolic content (TPC) was determined using the Folin-Ciocalteu assay, with CS1 exhibiting the highest TPC value of 164.98 ± 4.98 mg GAE/g. The colorfastness of the treated cotton textiles was evaluated using the ISO 105-C06:2010 standard, with CS_1 showing a colorfastness rating of 4.3/5. The tensile strength and elongation at break of the treated textiles were also evaluated, with CS_1 showing a significant improvement in tensile strength (15.6% increase) and elongation at break (12.3% increase). The results demonstrate the potential of CS_1 as an eco-friendly textile finish, offering improved colorfastness, antioxidant properties, and mechanical strength. This study provides a sustainable alternative to synthetic textile finishes, promoting environmentally responsible textile production.
Keywords: *Curcuma longa*, *Sorghum bicolor*, phenolic compounds, textile properties, eco-friendly, sustainable textiles.

GASTRONOMİ TURİZMİNDE SOKAK LEZZETLERİ: İNCELEME YAKLAŞIMIYLA BİR DEĞERLENDİRME
STREET FOOT IN GASTRONOMY TOURISM: AN EVALUATION WITH A REVIEW APPROACH

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ÖZET
Gastronomi, bir destinasyonun kültürel kimliğinin önemli bir parçasıdır ve son yıllarda kültürel değerleri tanıtma ve ekonomik katkı yaratmada önemli bir araç haline gelmiştir. Gastronomi turizmi, yerel mutfak kültürlerinin tanıtılması ve bu kültürel değerlerin turistik çekicilik haline gelmesi üzerine kuruludur. Yiyecek ve içeceklerin hazırlanması, sunumu ve tüketimi, o kültürün geleneklerini yansıtırken turistlere de benzersiz deneyimler sunar. Bu bağlamda, turistlerin deneyimledikleri önemli gastronomi unsurlarından birisi de sokak lezzetleridir. Sokaklarda sunulan geleneksel ve etnik yiyecek ve içecekler, şehrin dokusunu yansıtan kültürel öğeler olarak dikkat çekmektedir. Turistleri benzersiz kültürel deneyimlere ulaşmasını sağlayan sokak lezzetleri, destinasyonların cazibesini artırmakta ve turistlerin yerel halkla iç içe, canlı bir atmosferde otantik bir yemek deneyimi yaşatmaktadır. Bu çalışmada, literatür taraması yöntemi kullanılarak sokak lezzetleri, gastronomi turizmi, mutfak ve kültür üzerine yapılan araştırmalar incelenecektir. Çeşitli kaynakların değerlendirilmesi sonucunda, sokak lezzetlerinin turistik destinasyonlarda otantik deneyimler sunarak turistlerin ilgisini çektiği ve yerel halk için önemli bir gelir kaynağı olduğu belirlenmiştir. Ayrıca, incelenen çalışmalardan elde edilen bilgiler doğrultusunda; gastronomi turizmi, kültürel miras ve sürdürülebilirlik arasındaki ilişkide sokak lezzetlerinin nasıl bir bağlayıcı rol oynadığı da ortaya konulmaktadır.
Anahtar Kelimeler: Sokak Lezzetleri, Yöresel Lezzetler, Gastronomi Turizmi

ABSTRACT
Gastronomy is an integral part of a destination's cultural identity and, in recent years, has become an essential tool for promoting cultural values and creating economic contributions. Gastronomy tourism is based on promoting local culinary cultures and transforming these cultural values into tourist attractions. The preparation, presentation, and consumption of food and beverages reflect the traditions of that culture and offer unique experiences to tourists. In this context, street food is one of the essential gastronomy elements that tourists experience. Traditional and ethnic foods and beverages served on the streets draw attention as cultural elements that reflect the texture of the city. Street food offers tourists unique cultural experiences, enhances the appeal of destinations, and offers tourists an authentic dining experience in a lively atmosphere where locals mingle. This study will examine research on street food, gastronomy tourism, cuisine, and culture using the literature review method. The

evaluation of various sources has determined that street food attracts tourists by providing authentic experiences in touristic destinations and serves as an essential source of income for local people. Furthermore, the data from the scrutinized studies indicates that street food interconnects gastronomy tourism, cultural heritage, and sustainability.
Key Words: Street Foods, Local Food, Gastronomy Tourism

SIFIR ATIK (ZERO-WASTE) RESTORANLARIN GASTRONOMİ TURİZMİNDEKİ ROLÜ
THE ROLE OF ZERO-WASTE RESTAURANTS IN GASTRONOMY TOURISM

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ÖZET
Atıklar modern dünyanın en büyük problemlerinden birisidir. Malların ve hizmetlerin üretimi ve tüketimi sonucu ortaya çıkan atıkların, insanlığa ve doğaya olumsuz birçok etkileri vardır. Bu etkilere yönelik alınan önlemlerden bir tanesi de, atıkların geri dönüştürülerek yeni ürün üretiminde girdi olarak kullanılmasıdır. Bu yaklaşım Dünya geneline yayınlan ve sıfır atık şeklinde ifade edilen yeni bir süreç başlatmıştır. Bu yeni süreçte, üretim ve tüketim şekillerini değiştirmesinin yanı sıra geride daha yaşanılası bir dünya bırakılması da önem arz etmektedir. Atık yönetiminin önemli bir bileşeni olan sıfır atık süreci açlık konusunun gündemde olduğu son yıllarda gıda israfının azaltılması ve sürdürülebilirliğe katkı sağlanması açısından restoranlar tarafından da uygulanmaya başlanmıştır. Bu çalışmada, alan yazın taraması yöntemi kullanılarak gastronomi turizmi ve restoranlar bağlamında sıfır atık konusu üzerine yapılmış olan araştırmalar incelenecektir. Alan yazında ulaşılabilen kaynakların incelenmesi sonucu sıfır atık uygulamalarının sanayi devrimi sonrası önem kazandığı ve sürecin tüm alanlarda uygulanabilirliğinin olduğu belirlenmiştir. Araştırma bulguları, sıfır atık yaklaşımının uygulandığı restoranlara ve diğer turizm işletmelerine sağladığı finansal katkıları ve müşteri çekmedeki rolünün ne olduğunu da ortaya koymaya çalışmıştır.
Anahtar Kelimeler: Sıfır Atık, Gastronomi Turizmi, Restoranlar

ABSTRACT
Waste is one of the biggest problems of the modern world. The waste generated from producing and consuming goods and services has numerous negative impacts on humanity and the environment. One of the measures taken to address these impacts is to recycle waste and use it as input in producing new products. This approach has gained global traction and initiated a new process known as zero waste. In this new process, leaving behind a more livable world and changing production and consumption patterns is essential. Restaurants have begun implementing the zero-waste process, a vital waste management component, to reduce food waste and contribute to sustainability in recent years, particularly when hunger has become a pressing issue. In this study, studies on zero waste in the context of gastronomy tourism and restaurants will be examined using the literature review method. The literature review revealed that zero waste practices gained importance after the Industrial Revolution and their applicability in all areas. The research findings also revealed the financial contributions of the zero-waste approach to restaurants and other tourism businesses and its role in attracting customers.
Key Words: Zero Waste, Gastronomy Tourism, Restaurants

THE ROLE OF MOTHER TONGUE EDUCATION IN THE ACHIEVEMENT OF SUSTAINABLE DEVELOPMENT GOALS IN NIGERIA

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Abstract
This study looks at how mother tongue instruction at the elementary school level in Nigeria contributes to the country's efforts to meet Sustainable Development Goal No. 4. A number of languages in Nigerian are capable of being use in elementary schools, as evidenced by the success stories surrounding the use of Hausa in the north. The quickest way to end illiteracy is through learning in the mother tongue, which will facilitate conceptual understanding and assist the child to absorb cultural values. The study contends that when specialists in numerous additional language domains are brought in to provide standardized curricular materials, the country will reap the full benefits of mother tongue education. It also calls for greater preparation in the form of comprehensive teacher preparation programs taught in a greater number of indigenous languages, as well as the delivery of instructors and resources to underserved communities. For the greatest benefit to Nigeria's sustainable growth, the three levels of government, stakeholders, parents, and communities should all make financial contributions to mother tongue education.
Keywords: Mother Tongue Education, Achievement, Sustainable, Development Goals,

APPLICATION OF GEOMETRIC AVERAGE MODEL FOR IDENTIFYING HIGH MINERALIZATION ZONES USING GAMMA-RAY SPECTROMETRY DATA IN THE BOKE BAUXITE DISTRICT, REPUBLIC OF GUINEA

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Abstract:

The identification and delineation of zones with high mineralization potential are critical for discovering valuable mineral deposits. Various methodologies have been employed to pinpoint areas subjected to alteration processes, including the analysis of airborne gamma-ray spectrometry data, which has consistently produced accurate and reliable results.

In this study, gamma-ray spectrometry was utilized for the first time in the Boke region of north-western Republic of Guinea, a renowned global bauxite district. Data were systematically collected, processed, and mapped to produce concentration maps for potassium (K), thorium (eTh), and uranium (eU). The generation of abundance ratios and the F parameter facilitated the identification of regions with elevated potassium concentrations, which serve as indicators of potential alteration zones associated with bauxite mineralization.

The analytical results from the K/eU and K/eTh ratios, along with the F parameter and potassium concentration map, were integrated using geometric average model. This model synthesized the resulting informative maps into a comprehensive mineral prospectivity map, which is instrumental for guiding mineral exploration. The study identified three high-prospectivity areas: the Ordovician at Pita, the Silurian at Telimele, and the Devonian at Faro. Preliminary prospecting in these delineated regions suggests the presence of significant potential, warranting further advanced exploration.

Keywords: Gamma-Ray Spectrometry; Bauxite Mineralization; Potassium Concentration; Geometric average Model; Mineral Prospectivity Map

BARRIERS TO WOMEN'S ECONOMIC EMPOWERMENT IN RURAL NIGERIA: A STUDY OF CULTURAL PRACTICES IN "LONELY DAYS"

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Abstract
This study examines the barriers to women's economic empowerment in rural Nigeria focusing on cultural practices showcased in Bayo Adebowale's Lonely Days. The novel provides a vivid portrayal of the challenges faced by women in a traditional Nigerian village, particularly widows, in their pursuit of economic independence. This research examines how entrenched cultural norms and practices act as significant obstacles to women's empowerment and wealth creation. Through a qualitative textual analysis of Lonely Days, the study identifies specific cultural practices like restrictive widowhood rites, rigid gender roles, and discriminatory inheritance laws that restrict women's economic opportunities. The protagonist, Yaremi, serves as a case study of how these cultural barriers limit the capacity of women to achieve economic autonomy. Despite her efforts to maintain her late husband's business and assert her independence, Yaremi faces immense societal pressure to conform to traditional expectations, ultimately restricting her economic potential. Findings reveal that the cultural practices depicted in Lonely Days are reflective of broader societal norms in rural Nigeria, where patriarchal structures continue to dominate. These practices not only undermine women's efforts to become economically empowered but also perpetuate cycles of poverty and dependence among widows and other marginalized women. This research, hence, contributes to a deeper understanding of the socio-cultural challenges that impede women's economic empowerment in rural Nigeria. It also offers insights into how these barriers can be addressed through targeted policies and interventions aimed at promoting gender equality and economic development in similar rural contexts. Further research is recommended to explore comparative analyses with other African literary works and real-life case studies.

Keywords: Lonely Days, Widowhood, Women, Gender, Empowerment

VALORIZATION OF THE ALGAL BIOMASS OF *DUNALIELLA SALINA* FROM THE BETHIOUA SALT FLATS (ALGERIA)

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Dunaliella salina is a chlorophyceous microalgae that has evolved to live in extreme environmental conditions. It is known for its powers to synthesize beta carotene and glycerols in cases of stress caused by high temperatures and high salinities.

An eco-biological study of this species was carried out in the two sebkhas of western Algeria: the salt pans of Bethioua (Arzew) and the Sebkha of Oran. Sampling of water and red-spotted salts was carried out during the four seasons of the year and in several sites to identify the presence of *Dunaliella salina* in the two Sebkhas. A comparison with a productive strain was tested in the laboratory to compare the performance in multiplication and production of beta carotene.

The results confirmed the presence of *Dunaliella salina* in the Bethioua salt pans and its absence in the sites visited in the sabkha of Oran. Cultures in the laboratory are being carried out and other surveys are planned to carry out screening in the salt pans of western Algeria with the aim of knowing and selecting high-performance strains for small-scale production.

Keywords: *Dunaliella salina*, Bethioua Saltworks, Sebkha of Oran, beta carotene.

PHYSIOLOGICAL AND ANATOMICAL STUDY OF THE ROLE OF PHYTOREMEDIATION OF MUSTARD PLANT IN REDUCING POLLUTANTS IN NAJAF GOVERNORATE/IRAQ.

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Abstract
The experiment was carried out in Najaf Al-Ashraf / Iraq during the winter season of the year 2023. The seeds planting took place on 11/1/2023 to limit the types of some heavy metals in Najaf Al-Ashraf Governorate , investigate the role of phytoremediation of mustard plants in absorbing these heavy metals, the plant's response to these pollutants by measuring some nutrients and heavy metals, and studying some anatomical characteristics. Five large pots were used in the experiment and distributed 20 days after germination to the study sites represented by (P1-a natural climate area,P2- a restaurant (Barakat Al-Sabtain Restaurant), P3- a residential neighborhood (Al-Zahraa neighborhood) , P4- an airport street (Al-Najaf Al-Ashraf airport), P5 - a cement factory (Kufa Cement Factory. The results indicated the following a significant increase was observed in the percentage of the elements (potassium and phosphorus) in the plants found in the site of the P1, as the site recorded the highest rate of the two elements, reaching 1.44% and 0.385%, respectively. An increase was also observed in the percentage of the elements (magnesium and calcium) in the fifth site P5 and the site recorded the highest rate of 15.598% and 1.70% compared to the other sites. There was a significant increase in the concentration of heavy elements (lead, lithium and copper) in the P5 (Kufa Cement Factory), as the site recorded the highest rates of the mentioned elements, reaching 6.560 mg/kg, 24.21 mg/kg and 15.598 mg/kg, respectively, while a significant increase in the concentration of the elements (nickel and lead) appeared in the P4 (Airport Street) and recorded the highest rates of 4.342 mg/kg, 6.560, with the presence of cadmium in these plants. As for the significant increase in cadmium, it was observed in the P2 (Restaurant) and recorded the highest rate of 0.569 mg/kg. The increase in the percentage of barium appeared only in the plants of the P1 , as it recorded the highest rate of 3.38. The results of the study showed an increase in the thickness of the cortex and the length of the vascular bundle in the plants placed in the P5 (Kufa Cement Factory), as they recorded the two highest rates of 44.80 *m*m and 9.27 *m*m, while the plants placed in the P2 (Restaurant) recorded the highest rate in stem diameter of 81.428 *m*m and the number of vascular bundles reached 20.34.
Keywords:Phytoremediation, Heavy metals, Anatomical traits, Mustard, Nutrients, Pollutions

ALÜMİNYUM ALAŞIMLARINA UYGULANAN ELOKSAL KAPLAMALARININ OPTİMUM ÜRETİM KOŞULLARININ ARAŞTIRILMASI VE SAVUNMA SANAYİ UYGULAMALARI İÇİN TEST EDİLMESİ

INVESTIGATION OF THE OPTIMUM PRODUCTION CONDITIONS FOR ANODIZING COATINGS APPLIED TO ALUMINUM ALLOYS AND TESTING FOR DEFENSE INDUSTRY APPLICATIONS

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ÖZET

Alüminyum alaşımlarını, düşük yoğunluk ve yüksek mekanik dayanım özellikleri nedeniyle mimari, otomotiv endüstrisi, elektronik endüstrisi, hidrolik, medikal ve yarı iletken ekipmanları gibi birçok uygulamada kullanımını görmek mümkündür. Saf alüminyum, yüksek ve düşük pH ortamları dışında, genelde oldukça yüksek bir korozyon direncine sahiptir ve çoğu metale göre daha az koruma gerektirir. Ancak, alüminyum matrisini güçlendirmek için kullanılan alaşım elementleri, mikroyapıda ikinci fazlar oluşturarak matrisle önemli ölçüde farklı elektrokimyasal potansiyellere sahip olabilir. Bu durum, mikro-galvanik çiftlerin oluşmasına yol açabilir ve korozyon dayanımını arttırmak için yüzey modifikasyonu gerektirebilmektedir. Bu çalışmada, savunma sanayinde kullanılan 7075 alüminyum alaşımının yüzeyine anodizasyon (eloksal kaplama) işlemi uygulanarak MIL-STD-810 standardına uygun kaplamalar üretilmiştir. Anodizasyon işlemi alüminyum üzerinde "alumina" olarak bilinen koruyucu poroz oksit yapı bir tabakanın oluşturulduğu elektrolitik bir işlemdir. Bu işlem sonrasında alaşımın korozyon ve aşınma direnci önemli ölçüde artırmaktadır. Deneylerde, kaplama işlemi sırasında sülfürik asit içeren bir elektrolit kullanılmıştır. Kaplanan numuneler, boyandıktan sonra saf su kullanılarak 95°C'de mühürleme işlemine tabi tutulmuştur. Çalışmada, anodizasyon koşullarının kaplama özelliklerine etkisini anlamak amacıyla uygulanan akım yoğunluğu, anodizasyon süresi ve elektrolit asit konsantrasyonunun etkileri değerlendirilmiştir. Anodizasyon işlemi sonrasında elde edilen kaplamaların zorlu çevresel koşullara dayanıklılığı MIL-STD-810 standardına uygun testlerle analiz edilmiştir. Ayrıca, kaplamaların mikroyapısal özellikleri taramalı elektron mikroskobu (SEM) kullanılarak detaylı bir şekilde incelenmiştir. Boyanabilirlik ve boyanın yüzeye yapışma performansları açısından da kaplamaların değerlendirilmesi yapılmıştır. Çalışmanın sonunda, optimum anodizasyon koşulları belirlenerek, savunma sanayinde kritik öneme sahip alüminyum alaşımlarının yüzey kaplama kalitesi artırılmıştır.

Anahtar kelimeler: Eloksal kaplama, Anodik oksidasyon, MIL-STD-810, Savunma sanayii, Alüminyum, Alüminyum alaşımları, Alüminyum 7075

ABSTRACT

Aluminum alloys are widely used in applications such as architecture, the automotive industry, electronics, hydraulics, medical devices, and semiconductor equipment due to their low density and high mechanical strength. Pure aluminum generally has a high corrosion resistance, except in high and low pH environments, and requires less protection than most metals. However,

alloying elements used to strengthen the aluminum matrix can form secondary phases in the microstructure with significantly different electrochemical potentials compared to the matrix. This can lead to the formation of micro-galvanic couples, which may necessitate surface modification to enhance corrosion resistance. In this study, an anodizing (also known as anodic oxidation) process was applied to the surface of 7075 aluminum alloy, commonly used in the defense industry, to produce coatings in compliance with the MIL-STD-810 standard. Anodizing is an electrolytic process in which a protective porous oxide layer, known as alumina, is formed on the surface of aluminum. This process significantly improves the corrosion and wear resistance of the alloy. During the experiments, an electrolyte containing sulfuric acid was used in the coating process. The coated samples were subjected to a sealing process in pure water at 95°C after being dyed. The effects of current density, anodizing time, and electrolyte acid concentration on the coating properties were evaluated to understand the impact of anodizing conditions. The durability of the coatings obtained after the anodizing process was analyzed using tests in accordance with the MIL-STD-810 standard under harsh environmental conditions. Additionally, the microstructural properties of the coatings were examined in detail using scanning electron microscopy (SEM). The coatings were also evaluated for paintability and paint adhesion performance. At the end of the study, optimal anodizing conditions were determined, enhancing the surface coating quality of aluminum alloys that are critically important in the defense industry.

Key Words: Anodizing coating, anodic oxidation, MIL-STD-810, Defense industry, Aluminum, Aluminum alloys, Aluminum 7075

^{64}Zn ELEMENTİNİN TALYS KODU İLE TESİR KESİTİNİN HESAPLANMASI VE BU SONUÇLARIN DENEYSEL ÖLÇÜMLERLE UYUMUNUN HESAPLANMASI

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Bir nükleer reaksiyonda, çarpışma sonucunda meydana gelebilecek her bir durumun kendine özgü bir olasılığı ve bu duruma karşılık gelen bir tesir kesiti değeri vardır. Tesir kesiti, nükleer reaksiyonların incelenmesinde ve anlaşılmasında kritik bir parametredir. Özellikle nükleer teknoloji, tıbbi uygulamalar ve temel bilimsel araştırmalarda bu tür bilgilerin doğru bir şekilde hesaplanması ve yorumlanması büyük önem taşır. Tesir kesiti, bir elementin veya izotopun farklı parçacıklarla etkileşime girdiğinde nasıl bir sonuç vereceğini belirlemeye yardımcı olur. Tesir kesiti verilerinin detaylı bir şekilde incelenmesi, nükleer veri tabanlarının geliştirilmesi ve yeni uygulamalar için yol gösterici olabilir.
Bu çalışmada, çinko elementinin proton girişli reaksiyonlar için tesir kesitleri hesaplanmıştır. Çalışmada, proton girişli reaksiyonlar için tesir kesitlerinin hesaplanması amacıyla TALYS 1.95 kodu kullanılmıştır. TALYS, nükleer reaksiyonların teorik olarak hesaplanmasında yaygın kullanılan bir yazılımdır ve çeşitli nükleer süreçleri modelleyerek geniş bir enerji aralığında sonuçlar sağlar. TALYS kodu bir çok parametre ve nükleer reaksiyon mekanizmasına göre hesaplama gerçekleştirebilmektedir. Bu çalışmada TALYS kodunun Sabit Sıcaklık Fermi Gaz, Geri Kaydırmalı Fermi Gaz ve Genelleştirilmiş Süper Akışkan seviye yoğunluğu modelleri kullanılmıştır.
Hesaplanan tesir kesiti sonuçları, literatürde yer alan deneysel verilerle karşılaştırılarak yorumlanmıştır.
Anahtar kelimeler: Tesir kesiti, TALYS, Seviye Yoğunluğu

CALCULATION OF THE CROSS SECTION OF ELEMENT ^{64}Zn WITH TALYS CODE AND CALCULATION OF THE AGREEMENT OF THESE RESULTS WITH EXPERIMENTAL MEASUREMENTS

In a nuclear reaction, each event resulting from the collision has its own probability and corresponding cross-section value. The cross section is a critical parameter in the study and scope of nuclear reactions. Especially in nuclear technology, medical applications and basic scientific research, accurate calculation and interpretation of such information is of great importance. The cross section helps determine how an element or isotope interacts with different frequencies to produce a change in the result. Detailed examination of cross-section data may provide guidance for the development of nuclear databases and new applications.
In this study, the cross sections of the zinc element for proton-introduced reactions were calculated. In the study, TALYS 1.95 code was used to calculate the cross sections for proton-

input reactions. TALYS is a widely used software for theoretical calculations of nuclear reactions and provides results over a wide energy range by modeling various nuclear processes. TALYS code can perform calculations according to many parameters and nuclear reaction mechanisms. In this study, Constant Temperature Fermi Gas, Backshift Fermi Gas and Generalized Superfluid level density models of TALYS code are used.
The calculated cross-section results were interpreted by comparing them with the experimental data in the literature.
Keywords: Cross Section, TALYS, Level Density

MONTE CARLO SİMÜLASYONU KULLANILARAK HİDROKSİPROPİL METİL SELÜLOZ POLİMERİNİN GAMA ZAYIFLATMA ÖZELLİKLERİNİN ARAŞTIRILMASI

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Bilimsel ve teknolojik gelişmeler devam ettikçe radyasyonun kullanım alanları da her geçen gün genişlemektedir. Radyasyonun artan kullanımı, buna maruz kalan insan sayısında da buna paralel bir artışa yol açtı. Radyasyona yakın mesafede yaşamak canlı organizmalar için biyolojik riskler oluşturur. Bu durum özellikle görevleri gereği radyasyona maruz kalmaları gereken radyasyonla ilgili alanlarda çalışan kişiler için geçerlidir.
Radyasyon korumasının üç temel ilkesinden biri kalkanlamadır. Kurşun tarihsel olarak en yaygın kullanılan kalkanlama malzemesi olmasına rağmen, toksik özellikleri yeni kalkanlama malzemelerine yönelik devam eden araştırmaları teşvik etmiştir. Bu amaçla cam, polimerler ve kompozitler gibi çeşitli malzemeler geliştirilmekte ve radyasyon geçirgenlikleri incelenmektedir. Yeni kalkanlama malzemelerinin geliştirilmesindeki ilerlemeler, radyasyon maruziyetinin potansiyel olarak zararlı etkilerine karşı korunma yeteneğimizi artırmada hayati bir rol oynamaktadır.
Bu çalışmada, Hidroksipropil Metil Selüloz polimerinin Zayıflama Katsayıları, Yarım Değer Katmanı, Onuncu Değer Katmanı ve Radyasyon Koruma Verimliliği dahil olmak üzere foton etkileşim parametreleri, PHITS 3.22 ve MCNP6 Monte Carlo simülasyonları kullanılarak 0,1-10 MeV enerji aralığında hesaplandı. Bu sonuçlar daha sonra WINXCOM'dan teorik hesaplamalarla karşılaştırıldı.
Anahtar Kelimeler: Radyasyon Koruması, Foton etkileşim parametreleri, Monte Carlo Simülasyonu, WINXCOM

INVESTIGATION GAMMA ATTENUATION PROPERTIES OF HYDROXYPROPYL METHYL CELLULOSE POLYMER BY USING MONTE CARLO SIMULATION

As scientific and technological advancements continue to progress, the applications of radiation are expanding day by day. The increased use of radiation has led to a corresponding rise in the number of people exposed to it. Living in close proximity to radiation poses biological risks to living organisms. This is especially true for individuals working in radiation-related fields who are required to be exposed to radiation as part of their duties.
One of the three fundamental principles of radiation protection is shielding. Although lead has historically been the most widely used shielding material, its toxic properties have spurred ongoing research into new shielding materials. For this purpose, various materials such as glass, polymers, and composites are being developed and their radiation permeability is being

examined. Advancements in the development of new shielding materials play a vital role in enhancing our ability to protect against the potentially harmful effects of radiation exposure.
In this study, the photon interaction parameters of Hydroxypropyl Methyl Cellulose polymer, including Attenuation Coefficients, Half Value Layer, Tenth Value Layer, and Radiation Protection Efficiency, were calculated in the energy range of 0.1-10 MeV using PHITS 3.22 and MCNP6 Monte Carlo simulations. These results were then compared with theoretical calculations from WINXCOM.
Keywords: Radiation Protection, Photon interaction parameters, Monte Carlo Simulation, WINXCOM

EFFICACY OF SOIL AMENDMENTS WITH BIO-FUMIGANT CROPS AND ANIMAL MANURE ON THE GROWTH AND FRUIT YIELD OF FUSARIUM WILT-INFECTED TOMATOES

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Abstract
A screenhouse study was conducted to investigate the effects of bio-fumigation with biofumigant crops and animal manure on the growth and yield of tomatoes infected with Fusarium wilt. The evaluation was a 4 x 4 factorial experiment arranged in a split-plot design which consisted of bio-disinfectants as the main plot and bio-fumigant crops as a subplot. The 16 treatment combinations were replicated three times. The main plot contained four treatments: poultry manure, cow dung, synthetic fungicide CAMAZEB® (60% Mancozeb + 40% Carbendazim WP) and untreated soil as control. The subplot constituted three bio-fumigant crops; cabbage, onion, garlic and un-amended soil. Data on growth parameters and yield components were measured and subjected to analysis of variance. Results revealed that tomatoes grown on soil amended with poultry manure and cabbage residues significantly ($P \leq 0.05$) produced seedlings with the tallest plant height (83 cm) and the highest number of leaves (154) than the other treatments. Tomatoes with the average highest yield (8.26 t ha^{-1}), fresh shoot (296.5 g) and fresh root (69.2 g) weights were recorded on tomatoes transplanted on poultry manure and cabbage-amended soil. Decomposition of poultry manure and cabbage released gases lethal to Fusarium wilt pathogen and soil nutrients essential for tomato growth. Based on the results obtained, amending soil with 0.85 kg of poultry manure and 200g of cabbage per plant is recommended as the best treatment combination for sustainable organic tomato production under screenhouse conditions.
Keywords: Bio-fumigant crops, cabbage residues, cow dung, Fusarium wilt, tomato, poultry manure

THE IMPACT OF DIGITAL TRANSFORMATION ON GREEN GOVERNANCE IN NIGERIA

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Abstract

Digital transformation has in recent years become the high-impact driver of change and reshaping governance systems, sustainable development worldwide. Green governance integrated with digital technologies presents substantial opportunities for the achievement of sustainability objectives in Nigeria a country experiencing rapid socio-ecological and environmental stress. The significance of this paper is located in the adjustment of digital transformation with green governance in Nigeria, and how, for instance, technology's like artificial intelligence (AI), the Internet of Things (IoT), drones, blockchain and big data enable more efficient resource management, environmental monitoring and policy implementation. Through this study, we investigate how digital tools play a part in one of its most pressing environmental issues such as deforestation, air and water pollution, and have thereby affected waste management practice in Nigerian cities. Further the report discusses smart city adoption, which can be seen in urban areas such as Lagos and Abuja, and how they can both mitigate carbon emissions and increase environmental resilience. The paper also discusses issues like the digital divide, inadequate infrastructure, and regulatory gaps that hinder the widespread adoption of green digital technologies in the country. Through comparative appraisal of case studies and policy frameworks, the study highlights how Nigeria can utilise digital transformation in reinforcing green governance. The results indicate that the judicious incorporation of digital technologies can enhance transparency, citizen participation, and agriculture management whilst contributing towards a sustainable future. There are suggestions of leveraging higher financial support for digital infrastructure, aligning strategic capacity enhancement and an ecosystem-wide policy structure to ensure that Nigeria harnesses the potential of making its resilience vision a reality. This study contributes to the growing body of knowledge on sustainable development and provides actionable insights for policymakers, technologists, and environmental stakeholders seeking to harness digital transformation for green governance in Nigeria.

Keywords: Digital transformation, Internet of Things (IoT), Green governance, Artificial Intelligence

PUBLIC PERCEPTION OF THE TELEVISION COVERAGE OF GENDER-BASED VIOLENCE IN NIGERIA: A STUDY NIGERIA TELEVISION AUTHORITY, ABUJA

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Abstract
The study investigated public perception of mass media coverage of gender-based violence in Nigeria, focusing on residents in the Federal Capital Territory, Abuja.The study adopted the social responsibility theory, agenda setting theory and the framing theory to justify why and how media report certain issues, and in what frame. The survey research method was adopted in which 400 copies of questionnaire were administered to Kubwa residents in Abuja, and 375 copies were retrieved and analysed. Frequency percentage tables were used to present and interpret collated data. The findings show that FCT residents were very much aware of gender-based violence in the country. It also revealed that most of their knowledge of GBV come from mass media contents. It was therefore concluded that the continuous perpetration of GBV and adequate television and social media reportage of discrimination and violence against women and children has increased the level of awareness among FCT 'residents. Amongst others, the study recommended that women should endeavour to make out time to watching television programmes more often, especially campaigns against discrimination and violence among women. This is because through exposure to such programmes they can be fully aware of their rights and how best to defend themselves when attacked.
Key Words: Gender, Violence, Gender campaign, Mass media

EXACERBATION OF CLIMACTERIC SYNDROME IN WOMEN AFTER COVID-19

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Abstract.
Background: Many women who have had COVID-19 complain of various gynecological problems; **t**his is especially true for women with menopausal syndrome, whose course worsens after COVID-19. **Objective:** To study complications of climacteric syndrome after COVID-19. **Methods:** We examined 41 women under the constant outpatient observation of a gynecologist. Each of the women underwent a comprehensive examination before and after COVID-19, which included collection of complaints, anamnesis, routine gynecological examination in speculum, examination of vaginal smears for bacterial microbiota, and cytological analysis. A general blood test, biochemical, and blood clotting parameters were carried out using standard methods. **Results:** All the women surveyed noted that after having COVID-19, they had developed or intensified symptoms of climacteric syndrome. The main complaints among women were “hot flashes,” a feeling of heat, sweating, weakness, anxious short-term sleep, dryness, itching of the external genitalia, and a decrease in the amount of discharge. The transferred disease COVID-19 significantly aggravated the manifestations of menopausal syndrome, which resulted in an increase in cases of its severe degree by more than five times. Gynecological examination showed significant changes in almost all indicators: the amount of vaginal discharge decreased, the moisture of mucous membranes worsened, and vaginal wall elasticity significantly decreased. In the state of epithelial integrity, a complete disappearance of the preserved level was observed, and, due to this, some increase in the levels of thinning and bleeding on contact. The pH of the vaginal contents has significantly changed towards neutralization, which is typical for atrophic processes. The number of patients with estrogen deficiency has increased significantly, which may result from changes in immunity due to the disease. **Conclusion:** The COVID-19 disease in women of menopausal age leads to a significant increase in the symptoms of climacteric syndrome and an increase in atrophic processes.
Keywords: women, menopausal syndrome, COVID-19, complications

THE USE OF SOCIAL NETWORKING WEBSITES AS A RECRUITING PRACTICE

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ABSTRACT

The purpose of this paper is to highlight the technological impact of recent years on recruitment. Due to the mass digitalization of recruitment processes in most companies, recruiters are currently accustomed to recruiting candidates through social networks.

This paper analyzes the social media platforms most frequently used in recruitment and identifies their advantage s and disadvantages. Based on the theoretical concepts presented and discussed in the first part of the paper, a questionnaire was created for the companies in the Western part of Romania. Using this questionnaire, there will be determined their preference regarding the method used in recruitment: online, traditional, or mixed and map interactively the social networking sites they use for recruitment.

Finally, we will be able to gain an overview of the level of digitalization of recruitment techniques and the use of social media platforms in such processes.

Regarding the robustness of this research, the results are relevant for the Western region of Romania, but because most of the analyzed companies operates at an international level, mostly in Europe, America and Asia, it results that the conclusions of this research can be relevant in some cases for the recruitment processes on an international level as well, serving as a reference tool for future research.

KEY WORDS: *recruitment, social media, social networks, digitization.*

APPLICATION OF A NEW APPROACH TO THE ANALYSIS OF THE TECHNICAL CONDITION OF SENSOR DEVICES BASED ON THEIR NOISE CHARACTERISTICS

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Today, the analysis of various substances is widely used in many areas of human activity, starting with industry and agriculture and ending with the medical industry. It is important to be able to compare experimental compositions of substances with a given reference sample. Thus, blood quality analysis is widely used today in determining various diseases in the early stages, which is especially important in the complex analysis of human health, for example, during medical examination.

Existing methods of analysis based on the correlation of output signals from various sensors in comparison with a certain threshold value are widely used and are suitable for determining the qualitative composition of a substance with a high degree of accuracy.

At the same time, it is worth noting that the study of this substance at the level of noise data will most accurately determine the subtle differences in the composition of the substance. In this case, three aspects are the most important, the first of which is the development of a highly sensitive data processing method based on an accurate mathematical apparatus that will be free from model assumptions and will not contain uncontrolled errors. The second aspect is related to the analysis (removal of experimental data), which imposes certain restrictions on experimental equipment. The third aspect is the choice of a reference sample with which further comparison of experimental data will be carried out. It is important to take into account that if the data processing method is chosen correctly, the main error will be associated with the experiment.

Key words: correlation, data processing, noise, digital equipment, sensor.

İŞÇİLERİN KİŞİSEL VERİLERİNİN KORUNMASI
PROTECTION OF WORKERS PERSONAL DATA

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ÖZET
Günümüzde, dijitalleşmenin hızla artmasıyla birlikte, kişisel verilerin korunması konusu her zamankinden daha fazla önem kazanmıştır. İşçilerin kişisel verileri, yalnızca işverenler için değil, aynı zamanda bireylerin hakları ve özgürlükleri açısından da kritik bir meseledir. Bu veriler, çalışanların kimlik bilgileri, iletişim bilgileri, sağlık durumları ve maaş bilgileri gibi hassas bilgileri içermektedir. İşçilerin bu verilerinin korunması, işyerinde güven ortamının sağlanması için esastır. Ayrıca, bu durum, şirketlerin yasal yükümlülüklerini yerine getirmeleri açısından da büyük bir önem taşımaktadır.
Birçok ülkede, işçilerin kişisel verilerinin korunması için çeşitli yasalar ve düzenlemeler bulunmaktadır. Özellikle Avrupa Birliği Genel Veri Koruma Yönetmeliği (GDPR), kişisel verilerin işlenmesi ve korunması konusunda sıkı kurallar getirmektedir. Bu yasalar, işverenlere, çalışanların kişisel verilerini yalnızca belirli amaçlarla toplama, işleme ve saklama yükümlülüğü getirmektedir. İşverenlerin, çalışanların rızasını almak ve verilerin güvenliğini sağlamak için gerekli önlemleri almak zorunda olmaları, yasal açıdan büyük bir sorumluluktur. Bu nedenle, işverenlerin bu düzenlemelere uyum sağlaması hem toplumsal sorumluluk hem de hukuki yükümlülük açısından hayati öneme sahiptir.
İşverenler, çalışanların kişisel verilerini korumak için etkili uygulamalar geliştirmelidir. Bu, veri işlemenin şeffaflığı, çalışanlara bilgi verme ve veri güvenliğini sağlama gibi unsurları içerir. Örneğin, çalışanlara kişisel verilerinin nasıl toplandığı, kullanıldığı ve korunduğu hakkında bilgi verilmesi, güven duygusunu artırır. Ayrıca, veri güvenliği önlemleri olarak şifreleme, erişim kontrolü ve düzenli güvenlik denetimleri gibi yöntemler kullanılmalıdır. Bu uygulamalar, yalnızca yasal yükümlülükleri yerine getirmekle kalmaz, aynı zamanda çalışanların güvenliğini ve şirketin itibarını korumada da büyük rol oynar.
Sonuç olarak, işçilerin kişisel verilerinin korunması, sadece bir yasal gereklilik değil, aynı zamanda etik bir sorumluluktur. İşverenlerin, bu konuda bilinçli bir yaklaşım benimsemeleri ve çalışanları bilgilendirerek güvenli bir çalışma ortamı yaratmaları gerekmektedir. Çalışanların haklarının korunması, sadece bireylerin değil, tüm toplumun refahı için de kritik öneme sahiptir. Bu nedenle, kişisel verilerin korunması konusundaki bilinç artırılmalı ve iş yerlerinde etkili veri koruma stratejileri uygulanmalıdır.
Anahtar Kelimeler: Kişisel verilerin korunması, işverenin yükümlülükleri, dijitalleşme, etik sorumluluk

ABSTRACT

In today’s world, with the rapid increase in digitalization, the issue of protecting personal data has gained more importance than ever. Workers' personal data is a critical matter not only for employers but also for the rights and freedoms of individuals. This data includes sensitive information such as employees' identification details, contact information, health status, and salary information. Safeguarding this data is essential for ensuring a secure environment in the workplace. Additionally, this situation is of great importance for companies in fulfilling their legal obligations.

Many countries have various laws and regulations in place to protect workers' personal data. Particularly, the European Union's General Data Protection Regulation (GDPR) establishes strict rules regarding the processing and protection of personal data. These laws obligate employers to collect, process, and store employees' personal data only for specific purposes. It is a significant legal responsibility for employers to obtain employees' consent and take necessary measures to ensure the security of this data. Therefore, compliance with these regulations is vital for employers, both from a societal responsibility and legal obligation perspective.

Employers should develop effective practices to protect employees' personal data. This includes transparency in data processing, informing employees, and ensuring data security. For instance, providing employees with information on how their personal data is collected, used, and protected enhances their sense of trust. Additionally, security measures such as encryption, access control, and regular security audits should be implemented. These practices not only fulfill legal obligations but also play a significant role in safeguarding employees' security and the company's reputation.

In conclusion, the protection of workers' personal data is not just a legal requirement; it is also an ethical responsibility. Employers need to adopt a conscious approach in this matter and create a safe working environment by informing employees. Protecting employees' rights is critical not only for individuals but also for the welfare of society as a whole. Therefore, awareness regarding the protection of personal data should be increased, and effective data protection strategies should be implemented in workplaces.

Keywords: Personal data protection, employer's obligations, digitalization, ethical responsibility

ASGARİ ÜCRETİN TESPİT EDİLME SÜRECİ
THE PROCESS OF DETERMINING MINIMUM WAGE

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ÖZET
Asgari ücret, bir ekonominin temel taşlarından biri olup, çalışanların yaşam standartlarını belirleyen en önemli unsurlardan biridir. İş gücünün maliyetlerini etkileyen bu kavram, sadece ekonomik bir ölçüt değil, aynı zamanda sosyal bir adalet meselesidir. Asgari ücretin belirlenmesi süreci, birçok faktörü göz önünde bulundurmayı gerektirir. Enflasyon oranları, yaşam maliyeti, işsizlik istatistikleri ve ekonomik büyüme gibi makroekonomik göstergeler, asgari ücretin hangi seviyede belirlenmesi gerektiği konusunda belirleyici rol oynar. Bu unsurlar, çalışanların alım gücünü, yaşam standartlarını ve dolayısıyla toplumun genel refahını doğrudan etkiler.
Asgari ücretin adil bir şekilde belirlenmesi, işverenlerin maliyetleri ile çalışanların ihtiyaçları arasında bir denge kurma gerekliliğini beraberinde getirir. İşverenler, sürdürülebilir bir işletme modeli oluşturmak zorundadır; ancak bunun yanında çalışanların da insana yakışır bir yaşam sürmesi için yeterli gelire sahip olmaları sağlanmalıdır. Bu nedenle, asgari ücretin belirlenmesi süreci, yalnızca ekonomik verilere dayalı teknik bir hesaplama değil, aynı zamanda sosyal diyalog ve toplumsal sorumluluk gerektiren bir süreç olmalıdır.
Bu bağlamda, sosyal diyalog mekanizmalarının etkin bir şekilde işletilmesi kritik bir önem taşır. Sendikaların ve işverenlerin görüşlerinin dikkate alınması, asgari ücretin belirlenmesi sürecinin şeffaf ve adil bir şekilde gerçekleştirilmesini sağlar. Çalışanların sesinin duyulması, onların ihtiyaç ve beklentilerinin göz önünde bulundurulması, sosyal uyum ve huzurun sağlanmasına katkı sağlar. Ayrıca, asgari ücretin düzenli olarak gözden geçirilmesi, değişen ekonomik koşullar ve yaşam maliyetleri dikkate alınarak yapılmalıdır. Böylelikle, asgari ücretin belirlenmesi, toplumun ihtiyaçlarına duyarlı bir yaklaşım sergilemiş olur.
Anahtar Kelimeler: Asgari ücret, işveren maliyetleri, çalışan ihtiyaçları, sürdürülebilir işletme modeli

ABSTRACT
Minimum wage is one of the cornerstones of an economy and a crucial factor in determining the living standards of employees. This concept, which affects labor costs, is not only an economic measure but also a matter of social justice. The process of determining minimum wage requires consideration of various factors. Macroeconomic indicators such as inflation rates, cost of living, unemployment statistics, and economic growth play a decisive role in determining the appropriate level for minimum wage. These factors directly impact employees' purchasing power, living standards, and consequently the overall welfare of society.
Fairly determining the minimum wage brings the necessity of balancing employers' costs with employees' needs. Employers must create a sustainable business model; however, it is also essential to ensure that employees have sufficient income to live with dignity. Therefore, the

process of setting the minimum wage should not only be a technical calculation based on economic data but also a process that requires social dialogue and societal responsibility.
In this context, the effective operation of social dialogue mechanisms is critically important. Considering the opinions of trade unions and employers ensures that the process of determining minimum wage is carried out transparently and fairly. Allowing employees' voices to be heard and taking their needs and expectations into account contributes to social cohesion and harmony. Additionally, the minimum wage should be regularly reviewed in light of changing economic conditions and living costs. Thus, the determination of minimum wage reflects a sensitive approach to the needs of society.
Keywords: Minimum wage, employer costs, employee needs, sustainable business model

EXAMINING THE EFFECTS OF IMPROPER DISPOSAL OF SOLID WASTE ON URBAN FLOODING IN KADUNA CITY, NIGERIA

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Abstract
In many developing countries, like Kaduna City in Nigeria, flooding has become a common environmental problem. One of the main causes of this problem is the uncontrolled dumping of solid waste. Poor waste management techniques result in the build-up of trash in drains and rivers as cities grow and population growth surpasses urban planning. This, in turn, generates obstructions that exacerbate floods during times of intense precipitation. This study examines the impact of improper disposal of solid waste on urban flooding in Kaduna City, Nigeria. The research explores how unregulated waste management practices, such as dumping refuse in drainage channels, waterways, and other inappropriate locations, contribute to the frequency and intensity of floods in the city. Data was collected through field surveys, interviews with residents, and analysis of satellite imagery to assess the spatial distribution of waste accumulation and its correlation with flood-prone areas. The findings reveal that inadequate waste disposal not only clogs drainage systems but also disrupts natural water flow, leading to increased flood vulnerability during heavy rainfall. Furthermore, this study identifies socio-economic factors, government policies, and community practices that exacerbate the situation. The research highlights the need for effective solid waste management strategies, public awareness campaigns, and improved urban planning to mitigate the adverse effects of flooding in Kaduna City. By understanding the linkage between waste disposal and flooding, this study aims to inform sustainable urban development policies and disaster management strategies in the region.
Keywords: Urban flooding, Improper waste disposal, Solid waste management, Drainage systems, Kaduna City, Environmental impact, Flood vulnerability.

ENHANCING SECURITY AND EFFICIENCY IN IoT-FOG-CLOUD COMPUTING: A SURVEY ON TASK OFFLOADING STRATEGIES

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Abstract:
The proliferation of IoT devices has led to an explosion of the data generated by these devices. This creates challenges in managing, processing, and analyzing this data promptly and efficiently. It is important to offload computing tasks to other layers for limited computing power and delay-sensitive applications on the Internet of Things. However, offloading to another opens up new security and privacy vulnerabilities. Cloud computing, the emerging trend technology is a solution that can help overcome security and privacy issues. This paradigm has emerged as a promising solution to address these challenges by enabling data processing, storage, and achieving objectives regarding trust management and incentive mechanisms. In this paper, we present a comprehensive survey of security-aware task offloading techniques in IoT Fog Cloud computing. We begin by introducing the IoT-Fog Cloud architecture and its main functions. Then, we look at the different types of task offloading that are included in the complete offloading, and the associated benefits and challenges. We discuss various factors that influence the decision to offload tasks. Next, we examine the various task offloading strategies that have been proposed for IoT-Fog-Cloud computing. We also discuss the trade-off between these approaches in terms of different evaluation parameters such as energy consumption, latency, response time, and cost. Finally, we highlight the open research challenges and future direction.
Index Terms—Keywords: Internet of things, security, mobile edge computing (MEC), Fog computing, Cloud servers, Computation offloading.

AWARENESS AND EDUCATION ON DRINKING WATER QUALITY AND ITS HEALTH EFFECTS IMPACTS: A CASE STUDY OF FUD STUDENTS AND THE DUTSE COMMUNITY

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Abstract

Safe drinking water is essential for health, well-being, fundamental right, and sustainable development. However, many communities continue to struggle with challenges related to water quality, posing serious health risks. This study explores the awareness and education levels concerning drinking water quality and its associated health effects among students at the Federal University Dutse (FUD) and Dutse community in Nigeria. Using a mixed-methods approach (quantitative and qualitative), the research incorporates surveys and focus group discussions to evaluate participant knowledge, attitudes, and practices regarding water quality and its health implications in the community. The findings reveal a significant lack of awareness about the dangers of contaminated water, including its role in spreading waterborne diseases (cholera, typhoid, and dysentery). These health issues arises from contaminated not only jeopardize individual well-being but also disrupt academic performance and community productivity. Analysis revealed that over 70 % of respondents admitted to relying on untreated water sources (hand-dug well, hand-pump, borehole water), while only 30 % relying on sachet water as source of drinking water, this highlighting the urgent need for improved education and access to safe water. The study recommends targeted interventions such as educational workshops, public health campaigns, and partnerships with local health and environmental agencies to encourage safe water practices, improve awareness of water quality standards, and cultivate a proactive culture of water safety. By emphasizing the importance of building informed and resilient communities, this study aims to mitigate health risks associated with poor water quality, thereby contributing to broader public health and sustainable development goals.

Keywords: Drinking Water Quality; Health Effects; Knowledge, Altitude, Practice (KAP); Waterborne Diseases; Community Productivity

FINANCIAL LITERACY AS A CATALYST FOR WOMEN'S EMPOWERMENT AND ECONOMIC DEVELOPMENT IN INDIA

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Abstract
Financial inclusion is the expanding outreach of banking or financial services at an affordable cost to a vast section of disadvantaged groups of society which may provide them a financial cushion for their sustenance as well as social empowerment. In India where women constitute 46% of total population majority of them are denied to opportunities and rights due to their financial dependence. Financial inclusion is much needed for women as it helps in increasing amount of regular savings along with enabling women to pay for micro insurance and obtain credit. It also helps in increasing income from employment and micro enterprise, usage of mainstream banking services that offer appropriate designed products and service. In other words financial inclusion make women informed about their role and right in economic development to improve access to markets and other information for overall empowerment. By helping women to meet their practical needs, micro finance may help women to gain respect and achieve more in their socially defined roles along with wellbeing. This paper mainly deals withImportance of women's financial inclusion, Women's specific financial needs in respect to men's, Functions of finance and role of women, Growth, development and financial inclusion, Financial literacy
as a tool for women empowerment, Institutional framework in India for financial education, Economic and social development of women and financial inclusion, Gender inequality and lack of access to financial services, Certain issues and aspects related with financial inclusion and women empowerment. The paper calls for women empowerment by means of effective financial inclusion and financial literacy by studying the relationship between women empowerment and financial inclusion.
Keywords: Financial Inclusion, Financial Literacy, Women Empowerment, Growth and Development

IN SILICO COMPARISON OF NOVEL PROTEINS FROM *PLASMODIUM FALCIPARUM* AS CANDIDATE DRUG TARGETS AGAINST MALARIA

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Abstract Malaria is a parasitic disease with a persistent prevalence in multiple parts of the world. *Plasmodium falciparum*, the deadliest human-infecting strain, has been a rising concern as the multi-faceted life-cycle poses a challenge in developing anti-malarial treatments while the effectiveness of present drugs begins to decline. As such, various research has been done to identify new drug targets leveraging modern computational biology techniques, such as proteomics. The objective of this study is to evaluate potential drug targets by comparing novel proteins in *P. falciparum* as reported in recent literature (2018-2022) based on their structural analysis of their 3D models along with the druggability properties and protein-protein interactions. A list of 22 proteins were acquired from 48 literature, in which only 7 can be considered as a favorable candidate protein drug target due to their non-human homologous nature, ERRAT score, residues percentage in favourable spot in Ramachandran plot, and high druggability score. Following an examination of protein-protein interactions, it is found that among the evaluated proteins only PF3D7_1438600 exhibits a sufficiently robust network, highlighting it to be the most promising candidate for drug targeting. This study demonstrates the valuable role of proteomics in uncovering potential drug targets and highlights its significance in driving emerging research efforts.
Keywords: *Plasmodium Falciparum*, anti-malarial drug target, novel protein drug target, proteome mining, protein-protein interactions

THUTHI LEAF

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ABSTRACT;
Abutilon indicum is a plant that belongs to the Malvaceae family, which is distributed throughout a number of tropical and subtropical areas and has been used for various disorders in traditional and folk medicine. The various medicinal applications of this plant include anti-inflammatory, antioxidant, demulcent, aphrodisiac, laxative, diuretic, pulmonary and sedative. Thus the present study was formed to identify the biological activities of A. indicum fruit by in silico and in vivo approach. The ethanolic extract was prepared and screened for in vitro antimicrobial activities against Staphylococcus aureus and Enterococcus faecalis and also against a fungi Aspergillus niger. The ethanolic extract was subjected to Gas chromatography–mass spectrometry (GC-MS) analysis for identification of compounds present in fruit sample. The identified compounds were then screened for anti-inflammatory activity by molecular docking against the Cyclooxygenase-2 inhibitors. Also, Density Functional Theory (DFT) & Absorption Distribution Metabolism Excretion and Toxicity (ADMET) studies were carried out to assess the quantum-chemical parameters and pharmacokinetics behaviour respectively. The ethanolic fruit extract of A. indicum showed moderate antimicrobial activity against S. aureus, E. faecalis and Aspergillus niger at the MIC of 25 μg/μl. AI 1003, AI 1004 and AI 1005 were identified as lead compounds against the target Cyclooxygenase −2 which exhibited strong hydrogen bond interaction & also desirable pharmacokinetic properties. DFT studies also showed the promising reactivity with lowest energy gap of compounds AI 1004 &AI 1005. Thus, owing to the significant interaction of the compounds with the target COX-2 and desirable pharmacokinetic properties of compounds of ethanolic extract of A. indicum could be further explored for anti-inflammatory properties by in vitro & in vivo analysis.
KEYWORDS Abutilon indicum Antimicrobial Molecular docking DFT Inflammation.

EXISTENCE OF SOLUTIONS FOR NONLINEAR NEUMANN PROBLEM WITH BOUNDARY CONDITION AND MEASURE DATA

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Abstract
In this study, we analyze a class of strongly nonlinear and non-coercive Neumann problems described by the following boundary value problem:

$$Au + |u|^{p-2}u = \mu \quad \text{in} \quad \Omega,$$
$$\sum_{i=1}^{N}(a_i(x,u,\nabla u) - g_i(x)).n_i = h(x) \quad \text{on} \quad \partial\Omega,$$

where Ω is a bounded domain, and the functions and terms involved exhibit anisotropic characteristics. Here, $Au=-\sum_{i=1}^{N} D^i a_i(x,u,\nabla u)$ is a Leray-Lions operator acting from $W^{1,\vec{p}}(\Omega)$ into its dual. The function $a_i(x,u,\nabla u): \Omega \times \mathbb{R} \times \mathbb{R}^N \to \mathbb{R}$ are Carathéodory functions satisfying the following conditions:

1) Growth condition:

$$|a_i(x,s,\xi)| \leq \beta(Q_i(x)+|s|^{\{p_i-1\}}+|\xi_i|^{\{p_i-1\}}),$$

with $\beta > 0$ and the nonnegative function $Q_i(x)$ is assumed to be in $L^{p'_i}(\Omega)$ for i=1,…,N.

2) Monotonicity condition:

$$(a_i(x,s,\xi) - a_i(x,s,\xi'))(\xi_i - \xi_i') > 0 \quad \text{for} \quad \xi_i \neq \xi_i',$$

3) Coercivity degenerated condition:

$$a_i(x,s,\xi)\,\xi_i \geq b(|s|)|\xi_i|^{p_i} \quad \text{with} \quad b(|s|) \geq \frac{b_0}{(1+|s|)^{\lambda}},$$

where b_0 is a positive constant and $b(|.|): \mathbb{R}^+ \to \mathbb{R}^+$ is a decreasing function belonging to $L^1(\mathbb{R}) \cap L^\infty(\mathbb{R})$.
Moreover, we suppose that

$$\mu = f - \operatorname{div}(g) \in L^1(\Omega) + (W^{1,\vec{p}}(\Omega))',$$

The analysis is carried out within the framework of anisotropic Sobolev spaces $W^{1,\vec{p}}(\Omega)$, which are well-suited for handling the directional dependence of the problem. We establish the **existence of weak and renormalized solutions** for this elliptic nonlinear non-coercive equation, addressing the challenges posed by the anisotropy, nonlinearity, and low regularity of the data.

Keywords: Anisotropic Sobolev spaces, strongly nonlinear equation, non-coercive equation, weak solutions, renormalized solutions.

TOPLUMSAL HAREKETLERDE MÜZİĞİN ROLÜ: "BARAYE" VE İRAN PROTESTOLARI

THE ROLE OF MUSIC IN SOCIAL MOVEMENTS: "BARAYE" AND THE IRANIAN PROTESTS

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ÖZET

Toplumsal hareketler, tarih boyunca müziği bir direnç, dayanışma ve ifade aracı olarak kullanmıştır. Müziğin kolektif hafıza yaratma, duygusal bağ kurma ve kimlik oluşturma gücü, özellikle protesto hareketlerinde kritik bir rol üstlenir. 2022 yılında İran'da Mahsa Amini'nin ahlak polisi tarafından öldürülmesinin ardından başlayan protesto dalgası, İran'ın toplumsal, politik ve kültürel dinamiklerini sarsmış; dünya genelinde ses getiren bir özgürlük ve hak arayışı hareketine dönüşmüştür. Bu süreçte müziğin güçlü etkisi, toplumsal direnişin sembolik ve duygusal bir aracı olarak bir kez daha ortaya çıkmıştır. Protestolara eşlik eden eserler arasında, Shervin Hajipour'un bestelediği *"Baraye"* şarkısı, yalnızca bu hareketin bir simgesi değil, aynı zamanda küresel çapta yankı bulan bir dayanışma çağrısı haline gelmiştir.

"Baraye", sosyal medyada İran halkının umutlarını, hayallerini ve sistem karşıtı eleştirilerini bir araya getiren sözleriyle, çağdaş protesto müziği geleneğinin öne çıkan bir örneğidir. Şarkı, kadın haklarından çevre sorunlarına kadar geniş bir yelpazede bastırılmış talepleri dile getirerek, bu taleplerin ulusal sınırları aşmasını sağlamış ve küresel bir farkındalık yaratmıştır. Şarkının viral hale gelme süreci, modern iletişim araçlarının toplumsal hareketleri nasıl güçlendirdiğini ve dayanışmayı sınırlar ötesine taşıyabildiğini göstermektedir.

Nitel araştırma yöntemlerinden netnografik araştırma deseniyle çalışılan bu bildiride, *"Baraye"* şarkısının yanı sıra İran protestoları sırasında öne çıkan diğer şarkılar ele alınacaktır. Özellikle *"Baraye"nin* sözleri, müzikal yapısı ve protestolarla olan ilişkisi detaylı bir şekilde incelenecek; şarkının İran toplumundaki sembolik direniş aracı olarak rolü ve uluslararası kamuoyundaki etkisi tartışılacaktır. Bu analiz, müziğin yalnızca estetik bir ifade biçimi değil, aynı zamanda toplumsal dönüşümde güçlü bir araç olduğunu vurgulamayı amaçlamaktadır.

Anahtar Kelimeler: Müzik, Toplumsal Hareketlilik, İran Protestoları, "Baraye"

ABSTRACT

Throughout history, social movements have utilized music as a tool of resistance, solidarity, and expression. The power of music to create collective memory, establish emotional bonds, and shape identity plays a particularly critical role in protest movements. In 2022, the wave of protests that erupted in Iran following the death of Mahsa Amini at the hands of the morality police shook the country's social, political, and cultural dynamics, evolving into a global movement for freedom and justice. During this period, the transformative impact of music re-emerged as a symbolic and emotional tool of social resistance. Among the works accompanying these protests, Shervin Hajipour's song "Baraye" became not only a symbol of this movement but also a call for solidarity that resonated worldwide.

"Baraye" stands out as a contemporary example of protest music, with lyrics that compile the hopes, dreams, and systemic criticisms expressed by the Iranian public on social media. The

song addresses a wide spectrum of suppressed demands, from women's rights to environmental issues, making these demands visible beyond national borders and contributing to global awareness. Its viral spread highlights how modern communication tools empower social movements and extend solidarity across borders.

In this paper, conducted using the netnographic research design, one of the qualitative research methods, the song *"Baraye"* as well as other prominent songs from the Iranian protests will be examined. Specifically, the lyrics, musical structure, and relationship between "Baraye" and the protests will be analyzed in detail. The role of the song as a symbolic tool of resistance in Iranian society and its impact on raising international awareness of the protests will also be discussed. This analysis aims to emphasize that music is not merely an aesthetic form of expression but also a powerful instrument for social transformation.

Keywords: Music, Social Mobilization, Iranian Protests, "Baraye"

APİTERAPÖTİK YENİLEBİLİR NANOEMÜLSİYONLARIN SENTEZİ VE KARAKTERİZASYONU

SYNTHESIS AND CHARACTERIZATION OF APITHERAPEUTIC EDIBLE NANOEMULSIONS

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ÖZET

Nanoemülsiyonlar, 20-400 nm aralığında parçacık boyutlarına sahip, karışmayan iki fazın yüzey aktif maddeler veya emülgatörlerle karıştırılmasıyla elde edilen kolloidal sistemlerdir. Sağladıkları yüksek stabilite, artırılmış biyoyararlanım, kontrollü salım ve homojen yapıları nedeniyle farmasötik, kozmetik ve gıda gibi çeşitli sektörlerde geniş bir kullanım alanına sahiplerdir. Küçük damlacık boyutları sayesinde, aktif bileşenlerin emilimini kolaylaştırarak biyoyararlanımı ve ürünlerin etkinliğini arttırmaktadırlar. Arı ürünleri, antioksidan, antiinflamatuar ve antimikrobiyal özelliklere sahip doğal bileşenler içerir; nanoemülsiyon formunda kullanıldığında bu özellikler daha iyi korunabilir ve stabilize edilebilir. Ayrıca, nanoemülsiyonlar, arı ürünlerinin tat, koku ve raf ömrü gibi duyusal özelliklerini iyileştirirken, oksidatif bozulmayı da azaltır. Bu sayede, hem gıda takviyesi hem de fonksiyonel ürünler geliştirme alanında nanoemülsiyonlar önemli bir yenilik sunabilir.

Bu bağlamda, arı ekmeği ve propolis ekstrelerine ek olarak bal ve çeşitli baharatlar içerikli yenilebilir nanoemülsiyonların geliştirilmesi ve karakterizasyonu üzerine gerçekleştirilen bu çalışma, ilgili nanoemülsiyon sistemlerinin gıda endüstrisinde takviye ürün olarak kullanım potansiyelini ortaya koymaktadır. Çalışma kapsamında arı ekmeği ekstresi, propolis ekstresi ve Tween80 miktarlarının değiştiği ve antioksidan aktiviteye dayalı bir sentez optimizasyonu gerçekleştirilmiştir. Elde edilen nanomeülsiyonlardan en yüksek antioksidan aktiviteye sahip olan 2 örnek, Taramalı Elektron Mikroskobu ve Fourier Dönüşümlü Kızılötesi Spektroskopisi analizlerine tabii tutulmuştur. Elde edilen sonuçlar sentezlenen nanoemülsiyonların ortalama partikül boyutlarına ve korunmuş faz ayrımına sahip olduğunu ve aynı zamanda geliştirilmiş antioksidan aktivite sunduğunu göstermiştir. Bu bulgular, geliştirilen nanoemülsiyonların gıda takviyelerinde yenilikçi bir formülasyon olarak kullanılabileceğini ve ilgili potansiyelini ortaya koymaktadır.

Anahtar Kelimeler: Nanoemülsiyon, Arı Ekmeği, Propolis, Gıda Takviyesi

ABSTRACT

Nanoemulsions are colloidal systems with particle sizes ranging from 20 to 400 nm, formed by mixing two immiscible phases with the help of surfactants or emulsifiers. Due to their high stability, enhanced bioavailability, controlled release, and homogeneous structure, they find extensive applications in industries such as pharmaceuticals, cosmetics, and food. Their small droplet size facilitates the absorption of active ingredients, increasing bioavailability and

improving product efficacy. Bee-derived products, rich in natural components with antioxidant, anti-inflammatory, and antimicrobial properties, can have these features better preserved and stabilized when formulated as nanoemulsions. Furthermore, nanoemulsions improve sensory characteristics such as taste, aroma, and shelf life of bee products, while reducing oxidative degradation, making them an innovative tool for developing both dietary supplements and functional food products.

In this context, this study focuses on the development and characterization of edible nanoemulsions containing bee bread and propolis extracts, along with honey and various spices, showcasing the potential of such nanoemulsion systems as dietary supplements in the food industry. The study involved the optimization of synthesis based on antioxidant activity, varying the amounts of bee bread extract, propolis extract, and Tween80. Among the synthesized nanoemulsions, two samples exhibiting the highest antioxidant activity were subjected to Scanning Electron Microscopy (SEM) and Fourier Transform Infrared Spectroscopy (FTIR) analyses. The results demonstrated that the synthesized nanoemulsions possessed an average particle size, preserved phase separation, and enhanced antioxidant activity. These findings highlight the potential of the developed nanoemulsions as innovative formulations for use in dietary supplements, underlining their significance in the food industry.

Keywords: Nanoemulsion, Bee Bread, Propolis, Dietary Supplements

A REVIEW ON: FEMALE AS SCIENTIST/ WOMEN IN FIELD OF SCIENCE

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Abstract

Women have made a lot of significant contribution in the field of Science throughout the History, overcoming various challenges and biases. Woman plays a pivotal role in the sustainability and progress of the world. There are list of women who are the owner of Nobel prizes in every field of science and technology. In recent years, the absolute number of women earning degree in every field across the world especially Science, Technology, and Engineering and Mathematics (STEM) fields has increased if we compare to the men. In many other scientific fields like (psychology, life science, social science), women are found in much higher percentages. Women leaders in Science bring a fresh perspective to the field that is essential for driving many innovations and progress. Their diverse experiences and excellent backgrounds allow them to approach various Scientific Problems in very unique ways, which leads toward a new studies and discoveries in many fields of Science and Technology. According to a study, 28% of researchers worldwide are females. This study also helps to understand the problems and challenges faced by female scientist all around the world. This research study sheds a light upon various aspects of women contribution in the field of Science all around the world. Overall, this review highlights the major role and achievements of women present and has a notable role in the world and their notable impact on Society.

Key Words: Women, Science, Technology, STEM, Research, Scientific Problems

MAJOR CHALLENGES CONFRONTING EFL HIGH SCHOOL TEACHERS

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Teachers, of English as a foreign language (EFL), play a rather significant role in schools as they work closely with students in educational programs. The effectiveness of their efforts in enhancing educational quality is primarily determined by their competence in shouldering teaching responsibilities (Asra et al., 2018). Teaching English Language to high school students is not a simple process as it seems to be. There might be a range of problems and challenges that influence the quality of instruction and student performance. To that end, the present study aims to investigate those challenges and problems that high school EFL teachers encounter during their teaching process. Utilizing a qualitative approach, the current research gathers data through a semistructured interview. The interview consists of 15 question items to provide adequate responses to the addressed research questions. Thus, 20 EFL teachers from eight high schools at Koya city were interviewed. The findings showed that there are various problems and challenges in front of the teaching process of the high school EFL teachers. Some of the problems are concerned with the teachers, students and the authorities, whereas other challenges refer to the buildings and textbooks. This paper aims to provide insights to promote teaching practices and enhance student outcomes.
Keywords: EFL Teachers, Challenges, Educational Settings, Classroom Problems

ON THE THEORY AND GENERALIZATION OF Σ-GROUPS

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ABSTRACT

The theory of abelian groups is fundamental with respect to the investigation of TAG-modules. The concept of TAG (torsion abelian group like) module was introduced and initially investigated by Singh [26]. The notion of TAG-modules is one of the most important tools in module theory and many different forms of generalizations of torsion abelian groups have been introduced and investigated for these modules. This notion has many more pleasing properties which have been the focus of attention of many authors (see, for instance, [1, 28]).
Over an arbitrary (associative, unitary) ring R, a module M is called a TAG-module if it satisfies the following two conditions relating to uniserial modules.

- **(i)** Every finitely generated submodule of any homomorphic image of M is a direct sum of uniserial modules.
- **(ii)** (ii) Given any two uniserial submodules U_1 and U_2 of a homomorphic image of M, for any submodule N of U_1, any non-zero homomorphism $\phi : N \rightarrow U_2$ can be extended to a homomorphism $\psi : U_1 \rightarrow U_2$, provided the composition length $d(U_1/N) \leq d(U_2/\phi(N))$.

In 1987 Singh followed this up in his another work [27], and introduced the notion of QTAG-modules by applying condition (i) only. The study was then followed by numerous developments on the topic. In particular, a lot of variations of the concept have been introduced and studied (see, for example, [10, 11, 23, 24, 25] and the references cited therein). It is worthwhile noticing that many of the developments in this direction are analogous to the earlier development of torsion abelian groups.
In this work we present a systematic study of n-layered modules which are closely related to Σ-modules. For each integer $n \geq 1$ we prove some results for n-layered modules concerning when Σ-modules are direct sum of countably generated modules. Moreover, we discover additional restriction which leads to coinciding of n-layered modules and m-layered modules for $n > m$.

AMS Classification: 16K20
Keywords: QTAG-modules, n-layered modules, high submodules.

NADİR GÖRÜLEN İKİ YENİDOĞAN UMBLİKUS ANOMALİSİ OLGUSU; UMBLIKAL KORD HERNİSİNDE MECKEL DİVERTİKÜLÜ VE URAKAL KIST ANOMALİSİ

TWO RARE CASES OF NEWBORN UMBLICAL ANOMALLY; MECKEL'S DIVERTICULUM AND URACHAL CYST ANOMALLY İN UMBLICAL CORD HERNIA

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ÖZET

Giriş:

Umblikal kord hernisi (UKH), karın duvarı açıklığının 4cm.'den küçük olduğu, bağırsak içerikli, yüzeyi amniyon zarı ile kaplı bir defekttir. Literatürde sınırlı sayıda olmakla birlikte umblikus anomalilerinde tedaviyi ve nihayi sonucu etkileyen çeşitli klinik ve malformasyonlar vardır. Bu bildiride UKH'ne eşlik eden 2 farklı vaka, meckel divertikülü ve urakal kist anomalisi sunulmuştur. Birinci olguda 33hf.'lık 1980gr. kız hasta, muayenesinde yaklaşık 3cm.'lik defekti mevcuttu, redükte edilemiyordu. Mekonyum çıkışı oldu, fakat beslenmeyi tolere edemedi. Postnatal 5.gününde hasta operasyona alındı. Hastanın cerrahi eksplorasyonunda bağırsak segmentinin umblikusa doğru kör sonlandığı ve keseye yapışık olduğu gözlendi. Meckel divertikülü tanısı konuldu. Rezeksiyon anastomoz yapıldı. Defekt primer kapatıldı. Hastanın takibinde postoperatif 3.gün gaita çıkışı gözlendi ve 5. gün beslenmesi başlatıldı. Fakat hastanın solunumsal destek ihtiyacının devam etmesi, hipotonik seyri ve nöbet geçirmeye başlaması nedeniyle çocuk yoğun bakım ünitesi takibi devam etti. İkinci olguda ise 35hf.'lık 2495gr. erkek hasta, muayenesinde umblikusta 1,5x2,5cm.'lik defekt gözlenmekte ve redükte edilemiyordu. Cerrahi eksplorasyonda kese içerisinde kist oluşumu gözlendi. Kist takip edildiğinde mesaneye doğru bağlantısı ortaya konulup urakal kist tanısı konuldu. Urakal kist ve artığı mesaneden kontrollü şekilde rezeke edildi. Mesane kaçak kontrolü ve batın ek anomali taraması ardından umblikal defekt sorunsuz kapatıldı. Postoperatif 5.gününde taburcu edildi. Taburculuk sonrası 1.ayda çekilen üriner ultrasonunda herhangi bir üriner patoloji gözlenmedi. 6 aylık takibinde idrar yolu enfeksiyonu gözlenmedi. UKH çeşitli kliniklerle ve eşlik edebilecek anomalilerle hafife alınmaması gereken bir patolojidir. Sıklıkla yenidoğan dönemi cerrahi gereksinimi olan bir malformasyondur. Operasyon hazırlığının basit bir umblikal herniden ziyade yenidoğan obstrüksiyonlarına hazırlanır gibi yapılması morbidite ve mortaliteyi azaltabilir.

Anahtar Kelimeler: Umblikal kord hernisi, Meckel divertikülü, Urakal kist, Yenidoğan cerrahisi, Konjenital anomaliler.

ABSTRACT

Umbilical cord hernia (UCH) is a rare congenital anomaly characterized by a defect less than 4 cm in diameter containing intestinal loops, covered by the amniotic membrane. The literature on UCH is limited, but associated malformations, such as Meckel's diverticulum and urachal cysts, may influence treatment and prognosis. This report presents two cases of UCH in preterm neonates.

In the first case, a female infant (33 weeks, 1980 g) was diagnosed with a 3 cm irreducible defect. She underwent surgical repair, where Meckel's diverticulum was identified and resected. The patient recovered postoperatively but required continued intensive care due to respiratory issues and seizures.

In the second case, a male infant (35 weeks, 2495 g) presented with a 1.5x2.5 cm defect. Surgical exploration revealed a urachal cyst, which was resected without complications. The patient recovered well and was discharged on postoperative day 5, with no further issues during follow-up.

UCH, although rare, requires careful management due to its potential association with other anomalies. Early recognition and surgical intervention, prepared for possible neonatal obstructions, may reduce morbidity and improve outcomes.

Keywords: Umbilical cord hernia, Meckel's diverticulum, urachal cyst, neonatal surgery, congenital anomalies.

ÜNİVERSİTE ÖĞRENCİLERİNİN ALEKSİTİMİ DÜZEYLERİNİN FARKLI DEĞİŞKENLER AÇISINDAN İNCELENMESİ
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Özet
Bu çalışma, üniversite öğrencilerinin aleksitimi düzeylerini cinsiyet, yaş, anne-baba eğitim düzeyi, fakülte gibi bazı değişkenlere göre incelemektedir. Araştırma evreni Kırgız-Türk Manas Üniversitesinde öğrenim gören öğrencilerden, örneklemi ise yine aynı üniversitede okuyan çalışmada kullanılan veri toplama aracını istekli olarak cevaplayan 196'sı kadın, 59'u erkek olarak toplam 255 öğrenciden oluşmaktadır. Veri toplama aracı olarak Kişisel Bilgi Formu ve Perth Aleksitimi Ölçeği (PAÖ) kullanılmıştır. Verilerin analizinde iki kategoriye sahip örneklem ortalaması için t-testi, ikiden fazla kategorili örneklem ortalaması için de ANOVA testi kullanılmıştır. Araştırmadan elde edilen bulgular incelendiğinde, cinsiyete göre kadın öğrencilerin negatif duyguları tanıma (N-DTZ) ve negatif duyguları ifade zorluğu (N-DİZ) alt boyutlarında aldığı ortalama puanları erkek öğrencilerle kıyasla daha yüksek, erkek öğrencilerin ise pozitif duyguları ifade zorluğu (P-DİZ) alt boyutunda aldığı ortalama puanının kadın öğrencilere göre daha yüksek olduğu saptanmıştır. Sınıf değişkenine göre 3. sınıf ve 4. sınıf arasında anlamlı bir farklılık olduğu görülmüştür. 4.sınıf öğrencilerinin pozitif duyguları tanımada (P-DTZ boyutu) diğer sınıflara göre daha fazla zorlandıkları saptanmıştır. Ayrıca 4.sınıf öğrencilerinin aleksitimi ölçeğinin tüm boyutlarında diğer sınıflara göre daha yüksek puan ortalamaları sergilediği görülmüştür. Büyüdüğü bölgeye göre şehirde büyüyen öğrencilerin köyde büyüyen öğrencilere göre daha çok dışa vuruk düşünme (G-DVD) eğiliminde oldukları belirlenmiştir. Araştırmanın diğer bir bulgusu aleksitiminin genel dışa vuruk düşünme (G-DVD) alt boyutunda son çocukların ilk çocuklara göre daha yüksek puan aldığını ortaya koymuştur. Fakülte, yaş, kardeş sayısı, anne-baba birliktelik durumu ve anne-baba eğitim düzeyinin katılımcıların aleksitimi düzeylerini etkilemediği görülmüştür.
Anahtar kelimeler: Üniversite öğrencileri, duygular, duyguları tanıma ve ifade etme, aleksitimi

EXAMINING UNIVERSITY STUDENTS' ALEXITHYMIA LEVELS IN TERMS OF DIFFERENT VARIABLES
(Case of Kyrgyzstan)

SUMMARY
This study examines the levels of alexithymia in university students according to some variables such as gender, age, parents' educational level, and faculty. The research universe consists of students studying at Kyrgyz-Turkish Manas University, and the sample consists of 255 students, 196 of whom are female and 59 are male, who voluntarily answered the data collection tool used in the study. The Personal Information Form and the Perth Alexithymia Scale (PAQ) were used as data collection tools. t-test and ANOVA test were used in the analysis of the data.

When the findings obtained from the research are examined, it is observed that female students scored higher on the negative emotion identifying and difficulty in describing negative emotions sub-dimensions compared to male students, while male students scored higher on the difficulty in describing positive emotions sub-dimension compared to female students. A significant difference was found between the 3rd and 4th grade according to the grade variable. It was determined that 4th grade students have more difficulty in identifying positive emotions dimension) compared to other grades. In addition, it was observed that 4th grade students had higher average scores on all dimensions of the alexithymia scale compared to other grades. According to the region they grew up in, it was determined that students who grew up in the city tended to have more general-externally orientated thinking than students who grew up in the village. Another finding of the research revealed that last-born children scored higher on the general-externally orientated thinking sub-dimension compared to first-born children. It was observed that faculty, age, number of siblings, parents' marital status, and parents' education level did not affect the participants' alexithymia levels.
Keywords: University students, emotions, emotional expression, alexithymia.

ASSESSING THE IMPACT OF SOCIAL AND NUTRITIONAL DETERMINANTS ON MATERNAL AND CHILD HEALTH IN RURAL AND URBAN PUNJAB

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Abstract

The impact of social and nutritional determinants on maternal and child health in both rural and urban Punjab highlights significant disparities in health outcomes, attributable to variables such as socioeconomic status, educational attainment, and access to nutritional resources. Rural mothers frequently encounter heightened risks of low birth weight in their infants, attributed to insufficient antenatal care and suboptimal nutritional intake. This underscores the necessity for enhanced healthcare services in these areas.This research examines the socio-cultural factors contributing to malnutrition and their health consequences for mothers and children in Punjab, Pakistan. A cross-sectional design was utilized, collecting data from 600 mothers with children below the age of five. Both qualitative and quantitative approaches were employed, encompassing interviews and focus group discussions. The evaluation of nutritional status was conducted through the utilization of Body Mass Index (BMI). The examination uncovered substantial socio-economic determinants, including maternal education, age at marriage, occupational status, and family size, that impact health status. The study revealed a noteworthy positive correlation between elevated social status and enhanced health outcomes, whereas cultural practices such as son preference and the consumption of junk food adversely affected nutrition. Mothers who possess greater decision-making autonomy exhibit a reduced likelihood of experiencing malnutrition, indicating that the empowerment of women is fundamental to enhancing health outcomes. The multivariate analysis revealed that an understanding of nutrition and proactive healthcare-seeking behaviors played a pivotal role in enhancing health outcomes, as evidenced by a positive coefficient (0.096) that signifies a direct influence on the improvement of maternal and child health. Recommendations highlight the importance of nutritional education, interventions aimed at behavior modification, and policy reforms that prioritize healthcare accessibility and gender equality in order to mitigate malnutrition rates. The research findings indicate that it is essential to confront socio-cultural obstacles via education and empowerment to effectively address malnutrition in Punjab.

Keywords: Nutrition, Mother-child health, Decision Making, Health-care seeking behavior.

VALORIZATION OF ANAEROBIC DIGESTATE INTO HYDROCHAR FOR ENHANCED ADSORPTION OF METHYLENE BLUE DYE: PROCESS OPTIMIZATION VIA RESPONSE SURFACE METHODOLOGY

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Abstract

This study presents an environmentally sustainable strategy for producing hydrochar via hydrothermal carbonization (HTC) of anaerobic digestate obtained from the anaerobic digestion of animal waste. The hydrochar was synthesized at 180°C for 4 hours and subsequently activated with acid to enhance its adsorption efficiency for Methylene Blue (MB) dye. Comprehensive characterization of the hydrochar was performed using advanced analytical techniques, including X-ray diffraction (XRD), Fourier-transform infrared spectroscopy (FTIR), scanning electron microscopy coupled with energy-dispersive X-ray spectroscopy (SEM-EDX), and zeta potential (ZP) measurements. Optimization of the adsorption process was achieved using response surface methodology (RSM) with a central composite design (CCD), targeting critical parameters such as pH, contact time, adsorbent dosage, and initial MB concentration. Adsorption kinetics and equilibrium studies revealed that the process conformed to a pseudo-second-order kinetic model and the Langmuir isotherm, respectively. Thermodynamic analysis confirmed the adsorption as a spontaneous and exothermic process. The hydrochar exhibited a maximum adsorption capacity of 150.87 mg g^{-1}, demonstrating its potential as an efficient and sustainable adsorbent for the removal of cationic dyes from water.

Keywords: Hydrochar. Water treatment. Adsorption. dyes. Methylene bleu.

OPTIMIZATION AND CHARACTERIZATION OF COMPOSITE NANOFIBERS FOR TISSUE ENGINEERING APPLICATIONS

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Abstract

In the past 20 years, electrospinning, regarded as a low-cost and simple approach, has attracted great attention due to its wide applications in various fields such as medicine, pharmaceuticals, and cosmetics, thanks to the nanofibrous materials with diverse functional properties it can produce. Nanofibers produced by the electrospinning method are frequently used in both laboratory and industrial fields due to their high surface area and porous structure. In particular, they enhance treatment efficacy and reduce side effects through controlled and targeted drug release. Therefore, nanofiber-based drug therapies are becoming an increasingly preferred option in advanced treatment methods. In this study, novel nanofiber-based drug delivery systems, which have not been studied before and are based on a blend of polyacrylic acid (PAA), sodium alginate (NaALG), and kappa carrageenan (kCRG), were developed to provide biocompatibility, controlled release, and suitability for tissue engineering applications. PAA, thanks to its high water retention capacity, helps cells stay alive and provides the necessary hydration environment; NaALG polymers provide controlled release when used as a carrier structure for drugs or growth factors; kCRG's thermogelation feature, which can gel at certain temperatures, and its high viscosity will provide mechanical durability. In addition, the effect of the addition of Triton X-100 on the morphology of nanofiber blends was investigated in the study. The morphology and size distribution curves of nanofibers were determined by Scanning electron microscopy (SEM). The chemical structure of nanofibers was investigated by Fourier transform infrared spectroscopy (FTIR) analysis. Experimental results showed that 5% (w/v) PAA nanofibers blended with 2% (w/v) NaALG, 0.5% (w/v) kCRG and 0.5% (v/v) Tritonx-100 was found to be optimum among the examined. Composite nanofibers based on PAA/NaALG/kCRG developed by electrospinning show great promise as an alternative to existing treatment methods in tissue engineering applications by providing controlled release and enhancing therapeutic efficacy.

Keywords: Electrospinning, Kappa-carragenan(kCRG), Nanofiber, Poly(acrylic acid), Sodium Alginate(NaALG), Tissue Engineering

Acknowledgement: This work was funded by the Scientific and Technological Research Council of Türkiye (TÜBİTAK) with the project number 20AG041.

DOKU MÜHENDİSLİĞİ UYGULAMALARI İÇİN KOMPOZİT NANOFİBERLERİN OPTİMİZASYONU VE KARAKTERİZASYONU

Elektroeğirme yöntemi, düşük maliyetli ve basit bir yaklaşım olarak kabul edilen, üretebildiği çeşitli fonksiyonel özelliklere sahip nanofibröz malzemeler sayesinde son 20 yılda tıp, ilaç ve kozmetik gibi çeşitli alanlarda geniş uygulamaları nedeniyle büyük ilgi görmüştür. Elektroeğirme yöntemiyle üretilen nanofiberler, yüksek yüzey alanı ve gözenekli yapısı sayesinde hem laboratuvar hem de endüstriyel alanlarda sıklıkla kullanılmaktadır. Ayrıca özellikle kontrollü ve hedefli ilaç salımı ile tedavi etkinliğini artırır ve yan etkileri azaltırlar. Bu nedenle, nanofiber bazlı ilaç tedavileri ileri tedavi yöntemlerinde giderek daha fazla tercih edilen bir seçenek haline gelmektedir. Bu çalışmada, daha önce çalışılmamış poliakrilik asit (PAA), sodyum aljinat (NaALG) ve kappa karragenan (kCRG) bazlı, biyouyumlu ve özgün nanofiber ilaç taşıyıcı sistemler kontrollü salım ve doku mühendisliği uygulamalarında kullanılmak üzere geliştirilmiştir. PAA, yüksek su tutma kapasitesi sayesinde hücrelerin canlı kalmasını sağlayarak gerekli hidrasyon ortamını sağlarken; NaALG polimeri ilaç veya büyüme faktörleri için taşıyıcı yapı olarak kullanıldığında kontrollü salımı sağlar; belirli sıcaklıklarda jelleşebilen kCRG, termojelleşme özelliği ve yüksek viskozitesi sayesinde mekanik dayanıklılık sağlamaktadır. Ayrıca, çalışmada Triton X-100 ilavesinin nanofiber karışımların morfolojisi üzerindeki etkisi incelendi. Nanofiberlerin morfolojisi ve boyut dağılım eğrileri Taramalı elektron mikroskobu (SEM) ile belirlendi. Nanofiberlerin kimyasal yapısı Fourier dönüşümü kızılötesi spektroskopisi (FTIR) analizi ile incelendi. Deneysel sonuçlar, incelenenler arasında %2 (a/h) NaALG, % 0.5 (a/h) kCRG ve % 0.5(h/h) Triton X-100 ile karıştırılan % 5 (a/h) PAA nanofiberlerin optimum olduğunu gösterdi. Elektroeğirme yöntemiyle geliştirilen PAA/NaALG/kCRG bazlı, kompozit nanofiberlerin kontrollü salımı sağlayarak terapötik etkinliği artırması doku mühendisliği uygulamalarında mevcut tedavi yöntemlerine alternatif sunması açısından büyük umut vaat etmektedir.

Anahtar Kelimeler: Elektroeğirme**,** Kappa-karragenan(kCRG), Nanofiber, Poli(akrilik asit), Sodyum Aljinat(NaALG), Doku Mühendisliği

Teşekkür: Bu çalışma, Türkiye Bilimsel ve Teknolojik Araştırma Kurumu (TÜBİTAK) tarafından 20AG041 proje numarasıyla finanse edilmiştir.

ISOLATION AND STRUCTURAL ANALYSIS OF ALGINATES FROM *LAMINARIA* USING FTIR AND NMR

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Introduction : Alginates are structural polysaccharides extracted from brown macroalgae (*Laminaria*) with diverse applications in the food, pharmaceutical, and biomedical industries. Their chemical structure, composed of mannuronic (M) and guluronic (G) acids, gives them unique properties such as gelling ability. This study aims to extract alginates from 5 g of *Laminaria* and characterize them using FTIR and NMR spectroscopy.
Materials and Methods :After drying and grinding the algae, extraction was performed using a 3% Na2CO3 alkaline solution at 60 °C for 3 hours. The soluble alginate was precipitated with ethanol and converted into sodium alginate. Structural characterization was conducted using FTIR spectroscopy to identify functional groups (C=O, O-H) and NMR (1H and 13C) to determine M/G ratios.
Results :FTIR analysis revealed characteristic bands of alginates, including the stretching vibrations of carboxylate groups (1600 cm^{-1} and 1400 cm^{-1}) and hydroxyl groups (3200-3400 cm^{-1}). NMR data confirmed a structure dominated by M and MG blocks, with an M/G ratio of 1.5, indicating moderate gelling ability. The extraction yield was 15%, consistent with reported data for *Laminaria*.
Conclusion : This study confirmed that *Laminaria* is a reliable source of alginates. The combination of FTIR and NMR analyses provides detailed insights into the composition and structure of the polymers, essential for specific applications.
Keywords **: Alginates , Laminaria , characterization**

BİNİCİLİK SPORUNDA GÖRSEL PROPAGANDA UYGULAMALARININ ETKİLERİ
EFFECTS OF VISUAL PROPAGANDA APPLICATIONS IN EQUESTRIAN SPORTS

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Özet:
Bu çalışma, binicilik sporunda görsel propaganda uygulamalarının mevcut durumunu analiz ederek, spora olan etkilerini ve geleceğe yönelik fırsatları değerlendirmeyi amaçlamaktadır. Binicilik sporu, insan ve at arasındaki uyum ve estetiği temel alan, tarihi ve kültürel öneme sahip bir spor dalıdır. At terbiyesi, engel atlama, üç günlük yarışma, atlı dayanıklılık, atlı okçuluk, polo ve atlı cirit gibi çeşitli disiplinleri içermektedir.
Görsel propaganda, binicilik sporunun tanıtımında ve popülaritesinin artırılmasında kritik bir rol oynamaktadır. Ancak, elitizm algısı, medya desteğinin yetersizliği ve stratejik yaklaşım eksikliği gibi sorunlar, görsel propagandanın etkinliğini sınırlamaktadır. Bu algı, geniş kitlelerin spora ilgisini azaltmakta ve sporu daha az erişilebilir kılmaktadır.
Çalışmada, görsel propagandanın spora olan ilgiyi artırması, ekonomik ve ticari katkılar sağlaması ve kültürel mirasın korunmasına katkıda bulunması gibi olumlu etkileri vurgulanmıştır. Özellikle duygusal bağ kurma ve yeni kitlelere ulaşma potansiyeli, görsel propagandanın önemli etkilerindendir.
Gelecek perspektifleri bölümünde, dijitalleşme ve teknolojinin entegrasyonunun önemi ele alınmıştır. Sanal ve artırılmış gerçeklik teknolojilerinin kullanımı, sosyal medya stratejilerinin geliştirilmesi ve influencer işbirlikleri gibi yenilikçi yaklaşımlar, binicilik sporunun daha geniş kitlelere ulaşmasını sağlayabilir. Ayrıca, eğitim ve farkındalık çalışmalarıyla genç nesillerin spora kazandırılması hedeflenmektedir.
Sonuç olarak, binicilik sporunda görsel propaganda uygulamaları, spora olan ilgiyi artırmak ve mevcut sorunları aşmak için stratejik bir araçtır. Doğru planlanmış ve hedef kitleye uygun görsel stratejilerle, binicilik sporunun popülaritesi ve sürdürülebilirliği sağlanabilir. Gelecekte, teknolojik yeniliklerle desteklenen görsel propaganda, binicilik sporunun global arenada hak ettiği konuma ulaşmasına katkı sağlayacaktır.
Anahtar Kelimeler: Binicilik, Spor, Görsel Propaganda,

Abstract:
This study aims to analyze the current state of visual propaganda applications in equestrian sports, evaluate their impact on the sport, and assess future opportunities. Equestrian sports are disciplines based on the harmony and aesthetics between humans and horses, possessing historical and cultural significance. They encompass various disciplines such as dressage, show

jumping, eventing, endurance riding, mounted archery, polo, and traditional Turkish equestrian games like atlı cirit (mounted javelin throwing).

Visual propaganda plays a critical role in promoting equestrian sports and increasing their popularity. However, issues such as the perception of elitism, insufficient media support, and a lack of strategic approach limit the effectiveness of visual propaganda. This perception reduces the interest of the broader public in the sport and makes it less accessible.

The study highlights the positive effects of visual propaganda, such as increasing interest in the sport, providing economic and commercial benefits, and contributing to the preservation of cultural heritage. Notably, the potential to establish an emotional connection and reach new audiences are significant impacts of visual propaganda.

In the section on future perspectives, the importance of digitalization and the integration of technology are discussed. Innovative approaches like the use of virtual and augmented reality technologies, the development of social media strategies, and collaborations with influencers can help equestrian sports reach a wider audience. Additionally, educational and awareness activities aim to introduce the sport to younger generations.

In conclusion, visual propaganda applications in equestrian sports are strategic tools to increase interest in the sport and overcome existing challenges. With well-planned visual strategies tailored to the target audience, the popularity and sustainability of equestrian sports can be ensured. In the future, visual propaganda supported by technological innovations will contribute to equestrian sports achieving the position they deserve on the global stage.

Key Words: Equestrian, Sports, Visual Propaganda

HYBRID BLOCKCHAIN SOLUTIONS FOR SUPPLY CHAIN MANAGEMENT: ENHANCING SECURE AND TRANSPARENT TRACEABILITY WITH ADVANCED PRIVACY MEASURES

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Abstract:
Supply Chain management is increasingly reliant on blockchain technology to address challenges related to transparency, security, and traceability. However, conventional public blockchains encounter limitations in privacy and scalability, impeding their widespread adoption. This paper proposes a novel approach: hybrid blockchain solutions tailored for supply Chain management. Leveraging a combination of public and private blockchains, this hybrid model aims to maintain the integrity and transparency of transactions while integrating advanced privacy measures. Through a thorough review of existing blockchain-based supply chain solutions, this research identifies limitations and explores opportunities for improvement. The theoretical framework presented emphasizes the importance of data partitioning, permissioned access, and consensus mechanisms customized for supply chain environments. This study contributes to the ongoing discourse on blockchain technology's application in supply chain management, providing insights into the potential benefits of hybrid block chain solutions in achieving secure and transparent traceability.
Keywords: Hybrid Block Chain, Supply chain management, Traceability, Privacy measures, Transparency.

STUDY OF ENERGY DISSIPATION LOSSES ON STEPPED SPILLWAY OF DIFFERENT GEOMETRIES

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Abstract
This research investigates the rate of relative energy dissipation in various stepped spillway geometries, including end sill at all steps, inclined at all steps, inclined between two steps, end sill between two steps, and combinations of inclined and end sill, starting with inclined and end sill at all steps. The models had six steps, a model height of 24 cm, a step height of 4 cm, and a chute angle of 45^0. They were all constructed of wooden materials. Energy dissipation rates were computed and compared, hydraulic parameters were measured, and variable flow discharges were applied to each model geometry. The ratio of energy losses to upstream energy varies from 49% to 70%, indicating that the steps shape has a substantial effect on energy dissipation on stepped chutes. Additionally, the outcome showed that, out of all the test models, model C's energy dissipation rate which is slanted between two steps is the highest. The amount of energy dissipated over the spillway can be estimated using equation derived.
Keywords: Stepped spillway; energy dissipation; upstream and downstream flow; flow discharge.

SAHİBKARLIQ SUBYEKTLƏRİNDƏ EHTİYATLARIN UÇOTUNUN TƏŞKİLİ

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XÜLASƏ

Təsərrüfat subyektlərində ehtiyatların uçotunun təşkili aktivlərin səmərəli idarə edilməsi, düzgün maliyyə hesabatlarının verilməsi və əsaslandırılmış qərarların qəbulu üçün vacibdir. Ehtiyatların uçotu malların və materialların alışdan istehlaka qədər hərəkətini və dəyərini izləməyi əhatə edir, müəssisələrə ehtiyat səviyyəsini idarə etməyə, itkiləri azaltmağa və gəlirliliyi yaxşılaşdırmağa imkan verir. Proses inventar maddələrinin müəssisəyə daxil olduğu zaman onların dəqiq uçotu, kəmiyyət, vahidin dəyəri və təchizatçı məlumatı kimi təfərrüatların sənədləşdirilməsi ilə başlayır. Bu, hər bir inventar elementinin uçota alınmasını təmin edir, biznesə gəlirliliyi dəqiq qiymətləndirməyə və aktivləri üzərində effektiv nəzarəti saxlamağa imkan verir.

Azərbaycanda aktivlərin uçotunun düzgünlüyünü təsdiq etmək üçün tətbiq edilən audit prosedurlarının təkmilləşdirilməsi müəssisələrdə maliyyə hesabatlarının şəffaflığını, düzgünlüyünü və etibarlılığını artırmaq üçün vacibdir. Effektiv audit prosedurları aktivlərin düzgün uçota alınmasını, düzgün qiymətləndirilməsini və milli və beynəlxalq standartlara uyğun hesabat verilməsini yoxlamaq üçün çox vacibdir. Bu prosedurların təkmilləşdirilməsinin əsas məqsədi aktivlərin uçotunun təşkilatın maliyyə vəziyyətinin həqiqi və ədalətli görünüşünü əks etdirməsini təmin etmək, maraqlı tərəfləri qərar qəbul etmək üçün etibarlı məlumatla təmin etməkdir. Buna nail olmaq üçün auditorlar aktivlərin həm fiziki mövcudluğunu, həm də düzgün qiymətləndirilməsini qiymətləndirən etibarlı yoxlama proseslərini həyata keçirməlidirlər. Bura aktivlərin mövcudluğunu və vəziyyətini, xüsusən də yüksək qiymətli və ya riskə meylli əşyalar üçün təsdiq etmək üçün daha tez-tez və ətraflı fiziki yoxlamaların aparılması daxil ola bilər. Yoxlama həmçinin, hər bir aktivin alınmasından xaricə keçənədək düzgün uçota alınmasını təmin etmək üçün satınalma qəbzləri, müqavilələr və amortizasiya cədvəlləri kimi təsdiqedici sənədlərlə birlikdə baş kitabda qeydlərin çarpaz yoxlanılmasını əhatə edir. Təkmil analitik prosedurların istifadəsi də vacibdir, çünki o, auditorlara cari aktivlərin dəyərlərini tarixi məlumatlar, sənaye göstəriciləri və ya oxşar müəssisələrlə müqayisə etməklə aktivlərin qiymətləndirilməsində uyğunsuzluqları müəyyən etməyə imkan verir.

Azərbaycanda aktivlərin uçotunun düzgünlüyünün yoxlanılması üçün audit prosedurlarının təkmilləşdirilməsi qabaqcıl yoxlama metodlarının qəbulunu, texnologiyadan istifadəni, mövcud standartlara riayət etməyi və hərtərəfli sənədlərin saxlanmasını nəzərdə tutur. Bu təkmilləşdirmələr Azərbaycanın maliyyə və biznes mühitinə daha çox inam və inamın yaranmasına töhfə verən, maliyyə hesabatlarının dürüstlüyünü gücləndirən yüksək keyfiyyətli auditləri təşviq etmək üçün vacibdir. Bu baxımdan tədqiqatda yer alan məlumatlar audit prosedurlarının təkmilləşdirilməsi baxımından olduqca aktualdır.

Açar sözlər: audit, standartlar, qiymətləndirmə üsulları, inventar xərcləri

ORGANIZATION OF ACCOUNTING OF RESERVES IN BUSINESS SUBJECTS

SUMMARY

The organization of accounting of reserves in economic entities is important for efficient management of assets, correct financial reporting and making informed decisions. Inventory accounting involves tracking the movement and value of goods and materials from purchase to consumption, enabling businesses to manage inventory levels, reduce losses and improve profitability. The process begins with accurate accounting of inventory items as they enter the facility, documenting details such as quantity, unit cost, and supplier information. This ensures that every item of inventory is accounted for, allowing businesses to accurately assess profitability and maintain effective control over their assets.

Improving the audit procedures used to confirm the accuracy of asset accounting in Azerbaijan is important to increase the transparency, accuracy and reliability of financial statements in enterprises. Effective audit procedures are critical to verify that assets are properly recorded, valued, and reported in accordance with national and international standards. The main purpose of improving these procedures is to ensure that asset accounting reflects a true and fair view of the organization's financial position, and to provide stakeholders with reliable information for decision-making. In order to achieve this, auditors must implement robust audit processes that assess both the physical existence and proper valuation of assets. This may include conducting more frequent and detailed physical inspections to confirm the availability and condition of assets, particularly for high-value or risk-prone items. The audit also involves cross-checking the ledger entries with supporting documents such as purchase receipts, contracts and depreciation schedules to ensure that each asset is properly accounted for from acquisition to disposal. The use of advanced analytical procedures is also important because it allows auditors to identify discrepancies in asset valuations by comparing current asset values with historical data, industry benchmarks, or similar entities.

Improving audit procedures for checking the accuracy of asset accounting in Azerbaijan involves the adoption of advanced audit methods, the use of technology, compliance with existing standards and the maintenance of comprehensive documents. These improvements are important to promote high-quality audits, which contribute to greater trust and confidence in Azerbaijan's financial and business environment, and strengthen the integrity of financial reporting. In this regard, the information contained in the study is very relevant in terms of improving audit procedures.

Keywords: audit, standards, assessment methods, inventory costs

COVİD-19 PANDEMESİNDE SAĞLIK ÇALIŞANLARINDA DEPRESYON, ANKSİYETE ve STRES

DEPRESSION, ANXIETY AND STRESS IN HEALTH CARE WORKERS DURING THE COVID-19 PANDEMIC

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ÖZET

Covid-19 pandemisi tüm dünyada olduğu gibi, ülkemizde de ruhsal, psikolojik, fizyolojik ve sosyo-ekonomik sorunları beraberinde getirmiştir. Pandemi sürecinde özellikle sağlık çalışanlarında depresyon, anksiyete, stres gibi kavramlar çok daha güçlü şekilde ortaya çıkmış, çalışanlar üzerinde ruhsal bozukluklara sebep olmuştur.

Sağlık çalışanları Covid 19 sürecinde en ön safhada yer almışlardır. Hastaları iyileştirebilmek, hedeflerine ulaşabilmek, yeterli bakım ve tedaviyi yerine getirebilmek için gayretleri en üst seviyeye çıkarmışlardır. Sağlık çalışanları çok çaba göstermişlerdir. Ayrıca sağlık çalışanları uzun saatler vardiyada kalmak zorunda kalmışlardır. Bu çabaları zamanla çalışanlarda, hastalığın çok hızlı yayılır olması, hastalar üzerinde mortalite oranının yüksek olması beraberinde depresyon, anksiyete, stresi ortaya çıkarmıştır. Sağlık çalışanlarında bu durum özellikle ciddi travmalara sebep olmuştur. Salgının hemen ardından art arda verilen sağlık çalışanlarında ki can kaybı bu durumu daha da tetikler hale gelmiştir. Salgın sürecinde çok farklı meslek grubunda ki sağlık çalışanlarının kaygıları, çalıştığı birime göre farklılıklar göstermiştir. Yoğun bakım, covid servisleri, filyasyon ekibi, gibi virüsle birebir temas halinde olan kişilerde ruhsal etkiler daha fazla olurken, diğer farklı birimlerde çalışanların kaygıları daha az olmuştur.

Pandemi sürecinde sağlık çalışanların yaşadığı stres, anksiyete ve depresyonlarını en aza indiren, olgulardan bir tanesi korunmak için alınan kişisel koruyucu ekipmanlar olmuştur. Bu süreçte çalışanların iş ortamı düzeltilmesi, virüslerin çalışanlara bulaşı önlenmesi, çalışanların sağlığını korumak için (biyolojik, fiziksel, kimyasal, psiko-sosyal) olumsuz etkileri ortadan kaldırmak için yapılan çalışmalar önemli olmuştur.

Anahtar Kelimeler: Covid -19 pandemesi, sağlık çalışanları, depresyon, anksiyete, stres

ABSTRACT

The Covid-19 pandemic has brought about mental, psychological, physiological, and socio-economic issues in our country, as it has around the world. During the pandemic, concepts such as depression, anxiety, and stress have emerged much more strongly, especially among healthcare workers, leading to mental disorders among these employees.

Healthcare workers have been on the front lines during the Covid-19 crisis. They have maximized their efforts to heal patients, achieve their goals, and provide adequate care and treatment. Healthcare workers have made significant efforts and have also had to work long hours. Over time, these efforts, combined with the rapid spread of the disease and the high mortality rates among patients, have resulted in increased depression, anxiety, and stress among

the workers. This situation has especially caused severe trauma for healthcare workers. The successive losses of healthcare staff immediately following the outbreak have exacerbated this situation. During the pandemic, the concerns of healthcare workers from various professional groups have varied depending on their work units. Those in direct contact with the virus, such as intensive care units, Covid wards, and contact tracing teams, have experienced more psychological effects, while those working in other units have faced fewer concerns.

One of the factors that minimized stress, anxiety, and depression among healthcare workers during the pandemic was the personal protective equipment (PPE) used for protection. Efforts to improve the work environment, prevent the transmission of viruses to workers, and eliminate the negative effects on employees' health (biological, physical, chemical, psychosocial) have been crucial.

Keywords: Covid-19 pandemic, healthcare workers, depression, anxiety, stress.

OBSERVATION OF THE INSTANTANEOUS POWER SPECTRAL DENSITY

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Abstract—in this work, we use an FIR low pass digital filter to observe low band signal instantaneous power spectral density (IPSD). This is a simple alternative to the wavelet method. Any signal which carries energy can be composed of different signals ranging from low frequency bands to high frequency bands. In many cases, however, the undesired energy is that carried by those signals with high frequency bands. Therefore, the aim of this work is to try to filter, instantaneously, the low frequency band signals and then estimate their PSD using the periodogram estimator. The result of this technique is illustrated in three dimensions, where the time and the frequency are the plane axes and the PSD in the third axis. In this way, we can visualize the PSD of low band signals in the time-frequency space. We will show, using a simple Python code, that this method is efficient in chasing the concentration of the spectral power of a given desired low band signal.
Keywords: FIR low pass; IPSD; time-frequency space

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THE ANTIMICROBIAL PROPERTIES OF AQUEOUS EXTRACT OF TRIGONELLA FOENUM-GRAECUM

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Summary
Trigonella foenum-graecum, commonly known as fenugreek, is a plant recognized for its medicinal and dietary benefits. This summary explores the antimicrobial activity of its aqueous extract, highlighting its potential as a natural alternative to antibiotic treatments.
Fenugreek seeds are a rich source of nutrients, including proteins, fibers, essential fatty acids, and various bioactive compounds such as flavonoids and saponins. These components contribute to its numerous health benefits.
Research has shown that the aqueous extract of Trigonella foenum-graecum exhibits significant antimicrobial activity against several bacterial strains. Tests revealed inhibition zones of up to 11 mm for certain bacteria, indicating a notable inhibitory effect. The extract demonstrated particular effectiveness against bacteria such as Escherichia coli, underscoring its potential as a natural agent against infections.
The antimicrobial properties of fenugreek are primarily attributed to the presence of phenolic compounds and saponins, which disrupt bacterial cell membranes, leading to their inhibition. Incorporating the aqueous extract of fenugreek into phytotherapeutic formulations could represent a promising approach for treating bacterial infections, thereby reducing reliance on synthetic antibiotics.
Additionally, fenugreek can be utilized in agricultural practices as a natural phytosanitary agent, contributing to more sustainable farming methods. The valorization of Trigonella foenum-graecum, with an emphasis on its antimicrobial properties, paves the way for new applications in both medical and agricultural fields. The aqueous extract of fenugreek represents a valuable natural resource that deserves further exploration for its potential benefits in public health and sustainable agriculture.
Keywords
Trigonella foenum-graecum, fenugreek, antimicrobial activity, aqueous extract, bacterial infections.

MİLLİ EĞİTİM İSTATİSTİKLERİNE GÖRE 1949-1965 YILLARI ARASI SİVAS'IN HAFİK İLÇESİNDE EĞİTİMDE MEYDANA GELEN DEĞİŞİMLER
CHANGES IN EDUCATION IN HAFIK DISTRICT OF SİVAS BETWEEN 1949-1965 ACCORDING TO NATIONAL EDUCATION STATISTICS

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Özet
Eğitim ve öğretim, ülkelerin gelişmesi açısından çok önemli bir yere sahiptir. Kaliteli eğitim, ülkelerin her alanda başarıya ulaşabilmesi için vazgeçilmez bir unsurdur. İyi bir eğitim verilebilmesi için eğitim sisteminin yanında, nitelikli öğretmenler ve donanımlı eğitim kurumlarının bulunması şarttır. Bu sayede öğretmenler öğrencilere akademik bilginin yanında toplumsal değerler ve sorumlulukları da aktarabilecektir.
Cumhuriyetin ilk yıllarında eğitim alanında ciddi sıkıntılar yaşanmıştır. Yeni kurulan devletin ülkenin her yanına eğitimi eşit şartlarda götürmesi mümkün olmamıştır. Öncelikle il merkezlerinden başlanarak ilçelere ve köylere yayılacak şekilde bir planlama yapıldığı görülmektedir. Bu sayede yapılan yatırımların, uzun vadede ülkenin her alanda güçlenmesine katkı sağlaması hedeflenmiştir.
Bu çalışmada Milli Eğitim Bakanlığı tarafından yayınlanan istatistikler temel kaynak olarak alınmıştır. 1949-1950, 1960-1961 ve 1961-1965 istatistikleri incelenmeye tabi tutulmuştur. Tek parti döneminin sonu, Demokrat Parti dönemi ve sonrası dönemden seçilen istatistikler, eğitimin yıllar içindeki gelişimini göstermesinin yanında üç farklı iktidar döneminin taşra eğitimine bakış açısını da ortaya koyması açısından önem arz ettiği görüşündeyiz.
Çalışmada, Hafik ilçesi özelinde farklı tarihlerde, ilçedeki öğretmen sayıları ve mezuniyetleri, okullaşma oranı ve kız-erkek öğrenci sayıları üzerine bilgiler karşılaştırmalı olarak paylaşılacaktır.
Anahtar Kelimeler: Eğitim, Öğretim, Taşra Eğitimi.

Abstract
Education and training have a very important place in terms of the development of countries. Quality education is an indispensable element for countries to achieve success in every field. In order to provide a good education, it is essential to have qualified teachers and well-equipped educational institutions as well as an education system. In this way, teachers will be able to convey social values and responsibilities as well as academic knowledge to students.
In the early years of the Republic, serious problems were experienced in the field of education. It was not possible for the newly established state to bring education to all parts of the country under equal conditions. It is seen that a planning was made starting from the provincial centers and spreading to the districts and villages. In this way, it was aimed that the investments made would contribute to the strengthening of the country in every field in the long run.

In this study, statistics published by the Ministry of National Education were taken as the main source. The statistics of 1949-1950, 1960-1961 and 1961-1965 were analyzed. We believe that the statistics selected from the end of the single party period, the Democrat Party period and the post-democratic period are important in terms of showing the development of education over the years as well as revealing the perspective of provincial education in three different periods of power.

In this study, information on the number and graduation of teachers, schooling rate, and the number of male and female students in Hafik district on different dates will be shared comparatively.

Key Words: Education, Teaching, Provincial Education.

CATALYTIC MICROWAVE-ASSISTED PYROLYSIS OF PLASTIC WASTE OVER $NiFe_2O_4$, $ZnFe_2O_4$, AND $MgFe_2O_4$ FOR THE PRODUCTION OF LIQUID OIL AND CARBON NANOTUBES (CNTs)

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Recovering fuels or solid products from plastic waste via pyrolysis is an innovative and promising route for both energy saving and refuse elimination. In this study, catalytic microwave-assisted pyrolysis of High-density polyethylene (HDPE) was performed to simultaneously improve the yield and quality of pyrolysis products. $NiFe_2O_4$, $ZnFe_2O_4$, and $MgFe_2O_4$ were respectively used as in-situ catalysts in a one-stage pyrolysis-catalysis system. The results showed that the optimum pyrolysis and catalysis temperatures were 500°C and 450°C, respectively, with 36.53 wt% oil product and 62.70% solid product achieved. The content of high octane-number compounds, primarily aromatics and isomerized aliphatics, increased from 22.5% to 48.4% as $ZnFe_2O_4$ to HDPE ratio rose from 0 to 1:5. The optimized balance between oil yield and oil quality was obtained at the $MgFe_2O_4$ to HDPE ratio of 1:10. The presence of $NiFe_2O_4$ during process slightly decreased the oil yield by 5.3-8.5 wt% and increased the solid yield 12.20-15.30 wt%. The improved performance of pyrolysis could be related to the suitable hydrogen abstraction ability of $NiFe_2O_4$, which produced enormous alkenes. Subsequently, cycloalkenes and aromatics were synthesized through Diels-Alder reactions over the catalysis of $MgFe_2O_4$. This approach in the microwave reactor provides a potentially profitable way to convert plastic waste into high-quality and high-yield products.
Keywords: Plastic waste, $NiFe_2O_4$, Liquid fuel, Carbon nanotubes.

EFFECT OF EXPLANT TYPE AND PLANT GROWTH REGULATORS ON MICROPROPAGATION *OF STEVIA REBAUDIANA* TROUGH CALLOGENESIS AND INDIRECT ORGANOGENESIS.

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ABSTRACT

Stevia rebaudiana Bertoni is a medicinal plant indigenous to Paraguay and containing compounds named glycosides steviol that are about 300 time sweeter than sucrose. The method of indirect organogenesis for stevia plant regeneration is a promising strategy for generating genetic variability that may be applied in the development of novel cultivars. The process is heavily impacted by the type of explant and exogenous plant growth regulators. This study aimed to evaluate the effects of explant type and exogenous plant growth regulators on Callogenesis and indirect organogenesis of stevia in vitro. Leaf, internodes, nodes and roots explants were placed on Murashig and Skoog (1969) (MS) medium supplemented with 1-naphthaleneacetic acid (ANA) , Kinetin (KIN), 6-Benzylaminopurine (BAP), and Indole-3-acetic acid (IAA) for callus induction. An efficient and standardized medium for callus induction was developed using leaf, nodes, internodes and roots explants cultured on MS medium supplemented with 1mg/l 2,4D and 1mg/l BAP. This medium was appropriate to produce friable yellow callus. Our results imply that internode and leaf explants were better than node and root explants in terms of callus induction, size, texture, and callus color. The best organogenesis response was seen on MS medium supplemented with 1 mg/l BAP and 1 mg/l NAA.

Keywords: auxin, callogenesis, cytokinin, indirect organogenesis, glycosides steviol, leaf, roots, stevia.

HORMONAL REGULATION OF OVULATION IN FEMALE CAMELS (CAMELUS DROMEDARIUS) : MECHANISMS AND TEMPORAL DYNAMICS

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Abstract
The reproductive success of female camels (Camelus dromedarius) is tightly controlled by a complex interplay of hormones that regulate the processes leading to ovulation. The estrous cycle in camels is characterized by distinct hormonal phases, with follicular development and ovulation primarily regulated by estrogen, luteinizing hormone (LH), follicle-stimulating hormone (FSH), and gonadotropin-releasing hormone (GnRH). Follicular development is initiated by FSH, which stimulates the growth of ovarian follicles that secrete estrogen. As estrogen levels rise, they induce a surge in LH, which is the key hormonal trigger for ovulation. The LH surge causes the mature follicle to rupture, releasing the oocyte into the oviduct, a process that is crucial for successful fertilization. Following ovulation, the remnants of the ruptured follicle transform into the corpus luteum, which secretes progesterone to maintain the uterine environment in preparation for possible pregnancy. The temporal dynamics of the LH surge and subsequent ovulation are influenced by several factors, including photoperiod, environmental conditions, and nutritional status. This review explores the mechanisms behind hormonal regulation of ovulation in female camels, the roles of key reproductive hormones, and their temporal patterns throughout the estrous cycle. Understanding these hormonal dynamics is essential for improving reproductive management, fertility treatments, and breeding strategies in camelid husbandry.
Key Word: Camel reproduction, Ovulation, LH surge, Estrogen, FSH, Progesterone, Reproductive endocrinology.

IMPACT OF MOTIVATION ON TEACHERS' PERFORMANCE IN PUBLIC SECONDARY SCHOOLS IN SABONGARI LOCAL GOVERNMENT AREA, KADUNA STATE, NIGERIA

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ABSTRACT
This study investigated the impact of motivation on teachers' performance in public secondary schools in Sabon Gari local Government area of Kaduna State, Nigeria. The research focused on how key motivational factors promotion such as, prompts salary payment, incentives and bonuses, and conducive working environment affects teacher's commitment, effectiveness and overall job satisfaction. The objectives of the study were to determine the extent to which these factors influence teacher's performance and identify potential areas for improvement. A descriptive research design was employed and data were collected using a structured questionnaire administered to principals and teachers in selected public secondary schools. The sample size consists of 84 respondents and the data were analysed using descriptive statistics including percentages and frequency distributions. The findings revealed that promotion, particularly when fair and transparent positively impact teachers' commitment to their duties. Prompt salary payments were identified as a key motivator, with the majority of the respondents agreeing that timely payment of salaries enhance their job satisfaction and performance. Incentives and bonuses were found to encourage teachers to exert extra effort, especially in extracurricular activities and overtime work. Additionally, a conducive working environment with access to essential resources like textbooks, technology, and proper classroom conditions were highlighted as crucial for effective teaching. The study concludes that these motivational factors are critical to enhancing teachers' performance and therefore, recommends that educational policymakers priotize improvement in promotion processes, salary payment schedules and workplace conditions. This research contributes to the growing body of knowledge on teacher motivation in the Nigerian educational sector and suggested that further studies on related motivational factors be carried out in other regions of the country.

Keywords: Impact**,** Motivation, Teacher's performance, public secondary schools

BİR ÖĞRETMEN TEFTİŞ RAPORU ÖZELİNDE CUMHURİYETİN İLK YILLARINDAKİ ÖĞRETMENLERİN NİTELİKLERİ ÜZERİNE BİR DEĞERLENDİRME

AN EVALUATION ON THE QUALIFICATIONS OF TEACHERS IN THE FIRST YEARS OF THE REPUBLIC BASED ON A TEACHER INSPECTION REPORT

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Öz

Toplumun milli ve manevi kimliğini korumanın, kültürel değerleri yaşatıp gelecek kuşaklara aktarmanın, gelişen ve değişen dünyaya uyum sağlayıp güçlü bir medeniyet olarak ayakta kalmanın ilk şartı nitelikli bir eğitim sistemine sahip olmaktan geçer. Bunun içindir ki ülkenin düşman işgaliyle karşı karşıya olduğu zor günlerde Ulu Önder Atatürk Maarif Kongresi'ni düzenlemiş, cumhuriyetin ilk yıllarında kalkınma hamlelerinin en önemli hedeflerinden biri eğitim seferberliği başlatmak olmuştur.

Şüphesiz ki eğitimde çağın gereksinimlerine uyum sağlamanın ve niteliği artırmanın en önemli unsuru 'nitelikli öğretmen' yetiştirmekten geçmektedir. Eğitim ve öğretimi ayrılmaz bir bütün olarak değerlendirildiğinde hem ülkenin milli kültürünü yaşayan hem de günün şartlarına uyum sağlayabilen, yaratıcı düşünce gücüne sahip, üretken, akılcı ve bilimsel, öğrendiklerini geliştirip yaşama aktarabilen nesillerin bu nitelikleri taşıyan öğretmenler tarafından yetiştirilebileceği görülmektedir. Bu noktada öğretmenlerin aldıkları eğitimin niteliği ve mesleki anlamdaki yeterlilikleri konusu ön plana çıkmaktadır. Öğretmenlerin teftişi ve verdikleri eğitimin niteliğinin değerlendirilmesi, bu değerlendirmenin hangi kriterlere göre yapılması gerektiği konuları da bu noktada önem arz etmektedir.

Bu çalışmada cumhuriyetin ilk yılları olan 1930-1934 yıllarındaki teftiş raporlarını inceleyerek o dönemde öğretmen teftişlerinde hangi kriterlere dikkat edildiği, öğretmenin hangi açılardan değerlendirildiği konusuna ışık tutmaya çalıştık.

Bu belgeler özelinde Cumhuriyetin ilk yıllarında görev alan öğretmenlerin öz yeterlikleri üzerine değerlendirmeler ile çalışmayı zenginleştirmeyi hedefledik.

Anahtar Kelimeler: Teftiş, Milli Eğitim, Eğitim, Öğretim, Öğretmen

Abstract

The first condition for preserving the national and spiritual identity of a society, keeping cultural values alive and passing them on to future generations, adapting to the developing and changing world and surviving as a strong civilization is to have a qualified education system. For this reason, the Great Leader Atatürk organized the Education Congress in the difficult days when the country was facing enemy occupation, and one of the most important goals of the development moves in the first years of the republic was to launch an education mobilization.

Undoubtedly, the most important element of adapting to the needs of the age and increasing quality in education is to train 'qualified teachers'. When education and training are considered as an inseparable whole, it is seen that the generations who can both live the national culture of the country and adapt to the conditions of the day, who have the power of creative thinking,

who are productive, rational and scientific, who can develop and transfer what they have learned to life can be raised by teachers with these qualities. At this point, the quality of the education teachers receive and their professional qualifications come to the fore. The inspection of teachers and the evaluation of the quality of the education they provide, and the criteria according to which this evaluation should be made are also important at this point.

In this study, we tried to shed light on which criteria were considered in teacher inspections and from which perspectives teachers were evaluated by examining the inspection reports of 1930-1934, the first years of the Republic.

We aimed to enrich the study with evaluations on the self-efficacy of teachers working in the first years of the Republic.

Keywords: Inspection, National Education, Education, Teaching, Teacher

SU BAZLI BOYALAR İÇİN POLİMERİK DİSPERSANTLARIN SENTEZİ VE UYGULAMA ÇALIŞMALARI

SYNTHESIS AND APPLICATION STUDIES OF POLYMERIC DISPERSANTS FOR WATER BASED PAINTS

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ÖZET

Boya, yüzeylerin doğal özelliğini korumak ve dekoratif görüntü vermek amacı ile yüzeylere uygulanan ve kuruma sonucu istenilen performansta film oluşturan kimyasal kaplama maddelerine denir. Pigment, bağlayıcılar ve incelticiler olarak üç ana bileşenden oluşan sıvı kolloidal süspansiyonlardır. Polimerik pigment dağıtıcılar, seçici pigment afinik gruplarına ve çözünür polimerik zincirlere sahip oldukları için dengeli kimyasal yapıları ile karakterize edilen blok kopolimerlerdir. Boya sistemine bağlı olarak (solvent ve su bazlı), pigment stabilizasyonu için farklı mekanizmalar mevcuttur.

Son birkaç yılda, polimerik ıslatıcı ve dağıtıcı katkı maddeleri, özellikle su bazlı formülasyonlarda, pigmentlerin stabilizasyonu için performanslarını kanıtladılar. Su bazlı sistemlerde dispersiyon ajanları pigment yüzeyinin hızlı bir şekilde ıslanmasına izin vermesinin yanı sıra dağılan pigment partiküllerinin stabilizasyonuna yardımcı olması ve pigment partiküllerinin depolama koşullarında uzun süre yeniden topaklanmasını önlemesi gibi gerekli bazı gereklilikleri karşılamalıdır. Bununla birlikte, dispersiyon sırasında polimerik dağıtıcının ek rolü, aglomeraları ince parçacık boyutuna ayırmaktır; bu, yüksek parlaklık, düşük bulanıklık sağlamaya yardımcı olur ve farklı pigment konsantreleri karıştırılabildiğinde çok çeşitli renk tonları verir. Tüm bu temel özellikleri elde etmek için, ıslatıcı ve dispersiyon katkı maddelerinin pigment yüzeyini çok hızlı ıslatması ve onları daha uzun süre stabilize etmesi gerekir, bu da kaplamayı estetik ve dayanıklı kılar.

Bu çalışmada ilk olarak poli(etilen glikol) kullanılarak tek uçlu (PEG-Br) ve çift uçlu (Br-PEG-Br) makrobaşlatcılar sentezlenmiştir. Bu makrobaşlatıcılar kullanılarak Atom Transfer Radikal Polimerizasyon (ATRP) yöntemi ile uçlarında poli(metil metakrilat) (PMMA) ve/veya poli(metakrilik asit) (PMAA) blokları içeren kopolimerler sentezlenmiştir. Sentezlenen polimerlerin sayıca ortalama molekül ağırlıkları (Mn) ve molekül ağırlık dağılımları (PDI) Jel Geçirgenlik Kromatografisi (GPC) ile belirlenmiştir. Bu polimerlerin, özellikle porselen sektöründe kullanılan ve çoğunlukla çökme problemi yaşanan, su bazlı boyaların dağıtımında dipersant olarak kullanılıp kullanılmayacağı araştırılmıştır. Bunun için sektörde kullanılan çökme problemi yaşanan lacivert renkli boyada farklı oranlarda polimerler ilave edilmiş ve çökme davranışı üzerindeki etkileri incelenmiştir. Elde edilen sonuçlar bu alan için umut vadetmekle birlikte, sektörde kullanılabilecek en uygun polimerik stabilizörün seçilmesi üzerine çalışmalar yapılamaya devam edilmektedir.

Anahtar Kelimeler: Su bazlı boya, pigment, polimer, dispersant, ATRP, çökme

ABSTRACT

Paint is a chemical coating material that is applied to surfaces to protect their natural properties and give them a decorative appearance, and forms a film with the desired performance after drying. They are liquid colloidal suspensions consisting of three main components: pigment, binders and solvents. Polymeric pigment dispersants are the block copolymers which are characterized by their balanced chemical structure as they possess selective pigment affinic groups and soluble polymeric chains. Depending on the paint system (solvent and water-based), different mechanism for the stabilization of pigment exist.

During the last few years, polymeric wetting and dispersing additives have proven their performance for the stabilisation of pigments, especially in water-based formulations. In water-based systems, dispersing agents must meet certain requirements, such as allowing rapid wetting of the pigment surface, as well as helping to stabilize the dispersed pigment particles and preventing the pigment particles from re-agglomerating for long periods under storage conditions. However, the additional role of the polymeric dispersant during dispersion is to break up the agglomerates into fine particle size, which helps to provide high gloss, low haze and gives a wide range of color tones when different pigment concentrates can be mixed. To achieve all these essential properties, wetting and dispersion additives must wet the pigment surface very quickly and stabilize them for longer periods of time. This makes the coating aesthetic and durable.

In this study, firstly, single-ended (PEG-Br) and double-ended (Br-PEG-Br) macroinitiators were synthesized using poly(ethylene glycol). Using these macroinitiators, copolymers containing poly(methyl methacrylate) (PMMA) and/or poly(methacrylic acid) (PMAA) blocks at their ends were synthesized by Atom Transfer Radical Polymerization (ATRP) method. Number average molecular weights (Mn) and molecular weight distributions (PDI) of the synthesized polymers were determined by Gel Permeation Chromatography (GPC). It was investigated whether these polymers could be used as dipersants in the distribution of water-based paints, especially those used in the porcelain sector and which often experience sedimentation problems. For this purpose, polymers were added to the dark blue colored water-based paint used in that industry at different ratios and their effects on sedimentation behavior were investigated. Although the obtained results are promising for this field, studies are still being conducted on selecting the most suitable polymeric stabilizer that can be used in the sector.

Keywords: Water-based paint, pigment, polymer, dispersant, ATRP, precipitation

TALASEMİ VE DİYET TEDAVİSİ: BESİN TAKVİYELERİNİN HASTALIK YÖNETİMİNDEKİ ROLÜ

THALASSEMIA AND DIETARY THERAPY: THE ROLE OF NUTRITIONAL SUPPLEMENTS IN DISEASE MANAGEMENT

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ÖZET:
Talasemi, genetik bir hemoglobin bozukluğu olup, kronik anemi, demir birikimi ve oksidatif stres gibi komplikasyonlarla karakterizedir. Talasemi, genetik bir hastalık nedeniyle hemoglobin sentezindeki bozukluktan kaynaklanırken, demir eksikliği anemisi vücutta yeterli demir bulunmaması sonucu ortaya çıkar. Bu komplikasyonlar, talasemi hastalarının yaşam kalitesini önemli ölçüde düşürmekte ve uzun vadeli sağlık sorunlarına neden olmaktadır. Anemi ve talasemi arasındaki farkı doğru bir şekilde teşhis etmek için özel ve tıbbi testlerden yararlanılmalıdır. Tedavi sürecinde kan transfüzyonu ve demir şelasyonu gibi standart yöntemlerin yanı sıra, bireyselleştirilmiş diyet tedavisi ve besin takviyelerinin kullanımı tamamlayıcı bir yaklaşım olarak dikkat çekmektedir. Bu çalışmada, talasemi hastalarında beslenme yönetiminin önemi ve kullanılan besin takviyelerinin etkileri ele alınmıştır.
Talasemi hastalarının beslenme düzeninde, demir içeriği düşük besinler tercih edilmelidir. Örneğin, kırmızı et ve sakatat gibi yüksek demir içeren besinlerden kaçınılmalı, bunun yerine baklagiller ve bitkisel protein kaynakları gibi demir içeriği nispeten düşük besinler önerilmelidir. Ayrıca, demir emilimini azaltan tanen içeren çay veya kahve gibi içeceklerin kontrollü tüketimi önerilebilir. Mikrobesinlerin önemi büyüktür; folat, eritropoezi destekleyerek anemiyi hafifletirken; D vitamini ve kalsiyum, kemik mineral yoğunluğunu artırarak osteoporoz riskini azaltır. Çinko takviyeleri bağışıklık sistemini güçlendirir ve büyüme geriliği gibi sorunları önleyebilir. E ve C vitaminleri gibi antioksidanlar oksidatif stresi azaltarak hücresel hasarı önlerken; omega-3 yağ asitleri inflamasyonu baskılayarak kardiyovasküler sağlığı destekler.
Sonuç olarak, talasemide diyet ve besin takviyelerinin kullanımı, yalnızca komplikasyonların yönetilmesine değil, aynı zamanda yaşam kalitesinin iyileştirilmesine de önemli katkılar sunmaktadır. Ancak, diyet ve takviye planlamasının mutlaka bireyselleştirilmiş bir şekilde, uzman kontrolünde yapılması gerekmektedir. Bu alanla ilgili daha fazla klinik araştırma, etkinliği ve güvenliği artırmak için kritik öneme sahiptir.
Anahtar Kelimeler: Talasemi, diyet tedavisi, besin takviyeleri, demir birikimi

ABSTRACT:
Thalassemia is a genetic disorder of hemoglobin, characterized by complications such as chronic anemia, iron accumulation and oxidative stress. Thalassemia is caused by a defect in hemoglobin synthesis due to a genetic disease, while iron deficiency anemia occurs when there is not enough iron in the body. These complications significantly reduce the quality of life of thalassemia patients and cause long-term health problems. Specialized medical tests must be used to accurately diagnose the difference between anemia and thalassemia. In the treatment process, in addition to standard methods such as blood transfusion and iron chelation, the use of individualized diet therapy and nutritional supplements draws attention as a complementary approach. In this study, the importance of nutritional management in thalassemia patients and the effects of nutritional supplements were discussed.
In the diet of thalassemia patients, foods with low iron content should be preferred. For example, high-iron foods such as red meat and offal should be avoided, and instead foods with relatively low iron content such as legumes and vegetable protein sources should be recommended. In addition, controlled consumption of beverages such as tea or coffee containing tannins, which reduce iron absorption, may be recommended. Micronutrients are of great importance; folate alleviates anemia by supporting erythropoiesis, while vitamin D and calcium increase bone mineral density and reduce the risk of osteoporosis. Zinc supplements boost the immune system and can prevent problems such as growth retardation. Antioxidants such as vitamins E and C prevent cellular damage by reducing oxidative stress, while omega-3 fatty acids support cardiovascular health by suppressing inflammation.
In conclusion, the use of dietary and nutritional supplements in thalassemia contributes not only to managing complications but also to improving quality of life. However, dietary and supplementation planning should be individualized and under expert supervision. Further clinical research in this area is critical to improve efficacy and safety.
Keywords: Thalassemia, diet therapy, nutritional supplements, iron deposition

PRELIMINARY *IN VITRO* PROPAGATION TRIALS OF CACTUS *Opuntia robusta*

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ABSTRACT
Cactus (*Opuntia* species) is a traditional crop, in Tunisia, whose fruits are highly appreciated. Cactus is also a source of fodder in arid and semi-arid regions, feeding about 40-50% of small ruminants. However, enormous damage has been caused by the Mexican cochineal (*Dactylopius coccus*), which has invaded all cactus-growing areas. In order to ensure rapid mass production of these *Opuntia* species, micropropagation is the most effective alternative. In this context, a micropropagation protocol for *Opuntia robusta,* resistant to the cochineal *Dactylopius coccus,* was developed to ensure rapid mass propagation of quality plants. During this protocol, the thorough disinfection of young cladodes with 0.1% $HgCl_2$ proved to be efficient and ensured an explant disinfection rate of 89.87%.
Preliminary trials of *O. robusta in vitro* propagation on POM media enriched with the cytokines metatopoline (mT) and benzyl adenine (BAP) at a rate of 0.5, 1, 2 and 3 mg/l showed that BAP is more efficient than mT and that M_3 medium containing 2 mg of BAP gave the highest multiplication rate (3.89). However, with this culture medium, relatively high rates of explant necrosis (75%) and callogenesis (96%) were registered. The lowest multiplication rate (1.26) was obtained with 0.5 mg BAP.
In vitro rooting trials of *O. robusta* plantlets on POM media supplemented with NAA leaded to a highest rooting rate (85.71%) and longest roots (8.54 cm) on the medium supplemented with 1.5 mg NAA.
Keywords: *Opuntia robusta*, micropropagation, cytokines, multiplication step, rooting.

SIÇANLARDA ABAMEKTİN'İN PANKREAS DOKUSU ÜZERİNE TOKSİK ETKİSİ VE MELATONİN'İN KORUYUCU ETKİSİ

ABAMECTIN-INDUCED PANCREATIC TOXICITY IN RATS AND THE EFFECTS OF MELATONIN

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ÖZET

Abamektin, Streptomyces avemitilis tarafından doğal olarak fermente edilen, antihelmintik aktiviteye sahip ve halk sağlığı programlarında böcek kontrolü için yaygın olarak kullanılan avermektin sınıfının bir üyesidir. Melatonin, anti-enflamatuar, antioksidan ve antiapoptotik aktiviteler de dahil olmak üzere birçok farmakolojik ve biyolojik etkiye sahip bir nörohormondur. Pankreas, hem endokrin hem de ekzokrin faaliyetleri birlikte yürüten çok sayıda salgı hücresi içeren karmaşık bir organdır. Oksidatif hasar, reaktif oksijen türlerinin üretilmesiyle ortaya çıkar, lipidler, proteinler ve DNA gibi yapılara zarar verir ve bu da antioksidan kapasitede azalmaya yol açar. Bu çalışmanın amacı, sıçanlarda abamektin kaynaklı pankreatik toksisiteye karşı melatoninin potansiyel iyileştirici etkilerini araştırmaktır. Malondialdehit (MDA) lipid peroksidasyonunun önemli bir göstergesidir. Süperoksit dismutaz (SOD), katalaz (CAT), glutatyon peroksidaz (GPx) ve glutatyon S-transferaz (GST) hücresel savunmada antioksidan enzimler olarak görev yapar. Yirmi dört sıçan dört gruba ayrılmıştır: 1. Grup: Kontrol grubu (1 ml/kg/gün mısır yağı), 2. Grup: Melatonin uygulanan grup (10 mg/kg/gün), 3. Grup: Abamektin uygulanan grup (0,5 mg/kg/gün) 4. Grup: Melatonin ve abamektin uygulanan grup. Deney hayvanlarına 28 gün boyunca abamektin ve melatonin gavaj yoluyla verilmiştir. Deney sonunda, abamektin uygulanan sıçanların pankreas dokularındaki MDA seviyeleri kontrol grubu ile karşılaştırıldığında istatistiksel olarak artarken, SOD, CAT, GPx ve GST enzim aktivitelerinde azalma gözlenmiştir. Abamektin ve melatonin uygulanan grup, abamektin uygulanan grup ile karşılaştırıldığında MDA seviyesinde azalma gözlenirken, antioksidan enzim aktivitelerinde istatistiksel olarak anlamlı bir artış gözlenmiştir. Çalışma sonucunda, abamektinin sıçan pankreas dokusunda oksidatif strese neden olduğu ve melatonin uygulamasının abamektin kaynaklı toksisiteyi azalttığı tespit edilmiştir.

Anahtar Kelimeler: Abamektin, Pankreas, Oksidatif stres, Antioksidan enzimler, Lipid peroksidasyonu

ABSTRACT

Abamectin is a member of the avermectin class, naturally fermented by Streptomyces avemitilis, which has anthelmintic activity and is widely used for insect control in public health programs. Melatonin is a neurohormone with many pharmacological and biological effects, including anti-inflammatory, antioxidant and antiapoptotic activities. The pancreas is a

complex organ containing a large number of secretory cells that carry out both endocrine and exocrine activities together. Oxidative damage occurs through the production of reactive oxygen species, damaging structures such as lipids, proteins and DNA, leading to a decrease in antioxidant capacity. The aim of this study was to investigate the potential ameliorative effects of melatonin against abamectin-induced pancreatic toxicity in rats. Malondialdehyde (MDA) is an important indicator of lipid peroxidation. Superoxide dismutase (SOD), catalase (CAT), glutathione peroxidase (GPx) and glutathione S-transferase (GST) act as antioxidant enzymes in cellular defense. This study was obtained from Gazi University Animal Experiments Local Ethics Committee. Twenty-four rats were divided into four groups: Group 1: Control group (1 ml/kg/day corn oil), Group 2: Melatonin treated group (10 mg/kg/day), Group 3: Abamectin treated group (0.5 mg/kg/day), Group 4: Melatonin and abamectin treated group. Abamectin and melatonin were given to the experimental animals by gavage for 28 days. At the end of the experiment, MDA levels in the pancreatic tissues of abamectin-treated rats increased statistically compared to the control group, while SOD, CAT, GPx and GST enzyme activities decreased. In the abamectin and melatonin-treated group, a statistically significant increase in antioxidant enzyme activities was observed, while a decrease in MDA levels was observed compared to the abamectin-treated group. As a result of the study, it was determined that abamectin caused oxidative stress in rat pancreatic tissue and melatonin administration reduced abamectin-induced toxicity.

Key Words: Abamectin, Pancreas, Oxidative stress, Antioxidant enzymes, Lipid peroxidation

GÜNEŞ KREMİ LEKELERİNE YÖNELİK YIKAMA PROSESİ GELİŞTİRİLMESİ
DEVELOPMENT OF A WASHING PROCESS FOR SUN CREAM STAINS

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ÖZET
Güneş kreminin güneşe karşı koruyucu bir kalkan olarak kullanımı antik çağlara kadar uzanmaktadır ve modern kültürde oldukça popüler bir ürün olarak varlığını sürdürmektedir. Güneş kremleri, UV ışınlarını absorbe eden bileşenler içermektedir. Bu bileşenler sebebiyle, güneş kremi tekstil üzerinde çıkarılması zor sarı-turuncu lekelere neden olma eğilimindedir. Bu kimyasallar yıkamadan önce görünmezken, yüksek pH seviyelerinde yıkandıktan sonra tipik olarak kumaşlarda sarı lekeler olarak ortaya çıkmaktadır. Güneş kreminin leke bırakmasına neden olan kimyasallardan en bilineni, Butyl Methoxydibenzoylmethane olarak da bilinen Avobenzon'dur. Avobenzon, çoğu güneş kremi formülünde bulunan, UV ışınlarını absorbe eden ve yağda çözünen bir bileşendir. Kumaşlar üzerinde biriken avobenzon, UV ışığını absorbe ederek optik parlatıcıların yıkama işleminde etkili bir şekilde çalışmasını engellemektedir. Avobenzon sadece optik parlatıcıların etkili bir şekilde çalışmasını engellemekle kalmamakta, aynı zamanda yıkama sırasında suda bulunan ağır metal iyonlarıyla renkli kompleksler oluşturmaktadır. Bu nedenle kumaşlarda paslı lekeler oluşmakta, özellikle demir açısından zengin suya sahip bölgeler daha fazla lekelenme görülmektedir. Bu tür bileşenler, turistik tesislerdeki havlu ve çarşaf gibi kumaşlar üzerinde birikmektedir. Ayrıca, sentetik kumaşlar pamuk gibi doğal liflere göre bu tür lekelenmelere daha yatkındır. Özellikle profesyonel çamaşırhanelerde normal yıkama döngüleri bu tür lekeler için etkili olmamakta ve yüksek oranda yeniden yıkama ve işleme maliyetlerinde artış ile karşı karşıya kalmaktadırlar. Bu çalışmanın amacı; güneş kremlerinin kumaşlarda neden olduğu lekelerin giderilmesi için formülasyon veya proses geliştirilmesi, performanslarının test edilmesi için gerekli çalışmaların gerçekleştirilmesidir.
Anahtar Kelimeler: Avobenzon, Güneş Kremi, Kumaş, Leke, Yıkama

ABSTRACT
The use of sunscreen as a protective shield against the sun dates back to ancient times and continues to be a popular product in modern culture. Sunscreens contain ingredients that absorb UV radiation. Because of these components, sunscreen tends to cause yellow-orange stains on textiles that are difficult to remove. Although these chemicals are not present before washing, they typically appear as yellow stains on fabrics after washing at high pH levels. The best known chemical that causes sunscreen staining is avobenzone, also known as Butyl Methoxydibenzoylmethane. Avobenzone is a fat-soluble component found in most sunscreen formulations. It absorbs UV radiation. Avobenzone deposited on fabrics prevents optical brighteners from working effectively in the washing process by absorbing

ultraviolet light. Avobenzone not only prevents optical brighteners from working effectively but also forms colored complexes with heavy metal ions in water during washing. Therefore, rusty stains form on fabrics, especially in areas with iron-rich water, and more staining is observed. Such components accumulate on fabrics such as towels and sheets used in tourist facilities. In addition, synthetic fabrics are more prone to such staining than natural fibers such as cotton. In professional laundries, normal washing cycles are not effective for such stains, and they require high re-washing and increased processing costs. The aim of this study is to develop formulations or processes for the removal of stains caused by sunscreens on fabrics and to conduct the necessary studies to test their performance.

Keywords: Avobenzone, Fabric, Stain, Sunscreen, Washing

ECONOMIC AND EMERGY ANALYSIS OF LOCAL MUNG BEAN AND COWPEA PRODUCTION SYSTEMS IN HIRMAND CITY

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Abstract

In order to monitor the sustainability and compare the cultivation systems of mung bean (*Vigna radiata* L.) and local Cowpea (*Vigna unguiculata* L.) using the integrated approach of emergy and economic analysis was implemented an experiment in the form of crop cultivation in two cropping systems of production and local Cowpea located in Hirmand city, in the north Sistan and Baluchistan province. The data required for this study were collected from 18 villages of Hirmand city through a questionnaire. Random sampling of farms was determined using Niemann's method. All information was obtained through verbal estimations using a questionnaire during the months of December 1401 to July 1402 and field measurements and objective observations during the same period of time. Statistics and long-term meteorological information and solar radiation energy were obtained from Hirmand and Zahak meteorological stations. In accordance with the previous studies, the share of renewable workforce in Iran was considered 10%. At the end of the season, in addition to evaluating performance and performance components, the total energy consumption for each cropping system including machinery energy, seeds, types of fertilizers and poisons, irrigation water energy, human power electricity, organic materials, wind energy, Rain and sun were measured. In order to evaluate the emergy and economic indicators, first the total energy input and output to each of the studied systems was measured and then were calculated various indicators. The results of this study showed that in the mung bean farming system, the largest share of energy was related to the input of animal manure, and in the local macaque system, the largest share of energy was related to the seed input. The lowest share of energy was related to irrigation equipment. The proportion of non-renewable energy in the production of mung beans and local Cowpea has been higher than the share of renewable energy, which shows the high dependence of these two products on fossil energy sources. Emergy analysis showed that in this region, local mung bean production is more stable than mung bean. The results showed that in the indices of emergy unit value (UEV), solar radiation emergy (SE), renewable percentage (R%) and emergy investment ratio (EIR) and product emergy exchange fraction (EERY) of the local mock farming system compared to the system The cultivation of mung beans is superior in this region, which shows the stability of the local mung bean farming system. However, mung bean cropping system was superior to the local macaque cropping system in the indices of emergy yield ratio (EYR), environmental burden ratio (ELR), emergy self-support ratio (ESR) and emergy for sustainable development (EISD). According to the results obtained in this research, it can be stated that the type of cultivation process in the local Cowpea production system is relatively more economical and justified and is more sustainable. Compared to mung bean, this system has significantly decreased in terms of labor force and animal manure.

Keywords: Emergy Analysis, Renewable Energy, Renewable Percentage, Mung been. Cowpea.

ARTERIAL BLOOD FLOW SIMULATION IN COMSOL EMPHASIZING MESH OPTIMIZATION

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ABSTRACT
Simulating arterial blood flow offers profound insights into cardiovascular dynamics, contributing significantly to the advancement of medical research and the development of biomedical devices. This study leverages COMSOL Multiphysics to model arterial blood flow, with a particular emphasis on the critical role of mesh optimization. By systematically refining the computational mesh, the model achieves an enhanced representation of fluid-structure interactions and captures intricate flow patterns with greater fidelity. The results underscore the pivotal importance of mesh quality in ensuring the reliability of simulations while maintaining computational efficiency. This methodology establishes a robust foundation for future investigations in hemodynamics and the advancement of personalized vascular modelling.
Keywords: Fluid structure interaction, COMSOL Multiphysics, Mesh Optimization, Arterial blood flow

Table:1 Mesh Statistics of different meshes

Statistics	Extremely Fine	Extra Fine	Finer	Fine	Normal	Coarse	Coarser	Extra Coarse	Extremely Coarse
Minimum Element Quality	0.6175	0.6198	0.5899	0.62	0.62	0.6195	0.572	0.5806	0.5412
Average Element Quality	0.9407	0.9396	0.926	0.9294	0.9153	0.8987	0.8672	0.8326	0.8003
Element area ratio	0.1481	0.2199	0.2151	0.2468	0.2924	0.3169	0.1925	0.1446	0.09503
Skewness	(0.617,1)	(0.62,0.99)	(0.59,1)	(0.62,1)	(0.62,0.99)	(0.619,1)	(0.572,0.998)	(0.581,0.992)	(0.541,0.984)
Maximum Angle	(0.728,1)	(0.735,1)	(0.743,1)	(0.748,1)	(0.742,1)	(0.743,1)	(0.694,0.999)	(0.711,0.997)	(0.736,0.991)
Growth rate	(0.589,1)	(0.619,1)	(0.612,1)	(0.641,1)	(0.663,1)	(0.643,1)	(0.625,1)	(0.53,0.987)	(0.441,0.979)
Condition Number	(0.843,1)	(0.851,1)	(0.847,1)	(0.864,1)	(0.858,1)	(0.858,1)	(0.8,1)	(0.812,1)	(0.802,1)

EFFECT OF CARBONIZATION OF WALNUT SHELL ON THE PHYSICO-MECHANICAL PROPERTIES OF NATURAL RUBBER

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Walnut shell (WS), a biodegradable agricultural by-product, is rich in lignin and cellulose. When walnut shells are carbonized, they transform into a carbon-rich material with unique physical and chemical characteristics, making it a potential reinforcing filler in natural rubber (NR). Walnuts were de-shelled, washed, dried, milled, sieved and was then carbonized by tightly packing the WS powder in a muffle furnace at a certain temperature range for some hours, after which the carbonized portion for retained for use. The Carbonized walnut shell (CWS) and Uncarbonized walnut shell (UWS) were then characterized by determining the moisture content, Ash content, pH measurement, Loss on Ignition and particle size. The NR composites filled with CWS and UWS at three ratios of 100/0, 50/50 and 0/100 were prepared and labeled as Mixes A, B and C.

The NR-CWS composites exhibited high physico-mechanical properties, such as tensile strength, elongation at break, abrasion resistance, compression set, and hardness, compared to NR-UWS composites. These improvements were attributed to the higher carbon content in CWS, resulting in better network formation and increased cross-link density. X-ray Fluorescence Analysis (XRF) was conducted to identify elements present in CWS and UWS. Several elements were present including sulphur and calcium. The result showed higher concentrations of sulfur (548 ppm) and calcium (445 ppm) in CWS compared to sulfur (489 ppm) and calcium (422 ppm) in UWS. These higher values for CWS contributed to enhanced rigidity and stronger interactions with NR.

Key Words: Carbonized, Biodegradable, Blends, Characterize, Cross-link, Composite.

ESSENTIAL MICRONUTRIENTS SIGNIFICANCE FOR HEAT STRESS MANAGEMENT IN LIVESTOCK

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ABSTRACT
Livestock is a vital component of the agriculture sector, providing nutritional security to a growing population, contributing to national economies through exports of livestock products, and offering employment and livelihood opportunities to small and marginal farmers. However, the changing climate poses a significant threat to livestock production systems, with production performance declining drastically in tropical countries. Rising summer temperatures due to climate change pose an alarming threat to human and animal survival. Heat stress in livestock is characterized by elevated core body temperatures beyond normal activity ranges. Micronutrients, encompassing major and trace minerals, as well as vitamins, are vital for sustaining animal productivity, optimizing nutrient utilization, mitigating oxidative stress, and reinforcing compromised immune function. Minerals are indispensable for maintaining physiological homeostasis in animals. During heat stress, the requirement for micronutrients escalates due to diminished feed consumption, elevated mineral excretion, and reduced concentrations of vitamins and minerals in serum and liver. Furthermore, stress conditions precipitate increased excretion and mobilization of vitamins and minerals from tissues. Integrating minerals such as zinc, selenium, and chromium into animal diets has been shown to enhance their resilience to heat stress. Supplementing with vitamins A, E, and C may also help alleviate the negative impacts of heat stress on animal health. Thus, to ensure sustainable livestock production, it is crucial to minimize the deleterious effects of heat stress by incorporating vital micronutrients into animal diets.
Key words: Heat stress, Micronutrients, Livestock, Temperature

DYNAMIC CAPABILITIES AND FIRM PERFORMANCE OF SELECTED QUOTED FOOD AND BEVERAGES COMPANIES IN EUROPE

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ABSTRACT
The food and beverages manufacturing industry are major drivers of the economy and dynamic capabilities is a major resource that curbs and contends competition. However, the high level of competition, constant change in the tastes and preferences of customers and brand consciousness of consumers have endangered the survival of the majority of firms in the industry. The main objective of this study would evaluate the relationship between dynamic capabilities and firm performance of quoted food and beverage manufacturing companies in Europe. The specific objectives of the study were: to determine the relationship between product innovation capability and sales growth; to examine the extent of relationship between strategic decision making capability and employee turnover; to assess the relationship between technological capability and return on equity; to evaluate the relationship between competitive intensity and operating cash flow; and, to ascertain the relationship between technological turbulence and working capital management. The study would adopt a survey research design. The target population would consist of 11 quoted food and beverage manufacturing companies comprising of 692 middle and top-level managers of the quoted firms. Total enumeration sampling technique would be employed. Primary data using structured questionnaire will be adopted and validated for the study. The Cronbach alpha coefficients for the constructs would range between 0.81 and 0.96. The response rate is expected to be within 92.9% which is 643 out of 692 copies of the questionnaires to be administered. The data will be analysed using descriptive and inferential (Pearson Product Moment Correlation and multiple regression) statistic). Findings would reveal that there is a significant relationship between: product innovation capability and sales growth, strategic decision-making capability and employee turnover, technological capability and return on equity, competitive intensity and operating cash flow, and, between technological turbulence and working capital management. It is recommended that food and beverages manufacturing firms should be consistently customer-oriented as this will lead to continuous customer satisfaction and eventually aid customer loyalty. For firms to consistently sustain their competitive advantage, they need to adopt the identified five dynamic capabilities components elucidated in this study.

Key Words: Dynamic capabilities, Firm Performance, Product and innovation capability, Strategic decision-making capability, Technological capability, Competitive intensity, Technological turbulence

EFFECTS OF PROBIOTICS ON ORAL MICROBIOLOGICAL ENVIRONMENT, GINGIVAL HEALTH AND DENTAL PLAQUE; A META-ANALYSIS

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ABSTRACT

Background:
The oral microbiome, comprising over 700 bacterial species, plays a crucial role in oral health. Key microorganisms like Streptococcus mutans and Porphyromonas gingivalis contribute to biofilm formation, leading to conditions such as gingivitis, periodontitis, and dental caries. Conventional treatments, including fluoride and professional cleaning, focus on plaque control, but probiotics are gaining attention as potential adjunct therapies for their ability to modulate the oral microbiome, reduce inflammation, and limit harmful bacteria.

Objective:
To evaluate the effects of probiotics on gingival health, plaque accumulation, and the oral microbiological environment.

Materials and Methods:
A meta-analysis was conducted according to PRISMA guidelines. After thorough web search, thirteen studies from 2009 to 2024 were included, comprising of 321 participants. Random effects models were used for statistical analysis, and the Cochrane Risk Assessment tool was applied to assess bias.

Results:
Probiotics significantly improved the Gingival Index (WMD=0.27, 95% CI=0.02–0.52, p=0.04). However, no significant changes were found in Plaque Index (p=0.64), Bleeding on Probing (p=0.92), or Gingival crevicular Fluid volume (p=0.94). While IL-1β concentration in GCF increased (p=0.02), bacterial counts, including Aggregatibacter actinomycetemcomitans and Porphyromonas gingivalis, showed no significant reduction.

Conclusion:
Probiotics may offer benefits by improving gingival health, though their effects on plaque and bacterial counts remain limited. Strain-specific effects, dosage, and individual variability could explain the inconsistent findings. Further research is needed to optimize probiotic interventions for oral health.

Keywords: dental plaque, gingiva, oral microbiota, probiotics

THE ROLE OF ANTIOXIDANTS IN CELLULAR DEFENSE MECHANISMS

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Abstract: Antioxidants are molecules that play a crucial role in protecting cells from oxidative damage caused by reactive oxygen species (ROS). ROS are byproducts of normal cellular metabolism and environmental stressors, but their accumulation can lead to cellular damage and contribute to the onset of various diseases, including cancer, cardiovascular diseases, and neurodegenerative disorders. This paper explores the role of antioxidants in maintaining cellular homeostasis, the mechanisms by which they neutralize ROS, and their therapeutic potential in preventing and treating oxidative stress-related diseases.

Introduction: Oxidative stress is a condition that arises when there is an imbalance between the production of reactive oxygen species (ROS) and the body's ability to neutralize or eliminate them. ROS, which include free radicals like superoxide anions (O2-) and hydroxyl radicals (OH•), are generated during normal cellular metabolism, especially in the mitochondria during oxidative phosphorylation. While ROS are involved in several essential physiological processes, including immune responses and signaling, their accumulation can lead to oxidative damage to cellular macromolecules such as proteins, lipids, and DNA. This damage has been implicated in aging and the development of various chronic diseases.

Antioxidants, both endogenous and exogenous, are crucial in neutralizing ROS and mitigating their damaging effects. The body produces several endogenous antioxidants, including enzymes like superoxide dismutase (SOD), catalase, and glutathione peroxidase. Additionally, dietary antioxidants such as vitamin C, vitamin E, and polyphenols can further enhance the body's defense against oxidative stress. This article examines the different classes of antioxidants, their mechanisms of action, and their role in maintaining cellular health.

Antioxidant Mechanisms: Antioxidants work by neutralizing ROS through various mechanisms, which can be broadly categorized into enzymatic and non-enzymatic actions:

Enzymatic antioxidants are proteins that catalyze specific reactions to neutralize ROS. The most well-known antioxidant enzymes include:

Superoxide Dismutase (SOD) catalyzes the conversion of superoxide anions (O2-) into hydrogen peroxide (H2O2), which is less reactive. There are three isoforms of SOD, each localized in different parts of the cell (cytoplasm, mitochondria, and extracellular space). Catalase further breaks down hydrogen peroxide into water and oxygen, preventing the accumulation of H2O2, which could lead to the formation of highly reactive hydroxyl radicals. Glutathione Peroxidase reduces hydrogen peroxide and lipid hydroperoxides using glutathione (GSH) as a substrate, thereby protecting cells from oxidative damage.

Non-enzymatic antioxidants are small molecules that can directly scavenge ROS. Key examples include:

Vitamin C (Ascorbic Acid) is a water-soluble antioxidant that neutralizes a variety of ROS, particularly in the aqueous compartments of the body, such as the cytoplasm and extracellular fluids. Vitamin E (Tocopherol) is a fat-soluble antioxidant that protects cell membranes from lipid peroxidation by scavenging lipid radicals and other lipid-soluble ROS. Polyphenols found

in plant-based foods, polyphenols, such as flavonoids, tannins, and resveratrol, possess antioxidant properties and have been linked to a reduced risk of cardiovascular diseases and cancer due to their ability to neutralize ROS and modulate signaling pathways.

Antioxidants in Cellular Defense: In healthy cells, the antioxidant defense system maintains a delicate balance, ensuring that ROS levels remain low enough to prevent cellular damage, while still allowing ROS to perform their physiological roles in signaling and immune function. However, when this balance is disrupted by increased ROS production or reduced antioxidant capacity, oxidative stress can occur, leading to cellular damage and dysfunction.

ROS are known to cause oxidative modifications to DNA, leading to mutations that can initiate carcinogenesis. Antioxidants protect DNA by preventing such damage and promoting DNA repair mechanisms. For instance, glutathione is crucial for maintaining the integrity of the DNA repair system.

ROS attack polyunsaturated fatty acids in cell membranes, resulting in lipid peroxidation. This process damages cell membranes, disrupts membrane-bound proteins, and alters membrane fluidity. Vitamin E is particularly effective in preventing lipid peroxidation by scavenging lipid radicals.

ROS can also modify amino acids in proteins, leading to altered protein function and aggregation. Antioxidants such as glutathione and ascorbic acid protect proteins from oxidative damage and ensure proper protein folding and function.

The accumulation of oxidative damage is linked to various diseases, including:

Oxidative stress contributes to DNA mutations, which can lead to uncontrolled cell proliferation and tumorigenesis. ROS are also involved in signaling pathways that regulate cell survival, apoptosis, and metastasis. Antioxidant therapies are being explored as adjuncts to cancer treatment, with the goal of reducing ROS-induced damage to normal cells during chemotherapy and radiation therapy.

In cardiovascular diseases, oxidative stress accelerates the process of atherosclerosis by oxidizing low-density lipoproteins (LDL), leading to plaque formation in arterial walls. Antioxidants like vitamin E and polyphenols are thought to reduce the risk of atherosclerosis and cardiovascular events by scavenging oxidized lipids and preventing endothelial cell damage.

Diseases such as Alzheimer's and Parkinson's are associated with increased oxidative damage in neural cells. ROS-induced damage to neurons can impair brain function and lead to neurodegeneration. Antioxidants, such as vitamin E and coenzyme Q10, have been studied for their neuroprotective properties and their potential to delay or prevent disease progression.

Therapeutic Potential of Antioxidants: Given their role in mitigating oxidative stress, antioxidants have become a focus of therapeutic research. Clinical trials have explored the use of antioxidant supplements in preventing and treating various diseases. For instance, antioxidants are being tested for their ability to improve outcomes in cancer therapy, reduce the risk of heart disease, and protect against neurodegeneration. However, the effectiveness of antioxidant supplementation remains a topic of debate, as results from clinical trials have been mixed. While some studies show promising results, others suggest that excessive antioxidant supplementation might interfere with the body's natural defense mechanisms or even promote adverse effects.

Conclusion: Antioxidants are essential components of the cellular defense system, protecting cells from oxidative damage and maintaining homeostasis. Through their enzymatic and non-enzymatic actions, antioxidants neutralize harmful ROS and prevent cellular dysfunction. Their role in mitigating oxidative stress is critical in the prevention and treatment of various diseases, including cancer, cardiovascular diseases, and neurodegenerative disorders. While antioxidants hold promise for therapeutic applications, further research is necessary to determine the optimal strategies for their use in clinical practice. Understanding the complex interplay between

antioxidants and ROS will continue to be a key focus in biochemistry and medicine, with the potential for developing novel therapeutic approaches to combat oxidative stress-related diseases.

Keywords: Antioxidants, reactive oxygen species, defense mechanism, oxidative stress

POWER GENERATION FROM WATER FLOW

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Abstract—Through the integration of motors and a micro turbine generator called Water Flow in water systems, this research investigates a revolutionary approach to power generation.
A complex system is designed to harness the kinetic energy of flowing water and turn it into electricity using a Water Flow micro turbine generator. The project looks into how well this technology works and how versatile it is for producing renewable energy from different types of water. It also explores the Water Flow micro turbine generator's design aspects, maximizing its performance under various flow circumstances. With potential uses in rural or off-grid places, this novel approach to power generation offers a decentralized and sustainable option. With the global search for sustainable and eco-friendly energy sources, the Water Flow micro turbine generator offers a viable option.
Keywords: FlowTurbine, Ausunio, Available energy, Power Generation

PHYTOCHEMICAL SCREENING USING NATURAL INDICATORS IN HERBAL MEDICINE

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Abstract:
Natural indicators are substances derived from plant sources that can be used to assess the presence or concentration of specific phytoconstituents in plant-based materials. These phytoconstituents include alkaloids, flavonoids, terpenoids, phenolics, and glycosides, which are bioactive compounds known for their therapeutic properties. Natural indicators are essential tools in phytochemistry, serving as both qualitative and quantitative markers for identifying plant components in pharmaceutical, medicinal, and food applications.Many natural indicators are derived from plant pigments, such as anthocyanins, flavonoids, and carotenoids, which change color in response to pH changes or the presence of specific chemical groups. For example, the presence of flavonoids like quercetin or anthocyanins in plant extracts can act as natural pH indicators, providing a visual cue for the chemical environment in which the phytoconstituents are found. These indicators are not only eco-friendly but also non-toxic, making them suitable for use in various fields, including environmental monitoring and food safety.Moreover, some plant-derived compounds exhibit selective reactivity with specific phytoconstituents, allowing for the identification of compounds like tannins, saponins, or alkaloids through colorimetric changes. The use of natural indicators in research and quality control processes aids in the development of herbal medicines, dietary supplements, and natural dyes. As the demand for sustainable and natural alternatives to synthetic chemical indicators grows, the role of plant-based indicators in phytochemistry continues to expand, offering a reliable and environmentally friendly approach to phytoconstituent analysis.In conclusion, natural indicators derived from plant sources are crucial for the detection and quantification of phytoconstituents, contributing to the advancement of natural product research and sustainable practices in various industries.

Keywords: Herbal medicine, phytochemical screening, natural indicators, quality control, therapeutic properties, plant-based treatments.

YAPAY ZEKA İLE SÜRDÜRÜLEBİLİR KATI ATIK YÖNETİMİ: AVRUPA VE TÜRKİYE KARŞILAŞTIRMASI

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Özet
Yapay zeka (YZ) teknolojileri, sürdürülebilir katı atık yönetiminde verimliliği artırmak, maliyetleri azaltmak ve çevresel etkileri minimize etmek için Avrupa'da geniş bir şekilde uygulanmaktadır. Bu çalışmada, Avrupa'daki ileri düzey YZ uygulamaları ile Türkiye'deki mevcut durum karşılaştırılmıştır. Avrupa'da, özellikle Almanya, İsveç ve Hollanda gibi ülkeler, YZ tabanlı atık toplama, ayrıştırma ve geri dönüşüm sistemlerini yaygın şekilde kullanmaktadır. İsveç'te YZ sayesinde çöp toplama rotalarının optimizasyonu ile karbon emisyonlarında %30, yakıt tüketiminde %40 azalma sağlanmıştır. Almanya'da YZ tabanlı ayrıştırma sistemleri, plastik geri dönüşüm oranını %90'a çıkarmış ve manuel ayrıştırmaya kıyasla %25 daha hızlı sonuç alınmıştır. Ayrıca, otonom sistemlerin atık toplama araçlarında entegrasyonu, verimlilik ve zaman yönetimi açısından büyük katkılar sağlamıştır. Günümüzde Türkiye'de ise YZ ve otonom sistem uygulamaları yaygın değildir; Türkiye'de atık geri kazanım tesisleri sayesinde geri dönüşüm oranı, Avrupadaki otonom sistemler ve tesisler sayesinde geri dönüşüm oranının ortalamasının altındadır.
Türkiye 'de "Sıfır Atık Projesi" gibi girişimlerle farkındalık artırılmaya çalışılmakta, ancak manuel süreçler ve altyapı eksiklikleri sürdürülebilir atık yönetimi hedeflerini yavaşlatmaktadır. Özellikle YZ tabanlı sensör sistemleri, otomatik ayrıştırma, otonom toplama araçları ve tahmine dayalı planlama süreçlerinin adaptasyonu, Türkiye'de geri dönüşüm oranlarını artırarak çevresel ve ekonomik kazanımları artırabilir.
Sonuç olarak, bu çalışma, Avrupa'daki başarılı uygulamaları inceleyerek Türkiye'nin bu alanda nasıl ilerleme sağlayabileceğine dair öneriler sunmaktadır.
Anahtar Kelimeler: Yapay Zeka, Katı Atık Yönetimi, Sürdürülebilirlik, Geri Dönüşüm, Otonom Sistemler, Akıllı Atık Yönetimi

SUSTAINABLE SOLID WASTE MANAGEMENT WITH ARTIFICIAL INTELLIGENCE: COMPARISON BETWEEN EUROPE AND TÜRKİYE

Abstract
Artificial Intelligence (AI) technologies are widely applied in Europe to enhance efficiency, reduce costs, and minimize environmental impacts in sustainable solid waste management. This study compares advanced AI applications in Europe with the current state in Turkey. In Europe, especially in countries like Germany, Sweden, and the Netherlands, AI-based waste collection, sorting, and recycling systems are extensively used. In Sweden, thanks to AI, the optimization of waste collection routes has led to a 30% reduction in carbon emissions and a

40% decrease in fuel consumption. In Germany, AI-based sorting systems have increased the plastic recycling rate to 90% and delivered results 25% faster compared to manual sorting. Furthermore, the integration of autonomous systems into waste collection vehicles has significantly contributed to efficiency and time management.
Currently, in Turkey, AI and autonomous system applications are not widespread. Despite waste recovery facilities, Turkey's recycling rates remain below the average achieved by autonomous systems and facilities in Europe. Initiatives like the "Zero Waste Project" aim to raise awareness in Turkey. However, manual processes and infrastructure deficiencies slow down progress toward sustainable waste management goals. The adoption of AI-based sensor systems, automated sorting, autonomous collection vehicles, and predictive planning processes could improve recycling rates in Turkey, resulting in greater environmental and economic benefits.
In conclusion, this study examines successful practices in Europe and provides suggestions on how Turkey can advance in this field.
Keywords: Artificial Intelligence, Solid Waste Management, Sustainability, Recycling, Autonomous Systems, Smart Waste Management

ÖĞRETMEN ADAYLARININ MATEMATİKSEL MODELLEME ÖZ YETERLİLİKLERİNİN İNCELENMESİ
EXAMINATION OF PRE-SERVICE TEACHERS' MATHEMATICAL MODELING SELF-EFFICACY

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ÖZET
Öğretmenlerin derslerinde, günlük yaşam problemleriyle matematiksel modellemeler yapmaları, öğrencilerin yaparak yaşayarak öğrenmeleri bakımından önemlidir. Bunun için öğretmen olmadan, öğrenim gördükleri lisans eğitimlerinde bu deneyimleri kazanmaları gerektiği düşünülmektedir. Öğretmen adaylarının matematiksel modellemelerde başarılı olmaları ve öğretmen olduklarında öğrencilerine uygulamalar yaptırabilmeleri için öz yeterliliklerinin hangi değişkenlerden etkilendiğini bilmek gerekir.
Bu çalışma öğretmen adaylarının matematiksel modelleme öz yeterliliklerinin çeşitli değişkenler açısından incelenmesi amacıyla yapılmıştır. Bu değişkenlerden bağımsız değişkenleri, akademik başarı düzeyi, cinsiyet, modelleme dersi alma durumu ve sınıf düzeyi, bağımlı değişkeni ise matematiksel modelleme öz yeterlilik puanları oluşturmaktadır. Çalışmaya Türkiye'de bir devlet üniversitesinin Eğitim Fakültesi'ndeki Matematik Eğitimi Ana bilim dalında öğrenim gören toplam 159 öğretmen adayı gönüllü olarak katılmıştır. İlişkili tarama yönteminin kullanıldığı bu çalışmada kullanılan nicel veriler SPSS programında t testi, Mann Whitney U ve tek yönlü varyans analizi (ANOVA) ile analiz edilmiştir. Analiz sonuçlarına göre; öğretmen adaylarının matematiksel modelleme öz yeterlilik inançlarının cinsiyet, ders alma durumu ve sınıf düzeyi ile arasında anlamlı farklılıkların olduğu ancak başarı düzeyi ile arasında anlamlı bir fark olmadığı ortaya çıkmıştır.
Çalışma sonucunda öğretmen adaylarının modelleme başarılarının arttırılması için daha fazla deneyimlerden yararlanılması, kız öğretmen adaylarının daha fazla teşvik edilmesi, modelleme derslerinin farklı ana bilim dallarında ve farklı sınıf düzeylerinde ders saati artırılarak yerini alması ve içeriğinin genişletilmesi şeklinde öneriler sunulmuştur.
Anahtar Kelimeler: Matematiksel modelleme, öğretmen adayı, öz yeterlilik

ABSTRACT
It is important for teachers to use mathematical modeling with real-life problems in their lessons, as it allows students to learn through hands-on experiences. For this, they need to gain such experiences during their undergraduate education, before becoming teachers. In order for pre-service teachers to be successful in mathematical modeling and to enable their students to practice it when they become teachers, it is necessary to understand which variables affect their self-efficacy.
This study was conducted to examine the mathematical modeling self-efficacy of prospective teachers in terms of various variables. The independent variables of these variables are academic achievement level, gender, taking a modeling course and grade level, and the dependent variable is mathematical modeling self-efficacy scores. A total of 159 pre-service teachers voluntarily participated in mathematics education department of the Faculty of

Education of a state university in Turkey. The quantitative data used in this study, in which the correlated screening method was used, were analyzed in the SPSS program t-test, Mann Whitney U and one-way analysis of variance (ANOVA). According to the analysis results; It was found that there were significant differences between pre-service teachers' mathematical modeling self-efficacy beliefs, gender, taking a course, and grade level. It was revealed that there was no significant difference between mathematics modeling self-efficacy scores and achievement level.

As a result of the research, suggestions were made to increase the modeling success of teacher candidates, such as benefiting from more experiences, encouraging female teacher candidates more, taking modeling courses in different departments and at different grade levels by increasing the number of hours, and expanding their content.

Keywords: Mathematical modeling, pre-service teacher, self-efficacy

CLASSIFICATION OF GLIOMAS, MENINGIOMAS, AND PITUITARY TUMORS USING CONVOLUTIONAL NEURAL NETWORKS (CNN)

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Abstract.
Multi-class brain tumor classification is a critical field in medical imaging, given the varying characteristics of different tumor types. One of the primary challenges lies in accurately classifying brain tumors using MRI images, as achieving high precision is essential. Despite the development of numerous techniques by computer vision experts, maintaining high accuracy in brain image classification remains a challenge. Early identification of brain tumor types enables timely intervention, improving patient survival rates. In recent years, deep learning models have shown significant promise, particularly in assisting neurologists with tumor classification. This study introduces a deep transfer learning approach aimed at enhancing the speed and accuracy of brain tumor detection using MRI scans. Five well-known deep learning architectures are employed to create an efficient diagnostic system for brain tumor classification [1].
Deep learning (DL) represents a subset of machine learning, focused on constructing hierarchical layers of features to learn intricate representations. This approach utilizes a hierarchy of features, with higher levels derived from lower ones, allowing the same lower-level features to contribute to multiple higher-level features [2]. DL expands upon traditional neural networks (CNN) by incorporating additional hidden layers between input and output layers, enabling the modeling of complex and nonlinear relationships. Its efficacy in various fields, particularly in medical image analysis applications such as image denoising, segmentation, registration, and classification, has garnered significant attention from researchers in recent years [3], [4], [2], [5], [6].
In this study, a classic CNN model was used, along with two improved versions of CNN and transfer learning. The concept of transfer learning was applied to train these models, which resulted in achieving highly accurate results.
Keywords: MRI, DL, AI Machine learning Deep learning, Magnetic resonance, QNN, ML, image processing

ASPİR (*CARTHAMUS TİNCTORİUS* L.) ÇİÇEK VE YAPRAK ÖZÜTLERİNİN ANTİMİKROBİYAL AKTİVİTELERİNİN KARŞILAŞTIRILMASI

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ÖZET

Asteraceae veya Compositaea familyasından olan olan Aspir (*Carthamus tinctorius L.*), hem gıda hem de endüstriyel kullanıma uygun özelliklere sahip olan tohumları ve çiçekleri için kültürü yapılan bir bitkidir. Ülkemizde aspir bitkisi hemen hemen her alanda kullanımı, sıcak ve soğuk şartlara dayanıklı olmasından dolayı kuru tarımın yapıldığı arazilerde, yabancı otlarla olan mücadelesi ve tuzluluğundan dolayı da sulu tarım yapılan bölgelerde göz ardı edilmeyecek önemli yağlı tohumlu bitkilerden biri konumundadır. Aspir, tohumunda %20-45 arasında yağ içeren, kökü 1.5- 2.0 metre derinliğinde olan sarı, kırmızı ve turuncu çiçekleri ve dikenli, dikensiz yapısı ile genel olarak yazlık yetiştirilen bir bitkidir. Özellikle su ihtiyacı az olan aspir; soya, kolza, ayçiçeği gibi yağlı tohumlu olan bitkilere göre kurak şartlarda yetişebilen ve son zamanlarda yağışların azalması ile daha da ön plana çıkan ve tohumundaki yağ oranı da yüksek olduğundan değerlendirilebilecek bir bitkidir. Bunun yanında içinde bulunan antioksidan özelliği ve E vitamin içeriği bakımından yüksek değerlere sahip tokoferoller vardır. Son zamanlarda antibiyotik direncine sahip suşlar nedeniyle ortaya çıkan ve giderek artış gösteren problemler araştırıcıları patojenlerle mücadelede, konak üzerinde yan etkisi olmayan ve normal florayı etkilemeyen, aynı zamanda çevre üzerinde de olumsuz bir etki göstermeyen yeni çözüm yolları araştırmaya itmiştir. Bu sebeple özellikle son zamanlarda yapılan çalışmaların çoğu, bitkilerden elde edilen antimikrobiyal aktiviteye sahip biyoaktif doğal bileşenlerin araştırılmasını konu almaktadır. Bu çalışmada da *C. tinctorius* L. bitkisinin Dinçer soyunun çiçek ve yaprak kısımlarından elden edilen özütlerin seçili mikroorganizmalar üzerindeki antimikrobiyal aktivitesi disk difüzyon yöntemi ile tespit edilmiştir. Buna göre; *C. tinctorius* L. bitkisinin Dinçer soyunun çiçek ve yaprak kısımlarından elde edilen özütlerde en yüksek aktivite *Bacillus subtilis*' de görülürken, en düşük aktivite *Staphylococcus aureus* da tespit edilmiştir. *Saccharomyces cerevisiae* ve *Candida albicans* mantarlarında herhangi bir aktivite gözlenmemiştir.

Anahtar Kelimeler: Aspir (*Carthamus tinctorius L.*), Bitki özütü, antimikrobiyal aktivite

ABSTRACT

Safflower (*Carthamus tinctorius L.*), which belongs to the Asteraceae or Compositaea family, is a plant cultivated for its seeds and flowers, which are suitable for both food and industrial use. In our country, safflower is one of the important oilseed crops that cannot be ignored in dry farming areas due to its use in almost every field, its resistance to hot and cold conditions, its control of weeds and its salinity in irrigated farming areas. Safflower is a plant that contains 20-45% oil in its seed, has a root 1.5- 2.0 meters deep, yellow, red and orange flowers and a thorny or thornless structure and is generally grown for summer. Safflower, which has a low water requirement, is a plant that can grow in arid conditions compared to oilseed plants such as soybean, rapeseed and sunflower, and has recently come to the forefront with the decrease

in rainfall and can be evaluated due to the high oil content in its seed. In addition, there are tocopherols with high values in terms of antioxidant properties and vitamin E content. The recent and increasing problems caused by antibiotic resistant strains have led researchers to search for new solutions to combat pathogens that do not have side effects on the host, do not affect the normal flora and do not have a negative impact on the environment. For this reason, most of the recent studies have focused on the investigation of bioactive natural components with antimicrobial activity obtained from plants. In this study, the antimicrobial activity of the extracts obtained from the flower and leaf parts of the Dinçer strain of *C. tinctorius L*. plant was determined by disk diffusion method on selected microorganisms. Accordingly, the highest activity was observed in *Bacillus subtilis*, while the lowest activity was detected in *Staphylococcus aureus* in the extracts obtained from the flower and leaf parts of *C. tinctorius L. plant*. No activity was observed in *Saccharomyces cerevisiae* and *Candida albicans* fungi.
Keywords: Safflower (Carthamus tinctorius L.), Plant Extract, Antimicrobial Activity

DERİ HASTALIKLARINA YÖNELİK POLİÜRETAN FİLM TABAKASININ ÜRETİMİ VE KARAKTERİZASYONU

PRODUCTION AND CHARACTERIZATION OF POLYURETHANE FILM LAYER FOR SKIN DISEASES

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ÖZET

Termal yanıklar, diyabete bağlı bacak ülseri gibi deri yaraları, hasarın boyutu ve derinliğine bağlı olarak deride bulunan dermal ve epidermal tabakaların zarar görmesine neden olur. Ayrıca enfeksiyon oluşumu önemli bir risk faktörüdür. Derideki yaralı bölgelerin tedavisine destek olmak üzere, yara örtüleri kritik bir öneme sahiptir. Yara örtüleri, açık yaraların enfeksiyon sebebi dış faktörlere ve mekanik tahrişe karşı korunmasını sağlar. Yaranın nemli kalmasına yardımcı olup yara kabuğu oluşumunu önleyerek daha az iz kalmasını kolaylaştırır. Bu fonksiyonlar, doku yenilenmesini hızlandırırken, ağrı ve rahatsızlığı da azaltır. Bu temel özelliklerin yanı sıra bazı yara örtüleri; antimikrobiyal ajanlar, büyüme faktörleri veya iyileşmeyi destekleyen diğer maddeleri içererek bu bileşenlerin yaraya kontrollü bir şekilde salınmasını sağlar. Dolayısıyla yara tedavisini yara tipine ve kişiye özel olarak yönetmek mümkün olmaktadır.

Sağladığı avantajlar nedeniyle, yara örtülerinin yapısında kullanılmak üzere sıkça tercih edilen malzemelerden biri poliüretan filmlerdir. Poliüretan filmler, esnek ve ince yapıları sayesinde vücut hareketlerine uyum sağladığından, özellikle eklem bölgelerindeki yaralar için çok uygundur. Yırtılmaya karşı dayanıklıdır ve dışardan gelebilecek fiziksel darbelere karşı koruma sağlar. Yarı geçirgen olmaları sebebiyle oksijen ve su buharını geçirirken, bakteriler ve diğer mikroorganizmaların yaraya ulaşmasını engeller. Poliüretan biyouyumlu bir malzeme olduğu için cilt üzerinde alerjik reaksiyon veya tahrişe neden olma olasılığı düşüktür. Ayrıca bazı poliüretan çeşitleri biyobozunur olduğundan, atık yönetimi yönünden avantaj sağlar. Poliüretan filmler genellikle şeffaf olduğundan, yaranın iyileşme sürecini üzerini açmadan gözlemlemek mümkün olur.

Mevcut çalışmada, farklı oranlarda poliüretan içeren film tabakaları, döküm yöntemi ile üretilmiştir. Mekanik, kimyasal, biyolojik, morfolojik açıdan karakterizasyonları yapılmış olup *in vitro* koşulda biyouyumluluğu test edilmiştir. Test sonuçları, tedavi sürecine katkı sağlayabilecek potansiyelde ürün elde edildiğini göstermiştir. İlerleyen aşamada antibakteriyel ajan, ilaç ve büyüme faktörü, vitamin, peptit, kolajen gibi iyileşme sürecini destekleyici

unsurların poliüretan film yapısına katılmasını inceleyen çalışmalara temel oluşturması öngörülmektedir.

Anahtar Kelimeler: Deri Hastalıkları, Film, Poliüretan, Yara Örtüsü.

Teşekkür:

Bu çalışma 31083 numaralı Türkiye Sağlık Enstitüleri Başkanlığı (TÜSEB) projesiyle desteklenmiştir.

ABSTRACT

Skin diseases, such as thermal burns and diabetic leg ulcers, can damage the dermal and epidermal layers, depending on injury depth and extent. Infection poses a major risk in these wounds. Wound dressings are essential in treating injured skin, as they shield open wounds from infection-causing external factors and mechanical irritation. They help retain moisture, preventing scab formation, which can reduce scarring. These functions not only accelerate tissue regeneration but also alleviate pain and discomfort.

Beyond these basic features, some wound dressings include antimicrobial agents, growth factors, or other healing-supportive substances that can be released in a controlled manner, enabling wound treatment tailored to wound type and patient needs.

Polyurethane films are preferred for wound dressings due to several advantages. Their flexible and thin structure adapts to body movements, making them ideal for wounds on joint areas. They are tear-resistant and protect against physical impacts. Being semi-permeable, they allow oxygen and water vapor to pass while blocking bacteria. Polyurethane's biocompatibility reduces the risk of skin irritation, and some types are biodegradable, aiding in waste management. Their transparency allows for observation of the healing process without removal.

In this study, films with different polyurethane ratios were produced via precise casting. Their mechanical, chemical, biological, and morphological properties were characterized, and in vitro biocompatibility tests were conducted. Results indicate a product with potential therapeutic benefits. This study is anticipated to lay a foundation for further research on incorporating antibacterial agents, drugs, growth factors, vitamins, peptides, and collagen into polyurethane film structures.

Keywords: Film, Polyurethane, Skin Diseases, Wound Dressing.

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DENİM TASARIMLARINDA BİYOBOZUNUR MALZEMELERİN KULLANIMI VE ÇEVRE DOSTU YAKLAŞIMLAR
THE USE OF BİODEGRADABLE MATERİALS AND ECO-FRİENDLY APPROACHES İN DENİM DESİGN

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ÖZET
Moda endüstrisindeki hızlı üretim artışı ve "hızlı moda" anlayışı, çevresel sürdürülebilirlik açısından ciddi sorunlara yol açtığı bilinmektedir. Özellikle polyester gibi suni ve sentetik ipliklere olan talep, son 15 yıl içinde neredeyse iki katına çıkarak doğal kaynaklara bağımlılığı azaltmak yerine, çevresel kirlilikte bir artışa neden olmuştur. Sentetik materyallerin biyolojik olarak parçalanamaması, tedarik zinciri boyunca önemli bir sorun haline geldiği bilinmektedir. Giysilerin kullanımı ve bakımı sırasında, özellikle yıkama işlemleri sırasında doğal ve sentetik kumaşlardan dökülen mikro elyaflar, su kaynaklarına karışarak çevre üzerinde kalıcı etkiler bırakmaktadır. Sentetik kumaşlar yıkandıklarında, mikro plastik formunda su yollarına karışan bu mikro elyaflar, okyanuslara ve diğer su kütlelerine taşınmaktadır.
Araştırmalar, bu mikro plastiklerin balıklar ve diğer deniz canlıları tarafından yutulduğunu ve böylece biyolojik birikim yoluyla gıda zincirine girdiğini ortaya göstermektedir. Biyobozunur denimler, bu olumsuz çevresel etkileri azaltma konusunda önemli bir çözüm sunmaktadır. Doğal liflerden ve biyolojik olarak parçalanabilir malzemelerden üretilen bu denimler, su yollarında mikro plastik kirliliğine neden olmayan, çevre dostu bir alternatif olarak öne çıkmaktadır. Üretim süreçlerinde kullanılan doğal boyalar ve kimyasalların azaltılması, biyobozunur denimlerin karbon ayak izini düşürürken, su tüketimini ve enerji harcamalarını da önemli ölçüde azaltmaktadır.
Biyobozunur denimlerin etkili bir çözüm haline gelebilmesi için, tüketicilerin bu yenilikçi ürünler hakkında bilinçlenmesi büyük önem taşımaktadır. Tüketiciler, ürünlerin etiketlerini dikkatlice incelemeli, üretim süreçlerini sorgulamalı ve çevresel etkileri en aza indiren ürünleri tercih etmelidir. Ayrıca, markaların şeffaflık politikalarını benimsemesi ve biyobozunur ürünlerin avantajlarını vurgulayan farkındalık kampanyaları düzenlemesi gerekmektedir.
Bu çalışmada, biyobozunur malzeme kullanımı ile biyobozunur materyallerin kullanımı ile sürdürülebilir denim giysiler tasarlanmıştır. Çalışmada, %69 pamuk %31 kenevir içeren denim kumaşlar kullanılmıştır. Ayrıca çalışma kapsamında tasarlanan tüm denim giysilerde biyozunur düğme ve jakron gibi aksesuarlar kullanılmıştır.
Anahtar Kelimeler: Biyobozunur, Denim, Denim Tasarım, Denim Giysi, Sürdürülebilir

ABSTRACT
The rapid increase in production within the fashion industry and the prevalence of the 'fast fashion' mindset are known to cause serious environmental sustainability issues. Particularly, the demand for synthetic fibers like polyester has nearly doubled in the past 15 years, leading to an increase in environmental pollution rather than reducing dependency on natural resources. The inability of synthetic materials to biodegrade has become a significant problem throughout the supply chain. During the use and care of garments, especially during washing, microfibers shed from both natural and synthetic fabrics mix into water sources, leaving lasting environmental impacts.

When synthetic fabrics are washed, these microfibers, in the form of microplastics, enter water streams and eventually flow into oceans and other water bodies. Research indicates that these microplastics are ingested by fish and other marine organisms, thereby entering the food chain through bioaccumulation.

Biodegradable denim offers a promising solution to mitigate these negative environmental effects. Produced from natural fibers and biodegradable materials, these denims emerge as eco-friendly alternatives that do not contribute to microplastic pollution in water streams. The reduction of chemicals and the use of natural dyes in their production processes decrease the carbon footprint of biodegradable denim while significantly lowering water and energy consumption.

For biodegradable denim to become an effective solution, raising consumer awareness about these innovative products is of great importance. Consumers should carefully examine product labels, question production processes, and prefer products that minimize environmental impacts. Additionally, brands should adopt transparency policies and organize awareness campaigns highlighting the benefits of biodegradable products.

In this study, sustainable denim garments were designed using biodegradable materials. Denim fabrics containing 69% cotton and 31% hemp were utilized. Additionally, biodegradable buttons, jacrons, zippers, and accessories were incorporated into the denim garments designed within the scope of this work.

Key Words: Biodegradable, Denim, Denim Design, Denim Garment, Sustainable

RELATIONSHIP BETWEEN SELF EFFICACY AND OCCUPATIONAL BURNOUT AMONG NURSING STAFF IN PAKISTAN: COPING STRATEGIES AS A FACILITATOR

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Abstract
The present study investigated for moderating role of Coping Strategies in relationship between Self Efficacy and Occupational Burnout among Nursing Staff. For this purpose General Self Efficacy was used to assess the Self Efficacy. Brief - Coping Orientation to Problems Experienced Inventory was used to assess the Coping Strategies. Burnout Assessment tool was used to assess Occupational Burnout. Data was collected from different government and private hospital of Rawalpindi and Islamabad. Sample comprised of Male nurses (n=30) and female nurses (n=270). Psychometric properties of scale indicated moderate to good reliability for the study sample. Results indicated that significant mean difference across family system, marital status, gender, monthly income, working shifts, institutions and employment status. Result showed significant negative correlation between self efficacy and occupational burnout (r=-.39, p< .01). Result also showed that significant positive correlation between self efficacy and coping strategies (r=.37, p< .01). In the present study there is no moderation occur between self efficacy and occupational burnout.The result of linear regression analysis showed that self efficacy (R^2 = .24***), coping strategies (R^2= .13*) and problem focused coping (R^2= .07***) significantly predict the occupational burnout. Implementation of stress management program and develop effective coping can help to reduce stress and burnout.

Keywords: Self Efficacy, Coping Strategies, Occupational Burnout, Problem Focused Coping, Regression, Nursing Staff.

FLOW AND THERMAL DYNAMICS OF HYDROMAGNETIC HYBRIDIZED WATER-BASED $MWCNTs/Fe3O4$ NANOPARTICLES OVER AN UNSTEADY MOVING DISK WITH JOULE-VISCOUS HEATING

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Abstract
A hybrid nanofluid's flow dynamics and heat transfer over a disk are essential for a variety of applications, including solar receivers, heat sinks in electronics, cooling rotating machinery, thermal energy storage, etc. Thus, the current study addresses the flow and thermal dynamics of hydromagnetic hybridized water-based nanofluid over a moving disk with the Joule and viscous heating phenomenon. A mathematical model is developed in the form of partial differential equations to describe the physical phenomenon. The model is transmuted to ordinary derivative equations by similarity variables and then solved numerically using the shooting techniques with the Runge-Kutta Felhberg method. The consequences of the investigation are depicted graphically for understanding and applications. The results revealed that the unsteadiness term causes the skin friction coefficient to increase, whereas the hydrodynamic and thermal boundary layers shrink. The Hartman number also propels the momentum boundary layer to diminish while the radiation parameter boosts the rate of heat transfer in the system.
Keywords: Heat transfer dynamics; Hydromagnetic fluid flow; Unsteady moving disk; Viscous-Joule heating

PASTANE VE RESTORANLARDA HAZIRLAMA VE SUNUM AŞAMALARINDA HİJYENE UYGUN OLMAYAN DAVRANIŞLAR

NON-HYGIENIC BEHAVIORS IN PREPARATION AND PRESENTATION STAGES IN PATISSERIES AND RESTAURANTS

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ÖZET

Toplumun önemli bir kesimi pastane ve restoranlarda hazırlanan ve sunulan ürün ve yiyecekleri tüketirken yine önemli bir kesimi bundan özellikle imtina etmektedir. Bu dürtünün arkasındaki neden araştırıldığında, önemli nedenlerden bir tanesinin bu yerlerde hijyene yeterli hassasiyet gösterilmediği düşüncesi ağır basmaktadır. Buradan hareketle günümüz bilgi, teknoloji, iletişim imkanları ve denetleme çalışmalarına rağmen pastane ve restoranlarda hijyenik üretimin gerçekten de zayıf olup olmadığı araştırılmıştır. Bu amaçla anket çalışmasından daha ziyade, Türkiye'nin farklı yerlerinde faaliyet yürüten pastane ve restoranlar ziyaret edilmiş, işyerlerinin izni ile hem de onlara yol gösterici olması amacı ile hijyenik olmayan bazı uygulamaları fotoğraflanmıştır. Burada işyerini deşifre edecek işaretlerden kaçınılmıştır. Ancak işyerlerinin bu samimi işbirliğine karşılık olarak, görülen eksik ve aksaklıklar işyerleri ile paylaşılmış ve hijyene uygun hazırlama ve sunum konusunda tavsiyelerde bulunulmuştur. Bu çalışma sırasında hijyene uygun olmayan hataların yanında bazı iş güvenliği riski, çevre kirliliği ve personel sağlığını da tehlikeye sokacak uygulamalar olduğu görülmüştür. Bunlar fotoğrafları ile birlikte derlenecek, yüksek lisans tezi olarak sunulacak ve sonrasında bu iş yerlerine rehber olması amacı ile kitaplaştırılacaktır.

Bu çalışma kapsamında yaklaşık 100 işletme ziyaret edilmiş ve hazırlama ve sunum alanları detaylıca gezilmiş ve hatalı uygulamalar fotoğraflanmıştır. Bu kapsamda bu iş yerlerinden ürün ve hizmet almaktan imtina edecek kişileri haklı çıkaracak uygulamalara rastlanmıştır. Bunlar; iş yerlerine girişte hijyen paspası dahil herhangi bir koruyucu tedbir alınmaması, personelin, maske ve eldiven kullanmaması, çöp kovalarının aşırı dolu olmasına rağmen hazırlama alanından uzak tutulması, meyve ve sebze bıçakları ile et doğrama bıçaklarının aynı olması, aynı tezgahta hem çiğ et hem de meyve ve sebze doğranması, hazır yiyecekler ile mikrobiyal açıdan risk taşıyan hammaddelerin aynı dolapta muhafaza edilmesi, tüketime hazır gıdaların sunum için beklerken ağzının açık olması, örtülmemesi, kullanıma hazır tabak ve benzeri eşyanın kapaksız en alt rafta tutularak kirlenmeye açık tutulması, çalışan personelin büyük bir kısmının hijyen eğitimi almamış olması, son tüketim tarihi geçmiş ürün kullanılması, ambalajı açılmış gıdanın yeniden bulaşmaya mahal vermeyecek şekilde paketlenmemesi, hammaddenin yetersiz alandan dolayı gıdanın hazırlandığı yerde depolanması, ızgara, gözleme, tost yapılan yüzeylerde yağ, kir, pas olması, çalışma alanlarındaki yüzeylerin pürüzsüz olmaması veya çok sayıda kırık ve çatlak olması, yüzeylerin yağlı ve kirli olması, havalandırmanın yetersiz olması, gıdaların paletsiz ve doğrudan yere konulması gibi uygulamalardır. Bu çalışma sonunda, denetimlerin sık olsa bile personelin bu konulardaki hassasiyetinin, bilincinin ve tüketiciye saygısının az olması nedeni ile hedeflenen

sonuca ulaşılamamaktadır. Bu amaçla sık denetimlerle birlikte personelin daha iyi eğitilmesi ve personel sirkülasyon hızının azaltılması gerekmektedir.
Anahtar Kelimeler: Pastane, restoran, hijyen, denetim

ABSTRACT

While a significant part of the society consumes the products and foods prepared and served in patisseries and restaurants, a significant part of the society refrains from doing so. When the reason behind this impulse is investigated, one of the important reasons is the thought that there is not enough sensitivity to hygiene in these places. From this point of view, it was investigated whether hygienic production in patisseries and restaurants is really weak despite today's information, technology, communication opportunities and inspection efforts. For this purpose, rather than a questionnaire survey, pastry shops and restaurants operating in different parts of Turkey were visited and some unhygienic practices were photographed with the permission of the workplaces in order to guide them. Here, signs that would decipher the workplace were avoided. However, in response to the sincere cooperation of the workplaces, the deficiencies and defects observed were shared with the workplaces and advice was given on hygienic preparation and presentation. During the course of this study, in addition to unhygienic errors, some practices were observed that could jeopardize occupational safety, environmental pollution and personnel health. These will be compiled with photographs, presented as a master's thesis and then published as a book to guide these workplaces.

Within the scope of this study, approximately 100 businesses were visited and the preparation and presentation areas were visited in detail and faulty practices were photographed. In this context, practices were found that would justify people who would refrain from purchasing products and services from these workplaces. These include No protective measures, including hygiene mats, are taken at the entrance to workplaces, staff do not use masks and gloves, garbage bins are kept away from the preparation area despite being overfull, fruit and vegetable knives and meat chopping knives are the same, both raw meat and fruit and vegetables are chopped on the same counter, keeping ready-to-eat foods and raw materials with microbial risk in the same cupboard, keeping ready-to-eat foods open and uncovered while waiting for presentation, keeping ready-to-use plates and similar items on the bottom shelf without lids and keeping them open to contamination, The majority of the personnel are not hygiene trained, expired products are used, unpackaged food is not packaged in a way that does not allow re-contamination, raw materials are stored in the place where the food is prepared due to insufficient space, there is grease, dirt, rust on the surfaces where grills, pancakes and toasts are made, the surfaces in the working areas are not smooth or have many cracks and cracks, the surfaces are oily and dirty, ventilation is insufficient, food is placed directly on the floor without pallets. At the end of this study, even if the inspections are frequent, the targeted result cannot be achieved due to the low sensitivity, awareness and respect of the personnel to the consumers. For this purpose, it is necessary to train the personnel better and reduce the personnel circulation rate together with frequent inspections.
Keywords: Patisserie, restaurant, hygiene, inspection

AWARENESS AND UTILISATION OF MODERN TECHNOLOGIES FOR AQUACULTURE INSTRUCTION AMONGST TERTIARY INSTITUTION TEACHERS IN NIGER STATE, NIGERIA

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Abstract
The paper examined awareness and utilisation of modern technologies for aquaculture instruction amongst tertiary institution teachers in Niger State, Nigeria. The researchers adopted a descriptive survey design. The total population of Lecturers was 72, in the 6 tertiary institutions under study in Niger State. The sample size for this study was 52. The study used a purposive sampling technique to select participants which included Aquaculture Lecturers. An online questionnaire was the instrument used for data collection. The findings revealed that lecturers generally view modern technologies in aquaculture instruction positively, with mean scores from 3.38 to 3.58, and low standard deviations between 0.50 and 0.70, indicating strong and consistent agreement on the importance of technologies such as Virtual Reality and AI-based systems, reflected in a grand mean of 3.51. Also, the overall utilisation of modern technologies for aquaculture instruction, with a grand mean score of 2.55, highlights that while gamification tools and E-learning platforms are used more frequently (means of 2.94 and 2.77), Augmented Reality and Artificial Intelligence (AI) based systems are less commonly utilised (means of 2.15 and 2.21), suggesting varied adoption rates depending on technology complexity and infrastructure needs. The findings revealed no significant gender differences in the utilisation of modern technologies for aquaculture instruction, with a p-value of 0.13. In conclusion, the study revealed that teachers in tertiary institutions in Niger State, Nigeria have a generally positive awareness of modern technologies for aquaculture instruction, particularly appreciating tools like E-learning platforms and simulation softwares. Based on the findings, the researchers recommended that: Targeted training and support should be provided for teachers on using advanced technologies like Biotechnology techniques and usage of IOT devices to improve their utilisation in aquaculture instruction, while also implementing gender-inclusive strategies, such as tailored workshops and mentorship programs, to ensure equal access and utilisation of modern technologies amongst male and female lecturers.
Keywords: Awareness, Utilisation, Modern Technologies, Aquaculture.

InSe SEMICONDUCTOR CRYSTAL

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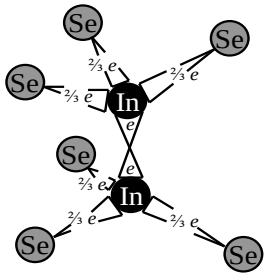
InSe (Indium Selenide) is a semiconductor material with a layered structure. Each layer consists of Se-In-In-Se (4 monolayers) atoms connected by strong covalent bonds. The chemical bonding between the layers is provided by weak Van-der-Vaals forces, which causes the crystal to have a distinct two-dimensional structure. The characteristic of this layered structure is similar to other 2D materials, and this feature makes InSe particularly attractive for flexible electronics applications.
The atoms in the inner layer are arranged at certain intervals: the distance between In-In atoms is approximately 2.79 Å, and the distance between In-Se atoms is 2.65 Å. Thus, the total thickness of each crystal layer is 5.36 Å. This delicate crystal structure has a direct effect on both the optical and electrical properties of the material [1].



Şəkil 1.1. Configuration of In and Se atoms in InSe crystals

InSe is notable for its semiconductor properties and has a wide band of forbidden energy. This feature enables the material to be used in optoelectronic applications. While the bandwidth (Eg) at 77 K is 1.360 eV, this value decreases to 1.2635 eV at room temperature (300 K). The relationship between this temperature and the bandwidth is critical to understanding how semiconductors behave under thermal effects. Having a higher band energy, especially at low temperatures, is suitable for cooled electronic devices.
InSe crystals are usually produced by the Bridgman method. This method is a common technique for obtaining semiconductor crystals with high purity and regular structure and has a direct effect on the optical and electrical properties of the crystal. In the Bridgman method, the molten material is allowed to solidify slowly along a temperature gradient. At the end of this process, crystal growth is carried out in a controlled manner and hexagonal or rhombohedral crystals can be obtained.
There are three common polytypes of InSe semiconductor: ε-InSe, γ-InSe, and β-InSe. These polytypes are distinguished by the different arrangement of the quaternary layers (Se-In-In-Se) [2]. ε-InSe: It has a hexagonal lattice structure and belongs to the asymmetric space group D13h. This phase consists of two quaternary layers with alternating layer arrangements in the form of ABAB. γ-InSe: It has a hexagonal lattice structure and belongs to the symmetric space group D46h. The difference between the two quaternary layers is that the upper layer is rotated by 60° concerning the lower layer. β-InSe: It has a rhombohedral structure and belongs to the asymmetric space group C53V. It has a triple layer arrangement in the form of ABCABC. The c-axis of this polytype is larger than that of the other two phases (approximately 25 Å).

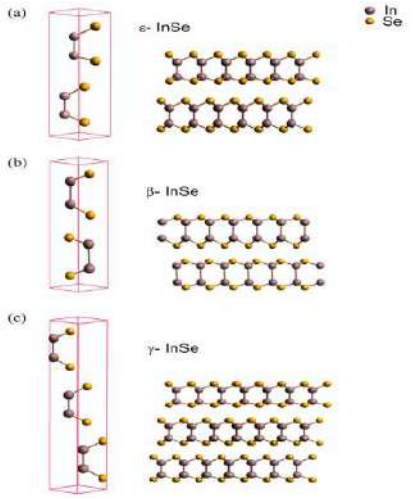


Fig. 2. Crystal structure of three common polytypes of InSe.

The method of obtaining the crystal is of great importance in terms of structural order and purity. Any irregularity in the crystal structure can directly affect the performance of the semiconductor. These structural features, which are especially critical for optical and electronic applications, can be decisive in terms of the efficiency and functionality of the material.

The InSe semiconductor has a wide range of applications. Its optical and electrical properties make it usable in various technological applications. InSe's bandgap energy makes it effective in sunlight absorption and photovoltaic devices. It can be used to increase energy efficiency in solar cells. Due to its layered structure and Van-der-Vaals bonds, InSe can be produced in thin films and used in flexible electronics. At the same time, its capacity to absorb visible and infrared light makes InSe suitable for use in optical sensors and laser technologies.

As a result, the InSe semiconductor is a promising material with a wide range of applications thanks to its layered crystal structure and wide bandgap. With the development of production methods, the performance of this material has been further improved and has become more widespread in the industry.

Keywords: Semiconductor, layered structure, Bridgman method, electrical properties, thin film.

CHEMICAL AND MICROBIOLOGICAL QUALITY OF DESALINATED WATERS IN BOUSMAIL CITY, ALGERIA

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Algeria, located in the south of the Mediterranean basin, a semi-arid or even arid country, is among the countries poor in water, due to rainfall of less than 600 mm on average and unequally distributed. To overcome the lack of drinking water in the country, Algeria has chosen seawater desalination. Desalinated water intended for human consumption must comply with potability standards (physicochemical and microbiological quality). The objective of this study is to evaluate the physicochemical and microbiological quality of desalinated water from the Bousmail desalination plant. Desalinated water samples were taken according to the sampling standards for samples intended for physicochemical and microbiological analyses. The physicochemical analyses focused on pH (using a pH meter), electrical conductivity is measured using a conductivity meter and turbidity using a turbidimeter. Pollution parameters were also determined (NH_4^+, No_2^-, PO_4^{-3}). Microbiological analyses focused on total coliforms and fecal coliforms, fecal streptococci. The results of physicochemical and microbiological analyses showed that the water is of good physicochemical and microbiological quality and can be used for human consumption.
Keywords: *Algeria, desalinated water, microbiological and physicochemical quality, drinking water.*

PRODUCTION AND CHARACTERIZATION OF CARBON NANOTUBES FROM BIOCHAR UNDER MICROWAVE IRRADIATION

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ABSTRACT

Carbon nanotubes (CNTs) are widely used in a variety of fields to produce a diversity of products, including hydrogen storage systems, and field emitters. In the proposed study, CNTs synthesized via biochar under the microwave irradiation method. In this method, the combination of charcoal and ferrocene are used to synthesize CNTs from the biochar approach. Biochar samples for CNTs synthesis are made from pyrolyzed agro-industrial waste such as rapeseed cake, hazelnut hulls, wheat straw, and oat hulls at different temperatures. The biochar was produced from agro-industrial biomass. During experiments, 100g of biomass was placed in a microwave reactor. The samples were pyrolyzed at 400 °C to 600°C. SEM analysis was used to confirm the morphology of CNTs. SEM micrographs revealed the perfect structure of multiwall carbon nanotubes, while interlayers spacing was changed due to variation of catalysts and measured about 0.34nm. Further, the optical properties were examined by UV-visible spectroscopy. In the UV, one band is clear at 240 nm region due to resonance of nanotubes pi(π) electrons of carbon nanotubes. XRD was used to analyze the glassy structure of prepared CNTs under microwave revealed that the creation and growth of CNTs were mostly influenced by microwave irradiation and the ferrocene catalyst. The structure of CNTs was developed under microwave heating and in the presence of ferrocene catalyst. To research how nitrogen impurities adhere to CNTs, FTIR experiments were conducted in the 400–4000 cm^{-1} range. The sample's FTIR spectra exhibit prominent peaks that correspond to C-H and C=C, respectively.

IMPACT OF CLIMATE CHANGE RELATED SHIFTS IN THE AGRICULTURAL SYSTEM SPECIAL FOOD SECURITY AND LIVELIHOOD OF THE FARMING COMMUNITY IN SUKKUR SINDH-PAKISTAN

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Abstract
The threat of climate change is particularly in the areas of agriculture, land use, energy consumption, biodiversity, health and water resources. Poor people who depend on agriculture as a means of livelihood are the most vulnerable to the challenges stemming from climate change. The impacts of climate change will surely be felt in almost all the geographical location as well as sectors of the nation's development. Specifically it will manifest in the following ways; burning fossil fuels, deforestation and a growing world populations. There are four major causes of climate change namely; astronomical causes, volcanic eruptions, variations in solar output and changes in earth's environment as a result of human activity. The intergovernmental panel on climate change (IPCC) says that human activity is the main cause of the changes seen in climate. This it does through activities that cause emissions of greenhouse gases (mainly consist of carbon dioxide, water vapor, methane and nitrous oxide). Climate change impacts the four key dimensions of food security, namely food availability, food stability, food accessibility, and food utilization. Availability of agricultural products is affected by climate change directly through its impacts on crop yields, crop pests and diseases, and soil fertility and water-holding properties. It is also affected by climate change indirectly through its impacts on economic growth, income distribution, and agricultural demand. In addition, stability of crop yields and food supplies is negatively affected by variable weather conditions. Therefore, climate change mitigation can be partly achieved through the reduction of greenhouse emissions from agriculture by encouraging environmental friendly agricultural practices. The need for effective adaptive measures to changes in climatic condition cannot be overemphasized as the challenges posed by vagaries of climate has an adverse effect on food security, livelihood, labor productivity, poverty and the economy in general. It is recommended that policy measures on climate change adaptation should be very supportive of climatic information dissemination as successful adaptation to climate change depends on reaching the most vulnerable, who may not have easy access to and appropriate understanding of existing climate information.

EXPLORING THE IMPACT OF GRAZING AND FEEDLOT SYSTEMS ON RUMINANT ANIMAL PRODUCTION: ASSESSING EFFICIENCY AND EFFECTIVENESS

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ABSTRACT

Ruminant livestock management for food production is essentially divided into two types: grazing-based systems and feedlot systems. Each system has specific benefits and challenges, which have a considerable impact on production efficiency and effectiveness. This study will compare the two systems by assessing critical parameters such as animal growth performance, feed efficiency, environmental impact, and overall cost-effectiveness. Grazing systems that rely on natural forage are frequently thought to be more sustainable, as they promote animal wellbeing and lower feed costs. However, fluctuations in fodder quality, climatic reliance, and slower growth rates can all reduce output. In contrast, feedlot systems, which involve extensive feeding of high-energy, grain-based diets, often result in faster growth rates and improved production efficiency. Nonetheless, feedlots confront issues like as rising feed costs and greater disease risk.

Nonetheless, feedlots confront issues such as rising feed costs, an increased risk of disease transmission, and increased environmental concerns, notably with waste management and greenhouse gas emissions. The study examines these systems using a variety of performance metrics, weighing the trade-offs between sustainability, economic feasibility, and animal welfare. According to preliminary findings, while feedlot systems may provide higher output, grazing systems contribute more positively to long-term sustainability goals. This comparison sheds light on optimizing ruminant production systems to fulfil rising demand for animal products while balancing environmental and economic concerns.

Keyword(s): Grazing-based systems, Feedlot systems, Ruminant, Livestock management

ADOPTION OF BIOSECURITY PRACTICES AMONG RUMINANT FARMERS AND HERDERS

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ABSTRACT

The adoption of biosecurity practices by ruminants is essential to improve animal health, reduce disease transmission and ensure sustainable livestock production. However, the level of adoption is influenced by many factors related to production systems and management practices. This article examines how ruminant producers and breeders implement biosecurity measures, such as quarantine, vaccination, hygiene and animal movement restriction, with a focus on factors such as farm size, education and access to resources. Smallholder farmers, who dominate ruminant production in many regions, often lack the financial and technical capacity to fully adopt biosecurity practices and therefore rely more on traditional management methods. In contrast, larger commercial operations with greater access to veterinary resources and services tend to implement more comprehensive biosecurity protocols and have higher rates of adoption of biosecurity practices.

The following factors, such as farm size, education and access to resources, have a significant impact on the adoption of biosecurity practices in the agricultural sector. Farmers, who are the main ruminant producers in many regions, often face difficulties to fully adopt biosecurity practices due to limited financial and technical capacity, relying more on traditional management methods. Farmers, especially those involved in transhumance, face additional difficulties in implementing biosecurity measures due to the mobility of their animals. Socio-economic barriers, lack of awareness and cultural factors also significantly influence the adoption of biosecurity among this group. The study highlights the need for targeted extension services, training programs and policy interventions to improve awareness and access to biosecurity measures, particularly for smallholder farmers and mobile herders. By encouraging the adoption of biosecurity practices, the risk of disease outbreaks can be minimized, leading to improved productivity, reduced economic losses and better public health outcomes.

Keyword(s): Adoption, Biosecurity practices, Ruminants, Smallholder, Commercial

HINDU INFLUENCE ON ISLAMIC SOCIETY AND CULTURE IN GUJARAT DURING 16TH AND 17TH CENTURY

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Abstract:
India's cultural landscape is defined by its immense diversity, shaped by centuries of interaction among various customs, languages, art forms, and religions. This diversity is particularly evident in the cultural exchanges between Hindu and Muslim communities, especially during the Mughal era, when Gujarat emerged as a prominent region for the fusion of these traditions. Gujarat's strategic location as a trade hub and its inclusion in the Mughal Empire fostered a dynamic cultural interchange, influencing language, art, architecture, festivals, and social practices.

The arrival of Muslim immigrants from Persia, Afghanistan, and Khurasan laid the foundation for a gradual process of cultural synthesis that culminated during the Mughal period. Over time, Muslims absorbed a range of Hindu customs, from language and art to marriage and funeral rites. This blending of traditions produced a unique "Indian Muslim culture" that retained Islamic roots while embracing elements of Hindu culture. The Mughal emperors, particularly Akbar, played a pivotal role in promoting religious tolerance and integrating Hindu practices into the Muslim cultural fabric, facilitating the exchange of ideas and the creation of a syncretic culture.

Gujarat, with its long history of trade and cultural exchange, saw the coexistence and blending of Islamic and Hindu influences. The region's art and architecture reflected this cultural fusion. Muslim rulers in Gujarat adopted many elements from Hindu temples and other structures, leading to the development of a distinctive style of Islamic architecture that incorporated Hindu artistic techniques. The architectural landscape, which combined Islamic principles with local traditions, served as a testament to the rich cultural dialogue between the two communities.

Language was another area where the fusion of Hindu and Muslim cultures was apparent. Persian, Arabic, and Turkish were initially the dominant languages of the Muslim elite, but as Muslims interacted with Hindus, local languages like Hindi, Gujarati, and Punjabi began to influence Muslim literature. This cultural exchange led to the emergence of Urdu, a language that blended Persian, Arabic, and local dialects, symbolizing the convergence of Hindu and Muslim traditions in India.

Festivals, too, underwent significant transformations as a result of these cultural interactions. The celebration of Muharram, a solemn Islamic observance, was adapted to incorporate elements of Hindu festivities. In Gujarat, for example, the practice of offering Sharabat to children during Muharram, a tradition that mirrored the Hindu festival of Holi, exemplified this blending of customs. Similarly, Shab-i-barat, a Muslim festival coinciding with the Hindu Shivratri, became a point of intersection between Hindu and Muslim practices, further illustrating the syncretic nature of the region's cultural landscape.

The transformation of social customs, particularly in the realm of marriage, was another area of cultural fusion. Hindu practices such as early marriages and the role of women in matchmaking were adopted by Indian Muslims, altering the traditional Islamic approach to marriage. Likewise, funeral customs, which were influenced by Hindu beliefs, saw the

integration of practices such as the use of crimson shawls in Gujarati Muslim funerals, further demonstrating the fluidity of cultural boundaries.

The Mughal era also brought about major changes to architecture, a timeless representation of cross-cultural interaction. Hindu and Islamic architectural elements were combined in Gujarat's early Muslim structures, which were frequently modified from Hindu temples. For example, the usage of Hindu-style pillars in mosques demonstrated the cultural and practical adjustments made as Muslim artisans and monarchs operated in the surrounding environment. Muslims developed a distinctive architectural style that flourished throughout the Mughal era as they gradually established their power and resources and started creating imposing structures with distinctly Islamic components while preserving some of Hindu architectural traditions.

The role of Gujarat in the broader Mughal Empire was central to the development of this syncretic culture. The region's prosperity due to trade and commerce enabled the flourishing of both Islamic and Hindu cultural forms, which in turn influenced the development of art, language, social customs, and architecture. As Gujarat became integrated into the Mughal Empire, the processes of Indianization among Muslims accelerated, leading to the creation of a distinct Indian Muslim culture.

KEYWORDS: Gujarat, Culture, Custom, Mughal.

THE USE OF ARTIFICIAL INTELLIGENCE IN ENSURING FOOD SECURITY

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Abstract:
The quest for a sustainable food system has led to the use of cutting-edge technologies such as Artificial Intelligence (AI) to improve food security. The FAO, IFAD, UNICEF, WFP, and WHO have released a report that global food insecurity is expected to worsen due to accelerated population growth, overexploitation, the depletion of natural resources and unprecedented climate change. To feed the growing population, 70% more food will be needed by 2050, while global food intake from the consumption of agricultural products is projected to increase by 1.3% per year over the next decade. Artificial intelligence applications are used to reduce human intervention and effort. Improving agricultural yields, enhancing crop monitoring and pest detection, AI-Prediction in food quality management (FQM) optimizing irrigation and resource management, reducing food waste through smart logistics are some of the uses of artificial intelligence in food science. There are advantages and drawbacks to these approaches when it comes to theoretical understanding and model interpretation. This review article summarizes different AI techniques used in food security system. Furthermore, there are significant challenges such as data quality, ethical considerations and the complexity of AI models that must be addressed.
Key words: Artificial intelligence, food security

COMPUTATIONAL INSIGHTS OF GEOMETRIC AND ELECTRONIC PROPERTIES OF PYROVANADATES

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Abstract
Computational calculations have become an indispensable tool in the hands of researchers for efficiently resolving complex problems. Vanadates have attracted strong attention due to their potential applications in photocatalysis, environmental purifications, water splitting, and electrochemical sensors ascribed to their exceptional photocatalytic and electrochemical properties. This research work provides deep insights into the First-Principle calculations of pyrovanadates (V_2O_7- type). This innovative task has been carried out using the DS-BIOVIA Material studio program package licensed to GCUF. The computational calculations have been performed owing to the DFT-D approach via CASTEP or DMol^3 modules by applying multiple functionals such as GGA/PBE, GGA/RPBE, GGA/PW91, and LDA/CA-PZ. This research project includes computational predictions of geometry optimization, band structure, band gap, density of states (DOS), partial density of states (PDOS), elastic constants, and electron density distribution. The geometrically optimized structures of the crystals have been visualized and analyzed using the VESTA program. Moreover, Origin-Pro software has been employed to analyze DOS, PDOS, VBM, CBM, and optical properties. Elastic constants tell about the material's rigidity and stiffness. Population analysis studies give insights into ionic or covalent nature of compounds. This research study provides comprehensive detail of the material properties that make them suitable for functional applications in various emerging fields.

TRANSFORMING COOPERATIVES THROUGH STRATEGIC LOGISTICS: A PATH TO SUSTAINABILITY AND GROWTH

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Abstract:
Strategic logistics management plays a fundamental role in optimizing the performance of cooperatives by addressing key operational areas such as goods flow optimization, cost reduction, inventory management, traceability, local producer support, and sustainability. This study integrates quantitative and qualitative data to evaluate the impact of advanced logistical strategies and technologies, including real-time tracking systems and automation, in improving operational efficiency and delivery timelines while reducing costs. The analysis emphasizes the dual benefits of adopting sustainable logistics practices, which align cooperatives with environmental goals while enhancing competitiveness.

Despite the clear advantages, challenges such as productivity fluctuations require a balanced approach to implementation. The proposed solutions focus on enhancing collaboration with local producers, integrating innovative technologies, and embedding sustainability in all logistical processes. Strategic logistics management emerges as a transformative lever for cooperatives by aligning operational goals with social and environmental objectives.

This research also provides a comprehensive roadmap for cooperatives to navigate logistical complexities while maintaining economic viability. The findings offer practical insights into how strategic logistics management can bolster competitiveness, align operations with sustainability goals, and advance cooperatives' social mission. These contributions make logistics a powerful tool for fostering growth, innovation, and long-term sustainability in cooperative frameworks.

Keywords: Strategic Logistics, Cooperatives, Advanced Technologies, Sustainability, Inventory Management

ÂŞIK GARİP HİKAYESİ'NİN ERMENİ HARFLİ TÜRKÇE NÜSHASI ÜZERİNE BİR İNCELEME

A STUDY ON THE TURKISH COPY WITH ARMENIAN LETTERS OF THE STORY OF ASHIK GARİP

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ÖZET

Âşık Garip, sadece Türk dünyası edebiyatlarında değil, pek çok farklı millete ait edebiyat içinde kendine yer bulmuş bir halk hikâyesidir. Hikâyeye, yazma ve matbu metinlerin yanı sıra sözlü kaynaklardan da erişilebilemektedir. Metinler arasında dönemsel, bölgesel ve aktarımsal hatta biçimsel farklar da bulunabilmektedir. 1922 yılındaki Ermenice baskısında "*Hoca Ahmed*" yerine "*Melik Abraham*" adının kullanılmasında olduğu gibi bazı varyantlarda yer, şahıs vb. adların değiştirildiği/yerelleştirildiği bilinmektedir. Ermeni harfli Türkçe olarak basılan üç farklı künye kaydına erişilebilmiştir. Bunlardan metnine erişebildiğimiz ve incelememize konu olan nüsha, "*Hikâyeyi Aşık Garib/ Türküleriyle Beraber*" başlığını taşımaktadır ve İstanbul'da Dimaksyan Matbaası'nda 1875 yılında basılmıştır. Metin, kapak ve iç kapaklar dahil 111 sayfadan oluşmaktadır. Nazım ve nesir karışık şekilde yazılan nüshanın bazı sayfalarında gölgelenmeler bulunmakla birlikte okunurluk düzeyi oldukça yüksektir. Ermeni harfli Türkçe metnin, hangi nüsha dikkate alınarak yazıldığının tespiti zor olmakla birlikte metnin epizot yapısı, muhtelif varyantlarıyla oldukça benzer bir nitelik taşımaktadır. Ermeni harfli Türkçe metinde Âşık Garip, Tebriz'de yaşamaktadır ve asıl adı Resul'dür. Babası ise Hoca Ahmed adlı bir bezirgândır. Kahramanın ailesi zenginken babasının ölümünün ardından Resul'ün savurganlığı yüzünden fakir duruma düşmektedir. Bu sürecin ardından kahramanın iş arama çabaları olumsuz bir sürece evrilmiş; metne göre tam 32 farklı yerde çıraklık yapmış ancak her defasında dayak yiyerek kovulmuş; en sonunda bir şairin yanında çırak olmuştur. Âşık olma ve saz çalma aşamasına rüyasında Hızır'ı görerek erişmiştir. Rüyasında Tiflis'te yaşayan Hoca Sinan'ın kızı Şahsinem'e âşık edilmiştir. Âşık Garip'in sazı ve sözü hem çok beğenilmekte hem de oldukça kıskanılmaktadır. Âşık olmasının ardından olay örgüsü ve motif yapısı Şahsinem'i araması, onunla karşılaşması, gurbete gitmesi, Şahsinem'in amcasının oğluyla evlendirilmek istenmesi, Âşık Garip'in bundan haberdar olması, Âşık Garip'in sevdiğinin memleketine dönmesi ve çeşitli maceralardan sonra düğünlerinin gerçekleşmesi şeklinde ilerlemektedir. Çalışmamız, Ermeni harfli Türkçe metnin tanıtılması, epizot ve motif yapısının ortaya konulması amaçlarını taşımaktadır.

Anahtar Kelimeler: Ermeni harfli Türkçe, Âşık Garip, halk hikâyesi

ABSTRACT

Ashik Garip is a folk tale that has found its place not only in the literature of the Turkish world but also in the literature of many different nations. The story can be accessed through both written and printed texts, as well as oral sources. There are also periodic, regional, and even formal differences among the texts. For instance, in the Armenian edition from 1922, the name "*Melik Abraham*" is used instead of "*Hoca Ahmed*", indicating that names and places have been changed or localized in some variants. Three different bibliographic records published in Turkish using Armenian letters have been accessed. Among these, the version that we could examine is titled "*Hikâyeyi Aşık Garip/ Türküleriyle Beraber*" and was printed in 1875 at the

Dimaksyan Printing House in Istanbul. The text consists of 111 pages, including covers and endpapers. Although there are some shadowing issues on certain pages of the mixed prose and poetry manuscript, the readability is quite high. Determining which version the Armenian-letter Turkish text was based on is challenging, but the episodic structure of the text shares a similar quality with various variants. In the Armenian-letter Turkish text, Ashik Garip lives in Tabriz, and his real name is Resul. His father is a merchant named Hoca Ahmed. While the hero's family was wealthy, they fell into poverty due to Resul's extravagance following his father's death. After this process, the hero's attempts to find a job turned negative; according to the text, he apprenticed in 32 different places but was kicked out each time after being beaten. Eventually, he became an apprentice to a poet. His journey to becoming a poet and playing the saz began when he saw Hızır in a dream. In his dream, he fell in love with Şahsinem, the daughter of Hoca Sinan, who lives in Tbilisi. Ashik Garip's music and poetry are both highly appreciated and greatly envied. After he becomes a poet, the plot and motif structure unfolds with his search for Şahsinem, their meeting, his journey to a foreign land, the desire to marry Şahsinem to his cousin, Garip's awareness of this, Ashik Garip's return to his beloved's homeland, and their wedding after various adventures. Our study aims to introduce the Armenian-letter Turkish text and to reveal the episodic and motif structure.

Keywords: Turkish with Armenian script, Ashik Garip, folk tale

FEN BİLİMLERİ ÖĞRETMENLERİNİN 6. SINIF 'VÜCUDUMUZDAKİ SİSTEMLER' ÜNİTESİNİN ÖĞRETİMİNE YÖNELİK GÖRÜŞLERİ

SCIENCE TEACHERS' VIEWS ON THE TEACHING OF THE 6TH GRADE UNIT 'SYSTEMS IN OUR BODY'

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ÖZET

Fen öğretim programları yaşanan değişim ve gelişmeler sonucu değişen ihtiyaçlara ve öğretim yaklaşımlarındaki yeniliklere uygun olarak yenilenmektedir. Programın kazanımları ilgili disipline yönelik bilgi ve becerileri sarmal yaklaşımla sunan önceki öğrenmelerle ilişkilendirilmiş, anlamlı ve kalıcı öğrenmeyi sağlayan, üst bilişsel becerilerin kullanımına yönlendiren ve hayatla ilişki kurmayı sağlayacak niteliktedir. Bu niteliklerin korunması için gerekli görüldükçe programda değişiklikler yapılmaktadır. Son değişiklik 2024 yılında Türkiye Yüzyılı Maarif Modeli adı altında gerçekleştirilmiştir. Değişiklik yapılan ünitelerden biri önceki programda 6. sınıfın altıncı ünitesi olan Vücudumuzdaki Sistemler ve Sağlığı ünitesidir. Bu araştırmanın amacı 2018 Fen Bilimleri Dersi Öğretim Programı 6. sınıf 'Vücudumuzdaki Sistemler ve Sağlığı' ünitesinin kazanımlarına ayrılan süreyi yetersiz bulan fen öğretmenlerinin bu ünitenin öğretimine yönelik görüşlerini incelemektir. Nitel yöntemle yürütülen çalışmada altı fen bilimleri öğretmeniyle görüşmeler gerçekleştirilmiştir. Görüşmelerden elde edilen veriler betimsel analize tabi tutulmuştur. Bulgular araştırmaya katılan öğretmenlerden beşinin dolaşım sisteminde süreyi yetersiz bulduğunu, bir öğretmenin ise bütün sistemler için süreyi yetersiz bulduğunu ortaya koymaktadır. Ünite kazanımları için verilen sürenin yetersiz gelme nedenleri konusunda öğretmenlerin çoğu öğrenciler için konu kavramlarının zor ve ağır geldiğini belirtmişlerdir. Öğretmenlerden bazıları sistemlerin zor ve karmaşık olanlarını üst sınıf seviyelerinde daha basit ve anlaşılır olanlarının ise küçük sınıf seviyelerinde verilmesini çözüm önerisi olarak sunmuştur.

Anahtar Kelimeler: Fen Öğretim Programı, Vücudumuzdaki Sistemler Ünitesi, Fen Bilimleri Öğretmenleri, Öğretmen Görüşleri

ABSTRACT
Science teaching programmes are renewed according to changing needs and innovations in teaching approaches as a result of changes and developments experienced. The outcomes of the programme are linked to the previous learning outcomes that present the knowledge and skills associated with providing meaningful and sustained learning, guiding the use of meta-cognitive skills and providing a relationship to life. Changes are made to the programme as necessary to maintain these qualities. The last change was made in 2024 under the name of the Turkish Century Education Model. One of the changed units is the unit "Systems in Our Body and Health", which was the sixth unit of the 6th grade in the previous programme. The purpose of this study is to examine the opinions of science teachers, who believe that the time allocated for the achievement of the 'Systems in Our Body and Health' unit of the 6th grade of the 2018 Science Course Curriculum is insufficient, regarding the teaching of this unit. In the study, which was conducted using a qualitative method, interviews were conducted with six science teachers. The data obtained from the interviews were subjected to descriptive analysis. The results show that five of the teachers who participated in the study found the time for the circulatory system insufficient, while one teacher found the time for all systems insufficient. Regarding the reasons why the time given for the unit outcomes was insufficient, most of the teachers stated that the subject concepts were difficult and heavy for the students. As a solution, some of the teachers suggested that the difficult and complex systems should be given in the higher grades and the easier and more understandable systems in the lower grades.
Keywords: Science Curriculum, Systems in Our Body Unit, Science Teachers, Teachers' Views

THE ROLE OF RUMINATION, SELF-REFLECTION IN PREDICTING PSYCHOLOGICAL VULNERABILITY AMONG UNIVERSITY STUDENTS

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Abstract
The purpose of the research was to explore the relationship between rumination and psychological vulnerability and role that is being played by self-reflection. The data was conducted from university students (*N*=300). For this specific purpose, the scales that were used are Rumination Inertia Scale (Shahzad & Jabeen 2021), Self-Reflection and Insight Scale (Grant & A.M, 2002) and factor 1 which is sense of dysfunctionality of Student Problem Checklist (Saleem& Mehmood, 2011). The results of hierarchal regression analysis showed that among gender psychological vulnerability were found more in female gender than male. Rumination about self, spiritual rumination and insight are significant positive predictors of psychological vulnerability. The result of T test analysis demographic variable No. of siblings in rumination, self-reflection and psychological vulnerability which was higher in group 1(1-3 siblings). The current research is helpful to understand the association between ruminations and psychological vulnerabilities with cultural significance.
Keywords: Rumination, Self-Reflection, Psychological Vulnerability.

RECENT INNOVATIONS IN SOLID WASTE MANAGEMENT: INTERNET OF THINGS AND ARTIFICIAL INTELLIGENCE TOWARS SMART MANAGEMENT SYSTEM

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ABSTRACT:
This study investigates the integration of Internet of Things (IoT) and Artificial Intelligence (AI) technologies in solid waste management (SWM) to enhance operational efficiency and sustainability.
Background: The global increase in solid waste generation, projected to rise from 2.01 billion tons in 2018 to 3.40 billion tons by 2050, presents significant challenges for traditional waste management systems, which often rely on inadequate practices such as landfilling and illegal dumping. These methods contribute to environmental degradation and public health risks.
Methods: The research employs a comprehensive review of recent innovations in smart waste management systems, focusing on the implementation of IoT and AI technologies. It analyzes various case studies showcasing smart bins, automated collection systems, and machine learning applications that optimize waste collection and processing.
Results: The findings indicate that integrating IoT and AI can significantly improve the efficiency of SWM by enabling real-time monitoring, predictive analytics, and automated decision-making processes. These technologies facilitate better resource allocation, reduce operational costs, and enhance community engagement in recycling efforts.
Conclusions: The study concludes that adopting smart technologies in SWM is crucial for addressing the limitations of traditional practices. By fostering innovation through IoT and AI, cities can achieve sustainable waste management solutions that minimize environmental impact and promote public health. The research emphasizes the need for supportive policies and investments to facilitate the transition towards smarter waste management systems, ultimately contributing to cleaner urban environments and improved quality of life.
Key words: Smart waste management, Artificial Intelligence (AI), Internet of Things (IoT), Solid waste management, sustainability.

TWENTY-FIRST CENTURY PROFESSIONAL CAPACITY TRAINING NEEDS FOR EFFECTIVE TEACHING AND LEARNING AMONG SCIENCE TEACHERS IN NIGER EAST SENATORIAL ZONE, NIGER STATE. NIGERIA

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Abstract
The 21st-century educational landscape is shaped by rapid technological advancements, evolving pedagogical theories, and a growing emphasis on 21st-century skills. This study investigates the professional capacity training needs of science teachers in Niger East Senatorial Zone, Niger State, Nigeria, to enhance effective teaching and learning. A descriptive survey research design was employed, with a sample of 288 science teachers (159 male, 129 female) randomly selected from local schools. The study utilized a 34-item questionnaire titled *Twenty-First Century Science Teachers' Professional Capacity Training Needs Questionnaire (TCSTPCTN)*. Validation was conducted by experts from the Federal University of Technology, Minna, and the Niger State Teacher Professional Development Institute. The instrument demonstrated strong reliability with a Cronbach Alpha coefficient of 0.84. Descriptive statistics, including mean and standard deviation, were used to analyze research questions using statistical Package for social sciences SPSS Version 26 while the hypotheses were test using Mann-Whitney U-test at 0.05 level of significant. Findings revealed that science teachers in the Niger East Senatorial Zone require training in pedagogy and classroom management and organization skills, Assessment and feedback strategies to improve teaching effectiveness. The study recommends that secondary schools should implement professional development programs combining 21st-century pedagogical skills and classroom management and organization skills, Assessment and feedback strategies. These programs should emphasize the connection between effective teaching practices and fostering a productive classroom environment.

Keywords: Science Teachers, Educational landscape, technological advancements, pedagogical theories.

BIOREMEDIATION STRATEGIES TO ALLEVIATE HEAVY METALS FOR SOIL QUALITY MANAGEMENT AND SUSTAINABLE AGRICULTURE

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Abstract
Heavy metal contamination arising from various human activities create serious problems to environment. The present study explores the role, importance and application of various remediation strategies to remove heavy metals contaminants from soil to increase the productivity of soil and sustain agriculture. A thorough review of literature of last two decades shows various practices like physical,chemical and biological were employed for the removal of heavy metals from the soil. Contamination of heavy metals in soil reduces availability of nutrients in soil, disrupts microbial activity and retard the growth of plants by affecting their physiological processes. Various physical remediation strategies are effective but the cost associated with them is very high and also causes problems to the environment. Bioavailability of these metals can be reduced by the addition of synthetic amendments such as the use of chelators but there are chances of contaminations with these practices. Biological remediation strategies involves phytoremediation and bioremediation because of their environmental sustainability and efficiency these strategies are more effective as compared to physical and chemical remediation strategies. In these methods microbes or metal accumulator plants helps in the detoxification of heavy metals from the soil. Various research studies indicates that integration of various methods which combine biological remediation with bio based manures such as compost or vermicompost enhances the microbial diversity increases nutrients uptake in soil ensures the restoration of degraded soil. Various nanotechnological approaches like the use of nanofertilizers is highly beneficial in removing these toxic metals from soil. Nanofertilizers have the potential to absorb large number of contaminants, moreover accelerate reactions by decreasing energy to disintegrate them because of their distinct surface characteristics. Most of these strategies are eco-friendly and plays a crucial role in the remediation of soil contaminated with toxic metal pollutants.
Keywords : heavy metals, soil health, remediation, sustainable agriculture

INVESTIGATING THE IMPACT OF HOTELS SUSTAINABILITY SCORE ON DEFAULT PROBABILITY IN ITALY

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Abstract
Corporate social responsibility (CSR) and sustainability practices play a pivotal role in aligning corporate practices with stakeholders' expectations. If this is true in most sectors, even stronger regards the hospitality sector; among others, the importance of environmental attention has become increasingly pronounced, as industry players strive to meet the stringent requirements of socially conscious travelers who prioritize sustainability and responsible practices.
Hence, this study aims to examine the impact of hotels' CSR practices – measured through the Booking Sustainability Index (BSI) that involves a set of voluntary-declared aspects, such as waste and plastic management, energy consumption, and employees' well-being – on the probability of financial default – proxied by Altman's Z-scores.
Using a dataset of 146 Italian hotels over the period 2020-2022, it employs logit and probit regression models to analyze the relationship.
Findings reveal that a higher BSI significantly prevents the likelihood of financial default, emphasizing the strategic importance of sustainable practices in the hospitality sector. Results are robust if tested via logit and probit models as well as OLS and lasso regressions.
This research offers practical implications for managers in the hospitality industry, suggesting that paying attention to sustainability issues can improve financial stability and enhance stakeholders' approval, especially among customers. Theoretically, it contributes to stakeholder, legitimacy, and signaling theories as well as to the literature on CSR and financial default.
Keywords: hospitality, CSR, default probability, sustainability

LINGUISTIC COMMUNICATION IN SPECIAL EDUCATION

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The community is experienced as a practice of the we, which does not overwhelm the I, but gives it space according to the relational model of communication. However, not all communities are educational, because not all are in continuity with an authentically democratic conception of society.

The pedagogical approach to the community rediscovers and relaunches it as a place of democratic education and training of the individual in an emancipatory key, thus meeting with the "pedagogies of liberation" in the common interest of promoting the collective awakening of a new social and political conscience. The common purpose of the two pedagogical approaches is to give back to the individual his own power, reaffirming the rights of the excluded and gradually of every other subject, all called to form themselves as political subjects, capable of transforming society in an authentically democratic direction. Education is entrusted with the important task of forming a new citizenship, aware, active, participatory and critical, keeping alive the differences and specificities of each; it is about promoting bottom-up participation, articulated in a pluralistic and differentiated way in relation to different communities. The basic assumption of this emancipatory approach is that the structure of society presents forms of power and oppression that are also reproduced within educational contexts, creating various forms of social injustice. It is therefore necessary to start from the critique of educational institutions to identify the power relations that make them places of reproduction of ideologies, rather than places of human growth. Liberation pedagogists take on the task of critically problematizing the existing and of prefiguring possible alternatives, reflecting on a dialogical educational practice that is a fight against the different forms of domination, awareness-raising on the part of the weakest subjects and the search for an authentic democracy. It is a “pedagogy for the oppressed” (Freire, 2002), that is, for all those who are excluded from the world, the poor, the beggars, the illiterate, with the intent of activating a process of awareness that makes them transformative subjects and no longer beings who accommodate themselves to the existing. The method of this struggle for humanization is democratic, authentic and dialogical education that ≪welcomes the dramatic challenge of the present moment≫ and denounces the different forms of dehumanization that everywhere deny the humanity of the person ≪in injustice, exploitation, oppression, violence of the oppressors≫. The pedagogy of liberation takes on the task of reversing the tendency towards dehumanization, going beyond the conditioning of a culture of silence, whose nature is political, since it keeps the oppressed in a condition of silence, passive acceptance and dependence. We need to overcome a custodial education, in which knowledge is deposited as in a bank to be archived, which reduces men to silence and chronic illiteracy, forcing them to adapt to a pre-established reality and condemning them to be "spectators and not re-creators of the world". It must be a pedagogy in which dialogue is an essential element of democracy, which must be learned permanently and which is achieved through change, participation, overcoming individualism, openness and listening to others. The community becomes a place of liberation and democratic education: the art of writing, for example, through comparison and exchange between different subjects, gives them

back the creative power to build a collective history, that is, it makes them community and historical subjects, acquiring confidence in their own ability to create new aspects and where they can freely assert their values. The realization of democracy is thus favored by the development of creativity which is a transformative force and by ethical commitment which is openness to new horizons and confidence in a better future. And therefore, the educational practice experienced in community contexts generates the democratic co-responsibility of all, placing in the foreground the care of the common good and non-violent respect towards others, within a new planetary horizon that calls everyone, beyond cultural, ethnic, religious, economic distinctions, to engage in a choral project aimed at the defense and the very survival of the world. Education is not an aspect that must be delegated only to specialist figures, but an alliance between all the actors involved is necessary to create an authentic educational community that supports the growing subject.

We need to establish New Pacts of educational co-responsibility to be redefined and consolidated. If we think that education should only concern parents and teachers we have already failed, but we need to create an imaginary that includes the educational function in society.

Keywords: pedagogy- education- communication- community- democracy

SPORUN SOSYOEKONOMİK EŞİTSİZLİKLERİN AZALTILMASINDAKİ ETKİSİ
THE ROLE OF SPORTS IN REDUCING SOCIOECONOMIC INEQUALITIES

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ÖZET
Sosyoekonomik eşitsizlikler, toplumların refahını ve bireylerin yaşam kalitesini olumsuz etkileyen en temel sorunlardan biridir. Bu eşitsizlikler, eğitim, sağlık ve sosyal katılım gibi alanlarda derinleşerek bireylerin fırsatlara erişimini sınırlamaktadır. Sporun, bireyler ve gruplar arasındaki bu uçurumları kapatma potansiyeli, günümüzde çeşitli araştırmalarla desteklenmektedir. Spor etkinlikleri, özellikle dezavantajlı grupların sosyal hayata katılımını artırarak toplumsal dayanışmayı güçlendiren bir platformdur.

Bu çalışmada, sporun sosyoekonomik eşitsizliklerin azaltılmasındaki rolünü teorik ve ampirik bir yaklaşımla ele alınmaktadır. Öncelikle, sporun ekonomik kalkınmaya olan katkıları, istihdam fırsatlarının yaratılması ve bireylerin sosyal sermayesini artırması gibi etkilerinin yanı sıra farklı ülkelerden ve toplumlardan elde edilen vaka örnekleri ile sporun eşitsizlikleri azaltmadaki somut etkileri analiz edilmiştir. Çalışmada ayrıca, spor politikalarının dezavantajlı bireyler ve gruplar üzerindeki etkisini değerlendiren uluslararası uygulamalarda ele alınmıştır.

Elde edilen bulgular, sporun yalnızca fiziksel ve ruhsal sağlık üzerindeki olumlu etkilerinden ibaret olmadığını, aynı zamanda bireyler ve gruplar arasındaki ekonomik ve sosyal uçurumları kapatma potansiyeline sahip olduğunu göstermektedir. Ayrıca, bireylerin spora katılımını teşvik etmek için çevresel faktörlerin düzenlenmesi gerektiği vurgulanmaktadır. Gelir düzeyi düşük bireyler için sporun erişilebilir hale getirilmesi, uzun vadede toplumsal refahı artırıcı etkiler yaratabilir. Bu bağlamda, uluslararası uygulamalar incelendiğinde, spor temelli sosyal programların özellikle göçmenler, engelli bireyler ve gençler gibi dezavantajlı grupların sosyal uyumuna önemli katkılar sunduğu görülmektedir. Sporun bireyler arası empati, hoşgörü ve sosyal kapsayıcılık gibi değerleri güçlendirdiğini ve ekonomik eşitsizlikleri azaltmada etkili bir araç olduğunu göstermektedir. Ayrıca politika yapıcıların, spor tesislerine erişimin artırılması gibi altyapı geliştirme projelerinin, düşük gelirli sosyal grupların spora katılımını önemli ölçüde artıracağı önerilmektedir. Son olarak, sporun eşitsizliklerin giderilmesindeki etkisi üzerine daha fazla çalışma yapılması gerekmektedir. Farklı sosyoekonomik gruplar üzerinde sporun eşitlik üzerindeki etkilerini inceleyen yeni araştırmalar, bu alandaki bilgi birikimini derinleştirecek ve politika yapıcılar için yol gösterici olacaktır. Sporun yalnızca bireysel faydalarıyla değil, toplumsal dönüşüm ve eşitlik sağlama kapasitesiyle de değerlendirildiği bir yaklaşım benimsenmesi, sürdürülebilir bir sosyal kalkınma stratejisinin temel taşlarından biri olabilir.

Anahtar kelimeler: Spor, Sosyoekonomik Eşitsizlik, Toplumsal Bütünleşme, Spor Politikaları

ABSTRACT

Socioeconomic inequalities are among the most fundamental issues adversely affecting the welfare of societies and the quality of life of individuals. These inequalities deepen in areas such as education, health, and social participation, limiting individuals' access to opportunities. The potential of sports to bridge these gaps between individuals and groups has been supported by various studies. Sports activities serve as a platform that enhances social participation, particularly among disadvantaged groups, and strengthens social cohesion.

This study examines the role of sports in reducing socioeconomic inequalities through a theoretical and empirical approach. It first analyzes the contributions of sports to economic development, such as creating employment opportunities and enhancing individuals' social capital. Additionally, it explores the tangible impacts of sports on reducing inequalities through case studies from different countries and societies. The study also evaluates international practices regarding the effects of sports policies on disadvantaged individuals and groups.

The findings indicate that sports not only have positive impacts on physical and mental health but also possess the potential to bridge economic and social gaps between individuals and groups. Furthermore, the importance of regulating environmental factors to encourage individuals to participate in sports is emphasized. Making sports accessible to low-income individuals can have long-term effects on improving social welfare. In this context, international practices show that sports-based social programs significantly contribute to the social integration of disadvantaged groups, such as migrants, individuals with disabilities, and youth. Sports are shown to be an effective tool for reducing economic inequalities while fostering values such as empathy, tolerance, and social inclusion among individuals.

Moreover, policymakers are recommended to focus on infrastructure development projects, such as increasing access to sports facilities, which could significantly boost the sports participation of low-income social groups. Finally, further research is required to investigate the effects of sports on reducing inequalities. New studies examining the impact of sports on equality across different socioeconomic groups will deepen the knowledge in this field and provide guidance for policymakers. Adopting an approach that evaluates sports not only for their individual benefits but also for their capacity to drive societal transformation and equity can become a cornerstone of sustainable social development strategies.

Keywords: Sports, Socioeconomic Inequalities, Social Cohesion, Sports Policies

LOGARİTMİK KAYIP FONSKİYONU
LOGARITHMIC LOSS FUNCTION

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ÖZET
"Logaritmik Kayıp Fonskiyonu (LKF)", literatürde bilinen kısa adıyla "**Log_Loss**", genel itibariyle sınıflandırma problemlerinde kullanılmakta olan modellerin performansını ölçmeye yarayan standart bir kayıp fonksiyonudur. İkili sınıflandırma (binary classification) ve çoklu sınıflandırma (multiclass classification) modellerinin doğruluğunu değerlendirmek için kullanılabilir.
Çarpraz entropi kaybı (cross-entropy loss) olarak da bilinen LKF, kullanılan sınıflandırma modelinin, gözlemleri atadığı sınıfları, gerçek sınıf değerleriyle karşılaştırarak hata miktarını ölçer. "Olasılıksal" sınıflandırıcı modeller, atadığı gözlemin doğru sınıfa atanma olasılığını da hesaplamaktadır. Bu da modelin güvenini ölçeklendirmek etkin bir araçtır. LKF, modelin tahmini anlamına gelen bu olasılıkları gerçek etiketlerle karşılaştırma yoluyla hatayı ölçer. Tahmin edileceği üzere, hata küçükse bu sınıflandırıcı modelin başarılı olduğu, büyükse de modelin performansının düşük olduğu anlamına gelmektedir.
Normal logaritmik kayıp fonksiyonu ve özel logaritmik kayıp fonksiyonu ve hibrit logaritmik kayıp fonksiyonu vb. kullanımları bulunan LKF, yanlış tahminleri cezalandırma yoluyla, modellerin optimizasyonuna ve doğru sonuç sınıf etiketleri elde etmesine katkıda bulunur. Olasılıksal sınıflandırıcı modellerin gücünü test eden önemli kriterlerden birisidir.
Brier Kayıp Fonksiyonu (BKF) ve Küresel Kayıp Fonksiyonu (KKF) LKF'ye alternatif olabilecek iki farklı kayıp fonksiyonuda bilinmekte ve yaygın bir şekilde kullanılmaktadır.
Yapılan literatür araştırmasında, LKF'ndan alternatifi konumunda olan iki standart fonksiyonun da aynı amaç için kullanılabileceği, ama veri kümelerinin ekserisinde, LKF'nin "uygun" bir kayıp fonksiyonu olduğu kanaatine varılmıştır.
Anahtar Kavramlar: Logaritmik Kayıp Fonksiyonu, Brier Kayıp Fonksiyonu, Küresel Kayıp Fonksiyonu.

ABSTRACT
"Log_Loss Function (LLF)", known in the literature as "Log_Loss", is a standard loss function that is used to measure the performance of models generally used in classification problems. It can be used to evaluate the accuracy of binary classification and multiclass classification models.
LLF, also known as cross-entropy loss, measures the amount of error by comparing the classes assigned to the observations by the classification model used with the real class values. "Probabilistic" classifier models also calculate the probability that the observation they assigned will be assigned to the correct class. This is an effective tool to scale the confidence of the model. LLF measures the error by comparing these probabilities, which mean the model's estimate, with the real labels. As can be expected, if the error is small, this means that the classifier model is successful, and if it is large, it means that the model's performance is low.
Normal logarithmic loss function and special logarithmic loss function and hybrid logarithmic loss function, etc. LLF, which has many uses, contributes to the optimization of models and

obtaining correct result class labels by penalizing wrong predictions. It is one of the important criteria that tests the power of probabilistic classifier models.
Brier Loss Function (BLF) and Spherical Loss Function (SLF) are two different loss functions that can be alternatives to LLF and are widely used.
In the literature research, it was concluded that the two standard functions, which are alternatives to LLF, can be used for the same purpose, but LLF is a "suitable" loss function in most data sets.
Keywords: Logarithmic Loss Function, Brier Loss Function, Spherical Loss Function.

DIALECTICAL DISCOURSE FOR CONFLICT RESOLUTION AND PEACE BUILDING

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This study explores the potential of both dialectical Malagasy and international proverbs as effective tools for conflict resolution. These proverbs encapsulate dialectical thinking, promoting nuanced, intermediate perspectives that facilitate balanced and harmonious resolutions between conflicting parties. Building on findings from our Ph.D. thesis, in which we argue that Malagasy proverbs, with their neutral appraisals (±) and cultural values (±), are particularly effective in mediation by fostering open-mindedness. As Hiley and Peat (2005) suggest, the resolution of conflicts is deeply influenced by the perspectives and attitudes of the involved parties. Through their dialectical structure, Malagasy proverbs offer alternative interpretations and flexible viewpoints that promote empathy and mutual understanding—key elements in successful conflict resolution.

This research work employs systemic functional grammar stylistics and linguocultural analysis to examine a selection of Malagasy and international proverbs, emphasizing their potential as peacebuilding tools. The findings highlight how these proverbs create space for the coexistence of opposing ideas, aligning with Madagascar's traditional conflict resolution approach, known as the "conciliatory middle ground," and offering broader implications for global peace initiatives. By bridging traditional wisdom with contemporary conflict resolution theories, we propose that dialectical proverbs provide a unique pathway for fostering dialogue and empathy. This research paves the way for future studies on the application of dialectical proverbs across diverse sociocultural contexts, suggesting that the world could benefit from the values embedded within them.

Keywords: Dialectical proverbs, conflict resolution, mediation, stylistics, linguoculturology, peacebuilding, women, peace

INSILICO STUDY OF 4-AZIDO-2-(4-METHOXYPHENYL)-5-(2-NITROPHENYL)-2H-1,2,3-TRIAZOLE AS A DRUG

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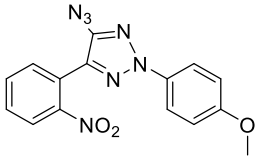
Abstract
Pfizer's rule of five, also known as Lipinski's rule of five (RO5), examines the drug-likeness of the structure of synthesized compounds and predicts whether a compound with a given pharmacological activity has chemical and physical properties. As we know, there are a large number of compounds and it is impossible to test their structural properties for drug-likeness. Theoretically, RO5 is used to examine this. This rule was proposed by Christopher Lipinski in 1997. The principle includes the following five rules.
- The number of hydrogen bond donors should not exceed 5 (OH and NH).
- The total number of hydrogen bond acceptors should not exceed 10 (N or O atoms).
- Its molecular weight must be less than 500 Da (Dalton);
- Lipophilicity should not exceed 5 (octanol/water ratio log P < 5) and
- Number of returned contacts (should not exceed 10).
The corresponding synthesized 4-azido-2-(4-methoxyphenyl)-5-(2-nitrophenyl)-2H-1,2,3-triazole in the table below appears to satisfy Lipinski's rule of 5. Thus, it allows predicting that 4-azido-2-(4-methoxyphenyl)-5-(2-nitrophenyl)-2H-1,2,3-triazole will show activity as a medicinal substance.

Information provided	
molecular weight	337.29 g/mole
Number of contacts returned	5

Number of people accepting H bonds	8
Number of H bond donors	0
Daily Po/w (iLOGP)	2.70

Keywords: triazole derivatives, Swiss ADME, biological activite, RO5

METHANOLYSIS OF DICHLORODIAZADIENES SYNTHESIZED BASED ON 4-METHYLBENZALDEHYDE

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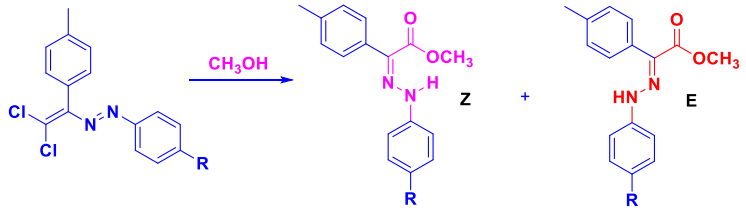
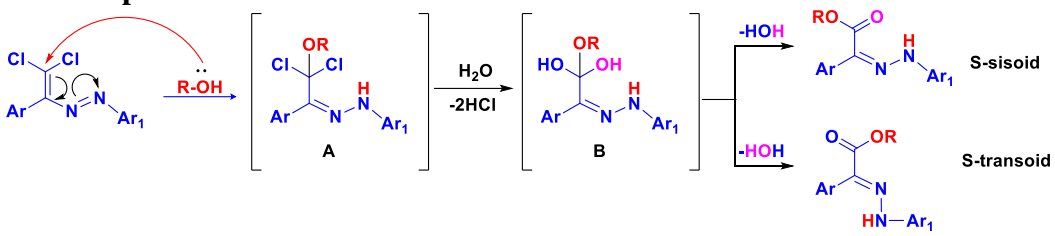
We carried out methanolysis of dichlorodiazadienes synthesized on the basis of 4-methylbenzaldehyde and as a result of the reaction it was determined that both isomers E/Z of methyl(Z)-2-(2-phenylhydrazineylidene)-2-(p-tolyl)acetate derivatives were obtained. The structures of the obtained compounds were confirmed by NMR and X-ray method. Compared to the E isomer, in the Z isomer, the hydrogen atom of the imine group formed an intramolecular hydrogen bond with the carbonyl group of the ester, which was reflected in the molecular structure. Taking this into account, we proposed two possible mechanisms of the reaction. Based on nucleophilic addition and nucleophilic substitution reactions, we have shown that E/Z isomers have S-cisoid, S-transoid configurations, which is clearly visible in molecular structures. Thus, we proposed a new convenient method for the synthesis of aryl hydrazones of α-keto acid esters from the solvolysis reaction of dichlorodiazadienes in alcohol. Based on the fact that the arylhydrazones of α-keto acid esters obtained as a result of the reaction have many antimicrobial, bactericidal and fungicidal properties, it is worth noting that they are important compounds from the point of view of organic synthesis and pharmacological chemistry.



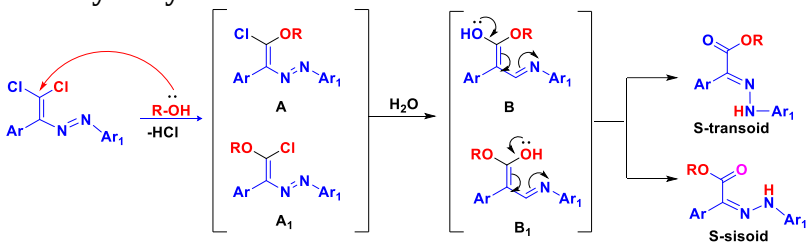
Scheme 1. Methanolysis reaction of dichlorodiazadienes.

1. **Nucleophilic addition reaction to heterodiene**.



Scheme 2. The first probable mechanism of the reaction.

2. **The second direction is the nucleophilic substitution reaction of the chlorine atom and its hydrolysis:**



Scheme 3. The second possible mechanism of the reaction.

Thus, both proposed mechanisms involved the production of E/Z-isomers.

Keywords: methanolysis, dichlorodiazadienes, methylbenzaldehyde

ARTIFICIAL INTELLIGENCE REVOLUTIONIZING GENE EDITING TOOLS

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Abstract
With CRISPR-based technologies in particular, artificial intelligence (AI) is revolutionizing genome editing by improving editing techniques' accuracy, effectiveness, and price.AI-driven models have become essential resources for predicting on- and off-target effects, improving the design of guide RNAs (gRNAs), and supporting personalized medicine strategies. These models evaluate intricate genomic data using deep learning and machine learning algorithms to enhance the effectiveness of gene editing processes and customize therapies based on each patient's unique genetic profile. Notwithstanding AI's potential, issues including safety, reducing off-target impacts, and creating efficient delivery systems continue to be major concerns. In order to further integrate AI approaches into genome editing workflows and open up new possibilities in genetics and therapeutic interventions, this paper examines the revolutionary role of AI in gene editing, going over its applications, achievements, and ongoing difficulties.

RISING INVESTMENTS IN GENE AND CELL THERAPIES

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Abstract

The financial environment for gene and cell therapies has seen substantial ups and downs in recent years, with a major rebound in funding after a difficult time. Investment levels fell precipitously in the years that followed, peaking at $22.7 billion in 2021 and falling to $11.7 billion in 2023. With over $10.9 billion raised in the first half of 2024, exceeding 2019 totals and suggesting a possible comeback for the industry, early 2024 has shown a positive rise. This revived interest is mostly due to successful clinical trials, growing regulatory approvals, and technological improvements that make gene and cell therapies more appealing to investors. Furthermore, because they see the potential for novel treatments to address unmet medical needs and close gaps in their product pipelines, big pharmaceutical corporations are becoming more involved in this field. The market prognosis is still positive despite obstacles like high development costs, complicated manufacturing processes, and strict regulatory frameworks. As investment dynamics change and new therapeutic approaches are developed, more growth is projected. The present level of investment in gene and cell therapies is summarized in this abstract, which also highlights the growth drivers and wider ramifications for the pharmaceutical sector.

DETERMINANTS OF CO_2 EMISSIONS IN LOW AND MIDDLE-INCOME COUNTRIES: A BALANCED PANEL GMM ANALYSIS

DÜŞÜK VE ORTA GELİRLİ ÜLKELERDE CO_2 EMİSYONLARININ BELİRLEYİCİLERİ: DENGELİ PANEL GMM ANALİZİ

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ABSTRACT
Negative impacts, such as climate change, environmental degradation, biodiversity loss, and droughts, pose a serious threat to economies and have unfavorable consequences for human health. Many countries have started to create low-carbon economies globally to combat these impacts, making it even more important to determine the factors affecting CO_2 emissions. This study aims to estimate the determinants of CO_2 emissions in 90 low and middle-income countries for the period 2000-2020 by panel GMM analysis. In addition to the difference GMM (DIF-GMM) model, a more comprehensive model, the system GMM (SYS-GMM), was also estimated for comparison purposes. In both models, the findings show that one lagged value of CO_2 emissions positively and significantly affects CO_2 emissions in the current period. In the SYS-GMM, a 1% increase in one lagged value of CO_2 emissions increases CO_2 emissions in the current period by 0.965%, while this rate is 0.504% in the DIF-GMM. This result indicates that CO_2 emissions in the previous period affect the next period. In both models, the effect of trade openness and dirty energy consumption variables on CO_2 emissions is positive and statistically significant. A 1% increase in trade openness and dirty energy consumption variables increases CO_2 emissions by 0.038%, 0.015% in SYS-GMM, 0.046%, and 0.568% in DIF-GMM, respectively. This result suggests that the increase in trade openness and dirty energy consumption will lead to more CO_2 emissions. The effect of the population density variable on CO_2 emissions has a negative coefficient in both models, but the significance levels differ. The effects of urbanization, GDP, clean energy investments, and industrialization variables on CO_2 emissions differ but are not found to be statistically significant. The study findings will assist policymakers in creating comprehensive policies regarding which factors can be effective in combating and controlling the impacts of CO_2 emissions.
Keywords: CO_2 emissions, Difference GMM, System GMM, Low-Middle Income Countries, Clean energy investment

ÖZET
İklim değişikliği çevresel bozulmalar, biyolojik çeşitlilik kaybı, kuraklık gibi etkiler ülke ekonomileri için bir tehdit unsuru olmakla beraber insan sağlığı üzerinde de olumsuz sonuçlara neden olmaktadır. Bu etkiler ile mücadele etmede birçok ülkenin küresel çapta düşük karbonlu ekonomiler oluşturmaya başlaması, CO_2 emisyonlarını etkileyen faktörlerin belirlenmesini daha da önemli hale getirmiştir. Bu çalışma, 2000-2020 dönemi için 90 düşük ve orta gelirli ülkede CO_2 emisyonlarının belirleyicilerini panel GMM analizi ile tahmin etmeyi

amaçlamaktadır. Çalışmada, fark GMM (DIF-GMM) modeline ek olarak karşılaştırma amaçlı ve daha kapsamlı bir model olan sistem GMM (SYS-GMM) modeli de tahmin edilmiştir. Her iki modelde de bulgular, CO_2 emisyonlarının bir gecikmeli değerinin, mevcut dönemdeki CO_2 emisyonlarını pozitif ve anlamlı bir şekilde etkilediğini göstermektedir. SYS-GMM'de CO_2 emisyonlarının bir gecikmeli değerindeki %1'lik bir artış, mevcut dönemdeki CO_2 emisyonlarını %0.965 oranında artırırken, DIF-GMM'de bu oran %0.504'dır. Bu sonuç, bir önceki dönemdeki CO_2 emisyonlarının bir sonraki dönemi etkilediğini göstermektedir. Her iki modelde, ticari açıklık ve kirli enerji tüketimi değişkenlerinin CO_2 emisyonları üzerindeki etkisinin pozitif ve anlamlı olduğu gözlenmiştir. Ticari açıklık ve kirli enerji tüketimi değişkenlerindeki %1'lik bir artış CO_2 emisyonlarını sırasıyla; SYS-GMM'de %0.038, %0.015, DIF-GMM'de %0.046, %0.568 oranlarında artırmaktadır. Bu sonuç, ticari açıklık ve kirli enerji tüketimindeki artışın daha fazla CO_2 emisyonuna neden olacağını göstermektedir. Nüfus yoğunluğu değişkenin CO_2 emisyonları üzerindeki etkisi her iki modelde de negatif katsayıya sahip olup, anlamlılık düzeyleri farklılık göstermektedir. Kentleşme, GSYİH, temiz enerji yatırımları ve sanayileşme değişkenlerinin CO_2 emisyonları üzerindeki etkileri ise farklılık göstermekle birlikte, istatistiksel olarak anlamlı bulunmamıştır. Çalışma bulguları, CO_2 emisyonlarının etkileri ile mücadele etme ve bu etkileri kontrol altına alma konusunda hangi faktörlerin etkili olabileceği ile ilgili kapsayıcı politikalar oluşturmada politika yapıcılara yardımcı olacaktır.

Anahtar kelimeler: CO_2 emisyonları, Fark GMM, Sistem GMM, Düşük-Orta gelirli ülkeler, Temiz enerji yatırımları

GÜNÜBIRLIK CERRAHI HASTALARININ AMELIYAT ÖNCESI ANKSIYETE DÜZEYLERININ POSTOPERATIF AĞRI VE DERLENME KALITESI ÜZERINE ETKISI

EFFECT OF PREOPERATIVE ANXIETY LEVELS OF DAY SURGERY PATIENTS ON POSTOPERATIVE PAIN AND QUALITY OF RECOVERY

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ÖZET:
Bu çalışma günübirlik cerrahi hastalarının ameliyat öncesi anksiyete düzeylerinin postoperatif ağrı ve derlenme kalitesi üzerine etkisini belirlemek amacıyla yapılmıştır. Araştırma yöntemi olarak nicel araştırmanın betimsel yöntemi kullanılmıştır. Çalışmanın evrenini bir üniversitenin Araştırma ve Uygulama Hastanesi'nde göz, genel cerrahi, ortopedi, kulak burun boğaz ve üroloji servislerinde günübirlik cerrahi için yatışı yapılan ve çalışmaya katılmaya gönüllü olan 105 hasta oluşturmuştur. Veriler, Aralık 2018- Haziran 2019 tarihleri arasında sosyodemografik ve klinik özellikleri içeren Kişisel Bilgi Formu, Ameliyata Özgü Kaygı Ölçeği , Sayısal Ağrı Ölçeği , Derlenme Kalitesi-40 Ölçeği kullanılarak elde edilmiştir. Hastaların Ameliyata Özgü Kaygı Ölçeği puanı ortalamaları 29,00±8,32, Ağrı Ölçeği puanı ortalamaları altıncı saatte 6,00± 1,99, onuncu saatte 3,00±1,81 , Derlenme Kalitesi-40 ölçeğinin alt faktörlerinden; konfor faktörü ortalama puanın 52,00 ± 10,42, duygu faktörü ortalama puanın 37,00 ± 5,71, fiziksel bağımsızlık faktörü ortalama puanın 16,00 ± 3,41, hasta desteği faktörü ortalama puanın 26,00± 4,00, ağrının ortalaması 33,00± 2,82, toplam derlenme kalitesi puan ortalaması 158,00±18,91 olarak saptanmıştır. Çalışmada günübirlik cerrahi hastaların kaygı düzeyi orta düzeyin üzerinde bulunmuş olup postoperatif ağrı puanı ortalamaları arasında pozitif yönde orta düzeyde ilişki olduğu saptanmıştır. Günübirlik cerrahi hastalarında Ameliyat Öncesi Kaygı Ölçeği puan ortalaması ile Derlenme Kalitesi-40 ölçeği puan ortalamaları arasında negatif yönlü ilişki olup yüksek olan kaygı düzeyi derlenme kalitesini azaltmaktadır. Sosyodemografik ve klinik özelliklere göre yapılan istatistiklerde ise; ameliyata ilişkin bilgilendirme yapılan hastaların ameliyata özgü kaygı düzeylerinin bilgilendirme yapılmayan hastalara göre düşük olduğu, özellikle ameliyata dair hissedilen kaygıların ameliyat sonrası dönemde yaşanabilecek sağlık sorunlarıyla baş edememe olduğu, ameliyat tarihi belirlenen hastalarda değişen uyku düzeni ve ameliyatla ilgili hissedilen kaygının derlenme kalitesini azalttığı sonuçlarına varılmıştır.

Anahtar Kelimeler: Günübirlik cerrahi, hemşirelik bakımı, derlenme kalitesi, postoperatif ağrı, kaygı

Abstract:
This study was conducted to determine the preoperative anxiety status, postoperative pain and recovery quality of day surgery patients.The descriptive method of quantitative research was used as the research method. The universe of the study consisted of 105 patients who were hospitalized for day surgery in the ophthalmology, general surgery, orthopedics, ear, nose and throat and urology departments of a university Research and Practice Hospital and volunteered to participate in the study. Data were obtained using the Personal Information Form, Surgery-Specific Anxiety Scale, Numerical Pain Scale, Recovery Quality-40 Scale, including sociodemographic and clinical characteristics between December 2018 and June 2019. The patients' Surgery-Specific Anxiety Scale mean score was 29.00±8.32, the Pain Scale mean score was 6.00±1.99 at the sixth hour and 3.00±1.81 at the tenth hour. From the sub-factors of the Recovery Quality-40 scale; comfort factor mean score was 52.00 ± 10.42, emotion factor mean score was 37.00 ± 5.71, physical independence factor mean score was 16.00 ± 3.41, patient support factor mean score was 26.00 ± 4.00, pain mean was 33.00 ± 2.82, total recovery quality mean score was 158.00 ± 18.91. In the study, the anxiety level of day surgery patients was found to be above the medium level and a positive moderate relationship was found between the postoperative pain score averages. There was a negative relationship between the Preoperative Anxiety Scale mean score and the Recovery Quality-40 scale mean score in day surgery patients and a high anxiety level reduces the recovery quality. In the statistics made according to sociodemographic and clinical characteristics; It was concluded that the surgery-specific anxiety levels of patients who were informed about the surgery were lower than those of patients who were not informed, that the anxiety felt especially about the surgery was due to the inability to cope with health problems that may occur in the post-operative period, and that the changing sleep patterns and anxiety felt about the surgery reduced the quality of recovery in patients whose surgery date was determined.
Key Words: Day surgery, nursing care, quality of recovery, postoperative pain, anxiety.

TÜRKİYE YÜZYILI MAARİF MODELİ LİTERATÜRE NE KATMAKTA VE EĞİTİM CAMİASINA NE SÖYLEMEKTEDİR?

WHAT DOES THE TURKISH CENTURY EDUCATION MODEL ADD TO THE LITERATURE AND WHAT DOES IT SAY TO THE EDUCATION COMMUNITY?

Hacer KARA
Uzman Öğretmen, Karatay Akabe İlkokulu
Emine KÖSEN
Başöğretmen, Selçuklu Halk Eğitim Merkezi

ÖZET

Türkiye Yüzyılı Maarif Modeli, ülkemizin eğitimindeki eksik yönleri göz önünde bulundurularak on yıllık uzun soluklu bir çalışma sonucunda; Singapur, İngiltere, Estonya, Güney Kore, Hong Kong, Avustralya, Kanada, İskoçya, Yeni Zelanda, Almanya, Danimarka, Japonya ve Finlandiya eğitim modellerinden esinlenerek ortaya çıkarılan bir modeldir. Sadeleşirken konularda derinleşmeye gidilen bu modelde amaç; köklerimizle bütünleşen, erdemli ve hikmetli, millî duygulara sahip ve öğrendiklerini beceriye dönüştürebilen kökleri sağlam bireyler yetiştirmektir. Modelin programı oluşturulurken; 20 stratejik ve eylem planları ile 2013-2024 yılları arasında yayınlanan yüz yetmiş iki rapordan yararlanılmıştır. Bu raporlar içerisinde; Kadına Yönelik Şiddetle Mücadele Eylem Planı, Ulusal Deprem Strateji ve Eylem Planına, İnsan Hakları Eylem Planı, Tütün Kontrolü Strateji Belgesi ve Eylem Planı, Karayolu Trafik Güvenliği Eylem Planı, Ulusal Akıllı Ulaşım Sistemleri Strateji Belgesi ve Eylem Planı, Ulusal Akıllı Şehirler Stratejisi ve Eylem Planı, AB'ye Katılım İçin Ulusal Eylem Planı, Engelli Hakları Ulusal Eylem Planı, Türkiye Çocuk Hakları Strateji Belgesi ve Eylem Planı, Değişen İklime Uyum Çerçevesinde Su Verimliliği Strateji Belgesi ve Eylem Planı vb. yer almaktadır. Süreç sonu değerlendirmenin eksik yönlerinin görülerek onun yerine süreç içerisinde öğrenci öğrenmelerinin değerlendirilmesini ve aynı zamanda sistemle beraber eğitimcilerin kendilerini de değerlendirerek özeleştiri yapmalarını sağlayan dijital platformlar sunan Türkiye Yüzyılı Maarif Modeli'nde eğitim; herkesin hayat boyu erişiminin teminat altına alındığı temel bir hak olarak görülür ve eğitim alma ve öğrenme; hayatın toplumsal açıdan ve herkes için daha güvenli, birlikteliğimizin pekiştirilmesi ve Türkiye Cumhuriyeti'nin dinamik vizyonuyla güçlü bir şekilde var olması bağlamında bir ödev olarak görülmektedir.

Anahtar Kelimeler: Maarif, süreç, süreç boyu değerlendirme, hikmet, sadeleşme.

ABSTRACT

Türkiye Century Education Model is the result of a ten-year long-term study, taking into account the deficiencies in our country's education; It is a model inspired by the education models of Singapore, England, Estonia, South Korea, Hong Kong, Australia, Canada, Scotland, New Zealand, Germany, Denmark, Japan and Finland. The aim of this model, which deepens the subjects while simplifying them; Our aim is to raise well-established individuals who integrate with our roots, are virtuous and wise, have national feelings and can turn what they have learned into skills. While creating the program of the model; 20 strategic and action plans and one hundred seventy-two reports published between 2013 and 2024 were used. Among these reports; Action Plan for Combating Violence Against Women, National Earthquake Strategy and Action Plan, Human Rights Action Plan, Tobacco Control Strategy Document and Action Plan, Road Traffic Safety Action Plan, National Smart Transportation Systems Strategy Document and Action Plan, National Smart Cities Strategy and Action Plan , National Action

Plan for EU Accession, National Action Plan for Disability Rights, Turkey Child Rights Strategy Document and Action Plan, Water Efficiency Strategy Document and Action Plan within the Framework of Adaptation to the Changing Climate, etc. is located. Education in the Turkey Century Education Model, which offers digital platforms that enable the evaluation of student learning during the process by seeing the shortcomings of end-of-process evaluation and enabling educators to self-criticize by evaluating themselves along with the system; Receiving and learning education is seen as a fundamental right to which everyone is guaranteed lifelong access; It is seen as a duty in the context of ensuring that life is safer socially and for everyone, that our unity is strengthened, and that the Republic of Turkey exists strongly with its dynamic vision.

Key Words: Education, process, evaluation throughout the process, wisdom, simplification.

SAFFRON: THE RED-GOLDEN SPICE WITH A PLEASANT AROMA

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Abstract

Saffron is the dried stigmas of *Crocus sativus* L.'s flower, known in Algeria as *zaãfaran* that means yellow color. It is a medicinal plant widely used in herbal folk medicine and it also used as a natural food spice especially in Southeast Asian culture. Saffron is used as an aromatic spice in food for its attractive yellow color, special bitterness and pleasant aroma due to crocin, picrocrocin and safranal respectively. Safranal is the major essential oil of saffron, which represents over 60% of volatile compounds. Using optimised maceration extraction method through response surface methodology RSM, HPLC and UV-Vis analysis of saffron extracts evaluated the quantity of safranal in Algerian saffron stigmas. The results revealed that local saffron contains an important quantity of safranal, which influenced by thermal treatments and storage conditions. This bioactive compound is characterised by its powerful biological properties and high antioxidant potential, which could be used in the value-added products in food, pharmaceutical, and cosmetic industries.

Key words: Saffron, Safranal, UV-Vis Analysis, HPLC, Essential oil

MESOSTRUCTURED TRANSITION METAL PHOSPHATES: SYNTHESIS AND APPLICATIONS

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ABSTRACT

Transition-metal phosphates have attracted considerable attention in catalysis and electrochemistry due to their rich compositional and structural diversity. Different metals were used (M-PO), such as Ce, Ni and Eu. Recently, various methods have been investigated for their preparation, such as precipitation, ammonia-gel and hydrothermal route.

Among these materials is iron phosphate, because of their electrochemical properties, compositional and good activity. This material is known as an electrode and a catalyst for oxidation reaction. The method of the preparation of the $FePO_4$ catalyst is the key of their structure and activity. The use of our catalyst stays limited In organic synthesis comparing with others heterogeneous one especially in the C-C coupling reaction for the benzimidazole synthesis which are are a class of heterocyclic aromatic chemical compounds. Their derivatives have attracted significant attention due to their pharmacological and biological activities.

In the present study provides a new way to prepare the nanoparticles iron phosphate modified as a heterogeneous catalyst by hydrothermal route using urea and was characterized by Fourier-transform infrared spectroscopy FTIR, X-ray diffraction, UV-Vis, MEB. The nanocatalyst showed a high activity in the heterocyclic synthesis. The catalyst could be recovered and reused without any significant loss of activity.

Keywords: transition metal-phosphate, Nanocatalyst $FePO_4$, hydrothermal rout, Benzimidazole synthesis .

THE RESEARCH PRODUCTIVITY AND PROSPECTIVE RESEARCH PATHWAYS: A CASE OF CAMARINES SUR POLYTECHNIC COLLEGES, PHILIPPINES

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ABSTRACT

Research is one of the four-fold functions of higher education institutions in the Philippines, which is essential to advancing knowledge, progressing in innovation, and contributing to societal development. This study is an analysis of the research productivity of Camarines Sur Polytechnic Colleges as it aims to achieve its full university status. By analyzing various aspects of research productivity, including completed research, presentations, publications, research utilization, and citations, the study identifies the productivity's influencing factors, such as gender, age, years in college, educational attainment, academic discipline, and academic rank of faculty members. This study also explores the research networking and linkages of the institution. The findings revealed trends in the research productivity indicators. Likewise, challenges were identified that affect the improvement of the research and development function of the institution. Based on the result of the study, strategic pathways and recommendations were proposed that focus on enhancing the research and development capacity to align with the institution's targets and milestones for its application for university status, underscoring the important role of further strengthening research culture. Finally, the result of the study further recommend to revise and update the policies covering the research and development aspects of the institution to address the present trends and needs, and likewise provide wider opportunities and motivation for faculty members to conduct and be engaged in research and development.

KEYWORDS research productivity, networking, linkages, state college, universityhood

ISOLATION AND IDENTIFICATION OF BACTERIA IN RETAILED SMOKED FISH SOLD IN KAZAURE MARKET

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Abstract
Fish are aquatic vertebrate animals that are typically endothermic (Previously cold blooded), covered with scales, and equipped with two sets of paired fins and several unpaired fins. Smoked fish is the fish that has been cured by smoking. In Nigeria, Fish serves as the affordable source of animal protein, where most individuals consume smoked fish as a food delicacy. This study was carried out to identify and ascertain the bacteria contamination of smoked fish sold at Kazaure market Jigawa state Nigeria. A total of three (3) samples of smoked were purchased from fish traders in the market. The fish samples were analyzed using standard bacteria techniques and procedures. The result shows that both the three (3) species of bacteria were isolated from the sample are gram positive bacteria. The bacteria isolated in this study were *Bacillus spp., Staphylococcus spp*. and *Micrococcus spp*. The study revealed that smoked fish sold in Kazaure market are contaminated by different groups of bacteria, which could be due to the unhygienic nature of the market and the fish handlers. The presence and abundance of these groups of bacteria in smoked fish could result into food poisoning, which is a matter of public health concern. These studies recommend that the fish handlers should be educated on proper hand washing during fish processing.
Key word: fish, bacteria, smoked, market

OTOMOTİV ENDÜSTRİSİNDE KULLANILABİLECEK YÜKSEK SÜRTÜNME DİRENCİNE SAHİP GÜÇLENDİRİLMİŞ PA6.6 KOMPOZİTLERİNİN GELİŞTİRİLMESİ

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Özet
Son zamanlarda artan elektrikli araç talebi, mekanik otomobil parçalarının tasarımında değişikliklere yol açmıştır. Bu parçalar için yüksek mekanik dayanım ve sürtünme direnci beklenmektedir. Poliamid 6.6 (PA6.6) yüksek eğilme, çekme ve darbe dayanımına, düşük sürtünme katsayısına sahip bir malzemedir. Bu malzeme, özellikle elektrikli araç uygulamalarında ihtiyaç duyulan sertlik ve dayanıklılığı sağlama kapasitesi ile dikkat çekmektedir. PA6.6 malzemesi yüksek mekanik dayanıklılığı, ısıya karşı direnci, kimyasal direnci ve düşük nem emme özellikleri ile bu beklentileri karşılayabilecek bir malzeme olarak seçilmiştir. Diğer mühendislik polimerlerine kıyasla daha iyi mekanik özellikler sunan PA6.6, aynı zamanda daha düşük maliyetle üretilebilmektedir. Metal parçalar yerine polimer içeren hafif ve ekonomik polimer kompozitlerin üretimi gün geçtikçe artmaktadır. Radyatör tanklarının çoğunda pirinç yerine cam elyaf takviyeli PA6.6 kullanılmaktadır. Bu çalışmada, PA6.6'nın sürtünme direncini artırmak ve mekanik değerlerinin iyileştirilmesi hedeflenmiş olup; literatür araştırması ve önceki çalışmalar ışığında yeni formülasyonlar geliştirilmiştir. İlk aşamada, geri dönüştürülmüş karbon elyaf ve üç farklı sürtünme direnci artırıcı katkı kullanılarak toplamda on farklı formülasyon hazırlanmıştır. Bu formülasyonlar, çoklu besleme haznesine sahip tek yönlü çift vidalı ekstrüder kullanılarak eriyikten karıştırma yöntemi ile üretilmiştir. Elde edilen granüller, enjeksiyon makinesinde test plakaları formuna dönüştürülmüş, üretilen malzemelerin karakterizasyonu için çekme-kopma testleri, basma-bükülme testleri, darbe dayanımı testleri, yük altında eğilme sıcaklığı tayini, erime sıcaklığı tayini, reoloji ve triboloji testleri gerçekleştirilmiştir. Yapılan çalışmalar sonucunda, PA6.6 malzemesinin kopma uzaması ve darbe dayanımı değerlerinin beklenenden düşük olduğu, ancak diğer mekanik test değerlerinde önemli iyileşmeler sağlandığı belirlenmiştir. Ayrıca, sürtünme direnci değeri yapılan denemeler sonucunda %8,2 oranında artış göstermiştir. Uzama değerleri ve sürtünme direnci değerleri maksimum seviyeye ulaşacak şekilde formül geliştirme çalışmaları tamamlanmıştır. Ancak, uzama değerlerini artırmaya yönelik çalışmalar gerçekleştirildiğinde sürtünme direncinin düştüğü gözlemlenmiştir.
Anahtar Kelimeler: PA6.6, Sürtünme Direnci, Mekanik özellikler,

Abstract
The recent increase in the demand for electric vehicles has led to changes in the design of mechanical automotive parts. High mechanical strength and friction resistance are expected from these components. Polyamide 6.6 (PA6.6) is a material known for its high flexural, tensile, and impact strength, as well as its low friction coefficient. This material stands out for its ability to provide the hardness and durability required, especially in electric vehicle applications. PA6.6 has been chosen as a material that can meet these expectations due to its high mechanical durability, heat resistance, chemical resistance, and low moisture absorption properties. Compared to other engineering polymers, PA6.6 offers better mechanical properties and can be produced at a lower cost. The production of lightweight and economical polymer composites

that include polymers instead of metal parts is increasing day by day. In many radiator tanks, glass fiber-reinforced PA6.6 is used instead of brass. This study aims to increase the friction resistance of PA6.6 and improve its mechanical properties; new formulations have been developed based on a literature review and previous studies. In the first phase, a total of ten different formulations were prepared using recycled carbon fiber and three different friction resistance-enhancing additives. These formulations were produced using a melt mixing method with a single-screw extruder equipped with a multiple feeding hopper. The obtained granules were transformed into test plates in an injection machine, and characterization tests for the produced materials were conducted, including tensile-break tests, compression-bending tests, impact resistance tests, determination of flexural temperature under load, determination of melting temperature, rheology, and tribology tests. As a result of the studies, it was determined that the elongation at break and impact resistance values of the PA6.6 material were lower than expected, but significant improvements were achieved in other mechanical test values. Additionally, the friction resistance value showed an increase of 8.2% as a result of the experiments. Development studies have been completed to maximize the elongation values and friction resistance values. However, it was observed that when attempts were made to increase the elongation values, the friction resistance decreased.

Keywords: PA6.6, friction resistance, mechanical properties

DOĞUŞTAN ENGELLİ VE SONRADAN ENGELLİ OLAN BİREYLERİN YAŞADIKLARI TÜKENMİŞLİK DENEYİMLERİNİN İNCELENMESİ

AN EXAMINATION OF THE BURNOUT EXPERIENCES OF INDIVIDUALS WITH CONGENITAL DISABILITIES AND INDIVIDUALS WITH ACQUIRED DISABILITIES

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ÖZET
Engelli bireylerin toplumsal hayat içerisinde maruz kaldıkları sorunlar, sağlıklı bir yaşam sürmelerinde ve kendilerini aktif biçimde gerçekleştirebilmelerinde bir dizi problemlere yol açmaktadır. Bu problemlerin başlıca olanı ise 'yük olma' düşüncesidir. Kendisini gerek bakım açısından gerekse diğer çeşitli açılardan yakınlarına ve ailesine bir yük olarak gören bireyler hayata küsmekte ve akabinde kendilerini iç dünyalarına kapatmaktadırlar. Ancak bu durum doğuştan bir engele sahip olan bireylerde daha sonradan engelli olan bireylere kıyasla daha az gözlemlenmektedir. Çalışmamızda; engelli olarak dünyaya gelmiş olan ve sonradan engelli olmuş bireylerin kendilerini ailelerine ve sevdiklerine karşı bir yük unsuru görmelerine bağlı olarak yaşadıkları tükenmişlik deneyimlerinin karşılaştırmalı olarak keşfedilip akabinde yaşamış oldukları bu güçlüğü aşmalarında ne çeşit güçlendirme çalışmalarına ihtiyaç duyduklarını tespit etmek amaçlanmıştır.
Bu amaca ulaşabilmek adına çalışmada; internet üzerinden çeşitli platformlarda konuya dair deneyimlerini aktaran sosyal medya kullanıcılarının ifadeleri incelenmiştir. Yapılan araştırma ve incelemelerin neticesinde elde edilen veriler ışığında sonradan engelli olan bireylerin doğuştan engelli olan bireyler ile kıyaslandığında kendilerini birlikte yaşamış oldukları kişilere karşı yük hissettikleri ve buna bağlı olarak daha fazla bir tükenmişlik içinde oldukları saptanmıştır. Bilhassa daha sonradan engelli olan bireylerin yaşamış oldukları bu sorunların önüne geçilebilmesi, en azından olabildiğince minimize edilebilmesi için ihtiyaç olan ilgili güçlendirme yaklaşımına bağlı olan çalışmaların yürütülmesi gerekmektedir. Bu hususta alanında uzman ilgili ortak paydaşların aktif çalışmalarına ihtiyaç duyulmaktadır.
Anahtar Kelimeler: Engellilik, yeti yitimi, tükenmişlik, yetersizlik hissi, güçlendirme yaklaşımı.

ABSTRACT
The problems that people with disabilities are exposed to in social life cause a series of problems in leading a healthy life and realizing themselves actively. The main one of these problems is the idea of 'being a burden'. Individuals who see themselves as a burden to their relatives and family, both in terms of care and in various other respects, become resentful of life and subsequently close themselves to their inner worlds. However, this situation is observed less in individuals with a congenital disability compared to individuals with later disabilities. In our study; it is aimed to comparatively explore the burnout experiences of individuals who were born with disabilities and individuals who later became disabled due to seeing themselves as a burden to their families and loved ones, and then to determine what kind of empowerment activities they need to overcome this difficulty they have experienced.
In order to achieve this goal, the study examined the statements of social media users who shared their experiences on various platforms on the internet. In the light of the data obtained

as a result of the research and examinations, it has been determined that individuals with later disabilities feel burdened towards the people they live with and accordingly, they are more burned out compared to individuals with congenital disabilities. In particular, in order to prevent these problems experienced by individuals with later disabilities, or at least to minimize them as much as possible, it is necessary to carry out studies based on the relevant empowerment approach. In this regard, there is a need for the active work of relevant stakeholders who are experts in their fields.

Keywords: Disability, disability, burnout, sense of inadequacy, empowerment approach

REVIEW OF WOMEN'S EDUCATION IN AFGHANISTAN: TWO DECADES OF REPUBLIC AND BEYOND

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Abstract
Women, as half of society, play a pivotal role in educating future generations. Their influence extends beyond the family unit to the broader social structure. In Islamic societies, women are obligated to emulate the scholars of Islamic history, educating their children and exercising their legal and religious rights to enlighten and nurture future generations.
Unfortunately, Afghan women face significant challenges in accessing these educational rights. One primary reason for these difficulties is rooted in harmful social beliefs and outdated traditions that view girls' education as taboo. Many people live in rural and remote areas, and a large proportion are illiterate. This has led to closed-minded and traditional views regarding women's roles in society, confining them primarily to domestic duties.
In recent years, particularly since the Taliban's return to power, Afghan girls have encountered even more severe obstacles. These include bans on attending schools, security threats such as suicide bombings and explosions at girls' schools, and the closure of schools and universities. These challenges not only undermine the natural and religious rights of girls but also have a detrimental impact on their morale.
However, Afghan girls have never given up. They continue to fight with unwavering determination for their right to education. This struggle is not only for their own benefit but also for a brighter future for Afghan society.
Keywords Afghanistan, education, women, republic, Islam, Taliban

ENHANCED PHOTOCATALYTIC ACTIVITY USING ZnO/NiO NANOCOMPOSITES FOR HARMFUL DYES WATER FILTERATION

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ABSTRACT

This work aims to investigate the enhancing the photo catalytic activity of Methylene Blue by adding Zinc oxide nanoparticle doped by nickel oxide. A zinc oxide and nickel oxide nanoparticles were synthesized using hydrothermal method, then they were mixed in different percentage, and then followed by heat treatment. The crystal structure examinations have been performed by TEM, these tests showed that the formed nanoparticles were homogeneously distributed in the prepared samples, also showed the proportional presence of elements. The specific surface area and porosity were evaluated by BET analysis. On the other hand, UV-vis testing was carried out on the methylene blue that added nanoparticles (30%) to assess the effect of adding particles on the absorption spectrum in range of UV to IR. Photo catalytic tests have been carried out for aqueous solution of Methylene Blue and different ratio of prepared nanoparticles. The additives included pure zinc oxide, pure nickel oxide and mix of zinc oxide and nickel oxide in different percentage. The results showed that the addition of these nanoparticles had an effect in enhancing the photo catalytic activity, it was noted that the maximum effect was when adding pure zinc oxide, which gave a decomposition rate of 70%. The results also showed that the highest decomposition rate was an 80% for the same sample that zinc oxide was added.

Keywords: hydrothermal method, Methylene Blue, nanoparticles, nickel oxide, photocatalytic, Zinc oxide.

ANKARA-POLATLI DEVLET YOLU İÇİN MAKRO VE MİKRO TRAFİK KARAKTERLERİ VE ANALİZLERİ

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ÖZET

Dünyadaki nüfusun her geçen yıl artmasının bir sonucu olarak ulaşım ihtiyacı da artış göstermektedir. Ulaşım ihtiyacında meydana gelen talep artışını karşılayabilmek, doğru çözümler üretebilmek ve doğru değerlendirmeler yapabilmek için toplanmış trafik verileri ve bu verilerin analizleri gerekmektedir. Toplanmış veriler ve bu verilerden elde edilen analizler ulaştırma sistemleri için geçerli olmak üzere planlama, yapım, işletim ve bakım-onarım aşamalarında değerlendirilerek kullanılmaktadır.

Çalışmanın yürütüldüğü Polatlı-Sivrihisar Devlet Yolu'nun geçmiş yıllarda proje ve yapımı tamamlanmıştır. Yatırım Programına alınarak proje revizyonları ile imalatı yakın dönemde tamamlanan söz konusu kesimin yapım çalışmalarına başlanmadan önceki dönem (2014 yılı) ve yapım çalışmalarının tamlamasından sonraki dönem (2022 yılı) için trafik analizlerinin yapılması amaçlanmaktadır.

Çalışmamız yapım öncesi dönemde yapılmış olup, trafik verileri; Karayolları Genel Müdürlüğü (KGM) tarafından Ankara-Polatlı Güzergâhı üzerinde yıl boyunca kaydedilen araç geçiş tarih ve zamanı, araç türü, hareket yönü, hızı ve şerit bilgileridir. Çalışmamız trafik akımı, trafik gelişim ve değişmelerini farklı araç türleri arasında değerlendirmek için yapılan analizleri içermektedir.

Anahtar Kelimeler: Trafik Mühendisliği, makro ve mikro akım parametreleri, zirve saat faktörleri, farklı zaman dilimleri, yön ve şeritlerde trafik akımı değişimi

ABSTRACT

As a result of the increase in the world population every year, the need for transport also increases. Collected traffic data and analyses of these data are required in order to meet the increase in demand for transportation, to produce correct solutions and to make correct evaluations. The collected data and the analyses obtained from these data are used in planning, construction, operation and maintenance-repair phases for transportation systems.

The project and construction of Polatlı-Sivrihisar State Highway, on which the study was carried out, was completed in the past years. It is aimed to carry out traffic analyses for the period before the start of the construction works (2014) and for the period after the completion of the construction works (2022) for the section in question, which has been recently completed with project revisions by being included in the Investment Programme.

Our study was conducted in the pre-construction period and the traffic data are the date and time of vehicle passage, vehicle type, direction of movement, speed and lane information recorded by the General Directorate of Highways (KGM) on the Ankara-Polatlı Route throughout the year. Our study includes analyses to evaluate traffic flow, traffic development and changes among different vehicle types.

Key Words: Traffic Engineering, macro and micro flow parameters, peak hour factors, traffic flow variations at different periods, directions and lines.

KIRSAL 2×1 BÖLÜNMÜŞ DEVLET KARAYOLU KESİMİNDE, YÖN, ŞERİT VE ARAÇ TÜRLERİ BAZINDA MİKROSKOBİK TRAFİK AKIM PARAMETRELERİNİN İNCELENMESİ: POLATLI-SİVRİHİSAR ÖRNEĞİ

INVESTIGATION OF DIRECTION, LANE AND VEHICLE TYPE BASED MICROSCOPIC TRAFFIC FLOW PARAMETERS IN RURAL STATE HIGHWAY: POLATLI-SİVRİHİSAR CASE

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ÖZET

Ulaşım, insan ilişkilerinin temel unsurlarından biridir. Insani münasebetlerin en dikkat çekici olanı ticaretin gerçekleşebilmesi için de ulaşım gereklidir. Ulaşım, ticareti yerel bir takas sürecinden uluslararası bir etkinliğe dönüştürmüştür. En eski çağlardan beri toplumların ulaşım imkânlarının olduğu limanlar veya kervan yolları etrafında şehirler, kasabalar ve köyler kurduğunu bilmekteyiz. Bu ticaret yollarının güvenliği, ulaşımın hızı ve taşınan yük miktarının önemi, tarih boyunca kendini açıkça göstermiştir. Toplumlar, her dönemde daha hızlı ve verimli ulaşım sağlamak adına büyük çaba sarf etmiştir.

Günümüzde de ulaşım, bir bölgenin refahını, güvenliğini ve kalkınmasını belirleyen en önemli faktörlerden biridir. Ulaşım çeşitliliğinden en yüksek verimi elde etmek için sürekli çalışmalar yapılmaktadır. Bu kapsamda, bir yol kesimindeki trafik akımının detaylı analizi, ülkemizin kalkınmasında önemli olan ulaşımın optimize edilmesi çabalarının vazgeçilmez bir parçası olarak değerlendirilmelidir.

Bu makalede, Polatlı-Sivrihisar 2×1 Devlet Karayolu Kesiminde kameralı araç sayım istayonu kesitindeki trafik akımının analizi üzerine odaklanılacaktır. Özellikle bu yol kesiminde Mikroskobik trafik parametreleri üzerinde yapılacak istatistiksel analizler yorumlanacaktır. Bu yol kesiminde, kamera sistemi, 2014 yılı boyunca tüm araç geçişlerini kaydetmiştir. Toplanan veriler, her aracın **geçiş tarihi ve zamanı**, **araç türü** (örneğin, binek araç, ağır taşıt), **hareket yönü**, **hızı** ve **bulunduğu şerit** bilgilerini içermektedir. Bu sistem, her iki yönde 2x1 bölünmüş yol üzerindeki araç hareketlerini kapsamaktadır. Analiz edilen trafik verileri, yol kesimindeki şeritlerin farklı hız ve trafik akışı özelliklerine sahip olduğunu göstermektedir. Özellikle **sollama şeritleri** ile **ağır taşıt şeritleri** arasındaki farklar incelenmiş, trafik akışının hangi şeritlerde daha yoğun olduğu ve araçların şerit değiştirme davranışları üzerine çıkarımlar yapılmıştır. Analizde temel olarak **trafik hızı (V)**, **trafik akımı (Qf)**, **şeritler arası araç yoğunluğu** ve **araçlar arası zaman farkı (headway time, ht)** gibi parametreler kullanılmıştır. Her bir şerit için ayrı ayrı ortalama değerler, standart sapmalar, minimum ve maksimum değerler hesaplanmıştır. Ayrıca, **şeritler arası hız dağılımları** ve **araç türlerine göre trafik akışı** gibi ilişkiler analiz edilmiştir. Elde edilen veriler tablo haline getirilmiş ve bu tablolarda şerit bazında trafik dinamikleri özetlenmiştir.

Çalışmanın amacı, bu analizler aracılığıyla trafik akımının çeşitli yönlerini ortaya koymak ve elde edilen bulgularla araştırmacılara ve strateji belirleyicilere veri oluşturmaktır. Ayrıca, makale şehir planlaması ve ulaşım yönetimi alanında gelecekte yapılacak çalışmalara temel oluşturmayı hedeflemektedir.

Anahtar Kelimeler: Ulaşım, Trafik Akımı, Mikroskobik Trafik Parametreleri, Araç Türleri, Şerit Analizi, Polatlı-Sivrihisar, Yol Güvenliği, Trafik Hızı, Şerit Yoğunluğu, Trafik Yönetimi

Abstract

Transportation is one of the fundamental elements of human relationships. Trade, one of the most prominent aspects of human interactions, also relies on transportation. Over time, transportation has transformed trade from a local bartering process into an international activity. Since ancient times, societies have established cities, towns, and villages around ports or caravan routes, where transportation opportunities existed. The importance of the security of these trade routes, the speed of transportation, and the quantity of goods carried has always been evident throughout history. Societies have continuously strived for faster and more efficient transportation in every era.

Today, transportation remains one of the most critical factors determining the prosperity, security, and development of a region. Continuous efforts are made to maximize the efficiency of diverse transportation modes. In this context, the detailed analysis of traffic flow on a road segment is an indispensable part of optimizing transportation, which is vital for the development of our country.

This study focuses on analyzing traffic flow data obtained from a camera-based vehicle counting station on the Polatlı-Sivrihisar 2×1 State Highway segment. Specifically, statistical analyses of microscopic traffic parameters on this road segment are discussed. The camera system monitored all vehicle movements throughout 2014. The collected data include the passage date and time, vehicle type (e.g., passenger cars, heavy vehicles), direction of movement, speed, and the lane used. This system captures vehicle movements on both directions of the 2×1 divided highway.

The analyzed traffic data indicate that the lanes on the road segment exhibit different speed and traffic flow characteristics. Differences between passing lanes and heavy vehicle lanes were particularly examined, and inferences were made about which lanes had higher traffic intensity and vehicle lane-changing behavior. The analysis primarily used parameters such as traffic speed (V), traffic flow (Qf), vehicle density between lanes, and headway time (ht). Average values, standard deviations, minimum, and maximum values for each lane were calculated. Furthermore, relationships such as speed distributions between lanes and traffic flow by vehicle types were analyzed. The findings were summarized in tables that highlight lane-based traffic dynamics.

The study aims to uncover various aspects of traffic flow through these analyses and provide data for researchers and policymakers. Additionally, it seeks to lay the groundwork for future studies in urban planning and transportation management.

Keywords: ransportation, Traffic Flow, Microscopic Traffic Parameters, Vehicle Types, Lane Analysis, Polatlı-Sivrihisar, Road Safety, Traffic Speed, Lane Density, Traffic Management

GASTRONOMİ GELECEĞİNDE ÇAĞDAŞ MUTFAK TRENDLERİ: YAŞAYAN MUTFAK HAKKINDA BİR DEĞERLENDİRME
CONTEMPORARY CULINARY TRENDS IN THE FUTURE GASTRONOMY: A REVIEW ABOUT LIVING CUISINE

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ABSTRACT
The evolution of cuisine has transformed over time, reflecting the changing trends in cuisine and as a dynamic cultural expression. Today, gastronomy embraces diverse trends, including raw food, social media-inspired dishes, fusion cuisine, fast food, slow food, haute cuisine, molecular gastronomy, smart cuisine, and zero-waste food. There has also been a resurgence of traditional dishes and modern culinary techniques using local ingredients. Not to mention, the support of cuisine and its practices has gained popularity, steering into activities such as kitchen workshops, mukbangs (shows focused on eating food), ASMR videos (Autonomous Sensory Meridian Response, videos focused on sensory aspects of the object), cooking as entertainment, food competitions, and culinary classes.
Each day a new gastronomy trend comes to light. One of the trends that is now in the spotlight is living cuisine. Living cuisine shows the kitchen as a home rather than a working space. This trend shows the culture behind the cuisine and the kitchen behind the said cuisine.
The aim of this research is to explore cuisine as a living culture. This research focuses on the history of cuisine, this ever-changing culture of cuisine and how it affects our daily diet. The main reason is that, without human interaction to boost our daily life, our daily diet would not have changed or developed so quickly. A proper literature review was conducted, and this study is expected to shape the researchers who may be interested in the subject in the future at the point of making new studies.
Keywords: Gastronomy, living cuisine, gastronomy trends

AFET BÖLGESİNDE GÖREV ALAN KADIN ÇALIŞANLARIN İKİNCİL TRAVMA İLE BAŞA ÇIKMA BECERİLERİ: MARAŞ-ANTEP DEPREMİ ÖRNEĞİ

SECONDARY TRAUMA COPING SKILLS OF WOMEN WORKERS IN DISASTER AREAS: THE CASE OF THE MARAŞ-ANTEP EARTHQUAKE

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ÖZET

İnsan yaşamını ve doğal yaşamı tehdit eden bir çok olay bulunmaktadır. Afet ise bunlar içinde yıkıcı sonuçları ile bilinen önemli bir kavram olarak karşımıza çıkmaktadır. İnsanların normal yaşamını ve faaliyetlerini kesintiye uğratan, ciddi zarar ve kayıplara neden olan, doğal veya insan kaynaklı olaylar afet olarak tanımlanmaktadır. Afetler, toplumsal düzeni etkileyen büyük ölçekli yıkım ve hasar yaratır, bu nedenle acil müdahale ve iyileştirme gerektirir. Örneğin, deprem, sel, yangın, fırtına gibi doğal olaylar veya endüstriyel kazalar, savaşlar gibi insan kaynaklı olaylar afet olarak kabul edilir. Türkiye gerek iklim gerekse coğrafi konum göz önüne alındığında doğal afetler için riskli bir konumda yer almaktadır. Türkiye'de yaşanan doğal afetler incelendiğinde yıkıcı etkilerinin toplumsal düzeyde hissedilen afetin deprem olduğu görülmektedir. 6 Şubat 2023 tarihinde saat 04.17'de gerçekleşen ve "Asrın Felaketi" olarak adlandırılan depremde de görüldüğü üzere başta depremzedeler sonrasında deprem sahasında çalışanlar ve ülke genelinde bu felaketten etkilenen bireyler üzerinde olumsuz psikolojik çıktılara neden olduğu bilinmektedir. Afet bölgesinde görev alan çalışanlar, genellikle yüksek stres ve yoğun duygusal yükle karşı karşıya kalırlar. Bu durum, çalışanların ikincil travma (veya ikincil travmatik stres) yaşama riskini artırır. İkincil travma, bir kişinin travmatik olaylara doğrudan maruz kalan bireylere yardım etmesi sonucu yaşadığı duygusal ve psikolojik etkileri ifade eder. Bu tür travma, sosyal hizmet uzmanları, sağlık çalışanları, arama-kurtarma ekipleri ve afet bölgelerinde görev yapan diğer meslek gruplarını etkileyebilir. Sahada yer alan çalışanlar arasında kadın çalışanlarda yer almaktadır. Afet bölgelerinde görev alan kadın çalışanlar, hem profesyonel olarak karşılaştıkları zorluklar hem de toplumsal cinsiyet rolleri nedeniyle, özel bir dikkat gerektirir. Araştırma, Türkiye'de 6 Şubat depreminin etkilediği 11 ilde görev alan kadın çalışanların ikincil travma ile başa çıkma becerileri olarak planlanmıştır. Araştırma nitel araştırma yöntemlerinden fenomonoloji deseniyle yazılacak olup 15 kadın çalışan ile derinlemesine görüşme sağlanacaktır. Bu görüşmeler MAXQDA programı ile analiz edilecektir.

Anahtar Kelimeler: sosyal hizmet, afet, deprem, kadın, ikincil travma

ABSTRACT

There are many events that threaten human and natural life. Among these, disasters are significant phenomena known for their destructive consequences. Disasters are defined as natural or human-made events that disrupt people's normal lives and activities, causing serious damage and loss. Disasters create large-scale destruction and damage that affect social order, and therefore require immediate intervention and recovery. For example, natural events such as earthquakes, floods, fires, and storms, or human-made events such as industrial accidents and

wars, are considered disasters. Workers involved in the disaster area generally face high stress and intense emotional burdens. This situation increases the risk of secondary trauma (or secondary traumatic stress) for the workers. Secondary trauma refers to the emotional and psychological effects experienced by a person who helps individuals directly exposed to traumatic events. This type of trauma can affect social workers, healthcare professionals, search-and-rescue teams, and other occupational groups working in disaster zones.

Considering Turkey's climate and geographical location, the country is in a vulnerable position concerning natural disasters. When examining the natural disasters that have occurred in Turkey, it is evident that earthquakes are the most devastating in terms of their societal impact. As seen in the earthquake that occurred on February 6, 2023, at 04:17, referred to as the "Disaster of the Century," it is known that this event caused negative psychological effects not only on the earthquake victims but also on the workers in the disaster area and individuals across the country affected by this catastrophe. Among the workers in disaster areas, female workers are also present. Female workers in disaster zones require special attention due to both the professional challenges they face and the gender roles they are subjected to. The research is planned to examine the coping strategies of female workers in 11 provinces affected by the February 6 earthquake in Turkey, specifically focusing on their ability to manage secondary trauma. The study will use a qualitative research method, adopting a phenomenological design, and will involve in-depth interviews with 15 female workers. These interviews will be analyzed using the MAXQDA software.

Keywords: social work, disaster, earthquake, women, secondary trauma

PREDICTION OF CONDUCTED ELECTROMAGNETIC INTERFERANCES GENERATED BY TWO VARIABLE SPEED DRIVES

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Abstract
Power electronics converters do not only generate low-frequency (LF) harmonics. The switching of controlled devices also produces high-frequency (HF) disturbances. In particular, the power semiconductor components used in variable speed drives for asynchronous motors are a major source of conducted electromagnetic disturbances. Rapid voltage (dv/dtdv/dtdv/dt) and current (di/dtdi/dtdi/dt) variations at the converter output are responsible for the appearance of common-mode and differential-mode currents.
This work aims to study the electromagnetic interaction between two three-phase inverters locally connected to the same electrical network. The study focuses on evaluating their impact on electromagnetic compatibility (EMC) and the effect of the electromagnetic disturbances (EMD) generated by the system. The analysis is conducted through frequency-domain simulations using a matrix-based approach.
For this investigation, the two three-phase inverters are assumed to be connected via a Line Impedance Stabilization Network (LISN). The signals measured in this configuration are compared with the electromagnetic disturbances produced by a system with a single three-phase inverter connected to the electrical grid. The consideration of EMC constraints involves comparing the emission levels of the variable speed drives to the limits imposed by the EN 55022 standard in the frequency range of 150 kHz to 30 MHz.
Keywords: Electrical machine, Electromagnetic Interference (EMI), Standard DO160D.

OLAĞANÜSTÜ DÖNEMLER OLAĞANÜSTÜ VERGİLER: VARLIK VERGİSİ

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ÖZET
6 Şubat 2023 tarihinde Türkiye'yi vuran deprem, derin bir yıkıma yol açarak insanları hayattan koparmakla kalmamış; COVID-19 sonrası zor günler geçiren Türk ekonomisini de iflasın eşiğine getirmiştir. Depremin iktisadi, mali ve sosyal etkilerini bertaraf etmek için başvurulan mali kaynaklar, teorik ve kanuni dayanakları itibariyle sorgulanmıştır. Bu sorgulama, olağanüstü dönemlerin vergilerinin teorik temellerinin araştırılmasını da gerektirmiştir. Bu çalışma, olağanüstü bir dönemin vergisi olan Varlık Vergisini teorik ve kanuni dayanakları itibariyle araştırmaktadır. 20. yüzyılın başında vukû bulan iktisadi ve siyasi olaylar ve akabinde gelen İkinci Dünya Savaşı, Türk ekonomisinin direncini kırmıştır. Mezkûr iktisadi buhrandan kurtulmak isteyen Türkiye; 1940 yılında Milli Korunma Kanunu'nu, 1942 yılında Varlık Vergisini ve 1943 yılında ise Toprak Mahsulleri Vergisini ihdas etmiştir. Varlık vergisi; kamu finansman ihtiyacı, enflasyon ve savaş dönemi haksız kazançları dikkate alınarak tüccar, esnaf, çiftçi, serbest meslek sahipleri ve ücretliler üzerine salınan ve belirli komisyonlarca miktarı saptanan, itiraz hakkı bulunmayan ve bir defaya mahsus tahsil edilen olağanüstü bir vergidir. 1942 yılı bütçesinin kesin hesaplarına göre kamu harcamalarının 1/3'ü Varlık Vergisinden karşılanmıştır. Varlık Vergisinin 166 milyon lirası gayrimüslimler, 115 milyon lirası Müslümanlar ve 33 milyon lirası yabancılar tarafından ödenmiştir. Dolayısıyla, varlık vergisinin yüzde 53'ünü gayrimüslimler, yüzde 36.5'ini Müslümanlar ve yüzde 10.5'ini de yerleşik yabancılar ödemiştir. Kanun maddesinde yer almamakla birlikte uygulamada vergi yükünün gayrimüslimler üzerinde kalması din ve millet temelli bir ayrımla azınlıkların mallarına el konulduğu izlenimini vermektedir. Varlık Vergisi'nden 317.2 milyon lira ve Toprak Mahsulleri Vergisi ve Hayvanlar Vergisi'nden 415.9 milyon lira gelir sağlanmıştır. Varlık Vergisi ve bir diğer olağanüstü vergi olan Toprak Mahsulleri Vergisi mali kaygılar dikkate alınarak ihdas edilmiştir. Kimi mükellefler vergisini ödemiş, kimileri malını kaçırmış ve kimileri de kendisi kaçma teşebbüsünde bulunmuştur. Verginin uygulanma aşamasında suistimaller olmakla birlikte verginin ihdas edilmesinde Almanya veya farklı bir ülkenin dahli bulunmamaktadır.
Anahtar Kelimeler: Servet Vergisi, Varlık Vergisi, Vergi Adaleti, Vergi Ayrımcılığı

EXTRAORDINARY PERIODS EXTRAORDINARY TAXES: 1942's WEALTH TAX IN TÜRKİYE

ABSTRACT
The earthquake that struck Türkiye on February 6, 2023, killed an enormous number of people and brought the Turkish economy, which had fallen on hard times after COVID-19, to the brink of bankruptcy. The fiscal resources used to eliminate the earthquake's economic, fiscal, and social impacts have been questioned in terms of their theoretical and legal basis. This questioning has also necessitated an investigation of the theoretical foundations of taxes in

extraordinary periods. This study investigates the Wealth Tax, a tax of an extraordinary period, in terms of its theoretical and legal bases. At the beginning of the 20th century, economic and political events and the Second World War broke the resilience of the Turkish economy. To escape the aforementioned economic depression, Türkiye enacted the National Protection Law in 1940, the Wealth Tax in 1942, and the Land Crops Tax in 1943. The Wealth Tax is an extraordinary tax levied on merchants, shopkeepers, farmers, self-employed, and wage earners by taking into account the public financing issues, inflation, and unjust gains of the war period. Specific commissions determined the tax amount for charging once only, and there was no right to appeal. According to the final accounts of the 1942 budget, 1/3 of public expenditures were covered by the Wealth Tax. 166 million of the Wealth Tax was paid by non-Muslims, 115 million by Muslims, and 33 million by foreign traders. Therefore, 53 percent of the Wealth Tax was paid by non-Muslims, 36.5 percent by Muslims, and 10.5 percent by resident foreigners. The fact that the tax burden remained on non-Muslims in practice gives the impression that minorities' property was confiscated because of their religions and nationalities. Whereas the Wealth Tax yielded 317.2 million Turkish Liras, the Land Crops Tax yielded 415.9 million Turkish Liras. The Wealth Tax and another extraordinary tax, the Land Crops Tax, were introduced with fiscal concerns. Some taxpayers paid their taxes, some smuggled their property, and some attempted to escape. Although there were abuses during the implementation phase of the tax, Germany and other countries were not involved in creating this tax.

Keywords: General Wealth Tax, 1942’s Wealth Tax, Tax Equity, Tax Discrimination

FARKLI TASARIMLI SAPTIRICI GİRDAP ÜRETEÇLERİNİN PLAKALI ISI DEĞİŞTİRİCİSİNİN ISI TRANSFERİ PERFORMANSI ÜZERİNDEKİ ETKİSİNİN DEĞERLENDİRİLMESİ

EVALUATION OF THE EFFECT OF DIFFERENT DESIGNED BAFFLE VORTEX GENERATORS ON THE HEAT TRANSFER PERFORMANCE OF PLATE HEAT EXCHANGER

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ÖZET

Plakalı ısı değiştiricileri, ısıtma, soğutma ve iklimlendirme gibi birçok temel ısı transferi uygulamalarında yaygın olarak sanayide kullanılmaktadır. Bununla birlikte, teknolojinin ilerlemesiyle boyutları küçülen endüstriyel ekipmanlara paralel olarak plakalı ısı değiştiricilerin de boyutları küçülürken ısıl performanslarının iyileşmesi beklenmektedir. Bu amaçla, ısı değiştiricilere çeşitli geometrik özelliklerde ve akışkanın kanal hacmindeki karışımını artırarak ısı transfer oranını artıran saptırıcı girdap üreteçleri eklemek uygulamalar yer arasında yer almaktadır. Bu çalışmada, akışkanın kanal içerisindeki karışımını artırarak plakalı ısı değiştiricilerin ısıl performansını iyileştirmek için kanal içerisine engelsiz ve altıgen saptırıcı engellin etkisi sayısal olarak incelenmiştir. Sayısal inceleme, zamandan bağımsız ve üç boyutlu olarak korunum denklemlerinin laminar akış yapısı ile Ansys-Fluent programının kullanılmasıyla çözümlenmiştir. Çalışma akışkanı olarak kullanılan suyun kanala giriş sıcaklığı 52 ^{o}C iken, kanalın alt ve üst duvar sıcaklıkları -6,5 ^{o}C olarak sabit alınmıştır. Saptırıcılar ve kanalın diğer yüzeyleri adyabatik olarak tasarlanmıştır. Çalışılan Re sayısı aralığı 0,1-200’ dir. Çalışmanın sonuçları, literatürde bulunan çalışmanın sayısal ve deneysel sonuçlarıyla karşılaştırılmış ve sonuçların birbirleriyle uyumlu oldukları görülmüştür. Sonuçlar, kanal içerisinde engelsiz kanalla karşılaştırmalı olarak akışkanın ortalama Nu sayısı (Nu_m), sıcaklık ve basınç düşününün Re sayısıyla değişimleri şeklinde değerlendirilmiştir. Bunun yanı sıra, kanaldaki akışkanın hız ve sıcaklık konturları dağılımları görselleştirilerek incelenmiştir. Sonuçlar, engelsiz kanalla kıyaslandığında ortalama Nu sayısının (Nu_m) Re= 200 için altıgen saptırıcı engelli kanalda %12,29 daha fazla olduğunu göstermiştir.

Anahtar Kelimeler: Plakalı ısı değiştirici, girdap üreteci, altıgen saptırıcı, sayısal ısı transferi.

ABSTRACT

Plate heat exchangers are widely used in industry for many basic heat transfer applications such as heating, cooling and air conditioning. However, it is expected that the thermal performance of plate heat exchangers will be improved while their dimensions are reduced in parallel with the industrial equipment whose dimensions are reduced with the advancement of technology. For this purpose, it is among the applications to add baffle vortex generators to heat exchangers with various geometrical properties and increasing the heat transfer rate by increasing the mixing of the fluid in the channel volume. In this study, the effect of barrier-free and hexagonal baffles inside the channel was numerically examined to improve the thermal performance of plate heat exchangers by increasing the mixing of the fluid in the channel. Numerical analysis was solved steady and three-dimensionally by using the Ansys-Fluent program with the laminar flow structure of the conservation equations. While the inlet temperature of the water used as the working fluid was 52 ^{o}C, the lower and upper wall temperatures of the channel were taken constant as -6.5 ^{o}C. The baffles and other surfaces of the channel were adiabatically designed. The Re number range studied is 0.1-200. The results of the study were compared with the numerical and experimental results of the studies in the literature and the results were found to be compatible with each other. The results were evaluated as the mean Nu number (Nu_m) of the fluid in the channel compared to the unobstructed channel, and the variations in temperature and pressure with the Re number. In addition, the velocity and temperature contour distributions of the fluid in the channel were visualized and examined. The results showed that the mean Nu number (Nu_m) was 12.29% higher in the hexagonal baffle obstructed channel for Re = 200 compared to the unobstructed channel.

Keywords: Plate heat exchanger, vortex generator, hexagonal baffle, numerical heat transfer

ASSESSMENT OF CONSUMERS AWARENESS AND PREFERENCE FOR MEAT (STEAK) COOKERY SPICES IN SELECTED CATERING OPERATIONS IN YABA LGA, LAGOS STATE

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Abstract
This study assessed the consumers awareness and preferences for spices used in meat (steak) cookery in selected catering operations (outlets) in Yaba Local Government Area in Lagos State. The objectives of the study were to identify the various types of spices used in preparing meat products in catering operations, examine the comparative analysis of cinnamon spice and turmeric spice for meat products, assess preference for spices used in the preparing of meat products in the catering operations and also to determine the influence of consumer age on the acceptability of cinnamon and turmeric spice meat products on appearance, colour and taste. A total of twenty (20) questionnaires. were administered to selected staff of Yabatech and other food vendors within the LGA for sensory evaluation while the samples were sent to a laboratory for proximate analysis and data collected was analysed using frequency distributions, mean, standard deviation and analysis of variance with the aid of Statistical Package for Social Science (SPSS 27.0). The findings revealed that in terms of colour, turmeric was preferred, taste (combination), flavour (rosemary and combination), texture (cinnamon), and overall acceptance (combination). Also, moisture content was highest in turmeric, the combination of the three has the highest crude fat, total ash and carbohydrate content and rosemary has the highest crude protein. The study, therefore, concluded that there is no clear preference for any of the spices and recommended that further study be done with higher samplers to establish catering operations preference for spices in preparing meat products.
Keywords: Catering Operation, Cookery spices, Sensory evaluation, Proximate analysis,

GEÇ DÖNEM OSMANLI'DA GAZETECİ ALİ SUAVİ ÜZERİNE BİR DEĞERLENDİRME
AN EVALUATION ON JOURNALIST ALI SUAVI IN THE LATE OTTOMAN PERIOD

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ÖZET
Ali Suavi, 19. yüzyılda Osmanlı'da Batıcılık adı altında politik, kültürel, ekonomik ve toplumsal dönüşümlerinin gerçekleştiği bir dönemde yazmış olduğu yazılarıyla ve çıkardığı gazete ve dergilerle en sert eleştirileri yapmış bir gazetecidir. Süavi 38 yıl süren kısa ömründe çok sayıda kitap ve makale yazmış, sayısız vaaz vermiş ve İstanbul'da Muhbir gazetesi, Londra'da Le Muhbir, Paris'te Ulum gazetesi, Lyon'da Kamus-ül Ulum Gazetesini çıkarmıştır. Ayrıca Çırağan Baskınını gerçekleştirecek kadar cesaretlidir. Yapılan çalışmalarda birçok farklı alanda düşünce üreten ve yazan Ali Süavi hakkında kesin bir fikir sahibi olunamamaktadır. Çalışmamızın amacı Süavi'nin farklı konularda bölük pörçük olarak düşüncelerini ortaya koyduğunu ve bu düşünceleri arasında mantıksal bir bağ olmadığını ortaya koymaktır. Düşüncelerinin sürekli değişkenlik gösterdiği ve daha önce ortaya koyduğu diğer konulardaki düşünceleriyle de çeliştiği örnekleriyle ortaya konmaya çalışılacaktır. 19. yüzyılda Osmanlı'da dönüşümlerin gerçekleştiği dönemde Ali Süavi dönüşümlerin ortasında ama düşüncelerinde bir tutarlık olmadan farklı konular arasında gezinmektedir. Bu durumun sonucunda kendisi her hangi bir düşünsel başlık altında ele alınamamaktadır. Çalışmada Ali Süavi'nin düşüncelerindeki tutarsızlıkları ve çelişkileri ortaya koymak için kendisinin düşünceleri ve eylemleri üzerine yazılmış makaleler, tezler, kitaplar ve notlar incelenmiştir. Ali Süavi Yeni Osmanlılara başlangıçtaki katılımıyla, bir gazeteci olarak çıkardığı gazete ve dergilerle ve Çırağan baskınını düzenlemesi ve baskın sırasında öldürülmesiyle basın tarihine adını yazdırmıştır ancak çıkardığı gazete ve dergilerde ve diğer yayınlarda paylaştığı düşünceleri birbirinden kopuk, tutarsız ve bütünlükten uzaktır.
Anahtar Kelimeler: Ali Suavi, Gazeteci, Ulum gazetesi, Le Muhbir, Çırağan Baskını

Abstract
Ali Suavi is a journalist who made the harshest criticisms with the articles he wrote and the newspapers and magazines he published, during a period when political, cultural, economic and social transformations took place in the Ottoman Empire under the name of Westernism in the 19th century. In his short life of 38 years, Süavi wrote many books and articles, gave countless sermons, and published Muhbir newspaper in Istanbul, Le Muhbir in London, Ulum newspaper in Paris, and Kamus-ül Ulum newspaper in Lyon. He is also brave enough to carry out the Çırağan Raid. In the studies carried out, it is not possible to have a definite idea about Ali Süavi, who produced and wrote ideas in many different fields. The aim of our study is to reveal that Suavi puts forward his thoughts in fragments on different subjects and that there is no logical connection between these thoughts. It will be tried to show with examples that his thoughts are constantly changing and contradict his thoughts on other issues he has previously expressed. In the 19th century, when transformations took place in the Ottoman Empire, Ali Süavi wandered between different topics in the middle of transformations but without any consistency in his thoughts. As a result of this situation, it cannot be discussed under any intellectual title. In the study, articles, theses, books and notes written on Ali Süavi's thoughts and actions were examined in order to reveal the inconsistencies and contradictions in his thoughts. Ali Süavi

made his name in the history of the press with his initial participation in the New Ottomans, the newspapers and magazines he published as a journalist, and his organization of the Çırağan raid and his death during the raid, but the thoughts he shared in the newspapers and magazines he published and other publications were disconnected from each other, inconsistent and far from integrity.
Keywords: Ali Suavi, Journalist, Ulum, Le Muhbir, Çırağan Incident

İBN BÂBEŞÂZ'IN *ŞERHU'L-MUKADDİMETİ'L-MUHSİBE* ADLI ESERİ BAĞLAMINDA NAHİV İLMİNDEKİ METODU

İBN BÂBEŞÂZ'S ŞERHU'L-MUKADDİMETİ'L-MUHSİBE HIS METHOD IN THE SCIENCE OF NAHIV IN THE CONTEXT OF HIS WORK

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ÖZET

Bu çalışmada, hicri beşinci yüzyılda yaşamış olan Ebü'l-Hasan Tâhir b. Ahmed b. Bâbeşâz'ın (öl. 469/1077) Arap gramer ilminde izlediği metodu ele alınmıştır. Kıraât, tefsir, hadis, belagat, edebiyat ve lügat gibi muhtelif alanlarda söz sahibi olan İbn Bâbeşâz, özellikle Arap gramer ilminde çok derinleşmiş ve döneminde Mısır'ın önde gelen nahiv imamlarından kabul edilmiştir. Nitekim Arap dil ilimlerindeki hâkimiyetinden dolayı divân-ı inşâ' kâtiplerine başkan olarak tayin edilerek onların yazdıklarını gramer, imla ve edebi açıdan kontrol etmekle görevlendirilmiştir. Yürüttüğü bu resmi görevinin yanı sıra Mısır'da uzun yıllar boyunca dil ve kıraat alanlarında ders vermiş ve farklı İslam beldelerinden öğrencilerin yöneldiği biri olmuştur. İbn Bâbeşâz nahiv alanında çok önemli eserler bırakmıştır. Bu eserlerin bir kısmı günümüze gelmemişse de veya henüz gün yüzüne çıkmamışsa da *Şerhu'l-Mukaddimeti'l-Muhsibe* adlı eseri, onun Arap gramer ilmine dair düşünceleri ve metodu hakkında bize çok önemli bilgiler vermektedir. Zira birçok müellifin aksine İbn Bâbeşâz, bu eserinde konu tasnifi ve tertibi başta olmak üzere diğer hususlardaki metodunun gerekçelerini bizzat kendisi ifade ederek gramer ilmine dair benimsediği felsefesini ve temel yaklaşımını ortaya koymuştur. Ayrıca söz konusu eser, müellifin ilmi anlamda olgun olduğu bir dönemin ürünü olması ve otuz yıl boyunca ders kitabı olarak okuttuğu *el-Mukaddime* isimli kitabına şerh olarak yazılmış olması da eseri önemli kılan hususlardandır. Bunların yanı sıra eserde aktarılan bilgiler ve gerekçeler, sonraki dönemlerde telif edilen bazı önemli eserlerin tahlilini ve felsefesinin anlaşılmasını da kolaylaştırmaktadır. Zira birçok açıdan kendine has bir metot ortaya koyan İbn Bâbeşâz, kendinden sonraki bazı büyük alimleri de önemli ölçüde etkilemiştir. Dolayısıyla onun bu eserindeki metodunu ve felsefesini anlamak, benzer metodun uygulandığı diğer eserlerdeki felsefenin anlaşılması bakımından da önem arz etmektedir.

Anahtar Kelimeler: Arap Dili ve Belagatı, İbn Bâbeşâz, Nahiv, Şerhu'l-Mukaddimeti'l-Muhsibe, Metot.

ABSTRCAT

In this study, Ebü'l-Hasan Tâhir b., who lived in the fifth century Hijri. Ahmed b. The method followed by Bâbeşâz (d. 469/1077) in Arabic grammar is discussed. Ibn Bâbeşâz, who had a say in various fields such as recitation, tafsir, hadith, rhetoric, literature and dictionary, was especially deepened in the science of Arabic grammar and was considered one of the leading grammar imams of Egypt during his time. As a matter of fact, due to his mastery of Arabic language sciences, he was appointed as the head of the divan-ı inşâ' clerks and was tasked with checking their writings in terms of grammar, spelling and literature. In addition to this official duty, he gave lectures in the fields of language and recitation in Egypt for many years and became a person to whom students from different Islamic countries turned. Ibn Bâbeşâz left very important works in the field of grammar. Even though some of these works have not

survived to the present day or have not yet come to light, his work titled Şerhu'l-Mukaddimeti'l-Muhsibe gives us very important information about his thoughts and method on Arabic grammar. Because, unlike many authors, Ibn Bâbeşâz, in this work, revealed his philosophy and basic approach to the science of grammar by expressing the justifications of his method on other issues, especially the classification and arrangement of the subject. In addition, the fact that the work in question is the product of a period when the author was scientifically mature and that it was written as a commentary on his book called al-Muqaddimah, which he taught as a textbook for thirty years, is another important aspect of the work. In addition, the information and justifications given in the work facilitate the analysis and understanding of the philosophy of some important works written in later periods. Because Ibn Bâbeşâz, who introduced a unique method in many respects, significantly influenced some of the great scholars after him. Therefore, understanding his method and philosophy in this work is also important in understanding the philosophy in other works where a similar method is applied.
Keywords: Arabic Language and Rhetoric, Ibn Bâbeşâz, Nahiv, Şerhu'l-Mukaddimeti'l-Muhsibe, Method.

TAKTİK TEKERLEKLİ ASKERİ KARA ARAÇLARINDA ELEKTRİK TAHRİKLİ YEDEK LASTİK TAŞIYICI SİSTEMLER[1]

ELECTRIC-DRIVEN SPARE TIRE CARRIER SYSTEMS FOR TACTICAL WHEELED MILITARY LAND VEHICLES

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ÖZET

Bu çalışma, taktik tekerlekli askeri kara araçlarında kullanılan manuel mekanik yedek lastik taşıma mekanizmasının elektrik motoru ile desteklenmesini ve otomatikleştirilmesini hedeflemektedir. Taktik tekerlekli askeri kara araçları, arazi ve zorlu koşullarda yüksek manevra kabiliyeti ve güvenilirlik sağlayacak şekilde tasarlanmıştır. Ancak bu araçların yedek lastik taşıma mekanizmaları genellikle manuel olarak çalışmakta ve kullanıcı tarafından fiziksel güç gerektirmektedir. Geleneksel olarak, yedek lastik mekanizması bijon anahtarı yardımıyla elle çevrilerek işlem görmektedir. Bu manuel işlem hem zaman alıcı hem de zorlayıcı olup, acil durumlarda kullanıcıların hızını sınırlamaktadır. Bu durum, özellikle operasyon sırasında hızlı müdahale gerektiren askeri kara araçları için bir dezavantaj oluşturmaktadır.

Çalışmamız, bu manuel süreci daha pratik hale getirmek amacıyla mevcut mekanizma üzerinde değişiklik yapmayı ve bir elektrik motoru ekleyerek otomatikleştirmeyi önermektedir. Geliştirilen sistemde, elektrik motorunun arıza yapması durumunda kullanıcıların manuel müdahale edebilmesi için bir sonsuz dişli mekanizması kullanılmıştır. Sonsuz dişli mekanizması, sistemin manuel kullanımı sırasında elektrik motoruna herhangi bir zarar gelmesini engelleyerek güvenilirliği artırmaktadır.

Bu çalışmada, önce mevcut manuel yedek lastik taşıma sisteminin kapsamlı bir analizi yapılmış, ardından elektrik motoru ve sonsuz dişli mekanizmasının entegrasyonu sağlanmıştır. Tasarım süreci ve bileşenlerin seçimi dikkatlice ele alınmıştır. Yapılan teorik hesaplamalar ve analizler, elektrik motoru destekli sistemin manuel sisteme kıyasla hem daha hızlı hem de kullanıcı dostu olduğunu göstermektedir. Bu yenilikçi yaklaşım, askeri kara araçlarında yedek lastik taşıma sistemlerinin verimliliğini artırmakta ve bu tür mekanizmaların operasyonel etkinliğini geliştirmektedir.

Anahtar Kelimeler : elektrik motor, yedek lastik sistemi, sonsuz dişli, otomatikleştirme

ABSTRACT

This study aims to enhance and automate the manual mechanical spare tire carrying mechanism used in tactical wheeled military land vehicles by supporting it with an electric motor. Tactical wheeled military land vehicles are designed to provide high maneuverability and reliability in rough terrain and challenging conditions. However, the spare tire carrying mechanisms in these vehicles are typically operated manually, requiring physical effort from the user. Traditionally, the spare tire mechanism is operated by manually turning a lug wrench. This manual process is both time-consuming and physically demanding, which can hinder users in urgent situations. This creates a disadvantage, particularly for military land vehicles that require rapid intervention during operations.

Our study proposes to modify the existing mechanism and add an electric motor to automate this manual process, making it more practical and reducing the physical burden on users. The developed system includes a worm gear mechanism that allows users to manually operate the mechanism if the electric motor fails. This worm gear mechanism increases reliability by preventing any potential damage to the electric motor during manual operation.

In this study, a comprehensive analysis of the existing manual spare tire carrying system was conducted, followed by the design and integration of the electric motor and worm gear mechanism. The design process and component selection were carefully examined. Theoretical calculations and analyses demonstrate that the electric motor-supported system is faster and more user-friendly compared to the manual system. This innovative approach increases the efficiency of spare tire carrying systems in military land vehicles and enhances the operational effectiveness of these mechanisms.

Keywords: electric motor, spare tire mechanism, worm gear, automation

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MOLECULAR IDENTIFICATION OF CULEX MOSQUITOES IN ILORIN, KWARA STATE, NIGERIA.

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ABSTRACT

The *Culex* mosquito genus is well-known for being the vector of various deadly illnesses, such as West Nile fever, Japanese encephalitis, Rift Valley fever, and lymphatic filariasis. These mosquitoes have major medical and public health implications, but little is known about their numbers, species distribution, and molecular diversity, especially in North-central and South-western Nigeria. By examining the species distribution and molecular diversity of *Culex* mosquitoes in various areas, our study aims to close this gap. To guarantee precise species identification, a multimodal strategy integrating genetic and morphological identification methods was used.

In order to maximise the diversity of captured specimens, the mosquitoes were collected using CDC tiny light traps that were baited with CO_2 and put strategically in different sites within the study areas. A total of 2,295 mosquito specimens were gathered, and morphological features were used to initially classify them into the *Anopheles, Aedes, and Culex* genera. Of these, *Culex* mosquitoes were separated from the pool in order to use multiplex PCR analysis and other molecular techniques to identify the species at a higher level.

According to our investigation, the mosquitoes that were gathered were dispersed as follows: *Anopheles* accounted for 1,454 (63.4%) of the total, *Culex* for 585 (25.5%), and *Aedes* for 256 (11.1%). Moreover, molecular research revealed that every *Culex* specimen showed the typical genetic bands connected to *Culex quinquefasciatus*, indicating that this species is the most common in the areas that were collected.

These results highlight the dominance of *Culex quinquefasciatus* in North-Central and South-Western Nigeria among *Culex* species. In view of this mosquito species' involvement in the spread of numerous infections, our research emphasises the critical need for enhanced public health protocols and focused vector control tactics. These steps are essential to stopping the spread of pathogens that pose a serious threat to public health and preventing the spread of diseases carried by mosquitoes to both humans and animals.

Key words: *Culex quinquefasciatus*, Mosquitoes, Kwara, Nigeria

APPLICATION OF THE CODERUNNER PLUGIN IN PROGRAMMING LESSONS AT THE PRIMARY SCHOOL LEVEL

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ABSTRACT

Learning the fundamentals of computer programming is essential for all students, yet many still encounter challenges in mastering these basics. The high failure rate in programming exams in primary schools clearly indicates the need for more effective methods of assessing student knowledge. Moodle is an open-source online learning platform that supports various plugins, and we found the CodeRunner plugin most useful for our assessment needs. CodeRunner is a question type within Moodle that allows teachers to run programs to assess students' responses in Python, C, JavaScript, PHP, Octave, and Matlab.

The research on a sample of 85 seventh grade primary school students who used CodeRunner aimed to examine whether there is statistically significant correlation between the results achieved during the exercises before the test and the test itself. Two tasks were prepared that had to be solved in the Python programming language. In order to determine the above, Spearman's correlation coefficient was calculated, which was chosen since the normality of the distribution of variables was not satisfied. A statistically significant positive correlation between the results of the first task ($\rho = 0.580$, $p < 0.001$) and the second task ($\rho = 0.598$, $p < 0.001$).

This indicates that there is a connection between the exercises before the test and the results achieved on the test. The research also showed that the use of the CodeRunner plugin is applicable in teaching at the primary school level and can be integrated in learning as is for all schools available free of charge.

Keywords: CodeRunner, Moodle, programming, primary school

REKREASYONEL UYGUNLUĞUN BASİT AĞIRLIKLI TOPLAM YÖNTEMİ İLE DEĞERLENDİRİLMESİ: SAHİLKÖY ORMAN İŞLETME ŞEFLİĞİ ÖRNEĞİ

EVALUATION OF RECREATIONAL SUITABILITY USING THE SIMPLE WEIGHTED AVERAGE METHOD: A CASE STUDY OF SAHILKÖY FOREST MANAGEMENT UNIT

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ÖZET

Orman ekosistemleri, sundukları çeşitli ekosistem hizmetleri arasında rekreasyonel faaliyetlere olanak tanıyan hizmetleriyle öne çıkmaktadır. Rekreasyonel uygunluk analizleri, doğal alanların sürdürülebilir kullanımını planlamak ve insan refahını artırmak için kritik bir rol oynamaktadır. Bu çalışma, Sahilköy Orman İşletme Şefliği sınırlarındaki orman alanlarının rekreasyonel uygunluğunu değerlendirmek için Basit Ağırlıklı Toplam (BAT) Yöntemi'nin uygulanmasını ele almaktadır. Analizde eğim, kapalılık ve gelişim çağı olmak üzere üç temel kriter kullanılmıştır. Kriterlerin ağırlıkları uzmanlar tarafından belirlenmiş ve normalize edilen değerler kullanılarak uygunluk puanları hesaplanmıştır. Sonuçlara göre, ormanlık alanların rekreasyon uygunluğu %42 düşük, %47 orta ve %11 yüksek olarak belirlenmiştir. En yüksek uygunluk seviyesine sahip alan toplamda 1,165 hektar büyüklüğündedir. Bu oran, mevcut amenajman planında rekreasyon için ayrılan 49.3 hektarlık alanın çok üzerinde bir potansiyel olduğunu göstermektedir. Bu çalışma, sürdürülebilir orman yönetimi kapsamında, ormanlık alanların rekreasyonel amaçlarla değerlendirilmesinde Basit Ağırlıklı Toplam Yöntemi'nin etkili bir araç olduğunu ortaya koymaktadır. Ayrıca, sonuçlar Birleşmiş Milletler Sürdürülebilir Kalkınma Hedefleri ile ilişkilendirilmiş ve rekreasyonel uygunluk analizlerinin, şehirlerin sürdürülebilir planlamasında önemli bir rol oynayabileceği vurgulanmıştır. Bu bağlamda, çalışmanın bulguları, Sahilköy Orman İşletme Şefliği'nin mevcut rekreasyonel potansiyelinin daha etkin bir şekilde değerlendirilebileceğine dair önemli bir çerçeve sunmaktadır.

Anahtar kelimeler: Rekreasyonel Uygunluk, Basit Ağırlıklı Toplam Yöntemi, Sürdürülebilir Orman Yönetimi,

ABSTRACT

Forest ecosystems stand out among the various ecosystem services they provide, particularly for enabling recreational activities. Recreational suitability analyses play a critical role in planning the sustainable use of natural areas and enhancing human well-being. This study evaluates the recreational suitability of forest areas within the Sahilköy forest sub-district directorate using the Simple Weighted Average (SWA) Method. Three main criteria—slope, canopy closure, and development stage—were employed in the analysis. The weights of these criteria were determined by experts, and suitability scores were calculated using normalized values. According to the results, the recreational suitability of the forest areas was identified as 42% low**,** 47% moderate**,** and 11% high**.** The area with the highest suitability covers a total of 1,165 hectares. This is significantly larger than the 49.3 hectares currently allocated for recreation in the forest management plan, highlighting the much greater potential for recreational use. This study demonstrates that the SWA Method is an effective tool for assessing forest areas for recreational purposes within the scope of sustainable forest management. Additionally, the findings are aligned with the United Nations Sustainable Development Goals

(SDG), particularly SDG 11 (Sustainable Cities and Communities) and SDG 15 (Life on Land). The analysis underscores the significant role of recreational suitability evaluations in sustainable urban planning. The findings provide a valuable framework for more effectively utilizing the recreational potential of the Sahilköy forest sub-district directorate.
Keywords: Recreational Suitability, Simple Weighted Average Method, Sustainable Forest Management

HEAT TRANSFER OF A HYBRID NANOFLUID IN A POROUS HEAT EXCHANGER

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ABSTRACT:
When investigating the performance of thermal transmission in heat systems, hybrid nanofluid are considered to be great candidates that have significant potential in terms of thermos-physical properties and combined with their flow in a well performing porous media setup, thermal transfer reaches a high efficiency.
This study examines the thermal transfer due to the flow MgO-Ag water-based hybrid nanofluid in a 2D porous heat exchanger, through the Finite Element Method that solves the Continuity, Momentum (modified by the Darcy-Brinkmann-Forchheimer model), and Energy equation in COMSOL *multiphysics* software. The thermal system is a co-axial heat exchanger between a circle and a unique geometry that enables great heat transfer, the inner cylinder is heated, while the outer cylinder is set at a cold temperature.
The results are given as functions of the volume fraction of the nanoparticles $2\%\leq\varphi\leq6\%$, Darcy number $10^{-4}\leq\varphi\leq10^{-1}$, and the porosity of the system $0.1\leq\varepsilon\leq0.5$, by varying these parameters, the numerical study reveal the important dependence of the thermal performance on the porous factors of the porous media, as the average Nusselt number, temperature distribution, and stream values appear to be proportional to the Darcy number and porosity, along with the volume fraction of the used nanoparticles that furthermore enhances the efficiency.
Keywords: Nanomaterials, Nanofluids, Thermal transfer, Porous media, Heat exchanger.

SELF REPORTED TIME MANAGEMENT NEEDS AND PRACTICES OF SCHOOL PRINCIPALS

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Abstract
The study investigates the need of time management for head teachers of secondary schools as well as the effect of age and experience on time management. The study tries to find time management practices as perceived by and reported by the head of schools. A 5-point Likert type scale-based questionnaire was prepared to get data on the need of time management for the secondary schools ' heads. The target population was the head teachers of secondary schools situated in Lahore city, Pakistan. The sample of 300 secondary schools were taken randomly. A questionnaire were distributed and was collected at the spot. The collected data was analyzed with the help of SPSS (statistical packages for social sciences). The findings showed that there are some principles of time management by using which, head teachers can increase their work efficiency of productivity of work. In developing a philosophy of time management, a head should learn to manage the present, and foresee the future instead of looking back to past. People hold and practice myths about time that produce only frustration time myths are nothing more that false ideas of how people structure their time. For the effective use of time planning organizing are essential. Planning is the systematic and orderly arrangements for doing something. The study suggests a need to develop a plan otherwise head teachers will allocate time according to whatever happens to land on desk. The head teacher must identify their time waster and they should manage their time wasters by using their management techniques or tips.

Key Words: head teachers, secondary education, time management, strategies,

DEVELOPMENT OF CONCEPTS USING CONCEPT FORMATION TEACHING MODEL

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ABSTRACT
Concept building is always a challenging task. Scientific discipline like computer science need proper skill building specially in practical work. A study was conducted that how students of computer science can enhance their skills. Objective of the study was to know experimentally that how much Concept Formation Teaching Model can be used to improve students' skills. Results shown significant improvement in their concepts. It was concluded that this model if used will be very useful for students' concept building. It was suggested to use it in the said subject.
Key words: Concept, Concept building, Computer Science, Experimental Study

EXAMINING THE SITUATION OF AFGHAN MIGRANT WOMEN IN IRAN, ESPECIALLY DIFFICULT WORKING CONDITIONS AND LOW WAGES

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The issue of examining the situation of Afghan migrant women in Iran, especially their difficult conditions and low wages, has become one of the most important and complex social issues in the country. Afghan migrant women, who have sought refuge in Iran mainly due to the adverse economic and security conditions in Afghanistan, are exposed to numerous social, economic and legal challenges. These women mainly work in informal and low-income jobs and often face problems such as lack of access to labor rights, deprivation of social insurance and unstable working conditions.

Since many of these women do not have identification documents or legal residence permits in Iran, their legal and social rights are limited, which makes them more vulnerable to economic and social exploitation. Also, many of these women are employed in low-wage jobs such as domestic work, agriculture, factories and industries, where very low wages and unsafe working conditions are common.

This situation not only leads to economic and social problems for the women themselves, but also has negative effects on migrant families and communities. Finally, to improve the situation of these women, there is a need for supportive policies and strengthening of the human and social rights of immigrants, especially women.

BIOETHICAL CONSIDERATIONS IN MEDICAL BIOTECHNOLOGY: CHALLENGES AND THEIR PERSPECTIVES

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Abstract
There are both ancient and current applications of bioethics in biotechnology. Biotechnology is the branch of biology that combines living things with technology to produce desired goods. The most common application of biotechnology is in the area connected to medicine and other fields. The discipline is also referred to as red biotechnology. In biotechnology, several tests and trials are conducted to obtain adequate findings, yet these procedures are occasionally unethical and more. Genetic testing, medication therapies, and artificial tissue growth are some of the most prevalent modern biological technology applications. New issues have arisen as a result of the numerous developments in medical biotechnology. There are several things to consider and control when it comes to this quick-paced profession, from funding to ethics. Learn about the issues raised by the numerous biological technological advances. The CRISPR/Cas9 gene editing system and artificial gene synthesis are the main topics of this concise analysis of the regulatory, security, and ethical difficulties nations and the international community are confronting regarding developing biotechnology technologies. Because of a fundamental change in the nature of the issues posed and a modified global landscape, it emphasizes the incapacity of conventional systems, such as export control regimes, to govern these developing technologies. The executive summary also emphasizes the necessity for an open discussion forum for ethical issues and offers potential answers to the myriad of problems. How can we create a security system for biology? What have we discovered about managing earlier technology advances? How much information should be available to the public? Should science in general or biology be regulated? Who should control it? It is necessary to address these and numerous other ethical issues.
Keywords: CRISPR/Cas9 gene, Ethics, Medical Biotechnology, Medication therapies, Issues of biology.

BİR ARAŞTIRMA YÖNTEMİ PARADİGMASI: ÖZEL EĞİTİMDE NİTEL ARAŞTIRMALARIN KULLANIMI

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Özet
İnsanlar, varoluşlarından bu yana çevrelerini anlamaya yönelik çaba içinde olmuş ve bu durum araştırma yapma gereksinimini doğurmuştur. Araştırma sürecinde bilime katkıda bulunmak amacıyla, verilerin planlı ve sistematik bir şekilde toplanması, yorumlanması ve değerlendirilmesi yoluyla gerçekleştirilen çalışmalara bilimsel araştırma ifadesi kullanılmıştır. Bilimsel araştırmalar yapılırken çeşitli yöntemlerle insanlar doğal ve toplumsal çevrelerinde olup bitenleri anlamaya çalışarak bilimsel yöntemlerden yararlanmaktadır. Araştırma yaparken ayrıca kişisel deneyimler, başkalarının bilgileri ve akıl yürütmeleri gibi farklı yollarla da bilgi edinmeye çalışmışlardır. Özellikle sosyal bilimlerde, bireylerin deneyimlerini, bilgilerini ve bakış açılarını derinlemesine anlamayı amaçlayan nitel araştırma, insan deneyimlerini ve sosyal ilişkileri anlamada önemli bir yere sahiptir. Eğitim alanında da sıklıkla tercih edilen nitel araştırma yöntemleri, bireylerin etkileşimlerini, eğitim ortamlarını ve öğrenme süreçlerini daha iyi kavrayabilmek için kullanılmaktadır. Özel eğitim alanında ise nitel araştırma yöntemleri tercih edilmekte olup, nitel yöntemler bireylerin deneyimlerinin ve bakış açılarının ayrıntılı bir şekilde incelenmesine olanak tanımaktadır. Mülakat, gözlem ve vaka analizi öğrenci, öğretmen ve ailelerin deneyimlerini anlamada önemli araçlar sunmaktadır. Bu çalışmada, özel eğitim alanında yapılmış nitel araştırmalar YÖK Tez sisteminde ‘‘özel eğitim’’ ve ‘‘nitel araştırma’’ anahtar kelimeleri üzerinden incelenmiştir. Yapılan tarama sonrasında bulunan çalışmalar yüksek lisans ve doktora çalışması, araştırma gereksinimleri, katılımcı grupları ve kullanılan desenler açısından değerlendirilerek özel eğitim alanındaki nitel araştırmaların yönelimi ortaya konulmuştur.
Anahtar kelimeler: Araştırma, bilimsel araştırma, nitel araştırma, özel eğitim

A RESEARCH METHOD PARADIGM: THE USE OF QUALITATIVE RESEARCH IN SPECIAL EDUCATION

Abstract
Since their existence, people have been trying to understand their environment, and this has created the need for research. The term scientific research is used for studies carried out through the planned and systematic collection, interpretation and evaluation of data in order to contribute to science in the research process. While conducting scientific research, people use scientific methods to try to understand what is happening in their natural and social environments through various methods. While conducting research, they also tried to gain information through different means, such as personal experiences, the knowledge and reasoning of others. Particularly in social sciences, qualitative research, which aims to deeply understand the experiences, knowledge and perspectives of individuals, has an important place in understanding human experiences and social relations. Qualitative research methods, which are frequently preferred in the field of education, are used to better understand individuals' interactions, educational environments and learning processes. In the field of special education,

qualitative research methods are preferred and allow for detailed examination of individuals' experiences and perspectives. Interviews, observations and case studies provide important tools for understanding the experiences of students, teachers and families. In this study, qualitative research conducted in the field of special education was examined using the keywords "special education" and "qualitative research" in the YÖK Thesis system. After the screening, the studies found were evaluated in terms of master's and doctoral studies, research requirements, participant groups and used designs, and the orientation of qualitative research in the field of special education was revealed.
Keywords: Research, scientific research, qualitative research, special education

TECHNOLOGY INTERACTION USING HAND SIGN USING DEEP LEARNING

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Abstract-Hand Signs can be used as a human computer interaction tool by computer vision and deep learning. I have designed and developed a system that can identify hand signs and perform appropriate actions in the computer system which is predefined. By capturing the video from web cam and then read the video from image by image. Then the images will be feed into the single shot multiscale boundary detector convolutional neural network to match the pattern it learned which can be folded hand withopen thumb and pinky finger in different orientation and fore finger up along with thump or middle finger.
Keywords: Hand Sign Recognition; Camera Sensors; Deep Neural Networks.

BELIEF IN THE THERAPEUTIC PROPERTIES OF THE HOLY WORDS (MANTRA) IN ANCIENT IRAN AND MESOPOTAMIA AND COMPARING IT WITH THE PRESENT ERA

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Abstract
In ancient Iran and Mesopotamia, the belief in the power sacred words to cure diseases was deeply rooted in the cultural and religious practices of the time. Both regions had rich traditions of medicine that combined with spiritual beliefs. The magical power of speech, which is called “Mantra” in Indian literature, Veda, represents the sacred word and its power to perform magical actions through speech. Healing the sick and driving away evil spirits and harmful creatures are special powers of the Mantra. In ancient Iran, the use of prayers and hymns was integral to healing practices. The recitation of sacred texts was believed to bring about physical and spiritual healing. In Zoroastrian “Avesta”, the religious book of Zoroastrians, the prayer of “Airyema Išyo” is dedicated to the god “Aryaman”, who is the god of health and healing and is used against diseases. According to the Zoroastrian religion, disease is a creation of the devil and has its roots in his existence, and it is believed that during illness, the evil spirit resides inside a person and dominates him. Therefore, reading the holy words are considered the most effective way to drive away the evil spirit from the human being and to treat the disease. Zoroaster, the Iranian prophet, was able to ward off diseases and disasters by reciting religious prayers. According to Avesta, treatment through the holy word is the most important method of treatment, and the person who heals is referred to as "the most healing of those who give." In another place of the same book, it is stated that there are three types of medicine, the first is healer that treats with a knife, the second is the healer who does herbal treatment and the third is the healer who heals the patient with holy words, and among them, the third one, removes diseases from the patient's body better than others.
In Mesopotamian cultures such as the Sumerians, Akkadians, Babylonians, and Assyrians, incantations were a critical component of healing practices. Healers would recite specific phrases to invoke deities, like “Gula”. This research aims to show the use of the power of words for healing through the texts and tablets of the ancient period in Iran and Mesopotamia and to show the continuation of its use in modern times, while scientific advancements have transformed medicine, many people especially in villages emphasize the significance of sacred words.
Key Words: Ancient Iran, Mesopotamia, healing, holy words, Ma

ŞEKER PANCARI POSASININ BİYOKÜTLE OLARAK DEĞERLENDİRİLMESİ
UTILIZATION OF SUGAR BEET PULP AS BIOMASS

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ÖZET
Şeker pancarının (*Beta vulgaris* subsp. *vulgaris*) şeker üretim sanayiinde işlenmesi sonucu çok miktarda şeker pancarı posası/küspesi (ŞPP) organik artık olarak ortaya çıkmakta olup, bu da değerli bir yan ürün olarak değerlendirilebilmektedir. İşlenen her bir ton şeker pancarı için sırasıyla yaklaşık 160-500 kg ve 50-70 kg yaş veya preslenmiş posa ve kurutulmuş posa üretilir ve ŞPP Avrupa'da üretilen en yüksek hacimli bitkisel artıklardan biridir. ŞPP yaklaşık olarak %20-25 selüloz (ağırlık/ağırlık), %25-36 hemiselüloz, %20-25 pektin, %10-15 protein ve %1-2 lignin içerir. ŞPP, lignoselülozik içeriği nedeniyle genellikle hayvan yemi olarak kullanılır.
Bitkilerden ve hayvanlardan elde edilen organik materyali ifade eden biyokütle (biomass), fosil kaynaklara sürdürülebilir ve çevre dostu bir alternatif sunar. Geleneksel olarak biyokütle üç ana türe ayrılmaktadır. Bunlar, enerji mahsulleri, doğal bitki örtüsü, organik atıklar ve kalıntılardır. Endüstriyel ve tarımsal atıklar ve yan ürünleri önemli miktarda yüksek enerji üretim potansiyeline sahiptir. ŞPP'nın zengin lignoselülozik materyal ve mineral içeriği onu, biyoetanol, biyogaz, biyopolimerler ve biyoplastikler gibi farklı değerli ürünlerin endüstriyel üretimi için de iyi bir ham madde haline getirmektedir.
Bu nedenle, ŞPP yenilenebilir bir enerji kaynağı olarak düşünülebilir ve dönüşümü büyük bir teknolojik öneme sahip gibi görünmektedir. Paçallama (blending), yakıt maliyetlerinde olası bir azalma ile daha ucuz yakıtların kullanımına da yol açabileceğinden, son yıllarda kömür ve biyokütlenin (ŞPP) birlikte işlenmesi üzerine giderek artan sayıda çalışma yürütülmektedir.
Bu literatür taramasının temel amacı, ŞPP'nın sıvı yakıt üretimi, farklı linyit numunelerinin/ŞPP karışımlarının pirolizi, farklı linyit numunelerinin/ŞPP karışımlarının co-pirolizi, ŞPP'nın kömür karışımlarıyla co-firing, biyoetanol ve biyometanol üretimi amacıyla kullanımını değerlendirmektir.
Anahtar Kelimeler: Şeker Pancarı Posası, Biyokütle, Piroliz, Biyoetanol, Biyometanol

ABSTRACT
The processing of sugar beet (*Beta vulgaris* subsp. *vulgaris*) in the sugar production industry releases extremely large amounts of sugar beet pulp (SBP) as organic waste which can be considered as a valuable by-product. For each tonne of the sugar beets being processed, respectively, about 160-500 kg and 50-70 kg of wet or pressed pulp and dried pulp are produced and SBP is one of the highest volume vegetable wastes produced in Europe. SBP contains approximately, 20-25% cellulose (w/w), 25-36% hemicellulose, 20-25% pectin, 10-15% protein, and 1-2% lignin. Due to its lignocellulosic content, SBP is generally considered as forage for animal feed.

Biomass, which refers to organic material derived from plants and animals, provides a sustainable and environmentally friendly alternative to fossil resources. Traditionally, biomass is divided into three main types: energy crops, natural vegetation, organic waste and residues. Industrial and agricultural wastes and by-products have a considerable high amount of energy generation potential. The rich lignocellulosic material and mineral content of SBP also presents them as good raw substrate for industrial production of different valued products such as bioethanol, biogas, biopolymers, and bioplastics.

So, SBP can be considered as a renewable energy resource and its conversion seems to be of great technological importance. Since, blending can also result in the utilization of less-expensive fuels with a possible reduction in fuel costs, increasing number of studies on the co-processing of coal and biomass (SBP) has been carried out during the recent years.

This literature review basically aimed to evaluate the utilization of SBP for the production of liquid fuels, pyrolysis of different lignite samples/SBP blends, co-pyrolysis of different lignite samples/SBP blends, co-firing of SBP with coal blends, bioethanol and biomethanol production.

Keywords: Sugar Beet Pulp, Biomass, Pyrolysis, Bioethanol, Biomethanol

SPORTS GAMBLING: KNOWLEDGE AND PREVALENCE AMONG COLLEGIATE ATHLETE

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Abstract
Sports betting which is a form of gambling has become increasingly popular among university students and considerable number of students bet on sports and most do so with their monthly income and some their school fees. Hence, the aim of this study is to investigate the knowledge and prevalence of sports gambling among collegiate athletes in Nigeria. The study will be anchored on social exchange theory and Incentive theory. A descriptive survey design was adopted for the research. Data were collected from 118 student athletes in the University of Nigeria, Nsukka, using a survey questionnaire. The Cronbach's coefficient alpha for the questionnaire was 0.73. Frequencies, percentages, means, and standard deviations were used to analyse the data. The results revealed that 53.4% of the respondents were into sports betting, out of which, 11.1% of them place their bet via mobile USSD or SMS, 69.8% of them via the internet online, and 19.1% of them place their bet at betting shop. Also, almost 90% of the respondents knew that sports betting is a form of gambling activity. Based on the findings, it was recommended among others that the university management through its entrepreneur unit should create an appropriate enterprises to empower students financially and the guidance and counselling units should carry out an informative campaign to reduce the degree to which students overestimate sports betting as a means to generate income.
Keywords: Gambling, Sports betting, Student, Athletes, Knowledge, Prevalence,

ENHANCING ELECTRIC VEHICLE RANGE WITH SOLAR INTEGRATION AND WIRELESS CHARGING TECHNOLOGY

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ABSTRACT:

Electric vehicles (EVs) offer a sustainable alternative to traditional gasoline- powered vehicles, but limited driving range and long charging times hinder their effectiveness for long-distance travel. This project proposes a hybrid solution by integrating renewable energy sources, such as solar panels, directly onto the EV's surface to continuously generate power while driving. Additionally, a wireless charging system utilizing magnetic coils embedded in roads or charging stations allows the vehicle to recharge on the go, without the need for traditional plug-in stops. By combining solar energy and wireless charging, this system aims to extend the vehicle's range significantly, reduce reliance on stationary charging stations, and enhance the convenience of EV use during long trips. This approach not only addresses range anxiety but also contributes to a more sustainable transportation system by maximizing the use of clean energy sources.

Electric vehicles (EVs) are increasingly recognized as a cleaner, more sustainable alternative to traditional gasoline-powered cars, helping reduce carbon emissions and dependence on fossil fuels. However, two major challenges have limited the widespread adoption of EVs for long-distance travel: limited driving range and the need for long charging times. While the range of EVs has improved, it still remains a concern for travelers on long trips, particularly in areas where charging stations are sparse. The time required for charging, which can range from several hours to even days for fully depleting batteries, further exacerbates the issue.

This paper addresses these challenges by proposing a hybrid solution that integrates renewable energy sources, such as solar panels, directly into the EV's surface. This allows the vehicle to continuously generate power while driving, reducing dependence on charging stations. In addition, the system incorporates a wireless charging technology using magnetic coils embedded in roads or at designated charging stations, enabling vehicles to recharge on the move without the need for plug-in stops. By leveraging both solar energy and wireless charging, this solution aims to significantly extend the EV's driving range and reduce charging times, ultimately making long-distance EV travel more practical and sustainable.

The scope of this work is to develop a hybrid solution for electric vehicles (EVs) that integrates solar energy generation directly onto the vehicle's surface and incorporates wireless charging technology via magnetic coils embedded in roads or charging stations. This system aims to address key challenges in long-distance EV travel, such as limited driving range and long charging times. By utilizing solar power for continuous energy generation while driving and enabling on-the-go wireless recharging, the project seeks to enhance the convenience, range, and sustainability of EVs. Ultimately, the solution aims to reduce reliance on stationary charging infrastructure, mitigate range anxiety, and contribute to a more sustainable transportation system by maximizing the use of renewable energy sources.

Keywords: Electric vehicle, Solar energy, Wireless charging

ARTIFICIAL INTELLIGENCE WATER EXPLORATION OF MIDDLE MOULOUYA BASIN, (EAST OF MOROCCO)

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Abstract. Climate change has increasingly impacted water resources, particularly in arid regions like the Middle Moulouya Basin. The arid nature of this basin, coupled with low precipitation levels, compels residents to seek underground water by digging random wells. Given the vast area and the fact that it has not been thoroughly investigated, this study aims to predict potential underground water horizons using artificial intelligence, based on thematic maps related to groundwater, such as lineaments, faults, geology, stream networks, well yields, piezometry, and aquifer thickness. The lineament map was generated using Geomatica software and Sentinel-2 data. The results of this study will serve as a valuable resource for guiding exploratory borehole drilling and uncovering the area's water resources.
Key words: potential underground water, water exploration, water resources.

EXTRACTION AND ANALYSIS OF LINEAMENT IN THE MIDDLE MOULOUYA WATERSHED USING REMOTE SENSING SOFTWARE

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Abstract. The middle Moulouya watershed, situated in the Moulouya valley between the hight and middele Atlas, has being studied to ascertain the function of geological structures in the underground hydrodynamics of the area.
This study is based on Satellite imagery analysis where we used remote sensing software such as Geomatica to extract lineaments and potential geological features, including faults and fractures.
The extracted features should be analyzed to detect their correlations and assessing their orientation, distribution and density along with their impact on the watercourse in the middle Moulouya basin.
The predicted results could explain the relationship between the geological features, the ground water flow allowing management of ground water resources.
Key words: geological structures, underground hydrodynamics.

RATIONAL DESIGN OF NOVEL AGENTS FOR SLEEP DISORDERS: INSIGHTS FROM DRUG-LIKENESS, ADMET, AND MOLECULAR DOCKING DYNAMICS

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Abstract

Sleep disorders significantly affect patients' recovery and quality of life, necessitating the search for novel therapeutic agents. In this study, molecular docking and molecular dynamics (MD) simulations were utilized to identify potential drug candidates. Structure-based drug design was employed to analyze ligand behaviors computationally, using docking tools to visualize and examine protein-ligand complexes at the atomic level.

Twenty compounds derived from Cannabis sativa L. were screened for their interaction with orexin receptors. A comprehensive Drug-likeness and ADMET analysis was performed to identify compounds with favorable pharmacological properties for future drug development. The binding affinities of these compounds to orexin receptors were evaluated, revealing strong interactions and high binding energies.

MD simulations confirmed the stability of the docked complexes within the receptor cavities, further supporting the potential of these molecules as therapeutic agents. The findings suggest that Cannabis sativa L. compounds possess anti-sleep disorder properties, which may be repurposed for future therapeutic applications. These promising results pave the way for further experimental validation to explore their potential in combating sleep disorders.

Keywords: Cannabis, Sleep Disorders, Drug likness, ADMET, molecular docking, molecular dynamics

"THE RELATIONSHIPS BETWEEN CO_2 EMISSIONS, ECONOMIC GROWTH, AND ENERGY CONSUMPTION. AN ANALYSIS FROM THE PERSPECTIVE OF ENVIRONMENTAL ECONOMICS"

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Abstract:
The modern world faces a key challenge – how to reconcile dynamic economic growth with environmental protection. Energy consumption, which is the engine of economic development, is also the main source of carbon dioxide emissions, which contribute to global warming. The aim of my presentation is to present how these three elements – CO2 emissions, economic growth and energy consumption – are interconnected. Based on the assumptions of environmental economics, I will show that it is possible to balance these relationships through innovation, energy efficiency and appropriate policies based on a review of the literature. The presentation of research results would answer the question to what extent this problem is addressed in economics, econometrics and finance. The study used output data from the SCOPUS database, and visualization results were obtained using the VOSviewer computer program.
Keywords: CO_2 emissions, Economic Growth, Energy Consumption, Bibiliometric Analysis, VOSviewer.

ADVANCING PHONETIC CLASSIFICATION WITH A HYBRID EVOLUTIONARY NEURAL NETWORK MODEL

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ABSTRACT
Recent advancements in Automatic Speech Recognition (ASR) have been largely driven by the development of sophisticated and efficient algorithms, enabling more accurate and reliable systems. Among these innovations, research inspired by simplified biological processes has given rise to Estimation of Distribution Algorithms (EDA)—a novel class of methods designed to retain and build upon promising partial solutions during optimization. One notable member of this class is Population-Based Incremental Learning (PBIL), which integrates stochastic search with optimization strategies. This statistical approach, closely aligned with EDAs, leverages principles of evolutionary computation to refine recognition systems, particularly those based on artificial Neural Networks (NN). By combining the strengths of these methodologies, PBIL offers a robust framework for enhancing the adaptability and performance of ASR systems.
Key Words: automatic speech recognition, estimation of distribution algorithms, population-based incremental learning, neural networks.

ROLE OF SELF-CONTROL IN THE RELATIONSHIP BETWEEN ONLINE SHOPPING ADDICTION AND COMPULSIVE BUYING BEHAVIOR AMONG YOUNG ADULTS

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Abstract
Online shopping addiction can lead to compulsive buying behavior and self-control plays a crucial role in managing and mitigating these behaviors. The study aimed to explore the relationship between online shopping addiction and compulsive buying behavior among young adults, with self-control acting as a mediator. Online Shopping Addiction Scale was used to measure the online shopping addiction (Zhao et al., 2017). Compulsive Buying Behavior Scale was used to measure the severity of compulsive buying tendencies in participants (Valence et al., 1988). The Brief Self-Control Scale (BSCS) was utilized to assess self-control (Tangney et al., 2004). The cross-sectional correlational research design was used in this study. The sample consisted of (*N=300*) young adults. An equal number of boys and girls participated in the current study. The age range of the participants was 18-39 years old. The findings of the study revealed a significant relationship between online shopping addiction, compulsive buying behavior, and self-control. In correlation analysis, significant positive relationship was found between online shopping addiction and compulsive buying behavior; findings also revealed that both online shopping addiction and compulsive buying behavior were negatively correlated with self-control. Significant mean differences in online shopping addiction, compulsive buying behavior, and self-control were found across gender including gender in relation to the study variable. The mediation analysis showed that self-control had a significant mediating effect on the relationship between online shopping addiction and compulsive buying behavior. This study can provide insights into the development of effective interventions and strategies to promote healthy online shopping behaviors among university students.
Keywords. online shopping addiction, compulsive buying behavior, self-control, young adults.

ASSESSING THE PREDICTIVE ACCURACY OF FOUR IN SILICO TOOLS AND TWO ENSEMBLE MODELS FOR CLASSIFYING SCN1A VARIANTS LINKED TO DRAVET SYNDROME

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ABSTRACT

Genetic variants can impact clinical outcomes, medication responses, and disease susceptibility. Thus, it becomes essential to understand their significance. Genetic testing is revealing a growing number of variants with unknown significance, which presents a challenge for precision medicine. In Dravet syndrome, a severe form of epilepsy that typically starts in infancy is mainly driven by changes in the alpha subunit of the voltage-gated sodium channel, which is encoded by the SCN1A gene, leading to this issue. Addressing this, computational algorithms may be used to predict the effect of variants of unknown significance, helping to guide diagnosis and treatment decisions. This study aims to evaluate the effectiveness of four in silico tools (SIFT, PolyPhen-2, SNPs&GO, FATHMM-XF) and two ensemble predictors (CADD and Meta-SNP) in classifying SCN1A mutations linked to Dravet syndrome. The dataset composed of germline classifications of 489 single nucleotide and missense variants, consisting of 477 pathogenic and 12 benign variants, retrieved from the NCBI ClinVar database. Performance of selected predictive models was evaluated by calculating accuracy metrics, with particular focus on the Matthews correlation coefficient (MCC) due to the significant imbalance in the dataset, where pathogenic variants vastly outnumber benign ones. The prediction model with the highest MCC value was PolyPhen-2 (MCC=0.42). While this value is better than random performance for the classification, it suggests only moderate predictive power. PolyPhen-2 showed high accuracy (0.93), sensitivity (0.93), and specificity (0.84). However, the limitations such as the dataset size and dataset imbalance should be considered before drawing definitive conclusions. These findings provide insights into the performance of tools used for SCN1A variant classification, contributing to the reliability and applicability of predictive models in clinical diagnostics, genetic research, and precision medicine, ultimately supporting better decision-making and improved patient care.

Keywords: Dravet Syndrome, SCN1A gene, computational algorithms, predictive accuracy, precision medicine, in silico methods

BUILDING A SUSTAINABLE FUTURE: A SYSTEMATIC REVIEW OF MARKETING STRATEGIES FOR MICRO, SMALL, AND MEDIUM ENTERPRISES

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Abstract
This research provides a systematic review of the marketing strategies used by Micro, Small, and Medium Enterprises (MSMEs) to achieve sustainable growth in a highly competitive and eco-conscious market. This study focuses on MSMEs, which are crucial in fostering economic development. These enterprises encounter specific challenges in adopting sustainable practices due to limited resources and restricted access to advanced marketing innovations. The review explores various marketing strategies, such as digital marketing, the 7ps of the marketing mix, green marketing, and customer engagement techniques, effectively promoting sustainability while ensuring profitability. This research synthesizes findings from scholarly articles published over the past decade. It emphasizes the increasing significance of sustainability as a fundamental aspect of marketing strategy, highlighting practices corresponding with sustainable marketing and the obstacles encountered in applying this essential concept. Other important insights include the vital role of the 7ps of the marketing mix in sustaining MSMEs within global, international, and local settings. This study offers practical recommendations for MSME owners and policymakers by identifying essential success factors and obstacles to adoption. The findings accentuate the need for customized marketing approaches that harmonize sustainable practices with market needs, enabling MSMEs to effectively contribute to global sustainability objectives while succeeding in their respective sectors.
Keywords: Sustainable Future, Micro, Small, and Medium Enterprises (MSMEs), Marketing Strategy, Economic Development, Systematic Review

THE ROLE OF E-COMMERCE IN EMPOWERING WOMEN ENTREPRENEURS AND ECONOMIC DEVELOPMENT: A CASE STUDY OF SMES IN DEVELOPING COUNTRIES

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ABSTRACT

This study examines how e-commerce empowers women entrepreneurs and promotes economic growth in small and medium-sized enterprises (SMEs) in developing countries, with a focus on customer satisfaction, financial performance and operational efficiency. The study used a quantitative methodology to collect information from 217 women-owned SMEs in the sanitation sector using a standardized questionnaire. Regression and correlation were two statistical techniques used to examine the impact of e-commerce on the success of the business. It was found that the introduction of e-commerce and company success are significantly positively correlated ($r = 0.62$, $p < 0.01$). The regression analysis showed that e-commerce explained 41% of the variance in financial performance ($R2 = 0.41$, $p < 0.05$). The adoption of e-commerce increased consumer satisfaction and operational efficiency, which strengthened the role of women entrepreneurs in large cities and contributed to economic growth. However, the short study period and the sector-specific sample limit the generalizability of the study.

Future studies should assess the long-term impact of e-commerce on economic sustainability and expand their focus to a wide range of companies. To support the growth of women-led SMEs and their ability to contribute to local and regional development, it will also be important to examine the elements that enhance their digital capabilities.

Keywords: E-commerce, Women entrepreneurs, Business performance, Economic development, SMEs, Developing countries.

EFFECT OF MINERAL NITROGEN FERTILIZATION ON THE PRODUCTIVITY OF SWEET CORN HYBRIDS

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Effect of mineral nitrogen fertilization on the productivity of sweet corn hybrids was studied in field trial in the Maize Research Institute – Knezha, Bulgaria. The next hybrids were estimated: Kn Zah 1, Zah 1-6 x Zah1L; Zah 38 x Zah1L; Zah 1-4/03 x Zah1L and LV1/03 x Zah1L. The first is recognized hybrid and the other four are experimental crosses. The fertilization variants were as follows: N0 – without nitrogen fertilization, N5 – 5 kg N as active substance and N10 – 10 kg N as active substance. The density of sowing was 4000 plants/da. Productive characteristics of corn were recorded. The number of cobs for the N0 and N5 fertilization was found 4670 n/da and 5420 n/da, respectively for Zah 1-6 x Zah 1L. The highest number of cobs (6050 n/da) was found for Zah 1 - 4 x Zah 1L under N10 fertilization. The strongest effect of mineral nitrogen fertilization on the productivity characteristics was found for the hybrid Kn Zah 1. Under no fertilization the highest cob yield of 741,5 kg/da was established by Zah 1-6 x Zah 1L. The use doses of fertilizer N5 and N10 showed the best results at Zah 1-4/03 x Zah 1L, 858 kg/da and 932 kg/da, respectively.
Key words: sweet corn, hybrids, fertilization, productivity

ETHNOPHARMACOLOGICAL AND PHYTOCHEMICAL REVIEW ON AN ANTILEPROTIC DRUG HYDNOCARPUS

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ABSTRACT :
Ethnological Significance of Medicinals: The genus Hydnocarpus (Flacourtiaceae) includes forty species distributed throughout the world. In the Indian system of medicine, it is Hydnocarpus pentandrus which is primarily used to treat leprosy and other skin disorders. It is known as "Chaulmoogra" and is also used to treat other indications including constipation, inflammation, blood disorders, and worm infestations. Different species of Hydnocarpus are also used in traditional medicine in China, Thailand, Malaysia, and Myanmar to treat various skin disorders. To evaluate the therapeutic potential of species of the genus Hydnocarpus and to determine future avenues of research. All relevant scientific literature published was retrieved through library and electronic searches , Hand searches of traditional books such as ancient classics including Vaidya Yoga Ratnavali and Siddha Materia Medica and contemporary references including ancient Indian Pharmacopoeia and Ayurvedic formula were also performed. The oil of seeds of species of the genus Hydnocarpus is used for medicinal purposes, mostly for various skin disorders. This oil has been reported to contain a distinct class of compounds known as cyclopentenyl fatty acids. Moreover, the seeds of this genus have been reported to contain triglycerides of fatty acids, sterols, flavonoids, and flavonolignans. Hydnocarpin, a flavonolignan, has been reported to potentiate antimicrobial and anticancer activity. Extracts and compounds isolated from this plant exhibit a wide range of pharmacological properties, including antibacterial, antibacterial, antituberculous, antimigraine, rheumatic, hypolipidemic, antidiabetic, anticancer, anti-inflammatory, and antioxidant activities. The antibacterial activity is supposed to be due to the cyclopentenyl fatty acids present in the seed oil. Conclusion: Flavonolignans contain an important chemical element, and hydrocarbons and their derivatives should be investigated for their activities and the mechanism behind these activities. Multidrug-resistant microbes are increasing, and the potential inhibitory effect of these compounds when used in combination with current antimicrobials must also be evaluated. Moreover, unique cyclopentenyl fatty acids must also be screened to understand the exact mechanism of action underlying the antibacterial activity. Additional in-depth phytochemical investigations of the seed oil and extracts are required to take advantage of the true potential of species of the genus Hydnocarpus.
Keywords : cyclopentene stearic acid. Hydnocarpus. leprosy; traditional uses.

PRO-JOB UNETHICAL BEHAVIOR, EFFORT-REWARD IMBALANCE, EMPLOYEE SILENCE AND EFFORT WITHHOLDING IN UNIVERSITY TEACHERS

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Abstract
The present study aims to find out the relationship between Unethical Pro-Organization behavior, Effort-Reward Imbalance, Employee Silence and Effort withholding in university teachers. It was hypothesized that there were likely to be a relationship between unethical pro job behavior, effort reward imbalance employee silence and effort withholding. A sample of 200 teachers was taken from 1 private and 1 public university with equal distribution on the basis of gender. Sample size was calculated by G-Power (Faul, 2009). Data was collected by using convenient sampling technique. Unethical Pro-Organization behavior scale, Effort-Reward Imbalance scale, Employee Silence scale and Effort withholding scale was used as assessment measures. Data was analyzed by using SPSS. Reliability analysis, correlation, regression, mediation analysis was used to analyze the data. Correlation analysis showed significant relationship between unethical pro job behavior, withholding effort, job neglect, social loafing, free riding, and shirking. The result of regression indicate that unethical pro job behavior predicts withholding effort, job neglect, free riding, shirking and social loafing in university teachers, whereas, Effort reward imbalance negatively predicts withholding effort, job neglect and shirking in university teachers but effort negatively predicts shirking in university teachers.

Keywords: Pro-Job Unethical Behavior, Effort-Reward Imbalance, Employee Silence, Effort Withholding, University Teachers

THE THERAPEUTIC EFFECTS OF DENIPLANT NUTRACEUTICALS ON THE GUT MICROBIOME IN PATIENTS WITH PSORIASIS

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Background
A growing body of evidence highlights that intestinal dysbiosis is associated with the development of psoriasis. The gut–skin axis is the novel concept of the interaction between skin diseases and microbiome through inflammatory mediators, metabolites and the intestinal barrier. The gut microbiome affects skin homeostasis through its influence on the signaling pathways that coordinate epidermal differentiation.
The objective of this study was to synthesize current data on the Deniplant natural modulator of the gut microbiome in patients with psoriasis.
Materials and methods
All studies confirmed the association of psoriasis and gut microbiota dysbiosis. We describe the recent advances regarding the interplay between gut microbiota and the skin. Thus, the microbiome can be considered an effective therapeutical target for treating this disorder.
Results
This presentation provides a detailed and comprehensive systematic study regarding gut microbiome in patients with psoriasis. These results are supported by clinical observations based on a case serie showing improvement in psoriatic skin lesions after Deniplant natural modulator. It is still not clear whether psoriasis is an effect or a cause of the observed disbalance between beneficial and pathogenic microbes. In this context, the study provides very interesting results, showing significantly greater changes in the gut microbiome of patients with psoriasis treated Deniplant natural modulator
Conclusion
There is a significant association between alterations in gut microbial composition and psoriasis. Intestinal dysbiosis is a state of imbalanced gut microbiome that eventually has a negative impact on skin function and integrity. Deniplant natural modulator is a potential therapeutic strategy in patients with psoriasis
Keywords: dysbiosis, microbiome, psoriasis, gut-skin axis, gut barrier, Deniplant nutraceuticals

SYNTHESIS AND STRUCTURAL STUDY OF PARA-NITROSALICYLATE Ni(II)

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ABSTRACT

A new complex with the composition - $(4 – O_2N, 2 – HO – C_6H_3COO)_2$ Ni · $4H_2O$ has been synthesized. Single crystals were obtained and the crystal and molecular structures of the new complex were deciphered and crystallographic parameters were calculated using X-ray diffraction analysis. The central nickel (II) atom was found to be coordinated to the carboxyl groups by a monodentate thyrus. Four water molecules with donor oxygen atoms coordinate with the Nickel atoms and complete the coordination number to the sixty.

Introduction: A new complex of composition: $(4 - NO_2, 2 - OH, C_6H_3COO)_2Ni(II) \cdot 4H_2O$ was synthesised and by X-ray diffraction analysis.

Research and results: The new aqua complex was synthesised as follows 1.89 g (0.01 mol) Na sol para - aminosalicylato dissolved in 50 ml of hot (70 - 800C) distilled water. A solution of 1.44 g (0.005 mol) $NiSO_4 \cdot 7H_2O$ is added to the solution. The resulting solution is left at room temperature. After a few days, brown coloured needle-like crystals fell out.

The precipitate was filtered and dried in an exciter over anhydrous $CaCI_2$.

The monocrystals were selected under microscope and sent to Sargodha University of Pakistan Republic. The data for structural analysis were obtained with the help of automatic diffractometer of Bchiker ARCH SSD brand. Molecular and crystalline structures were deciphered with the help of the programme [1,2,3] (Fig.1).

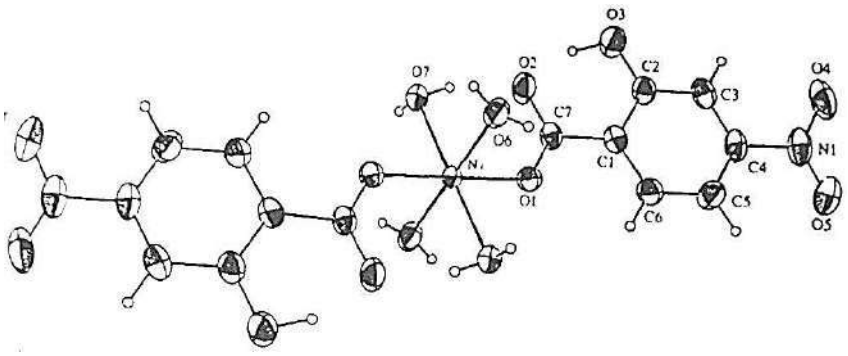

Figure 1. Molecular structures of the complex $(4 - O_2N, 2 - HO - C_6H_3COO)_2$ Ni · $4H_2O$

Table 1 shows the basic data of interatomic bonds and valence angles

Table 1.

Bonds	d(Å)	Valent angles	ω^0	
Ni-O(1)	2,053	O(1)-Ni-O(6)	88,22	
Ni-O(6)	2,087	O(1)-Ni-O(7)	92,63	
Ni-O(7)	2,151	O(4)-Ni(1)-O(5)	123,5	
Ni-O(5)	2,079	O(5)-Ni(1)-C(4)	118,3	
C-O (1)	1,222	Ni(1)-C(4)-C(3)	118,4	
C-O 2 (2)	1,348	Ni(1)-C(6)-C(4)	118,5	
Ni(1)-O(7)	1,222	O(6)-Ni-O(7)	88,78	
Ni(1)-O(5)	1,348	Ni-O(1)-C(7)	128,5	

As can be seen from Figure 1, the central Nickel atom is coordinated by donor oxygen atoms in a monodentate manner. Included in the molecule are four water molecules through donor oxygen atoms coordinating the central Nickel atom and completing the coordination number of Nickel to six, forming around its octahedron. The molecule has strong hydrogen bonds with uncoordinated water molecules and bonds the molecules together to form a polymer structure.

Conclusions

A new complex of para-aminosalicylic acid with Nickel(II) cation has been synthesised. Single crystal crystals were obtained for X-ray structural analysis. With the help of an automatic diffractometer Bruker ARCH SSD, the necessary data were obtained and the crystal structures were deciphered using a special programme. The carboxyl groups of the ligand are coordinated to the Nickel cation by a monodentate diter. The central Nickel atom is coordinated by four water molecules and completes its coordination number to six. The polehedron around the central atom is an octahedron.

Key words: para-aminosalicylic acid, nickel aqua complex, crystal structure, monodentate coordination number.

BLOOMBERG GPT: REVOLUTIONIZING AI IN FINANCIAL ANALYSIS

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ABSTRACT

BloombergGPT: Revolutionizing AI in Financial Analysis" This research investigates how BloombergGPT, a large language model with 50 billion parameters, can enhance natural language processing (NLP) tasks specific to the financial industry. With an increasing reliance on AI for analyzing large volumes of complex financial data, the question arises: How can a domain-specific AI model improve financial operations and decision-making? Bloomberg is exploring this question to improve its financial analytics capabilities, enabling more accurate and efficient data-driven insights.

BloombergGPT was developed by fine-tuning a general-purpose large language model with proprietary data from Bloomberg's vast financial archive. This approach combines general language understanding with deep financial domain expertise, enabling the model to perform NLP tasks such as sentiment analysis, document classification, and financial trend prediction with greater precision.

Initial results suggest that BloombergGPT significantly outperforms existing models on financial-specific tasks while maintaining competitive performance on general language tasks. By leveraging a blend of domain-specific data and AI techniques, Bloomberg has achieved higher accuracy in processing financial documents, leading to better market predictions and risk analysis. The deployment of BloombergGPT indicates a shift in AI application within finance.

The model's ability to process and interpret complex financial data has the potential to revolutionize financial decision-making processes. Future implications include expanding the use of AI in fintech applications, allowing for real-time, more informed financial analysis, and possibly setting a new standard for AI-driven financial insights.

Keywords: BloombergGPT, Finance, NLP, AI

THE ROLE OF ARTIFICIAL INTELLIGENCE IN REVOLUTIONIZING THE FASHION INDUSTRY

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ABSTRACT

Artificial Intelligence (AI) is significantly reshaping the fashion industry, influencing areas such as design, marketing, and sustainability. This paper explores AI's role in transforming these key sectors, offering new opportunities for innovation and improving customer experiences while addressing environmental challenges.

In design, AI provides tools that enhance creativity and streamline processes. Platforms like Adobe Firefly and DALL·E allow designers to quickly generate virtual prototypes, experiment with patterns, colors, and textures, and analyze trends. This helps brands like Gucci and Ralph Lauren create virtual collections, attracting tech-savvy consumers. AI analyzes fashion data, helping designers stay relevant by identifying popular trends and combinations. Rather than replacing human creativity, AI complements it by offering fresh perspectives and faster design iterations.

In marketing, AI personalizes consumer interactions by analyzing data to predict preferences and recommend products. For example, Burberry's use of AI-powered product recommendations increased their online sales by 30%. AI also helps brands like Tommy Hilfiger adapt quickly to emerging trends, enabling faster market responses. Additionally, AI-driven virtual and augmented reality (VR/AR) technologies enhance customer engagement by allowing virtual try-ons and interactive experiences, transforming the shopping experience.

Sustainability is another area where AI makes a significant impact. AI optimizes production processes, reducing waste and lowering environmental footprints. Brands like H&M and Patagonia use AI for demand forecasting, producing only what is necessary and minimizing overproduction. Stella McCartney's collaboration with Google demonstrates AI's ability to track and measure supply chain emissions, helping brands reduce their carbon footprint and choose sustainable materials.

While AI offers numerous benefits, it also raises ethical concerns such as biases in algorithms and environmental impacts, requiring careful consideration in its implementation. In conclusion, AI is revolutionizing fashion, fostering creativity, enhancing marketing, and promoting sustainability, with ethical challenges that must be managed responsibly.

Keywords: Artificial Intelligence, Fashion Industry, Marketing, Sustainability, Ethics

THE MINERAL WATER ANTIMICROBIAL POTENTIAL AS A COMPONENT OF ELIMINATION IRRIGATION THERAPY FOR THE UPPER RESPIRATORY TRACT MUCOSE MICROBIOTA TREATMENT

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Abstract. Elimination irrigation therapy for is characterized by two effects on upper respiratory way infections: its antimicrobial properties and mechanical cleansing effects. A combination of mineral water with antibiotic also shows effectiveness for enhancing normal microbiota state.
The aim of the work was to study the influence of elimination-irrigation therapy using a combination of mineral water and ciprofloxacin on the interaction form of individual microbiota species of the upper respiratory tract mucous membrane.
During the investigation there were used microbiological, such as microscopic, bacteriological and biofilm cultivation, methods.
The treatment of biofilms, both mono- and multispecies (*L. sporogenes, S. aureus* ATCC 25923, *E. coli* ATCC 25922 and their corresponding combinations), with an antibiotic and mineral water provokes antagonistic interactions inside these associations and general decrease of the microbial colonization activity. During the multispecies biofilm formation a mutual antagonistic effect was determined. The forms of microbial interaction in multispecies biofilmwas changed in the Ciprofloxacin presence but additional mineral water treatment enhanced the antagonistic interaction between the studied microorganisms.
Key words: mineral water, microbial biofilm, elimination-irrigation therapy.

HETEROCYCLIC MOLECULES: SYNTHESIS AND ANTIDIABETIC ACTIVITY

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Abstract
A range of heterocyclic derivatives were synthesized and evaluated for their anti-diabetic activities. The synthesis was carried out through conventional organic chemistry reactions using multistep approach. The structure assignments was done by using advanced spectroscopic techniques. Among the synthesized derivatives, Among the synthesized derivatives, many were found as good inhibitors of enzymes. The structure-activity relationship (SAR) performed on these active compounds would be helpful for the synthesis of novel antidiabetic agents.
Keywords: Pyrazolobenzothiazine, Anti-diabetic activity, cytotoxic activity.

SMART SENSORS FOR EFFICIENT IRRIGATION

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Abstract
Water scarcity and climate change pose significant challenges to modern agriculture, necessitating innovative solutions to optimize water usage. Smart sensors have emerged as a vital tool for enhancing irrigation efficiency, enabling farmers to monitor and respond to real-time data on soil moisture, temperature, humidity, and crop water needs. By integrating smart sensors with advanced technologies such as artificial intelligence (AI) and the Internet of Things (IoT), precision irrigation systems can automate water delivery, reducing waste and ensuring optimal plant growth.
This article explores the latest advancements in smart sensor technology and their applications in agriculture, highlighting successful case studies that demonstrate significant water savings and improved crop yields. It also examines the challenges associated with sensor deployment, including calibration, energy efficiency, and economic feasibility, and proposes strategies to address these issues. By fostering sustainable irrigation practices, smart sensors play a crucial role in conserving water resources and supporting global food security in the face of environmental pressures.
Keywords: Smart Sensors, Precision Irrigation, Water Management, Sustainable, Agriculture, Internet of Things (IoT).

SHAPING GLOBAL ENERGY FUTURES: THE U.S. PRESIDENTIAL ELECTION AND BRICS IN A NEW WORLD ORDER

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Abstract
This paper indicates the outcome of U.S. presidential elections has a profound impact on global energy governance, particularly concerning BRICS (Brazil, Russia, India, China, and South Africa). U.S. policies, especially sanctions on energy-producing countries like Russia and Iran, directly affect BRICS' energy strategies, potentially encouraging them to strengthen internal alliances or seek alternative energy partnerships to reduce reliance on U.S.-controlled financial and trade systems. This geopolitical shift highlights the contrasting energy strategies between the U.S., which favors fossil fuel development, and BRICS, which prioritizes renewable energy. As a result, there may be both competition and collaboration in sectors such as clean energy, solar power, and electric vehicles. The role of alternative financial structures, like the BRICS Development Bank, challenges U.S.-dominated institutions such as the World Bank, as BRICS nations aim to finance energy projects that align with their own priorities. Moreover, the evolution of multilateral energy governance frameworks and the U.S.'s position within platforms like the Paris Agreement will shape future global energy norms. These dynamics suggest that U.S. elections will continue to influence not only energy policies but also broader geopolitical relations, determining the future direction of global energy governance and power dynamics within the energy sector.
Keywords: Energy, BRICS, sanctions, Development

THE GEOPOLITICS OF CRITICAL MINERALS: CHINA, RESOURCE NATIONALISM, AND BATTERY INNOVATION

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Abstract

This paper explores the global transition to renewable energy which is increasingly shaped by the geopolitical dynamics surrounding critical minerals like lithium, cobalt, and nickel, which are essential for electric vehicle (EV) batteries and solar panels. China's dominance in processing rare earth elements has created vulnerabilities in global supply chains, with heavy dependence on a single country. In response, nations like Indonesia and Chile have implemented resource nationalist policies, restricting mineral exports to prioritize domestic needs. These measures disrupt global mineral flows and may delay the shift to sustainable energy, while also intensifying tensions between major powers such as the U.S. and the EU. Concurrently, innovations in battery technology, such as sodium-ion and solid-state batteries, hold potential to reduce reliance on these minerals, but the pace of scaling these technologies remains uncertain. This creates risks for global energy strategies, as geopolitical conflicts over resource extraction persist. For example, China's expanding influence in regions like the Solomon Islands, where it has secured mining agreements, raises concerns about regional stability and the security of mineral supply chains. These developments—resource nationalism, technological advancements, and shifting geopolitical alliances, exemplified by U.S.-China tensions, Indonesia's nickel export ban, Chile's lithium nationalization, and China's role in the Solomon Islands—intersect to influence the future of global energy. The outcomes of these competing factors will ultimately determine whether technological progress in battery technology can outpace geopolitical struggles for critical minerals and ensure a smooth transition to renewable energy

Keywords: Renewable, Energy, , Innovations

DİKKAT EKSİKLİĞİ VE HİPERAKTİVİTE BOZUKLUĞU OLAN ERGENLERİN VE YETİŞKİNLERİN PSİKOLOJİK ÖZELLİKLERİNİN İNCELENMESİ (KIRGIZİSTAN ÖRNEĞİ)

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Bu çalışmanın amacı, Kırgızistan'da yaşayan ergen ve yetişkinler arasında dikkat eksikliği ve hiperaktivite bozukluğu görülme düzeylerini belirlemektir. Bu araştırmada betimsel nitelikle tarama modeli kullanılmıştır. Çalışmanın evrenini 2023-2024 eğitim-öğretim yılında Kırgızistan – Türkiye Manas Üniversitesinde öğrenim gören öğrenciler oluşturmuştur. Örneklemini ise, yine aynı üniversitede öğrenim gören ve gönüllü olarak ölçeği dolduracak öğrenci oluşturmuştur. Çalışmaya toplam 355 kişi katılmıştır. Çalışmada, Günay ve arkadaşları tarafından geliştiren (2005) "Erişkinlerde dikkat eksikliği hiperaktivite ölçeği" kullanılmıştır. Verilerin analizinde SPSS-26 istatistik programından yararlanılmıştır. Verilerin analizinde öncelikle parametrik veya parametrik olmayan testlerden hangisinin kullanılması gerektiğini belirlemek üzere verilerin normal dağılım şartını yerine getirip getirmediğine bakılmıştır. Dolayısıyla kullanılan test normallik varsayımı yerine getirdiği için verilerin analizinde parametrik testlerden ikili değişkenler arasındaki farkların belirlenmesinde Bağımsız T-testi, ikiden fazla değişkenler arasındaki farkların belirlenmesinde Tek Yönlü ANOVA testi kullanılmıştır. Anlamlılık düzeyi ($p<.05$) olarak alınmıştır. Araştırmanın bulgularına göre dikkat eksikliği ve hiperaktivite bozukluğunun semtomları cocukluk döneminde başlanmasına rağmen ergenler ve yetişkinlerde de devam ettiği için yaşam kalitesini düşürdüğü görülmüştür. Ergen ve yetişkinlerinler dikkat eksikliği ve hiperaktivite bozukluğu cinsiyet değişkinine göre Ölçeğin geneli ve bütün boyutlarında anlamlı bir farklılık göstermemektedir, buna göre ergen ve yetişkinler ölçeğin geneli ve bütün boyutlardaki özellikler açısından birbirlerine yakın düzeyde kendilerini değerlendirdikleri söylenebilir. Alkol-madde kullanan deneklerin DEHBnın semtomlarının yükselmesine etken olduğu görülmüştür. Demek ki alkolün DEBH belirtilerinin ortaya çıkmasını etkilediğini göstermektedir. Kardeş sayısının dikkat eksikliği ve hiperaktivite bozukluğu üzerindeki etkisi karmaşık bir konudur ve tam olarak belirlenmiş bir yanıtı yoktur. Araştırmada dikkat eksikliği alt boyutundaki anlamlı farklılık çocukluk döneminde psikiyatrik başvurusu olanlar lehine çıkmıştır. Araştırmada elde edilen bulgular dikkate alınarak aşağıdaki önerilere yer verilmiştir. Çalışma sonucunda dikkat eksikliği ve hiperaktivite bozukluğunun semtomları cocukluk döneminde başlanmasına rağmen ergenler ve yetişkinlerde de devam ettiği için yaşam kalitesini düşürdüğü görülmüştür. Bu sonucun yaşlı bireylerde görülme ihtimaline karşı benzer çalışmalar yaşlı bireyler üzerindede yapılabilir.

Anahtar Kelimeler: Dikkat Eksikliği ve Hiperaktivite Bozukluğu, Ergen, Yetişkin.

INVESTIGATION OF PSYCHOLOGICAL CHARACTERISTICS OF ADOLESCENTS AND ADULTS WITH ATTENTION DEFICIT AND HYPERACTIVITY DISORDER (KYRGYZSTAN SAMPLE)

Abstract

The aim of this study is to determine the levels of attention deficit and hyperactivity disorder among adolescents and adults living in Kyrgyzstan. A descriptive screening model was used in this study. The universe of the study consisted of students studying at Kyrgyzstan-Turkey Manas University in the 2023-2024 academic year. The sample consisted of students studying at the same university who would voluntarily fill out the scale. A total of 355 people participated in the study. The "Adult Attention Deficit Hyperactivity Scale" developed by Günay et al. (2005) was used in the study. SPSS-26 statistical program was used in the analysis of the data. In the analysis of the data, it was first examined whether the data met the normal distribution condition in order to determine which of the parametric or non-parametric tests should be used. Therefore, since the test used fulfilled the normality assumption, Independent T-test was used to determine the differences between binary variables from parametric tests in the analysis of the data, and One-Way ANOVA test was used to determine the differences between more than two variables. The significance level was taken as ($p<.05$). According to the findings of the study, although the symptoms of attention deficit and hyperactivity disorder started in childhood, it was seen that they decreased the quality of life since they continued in adolescents and adults. Adolescents and adults did not show a significant difference in the general and all dimensions of the scale according to the gender variable of attention deficit and hyperactivity disorder, accordingly, it can be said that adolescents and adults evaluate themselves at a similar level in terms of the general and all dimensions of the scale. It was seen that subjects who use alcohol and substances were a factor in the increase of ADHD symptoms. Therefore, it shows that alcohol affects the emergence of ADHD symptoms. The effect of the number of siblings on attention deficit and hyperactivity disorder is a complex issue and does not have a fully determined answer. In the study, the significant difference in the attention deficit sub-dimension was in favor of those who applied to psychiatric hospital in childhood. Considering the findings obtained in the study, the following suggestions are included. As a result of the study, it was observed that although the symptoms of attention deficit and hyperactivity disorder started in childhood, they continued in adolescents and adults, thus reducing the quality of life. Similar studies can be conducted on elderly individuals in case this result is seen in elderly individuals.

Keywords: Attention Deficit and Hyperactivity Disorder, Adolescent, Adult.

TERMAL ENERJİ DEPOLAMALI YOĞUNLAŞTIRICILI GÜNEŞ KOLEKTÖRÜYLE ÇİFT AŞAMALI KURUTMA SİSTEMİNİN TASARIMI VE KURUTMA VERİMİNİN İNCELENMESİ

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ÖZET
Kurutma gıda, tekstil ve tarımsal ürünlerin işlenmesi gibi endüstrinin birçok alanında yüksek enerji tüketimli bir işlem olarak dikkat çekmektedir. Kurutma işlemi üründe bulunan su içeriğini azaltarak ürünün mikrobiyolojik ve fiziksel açıdan dayanıklı hale getirmektedir. Böylece daha uzun raf ömrü ve kalitesinin artırılması sağlanmaktadır. Ancak kurutma işlemi gerçekleştirilirken ürünlerin renk, koku, rehidrasyon ve görünüşlerinin korunması da oldukça önemlidir. Kurutma işlemi sırasında uzun süreler yüksek sıcaklığa maruz bırakılan ürünlerin besin değerinde ve kalitesinde kayıplara yol açabilir. Çift aşamalı kurutma, ürünlerin sıcaklık stresine maruz kalmasını azaltarak ürün kalitesini korur. İlk aşamada yavaş kurutma yapıldığından, ürün yüzeyinde sertleşme veya çatlama gibi deformasyonlar önlenir, bu da ürün kalitesini artırır. Ayrıca çift aşamalı kurutma, her aşamada farklı sıcaklık ve nem koşullarının uygulanmasına olanak tanır. Bu da kurutma sürecinin hem enerji tüketimini düşürür hem de kurutma işlemini daha güvenilir ve öngörülebilir hale getirir. Bu çalışmada, termal enerji depolamalı yoğunlaştırıcılı güneş kolektörüyle çift aşamalı kurutma sisteminin tasarımı ve kullanımı incelenmiştir. İki aşamada kurutma işlemi yapılması planlanan bu sistemde yoğunlaştırıcılı kolektör kullanarak ilk aşamada ürünlerin nem içeriğinin büyük oranda azaltılacaktır. Aynı zamanda bu aşamada güneş enerjili yoğunlaştırıcılı kolektörlerde elde edilen enerjinin bir kısmı yüksek sıcaklıkta bir faz değişim malzemesinde depolanacaktır. İkinci aşamada ise düşük sıcaklıkta kalan nemin tamamen alınması sağlanarak, nihai ürün kalitesi korunur ve enerji tasarrufu sağlanır. Çalışma sonucunda, çift aşamalı kurutma sisteminde güneş enerjisi ve termal depolama kullanımı ile %10-30 arası enerji tasarrufu sağlanabileceği öngörülmektedir. Bu sistemin uygulanabilirliği, sürdürülebilir enerji kullanımı ve endüstriyel verimlilik açısından umut verici sonuçlar ortaya koymaktadır.
Anahtar Kelimeler: Kurutma, Havalı kolektör, Termal enerji depolama

DESIGN OF A DUAL-STAGE DRYING SYSTEM WITH A CONCENTRATOR SOLAR COLLECTOR AND THERMAL ENERGY STORAGE: INVESTIGATION OF DRYING EFFICIENCY

ABSTRACT
Drying is a high-energy-consuming process widely used in industries such as food processing, textiles, and agriculture. The process reduces the moisture content of products, making them microbiologically and physically stable. This ensures longer shelf life and improved quality. However, it is equally important to preserve the color, aroma, rehydration capacity, and appearance of the products during drying. Prolonged exposure to high temperatures during the drying process may lead to losses in nutritional value and product quality. Dual-stage drying mitigates temperature stress, preserving product quality. In the first stage, slow drying prevents surface hardening or cracking, enhancing the product's quality. Additionally, dual-stage drying allows the application of different temperature and humidity conditions at each stage, reducing

energy consumption and making the process more reliable and predictable. This study examines the design and application of a dual-stage drying system with a thermal energy storage-supported concentrating solar collector. In this system, the first stage significantly reduces the moisture content using energy obtained from the solar concentrating collector. Simultaneously, a portion of the energy generated is stored in a high-temperature phase change material for later use. In the second stage, the remaining low-level moisture is removed, ensuring final product quality and achieving energy efficiency. The study projects that using solar energy and thermal storage in dual-stage drying systems can provide 10-30% energy savings. The findings demonstrate the system's feasibility and its potential to enhance sustainable energy usage and industrial efficiency.

Keywords: Drying, Air collector, Thermal energy storage

TIBBİ CİHAZ ÖRNEKLERİNDE FİTALAT MİKTAR TAYİNİ İÇİN GC-MS YÖNTEMİ GELİŞTİRİLMESİ VE KİMYASAL KARAKTERİZASYON

DEVELOPMENT OF A GC-MS METHOD FOR THE QUANTIFICATION OF PHTHALATES IN MEDICAL DEVICE SAMPLES AND CHEMICAL CHARACTERIZATION

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ÖZET

Tıbbi cihazlar, hastalıkların önlenmesi, teşhisi, tedavisi ve hasta rehabilitasyonu gibi alanlarda hayati öneme sahip, sağlık sistemlerinin temel bir bileşenidir. Fitalatlar, doğurganlık ve üreme üzerindeki potansiyel toksisiteye sahip bileşiklerdir. Birçok yasal otorite tarafından karsinojenik, mutajenik ve üreme açısından toksik olarak sınıflandırılırlar. REACH Yönetmeliği kapsamında çok yüksek önem taşıyan maddeler (SVHC) olarak tanımlanmıştır. MDR (Tıbbi Cihaz Yönetmeliği) kapsamında polimer tabanlı tıbbi cihazlarda plastikleştirici olarak ağırlıkça %0,1'lik bir konsantrasyonda kullanılmasına izin verilmektedir. Tıbbi cihazın piyasaya arz edilebilmesi için ana gerekliklerden biri tıbbi cihazın biyolojik olarak uyumlu olmasıdır. Genel güvenlilik ve performans gereklilikleri kapsamında hastaların vücuduna salınan maddelerden kaynaklanan riskler en aza indirilmelidir. Bunun yolu da kimyasal karakterizasyondan geçmektedir. Polimerden üretilen tıbbi cihazlardan tedavi sırasında fitalatlar, doğrudan kan dolaşımına salınabilir ve tolere edilen limitleri aşarak sağlık etkilerine neden olabilir. Çalışmamızda, polivinil klorür (PVC)'den üretilmiş şırınga ve serum seti satın alınmış ve bu tıbbi cihazlar ISO 10993-12 standardına göre hekzan ile özütlenmiş ve ISO 10993-18 standardına göre kimyasal karakterizasyon gerçekleştirilmiştir.

5 farklı fitalat (DBP, DIBP, BBP, DEHP, DNOP) türünün tayini için GC-MS tabanlı bir yöntem geliştirilmiştir. 9 noktalı kalibrasyon sonucunda, korelasyon katsayılarının (R^2) ≥0.995 olduğu görülmüştür. Cihazdan alınan iç kalite kontrol kabul kriteri değerleri 23,42-24,29 ppm saptanmış, bu değerlerin (25±%15 ppm, QC) uygun olduğu görülmüştür. Tespit sınırları ≤ 0.5 ppm olarak saptanmıştır. Avrupa Kimyasallar Ajansı (ECHA) veri tabanından elde edilen bileşimlerin toksikolojik bilgileri kullanılarak, ISO 10993-17 standardına göre toksikolojik açıdan risk değerlendirilmesi gerçekleştirilmiş ve güvenlik marjı değeri 0,70 olarak hesaplanmıştır. ISO 10993-17 standardının en kötü durum senaryosuna göre değerlendirildiğinde MOS<1 olarak hesaplanmış ve potansiyel risk olduğu görülmüştür.

Anahtar Kelimeler: GC-MS, Fitalatlar, Tıbbi Cihaz, Kimyasal Karakterizasyon, Toksikolojik Risk Değerlendirmesi, ISO 10993-17, ISO 10993-18

ABSTRACT

Medical devices are an essential component of healthcare systems, playing a crucial role in areas such as disease prevention, diagnosis, treatment, and patient rehabilitation. Phthalates are known for their potential toxicity to fertility and are classified as carcinogenic, mutagenic, and reproductively toxic by numerous regulatory authorities. Under the REACH Regulation, they are defined as substances of very high concern (SVHC). According to the Medical Device Regulation (MDR), phthalates are allowed to be used as plasticizers in polymer-based medical devices at a concentration up to 0.1% by weight. One of the main requirements for a medical device to be placed on the market is biocompatibility. Risks related to the substances released into a patient's body must be minimized in accordance with general safety and performance requirements, and this can be achieved through chemical characterization. Phthalates can be released into the bloodstream during treatment from polymer-based medical devices and this may cause health issues if their concentrations exceed tolerated limits. In our study, syringes and serum sets made up of polyvinyl chloride (PVC) were purchased, extracted with hexane according to the ISO 10993-12 standard and chemically characterized by following the ISO 10993-18 standard.

A GC-MS based method was developed for the determination of five phthalates (DBP, DIBP, BBP, DEHP, DNOP). Following a 9-point calibration, correlation coefficients (R^2) of ≥0.995 were obtained. The internal quality control acceptance criteria (25±15% ppm, QC), with values between 23.42 and 24.29 ppm were found to be appropriate. Detection limits were determined as ≤0.5 ppm. A toxicological risk assessment was performed in accordance with the ISO 10993-17 standard, using toxicological data from the European Chemical Agency (ECHA) database. The calculated margin of safety (MOS) was 0.70. When evaluated according to the worst-case scenario of the ISO 10993-17 standard, MOS was calculated as <1 and there was a potential risk.

Keywords: GC/MS, Phthalates, Medical Device, Chemical Characterization, Toxicological Risk Assessment, ISO 10993-17, ISO 10993-18

THE ROLE OF SUNDAY SCHOOL TEACHERS CREATIVITY THROUGH VISUAL MEDIA IN ENHANCING COGNITIVE DEVELOPMENT OF EARLY CHILDHOOD

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Sunday School teachers play a strategic role in supporting this development, particularly through creative approaches. One potential approach is the use of visual media, which can enhance children's engagement and understanding of Christian religious education. This study aims to analyze the role of Sunday School teachers' creativity in utilizing visual media to support the cognitive development of early childhood. The research method used is qualitative with a literature review approach. The study involved several Sunday School teachers from local churches as participants. The results show that teachers' creativity in designing and using visual media, such as pictures, short videos, and teaching aids, significantly enhances children's interest in learning. Furthermore, visual media helps children more easily understand abstract concepts, such as the values of love, truth, and faith. In conclusion, teachers' creativity in utilizing visual media greatly contributes to the cognitive development of early childhood while fostering their love for learning Christian values.
Keywords: Teacher Creativity, Sunday School, Visual Media, Cognitive Development, Early Childhood.

REDEFINING STRUCTURAL INTEGRITY: THE ROLE OF THE ARCHITECTURAL COLLAR IN MODERN DESIGN

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Abstract:
The architectural collar has now been evolved in modern architectural design as a structural support and an extrinsic character that transcends its basic function as one element of structure. In this study, the architectural collar is explored as a means to increase structural integrity, while providing aesthetic and sustainable design. The architectural collar showcases a unique adaptability integrating principles from engineering, environmental science, and material innovation to demonstrate resilience for structures challenged by modern city issues, (such as urban density, climate change, resource efficiency). Using an interdisciplinary approach, this paper studies the role of collars in load distribution, elimination of stress concentration and energy efficiency, and their central role in holistic design solutions. Looking at modern building case studies shows how the collars provide both practical as well as artistic functions in freeing design to comply with tight safety standards. The above further highlights the architectural collar's capacity to push beyond conventional structural concepts, and indeed, reconcile form, function, and sustainability in service of an urban landscape of needs.
Keywords: Architectural Collar; Structural Integrity; Modern Design; Load Distribution; Sustainable Architecture.

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TECHNOLOGY-DRIVEN PUBLIC SPACES: EXPLORING THE INTERSECTION OF SMART DESIGN AND ARCHITECTURE

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Abstract:
This marks a shift in urban design, one from an era of smart architecture and innovative design towards technology driven public spaces that ultimately contribute to the quality of urban life. It presents ways in which the dynamic intersection between technology and public space comes to be, by analyzing how smart systems integrated into conventional environments change the normal to become interactive, sensitive, and sustainable urban landscapes. We study the implementation of Internet of Things (IoT) devices, data driven resource management, and adaptive design strategies in particular that are most concerned about user experience and environmental stewardship through case studies and current literature. The result of this research emphasizes the significance of collaborative planning and multidisciplinary work, and of urban planners, architects, and resident communities working together to incorporate spaces that are technologically advanced, socially inclusive and environmentally sustainable. The findings highlight the way in which technology can address challenges like data privacy, accessibility, broad access, and create space for connecting people to take ownership in the space, while remaining sustainable and community engaged. This article advances the smart design principles of public space forward, and examines what the future of public space may look like with technology driving the evolution of urban ecosystems that become vibrant, resilient, and community centered.
Keywords: Technology-driven public spaces; Smart design; Urban architecture; Internet of Things (IoT); Sustainable urban design.

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BUILDING COMMUNITY BONDS: THE ROLE OF PUBLIC SPACE ARCHITECTURE IN ENHANCING SOCIAL COHESION IN SHARANIEN CITIES OF ALGERIA

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Abstract:
This study examines the function of architecture in public space in shaping social cohesion in the Sharanien cities of Algeria, where rapidly changing urbanization generates demands to ensure the continuity of communal ties. This research investigates what impact communal area, traditional architectural features, mixed use developments, and pedestrian friendly way can have towards greater social interaction and community identity by looking at how thoughtfully designed public space can work to improve these items. Findings resulting from a mixed method approach including surveys of residents, observations of public spaces, and statistical analyses of the effects of place specific to public spaces indicate that well designed public spaces have a significant impact on the sense of belonging and collective pride sensed by resident. In addition, utilizing participatory design processes by including members of the community in the planning and development makes persons more satisfied and feeling ownership of the process. Results from the study highlight the potential of culturally sensitive and inclusive public space architecture as a tool to build cohesive, resilient communities. The importance of the above insights for urban planners and policymakers as well as other rapid urbanizing contexts at large is to show that in the case of urbanizing Algeria and beyond, the more public spaces are designed with people's needs in mind, the stronger and more supportive the community will be.
Keywords: Social cohesion; Public space architecture; Community bonds; Sharanien cities; Urban design.

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BEYOND PLAY: THE IMPACT OF ARCHITECTURAL DESIGN ON SOCIAL AND COGNITIVE DEVELOPMENT IN PLAYGROUNDS.

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Abstract:
Architecturally designed playgrounds, typically conceived as recreational spaces, may aptly be exploited to promote social and cognitive development, first among children. This study investigates how spatial organization, sensory elements, and nature-based features in playgrounds influence developmental outcomes like problem solving, creativity and social engagement. The research is drawn from ecological systems theory and elucidates how inclusive design principles need to accommodate diverse abilities to create equitable access to opportunities for development. In this study, the interplay between structured and unstructured play in different playground layouts is examined to illustrate the effectiveness of such play environments to create resilience, collaboration and the adaptability of thought. This underscores the importance of an urban design approach involving architects, educators, and children's policymakers to shape what we might call playgrounds that are less about play and more about developing a child's whole self. This research argues for recasting playgrounds as essential community assets that both foster childhood wellbeing and wireless social and cognitive skills indispensable to future challenges.
Keywords: Playground Design; Social Development; Child Development; Environmental Psychology; Ecological Systems Theory.

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PRİMİPAR GEBELERİN DOĞUM ÖNCESİ BAKIM ALMA DURUMUNUN BELİRLENMESİ

DETERMINATION OF THE STATUS OF RECEIVING PRENATAL CARE OF PRIMIPAROUS PREGNANT WOMEN

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ÖZET

Bu tanımlayıcı çalışma, anne, fetüs, aile bireyleri ve toplum sağlığı için önemli olan prenatal bakım hizmetlerinin nicelik ve niteliksel açıdan değerlendirmek ve etki eden faktörlerin incelenmesi amacıyla yapılmıştır.

Araştırma örneklemini 360 anne oluşturmuştur. Örneklem seçimde bilinen evrenden örneklem hesaplama formülü kullanılarak rasgele olmayan örnekleme yöntemlerinden gelişigüzel örnekleme yöntemi kullanılmıştır. Verilerin toplanması araştırmacı tarafından geliştirilen ve 5 bölümden oluşan bilgi formundan yararlanılmıştır. Bu bölümler "Sosyo-demografik özellikler", "Tıbbi özellikler", "Obstetrik özellikler", "Prenatal bakım almaya ilişkin veriler", "Prenatal bakım içeriğine ilişkin bilgiler"dir. Veriler tanımlayıcı istatistikler ve iki nitel değişkenin karşılaştırılması için Ki-Kare testi kullanılarak değerlendirilmiş, bulguların yorumlanmasında frekans tabloları ve tanımlayıcı istatistikler kullanılmıştır anlamlılık düzeyi $p<0,05$ kabul edilmiştir.

Döncesi bakım yeterlilik durumu ile yaş sınıfları, eğitim durumu, eşin eğitim durumu, gebelikte çalışma, eşin çalışması, gelir durumu, eş ile akrabalık, aile yapısı, sosyal güvence, sigara kullanımı, alkol kullanım, gebelik kaybı yaşama durumu, gebelik öncesi danışmanlık alma durumu, planlı gebelik, eşin gebeliği istemesi, gebelikte sağlık sorunu yaşama durumu, gebelikte ilaç kullanma durumu, gebe eğitim sınıfına katılma durumu, gebelikte gebelik, doğum ve doğum sonrası bakıma yönelik eğitim/bilgi alma durumu, bilgi alma yöntemi arasında istatistiksel olarak anlamlı farklılık saptanmıştır ($p<0.05$).

Bu sonuçlar doğrultusunda verilen hizmetin kalitesini artırmak için hemşirelere Doğum Öncesi Bakım ve Yönetim Rehberinin içeriğine hakim olmaları önerilebilir.

Anahtar Kelimeler: primipar, gebe, doğum öncesi dönem, döğum öncesi bakım

ABSTRACT

This descriptive research aim to examine quantitatively and qualitatively to antenatal care services that important for mothers, fetuses, family members and community health and aim to investigate factors affecting antenatal care services. Sampling composed by 360 mothers. Sampling calculation formula used in the choosing the sample from known universe. Accidental non-probability sampling used in this research.In this research information form that contain 5 parts used in collecting the data. This form produced by investigator. This parts contain sociodemographic features, medical features, obstetric features, datas that related to getting prenatal care and datas that related to prenatal care contents. Datas examined by using statistical descriptive analysis and chi-squared test to compare two qualitative variables. In

interpretation of findings, frequency tables and descriptive statistical analysis used and for the significance $p < 0,05$ accepted.
A significant difference was found ($p<0,05$) between sufficient to antenatal care services condition and age classes, education status, husbansd's education status,working in pregnancy,husband's working,income,family relation between partners,family architecture,social security,smoking,alcohol,abortion experience in pregnancy,getting councelling before pregnancy,planned pregnancy,husband's willing to pregnancy,health problems experience condition in pregnancy,drug usage situation in pregnancy,attendance condition to pregnancy education class,getting pregnant in pregnancy, education/gaining information condition directed to parturition and post-natal care,gaining information method.
According to this results, nurses should know extensively antenatal care and management guidebook contents for increasing quality of ACS.
Key words: primipar, pregnant, antenatal period, antenatal care

HEALTH EFFECTS OF DESERT DUST ON MEN IN CONSTANTINE (CARDIOVASCULAR SYSTEM)

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ABSTRACT
The city of Constantine, located in the northeast of Algeria, occupies a strategically important geographical position in North Africa. Its proximity to both the Mediterranean Sea and the Saharan desert makes it particularly susceptible to the effects of desert dust, which is a common environmental phenomenon in the region. Desert dust in North Africa, often carried by strong winds, has significant health impacts on the population. These effects include a range of respiratory problems, such as asthma, bronchitis, and lung infections, as the fine particulate matter from dust storms can irritate and damage the respiratory system. Furthermore, exposure to desert dust has been linked to cardiovascular effects, including an increased risk of heart disease and strokes, as inhaling these particles can cause inflammation and stress within the cardiovascular system. Individuals with preexisting conditions, as well as vulnerable groups such as the elderly and children, are particularly at risk. In addition, desert dust can exacerbate allergic reactions and lead to eye irritations, causing discomfort and further health complications.To study the health impacts of desert dust exposure in Constantine, we used a gravimetric sampling method to measure the concentration of airborne particles. This involved weighing filters before and after exposure to dust-laden air, allowing us to calculate the concentration of desert dust based on the PM10 levels, which are particles with a diameter of 10 micrometers or less. These fine particles are small enough to be inhaled and penetrate deep into the lungs, increasing their potential health risks.Following the collection of particle concentration data, we conducted statistical analyses to explore potential links between exposure to desert dust and cardiovascular diseases, focusing specifically on the men's department at Constantine University Hospital. The hospital's patient data provided valuable insights into the prevalence of cardiovascular conditions in the population. Our statistical analysis revealed a moderately significant correlation between exposure to desert dust and the prevalence of cardiovascular disease, suggesting that long-term exposure to dust-laden air may contribute to the development or exacerbation of these conditions. These findings underscore the need for public health interventions aimed at minimizing exposure to desert dust, especially in vulnerable communities.

Keywords: Desert dust , PM10 , cardiovascular, health

IN SILICO ANALYSIS OF PHENOLIC COMPOUNDS IN *CURCUMA LONGA*: ANTI-INFLAMMATORY POTENTIAL

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Abstract:
Curcuma longa (turmeric) is renowned for its remarkable therapeutic properties, largely attributed to its phenolic compounds, such as curcumin. This research investigates the anti-inflammatory potential of the primary phenolic compounds in *C. longa* through in silico methodologies.
Molecular docking was employed to evaluate the interactions of these compounds with COX-1 and COX-2 enzymes, key players in the inflammatory pathway. Additionally, ADMET (Absorption, Distribution, Metabolism, Excretion, and Toxicity) analysis was used to predict the pharmacokinetic and toxicological profiles of the phenolic compounds. These computational techniques offer valuable insights into how *C. longa* compounds may regulate inflammation and their potential as therapeutic agents.
This study sheds light on the health benefits of *C. longa*, underscoring its potential as a functional plant with notable anti-inflammatory properties.
Keywords: *Curcuma longa*, Phenolic Compounds, In Silico Analysis, Molecular Docking, ADMET Analysis, Anti-Inflammatory Potential

DYNAMIC MODELLING OF AN EFFICIENT HYDRAULIC BASED AIR CONDITIONER USING GIBBS SYSTEMS DYNAMIC

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Abstract:
An air conditioning system that utilizes hydraulic technology is described, with its operational principles thoroughly explained. To evaluate how it performs, a dynamic model of this hydraulic-driven cooling system is created and simulated. The main breakthrough is in the compression stage. Unlike conventional air conditioners, the cooling system being examined employs a liquid piston to compress the working fluid. The compression process achieved by an alternative movement of a liquid piston within two similar structures in a cylindrical form so-called transfer cylinders. During the compression of the refrigerant, an incompressible liquid circulates between the two transfer cylinders with the help of a hydraulic pump. This liquid piston moves back and forth between the cylinders, each of which is set to operate at different pressure levels. The cylinders that facilitate this movement are linked to evaporator and the condenser via pairs of solenoid valves. These state of the valves changes accordingly to the operation cycle of the cooling system. At different stages of the cycle, one cylinder connects to the evaporator while the other links to the condenser, alternating as necessary.
The paper presents some the dynamic evolution of the cooling system parameters delivered by simulation results of the innovative hydraulic based air conditioner. The dynamic modeling is conducted using the OpenModelica environment. Through simulation, the efficiency of the hydraulic based air conditioner is demonstrated. The outcomes of the dynamic simulations not only align with the thermodynamic cycle description but also demonstrate that the new air conditioning cycle serves as an effective substitute for the existing systems available in the market.
Keywords: Space cooling, dynamic modelling, heat pump, Open-Modelica, refrigeration.

METFORMIN HCL-LOADED TRANSETHOSOMAL GEL; DEVELOPMENT, CHARACTERIZATION, AND ANTIDIABETIC POTENTIAL EVALUATION IN THE DIABETES-INDUCED RAT MODEL

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Abstract

Herein we designed, optimized, and characterized the Metformin Hydrochloride Transethosomes (MTF-TES) and incorporate them into Chitosan gel to develop Metformin Hydrochloride loaded Transethosomal gel (MTF-TES gel) that provides a sustained release, improved transdermal flux and improved antidiabetic response of MTF. Design Expert® software (Ver. 12, Stat-Ease, USA) was applied for the statistical optimization of MTF-TES. The formulation with Mean Particle Size Distribution (MPSD) of 165.4 ± 2.3 nm, Zeta Potential (ZP) of -21.2 ± 1.9 mV, Polydispersity Index (PDI) of 0.169 ± 0.033, and MTF percent Entrapment Efficiency (%EE) of 89.76 ± 4.12 was considered to be optimized. To check the chemical incompatibility among the MTF and other formulation components, Fourier Transform Infrared (FTIR) spectroscopy was performed and demonstrated with no chemical interaction. Surface morphology, uniformity, and segregation were evaluated through Transmission Electron Microscopy (TEM). It was revealed that the nanoparticles were spherical and round in form with intact borders. The fabricated MTF-TES has shown sustained release followed by a more pronounced effect in MTF-TES gel as compared to the plain MTF solution (MTFS) at a pH of 7.4. The MTF-TES has shown enhanced permeation followed by MTF-TES gel as compared to the MTFS at a pH of 7.4. In vivo antidiabetic assay was performed and results have shown improved antidiabetic potential of the MTF-TES gel, in contrast to MTF-gel. Conclusively, MTF-TES is a promising anti-diabetic candidate for transdermal drug delivery that can provide sustained MTF release and enhanced antidiabetic effect.

Keywords: Transethosomes; Antidiabetic effect; Nanoparticle; Metformin hydrochloride transethosomes; Statistical optimization

GLOBAL POWER SHIFT AND FOREIGN POLICY CHOICES FOR BANGLADESH

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Abstract:
The evolving global power dynamics, characterized by the rise of China, the resurgence of Russia, and the strategic rebalancing of the United States and its allies, have significant implications for smaller states like Bangladesh. Situated at the geopolitical nexus of South Asia and the Indo-Pacific, Bangladesh faces the dual challenge of navigating this shifting landscape while safeguarding its national interests. This study explores Bangladesh's foreign policy choices in the context of these transformations, employing both quantitative and qualitative methods. Quantitatively, the research analyzes trade data, foreign aid inflows, defense spending, and diplomatic engagements over the past two decades to identify patterns in Bangladesh's geopolitical alignment. Qualitative methods include a review of policy documents, expert interviews, and case studies of Bangladesh's bilateral and multilateral engagements with key global and regional powers such as China, India, the United States, and Japan. Results indicate that Bangladesh's foreign policy is guided by pragmatic non-alignment, with a focus on economic diplomacy, regional connectivity, and global partnerships. While China's Belt and Road Initiative (BRI) offers infrastructural benefits, it also raises concerns over debt dependency. Simultaneously, Bangladesh's deepening ties with India and the United States reflect a strategic balancing act, leveraging development aid and security cooperation without alienating Beijing. This study highlights the opportunities and risks for Bangladesh in adopting a more diversified and proactive foreign policy to mitigate the challenges posed by great-power competition. It recommends strengthening regional multilateralism, enhancing domestic institutional capacity for foreign policy formulation, and adopting a values-based approach to diplomacy that aligns with Bangladesh's development priorities and global ambitions. As the global power shift continues to unfold, Bangladesh's foreign policy choices will critically shape its trajectory in the 21st century.

DETERMINATION OF THE ANTIMICROBIAL ACTIVITY OF A FORMULATED HERBAL SOAP FROM *Vigna radiata* STEM FLOUR: FROM WASTE TO WEALTH.

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The innovative repurposing of certain farm waste materials into useful bio-resources emanated from the discoveries of their beneficial chemical content through scientific research which systematically explored their utilization in the development of certain potent products that can be commercialized to generate revenue in the country. Mung bean (*Vigna radiata* L.) stem (VrSt) is one of the by-products usually considered as waste material in the farm after the harvest of the seed. The quantity of the mung bean stem that constitutes farm waste prompted the exploration of a herbal soap formulated from the raw stem flour for evidence of untapped antimicrobial activity so as to convert the waste into wealth. The *Vigna radiata* stem was identified and harvested from the farm at National Biotechnology and Research Development Centre, Abuja, outreach centre Abagana, Nigeria, rinsed with distilled water to remove sand particles and dirt, air-dried to a constant weight for 3 weeks and ground into fine powder. A measured quantity of 15 g of *Vigna radiata* stem flour was incorporated at the time of production into a soap formed from 41.625 g of coconut oil, 41.625 g palm oil, 36.3 g palm kernel oil mixed together and a lye solution containing 12 g NaOH (lye) dissolved in 41.625 g of distilled water produced at temperature of 40 ^{o}C. The soap was left to cure for 8 months and the antimicrobial activity of the formulated herbal soap was tested against four bacteria isolates using disc diffusion method. The mean inhibition diameters of the formulated herbal soap recorded values of 22.67±0.01 mm, 23.67±1.34 mm, 21.00±0.11 mm and 23.33±0.12 mm for *Citrobacter murliniae*, *Bacillus licheni*, *Micrococcus roseus* and *Bacillus subtilis* respectively. All these values recorded were found to be above the threashold of 20.00±0.00 mm, stipulated by European Committee on Antimicrobial Susceptibility Testing validity and the result of the minimum inhibitory concentration of the formulated herbal soap sample revealed a broad spectrum activity at different concentrations of 500 mg/mL, 250 mg/mL, 125 mg/mL and 62.5 mg/mL for each bacteria isolate. The results obtained in this analysis have revealed that the formulated *Vigna radiata* stem flour herbal soap actually has significant antibacterial activity that can actually be used in the treatment of bacteria skin inffections and can be produced in mass for commercialization hence creating employment for the poor masses whose standard of living will be improved through this by generation of income after sales.

Keywords: Mung bean, formulation, soap, antimicrobial, waste, wealth.

GREEN SYNTHESIS AND UTILIZATION OF ZINC OXIDE NANOPARTICLES FOR REMOVAL OF TARTRAZINE DYE FROM AQUEOUS SOLUTION: BATCH STUDY

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Abstract
zinc oxide nanoparticles (ZnO-NPs) were synthesized by green method, using juice extract from Rosmarinus officinalis. Fourier Transform-Infrared (FT-IR), X-ray diffraction (XRD), TGA and UV-Vis spectroscopy were used to characterize the Zinc oxide. The ZnO XRD results revealed a propensity for the three strongest diffraction peaks. ZnO NPs crystallites were 51 nm in size on average. Using UV-Vis spectroscopy, a distinctive absorption peak at 375 nm demonstrated the existence of ZnO-NP. In the FTIR spectrum, The Zn-O bond's distinctive absorption peak was discovered at 416 cm-1. The ZnO nanoparticles is used to prove the ability of zinc oxide to degrade Tartrazine in aqueous solution in mode batch under UV irradiation (375 nm, Osram). The ZnO photocatalyst has a strong photocatalytic activity to remove dyes from water 99.6%, in 60min.
Keywords: ZnO nanoparticles, Tartrazine, Biological synthesis, X-ray diffraction, Photocatalytic activity.

EFFICIENT DIRECT RED 227 DYE PHOTOCATALYTIC DEGRADATION IN AQUEUS MEDIA USING NOVEL ZnO NANOMATERIALS SYNTHESISED BY GREEN METHOD

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Abstract
The green approach was utilized to synthesized zinc oxide nanoparticles (ZnO-NPs) by using Rosmarinus officinalis. The Green method is less hazardous and environmentally friendly than its chemically produced counterparts. The ZnO-NPs were characterized by using XRD, SEM-SDX, BET, FT-IR, and UV-Vis spectroscopy. The Zn-O bond's distinctive absorption peak was discovered in the FTIR spectrum at 416 cm-1. The ZnO XRD results revealed a propensity for the three strongest diffraction peaks. The average diameter of ZnO NP crystallites was 51 nm. ZnO nanoparticles were used under UV light (Philips, 375 nm) for dye degradation in aqueous solution. The ZnO photocatalyst is able to remove direct red 227 from water with strong photocatalytic activity, as evidenced by the results. After 90 min, total deterioration was achieved.
Keywords: ZnO nanoparticles, Direct Red 227, Green method, Photocatalytic activity.

ANALYSE THE BEHAVIOUR OF AN 11-STOREY HOUSE STRUCTURE IN ALGERIA USING NON-LINEAR STATIC ANALYSIS (PUSHOVER)

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Abstract
Algeria gests frequent earthquakes, with one of the most significant bones being the 2003 earthquake in Boumerdes, performing in loss of life and damage to structures. To address this, experimenters have studied how structures can repel earthquakes. This paper concentrated on an 11- story corroborated concrete structure in Algeria, using nonlinear static analysis with ETABS software. The results showed that a well- designed structure can perform well under anticipated seismic loads. still, unanticipated seismic loads may bear buttressing the structure due to critical plastic hinges appearing. It was also noted that designing against shear failure can lead to brittle failure, indeed under applicable seismic conditions for Algeria.
Key words: RPA99/2003/2024; performance levels; performance point; pushover analysis; RC framed building.

ATRIPLEX HALIMUS: A SOURCE OF PHYTOCHEMICALS AND BIOLOGICAL ACTIVIT

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Abstract:

Atriplex halimus (L.) plant is known to be characterized with numerous pharmacological prospects comprising antioxidant, anticancer, antibacterial, and antidiabetic. The core objective of the present study is harnessing the chemical composition of aqueous extract (EA), hydroethanolic extract (EHA), and ethanolic extract (EE), followed by investigation of the anti-diabetic potential of *A. halimus* extracts on two important targets porcine proteins (α-amylase and hemoglobin). While a molecular docking study was adopted to computationally identify the bioactive compounds responsible for the observed antidiabetic effect. Subsequent to the extraction process, EA, EHA, and EE were analyzed using LC-MS/MS to identify the multitude of bioactive compounds. The results indicated the existence of 21 phytochemicals in the three extracts (EA, EHA, EE), trans-cinnamic acid emerged as the most prevalent, appearing in all three extracts as the most abundant compound. Regarding, the antidiabetic potential, the IC_{50} values of the α-amylase were 1.89, 3.33, 2.069 mg/mL for EA, EHA, and EE respectively. However, the IC_{50} values of hemoglobin glycation were 0.29, 0.31, and 0.41 mg/mL respectively, demonstrating a significant inhibitory impact of *A. halimus* on both target proteins. With regard to the *in silico* computational study, it has been demonstrated that both catechin and epigallocatechin emerge as the most active compounds, displaying high binding activity compared to acarbose.

The majority of the primary phytochemicals found in the extracts of *A. halimus* could be utilized as lead compounds for the development of novel anti-diabetic supplement. This assertion is supported by molecular docking tests conducted against both porcine pancreatic α-amylase and human hemoglobin proteins.

Keywords: *Atriplex halimus*; LC-MS/MS; antidiabetic; α-amylase; hemoglobin glycation.

ANALYSIS AND LIVELIHOOD BENEFITS OF BEANS CAKE (AKARA) PROCESSING IN OFFA LGA OF KWARA STATE. NIGERIA.

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ABSTRACT
This study examines the analysis and livelihood benefits of beans cake (Akara) processing in Offa Local Government Area of Niger State, Nigeria. The study also assess the socio-economic characteristics of beans cake (Akara) processors, livelihood benefited from beans cake (akara) processing and the constraints faced by beans cake (akara) processors. Data were collected through the use of structured questionnaires supplemented with oral interviews. A total of one hundred and thirteen (113) questionnaires were administered randomly to four communities in the LGA, analytical tools used was descriptive statistics. It was observed that majority of the processors were female (80%) with moderate age of 25-40 years and were married. It was also observed in the study area that the respondents have long term experience of more than 10 years in beans cake (akara) processing. Majority of the respondents in the study area sustained their source of livelihood of beans cake (akara) processing through thrift savings (Adashi). However, the result basically indicated that majority of the respondents in the study area have been able to raise their children in school through the business of beans cake processing. The major constraints faced by the respondents ranges from inadequate capital, lack of credit facilities, poor working condition and high cost of raw materials. The study recommended that provision of credit facilities, good working environment conditions and access to should be provided by the government and Non-governmental organization, for sustainable livelihood for beans cake (akara) processing.
KEYWORDS: Analysis, Livelihood, Processing, Benefits and beans cake

THE PHYTOCHEMICALS AND THERAPEUTIC POTENTIALS OF *MORINGA OLEIFERA* (MIRACLE TREE) FOR THE TREATMENT OF SOME NEGLECTED TROPICAL BACTERIAL DISEASES

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This study investigated the phytochemicals and antimicrobial activity of extracts of *Moringa oleifera* against selected bacterial pathogens (*Mycobacterium tuberculosis, Vibrio cholerae* and *Neisseria meningitidis*) responsible for neglected tropical diseases such as tuberculosis, cholera and meningitis. *Moringa Oleifera* is a medium-sized evergreen, drought-resistant tree native to Africa and Asia. Every part of the moringa tree, like leaf, stem, is valuable ranging from medicinal properties to nutrient. Phytochemical analysis of *M. oleifera* leaves and roots was determined using gas chromatography-mass spectrometry (GC-MS). Antimicrobial activity was evaluated using the minimum inhibitory concentration (MIC) and minimum bactericidal concentration (MBC) assays. Toxicological study was carried out to determine its safety.

GC-MS analysis revealed the presence of bioactive compounds, including flavonoids, phenolic compounds, and terpenoids. *M. oleifera* extracts exhibited significant antimicrobial activity against *Mycobacterium tuberculosis*, *Vibrio cholerae* and *Neisseria meningitidis* with MIC ranging from 0.1-1.6 mg/mL. The extracts showed bactericidal activity at concentrations ≥2-fold the MIC values. Toxicological study revealed minimal toxicity to mammalian cells which means the plant is safe for human consumption. This study demonstrates the chemotherapeutic potential of M. oleifera against neglected tropical bacterial diseases. The phytochemicals present in M. oleifera extracts, particularly the flavonoids may have contributed to their antimicrobial activity. There is the need for further investigation into the development of *M. oleifera*-based treatments for these diseases, providing a promising alternative to conventional antibiotics. This research shows the importance of exploring medicinal plants like *M. oleifera* in the quest for novel treatments against neglected tropical diseases.

Keywords: Phytochemicals, therapeutic potentials, *Moringa oleifera*, neglected tropical diseases

ENHANCING SEISMIC RESILIENCE OF IRREGULAR BUILDING STRUCTURES THROUGH THE INTEGRATION OF SHEAR WALLS

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Abstract:
Reinforced concrete (RC) building structures with vertical geometric imperfections are commonly used in structural engineering due to their aesthetic appeal and functional benefits. Improving their reliability and seismic performance is a crucial priority, and is frequently seen as necessary. This study underlines the need of shear walls as a reinforcement approach for such buildings. To investigate this, twenty mid-rise structure models with setback inconsistencies were examined. Fragility analyses were carried out using a nonlinear analysis to determine the efficiency of shear walls in strengthening the resilience of irregular buildings. The results clearly show that incorporating shear walls significantly enhances the dynamic behavior and overall response of these buildings. The fragility analysis indicates a noticeable reduction in damage probability in many cases, with differences exceeding 13% in most models. In some cases, this reduction is even more pronounced, ranging between 30% and 60%. These findings highlight the substantial benefits of integrating shear walls into the design process for irregular structures.
Keywords: RC buildings, seismic resilience, setback irregularity, non-linear analysis

NOVEL MX-106 HYDROXYQUINOLINE DERIVATIVES: 2D-QSAR MODELING, MOLECULAR DOCKING, MOLECULAR DYNAMICS SIMULATIONS, AND ADMET PREDICTIONS FOR POTENT SELECTIVE SURVIVIN INHIBITORS

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Abstract:
The urgent need for the development and discovery of new inhibitors targeting survivin (BIRC5), recognized as one of the most tightly regulated genes in tumor cells, underscores the current research focus. Survivin serves as a specific cancer biomarker and represents a promising target for anticancer medications. This study outlines the design methodology employed for crafting a series of novel and selective survivin inhibitors, drawing inspiration from the hydroxyquinoline framework of our previously documented lead compound, MX-106. Our investigation identifies nine compounds projected to demonstrate heightened inhibitory potential compared to the most potent member within the studied set. In vitro assays confirmed the effectiveness of these compounds in impeding the proliferation of MDA-MB-435 breast cancer cells. Furthermore, the metabolic stability of these compounds surpassed that of the most active molecule within the test set.
Employing 2D-QSAR methods encompassing multiple linear regression (MLR), multiple nonlinear regression (MNR), and artificial neural networks (ANN), alongside molecular dynamics, molecular docking, and ADMET properties evaluation, we assessed the viability of 31 hydroxyquinoline scaffold derivatives of MX-106 as selective survivin inhibitors. Molecular docking simulations were conducted to gauge the stability of compound C24, revealing the establishment of multiple hydrogen bonds with diverse residues. A subsequent 100-ns molecular dynamics simulation affirmed its sustained stability over the entire duration, indicating their potential suitability for further drug development endeavors.
Building upon the insights garnered from molecular modeling outcomes, we devised nine innovative compounds (Pred1, Pred2, Pred3, Pred4, Pred5, Pred6, Pred7, Pred8, and Pred9), anticipated by MLR models to exhibit potent survivin inhibitory activity. We advocate for a comprehensive evaluation of the ADMET properties of these newly proposed compounds, positioning them as promising candidates for pioneering anticancer agents targeting survivin inhibition akin to MX-106.
Keywords: QSAR, tumor cells, Molecular Docking, Molecular dynamic, ADMET properties, selective survivin inhibitors, cancer, MX-106 hydroxyquinoline scaffold.

PROTECTIVE EFFECT OF JAMUN SEED (*SYZYGIUM CUMINI*) EXTRACT AND ORANGE PEEL (*CITRUS SINENSIS*) EXTRACT AGAINST LEAD INDUCED ALTERATIONS IN TESTES OF RAT

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Abstract:
In present study, rats were treated with lead and investigated histological changes of testes and to demonstrated the protective role of jamun (*Syzygium cumini*) seed and orange (*Citrus sinensis*) peel extracts. Wistar rats were treated as Group A: Control; Group B: lead (50 mg/kg b wt.); Group C: lead (50 mg/kg b wt.) and jamun seed extract (200mg/kg b wt.); Group D: lead (50 mg/kg b wt.) and orange peel extract (200 mg/kg b wt.); Group E: orange peel extract (200 mg/kg b wt.) and Group F: jamun seed extract (200 mg/kg b wt.). under light microscopical studies, testes was fixed on day 7 and 14 following the treatment. In 7 day lead (group B) treated rats testes exhibited detached basal lamina and lobule boundary cell degeneration, Disorganized seminiferous tubules and disrupted germinal epithelium with pyknotic primary spermatocytes were also seen. In Pb+ JSE (group C) and Pb+ OPE (group D) treated rats for 7 day, the testes possess little changes as compared to Pb exposed rats. Testes of rats treated for 7 day with OPE (group E) and JSE (Group F) have not shown any remarkable histological alteration. The testes of 14 day Pb (group B) treated rats demonstrated empty lobules, degeneration of germ cell linings of seminiferous tubules, and disrupted germinal epithelium, degenerated Leydig's cells, Sertoli cells, and vacuolation in the interstitial cytoplasm and degenerated spermatogenic cells and wide inter-tubular space show a lack of proper interstitial cells. In Pb+ JSE (group C) and Pb+ OPE (group D) treated rats for 14 day showed similar structure to control rats. In OPE (Group E) and JSE (group F) treated rats for 14 day no histological changes in testes were noticed. In this study, it can be concluded that lead caused marked histological changes in the testes of rats. These changes can be protected by providing jamun seed extracts and orange peel extracts because phytochemicals have antioxidant properties as they scavenge free radicals.
Keywords: Heavy metal; Lead; *Syzygium cumini*; *Citrus sinensis*; Testes; Toxicity

EFFECTIVENESS OF FEEDING DIFFERENT BIOCHARS ON GROWTH, DIGESTIBILITY, BODY COMPOSITION, HEMATOLOGY AND MINERAL STATUS OF THE NILE TILAPIA, OREOCHROMIS NILOTICUS

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Abstract

Oreochromis niloticus fingerlings (5.15 ± 0.02 g; n = 315) were fed with different types of biochar (BC)-supplemented sunflower meal-based (SFM) diet to investigate the effects of various BC inclusions on their nutritional digestibility, body composition, hematology and mineral status for 60 days. Seven different diets were formulated based on the SFM based diet: one was a control (TD-I, CON) and the other six diets were supplemented with 2% BC derived from different sources. These BCs were derived from the following: cotton stick (CSBC, TD-II), wheat straw (WSBC, TD-III), corn cob (CCBC, TD-IV), house waste (HWBC, TD-V), grass waste (GWBC, TD-VI), and green waste (GwBC, TD-VII) biochar. There were three replicates for each test diet. Each tank had fifteen tilapia fingerlings, and they were fed with 5% of their live wet weight and twice daily. The outcomes showed that the supplementation of CCBC significantly elevated the growth, nutrient absorption, and body composition of the *O. niloticus* fingerlings ($p < 0.05$); with concomitant lowering of the quantity of nutrients released into the water bodies whereas HWBC gave negative impacts. The maximal mineral absorption efficiency (Ca, Na, K, Cu, Fe, P, and Zn) was achieved by the supplementation of 2% CCBC. All hematological parameters showed positive improvements ($p < 0.05$) with CCBC. Interestingly, CCBC significantly improved the growth, digestibility, body composition, hematology, and mineral status of *O. niloticus*.

Keywords: *biochar*, *O. niloticus*, corncob biochar

NUTRITIONAL AND PHARMACOLOGICAL PROPERTIES OF CANTALOUPE PEEL: AN OVERVIEW

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Abstract

Recycling food and agricultural waste lowers the loss of natural resources and, by producing redesigned goods, greatly aids in the growth of new green markets. The peels of cantaloupe (Cucumis melo L.) cultivars were examined and successfully described for high-added biomolecules to confirm their potential use as profitable biomasses in order to cycle valuable molecules Flavonoids, phenolic components, carotenoids (α-, β-, and β-cryptoxanthin), lutein, zeaxanthin, vitamins like vitamin C, and a plethora of minerals like potassium, magnesium, calcium, sodium, iron, zinc, manganese, copper, and more are all abundant in cantaloupe peel. These ingredients have numerous pharmacological advantages, such as anti-oxidant, anti-CVD, anti-inflammatory and anti-cancer qualities. Pectin, which is utilized in many culinary products, is also present in its peel. Thus, by valuing this kind of waste (peel) we may help create a more sustainable and healthy future.

Keywords: Cucumis melo.L, antioxidant, anti-inflammatory, anti-CVD, Lutein, zeaxanthin

COMPARING GREEN AND CONVENTIONAL METHODS FOR SCHIFF BASE SYNTHESIS AND UNVEILING ENVIRONMENTAL STABILITY APPLICATIONS: A REVIEW

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ABSTRACT

Environmental concerns arising from industrial activities and population growth have encouraged the development of green chemistry, a sustainable approach to synthesis. Researchers have explored various techniques for the eco-friendly synthesis of Schiff bases, including microwave irradiation, ultrasound irradiation, grinding, and natural acids. These versatile compounds, known for their unique chemical properties, have found diverse applications in various fields. Recently, the use of Schiff bases as dyes in dye-sensitized solar cells (DSSCs) has drawn the attention of researchers. DSSCs have advantages over silicon-based solar cells, such as a low cost of fabrication and the ability to operate under low light conditions. Schiff bases can be used as adsorbents to remove toxic metals from water. By embracing sustainable synthetic methods, researchers have reduced the environmental impact associated with Schiff base production and employed these compounds to promote environmental sustainability. This review describes the green synthesis of Schiff bases and their potential applications for environmental protection.

Keywords: Schiff base; green synthesis; microwave irradiation; ultrasound irradiation; grinding techniques; natural acid catalyst; dye-sensitized solar cells; water treatment

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THE SCIENCE OF BIO-DIESEL PRODUCTION FROM JATROPHA OIL SEEDS AND ITS APPLICATION DOMAINS: A STUDY

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Bio-diesel is a renewable biodegradable non-toxic liquid fuel produced from basically from vegetable oil seeds from trees/ species like Jatropha, Karanja etc or animal fats. Indonesia is the largest producer of bio-diesel. Jatropha Curcas or physic nut is a bush or a small tree upto 5 meters tall of 170 species belongs to eurphorbia family. In India there are around 12 species. Jatropha is derived from Greek words 'jatros' meaning 'doctor' and 'trophe' means 'food' which means medicinal purpose. Jatropha is adaptable and grows in wide range of climatic and soil conditions. The plant lives around 40 years and yield of seeds start from 3 years to 40 years with an average of 2 kgs per plant per annum. The seeds are formed from male and female flowers and are on average 18 mm long, 12 mm wide and 10 mm thick. Each seed weighs 0.5 to 0.8 grams and 1333 seeds per kilogram. Seed consists of hard shell and white soft kernel which yield 35 percent of oil at moisture content of 7 percent.

The oil is extracted from seeds by crushing or exerting pressure on on seeds mechanically by compressing. In industries mechanical extraction by an expeller (screw presses) and solvent addition are employed for higher yield. Bio-diesel is made by chemically transesterification. Bio-diesel upto 20 percent can used in automobiles by blending with diesel as direct transportation fuel. It can be used for lamps, cooking stoves, stationary engines, electricity from generators, fertilisers, soaps in rural areas. In addition it can also be used for heating, lubrication, power generation, plasticizers, paint removal etc.

In the present work an attempt has been made to discuss bio-diesel generation and their application domains and alternative renewable energy sources. Several useful conclusions have been arrived at.

Keywords: Bio-diesel, Blended diesel, Jatropha, Oil expeller, Transesterification

SODYUM KLORÜR İÇEREN BESİN ORTAMLARININ ISPANAK (Sp*inacia oleracea* L.) ÇEŞİTLERİNİN BÜYÜMESİ ÜZERİNE ETKİSİ
IMPACT OF SODIUM CHLORIDE-CONTAINING NUTRIENT MEDIA ON THE GROWTH OF SPINACH (*Spinacia oleracea* L.) VARIETIES

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ÖZET
Kullanılan tarım alanları yıllar içerisinde azalmakta olup bu durum ekilebilir tarım alanlarını ciddi derecede etkilemektedir. Tuzluluk en önemli abiyotik stres faktörlerinden birisidir. Bu çalışma, farklı ıspanak çeşitlerinin *in vitro* koşullarda değişik konsantrasyonlarda hazırlanan sodyum klorür (0 kontrol, 50, 100, 150, 200, 250 300 mM)'de gelişim durumları belirlenmeyi amaçlamıştır. Çalışmada temel besin ortamı olarak MS kullanılmıştır. Deneme Sivas Bilim ve Teknoloji Üniversitesi Tarım Bilimleri ve Teknoloji Fakültesi bitki doku kültürü laboratuvarında yürütülmüştür. Araştırmada çimlenme oranı (%), gövde yaş ve kuru ağırlığı (g), kök yaş ve kuru ağırlığı (g), gövde ve kök uzunluğu (mm) belirlenmiştir.
Anahtar kelimeler: Ispanak, Tuzluluk, *in vitro*

ABSTRACT
Utilized agricultural areas have been decreasing over the years and this situation has a serious impact on arable agricultural areas. Salinity is one of the most important abiotic stress factors. This study aimed to determine the growth of different spinach cultivars under in vitro conditions in different concentrations of sodium chloride (0 control, 50, 100, 150, 150, 200, 250, 300 mM). MS medium was used as the primary nutritional medium in the study, which was conducted in the plant tissue culture laboratory at the Faculty of Agricultural Sciences and Technology, Sivas Science and Technology University. The following parameters were determined: germination rate (%), stem fresh and dry weight (g), root fresh and dry weight (g), and stem and root length (mm).
Key words: Spinach, Salinity, *in vitro*

EXPLORING MULTILINGUAL DYNAMICS IN THE ISTRIAN BILINGUAL DISCOURSE

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Introduction/Background:
The Istria County, a region shaped by long-standing historical multiethnical and multicultural contacts and exchanges, presents a unique multilingual environment where Croatian, Italian, and Istrovenetian (among other idioms) coexist. This linguistic diversity offers an ideal context for studying the dynamics of language use and alternation in bilingual/multilingual settings, by provinding a fertile ground paricularly for examining how speakers alternate between languages in spontaneous conversation.
Research Problem/Objective:
This research investigates the communicative strategies underlying language alternation (namely code-switching) in informal, naturally occurring bilingual conversations. Focusing on data from the C-ORAL-IC (*Corpus of Spoken Istrovenetian and Croatian*), the study aims to reveal how bilingual speakers in Istria navigate linguistic boundaries and how these alternations impact the structure and meaning-making processes in discourse.
Methods:
The study analyzes conversational samples from the C-ORAL-IC corpus, using qualitative discourse analysis for examining the instances of code-switching, particularly focusing on the use of discourse markers, modal particles, and semantic connectors.
Results:
The findings provide a window into the complex dynamics of linguistic interaction in a diglossic contexts, by suggesting that bilingual speakers use code-switching not only to navigate between languages but also to manage interactional flow and convey nuanced meanings. Discourse markers and other linguistic elements play critical roles in facilitating smooth communication and addressing cognitive functions within conversations.
Conclusion/Discussion:
This research offers insights into the pragmatic, structural, and sociolinguistic roles that different languages assume in Istrian bilingual discourse. The identified patterns of code-switching contribute to our understanding of multilingual interaction and provide a deeper view of the evolving linguistic praxis.
Keywords: bilingual discourse, Istria, code-switching, corpus, C-ORAL-IC, language sampling

ADVANCES IN VIRTUAL SYNCHRONOUS GENERATOR CONTROL FOR STABILIZING LOW-INERTIA POWER SYSTEMS

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ABSTRACT
The increasing integration of renewable energy sources into modern power grids has led to a significant reduction in system inertia, posing challenges for frequency stability and grid reliability. Virtual Synchronous Generators (VSGs) offer a promising solution by emulating the inertial and damping characteristics of conventional synchronous generators, thereby enhancing grid stability. This study explores recent advances in the control strategies for VSGs operating within low-inertia power systems. Key contributions include the development of robust control algorithms to improve frequency response, mitigate oscillations, and ensure stable operation under varying load and generation conditions. Additionally, the integration of VSGs with advanced grid-forming and grid-following inverters is analyzed to address the dynamic challenges introduced by high penetration of renewables. Simulation results are presented to demonstrate the effectiveness of the proposed approaches in maintaining grid stability. This study highlights the critical role of VSGs in the transition to sustainable and resilient power systems.
Keywords: Virtual synchronous generator (VSG), Low-inertia power systems, Frequency stability, Renewable energy integration, Grid stability control.

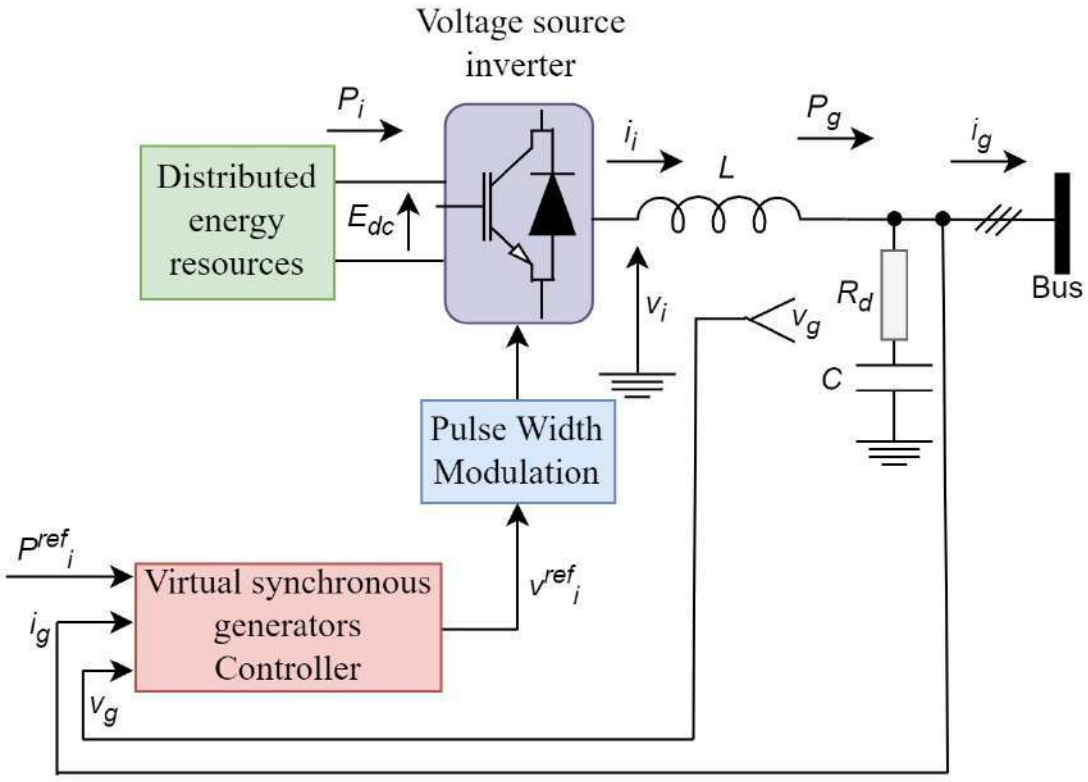

Figure 1. Configuration of virtual synchronous generator

IDENTIFICATION OF FUNGI IN BURN WOUNDS USING CONVENTIONAL AND VITEK SYSTEM IN DUHOK CITY, IRAQ.

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ABSTRACT:

Background: Fungal burns and wounds infections are frequent but underestimated causing invasive infections with late-onset morbidity and mortality in patients suffering severe perturbed immune systems.

Objectives: This study aimed to investigate fungal infections in clinical specimens by using conventional and Vitek system.

Methods: A total of 123 swabs were obtained from wound and burns patients with different age, gender, burn degrees and nationality that admitted burns and emergency hospital in Duhok city, Iraq, from March till August 2024. All swabs screened by direct examination, fungal isolation then subjecting the purified colonies to Vitak system 2 to confirm the identification of fungal species.

Results: Out of 123, 55.5% and 44.5% revealed fungal growth in wound and burn swab, respectively with more mono-fungal growth patterns. Male, middle ages group, Iraqi nationality and second-degree burn were more affected. *Cryptococcus laurentii* was the predominant (40%) followed by *Stephanoascus ciferri* (23%), *Aspergillus nigar* (11%) and *Candida albicans* was very low rate (1.1%), while other fungal specie's were recorded in fewer rates. The present study demonstrated that the wound and burn fungal infection cases are relatively high in above mentioned hospitals with a variety of fungal pathogens. Unexpectedly, the *Cryptococcus laurentii* and *Stephanoascus ciferri* were highly predominant.

Conclusions: The study concluded the necessity of using Vitak system for full identification and emphasize on the cleaning of surroundings of patients in the burn and wound units care, reduction of humidity, regular employment of topical and systemic antifungal agents that reduce morbidity and mortality in burn unit in this setting.

KEYWORDS: Burn wound Infections, Fungal infections, Burn Hospital, Vitek system

IMPACT ANALYSIS OF URBAN RENEWAL AND COMPACT DEVELOPMENT PROGRAM IN HARIPUR, RAJSHAHI

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Abstract
Urban renewal is the process of improving urban areas through actions like slum clearance, redevelopment, and heritage preservation, with a focus on enhancing physical, social-economic, and ecological aspects. It is a continuous process of redeveloping cities which can fix haphazard land use, urban blight, urban decay i.e. crime, complex urban problems like transportation, sanitation, drainage etc. The concept of Urban Renewal was first originated in England and The USA in 1930s; which was initially got referred as slum clearance. The necessity of urban renewal has many aspects; for smart city applications, sustainable economic growth, for making a safe neighborhood and better environment, for better transportation facilities and also for community involvement. This study intends to investigate the current condition of peripheral areas in Rajshahi city and to formulate a project proposal for compact development through urban renewal process. The study analyzed the primary data quantitatively using SPSS. Primary data of this study were gathered using a questionnaire survey. Analyzing the data, authors observed that almost 93.5% respondents want to redevelop their property and rest of the respondents do not want to leave their property. Evaluating the current condition of Haripur union of Rajshahi, this article presents a smart solution to overcome the issues, encouraging the relevant authorities to take necessary actions to promote it. Moreover, this article establishes a project focuses on making efficient use of land and resources by promoting higher density living through compact development which reduces urban sprawl, enhance walkability, support public transport, create vibrant communities. This project will also create a good source of works and will help the city not to be congested in future.

Keywords: Smart City, Urban Blight, Brownfield, Compact Development, Sustainable.

NATURAL FOOD COLORS AND THEIR IMPORTANCE ON HEALTH

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Abstract

Background:

This study seeks to assess natural food colorants as environmentally friendly alternatives to synthetic dyes in foods, aligning with consumer demand for healthier and sustainable options. It suggests that natural colorants not only improve visual appeal but also enhance the nutritional quality and safety of food items.

Methods:

This review describes the current research on natural food colors by systematically searching databases like PubMed Central, Google Scholar, and ScienceDirect. Keywords like "Food colorants", "Natural dyes" and "Pigments" were employed. Emphasizing the past decade, this study examines natural food colors and emphasizes on being health-oriented as well as increasing safety and sensory quality.

Results:

The findings of our study reveal that natural food colorants, particularly extracted from beetroot and turmeric, exhibit strong color retention and acceptance in various product contexts. While some colors showed decreased stability under extreme conditions, consumer sensory evaluations favored products incorporating natural colorants, emphasizing taste perception and health considerations as significant determinants.

Discussion:

The discussion emphasizes the importance of developing robust formulations that enhance the stability of these colors in commercial applications. This research highlights the viability of natural food colors as not just aesthetic enhancers but also as functional ingredients that align with consumer health trends. In conclusion, the integration of natural food colors into food products represents a promising direction for enhancing both safety and sensory quality in the food industry.

Keywords: Food colorants, Natural dyes, Pigments

g-C_3N_4/TiO_2: A NOVEL APPROACH FOR VISIBLE LIGHT PHOTOCATALYSIS

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Abstract
The integration of titanium dioxide (TiO_2) and graphitic carbon nitride (g-C_3N_4) forms a novel composite material with enhanced photocatalytic degradation capabilities, offering a promising solution for the efficient removal of organic pollutants in environmental remediation. This composite leverages TiO_2's optical band gap energy and photocatalytic activity under visible light, significantly enhanced by g-C_3N_4, to broaden the light absorption range and improve electron mobility, stability, and porosity. Characterized using X-ray diffraction (XRD), energy dispersive spectroscopy (EDS), Fourier transform infrared spectroscopy (FTIR), scanning electron microscopy (SEM), and transmission electron microscopy (TEM), the g-C_3N_4/TiO_2 composite exhibits optimized photocatalytic properties and mitigates the rapid recombination of photo-excited carriers, common in semiconductor-based photocatalysis. This advancement marks a significant step forward in environmental remediation, highlighting the composite's potential in water purification and air cleaning technologies and underscoring its role in addressing the challenge of persistent organic pollutants in ecosystems.
Keywords: Graphitic carbon nitride, Titanium Dioxide, g-C_3N_4-TiO_2 composite.

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TÜRKİYE'DE KADINA YÖNELİK ÇALIŞAN SİVİL TOPLUM KURULUŞLARINA GENEL BİR BAKIŞ

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ÖZET
Günümüzde sivil toplum kuruluşları kadınlara yönelik yapmış oldukları çalışmalarla ön plana çıkmaktadır. Bu doğrultuda çalışmanın konusunu Türkiye'de kadınlara yönelik çalışan sivil toplum kuruluşları oluşturmaktadır. Toplumda dezavantajlı konumda yer alan kadınların sosyal hayattaki sorunlarının ve problemlerinin incelenmesi önem arz etmektedir. Dolayısıyla Türkiye'de yaşayan kadınların sosyal problemlerinin giderilmesinde sivil toplum kuruluşlarının üstlenmiş olduğu faaliyetler önemli olmaktadır. Çalışmada toplumda dezavantajlı konumda yer alan kadınlara yönelik problemler kadın odaklı çalışan sivil toplum kuruluşları özelinde incelenmiştir. Bu bağlamda çalışmanın amacı Türkiye'de sivil toplum kuruluşlarının kadınlara yönelik gerçekleştirmiş olduğu faaliyetleri ve iletişim çalışmalarını ortaya koymaktır. Çalışmada Türkiye'de kadın odaklı faaliyetlerde bulunan sivil toplum kuruluşlarının kadınlara yönelik hizmet faaliyetleri web sayfalarından elde edilmiştir. Ayrıca çeşitli makalelerden yürütülen faaliyetler değerlendirilmiş olup; çalışmalar sonrası yaratılan etki belirlenmiştir. Sivil Toplum Kuruluşlarının etki alanları genellikle kadınların sosyal hayatta var olma çabası ve hayatlarını idame ettirmeye yönelik olmuştur. Çalışmanın sonucunda Türkiye'de kadına yönelik faaliyet gösteren sivil toplum kuruluşlarının kadınların sosyal sorunlarının giderilmesinde ve sosyal hayata uyum sağlanmasında aktif rol aldığı görülmüştür.
Anahtar Kelimeler: Kadın, Sivil Toplum Örgütleri, Sosyal Uyum, Türkiye.

Not: Nesrin KAYA'nın "Göç, Kadın, Sosyal Uyum ve Sivil Toplum Kuruluşları: Şanlıurfa'daki Suriyeli Kadın Göçmenlerin Sosyal Uyumuna STK'ların Katkısı" adlı tezinden türetilmiştir.

A GENERAL OVERVIEW OF CIVIL SOCIETY ORGANIZATIONS WORKING FOR WOMEN IN TURKEY

ABSTRACT
Today, civil society organizations stand out with their work for women. In this context, the subject of the study is civil society organizations working for women in Turkey. It is important to examine the problems and issues in social life of women who are in a disadvantaged position in society. Therefore, the activities undertaken by civil society organizations are important in eliminating the social problems of women living in Turkey. In the study, the problems for women who are in a disadvantaged position in society were examined specifically for civil society organizations working with a focus on women. In this context, the aim of the study is to reveal the activities and communication activities carried out by civil society organizations in Turkey for women. In the study, the service activities of civil society organizations in Turkey that are focused on women were obtained from their web pages. In addition, the activities carried out from various articles were evaluated; the effect created after the studies was determined. The areas of influence of civil society organizations were generally aimed at women's efforts to exist in social life and sustaining their lives. As a result of the study, it was

seen that civil society organizations in Turkey that are active in eliminating the social problems of women and ensuring their adaptation to social life.
Keywords: Women, Civil Society Organizations, Social Cohesion, Türkiye

Note: Derived from Nesrin KAYA's thesis titled "Migration, Women, Social Cohesion and Civil Society Organizations: Contribution of NGOs to the Social Cohesion of Syrian Women Migrants in Şanlıurfa".

THE ROLE OF SUSTAINABLE ECO-FRIENDLY CINNAMALDEHYDE FOR THE CONSERVATION OF CULTURAL HERITAGE

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Abstract
The conservation of archaeological buildings is significantly affected by the indoor environment. Key factors in their deterioration include air pollutants, microbial metabolic byproducts, and microbial excretions. This study focused on identifying and analyzing fungal species responsible for the degradation of limestone used to construct the Qaitbay Citadel in Cairo. Ten fungal species were isolated, including *Aureobasidium pullulans, Aspergillus flavus, A. versicolor, Candida albicans, Cladosporium cladosporioides, Fusarium moniliforme, Paecilomyces variotii, Penicillium citrimun, Scopulariopses brunmptii*, and *Trichoderma viride*. It was demonstrated that yeast species were superior to molds. By analyzing the construction materials using polarizing microscopes (PLM), scanning electron microscopes (SEM), X-ray diffraction (XRD), and energy dispersive X-ray analysis (EDX), the microbial damage was diagnosed. The antimicrobial activities of Tetracycline, Fungican, Fladazole, and a botanical fungicide named Cinnimaldehyde were tested. Cinnamaldehyde is the most effective against fungal degradation, followed by fladazole, which just slowed fungal development, while fungican and tetracycline were the least effective. Therefore, cinnamaldehyde emerges as a promising, eco-friendly method for preserving archaeological buildings and achieving a green, sustainable environment for the next generations.
Keywords: sustainability, cinnamaldehyde, green, cultural heritage, conservation, essential oil.

NATURAL POLYMERS AS SUSTAINABLE EXCIPIENTS IN MODERN PHARMACEUTICALS

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ABSTRACT

A polymer is generally defined as a chemical substance having a high molecular mass that is formed through the aggregation of numerous smaller molecules called monomers. The origin of the term "polymer" originates from the Greek term, which means "many parts" or "many units."These structures have multifarious applications and are especially valuable in the areas of medicine and pharmacy.The natural polymers and their derivatives are widely used in these industries because of their specific advantages, such as biocompatibility, meaning they can be safely interacted with the biological systems without causing harm. They are biodegradable, which provides the ability to break down into the non-toxic and easily removable by-products, for example, water and carbon dioxide. As such, this makes them primarily of use in medical and pharmaceutical purposes, where safety and environmental impact are key.Natural polymers are increasingly being used as excipients, non-active substances that will have a supporting role in drug formulation, by the pharmaceutical industry. Several factors account for their growing acceptance. First, they are cost-effective and widely available. Generally, natural polymers are safe for use on humans, making them a very practical choice. In addition, their biodegradability helps address some environmental concerns often ascribed to synthetic materials.Natural polymers also demonstrate a wide variety of forms and properties that can be customized to provide a range of functions such as controlling the release of drugs, stabilizing active ingredients, or improving the physical properties of pharmaceutical formulations. This variety allows them to be utilized in a wide number of pharmaceutical products, enabling progress in drug delivery and formulation techniques. As research advances, the role of natural polymers in sustainable and innovative pharmaceutical applications continues to thrive.

KEYWORDS: Natural Flavours, Excipients, Active ingredients, Prodrug.

DİJİTAL LİDERLİK ALGISI İLE İŞ GÜVENCESİZLİĞİ ARASINDAKİ İLİŞKİ
THE RELATIONSHIP BETWEEN PERCEPTION OF DIGITAL LEADERSHIP AND JOB INSECURITY

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ÖZET
Günümüzde bilişim teknolojileri alanındaki hızlı gelişmeler, işletmelerin rekabette ayakta kalabilmeleri açısından dijital dönüşümü zorunlu hale getirmektedir. Her dönüşüm süreci, örgütlerde kültürel bir dönüşümü de gerektirdiğinden liderlerin kritik bir rol üstlendiği kaçınılmaz bir gerçektir. Dijital dönüşümün liderlik üzerindeki etkisi sonucunda ortaya çıkan liderlik tarzlarından biri de Dijital Liderlik olarak literatüre girmiştir. İçinde bulunduğumuz dönemde örgütlerde dijital liderlere olan ihtiyaç, her geçen gün artmaktadır.
İş güvencesizliği veya iş güvencesizliği algısı, çalışanların işlerinin devamlılığına yönelik algıladıkları tehditleri içermektedir. Bir başka deyişle iş güvencesizliği, çalışanın işini kaybetmeye yönelik tehdit algısı ve bu tehditle ilgili kaygılar olarak ifade edilebilir. Günümüzde dünya genelinde meydana gelen ekonomik ve toplumsal değişimler, işsizlik oranlarındaki artışlar, kuruluşlardaki küçülmeler ve yeniden yapılanmalar, iş hayatında esneklik uygulamaları, hızlı değişim gibi faktörler, çalışanlarda iş güvencesi konusunda büyük bir endişe yaratmaktadır. Diğer taraftan, sık sık yaşanan ekonomik krizler ve bunların çalışanlar üzerindeki etkileri ile uluslararası rekabet, bu endişeyi daha da artırmaktadır.
Yönetici-lider tarzının ve çalışanlarla iletişim şeklinin iş güvencesizliğine sebep olduğunu tespit etmiş çalışmalar bulunduğundan bu araştırmada dijital liderlik algısının iş güvencesizliği ile ilişkisi incelenmiştir. Nicel araştırma yöntemlerinden "İlişkisel Tarama Modeli"nin kullanıldığı bu araştırmaya, Türkiye'de özel sektörde beyaz yakalı çalışan olarak görev yapan kişiler arasından kolayda örnekleme yoluyla ulaşılan 463 kişi katılmıştır. Dijital Liderlik algısı, Büyükbeşe, Dikbaş ve Ünlü (2022) tarafından geliştirilen Dijital Liderlik Ölçeği ile ölçülmüştür. İş Güvencesi de Erdoğan (2020) tarafından geliştirilen İş Güvencesi Algısı Ölçeği ile değerlendirilmiştir. Dijital liderlik algısı ile iş güvencesi arasındaki ilişkiyi test etmek için yapılan Pearson korelasyon analizi sonucunda, iki değişken arasında pozitif yönde anlamlı bir ilişki olduğu saptanmıştır, $r = .304$, $p < .01$. Buna göre dijital liderlik algısı arttıkça iş güvencesi algısı da artmakta, bir başka deyişle iş güvencesizliği algısı azalmaktadır. Regresyon analizi sonucuna göre dijital liderlik algısı, iş güvencesindeki varyansın yaklaşık %9,3'ünü açıklamaktadır ($R^2=0.093$, $p < .01$). Çalışanların iş performansı ve kurum aidiyeti üzerinde önemli bir unsur olan iş güvencesi algısını artırmalarında, işletmelerin lider işe alım ve yetenek yönetimi süreçlerinde dijital liderlik becerilerini değerlendirmeye ve mevcut liderleri bu alanda geliştirmeye odaklanmalarının katkı sağlayacağı düşünülmektedir.
Anahtar Kelimeler: Dijital Liderlik, İş Güvencesi, İş Güvencesizliği.

ABSTRACT

Today, rapid developments in the field of information technologies make digital transformation mandatory for businesses to survive in competition. Since every transformation process requires a cultural transformation in organizations, it is an inevitable fact that leaders play a critical role. One of the leadership styles that emerged as a result of the impact of digital transformation on leadership has entered the literature as Digital Leadership. In the current period, the need for digital leaders in organizations is increasing day by day.

Job insecurity or job insecurity perception includes the threats that employees perceive towards the continuity of their jobs. In other words, job insecurity can be defined as the employee's perception of the threat of losing their job and their concerns about this threat. Today, factors such as economic and social changes occurring throughout the world, increases in unemployment rates, downsizing and restructuring in organizations, flexibility practices in business life, and rapid change create great concern among employees about job security. On the other hand, frequent economic crises and their effects on employees and international competition further increase this concern.

Since there are studies that have determined that manager-leader style and communication style with employees cause job insecurity, the relationship between digital leadership perception and job insecurity is examined in this study. In this study, in which "Correlational Survey Model", one of the quantitative research methods, was used, 463 people who were reached through convenience sampling among the white-collar employees working in the private sector in Turkey participated. Digital Leadership perception was measured with the Digital Leadership Scale developed by Büyükbeşe, Dikbaş and Ünlü (2022). Job Security was also evaluated with the Job Security Perception Scale developed by Erdoğan (2020). As a result of the Pearson correlation analysis conducted to test the relationship between digital leadership perception and job insecurity, it was found that there was a significant positive relationship between the two variables, $r = .304$, $p < .01$. Accordingly, as the perception of digital leadership increases, the perception of job security increases, in other words, the perception of job insecurity decreases. According to the regression analysis, digital leadership perception explains approximately 9.3% of the variance in job security ($R^2=0.093$, $p < .01$). It is thought that focusing on evaluating digital leadership skills in leader recruitment and talent management processes and developing existing leaders in this area will contribute to increasing the perception of job security, which is an important factor in employees' job performance and organizational belonging.

Keywords: Digital Leadership, Job Security, Job Insecurity.

MULTİPL SKLEROZ HASTALARINDA YENİ ALT EKSTREMİTE BECERİ DEĞERLENDİRMESİNİN GÜVENİLİRLİĞİNİN VE GEÇERLİLİĞİNİN İNCELENMESİ

THE RELIABILITY AND VALIDITY OF THE NOVEL LOWER-EXTREMITY DEXTERITY ASSESSMENT IN PATIENTS WITH MULTIPLE SCLEROSIS

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ÖZET

Amaç: Bu çalışma; Multipl Skleroz (MS) hastalarında yeni alt ekstremite beceri değerlendirmesinin (YAEBD) güvenilirliğinin ve geçerliliğinin incelenmesi amacıyla yapıldı.
Gereç ve Yöntem: Çalışmaya 49 MS hastası ve 49 sağlıklı birey dâhil edildi. Test-tekrar test güvenilirliğini incelemek için sınıf içi korelasyon katsayısı (SKK), Bland-Altman grafikleri, standart ölçüm hatası (SÖH) ve minimum saptanabilir değişiklik (MSD) değerleri hesaplandı. Test-tekrar test güvenilirliği için MS hastalarında YAEBD 7-10 gün arayla tekrarlandı. Eş zamanlı geçerlilik için YAEBD ile dokuz delikli peg testi, dört adım kare testi, Berg Denge Ölçeği, aktiviteye özgü denge güven ölçeği, 10 metre yürüme testi, süreli kalk ve yürü testi ve Genişletilmiş Engellilik Durum Ölçeği arasındaki korelasyonlar incelendi. Bilinen gruplar geçerliliği için MS hastaları ve sağlıklı bireyler arasında ve düşen ve düşmeyen MS hastaları arasında YAEBD tamamlama süreleri karşılaştırıldı. MS grubunda, ROC analizi düşenleri düşmeyenlerden ayıran en iyi kesme sürelerini belirlemek için kullanıldı.
Bulgular: YAEBD hem dominant hem dominant olmayan ekstremitede mükemmel test-tekrar test güvenilirliğine sahipti (SKK=0,966 ve SKK=0,971, sırasıyla). Bland-Altman grafiğinde yüksek uyum vardı. SÖH ve MSD değerleri; dominant tarafta 1,35 sn ve 3,74 sn bulunurken, dominant olmayan tarafta 1,17 sn ve 3,24 sn bulundu. YAEBD, diğer ölçümler ile koreleydi ($p<0,05$). MS hastaları sağlıklı kişilerden ve düşen MS hastalan düşmeyen MS hastalarından daha uzun YAEBD sürelerine sahipti ($p<0,001$ ve $p<0.001$, sırasıyla). MS grubunda, düşenleri düşmeyenlerden ayıran en iyi kesme değer süreleri dominant taraf için 17,62 sn ve dominant olmayan taraf için 16,40 sn bulundu.
Sonuçlar: YAEBD, MS hastalarında alt ekstremite becerisini değerlendirmek için güvenilir ve geçerli bir ölçüm aracıdır. Bu sonuçlara göre, YAEBD ile ölçülen alt ekstremite becerisi MS rehabilitasyonuna eklenebilecek önemli bir sonuç ölçümü olabilir.
Anahtar Kelimeler: Alt ekstremite becerisi, Geçerlilik, Güvenilirlik, Multipl Skleroz

ABSTRACT

Aim: This study was conducted to examine the reliability and validity of the novel lower-extremity dexterity assessment (NLEDA) in patients with multiple sclerosis (PwMS).

Materials and Methods: Forty-nine PwMS and 49 healthy people were included in this study. To examine the test-retest reliability, intraclass correlation coefficient (ICC), Bland-Altman graphs, standard error of measurement (SEM) and minimum detectable change (MDC) values were calculated. For the test-retest reliability, the NLEDA was repeated with an interval of 7¬10 days in PwMS. For the concurrent validity, correlations between the NLEDA and nine hole peg test, four step square test, Berg Balance Scale, activity specific balance confidence scale, 10-meter walk test, timed up and go test and Expanded Disability Status Scale were used. For the known-groups validity, the NLEDA completion times were compared between PwMS and healthy people and between fallers and non-fallers with multiple sclerosis (MS). In the MS group, the ROC analysis was used to determine the best cut-off times to discriminate fallers from non-fallers.

Results: The NLEDA had excellent test-retest reliability in both dominant and non-dominant lower extremity (ICC=0.966 and ICC=0.971, respectively). There was high agreement in the Bland-Altman plot. The SEM and MDC values were found 1.35 s and 3.74 s on the dominant side, while were found 1.17 s and 3.24 s on the non-dominant side. The NLEDA was correlated with other measurements ($p<0.05$). PwMS had higher NLEDA times than healthy people and fallers with MS had higher NLEDA times than non-fallers with MS ($p<0.001$ and $p<0.001$, respectively). In the MS group, the best cut-off times that discriminated fallers from non-fallers were found to be 17.62 s for the dominant side, and 16.40 s for the non-dominant side.

Conclusion: The NLEDA is a reliable and valid measurement tool to assess lower extremity dexterity in PwMS. According to these results, the lower extremity dexterity measured with the NLEDA may be an important outcome measure that can be added to the rehabilitation of MS.

Keywords: Lower extremity dexterity, Reliability, Validity, Multiple sclerosis

ASSESSMENT OF SCIENCE TEACHERS' KNOWLEDGE AND USE OF INFORMATION AND COMMUNICATION TECHNOLOGY FOR TEACHING IN KWARA STATE SECONDARY SCHOOLS

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Abstract
There is no doubt that emergence of Information and Communication Technology (ICT) has significant impact on education especially for teachers in the discharge of their teaching duties. In this contemporary era, ICT is being used as synchronous and asynchronous teaching and learning platform that caters for both teachers and learners' needs. The purpose of this study was to investigate science teachers' knowledge and use of Information and Communication Technology for teaching in Kwara State. The study was descriptive research of the survey method using random sampling techniques to draw a sample of 200 (130 males and 70 females) science teachers from ten secondary schools in Kwara State, Nigeria. The main research instrument employed for data collection was a researcher-designed questionnaire. The research question was answered using mean and standard deviation. Hypotheses one to three were tested using T-test statistics while hypothesis four was tested using Analysis of Variance (ANOVA). All hypotheses were tested at a 0.05 significant level, and the statistical tool used for analysis is Statistical Package for Social Science (SPSS) version 21. Findings from the study indicated that science teachers were competent of use of and ICT for teaching and all the teachers' variables considered in the study except years of teaching experience have no influence on science teachers' level of knowledge of use of ICT for teaching. Thus, it was recommended among others that more professional development-oriented policies should be encouraged and sponsored by the government to maintain teachers' ICT knowledge for teaching in the classroom.

Keywords: Science Teachers, Level of Knowledge, ICT, Teaching

GLOBAL STABILITY OF HIV/AIDS DYNAMICS WITH PrEP INTERVENTION

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HIV/AIDS continues to pose significant global health concerns, underscoring the need for mathematical modelling to inform evidence-based intervention and policy decisions. This study explores the global Stability of HIV/AIDS Dynamics with PrEP Intervention and a six-compartment model which includes susceptible, vaccinated-PrEP, asymptomatic infective, symptomatic infective, treated and AIDS population is investigated. The validity of the solution states affirms that the model is well-defined and holds epidemiologically significant. The basic reproduction number (R_0) was also obtained using the next generation matrix. The disease-free and endemic equilibrium points were identified, and the global stability is analyzed. Sensitivity analysis was carried out using normalized forward sensitivity index. The outcomes from stability and sensitivity analysis suggest promising prospects for mitigating HIV/AIDS spread within populations. The sensitivity analyses identify critical parameters influencing disease transmission. By applying the insights gained from this analysis, stakeholders can develop evidence-based policies and interventions to curb the spread of HIV/AIDS within prisons, ultimately reducing the burden on public health and promote a safer and healthier population.

Keywords: Global stability**,** HIV/AIDS, PrEP intervention, Basic Reproduction Number,

ESTIMATION OF DAILY AND GLOBAL EXTRATERRESTRIAL SOLAR RADIATION AT MAKURDI BENUE STATE

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ABSTRACT

In this study, estimation of daily and extraterrestrial solar radiation was carried out so as to assess the feasibility of solar energy utilization in Makurdi Benue state. Accumulated data of Extraterrestrial solar radiation, Global solar radiation, Clearness index, Diffuse radiation, Diffuse ratio and Diffuse coefficient were obtain from the NIMET station Makurdi Benue state. The data obtained covered the period of eight years (2007-2014). The Extraterrestrial solar radiation, Global solar radiation, Clearness index, Diffuse radiation, Diffuse ratio and Diffuse coefficient were compared, the daily, monthly and annual variation were also evaluated .

The results revealed that the Extraterrestrial solar radiation, Global solar radiation, Clearness index, Diffuse radiation, Diffuse ratio and Diffuse coefficient varies over the period of the year, the month of April and August have the highest radiation while the month of May and September has the least values . The implication of these results on the effective utilization of solar radiation are discussed, the results in the study serve as very useful information for Engineers and other renewable energy technologists in the process of designing and estimation of performance of solar application system.

ODOUR CONTROLLED POULTRY MANURE; EFFECT ON OKRA (*ABELMOSCNUS ESCLENTUS*) PRODUCTION

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Abstract
The study evaluated the effect of odour controlled poultry manure (droppings) on the growth, yield as well as market value of Okra in Ufuma metropolis. There were two treatment groups, T_1 was the odour controlled treatment group which consists of 100 grams (g) of "Alum" to 2000g of wood shavings which was used as litter material in broiler chicken house. T_2 was not treated served as control. Each treatment group had five (5) potted Okra plants replicated ten (10) times making a total of 50 plants per treatment.10g of the treatment was added every fourth nightly with other routine management practices adequately observed. The plant height, leaf number, stem length, fruit number, flower number, leaf length and fruit weight were measured. There was no significant difference ($P > 0.05$) among all the parameters measured for both treatment groups T_1 and T_2. The fruit yield was slightly more in T_2 (untreated). Okra productivity which was accessed using cost and return analysis was profitable venture with a margin of about three thousand seven hundred and fifty naria (#3750). It is safe to conclude that controlling odour in poultry houses is an eco-friendly practice the promotes green economy, has no negative effect on Okra production.
Keywords: Okra, poultry manure, growth, yield

NATIONAL HISTORY MUSEUMS: FROM A LOOK INTO THE PAST—ON THE WAY TO THE FUTURE

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ABSTRACT
An important role in the development of Ukrainian statehood and national revival, the education of the young generation of patriots, undoubtedly, is played by museums created at educational institutions. Today, museums and collections of universities and other higher educational institutions study and preserve a significant part of the State Museum Fund of Ukraine, as well as research and popularize the history of science and education, forming the scientific worldview of young people. Their collections fascinate with the diversity of collections and the uniqueness of preserved rarities, which are not found in any other museums in Ukraine. They are actively involved in scientific research, educational programs, and cultural and educational work.
The National History Museum of the Kherson State Agrarian and Economic University was established in 1960. For almost 65 years of its existence, the National Museum of History of Kherson State Agrarian and Economic University has become the center where information about the pedagogical activities of the teaching staff and the achievements of graduates over the 150-year history of the educational institution is concentrated. The main and auxiliary funds of the National Museum of History of Kherson State Agrarian and Economic University contain over 3,500 storage units. This is a powerful information base that is used not only in the work of the museum but also as reference material in the work of graduate students, students, teachers, and employees of other institutions. The museum's exposition has eight thematic sections. All historical periods of the development of the educational institution are presented in the exposition in stages, starting from the time of its foundation in 1874. The main tasks of the National Museum of History of Kherson State Agrarian and Economic University are to study and reflect on the expositions of both the past and modern achievements of our university and to contribute to improving its image. The reflection of the traditions of scientific research and education in the expositions, the coverage of the lives and activities of famous graduates, the reflection of student life (study, leisure, traditions) — all this should be the basis for building the identity of our university. This is, after all, the intangible cultural heritage that must be preserved.
Material monuments tell about the formation and development of an educational institution, where its historical course comes to life in photos, documents, manuscripts, and printed publications of teachers, graduates, and students. Visiting the museum is an important part of the educational process, which contributes to the formation of respect for history and cultural heritage in students. After all, in the museum, the past is intertwined with the present: many students and teachers have the opportunity to see their photos on new stands and feel pride in its graduates.
Keywords: National History, Museums, Education.

THERAPEUTIC POTENTIAL OF METHANOLIC AND AQUEOUS EXTRACT OF *PSIDIUM GUAJAVA* ON MICE INFECTED WITH *TRYPANOSOMA EVANSI*

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Abstract
Trypanosoma evansi is one among several species of Trypanosome responsible for a major protozoa parasitic disease of domestic animals. The current study aimed to investigate the therapeutic potential of aqueous and methanolic extract of *Psidium guajava* on mice infected with *Trypanosoma evansi* and the *In vivo* efficacy of the extract was evaluated. In total 24 mice were randomly seperated into six groups (A-F) of four mice each were subcutaneously infected with 0.5ml of blood containing 1.0*10^6 trypanosome and treated for the period of five days with 0.1mg/ml and 0.01mg/ml of methanol absolute of *Psidium guajuva* (PGM) and 0.1mg/ml and 0.01mg/ml of aqueous (PGA) respectively. Clinical parameters and haematological indices were evaluated such as temperature, weight, packed cell volume (PCV), Hemoglobin (HB). Preliminary phytochemical screening revealed that *Psidium guajava* contained the following metabolites: phenol, flavonoids, tannin, saponins, Alkaloids, steroids, terpenoids and cardiac glycosides. There was marked initial reduction in packed cell volume (PCV), hemoglobin (HB), weight counts in the infected and treated group (Group D-F) but following treatment with *Psidium guajava* leaf aqueous and methanolic extracts those values were reversed. In conclusion the infection caused haematological changes that were ameliorated following treatment with methaolic and aqueous extract of *psidium guajava*. Across all parameters—weight, temperature, hemoglobin levels, and packed cell volume—the LSD values indicate that methanolic extracts (M1, M2) are more effective in maintaining or restoring normal physiological functions with no significant negative effects ($P > 0.05$).At 0.01mg/mL dosages of queous extract of *Psidium guajava* had the highest visible parasite counts of (14).while at 0.1mg/mLmethanol extract of *Psidium guajava* had the highest visible parasite counts of (8) showing that methanol extract of *Psidium guajava* had more effect on *Trypanosoma evansi* than aqueous extract with higher parasite counts. This suggest that methanol extract of *Psidium guajava* had more effect on *Trypanosoma evansi* than aqueous extract tested with higher parasite counts. In contrast, aqueous extracts (M3, M4) showed significant negative effects, with several parameters exceeding the LSD range, indicating statistical significance ($P < 0.05$), which suggests reduced effectiveness and possible toxicity at higher doses
Key word: *Trypanosoma evansi*,*Psidium guajava*, *In vivo*,Methanol, Aqueous

ANTI-TRYPANOSOMAL EFFICACY OF Telfairia *occidentalis* ON *Trypanosoma brucei brucei*-INFECTED WISTAR RATS

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Abstract

Evaluation of *Telfairia occidentalis* leaves in *Trypanosoma brucei brucei*-infected wistar rats was conducted from May, 2024 to July, 2024 in the Biology Laboratory of Federal University, Lokoja, Kogi state. A total of twenty-four (24) mice were randomly distributed into six groups of four mice each. Group A (positive control) was not infected and not treated. Group B was not infected, but treated (treatment control). Group C was infected, not treated (negative control). Group D, E and F was infected and treated with different dosage of methanol and aqueous extracts of *T. occidentalis*. Trypanosoma stock inoculation was carried out by injecting 0.2ml of blood containing approximately 1.0×10^5 Trypanosoma per unit, intraperitoneally into each mouse in the infected group. Following patency of 3 days, mice were treated at different dosages (1 and 0.1 mg/ml) of methanol and aqueous extracts. Pre-infection, post-infection, and post-treatment data for temperature, body weight, parasitemia level, packed cell volume, and daily survival were monitored.*In vivo* studies on hemoglobin (Hb) levels, packed cell volume (PCV) and temperature change of the experimental mice revealed that treatment with methanolic and aqueous extracts reversed the abnormalities in Hb, PCV, weight, and body temperature towards positive control levels in a fast way compared to the untreated control group. *T. occidentalis* methanolic extract (TOM) exhibited higher *in vivo* anti-trypanosomal than *T. occidentalis* aqueous extract (TOA) against the test organism. The parasitemia count in this study was observed to decrease in concentration depending on the dosage pattern of TOM and TOA extracts. There was an average of 90.48% and 40.91% reduction of parasitemia after treatment with TOM and TOA respectively.In contrast, aqueous extracts showed significant negative effects, with the several parameters exceeding the LSD range, indicating statistical significance ($P<0.05$), which suggests that dosage at mimmal level should put *in vivo* consideration while administering.

Keyword: *Telfairia occidentalis,Trypanosoma brucei brucei*,Lokoja, *in vivo*

EFFECT OF DEBTS ON ECONOMIC GROWTG IN NIGERIA

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ABSTRACT

This study investigated the effect of debts on Nigeria's economic growth using annual data from 1981 to 2023. The empirical results showed that external debt leads a hindrance to long-term growth while its short-term effect was growth enhancing. Internal debt had a significant positive impact on long-term growth while its short-term effect was negative. In the long term and short term, debt service payments led to decline on growth confirming debt overhang effect. The findings suggested that the government should direct the borrowed funds to the diversification of the productive base of the economy and to know which season is best to go into debt. This will improve long-term economic growth, expand the revenue base and strengthen the capacity to repay outstanding debts when due. Fiscal improvements that encourage domestic resource mobilization, efficient debt management strategies and reliance on domestic debt rather than external debt for increased deficit financing to engender greater growth are the main contribution of the study.

THERMOKINETIC ANALYSIS OF SYAGRUS ROMANZOFFIANA FIBERS FOR SUSTAINABLE BIOENERGY APPLICATIONS

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ABSTRACT
The rising demand for sustainable energy sources has sparked renewed interest in biomass as a renewable resource. Syagrus Romanzoffiana fibers (SRFs) are a promising biomass resource because of their availability and energy-rich nature. This study uses thermogravimetric analysis (TGA) to evaluate the pyrolytic behavior of Syagrus Romanzoffiana fibers (SRFs) under non-isothermal environments. In a nitrogen environment, SRFs were heated at rates of 5, 10, and 15°C/min from 25 to 800 °C, respectively. The pyrolysis process was divided into three stages, with a special emphasis on the second stage, in which degradation of low-temperature stable components happened between 218-376 °C, 218-391 °C, and 218-394 °C for the appropriate heating rates. The Coats-Redfern approach was used to analyze the kinetics of 21 models representing major solid-phase reaction processes. The diffusion model, based on the Zhuravlev equation, has the greatest correlation coefficients ($R^2 > 0.99$) for all heating rates, showing its applicability for SRF pyrolysis. The activation energy values varied according to heating rate, ranging from 114.02 to 119.44 kJ/mol. Moreover, using the kinetic data, the thermodynamic parameters entropy (ΔS), Gibbs free energy (ΔG), and enthalpy (ΔH) were obtained, offering insights into the energy needs and viability of SRFs as a renewable biomass feedstock. The results show how useful SRFs may be for applications involving renewable energy, such as facilitating the creation of bio-based products and the construction of effective pyrolysis reactors.

Keywords: Syagrus Romanzoffiana fibers; Thermogravimetric analysis; Coats-Redfern method; pyrolysis; kinetics.

SİLİNDİRİK MALZEMELERDE BOYUTSAL VE GEOMETRİK HATALARIN TESPİTİ İÇİN BİR OPTİK ALGILAMA SİSTEMİ TASARIMI

DESIGN OF AN OPTICAL MEASUREMENT SYSTEM FOR THE DETECTION OF DIMENSIONAL AND GEOMETRIC DEFECTS IN CYLINDRICAL MATERIALS

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ÖZET

Endüstriyel ürünlerin büyük bir kısmını oluşturan silindirik malzemeler, üretim süreçlerinde boyutsal ve geometrik muayeneye tabi tutularak kalite kontrolü sağlanır. Çelik, alüminyum, plastik ve kompozit gibi malzemelerden üretilen borular, iletkenler, çubuklar ve tüpler, geniş bir endüstriyel kullanım alanına sahiptir. Bu malzemelerdeki boyutsal ve geometrik sapmaların doğru bir şekilde tespiti, üretim hatalarının minimize edilmesine ve kalite kontrol süreçlerinin iyileştirilmesine olanak tanır. Bu çalışmada, silindirik malzemelerde boyutsal ve geometrik sapmaların tespiti için lineer Charced Coupled Device(CCD) sensör kullanılarak bir optik algılama sistemi geliştirilmiştir. Lineer CCD sensörler, yüksek hassasiyet ve çözünürlük gerektiren endüstriyel ve akademik çalışmalarda sıklıkla tercih edilmektedir. Özellikle kalite kontrol, boyut ölçümü, yüzey incelemesi ve otomasyon sistemlerinde yaygın olarak kullanılmaktadır. CCD sensörlerin düşük gürültü seviyeleri, doğruluk gerektiren ölçümlerde avantaj sağlar. Ayrıca, ışığa duyarlı yapıları sayesinde karmaşık yüzeyler üzerinde detaylı analiz yapılmasına olanak tanır. Lineer CCD sensörlerin geleneksel yöntemlere kıyasla sağladığı bir diğer avantaj ise, temas gerektirmemesi sayesinde malzeme yüzeyine zarar vermemesi ve hızlı ölçüm imkanı sunmasıdır. Özellikle silindirik yüzeylerin muayene süreçlerini hızlandırarak üretim verimliliğini artırmaktadır. Geleneksel fiziksel temas gerektiren yöntemlere kıyasla bu tahribatsız optik sistem, hem üretim sürecinde zaman tasarrufu sağlamakta hem de malzeme yüzeylerinin zarar görmesini engellemektedir. Lineer CCD sensörlerin hassas ölçüm kabiliyeti, bu yöntemi endüstriyel kalite kontrol uygulamalarında etkili bir çözüm haline getirmektedir. Optik bir muayene yönteminin geliştirildiği bu çalışmada, sensör verileri mikrodenetleyici aracılığıyla işlenmiş ve sonuçlar bir kullanıcı arayüzü üzerinden görselleştirilmiştir. Sistem tasarımında LED tabanlı aydınlatma sistemi tercih edilerek uygulamada var olan sistemlere göre daha ekonomik ve kullanım alanına göre yeterli ölçüm hassasiyeti sağlayan bir yapı oluşturulmuştur. Sistem, üretim sırasında temassız ölçüm yaparak hızlı ve doğru sonuçlar sağlamaktadır.

Anahtar Kelimeler: Lineer CCD Sensör, Hata Tespiti, Optik Ölçme

ABSTRACT

Cylindrical materials, which constitute a large part of industrial products, are subjected to dimensional and geometric examination during production processes to ensure quality control. Pipes, conductors, rods, and tubes made from materials such as steel, aluminum, plastic, and composites have a wide range of industrial applications. Accurate detection of dimensional and geometric deviations in these materials allows production errors to be minimized and quality control processes to be improved. In this study, an optical measurement system has been developed using a linear Charced Coupled Device (CCD) sensor for the detection of dimensional and geometric deviations in cylindrical materials. Linear CCD sensors are frequently preferred in industrial and academic studies that require high sensitivity and resolution. These sensors are widely used in quality control, dimension measurement, surface inspection and automation systems. The low noise characteristics of CCD sensors are advantageous in measurements that require high accuracy. In addition, their photosensitive structure makes it possible to perform detailed analysis on complex surfaces. Another advantage of linear CCD sensors compared to conventional methods is that they do not damage the material surface due to the fact that they do not require contact and also provide fast measurement. Especially by speeding up the inspection processes of cylindrical surfaces, it increases production efficiency. Compared to traditional methods that require physical contact, this non-destructive optical system not only saves time in the production process but also prevents damage to material surfaces. The precision measurement capability of linear CCD sensors makes this method an effective solution for industrial quality control applications. An optical inspection method was developed in this study, where sensor data was processed using a microcontroller and the results were visualized through a user interface. LED-based illumination system was preferred in the system design and created a structure that is more economical than the existing systems in practice as well as providing sufficient measurement accuracy according to the area of use. The system provides fast and accurate results by performing non-contact measurement during production.

Keywords: Linear CCD Sensor, Defect Detection, Optical Measurement

TİPOLOJİK BİR İNCELEME
A TYPOLOGICAL REVIEW

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ÖZET
İnsanoğlu tarih boyunca çevresini biçimlendirme çabası içerisinde olmuştur. Temel gereksinimlerini karşılayabilmek için elindeki malzemeyi kullanarak mimarlığı üretmeye başlamıştır. Mimarlık sadece fiziksel yapıyı oluşturmak değil, aynı zamanda toplumsal ve kültürel bağlamları da bir bütün olarak yansıtmaktadır. Bu sebeple, tarihsel süreç boyunca mimarlık disiplininin üretimlerini incelerken onların çevresel, sosyo-kültürel ve tarihi boyutlarının da ele alınması gerekmektedir. Bu bağlamda tipoloji, mimarlık üretimlerini bir bütün olarak değerlendirmemize imkan tanır ve mimari nesneler arasında ilişki kurulmasını sağlar.
Çalışma kapsamında portikler tipolojik olarak incelenmeye çalışılmıştır. Portik; Antik Yunan ve Roma'dan beri kullanılan, üstü örtülü, ön kısmı sütunlarla sıralanmış, güneşin ve yağışın zararlı etkilerinden koruyan yarı açık bir galeridir. Çalışma alanının İstanbul olarak seçilmesinin nedeni ise coğrafi konumu itibarıyla sanat, kültür, sanayi ve ticaret merkezi olarak ön plana çıkması, birçok farklı kültüre ev sahipliği yapması, tarihsel zenginliğe ve mimari üretim çeşitliliğine sahip olması en önemli nedenlerdir. İstanbul son yüzyılda yoğun göç dalgalarına maruz kalmasıyla hızlı kentleşme olgusunu gündeme getirmiştir. Bu durum, kültürel ve yapısal değişimleri de beraberinde getirmiştir. İstanbul'daki portikli yapılanmaların bir kısmı korunurken, bir kısmı farklı amaçlarla kullanılmaya başlanmış, bir kısmı da yok edilmiştir. Bu kapsamda yapılan tipolojik çalışma ile yapıların yalnızca fiziki özellikleri değil, yapılan değişimlerin, dönüşümlerin mantığının kavranması ve kuramsal yaklaşımla çözümlenmesi hedeflenmiştir. İstanbul'un tarihi ve kültürel mirasının korunması ve gelecek nesillere aktarılması için kapsamlı koruma ve belgeleme çalışmalarına ihtiyaç duyulmasıyla portiklerin tipolojileri incelenerek belgelenmesi ve sosyo-kültürel sürdürülebilirliğin sağlanması önem arz etmektedir.
Anahtar kelimeler: Mimarlık, Tipoloji, Portik

ABSTRACT
Throughout history, mankind has been trying to shape its environment. In order to meet its basic needs, it has started to produce architecture using the materials at hand. Architecture does not only create physical structures, but also reflects social and cultural contexts as a whole. For this reason, while examining the productions of the discipline of architecture throughout history, their environmental, socio-cultural and historical dimensions should also be addressed. In this context, typology allows us to evaluate architectural productions as a whole and enables the establishment of relationships between architectural objects.

Within the scope of the study, porticos were tried to be examined typologically. Portico; It is a semi-open gallery that has been used since Ancient Greece and Rome, covered, lined with columns in the front, and protects from the harmful effects of sun and rain. The reason why Istanbul was chosen as the study area is that it stands out as a center of art, culture, industry and trade due to its geographical location, hosts many different cultures, has historical richness and architectural production diversity. Istanbul has brought the rapid urbanization phenomenon to the agenda with its intense migration waves in the last century. This situation has also brought about cultural and structural changes. While some of the portico structures in Istanbul have been preserved, some have been used for different purposes and some have been destroyed. In this context, the typological study conducted aims to understand not only the physical characteristics of the structures but also the logic of the changes and transformations that have been made and to analyze them with a theoretical approach. Since comprehensive protection and documentation studies are needed to protect the historical and cultural heritage of Istanbul and to pass it on to future generations, it is important to examine and document the typologies of the porticos and ensure socio-cultural sustainability.
Keywords: Architecture, Typology, Portico

KARAR DESTEK SİSTEMLERİ KULLANILARAK, FARKLI SENSÖRLERDEN GELEN DİNAMİK VERİLERİN ENTEGRASYONUNU SAĞLAYAN UZAK MESAFE IOT SİSTEMİ

INTEGRATION OF DYNAMIC DATA FROM DİFFERENT SENSORS USING DECISION SUPPORT SYSTEMS FOR LONG RANGE IOT SYSTEM

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ÖZET

Geniş sahalardaki ekipmanlardan veri toplamak için geleneksel kablosuz iletişim teknolojileri, kısa mesafeli erişim kapasitesine sahip olmaları nedeniyle yetersiz kalmaktadır. Bu eksikliği gidermek için geliştirilen Düşük Güçlü Geniş Alan Ağları (LPWAN) teknolojileri, özellikle LoRaWAN, IoT projelerinde kritik bir çözüm olarak öne çıkmaktadır. LPWAN teknolojileri, geniş kapsama alanı sunarak IoT projelerinde daha az iletişim altyapısı ihtiyacı doğurmakta, bu sayede projelerin yatırım maliyetlerini düşürmekte ve geri dönüş sürelerini kısaltmaktadır.

LoRaWAN, yalnızca geniş alanlarda etkili veri iletimi sağlamakla kalmayıp, düşük enerji tüketimi ile uzun süreli sensör kullanımı da sunmaktadır. Bu özellik, enerji altyapısı gereksinimini en aza indirerek IoT projelerinde enerji ve kablolama maliyetlerini büyük ölçüde azaltmaktadır. Özellikle geniş sahalarda çalışan sensörlerin verimli bir şekilde kullanılabilmesi, projelerin sürdürülebilirliğini artırmakta ve yapılabilirliğini kolaylaştırmaktadır.

Bu bağlamda geliştirilen Airvision IoT platformu, marka ve model fark etmeksizin tüm sensörlerle entegre olabilen, merkezi sensör yönetimi ve verileri işleme yeteneklerine sahip bir çözüm sunmaktadır. LoRaWAN ile uyumlu olan bu platform, geniş kapsama alanı gereksinimi duyan projelere düşük maliyetle hızlı bir başlangıç yapma imkanı tanımaktadır. Platformun, sensörlerden toplanan verileri işleyip anlamlı çıktılara dönüştürmesi, IoT projelerinin hem ekonomik hem de operasyonel açıdan daha verimli olmasını sağlamaktadır.

Sonuç olarak, LPWAN teknolojilerinin sunduğu geniş kapsama alanı ve enerji verimliliği avantajları, Airvision IoT platformu ile birleştiğinde, IoT projelerinin uygulanabilirliğini artırmakta, yatırımın geri dönüş süresini hızlandırmakta ve dijital dönüşüme önemli katkılar sağlamaktadır. Bu yenilikçi yaklaşım, IoT projelerinde maliyet etkinliği ve operasyonel verimlilik açısından devrim niteliğindedir.

Anahtar Kelimeler: Uzak Mesafe IoT, LoRaWan, LPWAN

ABSTRACT

Traditional wireless communication technologies are insufficient for collecting data from equipment across vast areas due to their limited short-range access capabilities. Low Power Wide Area Network (LPWAN) technologies, particularly LoRaWAN, have emerged as critical solutions in IoT projects to address this challenge. LPWAN technologies provide extensive coverage, reducing communication infrastructure costs and shortening the return-on-investment (ROI) periods for projects.

LoRaWAN not only ensures effective data transmission over wide areas but also supports long-term sensor operation with low power consumption. This feature minimizes energy infrastructure requirements, significantly lowering energy and cabling costs in IoT projects. The efficient utilization of sensors over large fields enhances the sustainability and feasibility of such projects.

The Airvision IoT platform is designed to integrate with sensors of all brands and models, offering centralized sensor management and data processing capabilities. Compatible with LoRaWAN, this platform facilitates the rapid and cost-effective deployment of projects requiring extensive coverage. By processing data collected from sensors and transforming it into actionable insights, the platform ensures both economic and operational efficiency in IoT projects.

In conclusion, the wide coverage and energy efficiency offered by LPWAN technologies, combined with the Airvision IoT platform, significantly improve the feasibility of IoT projects, accelerate ROI, and contribute to digital transformation. This innovative approach represents a breakthrough in cost-effectiveness and operational efficiency for IoT applications.

Keywords: Long Range IoT, LoRaWan, LPWAN

INNOVATIVE ANTENNA DESIGN FOR ADVANCED 6G TECHNOLOGY

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Abstract:
In this research work, the requirements and advancements of antennas in 6G technology are explored. The characteristics and objectives of 6G as well as the key technological advances in this field are also described. A singleband antenna using stacked patches is presented. It provides good coverage for the millimeter-wave frequencies of the sixth generation (6G) and it is efficiently and widely employed in several applications such as autonomous vehicle telemetry and other wireless applications. To demonstrate the efficiency of this antenna, its performance was evaluated through simulations employing reflection coefficient (S-parameter), realized gain and radiation patterns at a resonance frequency of 150 GHz. The obtained results highlight the ability of the antenna to cover 6G technologies with high gains equal to 18.3 dB and a wide bandwidth of approximately 17 GHz.
Keywords—6G technology, A single-band antenna, realized gain, radiation patterns, wide bandwidth

AQUASOMES: A NOVEL DRUG CARRIER SYSTEM

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ABSTRACT:
Aquasomes represent an innovative drug delivery system designed to enhance the bioavailability and therapeutic efficacy of pharmaceutical compounds. Composed of a core structured from biocompatible and biodegradable materials, aquasomes are characterized by their unique water-like properties, which facilitate the solubilization of hydrophilic and hydrophobic drugs. The system utilizes a nanocarrier approach, where the drug is encapsulated within a hydrophilic polymer matrix, allowing for controlled release and targeted delivery.
The aquasome technology offers several advantages over conventional delivery systems, including improved stability, enhanced drug solubility, and reduced systemic toxicity. By mimicking the natural hydration properties of biological tissues, aquasomes can effectively navigate physiological barriers, resulting in increased cellular uptake and bioavailability.
In preclinical studies, aquasomes have demonstrated promising results in delivering a variety of therapeutic agents, including peptides, proteins, and small molecules, highlighting their versatility across multiple therapeutic areas. Future research will focus on optimizing the formulation and understanding the underlying mechanisms of action to fully harness the potential of aquasomes in clinical applications. This novel carrier system paves the way for advancements in personalized medicine and targeted therapies, promising a new frontier in drug delivery technology.
KEYWORDS: Aquasomes Drug Carrier, Bioavailability, Novel technique.

ANIMAL SCIENCE

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ABSTRACT

The study of animal nutrition plays a critical role in enhancing livestock productivity, health, and welfare. This research investigates the effects of various dietary supplements on the growth performance, immune response, and overall health of ruminant livestock. A comprehensive review of key nutrients, including proteins, vitamins, and minerals, highlights their contributions to optimizing feed efficiency and improving milk yield in dairy cattle. Additionally, the study explores the potential benefits of incorporating natural additives like probiotics, prebiotics, and herbal extracts to reduce reliance on synthetic antibiotics and promote sustainable livestock farming. Using a controlled feeding trial, we analyzed growth rates, feed conversion ratios, and immune markers in animals receiving different diet formulations. Preliminary results indicate that natural supplements can significantly enhance growth performance and immune resilience, reducing disease prevalence and mortality rates. This research underscores the importance of balanced nutrition in animal production systems, providing insights that could aid in the development of more sustainable and efficient feeding strategies in the livestock industry.

Keywords: Animal Nutrition, Immune Resilience, Mortality Rates, Feed Conversion Ratios.

INDIA'S ADOPTION OF ELECTRIC VEHICLE POLICY: A STEP TOWARDS SUSTAINABILITY

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Abstract
India's shift towards electric vehicles (EVs) is not just an environmental necessity but also a strategic move to reduce dependency on fossil fuels, improve air quality, and foster economic growth through sustainable mobility solutions. This paper explores the current landscape of EV adoption in India, examining key policies such as the Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME) and the National Electric Mobility Mission Plan (NEMMP). It analyzes the challenges of infrastructure, resource sustainability, and regulatory frameworks, while proposing key recommendations to enhance EV adoption, including financial incentives, localized manufacturing, and strengthened public-private partnerships. Furthermore, the paper discusses the role of a circular economy for EVs, focusing on battery recycling and reuse to ensure long-term environmental benefits. As India works towards integrating EVs into public transportation systems and daily life, this paper highlights the critical role of citizens, civil society, and corporate innovation in achieving a greener, more sustainable future for the nation.
Keywords; Electric Vehicles, India, EV Policies, FAME, Sustainability, Circular Economy, EV Infrastructure, Public Transportation, Policy Recommendations, Green Mobility

HAVAALANI SEÇİMİNDE ÇOK KRİTERLİ KARAR VERME YÖNTEMLERİ VE BULANIK ÇOK KRİTERLİ KARAR VERME YÖNTEMLERİ KULLANILMASI

USING MULTI-CRITERIA DECISION MAKING METHODS AND FUZZY MULTI-CRITERIA DECISION MAKING METHODS IN AIRPORT SELECTION

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ÖZET
Karar verme, çoğu zaman hayati önem taşıyabilmektedir. Bu açıdan değerlendirildiğinde, karar verme noktasında daha dikkatli ve süreç yönetiminde daha profesyonel olunması gerekmektedir. Finans, ekonomi, mühendislik, satış-alım, perakende ve lojistik gibi birçok alanda ve sektörde, karar verme hem kurum hem de yöneticiler için önemli bir durumdur. Bu noktada hataları azaltma ve riskleri bertaraf etmekle birlikte maksimum verimi almak için karar verme parametrelerinin doğru işletilmesi gerekmektedir. İşte tam da bu noktada çok kriterli karar verme olarak ifade edilen; karar vermede, neden, sonuç ve süreç ilişkisinin çok yönlü olarak değerlendirildiği ve minimum iş, maksimum verimin merkeze alındığı yöntemler, literatürde önemli yer edinmektedir. Çok kriterli karar verme yöntemleri çok sayıdadır. Her geçen süreçte bu yöntemler daha da artmakta ve literatüre kazandırılmaktadır. Bununla birlikte bulanık çok kriterli karar verme yöntemleri de, söz konusu literatürü daha da geliştirmek ve daha profesyonel karar verme süreçlerini takip etmek için önemli unsurlardandır. Bu çalışmada daha önceden yayınlanmış bir makale için havaalanı seçiminde, farklı çok kriterli karar verme yöntemleri ve bulanık çok kriterli karar verme yöntemlerinin kullanılması üzerinde durulmakta, kavramsal çerçeve oluşturulduktan sonra analiz bölümü ile değerlendirilmesi yapılması amaçlanmaktadır. İleriye dönük bunun bir yazılıma dönüşmesi hedeflenmiş ve bunun için giriş yapılmıştır.
Anahtar Kelimeler: Çok kriterli karar verme, Bulanık çok kriterli karar verme, Yöntem, Seçim, Havaalanı

ABSTRACT

Decision making can often be vital. From this point of view, it is necessary to be more careful in decision making and more professional in process management. In many fields and sectors such as finance, economics, engineering, sales-purchasing, retail and logistics, decision making is an important situation for both institutions and managers. At this point, it is necessary to operate the decision-making parameters correctly in order to reduce errors and eliminate risks, as well as to get maximum efficiency. At this point, what is expressed as multi-criteria decision making; In decision-making, methods in which the cause, effect and process relationship are evaluated multidimensionally and where minimum work and maximum efficiency are centered, have an important place in the literature. Multi-criteria decision making methods are numerous. In each passing process, these methods are increasing and being brought to the literature. However, fuzzy multi-criteria decision-making methods are also important elements to further develop the aforementioned literature and to follow more professional decision-making processes. In this study, the use of multi-criteria decision-making methods and fuzzy multi-criteria decision-making methods in airport selection is emphasized, and after the conceptual framework is created, it is aimed to evaluate it with the analysis section.

Keywords: Multi-criteria decision making, Fuzzy multi-criteria decision making, Method, Selection, Airport

UNDERSTANDING THE MECHANISM OF ANTIBIOTICS RESISTANCE: PHARMACOLOGICAL PERSPECTIVE

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Abstract
Antibiotic resistance is a growing global health concern that undermines the efficacy of pharmacological treatments for bacterial infections. This phenomenon arises primarily from the evolutionary pressure exerted by the widespread and often inappropriate use of antibiotics. Bacteria adapt through various mechanisms, including genetic mutations, horizontal gene transfer, and biofilm formation, leading to the acquisition of resistance genes. Additionally, enzymatic degradation of antibiotic molecules and alteration of drug target sites further complicate therapeutic interventions. From a pharmacological perspective, understanding these mechanisms is crucial for developing novel antibiotics and alternative therapies, such as bacteriophage therapy and immunomodulation. Furthermore, optimizing existing antibiotics through combination therapy and understanding pharmacokinetics and pharmacodynamics can enhance effectiveness against resistant strains. Public health initiatives emphasizing prudent antibiotic usage and new guidelines for infection control are essential to mitigate this crisis. Effective surveillance systems are needed to monitor resistance patterns and inform clinical decision-making. By integrating knowledge from microbiology, pharmacology, and epidemiology, we can devise comprehensive strategies to combat antibiotic resistance and preserve the utility of these vital medications.
Keywords: antibiotic resistance, pharmacology, bacterial adaptation, genetic mutations, combination therapy, public health.

CHEMICAL AND BIOLOGICAL SENSORS FOR CONTAMINANT MONITORING

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Abstract
Monitoring toxic elements in agri-food products is essential to ensure food safety and protect public health. Traditional methods for detecting contaminants, such as chromatography and spectroscopy, are effective but often time-consuming, expensive, and require skilled personnel. Recent advancements in artificial intelligence (AI) and deep learning (DL) have revolutionized the detection and monitoring processes by enabling faster, more accurate, and automated solutions.
This article reviews state-of-the-art technologies for monitoring toxic elements, with a focus on chemical and biological sensors integrated with AI models. It highlights how deep learning techniques, such as convolutional neural networks (CNNs) and recurrent neural networks (RNNs), are applied to analyze complex datasets from spectroscopic, imaging, and sensor-based systems. The integration of these technologies has improved sensitivity, reduced costs, and enabled real-time monitoring in various stages of food production and supply chains.
Despite significant advancements, challenges such as data scarcity, model interpretability, and scalability remain. Addressing these issues requires collaboration across research fields to develop robust, accessible solutions. By leveraging AI and deep learning, this study underscores the potential for transformative improvements in food safety and public health protection.
Key words : Artificial Intelligence, Deep Learning, Food Safety, Toxic Element Detection, Chemical Sensors.

BRAIN TARGETING OF CEFEPIME LOADED TRANSFERSOMES BASED THERMOSENSITIVE *IN SITU* GEL VIA INTRANASAL DELIVERY: *IN VITRO* AND *IN VIVO* STUDIES

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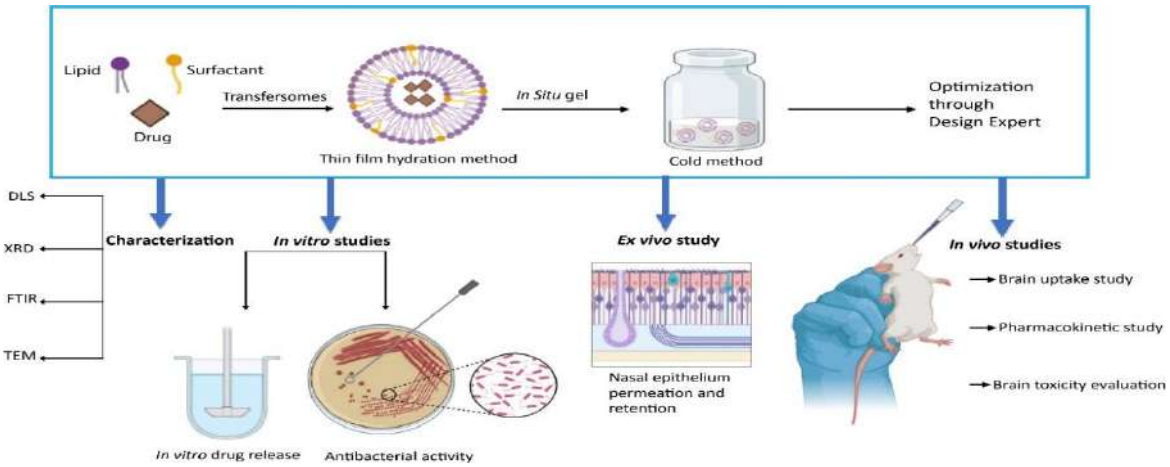
Abstract

In the present study, cefepime loaded transfersomes based *in situ* gel (CFP-TSFG) were developed for brain targeting via intranasal delivery. Cefepime loaded transfersomes (CFP-TSFs) prepared by thin film hydration method. Box–Behnken design was applied for optimization by analyzing the effect of independent variables i.e., phospholipon 90G, tween-80, and cefepime on particle size (PS), polydispersity index (PDI), zeta potential (ZP), and entrapment efficiency (EE%). The optimized CFP-TSFs formulation was found to be spherical shaped with PS 111.1nm, PDI 0.28, ZP -27 mv, EE 84%, and deformability index 73. Fourier transform infrared spectroscopy (FTIR) and X-ray diffraction technique (XRD), were performed to analyze the chemical interactions and crystallinity of excipients and formulation respectively. CFP-TSFs were effectively loaded in optimized thermosensitive *in situ* gel. CFP-TSFG was evaluated for its physicochemical properties, *in vitro*, antimicrobial, *ex vivo*, and *in vivo* studies. *In vitro* studies showed sustained behavior of CFP-TSFs. *Ex vivo* permeation studies of CFP-TSFG showed 34-fold increased permeation compared to conventional gel. *In vivo* studies demonstrating improved targeting efficiency of developed CFP-TSFG via the intranasal route. The biocompatibility of the CFP-TSFG was evaluated and confirmed by toxicity studies. In conclusion, the optimized CFP-TSFG system could be a potential formulation for brain targeting via intranasal delivery.

Keywords: Cefepime; Transfersomes; Brain targeting; Intranasal delivery; *In situ* gel.



Graphical Abstract

COMPARATIVE STUDIES ON THE PHYTOCHEMISTRY AND ANTIOXIDANT ACTIVITY OF BIOSOOT AND BIOASH OF *CALOTROPIS GIGANTEA*

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ABSTRACT

Calotropis gigantea is medicinally used for the treatment of rheumatic disorders and skin disorders. They are also found to possess antimicrobial, antioxidant, anti-inflammatory activities. The phytochemistry, antioxidant and pharmacological activities were studied from the plant extracts. It was reported that the smoke of medicinal plants are widely used in treatment of many diseases. However, the study pertaining to phytochemistry and antioxidant activity of the Biosoot generated from the plant has not been studied so far. Hence a comparative study on the phytochemistry and antioxidant activity of biosoot of the plant is studied. Biosoot is defined as soot generated while burning any biological material either plant or of animal origin and the remnants as Bioash. The biosoot and bioash collected by burning the dried leaves of the plant, *Calotropis gigantea* was studied for the presence of phytocompounds like Tannins, Phlobatannin Saponins, Flavonoids, Terpenoids, Cardiac Glycoside, Steroids, Alkaloids, Quinones and Coumarins. The presence of Saponin, Flavonoids, Quinones and Coumarin were recorded in Biosoot. However, only saponin was detected in the bioash of the plant. The total phenolic content, total flavonoid content and total antioxidant estimation revealed that the Biosoot possess more quantity when compared with that of Bioash. The antioxidant activity studied using DPPH also revealed that biosoot is potent antioxidant agent when compared to that of bioash. The result in detail will be discussed.

Keywords: Calotropis gigantean, Biosoot, Bioash, Phytochemistry, Antioxidant

A SHORT REVIEW ON ALOE VERA

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ABSTRACT:
The Aloe vera plant has been known and used for centuries for its health, beauty, medicinal and skin care properties. The name Aloe vera derives from the Arabic word "Alloeh" meaning "shining bitter substance," while "vera" in Latin means "true." 2000 years ago, the Greek scientists regarded Aloe vera as the universal panacea. The Egyptians called Aloe "the plant of immortality." Today, the Aloe vera plant has been used for various purposes in dermatology. The botanical name of Aloe vera is Aloe barbadensis miller. It belongs to Asphodelaceae (Liliaceae) family, and is a shrubby or arborescent, perennial, xerophytic, succulent, pea- green color plant. It grows mainly in the dry regions of Africa, Asia, Europe and America. In India, it is found in Rajasthan, Andhra Pradesh, Gujarat, Maharashtra and Tamil Nadu
Aloe vera is a commonly found household plant. It grows naturally in hot arid climates, like the desert (Aloe vera (aloe vera) (n.d.). Retrieved May 22, 2015). Aloe vera is a succulent plant, meaning parts of the plant are thicker in order to retain water. Aloe vera has a variety of uses and is found in many products. Aloe vera extracts are used cosmetically and medicinally (Aloe vera (aloe vera) (n.d.). Retrieved May 22, 2015). A glycoprotein found in the gel of the A. vera plant showed beneficial wound healing characteristics. The glycoproteins enhanced granulation and epithelialization in living organism models (Choi et al., 2001). In the laboratory setting, glycoproteins increased cell proliferation activity and enhanced epidermal tissue (Choi et al., 2001). Aloe vera extract also demonstrated anti-inflammatory activity. The mechanism of the anti-inflammatory activity was due to the inhibition of matrix metalloproteinase-9 on blood cells (Vijayalakshmi et al., 2012)
KEY WORDS: "Alloeh", barbadensis Miller, glyco protein, mettaloprotienase.

ELEKTROEĞİRİLMİŞ TERE TOHUMU (*Lepidium sativum* L.) MÜSİLAJI/PVA NANOFİBERLERİNİN FİZİKOKİMYASAL KARAKTERİZASYONU VE ANTİOKSİDAN AKTİVİTESİNİN BELİRLENMESİ

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Özet
Bu çalışmanın amacı, elektrospinning yöntemi ile tere tohumu (*Lepidium sativum* L.) müsilajı (TTM)/polivinil alkol (PVA) içeren nanofiberler üretmek, bu nanofiberleri karakterize etmek ve antioksidan aktivitesini belirlemektir. Tere tohumundan müsilaj eldesi için 10 gr tere tohumu 200 mL distile su ile karıştırılıp bir gece bekletildi. Süzülen müsilaj etüvde kurutuldu. Elektrospinning solüsyonu için %1'lik kurutulmuş tere tohumu müsilajı ve %10'luk PVA çözeltisi 60:40 oranında karıştırıldı. Çözeltiler distile su ile hazırlandı. Elektrospinning işleminde 24 kV voltaj uygulandı. Solüsyon akış hızı 0,2 mL/saat, iğne ile toplayıcı arası mesafe 12 cm idi.
Nanofiberlerin morfolojisi taramalı elektron mikroskobu (SEM) kullanılarak incelendi. TTM, PVA ve TTM+PVA nanofiber solüsyonlarının kimyasal yapısını ve olası kimyasal etkileşimleri belirlemek için fourier transform infrared spektrometresi (FTIR) kullanıldı. Ayrıca üretilen nanofiberlerin antioksidan aktivitesi DPPH radikal süpürme testi uygulanarak spektrofotometre ile tespit edildi.
SEM görüntülerine göre, nanofiberlerin düzgün ve pürüzsüz olduğu gözlenmiştir. Rastgele seçilen 100 nanofiberin ortalama çapı 72,6 nm olarak tespit edilmiştir. FTIR grafiklerine göre, nanofiberler oluşurken TTM ve PVA arasında kimyasal bir etkileşim olmamış, sadece fiziksel olarak birbirlerine karışmışlardır. DPPH deneyine göre, TTM/PVA nanofiberlerinin %59,86 gibi yüksek bir antioksidan aktiviteye sahip oldukları belirlendi. Bu yüksek antioksidan özellik, tere tohumu içeriğinde bolca bulunan gallik asit ve hesperidin gibi fenolik madde ve flavonoidlerden ileri gelmektedir.
Sonuç olarak, bu çalışmada TTM ve PVA ile nanofiber üretimi gerçekleştirilmiştir. Üretilen nanofiberler gösterdikleri antioksidan özellikler sayesinde gıda ve ilaç endüstrisinde ve biyoaktif bileşiklerin kapsüllenmesinde kullanılabilir.
Anahtar Kelimeler: Tere tohumu müsilajı, polivinil alkol, elektrospinning, nanofiber.

PHYSICOCHEMICAL CHARACTERIZATION AND ANTIOXIDANT ACTIVITY OF ELECTROSPUN CRESS SEED (*Lepidium sativum* L.) MUCILAGE/PVA NANOFIBERS

Abstract
The aim of this study was to produce cress seed (*Lepidium sativum* L.) mucilage (CSM) and polyvinyl alcohol (PVA)-containing nanofibers by electrospinning method, to characterize these nanofibers, and to determine their antioxidant activity. To obtain mucilage from cress seeds, 10 g of cress seeds were mixed with 200 mL of distilled water and left overnight. The filtered mucilage was then dried in an oven. For the electrospinning solution, 1% dried cress

seed mucilage and 10% PVA solution were mixed at a ratio of 60:40. The solutions were prepared using distilled water. A voltage of 24 kV was applied during the electrospinning process. The solution flow rate was 0.2 mL/h, and the distance between the needle and the collector was 12 cm.

The morphology of nanofibers was examined using scanning electron microscope (SEM). Fourier transform infrared spectrometry (FTIR) was used to determine the chemical structure and possible chemical interactions of CSM, PVA, and CSM+PVA nanofiber solutions. In addition, the antioxidant activity of the produced nanofibers was determined using a spectrophotometer by applying the DPPH radical scavenging test.

According to SEM images, nanofibers were regular and smooth. The average diameter of 100 randomly selected nanofibers was determined to be 72.6 nm. According to FTIR spectra, there was no chemical interaction between CSM and PVA while nanofibers were formed; they were only physically mixed together. DPPH radical scavenging test showed that CSM+PVA nanofibers exhibited a high antioxidant activity of 59.86%. This high antioxidant property is attributed phenolic substances and flavonoids, such as gallic acid and hesperidin, which are abundant in cress seed content.

As a result, nanofiber production using CSM and PVA was carried in this study. The produced nanofibers can be used in the food and pharmaceutical industries and in the encapsulation of bioactive compounds thanks to their antioxidant properties.

Key Words: Cress seed mucilage, polyvinyl alcohol, electrospinning, nanofiber.

EVALUATION OF WATER QUALITY IN THE KEBIR-RHUMEL BASIN: A PHYSICOCHEMICAL AND BIOLOGICAL APPROACH

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This study evaluates the water quality of the Kebir-Rhumel watershed by examining both physicochemical and biological parameters. Water samples were collected monthly over a two-year period, from January 2016 to December 2017, across 15 sites along the two main rivers: El Kebir and Rhumel. A total of 13 physicochemical parameters and macroinvertebrate species were analyzed. The global biological index (IBGN) was calculated to assess the biological health of the rivers. Principal component analysis (PCA) indicated that the stations in downtown Constantine, along the Rhumel River, showed the highest levels of pollution, with elevated concentrations of NO_3^-, NO_2^-, PO_4^{3-}, Cl^-, conductivity, and suspended solids, which reflect the impact of human and industrial activities. Cluster analysis (CA) identified three distinct groups of sampling sites. According to the IBGN index, water quality varied from average to poor across most of the sites throughout the study period. Stations along the El Kebir River displayed water quality ranging from good to poor, with station K10 consistently having very poor to poor water quality. Overall, the results show consistency between the physicochemical and IBGN index methods. This combined approach provides valuable insights into the overall health of aquatic ecosystems in the region.

Keywords: water quality, physicochemical parameters, IBGN index, macroinvertebrates, Kebir-Rhumel watershed, pollution, aquatic ecosystem health

REDUCING RESISTANCE TO CHANGE THROUGH LONG TERM ORIENTATION: A TPB APPROACH WITH AUTHENTIC LEADERSHIP AND ORGANIZATIONAL JUSTICE

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Abstract:
Purpose: In times of organizational change and transformation, leaders' attitudes toward change are vital for the success of these initiatives. This paper identifies authentic leadership as a key factor influencing employee resistance to change and examines the mediating role of long-term orientation, as well as the moderating role of organizational justice in the relationship between authentic leadership and employee resistance.
Methodology: We gathered data in two stages from 301 employees in Faisalabad, with a one-month interval between collections. For estimation, we applied PLS-SEM using SmartPLS 4.1.
Findings: Authentic leadership fosters long-term orientation among employees. However, for this long-term perspective to thrive, it is essential to adhere to principles of perceived organizational justice. If authentic leaders possess strong skills but the organization fails to implement these principles, it may lead to increased resistance to change.
Originality / value: The presented results reveal the mechanism between authentic leadership and employee resistance to change from cognitive perspective to decrease in resistance and depict an important step towards understanding how authentic leadership and employee uncertainty would be avoidance to apply organizational justice and how they interact with employee resistance to change.
Keywords Authentic leadership, Resistance to change, Uncertainty avoidance, Long-term orientation, perceived organizational justice.

DEVELOPMENT AND VALIDATION OF HAUSA PRACTICAL MODULE FOR INTEGRATING SCIENCE PROCESS SKILLS AMONG SECONDARY SCHOOL STUDENTS IN MINNA, NIGER STATE

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Federal University of Technology, Minna, Nigeria[1,2,3,4&5]

Abstract
The study developed and validated Hausa practical module for integrating science process skills among secondary school students in Minna, Niger state. This study utilized the design and development research approach to establish an empirical basis for the creation of Hausa Practical Module, which is a self-instructional module. In particular, the researcher utilized the ADDIE (Analysis, Design, Development, Implement, Evaluate) Model in developing the Hausa Practical Module in Volumetric Analysis. The total population was Twelve thousand Four hundred and thirty-three (12433). The students in each of the intact classes will constitute the sample size (414 obtained from the Raosoft Sample size calculator) to be used for the study. Two research questions were raised. Six experts validated the research instrument used for the study. Three instruments were used for this study. A Test-Retest Method was used to administer the CPATEL and CPATHL i.e. the students were given the CPATEL and CPATHL multiple-choice items with four options A-D after one week, and the same test was re-administered to the same group of students. The results of the first test and the second were subjected to Pearson's Product Moment Correlation Coefficient (PPMC) and its correlation coefficient indexes of 0.89 for the CPATEL, and 0.81 for the CPATHL, meaning the two instruments are reliable for the study.
Keywords: Hausa Practical Module and Science process skills.

NAVIGATING THE INVISIBLE BURDEN: CHALLENGES FACED BY WOMEN WITH CELIAC DISEASE IN HEALTH, SOCIETY, AND LIFESTYLE

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Abstract
Celiac disease (CD) is a chronic autoimmune disorder triggered by gluten, a protein found in wheat, barley, and rye. For women, managing CD involves unique challenges that extend beyond physical health, impacting mental well-being, social interactions, and economic stability. This study focuses on 138 women diagnosed with celiac disease in the Delhi NCR region, exploring their struggles in adhering to a gluten-free lifestyle and the resulting impact on their quality of life.Using a mixed-methods approach, data were collected through structured surveys and qualitative interviews. The study highlights that over 80% of participants face difficulties accessing safe and affordable gluten-free products, with cross-contamination being a persistent concern. Additionally, the high cost of gluten-free foods imposes significant financial burdens on households, forcing many women to compromise on dietary adherence.
Socially, participants reported a lack of understanding and support from peers and family, with many experiencing stigma or exclusion during gatherings. Mental health issues such as anxiety, depression, and stress were prevalent, with 68% of women expressing concerns about the emotional toll of managing their condition. The constant vigilance required to maintain a gluten-free diet further exacerbates these challenges, leading to feelings of isolation and frustration.The findings emphasize the need for targeted interventions, including increasing awareness about celiac disease, improving access to affordable gluten-free options, and providing mental health support. Enhanced public understanding and policy changes can empower women with CD to navigate their challenges more effectively and lead fulfilling lives despite the constraints of their condition.
Keywords: Celiac disease, gluten-free diet, women's health, Delhi NCR, quality of life, dietary challenges, mental health, social stigma, economic burden.

NITAZOXANIDE AND QUERCETIN CO-LOADED NANOTRANSFERSOMAL GEL FOR TOPICAL TREATMENT OF CUTANEOUS LEISHMANIASIS WITH MACROPHAGE TARGETING AND ENHANCED ANTI-LEISHMANIAL EFFECT

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Abstract

Anti-leishmanial medications administered by oral and parenteral routes are less effective for treatment of cutaneous leishmaniasis (CL) and cause toxicity; hence targeted drug de livery is an efficient way to improve drug availability for CL with reduced toxicity. This study aimed to develop, characterize and evaluate nitazoxanide and quercetin co-loaded nano transfersomal gel (NTZ-QUR-NTG) for the treatment of CL. NTZ-QUR-NT was prepared by thin film hydration method and was statistically optimized using Box-Behnken design. To ease the topical delivery and enhance the retention time, the NTZ-QUR-NT were dispersed in 2 % chitosan gel. Moreover, in-vitro drug release, ex-vivo permeation, macrophage uptake, cytotoxicity and anti-leishmanial assays were performed. The optimized formulation indicated mean particle size 210 nm, poly dispersity index (PDI) 0.16, zeta potential (ZP) 15.1 mV and entrapment efficiency (EE) of NTZ and QUR was 88 % and 85 %, respectively. NTZ-QUR-NT and NTZ-QUR-NTG showed sustained release of the incorporated drugs as compared to the drug dispersions. Skin permeation of NTZ and QUR in NTZ-QUR-NTG was 4 times higher in comparison to the plain gels. The NTZ-QUR-NT cell internalization was almost 10-folds higher than NTZ-QUR dispersion. The cytotoxicity potential (CC50) of NTZ-QUR-NT (71.95 ±3.32 μg/mL) was reduced as compared to NTZ-QUR dispersion (49.77 ±2.15 μg/mL). A synergistic interaction was found between NTZ and QUR. Moreover, in- vitro anti-leishmanial assay presented a lower IC50 value of NTZ-QUR-NT as compared to NTZ-QUR dispersion. Additionally, a significantly reduced lesion size was observed in NTZ-QUR-NTG treated BALB/c mice, indicating its antileishmanial potential.

Keywords: Cutaneous leishmaniasis, Nitazoxanide, Quercetin, Transfersomes, Macrophage targeting

THE MEDIATING ROLE OF FEAR OF MISSING OUT IN THE RELATIONSHIP BETWEEN NOMOPHOBIA AND CYBERLOAFING AMONG EMPLOYEES

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Abstract- The rapid advancement of digital technology has given rise to new phenomena and prevalent behaviors in today's digital age, making it essential to investigate and understand these emerging behaviors. Investigating Nomophobia, Fear of Missing out (FOMO), and Cyberloafing in professional settings is crucial due to the rapid growth of smartphone usage and technology-related behaviors. This study employed a correlational research design to investigate the relationships between nomophobia, fear of missing out (FOMO), and Cyberloafing behaviors among employees in Rawalpindi and Islamabad. A sample of 238 employees was recruited through purposive sampling. Data collection involved a demographic form, the Nomophobia Questionnaire (NMP-Q) to assess smartphone separation anxiety, the FOMO scale to measure social media-related anxieties, and the Cyberloafing scale to evaluate online distractions during work hours. The research was conducted in natural settings, considering the participants' work environments i.e. banks, government organizations, IT departments, Administrative institutes, data centers, and call centers. Statistical analyses, including correlation, regression, mediation analyses, t-tests, and ANOVA, were conducted to examine the relationships between variables and the influence of demographic factors. The findings of this study revealed a positive association between Nomophobia and FOMO, FOMO and Cyberloafing, and Nomophobia and Cyberloafing. Furthermore, the study found that Nomophobia significantly predicted FOMO and Cyberloafing, while FOMO significantly predicted Cyberloafing. Interestingly, FOMO did not act as a mediator between Cyberloafing and Nomophobia, which might be due to the presence of cultural and contextual factors. This implies that although FOMO successfully predicts Cyberloafing it does not mediate the relationship between Nomophobia and Cyberloafing activities. The study also highlighted the influence of demographic variables on the study variables, such as gender, education, job type, organization, and marital status. These findings underscore the importance of considering individual differences among employees when addressing Cyberloafing in organizations. In conclusion, the study highlights the complex interplay between Nomophobia, FOMO, and Cyberloafing among employees. Complex dynamics between these behaviors provide valuable insights into psychological factors driving them, ultimately informing strategies to promote healthy technology use & improve productivity. The findings of the study are essential for policymakers, organizations & mental health professionals to address excessive technology use & promote a healthier digital culture.

Keywords: Nomophobia, Fear of Missing Out, Employees, Cyberloafing, Regression Analysis.

EXPLORING THE PREDICTORS OF INTERPERSONAL DIFFICULTIES IN UNIVERSITY STUDENTS

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Abstract
Universities play a pivotal role in nurturing emotional, social, and interpersonal skills, equipping graduates for various professional paths. Challenges such as adjustment, stress, and financial strains, commonly faced by individuals aged 18-27 in academic settings, have repercussions on both mental and physical well-being. Despite the importance of interpersonal connections, students often confront obstacles like communication issues, divergent viewpoints, and conflicting values. Roughly one-third of university students encounter these hurdles, impacting their mental and social equilibrium. Individual personality traits, cultural factors, and situational demands also play a role in the inclination to conceal information. Protective factors, including self-confidence and supportive environments, can help alleviate these challenges. Extraversion, as a personality trait, promotes effective social interactions, and cultural contexts, like collectivist societies such as Pakistan, influence confidence levels and personal boundaries. To enhance mental well-being and relationships, individuals can work on improving their social skills, engaging in self-reflection, and gaining a better understanding of interpersonal dynamics. Given these considerations, the current study aims to identify the determinants of interpersonal difficulties among university students. Employing a correlational research design, data were gathered from 300 university students using convenience sampling, having mean age 22±2. Indigenous scales—Extraversion Scale (Imran & Khurshid, 2022), Self-Concealment Scale (Javed & Jabeen, 2018), Fear of Missing out Scale (Sabir & Jabeen, 2021), and Interpersonal Difficulties Scale (Saleem et al., 2014)—were utilized for data collection. Linear regression analysis was employed to discern the factors contributing to interpersonal difficulties in university students. The findings unveiled that academic programs, extraversion fear of missing out and self-concealment were positive predictors of interpersonal difficulties in university students. These results were interpreted in the context of existing literature and cultural nuances. The study suggests the need for further research that delves deeper into these variables.
Keywords: interpersonal difficulties, determinants, extraversion, self-concealment, fear of missing out, university students, Pakistan.

"MODELLING OF HYBRID AC/DC MICROGRID AND POWER FLOW ANALYSIS"

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Abstract:
A hybrid ac/dc micro grid to reduce the processes of multiple dc–ac–dc or ac–dc–ac conversions in an individual ac or dc grid. The hybrid grid consists of both ac and dc networks connected together by multi-bidirectional converters.AC sources and loads are connected to the ac network where as dc sources and loads are tied to the dc network. Energy storage systems can be connected to dc or ac links. The proposed hybrid grid can operate in a grid-tied or autonomous mode. The coordination control algorithms are proposed for smooth power transfer between ac and dc links and for stable system operation under various generation and load conditions. Wind speed, solar irradiation level, ambient temperature, and load are also considered in system control and operation. A small hybrid grid has been modelled and power flow analysis is simulated using the Simulink in the MATLAB.
Key Words: Wind Turbine Generator (WTG), photovoltaic (PV) array, Boost Converter, Storage Battery and ac and dc Load.

AN EVALUATION OF AIR POLLUTION CONTROL LAWS IN EMERGING ECONOMIES: EFFECTIVENESS, ENFORCEMENT CHALLENGES, AND PUBLIC HEALTH OUTCOMES

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ABSTRACT

Addressing air pollution and striking a balance between the need for sustainable environmental regulation and the rapid industrialization and urbanization of emerging nations present a unique set of challenges. In these areas, national policy, local economic priorities, and international environmental standards frequently influence the legal frameworks for controlling air pollution. However, issues with enforcement, institutional capability, and the complex socioeconomic environment often undermine the effectiveness of these laws. An analysis of the regulations governing air pollution in a few growing economies, shows a patchy track record of improvements in air quality and reductions in hazardous emissions. Even though some nations have achieved progress by implementing comprehensive legal frameworks, there are still difficulties in monitoring and implementing these rules, especially in regions with robust economic activity or inadequate governance. Institutional obstacles, such as corruption and a lack of funding for regulatory bodies, frequently hinder effective policy implementation. Furthermore, one of the most important measures of these policies' effectiveness is how they affect public health. In rising economies, where high pollution levels worsen pre-existing health inequities, air pollution has a significant negative influence on health, especially respiratory and cardiovascular disorders. We must carefully examine the legislative provisions of air pollution legislation, as well as the observable health advantages they offer, to assess their effectiveness. A comparative study of air pollution control laws and their results, which provides insightful information about the advantages and disadvantages of existing legal frameworks, provides recommendations for more efficient and fair air quality governance in emerging economies.

Keywords: Air Pollution Control, Emerging Economies, Environmental Regulation, Public Health Outcomes, Institutional Challenges.

YAĞ-SU AYIRMADA KULLANILMAK ÜZERE PLA/PS/ZnO ve PLA/PS/SiO_2 NANOKOMPOZİT SENTEZİ

PLA/PS/ZnO AND PLA/PS/SiO_2 NANOCOMPOSITE SYNTHESIS FOR USE IN OIL-WATER SEPARATION

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ÖZET

Hızla büyüyen sanayileşme ve nüfus artışı nedeniyle çevre olumsuz etkilenmektedir. Fosil yakıtların ve taşıt kullanımının artması, petrol ve türevi yağların atık miktarını arttırmıştır. Bu yağlar ayrıca uluslararası ticaretin gelişmesiyle birlikte, petrol sızıntı kazaları olarak da karşımıza çıkmaktadır. Geçtiğimiz yüzyılda, yağlı atık su arıtma teknolojileri, örneğin hava flotasyon, yakma, yerçekimi ile ayırma, membranlarla ayırma; kirlilik, düşük verimlilik, zaman alıcı, karmaşık ayırma teknikleri ve yüksek maliyet gibi büyük sorunlarla karşılaşmıştır. Gelişen teknoloji ile birlikte bu sorunları azaltmak ve daha verimli hale getirmek için kompozit malzemeler bu alanda alternatif olarak kullanılan hammaddelerden birisi haline gelmiştir. Son yıllarda, yağ-su karışımını ayırmak için hem hidrofobik hem de oleofilik özelliği aynı anda gösteren polimerik nanokompozit malzemelere talep artmıştır.

Bu çalışmada, termal ve kimyasal kararlılık özellikleriyle dikkat çeken polistiren (PS), petrol türevli polimerik malzeme olarak kullanılmıştır. Çinko oksit (ZnO) ve silika (SiO_2) nanopartikülleri, inorganik dolgu maddesi olarak tercih edilmiştir. Malzemeye biyobozunur özellik kazandırmak ve kullanılan petrol türevli polimer miktarını azaltmak amacıyla polilaktik asit (PLA) eklenmiştir. PS sentezi emülsiyon polimerizasyonu yöntemiyle gerçekleştirilmiştir. Daha sonra çözelti harmanlama yöntemi kullanılarak farklı oranlarda PLA: PS (kütlece 30:70, 50:50 ve 70:30) ve farklı yüzdelerde ZnO veya SiO_2 (kütlece %3, %5 ve %10) içeren PLA/PS/ZnO ve PLA/PS/SiO_2 nanokompozitleri sentezlenmiştir. Nanokompozitlerin yağ-su ayırmadaki etkinliğini ve tekrar kullanılabilirliğini incelemek için pamuklu kumaşlar damlatma yöntemiyle, poliüretan (PU) süngerler ise daldırma yöntemiyle kaplanmıştır. Deneylerde çeşitli yağ-su (ayçiçek yağı/benzin-saf su/deniz suyu) karışımları kullanılarak analizler gerçekleştirilmiştir. Malzemelerin karakterizasyonu sırasında Taramalı Elektron Mikroskobu (SEM) analizi, Fourier Dönüşümlü Kızılötesi (FTIR) analizi ve su temas açısı ölçümleri gerçekleştirilmiştir. Deney sonuçları incelendiğinde, PU sünger ve kumaş kaplamada en iyi yağ-su ayırma performansını kütlece 50:50 PLA:PS ve %5 ZnO içeren nanokompozit göstermiştir.

Teşekkür: Bu çalışma TÜBİTAK 2209/A tarafından desteklenmiştir. SEM analizleri ve temas açısı ölçümleri ODTÜ Merkez Laboratuvarında gerçekleştirilmiştir.

Anahtar Kelimeler: Yağ-Su Ayırma, Polistiren, PLA, SiO_2, ZnO

ABSTRACT

Rapid industrialization and population growth have negatively impacted the environment. Increased use of fossil fuels and vehicles has led to a rise in the amount of petroleum-based oil waste. These oils have also become a global concern due to oil spill accidents resulting from the development of international trade. Over the past century, oil-contaminated wastewater treatment technologies, such as air flotation, incineration, gravity separation, and membrane separation, have faced significant challenges, including pollution, low efficiency, time consumption, complex separation techniques, and high costs. With technological advancements, composite materials have emerged as alternative raw materials to address these issues and improve efficiency. In recent years, the demand for polymeric nanocomposite materials that simultaneously exhibit both hydrophobic and oleophilic properties for separating the oil-water mixture has increased.

This study used polystyrene (PS), known for its thermal and chemical stability, as a petroleum-derived polymeric material. Zinc oxide (ZnO) and silica (SiO_2) nanoparticles were selected as inorganic fillers. Polylactic acid (PLA) was incorporated to provide biodegradability and reduce the amount of petroleum-based polymer used. PS was synthesized using emulsion polymerization, and PLA/PS/ZnO and PLA/PS/SiO_2 nanocomposites were prepared via solution blending at various PLA:PS ratios (by weight: 30:70, 50:50, and 70:30) and different ZnO or SiO_2 contents (by weight: 3%, 5%, and 10%). Cotton fabrics were coated by the dripping method, and polyurethane (PU) sponges were coated by the immersion method to examine the effectiveness and reusability of nanocomposites in oil-water separation. Analyses were conducted on various oil-water mixtures (sunflower oil/petrol–pure water/seawater). Material characterizations included Scanning Electron Microscopy (SEM), Fourier Transform Infrared Spectroscopy (FTIR), and water contact angle measurements. The experimental results showed that the nanocomposite containing 50:50 PLA:PS by weight and 5% ZnO exhibited the best oil-water separation performance in both PU sponge and fabric coatings.

Acknowledgment: This study was supported by TÜBİTAK 2209/A. SEM analyses and contact angle measurements were performed at the METU Central Laboratory.

Keywords: Oil-Water Separation, Polystyrene, PLA, SiO_2, ZnO

DENİM EFEKTLENDİRME İŞLEMLERİNDE PONZA TAŞI YERİNE STRAFOR KULLANIMI İLE ASİT YIKAMA EFEKTLERİNİN ELDESİ VE OPTİMUM REÇETE ŞARTLARININ BELİRLENMESİ

Serkan YILMAZ
Tayeks Tekstil Ar-Ge Merkezi, Ulaş OSB Mahallesi 117. Sokak No.8 Ergene 2 OSB/Ergene / Tekirdağ
Kağan IRMAK
Tayeks Tekstil Ar-Ge Merkezi, Ulaş OSB Mahallesi 117. Sokak No.8 Ergene 2 OSB/Ergene / Tekirdağ
Merve GİDEROĞLU
Tayeks Tekstil Ar-Ge Merkezi, Ulaş OSB Mahallesi 117. Sokak No.8 Ergene 2 OSB/Ergene / Tekirdağ

ÖZET

Denim kumaşlara ve giysilere istenen görünümün kazandırılması için uygulanan terbiye işlemlerine denim yıkama adı verilmektedir. Bu yıkama işlemleri; taş yıkama, enzim yıkama, asidik selülazlar, nötral selülazlar, ağartma, sodyum hipoklorit (hypo) ağartması, potasyum permanganat ağartması, persulfat ağartması, enzimatik (lakkaz enzimi) ağartma, silikon yıkama, rinse yıkama, moon wash, buz yıkama, kar yıkama, power yıkama, süper taş yıkama, kum (perlit) yıkama, ozon yıkama, organik yıkama, file yıkama, random yıkama, reçine yıkama, krinkıl yıkama ve tint olarak sıralanbilmektedir. Asit yıkama ise denim kumaşa efektli görünüm vermek ve istenen kontrastı sağlamak için uygulanan bir denim yıkama prosesidir. Konvansiyonel yöntemde, ponza taşları permanganat çözeltisi ile emdirildikten sonra, işlem görecek ürünler bu taşlar ile susuz ortamda döner tambur içerisinde işlem görmektedir. Ancak, ponza taşı kullanımı, işlem sırasında oluşturduğu toz partikülleri nedeniyle solunum sağlığı açısından ciddi riskler taşımaktadır. Bunun yanı sıra, makinelerde aşındırıcı etki yaratması ve işlem sonrası taşların ayrıştırılmasının güçlüğü gibi dezavantajlar, ponza taşı yerine alternatif malzemelerin kullanımını gündeme getirmiştir.

Bu çalışmada, ponza taşı yerine strafor kullanımının denim kumaşlar üzerindeki asidik yıkama etkilerine olan katkıları ve bu süreçte optimum yıkama koşullarının belirlenmesi amaçlanmıştır. Strafor, düşük yoğunluklu ve daha az aşındırıcı bir malzeme olması nedeniyle, ponza taşına kıyasla denim kumaşlarda daha az fiziksel hasara neden olmaktadır. Ayrıca, strafor kullanılarak gerçekleştirilen asidik yıkama (kar yıkama) prosesinin, kumaşın dayanıklılığı ve estetik görünümü üzerindeki etkilerinin optimize edilmesi mümkün hale gelmiştir.

Bu çalışmada, ponza taşının dezavantajlarını ortadan kaldırmak amacıyla alternatif bir malzeme olarak straforun kullanımı incelenmiş ve maksimum verimliliğin sağlanabilmesi için optimum proses koşulları belirlenmiştir. Strafor malzemesi, potasyum permanganat çözeltisi ile emdirildikten sonra denim kumaşlar üzerinde asidik yıkama işlemi uygulanmıştır. Çalışmada, ponza taşının yüksek ağırlığı, makine aşınmasına neden olma riski, işlem sırasında oluşan toz partikülleri ve sınırlı tekrar kullanılabilirlik gibi dezavantajların strafor kullanımı ile nasıl giderilebileceği araştırılmıştır.

Anahtar Kelimeler: Denim Yıkama, Kar Yıkama, Strafor, Ponza Taşı, Asidik Yıkama, Optimum Reçete.

ABSTARCT

The process of treating denim fabrics and garments to achieve the desired appearance is called denim washing. These washing processes include stone washing, enzyme washing, acidic cellulases, neutral cellulases, bleaching, sodium hypochlorite (hypo) bleaching, potassium permanganate bleaching, persulfate bleaching, enzymatic (laccase enzyme) bleaching, silicone washing, rinse washing, moon wash, ice washing, snow washing, power washing, super stone washing, sand (perlite) washing, ozone washing, organic washing, net washing, random washing, resin washing, crinkle washing, and tinting. Acid washing, specifically, is a denim washing process applied to give the denim fabric an effect and achieve the desired contrast. In the conventional method, pumice stones are impregnated with a permanganate solution, and the treated products are processed in a dry rotating drum with these stones. However, the use of pumice stones poses significant risks to respiratory health due to the dust particles generated during the process. Additionally, disadvantages such as the abrasive impact on machinery and the difficulty in separating the stones after the process have prompted the search for alternative materials.

This study aims to evaluate the effects of using styrofoam as an alternative to pumice stones in acid washing processes on denim fabrics and to determine the optimal washing conditions during this process. Styrofoam, being a low-density and less abrasive material, causes less physical damage to denim fabrics compared to pumice stones. Moreover, the use of styrofoam in acid washing (commonly known as snow washing) has enabled the optimization of the process's impact on fabric durability and aesthetic appearance.

In this study, styrofoam was investigated as an alternative material to eliminate the disadvantages of pumice stones, and optimal process conditions were established to achieve maximum efficiency. Styrofoam material, impregnated with a potassium permanganate solution, was used to apply acid washing to denim fabrics. The study explored how the drawbacks of pumice stones—such as their high weight, risk of machine wear, dust particle formation during the process, and limited reusability—could be mitigated by using styrofoam.

Keywords: Denim Washing, Snow Washing, Styrofoam, Pumice Stone, Acid Washing, Optimal Recipe.

TÜRK EDEBÎ ESERLERİNDE "NAMUS" KAVRAMININ BİÇİMSEL EVRİMİ

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ÖZET
Toplumu oluşturan en temel kurum olan ailenin sağlıklı bir şekilde varlığını sürdürebilmesi için, aile üyelerinin gerek kendi içlerindeki gerekse toplumla olan ilişkileri belirli kurallar çerçevesinde sınırlandırılmış, bir anlamda hedonist (hazcılık) düzeydeki bireysel özgürlükler kısıtlandırılmıştır. Örgütsel davranış biçimlerinden farklı olarak bireyler, birbirlerine karşı hak gasplarına girişmeleri gibi durumlarda hem toplumun tepkisiyle karşılaşmakta hem de oluşturulan hukuk kurallarının gerektirdiği müeyyidelerle cezalandırılmaktadır. Ahlakî bütünlüğün temellendirilmesi demek olan dinler de ailenin korunması ve sürekliliğinin sağlanması için temellendirdiği kurallar ile bu durum adeta pekiştirilmiş ve berkitilmiştir. Bu bağlamda her bir din, can ve mal güvenliği, aklın ve neslin korunması ile bireyin namus ve diğer kişilik haklarının gözetilmesi yoluyla insan ve toplum varlığının devam ettirilmesi amacına ilişkin belirli düzenlemeler getirmiştir. Toplumsal yaşam için korunması zorunlu olan bu düzen ve düzenlemeler, dinlerdeki hukuk sistemlerinin altyapısını teşkil etmiş ve temel hükümlerini oluşturmuştur.
İçinde **"Dürüstlük ve doğruluk"** sözcükleriyle bütünleşik bir anlam taşıyan **"namus kavramı"** bir toplum içinde ahlak kurallarına ve toplumsal değerlere bağlılık ya da kısaca "**iffet"** olarak anlamlandırılmaktadır. Namus sözcüğü dillendirildiğinde ise ilk çağrıştırdığı olgu kadının cinsel saflığıdır. Kadın, töre tarafından belirlenmiş cinsel sakınma kurallarına aykırı davranışlarda bulunduğunda toplum içerisinde namusu lekelenmiş olarak görülmektedir. Bu durumun bir yansıması olarak aşırı gelenekselci toplum kesimlerine bakıldığında ise, o toplum tarafından kabul gören töre gereği bu durum sadece namussuzluk olarak algılanmamakta, aynı zamanda toplumsal iticiliğin bir emaresi olarak bu kurala aykırı hareket eden kadın ölümle cezalandırılmaktadır. Zina suçu olarak anlamlandırılan namus cinayetlerinin çıkış noktası da bu şekilde ortaya çıkmaktadır.
Hem bireyi hem de toplumu ilgilendiren ayrıca bir hak gaspı olarak da görülen zina, Tevrat'ta, Talmud'da ve İslam hukukunda günahlar çerçevesinde suç olarak görüldüğü gibi, zina suçunu işleyen fâillerinin ölümle cezalandırılması demek olan **"recm"** diğer bir deyişle ölünceye kadar taşlanarak cezalandırılacağı betimlendirilmiştir.
Bu bildiri kapsamında, neredeyse hiçbir toplumda hoş karşılanmayan ve çeşitli şekillerde yaptırımlar uygulanan namus kavramının, Türk edebî eserlerinde biçimsel yeri evrimsel bir çizgide incelenecek, gelişim süreçlerine ilişkin çıkarımlarda bulunulacaktır.
Anahtar Kelimeler: İffet, Namus, Recm, Zina

THE FORMAL EVOLUTION OF THE CONCEPT OF "HONOR" IN TURKISH LITERARY WORKS

ABSTRACT
For the family, the most fundamental institution that constitutes society, to continue its existence in a healthy way, the relationships of family members both within themselves and with society have been limited within the framework of certain rules, and in a sense,

individual freedoms at a hedonistic level have been restricted. Unlike organizational behavior patterns, individuals are both faced with the reaction of society and punished with the sanctions required by the established legal rules in cases such as when they engage in rights violations against each other. Religions, which mean the foundation of moral integrity, have also reinforced and strengthened this situation with the rules they have established for the protection and continuity of the family. In this context, each religion has brought certain regulations regarding the purpose of maintaining human and social existence by ensuring the security of life and property, the protection of the mind and generation, and the protection of the honor and other personal rights of the individual. These order and regulations, which must be protected for social life, have constituted the infrastructure of the legal systems in religions and have formed their basic provisions.

The concept of **"honor"**, which has an integrated meaning with the words "honesty and truth", is interpreted as commitment to moral rules and social values in a society, or simply **"chastity"**. When the word honor is uttered, the first thing it evokes is the sexual purity of women. When a woman behaves against the rules of sexual abstinence determined by custom, her honor is seen as tarnished in society. As a reflection of this situation, when we look at extremely traditionalist segments of society, this situation is not only perceived as dishonorable due to the customs accepted by that society, but also women who act against this rule are punished with death as a sign of social repulsion. The origin of honor killings, which are interpreted as the crime of adultery, also emerges in this way.

Adultery, which concerns both the individual and society and is also seen as a usurpation of rights, is seen as a crime within the framework of sins in the Torah, Talmud and Islamic law, and it is described that the perpetrators of the crime of adultery will be punished with death by **"stoning (Recm)"**, in other words by stoning until death.

Within the scope of this paper, the formal place of the concept of honor, which is almost never welcomed in any society and is subject to various sanctions, in Turkish literary works will be examined in an evolutionary line, and inferences will be made regarding its developmental processes.

Keywords: Chastity, Honor, Stoning (Recm), Adultery

THERAPEUTIC POTENTIAL OF SAREEHN (*ALBIZIA LEBBECK*) SEEDS EXTRACT AGAINST TOXIC EFFECTS OF GRAPHENE NANOSHEETS IN MORI (*CIRRHINUS MRIGALA*)

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Abstract

This research investigated the therapeutic potential of Sareehn (*Albizia lebbeck*) seed extract in alleviating graphene nanosheets (GNS) toxicity in *Cirrhinus mrigala* and addressed concerns about GNS effects on aquatic organisms. For experimental purposes, fish were collected and kept in the lab with all standard aquatic parameters maintained. During Phase I of the experiment, mortality rates were observed after oral GNS doses ranging from 0, 250, 500, 750, 1000, 1250, and 1500 mg/L, monitored at 96-hour intervals, resulting in an LC50 value of 121.37 mg/L. Three fractions of LC50 were made, including Fraction 1 (121.37 mg/L), Fraction 2 (60.58 mg/L), and Fraction 3 (40.45 mg/L). The medium fraction was used in Phase II of the experiment. The experimental groups included the Control (A) group with no exposure to GNSs and plant extract, Test Group B exposed to 60.58 mg/L of GNSs with no extract, Test Group C with 60.58mg/L of GNSs + 25 mg/L extract, Test Group D with 60.58mg/L of GNSs + 50 mg/kg extract, and Test Group E with 60.58 mg/L of GNSs + 75 mg/kg extract, with each group observed for 96 hours. Fish organ histology was assessed to show GNS impact: the liver histopathological changes included Pyknotic nuclei or karyomegaly, Atrophy, Acute Cellular swelling, melanomacrophage centers (MMC), hepatic vacuolation, sinusoid dilation, Hydropic degeneration, Necrosis, Perivascular degeneration were observed. However, Intestinal histology shows changes such as intestinal damage (Id), Collapsed Epithelial layer (CL), intestinal interior architecture damage (Ad), atrophy (A), bigger intercellular gaps, and Degenerated Goblet cells (DG). D: shows bigger intercellular space (IS) and kidney histology shows tubular necrosis (Tn), Severe Congestion (SC), tubular dilatation, Bowman capsule dilution (DBS), Destroyed Intestinal Integrity, Glomerulopathy (G), Hemocytic Infiltration (HI), hematopoietic tissue degradation, Vasodilatio (WL), Constricted NT lumen (CL). The therapeutic effect of Albizia lebbeck was also noted in mitigating GNS toxicity. High-performance liquid Chromatography (HPLC) analysis identified several bioactive components in Albizia lebbeck, including Ferulic acid, Chlorogenic acid, Gallic acid, P-coumaric acid, Quercetin, Caffeic acid, Sinapic acid, Kaempferol, oxalic acid, malic acid, Citric acid, Fumaric acid, Succinic acid, with Methylmalonic acid being the most abundant. The findings suggest that *Albizia lebbeck* seed extract offers protection against GNS toxicity in Cirrhinus mrigala, providing a potential solution for mitigating GNS-related environmental concerns.

Key words: *Albizia lebbeck* seeds, Graphene nanosheets toxicity, *Cirrhinus mrigala*, Therapeutic potential

DETERMINATION OF HEAVY METAL CONTAMINATION AND POLLUTION INDICES OF ATMOSPHERIC DUST IN TC "KOSOVA A & B", OBILIÇ – KOSOVO

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Abstract
Introduction: In this researcher paper, was studied the content of heavy metals in atmospheric dust of power plants, TC "Kosova A & B" in area of Obiliç city. The pollution levels and environmental risks of HMs were assessed using the geoaccumulation index, contamination factor, pollution load index and potential ecological risk index. The results revealed severe contamination of atmospheric dust from TC "Kosova A & B", with particularly hazardous HMs such as As, Cd and Pb and the proportion of As, Cd and Pb is higher in the power plants TC "Kosova A & B", compared to the other analyzed elements, in both power plants such as Fe, Cu, Ni, Co, Mn, Zn, and Cr, in this case study.
Methods: Dust samples were taken and analyzed to determine the content of heavy metals (HM): As, Pb, Cd, Fe, Cu, Ni, Co, Mn, Zn, and Cr using inductively coupled plasma optical emission spectrometry (ICP-OES). The values obtained for heavy metals were compared with the WHO air quality guidelines and the US-EPA regulatory guideline.
Results: The concentrations of As, Cd, Pb, Mn, Co and Zn in the dust of TC “Kosova A” and As, Cd, Pb, Co, Mn and Zn in the dust of TC "Kosova B", showed high variability (CV> 35%), which indicates an intense influence of anthropogenic activity. The results of the pollution factor analysis show that As, Pb, Cd, Co and Mn in TC "Kosova A" (atmospheric dust samples) and As, Cd, Pb, Co, Mn and Zn, in TC "Kosova B", resulted as high values (very high pollution class-CF>3).
Discussion: According to the results of the geoaccumulation index TC "Kosova A", is heavily polluted with the following elements: As, Cd, Pb (3< Igeo ≤4). Based on the ecological risk index method, As, Cd and Pb, were found to be priority pollutants in the study area of power plants, TC “Kosova A & B”, in Obiliç city, in the year 2023.
Take-home message: Air pollution is directly related to cancerous diseases, due to the content of polluted air, with many different organic and inorganic pollutants (especially heavy metals).
Keywords: Atmospheric dust, TC “Kosova A & B”, environmental risks of HMs,

ZOOPLANKTON COMPOSITION OF THE GALTAS IN TASSILI (TEMPORARY PONDS), TAMANRASSET, SOUTHERN ALGERIA

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The zooplankton composition of the Galtas in Tassili, temporary ponds located in the Saharan region of Tamanrasset, southern Algeria, was studied over two periods: the first in autumn 2016 and the second in winter 2017. The 31 surveyed gueltas exhibited distinctive physicochemical, morphodynamic, and biocenotic characteristics. Certain physicochemical parameters, including surface water temperature, pH, dissolved oxygen, salinity, and conductivity, were also evaluated.

A total of 42 zooplankton species were identified, comprising three main groups: 29 Rotifera species (73.31%), 8 Cladocera species (19.05%), and 3 Copepoda species (7.14%). The distribution study of the zooplankton fauna revealed that copepods were significantly more abundant in terms of numbers. Among them, the calanoid copepod species *Neolovenula alluaudi* was the most dominant, found in almost all surveyed sites.

Diversity indices (Shannon and Equitability) indicated an irregular distribution of diversity across stations, with the lowest diversity recorded at Torset (T25). This could be attributed to the presence of a highly specialized community dominated by a single species, *Neolovenula alluaudi*, which developed at the expense of other disappearing species.

Keywords: zooplankton, Sahara, Tassili, guelta.

THE STUDY ON BIOSORBENTS FOR THE REMOVAL OF CHLORIDES AND HARDNESS FROM CONTAMINATED WATER

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Abstract

The presence of pollutants in aqueous solution particularly from hazardous heavy metals and metalloids is an important environmental and social problem. The chlorides are one of the serious groundwater contaminants in rural areas. The chlorides are regulated in drinking water quality primarily because excess amounts can cause disease. Chloride in both its gaseous and liquid form can be irritating to the eyes, respiratory tract and skin due to its alkaline nature. Biosorption is one of the biological treatments that has emerged as a new technology for the removal and recovery of metal ions from aqueous solutions which is more environmentally friendly. In this study egg shells and hibiscus biosorbents were used with the intention to removals chlorides ions from synthetic (distill) water. The optimum adsorption capacities of was investigated under pH 6.5 and biosorbents dosage 4.3g at biosorbents concentration, at 90 rpm agitation speed with maximum removal achieved at 1/2 hours. Chloride analysis shows that presence of the heavy metal absorption by Solids and flowers. Every biosorbents had different physical, chemical and biological properties for heavy metals removal by biosorption from the water.

Keywords: Chlorides, Biosorption's, Kinetic equilibrium, Isotherm data and Regeneration.

EXPERIMENTAL STUDY ON PARTIAL REPLACEMENT OF CEMENT WITH FLY ASHAND FINE AGGREGATE WITH ROBO SAND

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Abstract
Generally we use materials which are required for conventional concrete and addition to those we replace the low cost as well as light weight materials such as Fly-Ash. In this project we replace the cement to the fly ash and fine aggregate to the robo sand by variable percentages. Fly ash is the byproduct of the combustion of pulverized coal in electric power generation plants. Fly ash particles are minute solid spheres. Fly ash is collected from the exhaust gases by electrostatic precipitators or bag filters Color generally ranges from dark grey to yellowish tan for fly ash used for concrete. Chemical makeup of fly ash is primarily silicate glass containing silica, alumina, iron, calcium. The perfect substitute for river sand is robo sand. River sand is one of the basic ingredients in manufacture of concrete. River sand has become expensive and scarce. The crusher dust is known as Robosand can be used as alternative material to the river sand. Robo sand possesses similar properties as that of river sand, hence accepted as a building material. All replacements were done to the M30 grade of concrete. The cement has been replaced by fly ash accordingly in the percentage, and fine aggregate has been replaced by robo sand in percentage. Concrete mixtures were produced, tested and compared in terms of compressive strength, tensile strength, flexural strength with conventional concrete. At certain amount of percentage replacement, strength will be nearly equal to the conventional concrete. Due to the scarcity of fine aggregate and high cost of cement partial replacement of material has been take place. In this study compressive strength, tensile strength and flexural strength are evaluated. In this project we replace the Fly-Ash to the cement for obtaining the optimum value. Optimum value is taken as the 25% of fly ash. Now keeping the fly ash percentage constant and partial replacement of fine aggregate by robo sand with increasing percentage has been take place. The test on concrete cubes is compressive test, on cylinders is tensile test and on beams is flexure test. The curing of cubes, cylinders and beams is 7days, 28 days and 90 days.
***Key words**: Fly ash, Robo sand, and Concrete, Fine aggregate and Coarse aggregate*

EXPLORING ANTIOXIDANT CAPACITY AND PHYTOCHEMICAL COMPOSITION IN THREE MEDICINAL PLANTS FOR HEALTH APPLICATIONS

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ABSTRACT
The rise in oxidative stress-related diseases has driven interest in natural antioxidants as potential therapeutic agents. Medicinal plants, rich in phenolic compounds, are known to possess antioxidant properties, yet comparative analyses of such plants are needed to better understand their bioactive potential. This study evaluates the antioxidant capacity of methanol extracts from the leaves of three medicinal plants: *Boerhaavia diffusa L.*, *Albizia lebbeck*, and *Dendrophthoe pentandra*. Samples were collected, air-dried, and subjected to phytochemical screening to detect bioactive compounds, including flavonoids, tannins, alkaloids, phenols, and saponins. The antioxidant activity was assessed using the DPPH free radical scavenging assay. Quantitative analyses indicated high phenolic and saponin content in each plant, with *Dendrophthoe pentandra* showing the highest phenolic concentration at 1239.72 mg/100g and the greatest antioxidant activity (85.82% inhibition at 500 µg/mL). *Albizia lebbeck* demonstrated a strong fit and approached 80% antioxidant capacity at high concentrations. *Boerhaavia diffusa* also showed an increase in antioxidant activity but reached only about 60% capacity at 500 µg/mL. Overall, all three plants exhibit significant dose-dependent antioxidant effects, with *Dendrophthoe pentandra* and *Albizia lebbeck* showing especially strong activity at higher concentration; suggesting that the bioactive compounds present in the extracts could play a role in mitigating oxidative stress related diseases. The findings support the potential of these plants as sources of natural antioxidants, with implications for developing health-promoting botanical extracts.
Keywords: antioxidant, bioactive potential, phytochemical screening, phenolics, medicinal plants, DPPH assay.

SOME COMMENTS ON THE ESTIMATION OF UNDRAINED STRENGTH OF STIFF COHESIVE SOILS

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ABSTRACT:
The undrained shear strength of stiff to hard saturated fine soils can be determined in the laboratory using triaxial test or unconfined (uniaxial) compression test, although the triaxial testing could better represent field condition but the uniaxial testing is practically more simple to adopt therefore it is very favorable for routine work However, both tests supposed to give similar results if all standard procedures were followed. Sampling methods and tools used to extract samples is one of the main source of disturbance and hence responsible for the discrepancies in the resulting strength values. Field test like standard penetration test SPT is commonly used for obtaining design parameters in case of cohesionless soils, it is considered not suitable for cohesive soils and the samples that can be recovered by the SPT split spoon samplers is categorized as semi-disturbed and therefore not recommended for strength evaluation. This investigation was carried out on a deposit of stiff cohesive soils collected from various depths ranging from 4m up to 50m obtained from several locations using different sampling methods. The undrained strength was obtained using both triaxial and unconfined compression laboratory testing. It was found that cohesive soils with relatively high strength is not very sensitive to the method of sampling and correlation with the field standard penetration test is possible.
KEY WORDS: Stiff soils, Undrained strength, Standard penetration test.

MITIGATING LATERAL FORCES: AN ANALYTICAL STUDY OF COMPOSITE OUTRIGGER SYSTEMS IN HIGH-RISE CONSTRUCTION

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ABSTRACT:

High-rise buildings stand as modern marvels, yet their stability is continuously challenged by relentless lateral forces from wind and seismic activity. This research provides a detailed investigation into the design and performance of outrigger structural systems in high-rise buildings, with a focus on quantitative analysis and performance metrics. High-rise structures, necessitated by rapid urbanization and limited land availability, require innovative systems to counteract significant lateral forces. Outriggers, acting as horizontal beams or trusses connecting the core to perimeter columns, serve as pivotal elements in enhancing lateral stiffness, reducing drift, and optimizing material usage.

The study's analytical findings demonstrate that incorporating composite outrigger systems—combining steel and concrete—can reduce lateral displacement by up to 60% and story drift by 66% compared to conventional designs. These improvements are quantified through software modeling and structural simulations under varying load conditions. Optimal outrigger placement, particularly at one-third and two-thirds of the building height, yields the highest structural efficiency, reducing base shear and inter-story drift significantly. The research also highlights that outrigger systems can reduce structural weight by 12%, translating into material cost savings and lower environmental impact.

Further, dynamic analysis shows a 25% improvement in vibration control when advanced damping systems are integrated into outrigger structures, enhancing seismic performance. The study validates these findings against Indian building codes, confirming that well-designed outrigger systems not only meet but exceed safety and performance standards.

In conclusion, this research underscores the critical role of precise outrigger design and material selection in high-rise construction. By leveraging advanced composites and strategic placement, engineers can achieve superior structural performance, cost efficiency, and sustainability, establishing outrigger systems as indispensable components in modern skyscraper engineering. . The study stands as testament to engineering innovation, shaping safer skylines and resilient cities of tomorrow.

KEYWORDS: Outrigger structural systems, High-rise buildings, Story drift, Composite, Base shear, Dynamic analysis, Vibration control, Seismic performance, Sustainability.

AİZANOİ ANTİK KENTİNİN HADRİAN DÖNEMİ İON SÜTUN BAŞLIKLARI
HADRIAN PERIOD IONIC COLUMN CAPITALS OF THE ANCIENT CITY OF AIZANOI

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Özet
Bu çalışma, Aizanoi Antik Kenti'nde bulunan ve Hadrian Dönemi'ne tarihlenen İon sütun başlıklarını ayrıntılı olarak ele almaktadır. Phrygia Epiktetos bölgesinin en önemli yerleşimlerinden biri olan Aizanoi, Roma İmparatorluk döneminin mimari ve sanatsal özelliklerini yansıtan çok sayıda yapıya ev sahipliği yapmaktadır. Kentin öne çıkan yapılarından biri, Roma dünyasında eşsiz bir örnek olan Zeus Tapınağı'dır. Zeus Tapınağı'nın İon düzenindeki sütun başlıkları, döneminin sanatsal ve estetik yaklaşımlarını yansıtan özgün detaylara sahiptir. Bu çalışma kapsamında, Zeus Tapınağı'nın sütun başlıkları haricinde bugüne kadar yapılan kazı çalışmaları esnasında gün yüzüne çıkarılan 14 İon sütun başlığı da incelenmiştir. Yapılan incelemeler sonucunda kentteki Hadrian Dönemi'ne ait sütun başlıklarının 5 grup altında değerlendirilmesi uygun görülmüştür. Bu grupların oluşturulmasında başlıkların ölçüsü, formu ve bezeme üslubu dikkate alınmıştır.
Tamamı mermerden yapılmış olan günümüze ulaşabilmiş başlıkların incelenmesi esnasında stilistik detaylarıyla birlikte işçilik kaliteleri de analiz edilmiştir.
Daha önceki araştırmalarda da değerlendirilmiş olan söz konusu sütun başlıkları farklı döneme tarihlendirilmiştir. Bu çalışmada, sütun başlıklarının stilistik unsurları daha detaylı incelenerek Hadrian Dönemi'ne özgü işçilik ve tasarım özellikleri göz önünde bulundurulmuş, böylece başlıkların yeniden ve daha doğru bir biçimde tarihlendirilmesi amaçlanmıştır. Araştırma sonuçları, Aizanoi'daki İon sütun başlıklarının stilistik detaylarının Hadrian Dönemi'ne özgü sanatsal yaklaşımlarla uyumlu olduğunu ortaya koymaktadır. Sütun başlıklarının form, bezeme ve işçilik özellikleri, dönemin İon düzenine ait özgün detayları göz önünde bulundurularak incelenmiş; başlıkların bezeme unsurları ve mermer işçiliği, Roma İmparatorluk dönemi içinde, özellikle Anadolu'daki İon düzeninin gelişimi açısından önemli bilgiler sunmaktadır. Bu kapsamda çalışma, kent genelindeki İon başlıklarının doğru bir tarihlendirme ile değerlendirilmesini sağlayarak Aizanoi Antik Kenti'nin sanatsal mirasına katkıda bulunmaktadır.
Anahtar Kelimeler: Aizanoi, Phrygia Epiktetos, İon Sütun Başlığı, Hadrian Dönemi, Roma Mimarisi

Summary
This study deals in detail with the Ionic column capitals found in the ancient city of Aizanoi and dated to the Hadrian Period. Aizanoi, one of the most important settlements of the Epictetus region of Phrygia, is home to many buildings reflecting the architectural and artistic characteristics of the Roman Imperial period. One of the prominent structures of the city is the Temple of Zeus, a unique example in the Roman world. The Ionic column capitals of the Temple of Zeus have unique details reflecting the artistic and aesthetic approaches of the period. Within the scope of this study, in addition to the capitals of the Temple of Zeus, 14 Ionic capitals

unearthed during the excavations to date were also examined. As a result of the examinations, it was deemed appropriate to evaluate the column capitals belonging to the Hadrian Period in the city under 5 groups. The size, form and decoration style of the capitals were taken into consideration in the formation of these groups.
During the examination of the surviving capitals, all of which are made of marble, the quality of workmanship was analyzed along with the stylistic details.
The capitals, which were also evaluated in previous studies, were dated to different periods. In this study, the stylistic elements of the capitals were analyzed in more detail and the workmanship and design features specific to the Hadrianic period were taken into consideration, thus aiming to date the capitals again and more accurately. The results of the study reveal that the stylistic details of the Ionic capitals at Aizanoi are consistent with the artistic approaches of the Hadrian Period. The form, ornamentation and workmanship of the capitals have been analyzed by taking into consideration the unique details of the Ionic order of the period; the ornamental elements and marble workmanship of the capitals provide important information about the development of the Ionic order in the Roman Imperial period, especially in Anatolia. In this context, the study contributes to the artistic heritage of the ancient city of Aizanoi by providing an accurate dating of the Ionic capitals throughout the city.
Keywords: Aizanoi, Phrygia Epiktetos, Ionic Column Capitals, Hadrian Period, Roman Architecture

EUROPEAN SMALL STATES

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Abstract
The discipline of international relations has traditionally focused on the key actors influencing global dynamics, particularly the great powers. From the mid-20th century onwards, superpowers have garnered the majority of scholarly attention due to their substantial impact on international affairs. However, with the conclusion of the Cold War, there has been a significant shift toward smaller states, which have often been overlooked. This increased focus can be attributed to the resilience and survival of these smaller states, many of which have historically been absorbed into expanding empires.
In the post-Cold War era, smaller states have found new opportunities to assert themselves internationally, engaging actively in critical areas such as conflict resolution and peacekeeping. They have demonstrated their capability to contribute meaningfully to global stability. Among these, the Nordic countries have distinguished themselves through their strong commitment to promoting human rights and democratic governance, earning a reputation as advocates for social justice in the international community.
This paper explores the historical development of the influence wielded by small states within Europe. By examining how they have navigated the complexities of international relations and established their own identities in a landscape traditionally dominated by larger powers, the paper seeks to illuminate the significant and often understated role that small states play in shaping today's world.
Keywords: Small States, Europe, Diplomacy, Neutrality, Foreign Policy, Strategy, 20th Century

AVRUPALI KÜÇÜK DEVLETLER

Özet
Uluslararası ilişkiler disiplini geleneksel olarak küresel dinamikleri etkileyen kilit aktörlere, özellikle de büyük güçlere odaklanmıştır. 20. yüzyılın ortalarından itibaren süper güçler, uluslararası ilişkiler üzerindeki önemli etkileri nedeniyle akademik ilginin çoğunu topladı. Ancak Soğuk Savaş'ın sona ermesiyle, genellikle göz ardı edilen daha küçük devletlere doğru önemli bir kayma oldu. Bu artan odak, çoğu tarihsel olarak genişleyen imparatorluklara dahil olan bu daha küçük devletlerin dayanıklılığına ve hayatta kalmasına bağlanabilir.
Soğuk Savaş sonrası dönemde, daha küçük devletler kendilerini uluslararası alanda iddia etmek için yeni fırsatlar buldular ve çatışma çözümü ve barışı koruma gibi kritik alanlarda aktif olarak yer aldılar. Küresel istikrara anlamlı bir şekilde katkıda bulunma yeteneklerini gösterdiler. Bunlar arasında, İskandinav ülkeleri insan haklarını ve demokratik yönetimi teşvik etme konusundaki güçlü bağlılıklarıyla kendilerini farklılaştırdılar ve uluslararası toplumda sosyal adalet savunucuları olarak ün kazandılar.
Bu araştırma, Avrupa'daki küçük devletlerin kullandığı etkinin tarihsel gelişimi ile ilgili. Uluslararası ilişkilerin karmaşıklıklarında nasıl yol aldıklarını ve geleneksel olarak daha büyük güçlerin egemen olduğu bir ortamda kendi kimliklerini nasıl oluşturduklarını inceleyerek, araştırma küçük devletlerin günümüz dünyasını şekillendirmede oynadıkları önemli ve genellikle hafife alınan rolü aydınlatmayı amaçlamaktadır.
Anahtar Sözcükler: Küçük Devletler, Avrupa, Diplomasi, Tarafsızlık, Dış Politika, Strateji, 20. Yüzyıl

LIBRARY AS A SCIENTIFIC AND INFORMATION CENTER OF EDUCATION

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ABSTRACT
Today, the library is an important scientific and information center of the university. An important achievement was the introduction of scientometric and bibliometric research methods. These tools contribute to increasing the impact of the university's scientific achievements at the international level. One of the main projects is the creation of a repository to popularize the scientific works of students and teachers. The repository provides free access to scientific materials and promotes integration into the global information space. Library users have access to leading international databases and receive consultations on their use. The library performs a key function in ensuring the educational process and scientific research of the university. Its activities include organizing informational, mass cultural, and educational events, such as information days, department days, book exhibitions, and thematic lectures. At the moment, the library's activities are focused on meeting the information needs of readers. Constant modernization and updating of services allow the library to remain relevant during distance learning. The main resource of the library is its highly qualified staff, who are dedicated to their work. The library staff provides comfortable conditions for readers, promptly responds to their requests, and constantly improves their professional skills by taking a large number of courses. The library is the spiritual and cultural center of the university. It combines rich traditions and modern technologies, ensuring the development of science, education, and culture.
Keywords: Library, Center of Education, Research Methods.

MULTICULTURALISM IN TRAINING FUTURE INTERNATIONAL RELATIONS SPECIALISTS AND TRANSLATORS

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At the current stage of the development of the systems of education, the importance of multiculturalism is recognized by many scholars, however, there are many problems that require practical solution. For example, even the definitions of multiculturalism differ significantly.

When training specialists in the field of international relations and regional studios, considerable attention should be paid to mastering skills of multicultural competence, which will contribute to the achievement of professional goals.

We support American scholars who have developed a number of principles that can promote multicultural competence and which are advisable to use in the process of teaching foreign languages, namely: the need to understand first of all your own culture and your vision of the world, as well as the reasons why people from other cultures think differently than you, the necessity to look at things from the perspective of people from other cultures in the process of communication and problem-solving

It should be noted that our students – future international relations specialists and translators – have problems in translation, which can be explained not only by lexical and grammatical difficulties in translation, but also by the lack of multicultural knowledge and skills.

Future international relations specialists and translators should also be aware of the cultural norms of representatives of different social groups, have non-verbal communication skills, and different ways of resolving conflicts. Foreign language teachers who train future international relations specialists and translators should help students develop an understanding of the peculiarities of their own national culture in the context of world cultures.

Teachers should be aware of and explain to students the ways of nonverbal communication in different cultural environments and different ways of resolving conflicts, to teach them the skills necessary for further study of other cultures, with particular emphasis on students' awareness of the value of their national identity.

KEY WORDS: multiculturalism, international relations, translators, national culture, world cultures.

STRATEGIC PUBLISHING: CHOOSING A JOURNAL TO INCREASE RESEARCH VISIBILITY

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ABSTRACT
Today, the issue of strategic publishing and the importance of choosing the right journal to increase the visibility of research is relevant. This is becoming a critical factor that determines the effectiveness of knowledge dissemination. To increase visibility, it is necessary to pay attention to the following: impact factor, journal rating, relevance of the journal to the research topic, and availability of the journal for scientists (Open Access). The demand for open-access journals is growing every day, the advantages of which are: 1) the opportunity to study the latest research results in various fields of science for free on an ongoing basis; 2) the openness of important information contributes to the acceleration of scientific progress, the rapid exchange of knowledge between scientists from all over the world; 3) the texts of published studies can be read, stored, and used for the development of science; 4) the opportunity for the author to familiarize the majority of scientists and researchers with his works, increase his authority and prestige; 5) the opportunity for the author to increase his citation index; 6) the ability to attract sponsors to finance new projects and conduct additional experiments; 7) the ability to find like-minded people to conduct research and write a scientific paper in co-authorship.
To increase the visibility of scientific work, not only the choice of journal is important, but also the correct preparation of the study. Keywords and SEO optimization play a role here. Using relevant keywords in the title, abstract, and text of the article helps improve visibility in search engines. Articles that are easy to find are more often cited and discussed. Alternative metrics (Altmetrics) that assess the article's impact based on mentions in social networks, news resources, and blogs are becoming increasingly important. A strategic approach to choosing a journal and effective dissemination of research is crucial for increasing scientific impact. Each stage requires careful planning and informed decisions, from choosing a journal to promoting the work.
Keywords: Libraries, Strategic Publishing, Research Visibility.

MORPHO-ANATOMICALMODIFICATIONIN*WITHANIASOMNIFERA(L.)* DUNALFROMPUNJAB, PAKISTAN: INSIGHTINTOADAPTATION

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Abstract

The Solanaceae family, commonly known as the deadly nightshade or potato family, encompasses wide range of important foodplants and medicinal species. Among these is *With aniasomnifera* (L.), also known as Ashwag and haor Winter cherry, an evergreen shrub native to India, the Middle East, and certain regions of Africa. This study focused on the collection of plant material from twelve different ecotypes in the Punjab region, including ShadanLund, Layyah, KotAdu, JamPur, Vodor, DGcanal, Kala, ChahJe and Wala, Faisalabad, DGKhan, Jang, and Multan, to investigate morphological and anatomical variations. The collected samples were preserved in a 70% alcohol solution, and free hand sectioning and double staining methods were employed. Microscopic examination using a digital ocular camera facilitated the analysis of various anatomical structures in the roots, stems, and leaves. Morphologicalandanatomicalfeatureswerecarefullyobservedanddocumented. Results indicated that the Jam Purecotype exhibited the maximum root epidermal thickness, while the Faisalabad ecotype is played the largest root radius. Stem characteristics varied significantly among the ecotypes, with the Vodorecotype exhibiting the highest cortical cell area, Jam Purecotyped is playing the greatest epidermis thickness, and the Shahdan Lundecotype showing the thickest sclerenchyma layer. The Vodor and Jang ecotypes had the highest abaxial stomatal area and number of trichomes. Statistical analysis, utilizing Analysis of Variance (ANOVA)at a 5% probability level, confirmed the significance of the observed results in terms of morphology and anatomy.

Keyword: *with aniasomnifera*, Morpho-Anatomical modification

SOSYAL HİZMET KURAMLARI BAĞLAMINDA YAŞLILIKTA SOSYALLEŞME KAVRAMINA BİR TANIM ÖNERİSİ
A SUGGESTED DEFINITION OF THE CONCEPT OF SOCIALIZATION IN OLD AGE IN THE CONTEXT OF SOCIAL WORK THEORIES

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Özet
Yaşlılık, bir bireyin yaşamının ileri bir dönemini ifade eden, genellikle 65 yaş ve sonrasını kapsayan biyolojik, psikolojik ve sosyal değişimlerin yaşandığı bir süreçtir. Ancak yaşlılık, bireyin yaşamındaki biyolojik, psikolojik, sosyal değişimlerin ve tinsel anlayışın etkisiyle farklı şekillerde deneyimlenen bir süreç olarak kabul edilmektedir. Yaşlılık teorileri, yaşlanma sürecini açıklamaya yönelik çeşitli yaklaşımlar sunar. Yaşamsal geri çekilme teorisi, yaşlıların sosyal rollerinden çekilmesini öngörürken, aktivite teorisi, yaşlıların aktif kalmasının önemine vurgu yapar. Süreklilik teorisi, bireylerin geçmiş deneyim ve sosyal bağlarını yaşlılıkta da sürdürmeye çalıştığını belirtir. Modernleşme teorisi ise, sanayileşme ile yaşlıların toplumdaki statülerinin olumsuz anlamda değişimine değinir.
Sosyalleşme, bireyin çevresindeki kültürün davranış kalıplarına uyum sağlaması sürecidir. Durkheim, sosyalleşmeyi yetişkinlerin, yetişmekte olan nesilleri toplumsal hayata alıştırma süreci olarak tanımlarken, Koştaş da bunu bireyin doğduğu sosyal sisteme uyum sağlama süreci olarak görür. Sosyalleşme kuramları, farklı perspektiflerden bu süreci açıklar; örneğin, Cooley "ayna benlik" kavramıyla, Mead ise "ötekinin rolünü üstlenme" ile açıklamıştır. Dijital çağda ve Covid-19 pandemisi sonrası sosyalleşme süreci hızla değişmiş, bireyler farklı kültürlerle etkileşim kurarak daha materyalist ve tekdüze bir kişilik tipine evrilmiştir. Bu dönemin sosyalleşmesi ise daha çok dijitalleşme ile eşleşmeye başlamıştır.
Sosyal hizmet kuramları çerçevesinde yaşlılık ve yaşlı bireylerin değerlendirilmesi, buna uygun hizmet ve müdahale planlarının yapılabilmesi için öncelikle kavramların netleştirilmesi gerekmektedir. Bu nedenle, bu çalışmada öncelikle literatür taraması yapılarak yaşlılık ve sosyalleşme kavramlarına dair çeşitli tanımlara ulaşılmış; sosyal hizmet kuramları incelenmiş ve bu kuramlar çerçevesinde yaşlılıkta sosyalleşme kavramına dair bir tanımın yapılmadığı görülmüştür. Bu çalışma, yaşlılık ve sosyalleşme kavramlarına dair tanım ve kuramları ele alarak, bunları sosyal hizmet perspektifinden yeniden değerlendirip sosyal hizmet literatürüne bir katkı yapmayı amaçlamaktadır. Biyopsikososyotinsel yaklaşım, yaşlı bireylerin fiziksel, zihinsel, kişisel, sosyal iyilik hallerini ve tinsel boyutlarını bütüncül bir şekilde değerlendirerek, onları toplumun kabul görmüş bir üyesi olarak sosyalleşme sürecine vurgu yapar. Ekosistem yaklaşımı ise bireyin çevresiyle olan etkileşimini ve bu etkileşimlerin zamanla nasıl dönüşüm ve uyum sağladığını vurgular. Her iki yaklaşım da, yaşlıların sosyalleşmesinin sağlıklı bir şekilde sürdürülmesi için geçmiş deneyimleri ve çevresel faktörleri dikkate alarak uygun müdahalelerin yapılmasının önemini belirtir. Bildiride tüm bu kavram ve ilişkiler daha kapsamlı olarak açıklanarak iki sosyal hizmet kuramı bağlamında yaşlılıkta sosyalleşme kavramının tanımı verilecektir.
Anahtar Kelimeler: Yaşlılıkta sosyalleşme, biyopsikososytinsel yaklaşım, ekosistem kuramı, yaşlılık, sosyalleşme

Abstract

Old age refers to an advanced stage in an individual's life, typically encompassing ages 65 and beyond, marked by biological, psychological, and social changes. However, old age is considered a process that is experienced differently depending on the influence of the individual's biological, psychological, social changes, and spiritual understanding. Theories of aging offer various approaches to explain the aging process. The theory of disengagement predicts that older adults will withdraw from their social roles, while the activity theory emphasizes the importance of remaining active in old age. The continuity theory states that individuals try to maintain their past experiences and social connections in old age. The modernization theory discusses how industrialization has negatively affected the status of older people in society.

Socialization is the process through which an individual adapts to the behavioral patterns of the surrounding culture. Durkheim defined socialization as the process by which adults acclimate the younger generations to societal life, while Koştaş viewed it as the process of adapting to the social system into which one is born. Socialization theories explain this process from different perspectives; for example, Cooley explained it through the concept of "looking-glass self," and Mead used the idea of "taking the role of the other." In the digital age and after the Covid-19 pandemic, the process of socialization has changed rapidly, with individuals interacting with different cultures and evolving into a more materialistic and homogeneous personality type. In this period, socialization is increasingly associated with digitalization.

In the context of social service theories, it is essential to clarify the concepts of old age and socialization to evaluate elderly individuals properly and design appropriate services and intervention plans. Therefore, this study begins with a literature review to explore various definitions of old age and socialization; social service theories are examined, and it is noted that no definition of socialization in old age has been made within these frameworks. This study aims to contribute to the social service literature by redefining the concepts and theories of old age and socialization from a social service perspective. The biopsychosocial approach emphasizes the holistic evaluation of elderly individuals' physical, mental, personal, social well-being, and spiritual dimensions, promoting their continued participation in the socialization process as accepted members of society. The ecosystem approach, on the other hand, highlights the individual's interaction with their environment and the transformation and adaptation of these interactions over time. Both approaches stress the importance of considering past experiences and environmental factors to ensure that interventions are made for the healthy continuation of socialization in old age. This paper will provide a comprehensive explanation of all these concepts and relationships and offer a definition of socialization in old age within the framework of two social service theories.

Keywords: Socialization in old age, biopsychosocial-spiritual approach, ecosystem theory, aging, socialization

SUSTAINABLE CHEMISTRY AND ENGINEERING IN PHARMA

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ABSTRACT:
Sustainable chemistry and engineering in the pharmaceutical industry focus on developing processes that minimize environmental impact, reduce resource consumption, and improve overall efficiency while maintaining drug efficacy and safety. As global demand for pharmaceuticals grows, the need for greener and more efficient methods of drug discovery, synthesis, and production has become increasingly urgent. Sustainable practices in pharmaceutical manufacturing encompass greener synthetic routes, the use of renewable feed stocks, energy-efficient processes, and waste reduction strategies. Green chemistry principles, such as the reduction of hazardous chemicals, atom economy, and solvent minimization, are being integrated into drug development pipelines. Moreover, advances in continuous manufacturing and process intensification are driving efficiencies in drug production, reducing waste, and lowering energy consumption. Enabling technologies, such as bio catalysis and flow chemistry, are providing alternatives to traditional chemical processes, further enhancing sustainability. The adoption of these methods is supported by digital technologies, such as machine learning and artificial intelligence, which help optimize reaction conditions, predict outcomes, and streamline regulatory compliance. Furthermore, the implementation of life cycle assessment (LCA) in drug development allows for the evaluation of environmental and social impacts, guiding decisions towards more sustainable practices. Ultimately, the integration of sustainable chemistry and engineering into pharmaceutical manufacturing not only supports regulatory and societal expectations but also contributes to reducing the environmental footprint of the pharmaceutical industry, ensuring that drug production meets both current and future healthcare needs without compromising the planet's well-being.
KEY WORDS: Green chemistry, Process intensification ,Pharmaceutical lifecycle assessment (LCA) ,Solvent replacement ,Catalysis (catalytic processes) ,Waste reduction ,Energy-efficient processes

POST-COVID IMPACT ON SEVERITY OF SYMPTOMS AND EFFICACY OF MINDFULNESS-BASED COGNITIVE BEHAVIOR THERAPY FOR OBSESSIVE COMPULSIVE DISORDER WITH DEPRESSION: HOSPITAL-BASED INTERVENTIONAL STUDY

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Abstract

Background: - The novel coronavirus disease (COVID-19) pandemic has caused a substantial public health burden and widespread adverse mental health effects on every population group that creates fear, apprehension, sadness, restlessness, life, health, and death instability. Obsessive-compulsive disorder (OCD) is a chronic distressing condition that is marked by impairment in daily functioning, including social, family, and occupational areas of life. Depression is the most common comorbidity among patients with OCD.

Aims and objectives: -The present study aimed to evaluate the impact of COVID-19 on the severity of symptoms and the efficacy of mindfulness-based cognitive behavior therapy on obsessive-compulsive disorders with depression.

Materials and Methods: An intervention-based hospital study design of 64 patients of OCD with depression was taken as per inclusion and exclusion criteria; samples were recruited through purposive sampling methods from OPD and IPD basis at J. N. Medical College and Hospital, AMU, Aligarh. Patients received 12 therapeutic follow-up sessions from February 2022 to December 2022. Descriptive data were collected using a Semi-structured socio-demographic and clinical data sheet designed for this study, and the Yale-Brown Obsessive-Compulsive Scale (YBOCS) and Hamilton Depression Rating Scale (HAM-D) were assessed at pre-and post-intervention.

Results: Significant findings were achieved by applying statistical analysis at pre- and post-assessment, reflecting good effect size after the Mindfulness-Based Cognitive Behavior Therapy intervention. Most of the patients reported that their OCD symptoms had worsened since the outbreak of COVID-19.

Conclusion: The findings suggest that Mindfulness-Based Cognitive behavioral therapeutic intervention is effective in the management of OCD with comorbid conditions of depressive symptoms. Adverse effects of COVID-19 were more strongly linked to contamination and responsibility for harm symptoms than to other symptom dimensions of OCD.

Keywords: COVID-19, OCD, depression, mindfulness-based cognitive behavior therapy, Poor Mental Health, impairment.

SUSTAINABILITY OF TOWNS OF THE VOJVODINA REGION

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Abstract:
History testifies to the existence of cities that have been inhabited for centuries, but also to cities that no longer exist. The subject of research are the cities of Vojvodina. The last population census indicates a decrease in the number of inhabitants in up to one city of Vojvodina. The task of the research was to determine which factors are causing the population to decrease. What is collapsing the sustainability of cities? Or without which cities in Vojvodina become unsustainable? Research results were obtained indirectly and directly. Indirectly means by studying scientific literature and other written and electronic sources. The direct results are the product of discussions with residents of the largest cities in Vojvodina, where the population is decreasing. The interlocutors in these in-depth interviews have a geographical education. The aim of the research was to show that cities are very vulnerable environments. The disappearance of just one of the vital factors (water, electricity) is enough for the city's population to start moving out rapidly. However, other factors have also been identified that make the population decide to leave one city and move to another. Research has shown that migration to rural areas is very rare. The significance of the research is that it suggests to local authorities what they should focus their attention on, invest their authority, direct the resources they own and decide on in order to prevent population decline that leads to the disappearance of settlements.
Key words: Vojvodina Region, towns, sustainability, Novi Sad

ONE HEALTH PERSPECTIVE: THE ROLE OF VETERINARIANS IN ZOONOTIC DISEASE PREVENTION

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ABSTRACT

The One Health approach recognizes the interconnectedness of human, animal, and environmental health, emphasizing the need for multidisciplinary collaboration to address global health challenges. Veterinarians, as frontline professionals in animal health, play a pivotal role in the prevention and control of zoonotic diseases that are transmissible between animals and humans. This abstract explores the contributions of veterinarians within the One Health framework, focusing on their involvement in surveillance, diagnosis, prevention, and outbreak management of zoonotic diseases. Veterinarians are uniquely positioned to identify emerging zoonotic threats at the animal-human interface. Their expertise in animal health surveillance enables the early detection of zoonotic pathogens, facilitating timely interventions. Additionally, veterinarians contribute to the development and implementation of vaccination programs, biosecurity measures, and public awareness campaigns aimed at minimizing disease transmission. Their role in ensuring food safety, through the monitoring of livestock health and slaughterhouse practices, further reduces the risk of zoonotic infections entering the human food chain. Collaboration with public health professionals, ecologists, and policymakers is essential for addressing complex zoonotic disease challenges such as rabies, avian influenza, and brucellosis. Veterinarians also play a critical role in the education of communities on proper animal husbandry practices and zoonotic disease prevention, especially in rural and underserved areas. Despite their significant contributions, challenges such as resource limitations, lack of interdisciplinary communication, and insufficient integration of veterinary expertise into public health initiatives persist. Addressing these challenges requires policy reforms, enhanced funding, and capacity building to strengthen veterinary involvement in One Health programs. Veterinarians are integral to zoonotic disease prevention and control. Their collaboration across disciplines is essential for safeguarding global health, underscoring the importance of a unified One Health approach to combat current and emerging zoonotic threats.

Keywords: One Health**;** Zoonotic Diseases**;** Veterinarians**;** Disease Prevention**;** Animal Human Interface**;** Public Health Collaboration

ASSESSING THE ROLE OF CONSUMER ORGANISATIONS & NON-GOVERNMENTAL ORGANISATIONS IN ENSURING CONSUMER PROTECTION IN NIGERIA

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Abstract
With Nigeria going through a spate of regulatory reforms which include privatization and deregulation, it would be harmful in the interest of consumers, especially the poor and vulnerable, where an adequate/effective mechanism is not put in place to protect and regulate the marketplace for a sustainable economic growth. Protecting consumer's interests is a vital and collective responsibility of several stakeholders – businesses, government, consumer organizations and non-governmental organisations etc. The existence of consumer organisations and non-governmental organisations is one of the regulatory mechanisms put in place to collaborate with the Federal Competitive and Consumer Protection Commission and other Government sector regulators to protect consumers' interests. The Consumer Organisation is a vital tool for educating the general public about consumer issues, publishing periodicals and other materials to impart knowledge about consumer issues, carrying out comparative testing of products in accredited laboratories to test relative qualities of competing brands and publishing same for consumers benefit. Thus, this paper assesses the role Of Consumer Organisations & Non-Governmental Organisations in ensuring consumer protection in Nigeria. It also looks into some of the challenges that confronts the consumer organisations in effectively discharging its set goals. The paper recommends a more strategic and intentional partnership between Government Institutions and consumer organisations and Non-Governmental Organisations as it can reinforce consumer protection and prevent the mistreatment /exploitation of citizens in the marketplace, as well as, encourage knowledge and information sharing, consumer education and business guidance.
Keywords; Consumer Protection, Strategic Partnership, Consumer Organisations and Non-Governmental Organisations.

ZERO DİVİSOR GRAFLARDA VERTEX COVER POLİNOMU ÜZERİNE
ON VERTEX COVER POLYNOMIAL IN ZERO DIVISOR GRAPHS

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ÖZET
Graf teorisi, matematik ve bilgisayar bilimleri alanında çok önemli yeri olan bir disiplindir. Grafların birden fazla çeşidi vardır ve esasen bir modelleme yöntemidir. Graf teori, ilişkiler ve bağlantılar üzerine analizler yapmaya olanak sağlar. Yapılan bu araştırmalar sadece teorik çıkarımlar ile sınırlı kalmaz, pratik uygulamalar için de kolaylık sağlar. Bu çalışmada, özellikle "zero divisor" grafları üzerinde durulmaktadır. Zero divisor grafları, değişmeli bir halkadaki sıfır bölenleri temsil eder. Grafın tepeleri halkanın elemanlarından oluşur ve bu elemanların çarpımları sıfırı veren tepe ikililerinin arasındaki bağlantılar da grafın kenarlarını temsil eder.
Bu çalışmanın odak noktalarından birisi de vertex cover (tepe örtüsü) polinomudur. Vertex cover, bir graftaki her kenarın en az bir köşesini içinde bulunduran köşeler kümesidir. Bu koşulu sağlayan olası tüm kümelerin elde edilmesiyle oluşturulan polinoma da vertex cover polinomu denir. Vertex cover problemi bir Np-hard problemdir yani polinom zamanda kesin sonucu verecek bir algoritma yazılamamaktadır. Bu çalışma, zero divisor graflarının yapısal özelliklerini inceleyerek bu graflardaki vertex cover polinomlarının matematiksel analizini gerçekleştirmeyi amaçlamaktadır. Bu çalışmada zero divisor graflardan "$\mathbb{Z}_{pq}, \mathbb{Z}_{2p}, \mathbb{Z}_{p^2}$" formatında olan graflar incelenmiş ve üzerlerinde vertex cover polinomlarının analizleri yapılmıştır.
Sonuç olarak, bu çalışma, hem teorik olarak bu konuların derinlemesine incelenmesine katkıda bulunmayı hem de pratik uygulamalarda kullanılabilecek yeni uygulamaların geliştirilmesine yardımcı olmayı hedeflemektedir. Sıfır bölen graflarının ve vertex cover polinomlarının analizi, cebirsel yapıların grafiksel olarak anlaşılmasına ve bu yapıların özelliklerinin daha iyi kavranmasına olanak sağlayacaktır.
Anahtar Kelimeler: Graf Teori, Zero Divisor Graflar, Vertex Cover Polinomu

ABSTRACT
Graph theory is a discipline that holds great importance in the fields of mathematics and computer science. There are many types of graphs, and they are essentially modeling methods. Graph theory allows for the analysis of relationships and connections. The research conducted in this field is not limited to theoretical inferences but also provides practical applications. This study focuses particularly on "*zero divisor"* graphs. Zero divisor graphs represent the zero divisors in a commutative ring. The vertices of the graph consist of elements from the ring, and the edges of the graph represent the connections between vertex pairs whose products yield zero.
One of the key focuses of this study is the "*vertex cover polynomial"*. A vertex cover is a set of vertices in a graph that includes at least one vertex of every edge. The polynomial generated by considering all possible vertex cover sets that satisfy this condition is called the vertex cover polynomial. The vertex cover problem is an NP-hard problem, meaning there is no algorithm

that can provide an exact solution in polynomial time. This study aims to perform a mathematical analysis of the vertex cover polynomials in zero divisor graphs by examining their structural properties. Specifically, graphs of the form "$\mathbb{Z}_{pq}, \mathbb{Z}_{2p}, \mathbb{Z}_{p^2}$" have been analyzed, and the vertex cover polynomials for these graphs have been studied.

As a result, this work aims to contribute to the in-depth theoretical examination of these topics, as well as assist in the development of new applications that could be useful in practical applications. The analysis of zero divisor graphs and vertex cover polynomials will facilitate a better understanding of algebraic structures and their graphical representations, providing deeper insight into their properties.

Keywords: Graph Theory, Zero Divisor Graphs, Vertex Cover Polynomial

NANOMATERIALS CONTAINING RARE EARTH IONS AND APPLICATIONS

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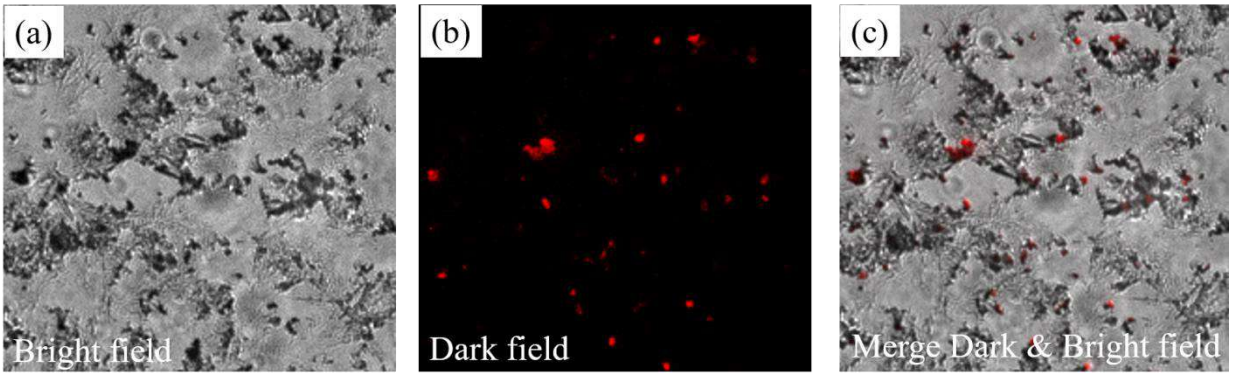
ABSTRACT: Nanomaterials containing rare earth (RE) ions Er^{3+}, Yb^{3+} and applications potential in medical will be presented. RE ions were doped in some host such as Y_2O_3, Gd_2O_3. NaYF4: synthesis, structure study, luminescent properties were detail studies. Upconversion luminescence and life time were presented. Upconverting nanomaterials for bioimaging by the rare earth ions are well known to produce infrared to visible green or red by a two photon of mechanism discussed. The upconversion processes in rare earth ions exhibit a strong power dependence on excitation intensity of 975 nm diod laser. An advantage ofered by the two photon excited. We can use a low power continuos wave diode laser excited. Nanomedicine is an emerging field Er-Yb doped Y_2O_3, Gd_2O_3 or $NaYF_4$ nanoparticles and nanospheres which asbsord infrared light by multistep multiphoton absorption to produce upconversion in green or red provide opportunity for background free bioimaging and deper penetration in cells and tisues Fabrication bio-nano $(Er, Yb)^{3+}$: Gd_2O_3 probe for determining Tumor stem cell NTERA-2 was studied.



Optical microscopy images of $(Er, Yb)^{3+}$: Gd_2O_3-mAb^CD133-NTERA-2 cell after incubation at 37 ^oC for (a) Bright field, (b) Dark field, and (c) Merged bright and dark field

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Keyworks: Nanomaterials, Rare earth ions, Application Potential, NTERA 2

BRYOPHYTES-A PROMISING SOURCE OF HERBAL MEDICINE DUE TO THEIR VAST POOL OF PHYTOCHEMICAL COMPOUNDS

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Abstract:
Bryophytes are recognized to have a vast array of therapeutic applications. Recent studies have shown that bryophyte samples include significant levels of terpenoids, phenolics, glycosides, and lipids. More than 400 bioactive chemicals, primarily flavonoids, bioflavonoids, terpenes, terpenoids (such as diterpenoids, triterpenoids, and lipophilic mono- and di-sesquiterpenoids) have been identified from bryophytes in recent years. A variety of biological activity, including cytotoxic, antifungal, and antibacterial effects, have been found in bryophyte extracts. Additionally, research has demonstrated the potential of bryophytes as sources of natural compounds with industrial and therapeutic uses. Majority of the phytochemicals found in bryophytes are compounds with biological activity. These phytochemicals probably contribute to the protection and defense against pests and microbial infections. The liverworts are a great source of terpenoids among the bryophytes, and while mosses have not been studied as much for their potential medical uses, secondary metabolites such as flavonoids, terpenoids, and bibenzyls have been found. Due to their effective antioxidant enzyme systems, many bryophytes have demonstrated high levels of antioxidant activity, others have flavonoids and phenolics to scavenge free radicals. Bryophytes are a natural reservoir of many phytochemical compounds which are of immense medicinal and pharmaceutical importance and hence these plants need to be explored further to unearth their significance as an alternate source of plant- based medicines.
Keywords: Bryophytes, Metabolites, Terpenoides, Phytochemicals, Antimicrobial, Cytotoxic.

WOMEN'S ECONOMIC PARTICIPATION FOR RECOGNITION OF THEIR ENTREPRENEURSHIP

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Abstract
Rural women represent a quarter of the world's population and play a major role in the rural economy, where they can be farmers, employees or entrepreneurs, while ensuring the well-being of their families, children and elderly parents, whom they feed and care for (ILO, 2019). Their work is often perceived as simple "support" or "help", when in reality, it is a form of entrepreneurship in its own right, often linked to survival dynamics or financial empowerment. As a result, they face a lack of recognition (Dubet, 2006) whether it comes from their entourage or their direct family. Malagasy women in Talata Ampano, a rural commune in the Haute Matsiatra region, in the south-central part of Madagascar, experience this in their daily lives and are mobilizing to ensure that their entrepreneurship is recognized as supporting certain household expenses, contributing to the resources, stability and growth of the family economy. How does this participation of women in the family economy contribute to the recognition of their entrepreneurship? This contribution is part of feminist organizational communication and aims to understand how women's organizations fight to have/maintain their place in social injustice. It thus highlights the actions undertaken to reduce the inequalities suffered by women (SDG10) and promote gender equality (SDG3).
Keywords: female entrepreneurship, participation, recognition, rural.

LANYA İLÇESİNDE YETİŞEN BAZI YENİLEBİLİR YABANİ OTLARIN TESPİTİ, SAĞLIK AÇISINDAN FAYDALARI VE YEMEKLERDE KULLANIM ŞEKİLLERİ

IDENTIFICATION, HEALTH BENEFITS, AND CULINARY USES OF SOME EDIBLE WILD PLANTS GROWING IN THE ALANYA DISTRICT

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ÖZET

İnsanoğlunun yerleşik hayata geçişi ve tarımın başlaması, gıda üretim ve tüketim alışkanlıklarını köklü bir şekilde değiştirmiştir. Neolitik dönemden tarıma geçiş, insanların toprağı üretim aracı olarak kullanmaya başlamasıyla doğa üzerinde kontrol sağlama çabalarını beraberinde getirmiştir. Bu durum, beslenme biçimlerini dönüştürmüş ve gıda güvenliği ile sürdürülebilirlik konularının önemini artırmıştır.

Ancak modern dünyada hızla artan nüfus ve tüketim arzusu, iklim değişikliği ve doğal kaynakların aşırı kullanımı nedeniyle gıda üretiminde güvenilirlik ve sürdürülebilirlik sorunlarını gündeme getirmiştir.

Mevcut tarım sistemleri, yetersiz beslenmeyi arttırmakta ve çevre üzerinde olumsuz etkiler yaratmaktadır. Bu bağlamda, yerel ve yenilebilir yabani otların keşfi hem beslenme açısından zenginlik sunmakta hem de ekosistemlerin sürdürülebilirliği açısından önemli bir fırsat oluşturmaktadır.

Türkiye, zengin bitki örtüsü sayesinde birçok yenilebilir yabani bitki türüne ev sahipliği yapmaktadır.

Alanya, Akdeniz ikliminin sunduğu çeşitlilik ile bu tür otların doğal yaşam alanını oluşturmaktadır.

Bu çalışma, Alanya ilçesinde doğal olarak yetişen bazı yenilebilir yabani otların tespit edilmesi, sağlık açısından faydalarının incelenmesi ve yemeklerde kullanım şekillerinin belirlenmesi üzerine odaklanmaktadır.

Araştırmanın amacı, Alanya'daki yerel bitkilerin gastronomik değerini ve sağlığa yararlarını ortaya koyarak sürdürülebilir gıda sistemlerinin geliştirilmesine katkıda bulunmaktır.

Ayrıca, bu bitkilerin gastronomi turizmine katkıları ve bölge halkının sağlığı üzerindeki etkileri incelenecektir. Çalışma, yenilebilir yabani otların sağlıklı ve yenilikçi alternatiflerini sunarak bölgenin gastronomik zenginliğine katkı sağlamayı hedeflemektedir.

Alanya'nın doğal bitki zenginliği, bölgenin tarihi ve kültürel mirasıyla örtüşmekte olup, bu bitkilerin kullanımı, geçmişten günümüze uzanan bir beslenme geleneğinin parçasıdır.

Bu araştırma, sürdürülebilir gıda kaynaklarının keşfi ve kullanımı hakkında önemli bilgiler sunacaktır.

Anahtar Kelimeler: Alanya, Sürdürülebilirlik, Yenilebilir yabani otlar

Abstract

The transition of human beings to settled life and the beginning of agriculture have radically changed food production and consumption habits. The transition from the Neolithic period to agriculture brought with it efforts to gain control over nature as people started to use land as a means of production. This has transformed diets and increased the importance of food safety and sustainability.

However, in the modern world, rapidly increasing population and consumption desire, due to climate change and over-exploitation of natural resources have raised the problems of reliability and sustainability in food production.

Current agricultural systems are increasing malnutrition and creating negative impacts on the environment. In this context, the discovery of local and edible wild herbs offers both nutritional richness and an important opportunity for the sustainability of ecosystems.

Türkiye is home to many edible wild plant species thanks to its rich vegetation.

Alanya constitutes the natural habitat of such herbs with the diversity offered by the Mediterranean climate.

This study focuses on the identification of some edible wild herbs growing naturally in Alanya district, examining their health benefits and determining their use in meals.

The aim of the reserach is to contribute to the development of sustainable food systems by revealing the gastronomic value and health benefits of local plants in Alanya.

In addition, the contribution of these plants to gastronomy tourism and their effects on the health of the people of the region will be analysed. The study aims to contribute to the gastronomic richness of the region by offering healthy and innovative alternatives of edible wild herbs.

Alanya's natural herb richness overlaps with the historical and cultural heritage of the region and the use of these herbs is part of a dietary tradition that extends from the past to the present.

This research will provide important information on the discovery and utilisation of sustainable food sources.

Keywords: Alanya, Sustainability, Edible wild herbs, Health benefits

YÖNETİCİ HEMŞİRELERİN İŞTEN AYRILMA NİYETİNE ÇALIŞMA ORTAMI VE İŞ DOYUMUNUN ETKİSİ: İKİ MERKEZLİ ÇALIŞMA
THE EFFECTS OF WORK ENVIRONMENT AND JOB SATISFACTION OF NURSE MANAGERS ON INTENTION TO LEAVE: A TWO-CENTER STUDY

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ÖZET
Bu çalışma, yönetici hemşirelerin işten ayrılma niyetine, çalışma ortamı ve iş doyumunun etki düzeyini belirlemek amacıyla yapıldı. Yöntem: Tanımlayıcı türdeki bu çalışma, Trabzon ve Ankara ili sınırları içinde bulunan bir özel hastane (20 yönetici hemşire) ve bir üniversite hastanesinde çalışan (35 yönetici hemşire) 55 yönetici hemşirenin oluşturması planlandı. Evrenin %92,7 (n=51)'sine ulaşıldı. Çalışma 28 Aralık 2023 -15 Şubat 2024 tarihleri arasında yapıldı. Verilerin toplanmasında, araştırmacılar tarafından hazırlanan "Demografik Bilgiler Formu", 2013 yılında Warshawsky ve arkadaşları tarafından geliştirilen ve Tosun ve Yıldırım tarafından Türkçeye uyarlanan "Yönetici Hemşire Çalışma Ortamı Ölçeği (The Nurse Manager Practice Environment Scale)", işten ayrılma niyeti ve iş doyum düzeyine ait sorular kullanıldı. Verilerin analizinde SPSS 24.0 (Statistical Package for Social Sciences-SPSS) programı kullanıldı. Karşılaştırmalı ve tanımlayıcı testler ile analiz edildi. Bulgular: Yönetici hemşirelerin yaş ortalaması 40,06±7,03 (min 25 - max 60); %37,3 (n=19)'ü 41-48 yaş aralığında, %35,3 (n=18)'ü bekar, %58,8 (n=30)'i lisans mezunu ve mesleki deneyim ortalaması 18,31±6,68 (min 8-max40) bulundu. Çalışılan bölümden memnun olma durumuna bakıldığında %84,3(n=43)'ünün memnun olduğu; %84,3(n=43)'ünün sosyoekonomik durumdan memnun olmadığı; %39,2 (n=20)'sinin iş doyumunun yüksek, %70,6 (n=36)'sının işten ayrılmayı düşünmediği sonucuna ulaşıldı. Yönetici hemşirelerin; çalışma ortamı ölçeği puan ortalaması 196,49±49,13 (min 56 - max 264) bulundu. Sonuç: Yönetici hemşirelerin işten ayrılma niyetlerinin düşük olduğu, çalışma ortamlarını ve iş doyumlarını orta düzeyde olumlu algıladıkları sonucuna ulaşıldı. İş doyumu ve çalışma ortamı algı düzeylerinin işten ayrılma niyeti üzerinde etkisi olduğu sonucuna ulaşıldı.
Anahtar Kelimeler: hemşire, çalışma ortamı, işten ayrılma niyeti, yönetici hemşire, iş doyumu

ABSTRACT
The present study was conducted to determine the effects of work environment and job satisfaction of nurse managers on the intention to leave. Method: This descriptive study was planned to consist of 55 nurse managers working in a private hospital (20) and a university hospital (35) in the cities of Trabzon and Ankara. A total of 92.7%(n=51) of the population was reached. The study was conducted between December 28, 2023, and February 15, 2024. The Demographic Information Form, which was prepared by the researchers, the Nurse Manager Practice Environment Scale developed by Warshawsky et al. in 2013 and adapted to Turkish by Tosun and Yıldırım, and questions regarding the intention to leave and job

satisfaction level were used in the analysis of the data. The SPSS 24.0 (Statistical Package for Social Sciences-SPSS) program was used for the analysis with comparative and descriptive tests. Findings: The mean age of nurse managers was found to be 40.06±7.03 (min 25 - max 60), 37.3% (n=19) were between the ages of 41-48, 35.3% (n=18) were single, 58.8% (n=30) were bachelor's, and the mean professional experience was 18.31±6.68 (min 8-max 40). When the satisfaction with the department worked in was evaluated, it was concluded that 84.3%(n=43) were satisfied, 84.3% (n=43) were not satisfied with the socioeconomic status, 39.2% (n=20) had high job satisfaction, and 70.6% (n=36) did not consider leaving the job. The mean score of the work environment scale of nurse managers was 196.49±49.13 (min 56-max 264).Conclusion:It was concluded that nurse managers' intention to leave the job was low, they perceived their work environment and job satisfaction moderately positively, and job satisfaction and work environment perception levels affected the intention to leave the job.

Keywords: nurse**,** work environment, intention to leave, nurse manager, job satisfaction

SESSİZ İSTİFANIN İŞTEN AYRILMA EĞİLİMİNE ETKİSİNDE OTANTİK LİDERLİĞİN ROLÜ

THE ROLE OF AUTHENTIC LEADERSHIP, IN THE EFFECT OF QUITTING QUIET ON EMPLOYEE TURNOVER INTENTION

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ÖZET

Sessiz istifa; çalışanların açıkça istifa etmek yerine, zamanla yaptıkları işlerden kademeli bir biçimde uzaklaşkları bir olguyu ifade etmektedir. Bir çalışanın mevcut işini terk etme konusunda güçlü bir arzu veya niyet geliştirdiği; ancak aktif bir şekilde alternatif iş arayışlarına girmek yerine, işiyle bağlantısını kesmeyi ve işinin sadece asgari gerekliliklerini yerine getirmeyi tercih ettiği, görev ve sorumluluklarına ek bir iş yapmayı sınırladığı bir durumdur. Sessiz istifa davranışı, işten ayrılma niyetini etkileyen ilk basamaktır. İşten ayrılmaya niyetiyle başlayan süreç çalışanın bir karar verme durumudur. Her iki kavramında sonuçları organizasyonlar açısından oldukça maaliyetlidir. Özellikle artan rekabet koşullarında, sürekli değişen teknolojik ve ekonomik koşullar altında işletmelerin başarılı olabilmesi için çalışanların verimli bir şekilde işletmelere katkıda bulunması oldukça önemlidir. Bu yüzden liderlere ve yöneticilere düşen görev çalışanları mutlu, sağlıklı ve tatmin olmuş bir şekilde organisyona daha bağlı hale getirmektedir. Böylece işletmeler zaman içerisinde diğer firmalara rekabet üstünlüğü sağlayabilmekte, varlığını güçlü bir biçimde sürdürebilmekte ve insan kaynağının verimliliğini ve performansını arttırarak işletmenin kârlılığını yükseltmektedir. Pozitif bir tarzı olan otantik liderlik davranışları ile çalışanlar daha bağlı hale gelebilmektedir.
Sessiz istifa, özellikle covid-19 salgını sonrasında sosyal medyanın da etkisi ile iş hayatında popüler bir kavram haline gelmiştir. Ancak öncesinde de farklı isimlerle literatürde yer bulmuştur. Anlatılanların ışığında bu çalışmanın amacı sessiz istifanın her geçen gün literatürde kendisine daha fazla yer bulacağını öngörmemiz ve buna bağlı olarak organizasyonlar ve liderler için sessiz istifa ve işten ayrılma niyeti arasındaki benzerlik ve farklılıkları ortaya koymak, otantik liderlik ile bu kavramlar arasındaki potansiyel ilişkileri belirlemektir. Bildiride bu konular ayrıntılı bir biçimde aktarılacaktır.
Bu çalışmada, verilerin toplanması ve hipotezlerin test edilmesi amacına yönelik olarak anket yöntemi tercih edilmiştir. Araştırmanın örneklemini İstanbul ilinde özel sektörde farklı pozisyonlarda çalışan 187 katılımcı oluşturmaktadır. Araştırmanın sonuçlarında otantik liderliğin, sessiz istifa ve işten ayrılma niyetine negatif bir etkisi olduğu; sessiz istifa ve işten ayrılma eğilimi arasında pozitif bir etki olduğunun bulgulanması hedeflenmektedir.
Anahtar Kelimeler: Sessiz İstifa, İşten Ayrılma Eğilimi, Otantik Liderlik.

ABSTRACT

Quiet Quitting, refers to a phenomenon in which employees gradually move away from their jobs over time, rather than openly resigning. It is a situation in which an employee develops a strong desire or intention to leave his/her current job, but instead of actively seeking alternative employment, he/she prefers to disconnect from his/her job and fulfill only the minimum requirements of his/her job, limiting his/her duties and responsibilities to additional work. Quiet

Quitting behavior is the first step affecting turnover intention. The process that starts with the intention to quit is a decision-making situation of the employee. The consequences of both concepts are very costly for organizations. It is very important for employees to contribute to the business efficiently for businesses to be successful, especially under increasing competitive conditions, constantly changing technological and economic conditions. Therefore, the task of leaders and managers is to make employees happy, healthy and satisfied and more loyal to the organization. In this way, businesses can gain a competitive advantage over other companies over time, maintain their existence in a strong way and increase the profitability of the business by increasing the productivity and performance of human resources. Authentic leadership behaviors with a positive style can make employees more committed.

Quiet Quitting has become a popular concept in business life with the effect of social media, especially after the covid-19 pandemic. However, it has found a place in the literature with different names before. In the light of the above, the purpose of this study is to predict that quiet quitting will find more and more place in the literature every day, and accordingly, to reveal the similarities and differences between quiet quitting and turnover intention for organizations and leaders, and to determine the potential relationships between authentic leadership and these concepts. These issues will be discussed in detail in this paper.

In this study, survey method was preferred for the purpose of collecting data and testing hypotheses. The sample of the study consists of 187 participants working in different positions in the private sector in Istanbul. In the results of the study, it is aimed to find out that authentic leadership has a negative effect on silent resignation and turnover intention, while there is a positive effect between silent resignation and turnover intention.

Keywords: Quiet Quitting, Turnover Intention , Authentic Leadership

KUMAŞLARDA NEM İLETİMİ: DİKEY NEM İLETİMİ VE DAMLA EMİLME TESTİ SONUÇLARININ KARŞILAŞTIRILMASI

MOISTURE TRANSMISSION IN FABRICS: COMPARISON OF THE RESULTS MEAUSURED BY VERTICAL WICKING TEST AND DROP TEST

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ÖZET

Tekstil yüzeylerinin, giyim konforu sağlayabilmesi için iyi sıvı nem iletim özelliğine sahip olması beklenmektedir. Nem iletim özelliği iyi olarak değerlendirilebilecek giysiler, nemi cilt yüzeyinden alıp, buharlaşma ile atmosfere iletebilmektedirler. Bir malzemenin daha yüksek hidrofiliteye sahip olması, iyi emilim gerçekleştirmesini sağlamaktadır.

Tekstil yüzeylerinin su emilim özelliklerini ölçmek için farklı teknikler kullanılmaktadır. Yapısal özellikleri birbirinden farklı kumaşların hidrofilitelerinin karşılaştırılabilmesi için kullanılan Uluslararası standart metotlar, su ile kumaşın temas şekli ve testin uygulanma şekli itibarıyla farklılık gösterdiğinden, bu testlerden elde edilen sonuçların değerlendirilmesi de büyük önem taşımaktadır.

Bu tekniklerden en çok bilinenleri arasında yer alan, dikey nem iletimi (kapilar yükselme metodu) ve damla emilim testi bu çalışmada incelenen ve karşılaştırılan yöntemlerdir. Farklı hidrofilite değerlerine ve farklı kullanım alanlarına sahip tekstil yüzeylerinin, su emicilik özelliklerinin karşılaştırılmasında doğru metodun kullanılmasının önemine dikkat çekilen bu çalışmada 5 farklı kumaş numunesi kullanılarak, kumaşların su iletim özellikleri, dikey nem iletimi ve damla emilim testi kullanılarak incelenmiştir. Kumaşlarda dikey nem iletiminin tespitinde, DIN 53924 standardı kullanılmıştır. Bu testte, alt kısmı suya dikey doğrultuda standardın belirttiği ölçüde daldırılan kumaş numunesinde, suyun belirli bir yüksekliğe çıkmasına kadar geçen süre kronometre ile tespit edilmiştir. Damla emilim testi, bir tekstil numunesinin yüzeyine damlatılan bir damla suyu, çok kısa bir sürede emip ememeyeceğini ölçmek için kullanılan oldukça efektif bir tekniktir. Bu metodun uygulamasında ise AATCC 79 standardı kullanılmıştır.

Test sonuçları incelendiğinde, oldukça yüksek hidrofiliteye sahip yüzeylerde damla emilim metodu kullanıldığında, çok kısa ve birbirine yakın emilim süreleri tespit edildiğinden, kumaşlar arasındaki farklılığın incelenebilmesi mümkün olamamaktadır. Bu tip kumaşlarda, dikey nem iletim testinin uygulanması kumaşlar arasındaki farklılığın daha hassas bir şekilde analiz edilebilmesine imkan sağlamaktadır. Nispeten daha düşük hidrofiliteye sahip kumaşlarda damla emilim testinden elde edilen sonuçlar arasındaki farklılık daha belirgin bir şekilde görülebildiğinden, bu tip kumaşlarda bu metodun kullanımının daha uygun olduğu sonucuna ulaşılmıştır.

Anahtar Kelimeler: Su Emicilik, dikey nem iletimi, kapilar yükselme, damla emilim testi

ABSTRACT

Textile surfaces are expected to have good liquid moisture transfer properties in order to provide wearing comfort. Clothes that can be evaluated as having good moisture transfer properties can take moisture from the skin surface and transfer it to the atmosphere by evaporation. A material having higher hydrophilicity ensures good absorption.

Different techniques are used to measure the water absorption properties of textile surfaces. Since the international standard methods used to compare the hydrophilicity of fabrics with different structural properties differ in terms of the contact type of the fabric with water and the way the test is applied, the evaluation of the results obtained from these tests is also of great importance.

Among these techniques, the most well-known are the vertical moisture transfer (capillary rise method) and the drop absorption test, which are the methods examined and compared in this study. In this study, which draws attention to the importance of using the right method in comparing the water absorption properties of textile surfaces with different hydrophilicity values and different areas of use, the water transfer properties of the fabrics were examined using the vertical moisture transfer and drop absorption test using 5 different fabric samples. In determining vertical moisture transmission in fabrics, DIN 53924 standard was used. In this test, the time elapsed until the water rose to a certain height in a fabric sample whose bottom part was immersed in water vertically to the extent specified by the standard was determined with a stopwatch. The drop absorption test is a highly effective technique used to measure whether a drop of water dropped on the surface of a textile sample can absorb in a very short time. The AATCC 79 standard was used in the application of this method.

When the test results were examined, it was seen that when the drop absorption method was used on surfaces with very high hydrophilicity, very short and close absorption times were detected, and therefore it was not possible to examine the difference between the fabrics. In these types of fabrics, the application of the vertical moisture transmission test allows the difference between the fabrics to be analyzed more precisely. Since the difference between the results obtained from the drop absorption test in fabrics with relatively lower hydrophilicity can be seen more clearly, it was concluded that the use of this method was more appropriate in these types of fabrics.

Keywords: Water Absorbency, vertical wicking, capillary rise, drop test

MITIGATING THE EFFECTS OF WORKPLACE OSTRACISM ON TURNOVER INTENTIONS IN THE IT SECTOR: THE ROLE OF EMOTIONAL EXHAUSTION AND TRANSFORMATIONAL LEADERSHIP

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Abstract:
Purpose: This study examines the impact of workplace ostracism (WO) on turnover intentions (TI) in the Information Technology (IT) sector, focusing on emotional exhaustion (EE) as a mediator and transformational leadership (TL) as a moderator. Given the high turnover and competitive pressures in IT, it aims to uncover the psychological pathways linking WO to TI and to explore the buffering effect of TL on these dynamics.
Methodology: Using a quantitative, cross-sectional design, data were collected from mid-level IT professionals across various multinational IT companies. Structural equation modeling (SEM) and moderation-mediation analysis were conducted to test the hypothesized relationships.
Findings: The results demonstrated a significant positive relationship between WO and TI, with EE partially mediating this association. Additionally, TL was found to moderate the WO-EE relationship, reducing EE's impact on TI when TL practices were strong. These findings underscore the potential of TL as a strategic intervention to counter the adverse effects of WO on turnover.
Originality/value: This study provides a novel examination of the interplay between WO, EE, and TL, filling a gap in the literature regarding the protective role of leadership in minimizing turnover intentions driven by ostracism. It expands on the theories of social exchange and job demand-resource, offering insights into the relational and psychological mechanisms that influence TI in high-stress industries.
Research limitations and future directions: Further studies could validate these findings in different sectors, such as healthcare and finance, and employ longitudinal designs to investigate the causal relationship between WO, EE, and TI over time. Future research could also explore other leadership styles as potential moderators.
Keywords: workplace ostracism, Turnover intentions, emotional exhaustion, Transformational leadership

ROLE OF POLYMERS IN ADVANCED DRUG DELIVERY SYSTEMS: A REVIEW

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ABSTRACT
The development of drug delivery technology has been greatly aided by polymers, which offer cyclic dosing, adjustable release of both hydrophilic and hydrophobic medicines, and regulated release of therapeutic agents in consistent doses over extended periods of time. Due in part to the advancements made by chemical engineers, the field has expanded significantly from its early days of utilizing off-the-shelf materials. Contemporary developments in drug delivery are now based on the logical creation of polymers that are suited for particular cargo and created to carry out particular biological actions. The basic drug delivery methods and their mathematical underpinnings are highlighted in this review, along with the physiological obstacles to medication distribution. The most current developments in polymers that can identify compounds or direct intracellular distribution are studied to identify research directions that push the limits of drug delivery. Modern developments in medicine delivery are now based on the rational design of polymers that are appropriate for particular cargo and made to carry out particular biological tasks. In this study, we discuss the physiological challenges associated with administering medications and highlight the fundamental drug delivery methods and their mathematical foundations. We review the history and applications of polymer treatments, such as stimuli-responsive polymer systems and polymer-drug and polymer-protein conjugates. The most recent developments in polymers that can identify compounds or direct intracellular distribution are reviewed to highlight research areas that are working the limits of drug delivery.
Keywords: Excipients, Synthetic Polymer, Natural Polymer, Polymer drug, Polymer Protein, Polymer Therapeutics, Stimuli-responsive

REAL-WORLD PERFORMANCE OF CHEMICAL SEALANTS: UNDERSTANDING THE GAP BETWEEN THEORY AND PRACTICE

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ABSTRACT

Chemical sealants often perform differently in real-world applications compared to the expectations set by datasheets. While datasheets offer specific curing times and performance metrics based on controlled lab conditions, these figures do not always account for the complexities found in practical environments. Real-world factors such as temperature fluctuations, humidity, and the type of substrate can significantly affect both the curing process and the long-term effectiveness of the sealant. For instance, a datasheet may predict an ideal cure time under stable conditions, but exposure to varying humidity levels or extreme temperatures could lead to either delayed curing or early failure of the sealant. This discrepancy highlights the gap between theoretical performance, which is based on standardized tests, and actual performance under diverse and unpredictable environmental conditions. Such variations can undermine the reliability of chemical sealants in critical applications, necessitating more comprehensive testing and application methods to ensure their true capabilities are understood. Therefore, it is essential to consider real-world testing procedures when evaluating chemical sealants to better align their performance with practical requirements. In the study, the chemical sealant was initially applied to the design unit following the procedure outlined in the datasheet. However, the sealing tests were unsuccessful. Upon further investigation, the application method and curing time for the sealant were adjusted based on the design's specific requirements. After revising the procedure, the tests were repeated, and the sealing performance was successful. This approach highlighted the importance of adapting the application process to the specific conditions of the design, demonstrating that real-world application methods may differ significantly from standardized datasheet instructions.

Keywords: Chemical sealants, Sealant effectiveness, Sealant application procedure, Sealing performance, Curing time

EVALUATING CHEMICAL SEALANT EFFECTIVENESS UNDER HUMIDITY STRESS- PERFORMANCE METRICS AND LONG-TERM RELIABILITY

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ABSTRACT

This study focuses on evaluating the effectiveness of chemical sealants under humidity stress, particularly in terms of performance metrics and long-term reliability. The assessment is conducted according to the MIL-STD-810G standard, Method 507.5, Procedure II, which subjects sealants to a 10-cycle humidity test known as the "Aggravated Cycle" (Figure 507.5-7). This test exposes the materials to extreme conditions of moisture and temperature changes, simulating real-world environments where humidity is a critical factor. Performance metrics include adhesion strength, resistance to moisture penetration, flexibility, and structural integrity. Under the test conditions, chemical sealants face cycles of high humidity that can challenge their bonding and moisture resistance properties. Sealants that fail to maintain their adhesion strength and flexibility under these circumstances may experience degradation, leading to potential moisture ingress and compromised reliability. By observing sealant performance across these metrics, this study seeks to identify which materials retain their effectiveness over time, an essential quality for applications in electronics, aerospace, automotive, and construction industries. Findings from this study are expected to contribute to the development of advanced sealants with enhanced durability, providing insights into material resilience in moisture-prone environments. Such data will be valuable for engineers and designers when selecting sealants for products intended to endure prolonged exposure to humidity, thereby improving both product longevity and reliability. This research highlights the importance of rigorous testing standards like MIL-STD-810G in validating the long-term effectiveness of sealants for industrial applications in challenging conditions.

Keywords: Chemical sealants, MIL-STD-810G, Environmental testing, Adhesion strength, Moisture resistance

THE HISTORICAL PATH AND DEVELOPMENT OF THE SCIENTIFIC LIBRARY OF THE KHERSON STATE AGRARIAN AND ECONOMIC UNIVERSITY AS AN INTEGRAL PART OF THE EDUCATIONAL INSTITUTION

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ABSTRACT
The Scientific Library of Kherson State Agrarian and Economic University was founded simultaneously with the opening of the Kherson Zemstvo Agricultural College in 1874, and from that time on, the active formation of the library fund began, the basis of which was the donations of books from several institutions and individuals. The library was supplemented with literature on agriculture and natural science, as well as on general topics. At the end of 1895, the library fund numbered more than 16 thousand copies. During World War II, German barracks and stables were located on the premises of the educational institution. During this period, almost the entire library fund was destroyed, and the premises were heated by it. In 1944, after the liberation of Kherson, a new period in the formation of the library began; everything started practically from scratch. The institute's staff managed to collect 5610 books. Since 1979, the library has become the coordination center of agricultural libraries of the Kherson territorial association, carries out general methodological guidance, and provides methodological and practical assistance on all issues of library and information work. The library has acquired the status of "Scientific". The unique multidisciplinary fund is constantly replenished. Today, the fund of the KSAEU Scientific Library is a collection of educational, scientific, and reference literature and periodicals, audiovisual documents, and electronic publications. Currently, the Electronic Catalog of the Corporate Library System of KSAEU (EC KBS KSAEU), a thematic database with almost 500 thousand bibliographic records, is actively being formed. A special asset and pride of the KSAEU Scientific Library is the fund of rare and valuable books, which includes almost 700 copies of unique books on agriculture, botany, genetics, entomology, zoology, and geology. Other fields of knowledge, chronological framework (1826–1946).
Keywords: Library, Catalog, Center, Education.

EXPLORING COBALT-DOPED BISMUTH FERRITE AS A LEAD-FREE ABSORBER MATERIAL FOR ENHANCED PEROVSKITE SOLAR CELLS

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Abstract: Solar cell efficiency is a critical parameter in renewable energy, representing the effectiveness with which solar cells convert sunlight into usable electrical energy. The appeal of perovskite solar cells lies not only in their efficiency but also in their cost-effectiveness and ease of manufacturing. Unlike traditional silicon solar cells, which require complex and expensive fabrication processes at high temperatures, perovskite cells can be produced using simpler, solution-based techniques at lower temperatures. The proposed study introduces a non-lead oxide-based, double perovskite, cobalt-doped bismuth ferrite (Co:BFO) as a promising alternative absorber material in perovskite solar cells (PSCs). This initiative aims to mitigate traditional lead-based perovskites' environmental and stability issues. The photovoltaic performance of an n–i–p architecture PSC, structured as FTO/ETL/Co:BFO/HTL/Au, was thoroughly analyzed using the SCAPS-1D simulation tool. The study focuses on the effects of various parameters, including absorber thickness, defect densities at both the bulk and interface levels, and the doping density of the Co:BFO layer.
Keywords: multiferroic, perovskite, photovoltaic, scaps 1D

THE FORMATION OF CZECH-SLOVAK INTERSTATE RELATIONS IN THE EARLY 1990s: EXPERIENCE FOR UKRAINE

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In the context of the implementation of Ukraine's European choice, the study of the experience of cooperation between the Czech Republic and the Slovak Republic is relevant and extremely important from a scientific, theoretical and practical point of view.
The presented study examines the specifics of the unique experience in the modern history of Europe of the formation and development of good-neighborly relations and strategic partnership between the newly independent states - the Czech Republic (CR) and the Slovak Republic (SR), which became independent through an agreed, contractual and peaceful termination of the Czech-Slovak conflict in the early 1990s and together laid the foundation for the system of establishing interstate relations with Ukraine. The established "super-standard" interstate relations are a successful example for Ukraine.
The Czech Republic and the Slovak Republic belonged to the group of post-socialist countries that achieved the greatest success in the systemic socio-political transformation of the transitional post-socialist period of the 1990s – early 2000s. Unlike Ukraine, which embarked on the path of implementing European and Euro-Atlantic vectors only after the Orange Revolution of 2004.
Constant consultations, coordination of positions and coordination of steps in the international arena ensured, for example, the simultaneous entry of the CR and SR into the EU. And for SR, targeted support from the Czech Republic and other regional states – NATO members – became almost decisive in accelerating the country's entry into the Transatlantic bloc.
It should be noted that the scientific study and generalization of important aspects of the Czech-Slovak experience of interstate cooperatio in the 1990s allows us to highlight the most positive aspects that can be applied by Ukraine both in relations with the Central European states - EU members and the European Union as a whole, and in improving relations with other states in the post-soviet space. However, the need to study the practice of the latest Czech-Slovak interstate cooperation in the context of the implementation of the modern strategy of European and Euro-Atlantic integration of Ukraine remains the most important thing.
KEY WORDS: unique experience, interstate cooperation, peaceful termination, socio-political transformation

ANTICANCER ACTIVITY OF TITANIUM (III) AND TITANIUM (IV) COMPLEXES WITH PYRIMIDINE SCHIFF BASES: DESIGN, SYNTHESIS AND CHARACTERIZATION

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Abstract

Our study focuses on the design, synthesis, and characterization of titanium(III) and titanium(IV) complexes derived from Pyrimidine Schiff bases ligands. The structure of Pyrimidine Schiff bases ligand and their transition metal complexes were characterized by various techniques such as elemental analysis, FTIR, ^{1}H NMR, ^{13}C NMR, UV-vis, mass spectra and powder X-ray diffraction technique. The anticancer activity of these complexes was evaluated against H460 (lung cancer), MCF-7 (breast cancer), and HCT-116 (colon cancer) cell lines through MTT assays. Titanium(III) and Titanium (IV) complexes have hihgher activity than the free ligands.

Keywords: Titanium(III), Titanium (IV), Pyrimidine Schiff bases ligand, Anticancer activity, Lung cancer, Breast cancer, Colon cancer.

MOBILE BANKING: CURRENT CHALLENGES AND OPPORTUNITIES OF M-BANKING IN AFGHANISTAN

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Abstract
Mobile banking has become an innovative means for customers to access banking services more conveniently.
M banking, an emerging substitute for e banking, has gained a wider diffusion in most countries worldwide.
Afghanistan began m banking service provision in 2009 to upgrade its banking industry.
Despite the substantial investments, however, the adoption rate remains at a very low level.
This study investigates the challenges and opportunities that face m banking in Afghanistan as a way of providing a foundation and recommendations for further studies.
A qualitative research approach was followed, where the
required data was extracted from primary and secondary sources.
The depth interview method was utilized with bank officials and customers
to study challenges in four important areas: economic factors, technological infrastructure, regulations and policies, and organizational issues.
Findings indicated the presence of major challenges in areas of economic and technological infrastructure, coupled with organizational inefficiencies.
Added to this came such concerns as those related to security, internet quality, risks, trust, awareness, and user interface design.
These findings provide the bases for enhancing the adoption of m-banking in Afghanistan.
Keywords: M-banking, online banking, challenges, qualitative research, Afghanistan

IMPACT OF rs1800871, rs1800872 and rs1800896 IL-10 PROMOTER POLYMORPHISMS AND IL-10 SERUM LEVELS ON ACUTE LYMPHOBLASTIC LEUKEMIA IN IRAQI PATIENTS

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Abstract

Objective

Promoter IL-10 Single nucleotide polymorphisms (SNPs) can influence IL-10 expression, impacting immune regulation in Acute Lymphoblastic Leukemia (ALL). Elevated IL-10 serum levels may promote immune suppression, aiding leukemia cell survival and progression. These genetic variations and cytokines levels could serve as biomarkers for disease susceptibility, prognosis, and potential therapeutic targets.

Aim

This study was designed to investigate the relationship between serum levels of interleukin-10 and three variants in the IL-10 gene promoter region and acute leukemia in Iraqi patients.

Methods

The study included 50 Iraqi patients with acute leukemia Patients divided into three groups (12 pre-treatment , 21 under- treatment and 17 relapse) and 30 apparently healthy individuals as a control group. Blood samples drawn from all subjects in the study were divided into two parts, the first part of the blood samples was used to extract DNA samples that were subjected to detection of three genetic variants (rs1800871, rs1800872 and rs1800896) in the IL-10 promoter region using Real-Time PCR technique specific primers and Probes. While, the second part included serum separation from blood samples to measure serum levels of interleukin-10 using ELISA technique.

Results

The results showed According to the three SNPs , ALL patients appear highly significant ($p<0.01$) elevation of CC genotype of rs1800871 T>C and rs1800872 A>C polymorphisms revealing its role as risk genotype in association with ALL.While , rs1800896 A>G polymorphism was not associated with ALL risk .Serum level of IL-10 was significantly ($p< 0.05$) elevated in pre-treatment group(353.21 ± 54.55 ng/ml) followed by relapse groups (230.23 ± 29.69ng/ml) than in under-treatment group (115.47 ± 7.33ng/ml). According to the three SNPs, IL-10 serum level was associated with CC genotype of rs1800871 and rs1800872 SNPs but not with rs1800896 SNP. Nine of ALL patients were had the three SNPs (rs1800871 , rs1800872 , rs1800896) had high interleukin-10 mean value (293.44 ± 38.72 ng /ml). While ,33 patients were with two SNPs , of whom 30 with rs1800871,rs1800872 SNPs have 231.05 ± 29.47 ng/ml IL-10 serum level . Lower IL-10 serum levels were found in ALL patients with any other contains of the three SNPs.

Conclusion

The rs1800871 and rs1800872 IL-10 promoter polymorphisms are associated with increased risk of Acute Lymphoblastic Leukemia (ALL) and elevated IL-10 serum levels, particularly in pre-treatment and relapse stages. The rs1800896 polymorphism was not linked to ALL risk.

Recommendation

Monitoring IL-10 serum levels and testing for rs1800871 and rs1800872 polymorphisms could aid in early detection and prognosis prediction for ALL patients. Further studies are needed to explore potential therapeutic strategies targeting IL-10 modulation.

Key words: Acute Lymphoblastic Leukemia, IL-10, serum level , Single nucleotide polymorphisms, rs1800871, rs1800872 and rs1800896, immunological and genetic markers

YAŞLILIKTA YAŞAM KALİTESİ VE YAŞAM DOYUMU: SOSYAL HİZMET PERSPEKTİFİNDEN PSİKOSOSYAL İHTİYAÇLAR VE DESTEK YAKLAŞIMLARI

QUALITY OF LIFE AND LIFE SATISFACTION IN OLD AGE: PSYCHOSOCIAL NEEDS AND SUPPORT APPROACHES FROM A SOCIAL WORK PERSPECTIVE

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ÖZET

Yaşlılık, bireylerin biyolojik, psikolojik ve sosyal açıdan değişim yaşadığı, genellikle 60 yaş ve sonrasında başlayan bir dönemdir. Kronolojik olarak yaşın ilerlemesiyle birlikte ortaya çıkan fizyolojik ve fonksiyonel kayıplar, yaşlı bireylerin günlük yaşamlarını olumsuz etkileyebilmektedir. Hastalıklarla mücadele eden, ekonomik sorunlarla karşılaşan ve sosyal çevresinden uzaklaşan yaşlı bireyler, yalnızlık ve yabancılaşma duygularını yoğun olarak yaşayabilmektedir. Bu süreç, yaşam doyumunu azaltıcı bir etki yaparken, sosyal izolasyon gibi psikososyal zorluklarla başa çıkmayı da gerektirmektedir. Yaşlılık, aynı zamanda, bireylerin geçmiş yaşam deneyimlerinden öğrendikleri ile tatmin duygusunu artırabilecek bir fırsatlar dönemi olarak değerlendirilebilir. Bu nedenle, yaşam kalitesinin iyileştirilmesi ve yaşam doyumunun artırılmasına yönelik psikososyal destek yaklaşımlarının uygulanması önem arz etmektedir. Psikososyal destek yöntemleri, yaşlı bireylerin fiziksel ve duygusal iyilik hallerini artırarak, topluma daha aktif katılımlarını teşvik etmektedir. Bu yaklaşımlar, sosyal bağların güçlenmesini sağlarken, yalnızlık ve depresyon gibi olumsuz durumların azaltılmasında da etkili olmaktadır. Bu çalışmada, literatür taraması yöntemi kullanılarak, yaşlılık döneminde karşılaşılan temel sorunlar ve bu sorunların çözümüne yönelik psikososyal destek yaklaşımları analiz edilmiştir. Elde edilen bulgular tematik analiz yöntemiyle incelenmiş ve yaşlı bireylerin yaşam kalitesini artırmaya yönelik sosyal hizmet uygulamaları bağlamında değerlendirilmiştir. Çalışmanın temel amacı, sosyal hizmet uzmanlarının yaşlı bireylerin psikososyal ihtiyaçlarını karşılamadaki rolünü vurgulamak ve bu alanda geliştirilebilecek uygulamalara ışık tutmaktır. Sonuç olarak, yaşlı bireylerin yaşam kalitesinin artırılmasına yönelik sosyal hizmet odaklı psikososyal destek yaklaşımlarının etkinliği literatürle desteklenmiştir. Bu bulgular, gelecekte yapılacak çalışmalar ve sosyal hizmet uygulamaları için yol gösterici niteliktedir. Ayrıca, yaşlı bireylerin daha tatmin edici bir yaşam sürmeleri için bu alandaki uygulamaların güçlendirilmesinin önemi vurgulanmaktadır.

Anahtar Kelimesi: Yaşlılık, Yaşam kalitesi, Yaşam doyumu, Psikososyal destek, Fizyolojik kayıplar, Fonksiyonel kayıplar, Yalnızlık, Sosyal izolasyon, Fiziksel iyilik hali, Duygusal iyilik hali, Psikososyal destek, Sosyal hizmet uygulamaları, Literatür Taraması

ABSTRACT

Aging is a period, typically beginning at 60 years and beyond, characterized by significant biological, psychological, and social changes. Physiological and functional losses associated with chronological aging can negatively affect the daily lives of older adults. Elderly individuals facing health challenges, economic difficulties, and social detachment often experience heightened feelings of loneliness and alienation. Such challenges can diminish life satisfaction and require strategies to address psychosocial difficulties, including social isolation.

Simultaneously, aging can be seen as a phase of opportunities, where accumulated life experiences contribute to enhanced satisfaction. Improving quality of life and life satisfaction during this stage necessitates the application of psychosocial support approaches. These methods enhance the physical and emotional well-being of elderly individuals while encouraging their active participation in society. Furthermore, such approaches strengthen social bonds and effectively mitigate loneliness and depression.This study employs a literature review to analyze the primary challenges faced by older adults and examines psychosocial support strategies aimed at addressing these issues. Findings are evaluated using thematic analysis and are contextualized within social work practices aimed at enhancing the quality of life for the elderly. The primary objective is to highlight the critical role of social workers in meeting the psychosocial needs of older adults and to provide insights into developing effective interventions in this domain. In conclusion, the effectiveness of psychosocial support approaches, particularly those focused on social work, in improving the quality of life for older adults is substantiated by the literature. These findings serve as a guide for future research and social work practices, emphasizing the importance of strengthening interventions in this area to ensure a more fulfilling life for the elderly.

Keywords: Aging, Quality of life, Life satisfaction, Psychosocial support, Physiological losses, Functional losses, Loneliness, Social isolation, Physical well-being, Emotional well-being, Psychosocial support, Social work practices, Literature review

OPTIMIZING PARALLEL GPS-INS SYSTEM RELIABILITY THROUGH STRATEGIC PRIORITY REPAIR OF GPS SYSTEM

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ABSTRACT:
This study investigates the stochastic reliability of an Inertial Navigation system (INS) structured in parallel with Global Positioning System (GPS). The INS system, critical for autonomous navigation in environment where GPS signals may be unavailable (e.g., underwater, aerospace), plays a foundational role. Conversely, the GPS system provides high precision data, essential for real-time applications like aviation, maritime navigation and autonomous vehicle. Initially both single unit systems are operational. The system as a whole continues functioning as long as at least one system is active. If a system fails, a repairperson is immediately available to address the issue, with priority given to repairing second system, GPS system. Upon completion of repairs, system returns to an "as good as new" state. Reliability metrics such as availability, Mean Time to System Failure (MTSF), and profit functions are evaluated using the Regenerative Point Technique and the Semi-Markov process. While failure rates are assumed to be arbitrary, repair rates follow an exponential distribution. The results are illustrated through graphical representations, offering a detailed analysis of MTSF, availability, and expected profit for the system.
Keywords: Parallel systems; INS system; GPS system; Reliability; MTSF; Availability; Priority to Repair: semi-Markov process: Regenerative point technique.

FACTORS AFFECTING ACADEMIC BURNOUT IN SECONDARY SCHOOL: A CROSS-SECTIONAL STUDY

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Abstract
Purpose The current study aims to identify the level of burnout among secondary school adolescents using the Maslach Burnout Inventory-Student Survey (MBI-SS) scale and to examine the effect of its associated factors, such as gender, school level, family income, school area, disease, and study path, on burnout components in Morocco.
Method 1116 participants from public secondary school students from Rabat Sale Kenitra Region (Morocco) with a mean age of 17.15 years (SD=1.328), including 59.1% of girls, responded to an Arabic-translated version of MBI-SS and standardized sociodemographic questions. The IBM SPSS statistics 26.0 and IBM SPSS Amos 24 were used to analyze the data.
Results the finding is twofold: first, about 47% of Moroccan students exhibit academic emotion. Second, Male students may develop attitudes that are more cynical and a greater sense of inadequacy in their academic abilities, the third-year students experience higher levels of emotional exhaustion compared to first-year students, while second-year students show a lower rate. Moreover, students from low-family income backgrounds, and from urban areas are more susceptible to academic burnout. Furthermore, students who pursue scientific studies had higher scores on Emotional Exhaustion and Cynicism, 13% and 20%, than those who pursue the literary path, with 5% and 13%, respectively.
Conclusion Regarding the relationship between sociodemographic factors and school burnout, the Moroccan education decision-makers in their future approaches could exploit this finding to reduce burnout among students leading to better academic achievement.
Keywords Burnout, Secondary school, MBI-SS; Burnout, Sociodemographic, Morocco.

INNOVATIVE APPROACHES TO ENHANCING ISLAMIC PORTFOLIO MANAGEMENT: LEVERAGING TECHNOLOGY FOR ETHICAL AND FINANCIAL SUSTAINABILITY

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Abstract
Islamic portfolio management offers a unique approach to investing, harmonizing financial objectives with ethical principles. By adhering to Shariah law, which prohibits interest (riba) and excessive uncertainty (gharar), Islamic investors aim to maximize returns while minimizing risk and ensuring ethical compliance. Key principles of Islamic portfolio management include halal investment, rigorous risk management, and comprehensive ethical screening. Halal investment involves selecting assets and businesses that are permissible under Shariah law. This includes equities, real estate, and sukuk (Islamic bonds). Rigorous risk management ensures that investments align with Shariah principles, while comprehensive ethical screening identifies and avoids investments in industries or companies that engage in activities prohibited by Shariah, such as gambling, alcohol, and conventional banking. Despite its unique approach, Islamic portfolio management faces challenges. The Shariah-compliant investment universe is often smaller than conventional markets, limiting diversification options. Additionally, rigorous screening processes are required to ensure compliance with Shariah standards, which can be time-consuming and resource-intensive. To address these challenges, Islamic finance institutions are leveraging technology to enhance portfolio management. Islamic indices, robo-advisors, and blockchain technology are being employed to streamline processes, improve transparency, and expand investment opportunities. By embracing these innovative solutions, Islamic portfolio management can continue to grow and evolve, offering a compelling alternative for investors seeking to align their financial goals with their ethical values.
Keywords: Islamic Finance, Portfolio Management, Shariah Compliance, Shariah Compliance, Shariah Compliance, Shariah Compliance, Shariah Compliance

PORTAKAL KABUĞU ATIKLARININ MAYALI VE MAYASIZ ÜRÜN ÜRETİMİNDE KULLANIM OLANAKLARININ İNCELENMESİ

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Özet

Dünya genelinde üretilen gıda maddelerinin büyük kısmı israf edilmekte olup, bu durum insanlık tarihinin en bilinçsiz davranışlarından biri olarak değerlendirilmektedir. UNESCO' ya göre, her yıl yaklaşık 18,8 milyon ton gıda israfı edilmektedir. Dünya nüfusunun 7,594 milyar olduğu göz önüne alındığında, sadece 4 milyon kişi temel tahıl ürünleri olan buğday, pirinç ve mısır tüketmekte; bu ürünler açlık sınırındaki topluluklara ulaşmakta ve bu nüfusun dörtte biri her açlık nedeniyle ölüm riskiyle karşı karşıya kalmaktadır (Okumuş, 2023).

Mutfak harcamalarının büyük kısmı taze meyve ve sebzelere yönelmekte, ancak evsel artıkların büyük bölümü bu ürünlerden kaynaklanmaktadır. Çoğu meyve ve sebzenin dörtte biri, atılan kabuk ve kullanılmayan kısımlardan oluşmaktadır. Bununla birlikte, bu kısımların yüksek besin değerlerine sahip olduğu ortaya konmuştur. Bu durum, mutfak harcamalarında tasarruf sağlarken, atık gıdaların yeniden değerlendirilmesiyle ek gelir elde edilmesine olanak tanımaktadır. Uygun işlemler uygulanarak, kullanılmayan kabuk ve kısımlar toz haline getirilip un olarak kullanılabilir.

Un, ekmek ve pastalar gibi pek çok ürünün hammaddesi olup, unlu mamullere olan talep her yıl %10 oranında artmaktadır (Engül ve Demir, 2008).

Bu araştırmacının amacı portakal kabukları kullanılarak portakal unu elde etmektir. Bu n portakal kabuklarından elde edilen un ile mayalı ve mayasız ürünler yapılacak ve yapılan ürünlerin duyusal analiz ve mikrobiyolojik analizleri incelenerek mutfaklarda sıfır atık çalışmalarının önemi bir kez daha vurgulanacaktır.

Anahtar Kelime: Portakal Kabuğu, Besinsel Lif, Fonksiyonel Gıda,

INVESTIGATION OF THE USE OF ORANGE PEEL WASTES IN FERMENTED AND UNFERMENTED PRODUCTS

Abstract

A significant portion of the world's food production goes to waste, representing one of the most thoughtless behaviors in human history. According to UNESCO, approximately 18.8 million tons of food are wasted annually. With a global population of 7.594 billion, only about 4 billion people consume staple grains like wheat, rice, and corn; these grains are vital for communities facing starvation, and a quarter of this population is at risk of death due to

Most household kitchen expenses are spent on fresh fruits and vegetables, yet these are also the primary sources of household waste. About a quarter of most fruits and vegetables consists of discarded peels and unused parts, which, despite being rich in nutrients, are typically wasted. Reusing these parts could reduce kitchen expenses and even generate additional income. By applying suitable processes, unused peels and parts can be p

Flour, a primary ingredient in bread and pastries, is increasingly in demand, with annual growth in bakery products reaching 10% (Engül and Demir, 2008). This research aims to produce orange flour from orange peels and use it to make both leavened and unleavened products. The sensory and microbiological properties of these products will be analyzed, underscoring the importance of zero.

Keywords: Orange peel, functional food, dietary fiber

EVALUATING THE CONCENTRATION OF HEAVY METALS IN EFFLUENT IRRIGATED VEGETABLES AROUND INDUSTRIAL AREA OF ABUJA

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ABSTRACT

This study assessed the concentration of heavy metals in irrigated Amaranthus and Capsicum crops grown with effluent water from the Idu Industrial Area of the FCT. Samples of effluent water were collected from three different industries (Afrifab Steel Limited, National Institutes for Pharmaceutical Research (NIPRD), and Salco), while soils as well as the root, shoot, and edible parts (leaf and chili) of Amaranthus and Capsicum crops grown in effluent water-irrigated crops were collected during the wet and dry seasons. The samples were analysed for some heavy metals (As, Cd, Cr, Cu, Pb, Hg, Ni, and Zn). The results were compared with the NESREA and FAO limits for metal concentration in effluent water, soil, and food crops, respectively. Findings from the study revealed, among others, that there is no significant difference in the concentration of heavy metals in the effluent water samples from the respective industries ($p = 0.559 > 0.05$ and $0.489 > 0.05$), irrigated soil samples ($p = 0.999 > 0.05$ and $0.992 > 0.05$), root, shoot, and leaf of the Amaranthus crop samples ($p = 0.606 > 0.05$ and $0.381 > 0.05$), and the root, shoot, and chili of the capsicum crop samples ($p = 0.925 > 0.05$ and $0.393 > 0.05$) irrespective of seasons. Similarly, the average concentration of heavy metals in the effluent water samples ($p = 0.206 > 0.05$ and $0.265 > 0.05$) and irrigated soils ($p = 0.789 > 0.05$ and $0.334 > 0.05$) were not statistically significant with the NESREA limit across seasons. Similarly, the Amaranthus leaf ($p = 0.175 > 0.05$ and $0.142 > 0.05$) and chili ($p = 0.242 > 0.145$ and $0.145 > 0.05$) samples were statistically indifferent to the FAO limit across seasons. The concentration of heavy metals in the soil showed a positive and significant relationship with that of the Amaranthus leaf ($r = 0.9211$, p-value $0.000 < 0.05$) and Capsicum chili ($r = 0.965$, p-value $0.000 < 0.05$). The study concluded that the accumulation of heavy metals in the soil is, in turn, the major pathway through which food crops can be contaminated. The study recommends, among others, that the direct application of industrial effluent water into farmlands for irrigation farming should be prohibited. Instead, all industrial effluent water should be collected at the Wupa Central Waste Treatment Plant for proper treatment in-line with the NESREA guidelines before being discharged into any agricultural field. This can be regulated by the Abuja Environmental Protection Board (AEPB) and the National Environmental Standards and Regulations Enforcement Agency (NESREA).

RELATIONSHIP BETWEEN SPIRITUAL WELL-BEING AND LIFE SATISFACTION IN WOMEN DURING PREGNANCY

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Introduction. The aim of this study is to reveal the relationship between physical and psychosocial factors and life satisfaction and spirituality of women during pregnancy. Life Satisfaction Scale (PSS), Psychosocial Health Assessment Scale (GASP) and Spirituality Scale (PBS) were applied to the sample group consisting of 152 volunteer pregnant women aged between 19-43.

The relationship between the independent variables of the study (age, educational status, economic status, trimester periods, planned pregnancy etc.) and psycho-social health, life satisfaction and spirituality were examined. According to the results obtained; Pregnant women who are 25-30 years old, who define themselves as religious, who have a planned pregnancy, who have a high level of education, happiness in their marriages, have higher life satisfaction, psychosocial health and spirituality than others. General psycho-social health, relationships with spouses, familial characteristics, and the need for psychosocial support and the effects of pregnancy-related changes are higher in pregnant women who will have children for the first time, than those who have had children before. There was no significant relationship between the variables of employment status, economic status, duration of marriage, trimester periods and medical problem during pregnancy.

Correlation analysis was performed to determine the relationship between dependent variables. Overall psychosocial health, life satisfaction and spirituality of the sample group were determined to be good. As a result of correlation analysis, increase in spirituality scores affect psychosocial health and life satisfaction positively and moderately strong. In line with all these results, it is thought that psychosocial health, life satisfaction and spirituality are related to each other, and support of pregnant women in these aspects will contribute positively to mother-baby health and the future of family institution. Based on the findings, recommendations were made to healthcare personel, especially nurses responsible for the care of pregnant women and psychologists and spiritual support specialists who provide psychological support.

Key words: Pregnancy, Psychosocial Health, Life Satisfaction, Spirituality, Spiritual Well-Being

KADINA YÖNELİK ŞİDDETLE MÜCADELE POLİTİKALARI: TÜRKİYE-CEZAYİR ÖRNEĞİ

POLICIES ON COMBATING VIOLENCE AGAINST WOMEN: THE CASE OF TURKEY AND ALGERIA

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ÖZET

20. yüzyılın son çeyreğinden itibaren, dünyada kadın meselelerine yönelik duyarlılığın artması ve eşitlik politikalarının gündeme gelmesi, kadınlarla ilgili mevzuat ve uygulamalarda belirgin bir artışa yol açmıştır. Kadına yönelik şiddetle mücadelede çok sayıda kurum ve kuruluş politika oluşturma ve uygulama sürecinde aktif rol oynamaktadır. Türkiye ve Cezayir'de, şiddetle mücadele politikalarının güçlenmesi, özellikle 2000'li yıllarda artan toplumsal farkındalık ve uluslararası taahhütlerle hız kazanmıştır. Bu süreçte kadınların haklarının yasal dayanakları konusunda önemli ilerlemeler kaydedilmiştir.

Türkiye'de kadına yönelik şiddet, tüm bakanlıkların konusu olmakla beraber Aile ve Sosyal Hizmetler Bakanlığının hazırladığı ulusal eylem planları aracılığıyla konu izlenmekte, atılacak adımlarla ilgili tüm aktörler yönlendirilmektedir. Aile içi şiddet konusunda kadın politikasını temelde şekillendiren mevzuat Anayasa, Türk Medeni Kanunu, Türk Ceza Kanunu ve Ailenin Korunması ve Kadına Karşı Şiddetin Önlenmesine Dair Kanun'dur. Aynı zamanda 2024-2028 arası dönemi kapsayan Kalkınma Planında ve Cumhurbaşkanlığı Yıllık Programında kadına karşı şiddet konusu yer almaktadır. Cezayir'de kadına yönelik şiddetle mücadelede öncü rol oynayan Ulusal Dayanışma, Aile ve Kadın Statüsü Bakanlığı, 2007 yılında ulusal bir strateji başlatmış ve bu çerçevede danışma mekanizmaları ile veri toplama sistemleri geliştirmiştir. Kadına yönelik şiddetin önlenmesinde, 1966 tarihli ve 2015 yılında ağırlaştırılan cezaları içeren Ceza Kanunu, 2005 yılında revize edilen Aile Kanunu ve aynı yıl kabul edilen Vatandaşlık Kanunu gibi temel yasalar önemli hukuki dayanaklar sunmaktadır. Ayrıca, bu alanda uzmanlaşmış ulusal komisyonlar oluşturulmuş ve 2015'te aile içi şiddet ile cinsel taciz gibi eylemleri suç kapsamına alan yeni düzenlemeler yapılmıştır. Cezayir, Türkiye'nin 1985 yılında imzaladığı BM *Kadınlara Karşı Her Türlü Ayrımcılığın Ortadan Kaldırılmasına (CEDAW)* Sözleşmesi'ni, 1996 yılında bazı çekincelerle onaylamıştır. Bu adımlar, iki ülke açısından kadın hakları bağlamında önemli kazanımlar olarak değerlendirilmektedir.

Bu çalışma Türkiye ve Cezayir'deki kadına yönelik şiddetle mücadele politikalarını karşılaştırmalı olarak ele almayı amaçlamaktadır. Bu bağlamda her iki ülkenin mevzuat, ulusal politikaları ve kadına karşı şiddetle mücadeleye yönelik sosyal hukuki mekanizmalar ile uygulamaları incelenerek güncel durumun ortaya çıkarılması hedeflemektedir.

Anahtar Kelimeler: Kadına Yönelik Şiddete Karşı Politikalar, Türkiye, Cezayir

ABSTRACT

Since the last quarter of the 20th century, increasing global awareness of women rights issues and the emergence of equality policies have led to a significant rise in legislation and practices concerning women. In the context of policy development, numerous institutions and organizations have played an active role in the creation and implementation of policies aimed at combating violence against women. In Turkey and Algeria, the strengthening of anti-violence policies has gained momentum, particularly in the 2000s, with increased social awareness and international commitments. During this period, significant progress has been made regarding the legal foundations of women's rights.

In Turkey, violence against women is a subject of all ministries, but it is primarily monitored through national action plans prepared by the Ministry of Family and Social Services, which guides all actors on the steps to be taken. The first law on domestic violence was enacted in 1998, but the legislation that fundamentally shapes women's policy includes the Constitution, the Turkish Civil Code, the Turkish Penal Code, and the Law on the Protection of the Family and the Prevention of Violence Against Women. Additionally, the issue of violence against women is addressed in the 2024-2028 Development Plan and the Presidential Annual Program. In Algeria, the Ministry of National Solidarity, Family, and Women's Affairs, which plays a leading role in the fight against violence toward women, launched a national strategy in 2007 and developed consultation mechanisms and data collection systems within this framework. Essential laws, such as the Penal 1966, amended in 2015 to include harsher penalties, the revised Family 2005, and the Citizenship 2005, provide significant legal foundations for preventing violence against women. Additionally, national commissions specialized in this field have been established, and in 2015, new regulations were introduced that criminalized actions such as domestic violence and sexual harassment. Algeria ratified the UN *Convention on the Elimination of All Forms of Discrimination Against Women* (CEDAW), signed by Turkey in 1985, in 1996 with certain reservations. These steps are considered significant achievements in terms of women's rights in both countries.

This study aims to comparatively examine the policies on combating violence against women in Turkey and Algeria. In this context, by analyzing the legislation and national policies of both countries, the study seeks to explore the social and legal mechanisms and practices in the fight against violence toward women, thereby revealing the current situation.

Keywords: Policies on Combating Violence Against Women, Turkey, Algeria.

EVALUATING THE IMPACT OF THE SINGLE NATIONAL CURRICULUM ON EDUCATIONAL EQUALITY AND TEACHER PREPAREDNESS IN PAKISTAN

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Abstract. This study explores the challenges and potential impacts of implementing the Single National Curriculum (SNC) in Pakistan's education system, particularly in Punjab. The purpose is to assess the SNC's effectiveness in addressing educational inequalities and improving the quality of education across public, private, and madrasa schools. A mixed-methods approach was employed, utilizing surveys, interviews, and thematic analysis to gather data from 100 teachers, 20 administrators, and 10 policymakers. Quantitative findings indicate that urban schools report tremendous SNC success (mean = 4.1) compared to rural schools (mean = 3.5), while qualitative analysis highlights the need for better teacher training and resources. The study concludes that while the SNC has potential, more support is needed for consistent implementation. Implications include the need for targeted policy reforms, improved teacher training, and resource allocation to ensure equitable education for all.
Keywords: educational reform; Pakistan education; single national curriculum; teacher training.

DETERMINATION OF HEAVY METALS AND ESSENTIAL MINERALS IN WATER, SOIL AND EDIBLE PLANT SAMPLES FROM THE VICINITY OF ANKPA COAL MINE, KOGI STATE.

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Abstract

This research work determined the physicochemical properties (pH, temperature, electrical conductivity, total dissolved solids and total suspended solids) of water, heavy metals (Cr, Cd, Cu, Pb and Zn) and essential minerals (P, Ca, K, Mg and Na) in water, plant and soil samples collected from the vicinity of Ankpa Coal mine, Kogi State. The heavy metals were analyzed using a Flame Atomic Absorption Spectrophotometer machine and the essential minerals analyzed using Microwave Plasma Atomic Emission Spectrophotometer machine. Results obtained for physical parameters of water are within the ranges; pH (4.51-6.91), temperature (19.8-26.5˚C), electrical conductivity (110-210 µs/cm), TDS (7.0-13 mg/l) and TSS (0-1.5 mg/l). The heavy metals concentration in water are as follows; Cd (ND), Pb (0.001-0.077 mg/l), Cr (0.028-3.459 mg/l), Cu (0.09-0.057 mg/l) and Zn (0.050-0.161 mg/l). In plants, Cd (ND), Pb (0.043-0.096 mg/kg), Cr (0.138-0.325 mg/kg), Cu (0.139-0.153 mg/kg) and Zn (0.150-0.510 mg/kg). In soils, Cd (ND), Pb (0.127-0.664 mg/kg), Cr (1.206-4.718 mg/kg), Cu (0.155-0.934 mg/kg) and Zn (0.00-0.400 mg/kg). Results obtained for essential minerals ranged as follows; In water, P (0.19-43.31 mg/l), Ca (5.75-158.63 mg/l), K (5.04-32.28 mg/l), Mg (1.98-11.34 mg/l) and Na (10.70-28.29 mg/l). In plants, P (15.12-23.90 mg/kg), Ca (30.13-144.44 mg/kg), K (64.10-119.06 mg/kg), Mg (10.38-25.69 mg/kg) and Na (0.94-3.55 mg/kg). In soil, P (180.01-1879.51 mg/kg), Ca (11.61-85.18 mg/kg), K (3.02-114.98 mg/kg), Mg (2.59-14.05 mg/kg) and Na (8.24-15.03 mg/kg). The results were compared with the maximum permissible limit (MPL) set by World Health Organization (WHO), Food and Agricultural Organization (FAO) and recommended dietary intake set by Food and Nutrition Board (FNB). The physicochemical parameters were all within WHO maximum permissible limit for drinking water. Lead and Cr exceeded the MPL set for drinking water, all heavy metals were within set limit for plants. Lead, Cu and Chromium exceeded the MPL set for soil. The essential minerals in all samples were compared to recommended dietary intake (RDI). Correlation analysis was done using Pearson's correlation coefficient. In plants Zn correlated positively with Ca (0.9298), K (0.7860) and Mg (0.9967) and in soil samples Cu correlated positively with P (0.8212), K (0.8191) and Na (0.8658), Cr correlated positively with P (0.9911), K (0.9915) and Na (0.8363) and Lead correlated positively with P (0.9734), K (0.9905) and Na (0.7948). It can be inferred from this result that Ankpa coal mine has negatively impacted its vicinity.

Key Words: - Heavy Metals, Essential Minerals, Total Dissolved Solids (TDS), Total Suspended Solids (TSS), Maximum Permissible Limits (MPL), Macro and Micro Elements, MicrowavePlasma Atomic Emission Spectroscopy (MP-AES), and Pearson's Correlation Analysis.

ГЕЙМИФИКАЦИЯ В ОБРАЗОВАТЕЛЬНОМ ПРОЦЕССЕ
GAMIFICATION IN THE EDUCATIONAL PROCESS

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АННОТАЦИЯ
Геймификация, или применение игровых элементов в неигровых контекстах, становится одной из актуальных методик в образовании. В образовательной среде геймификация направлена на повышение вовлеченности и мотивации студентов, помогая им активнее включаться в учебный процесс и усваивать материал. Статья рассматривает основные принципы, элементы и эффекты геймификации в образовательных учреждениях, а также её значимость для создания увлекательной и эффективной образовательной среды.
Основные элементы геймификации включают очки, уровни, виртуальные награды и таблицы лидеров. Эти механизмы стимулируют студентов участвовать в заданиях и добиваться успеха, так как они получают мгновенную обратную связь о своих достижениях. Также используются более сложные игровые подходы, такие как задания-квесты и командные конкурсы, которые помогают развивать навыки сотрудничества и критического мышления.
Психологический эффект геймификации обусловлен её способностью стимулировать внутреннюю мотивацию. Элементы игры создают среду, где студенты чувствуют себя заинтересованными и вовлеченными в процесс обучения, что, в свою очередь, снижает уровень тревожности и стресса, часто возникающих в традиционных учебных методах. Через игру студенты легче воспринимают учебные задачи как возможности для развития, а не как обязательные задания.
Применение геймификации в образовательной практике доказало свою эффективность в различных учебных заведениях и возрастных группах. Особенно успешными примерами являются изучение математики, языков и естественных наук, где игровые методики помогают повышать успеваемость, улучшать понимание материала и развивать навыки. Статья подчеркивает, что геймификация должна дополнять, а не заменять традиционные методы обучения, и что важным условием её эффективности является правильная интеграция игровых элементов в учебные задачи.
В заключение, геймификация становится мощным инструментом, который помогает преодолевать образовательные трудности, делая учебный процесс более увлекательным и ориентированным на практические навыки.
КЛЮЧЕВЫЕ СЛОВА: Квесты, геймификация, методы обучения, образовательная среда, навыки, учебный процесс.

ANNOTATION

Gamification, or the use of game elements in non-game contexts, is becoming one of the most relevant methods in education. In the educational environment, gamification is aimed at increasing the involvement and motivation of students, helping them to become more actively involved in the educational process and assimilate the material. The article examines the basic principles, elements and effects of gamification in educational institutions, as well as its importance for creating an exciting and effective educational environment.

The main elements of gamification include points, levels, virtual rewards and leaderboards. These mechanisms encourage students to participate in assignments and achieve success, as they receive instant feedback on their achievements. More complex game approaches are also used, such as quest tasks and team competitions, which help to develop skills of cooperation and critical thinking.

The psychological effect of gamification is due to its ability to stimulate internal motivation. The elements of the game create an environment where students feel interested and involved in the learning process, which, in turn, reduces the level of anxiety and stress that often occur in traditional learning methods. Through the game, students more easily perceive learning tasks as opportunities for development, rather than as mandatory tasks.

The use of gamification in educational practice has proven its effectiveness in various educational institutions and age groups. Particularly successful examples are the study of mathematics, languages and natural sciences, where game techniques help to improve academic performance, improve understanding of the material and develop skills. The article emphasizes that gamification should complement, not replace, traditional teaching methods, and that an important condition for its effectiveness is the correct integration of game elements into educational tasks.

In conclusion, gamification becomes a powerful tool that helps to overcome educational difficulties, making the learning process more exciting and focused on practical skills.

KEYWORDS: Quests, gamification, teaching methods, educational environment, skills, learning process.

ORGANİK ATIKLARIN GERİ DÖNÜŞÜMÜ: KOMPOSTLAMA
RECYCLING OF ORGANIC WASTE: COMPOSTING

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ÖZET
Katı atıklarının artan üretimi, birçok toplumda önemli çevresel zorluklardan biri haline gelmiştir. Gelişmekte olan ülkelerde belediye katı atıklarının (MSW) önemli bir kısmını organik atıklar oluşturmaktadır. Kompostlama, bu organik kısmın yönetimi için etkili ve sürdürülebilir bir yöntem olarak yaygın şekilde kabul görmektedir. Organik atıkların kompostlama yoluyla geri dönüştürülmesi, gıda artıkları, bahçe budama atıkları ve tarımsal artıklar gibi organik maddeleri besin açısından zengin komposta dönüştüren sürdürülebilir bir atık yönetimi yöntemidir. Bu süreç, organik materyali oksijen varlığında parçalayan bakteri ve mantar gibi mikroorganizmalar tarafından yürütülür. Kompostlama, atıkların hacmini azaltarak çöplüklere gönderilen miktarı düşürmekte ve metan salınımını azaltırken, aynı zamanda toprak yapısını, nem tutma kapasitesini ve verimliliğini artıran değerli bir toprak düzenleyici oluşturmaktadır. Bu inceleme, kompostlama sürecinin toplama, ayrışma, olgunlaşma ve kullanım aşamalarını inceleyerek, çevresel faydalarını ve kompostlama çalışmalarını küresel ölçekte genişletmede karşılaşılan zorlukları vurgulamaktadır. Toplum katılımını, eğitimi ve yenilikçi kompostlama tekniklerini öne çıkaran bu makale, kompostlamayı atık azaltma ve sürdürülebilir tarım uygulamalarını teşvik etmek için kilit bir strateji olarak savunmaktadır.
Anahtar kelimeler: Kompostlama, organik atık, geri dönüşüm

ABSTRACT
The increasing production of solid waste has become one of the significant environmental challenges in many societies. Organic waste constitutes a significant portion of municipal solid waste (MSW) in developing countries. Composting is widely recognized as an effective and sustainable method for managing this organic fraction. Recycling organic waste through composting is a sustainable method of waste management that transforms organic matter such as food scraps, yard trimmings, and agricultural residues into nutrient-rich compost. This process is driven by microorganisms, including bacteria and fungi, that decompose the organic material in the presence of oxygen. Composting not only reduces the volume of waste sent to landfills, mitigating methane emissions, but also creates a valuable soil amendment that enhances soil structure, moisture retention, and fertility. This review explores the stages of composting collection, decomposition, curing, and use - highlighting its environmental benefits and the challenges faced in scaling composting efforts globally. Emphasizing community involvement, education, and innovative composting techniques, this paper advocates for composting as a key strategy for reducing waste and promoting sustainable agricultural practices.
Keywords: Composting, organic waste, recycling

PHYTOCHEMICAL EVALUATION OF PLANT EXTRACTS AND GC-MS ANALYSIS OF N-HEXANE EXTRACTS OF THE LEAVES OF *BOERHAVIA DIFFUSA LINN AGAINST SCHISTOSOME SPECIES*

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ABSTRACT

Background & objectives:This study investigates the phytochemical profile and bioactive compounds present in the n-hexane extracts of the leaves of *Boerhavia diffusa* Linn against schistosomal species.

.Methods: by qualitative and quantitative phytochemical screening, which was further complemented with GC-MS analysis. Phytochemical screening showed that the plant contains phenols, flavonoids, tannins, saponins, alkaloids, terpenoids, and cardiac glycosides; however, phenols (458.98 mg/100 g) and flavonoids (94.96 mg/100 g) were found in significant amounts, which give the plant antioxidant and anti-inflammatory properties.

Results: GC-MS analysis revealed a complex mixture of volatile compounds, including prominent fatty acids such as pentadecanoic and oleic acid, known for their medicinal and antiscistosomal properties.

Interpretation & conclusion:The results validated the traditional uses of Boerhavia diffusa and highlighted its importance as a source of bioactive agents with a potential value warranting further research into its pharmacological applications in herbal medicine. Such research is important since traditional knowledge needs to be combined with modern scientific approaches so as to improve the understanding and usage of medicinal plants.

KEY WORDS: n-hexane,Bioactive, Phytochemica, *Boerhavia diffusa*

LANGUAGE AS A TOOL OF COLONIAL POWER: ANALYZING FANON'S PERSPECTIVE ON LINGUISTIC ALIENATION

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Abstract
While the colonial subject is often subjugated and oppressed in a myriad of ways exploited, brutalized, or discriminated against the role that language plays in the colonial encounter is sometimes overlooked. The analysis of the psychological effects colonial languages had on the colonized African seeks to uncover the myriad of ways in which language serves as a tool of oppression. In this paper, we analyze the work on the topics of native alienation and language. By examining the various ways in which the colonial language is used as a weapon of power and violence against the colonized subject, it becomes clear exactly how beneficial the "possession" of this language can be: amongst other things, it often constitutes the difference between life and death, personal autonomy versus subjugation and, on a broader scale, serves to reincarnate the entire history of the oppressor and their race.
The colonial experience, with its use of a foreign language as the main means of communication, serves to alienate and dehumanize the colonial subject, a situation which not only causes mental illness and psychosis in the individual, but also drives the national liberation movement as a whole. The act of writing a text in the dominant language is in of itself a colonial enterprise, and any translation or reiteration of colonial discourses involving the use of such language can only serve to perpetuate this unequal power dynamic. To carry out this enterprise, it is suggested that the colonized, given his lack of means and agency, seek recourse in the writing of the national liberation movement and attempt to build from there a new language to serve as the dialect, and eventually the language, of the newly decolonized nation.
Keywords: Colonialism, Language and Power, Linguistic Alienation, Frantz Fanon, Colonial Subject, Oppression, Colonial Encounter

SECONDARY METABOLITES OF BEE PRODUCTS RELATED TO ANTIOXIDANT METABOLISM

ARI ÜRÜNLERİNİN ANTİOKSİDAN METABOLİZMASI İLE İLGİLİ OLAN SEKONDER METABOLİTLERİ

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ÖZET

Arılar tarafından üretilen veya arı kaynaklı doğal ürünler arı ürünleri olarak adlandırılmaktadır. Başlıca arı ürünleri bal, polen, propolis, apilarnil (erkek arı larvası), arı zehri, arı havası ve arı sütüdür. Antioksidanlar birçok hastalığın tedavisinde öncülük görevi görmektedir. Serbest radikalleri gidermesi, oksidatif stresi azaltması ve kendilerinin radikal oluşturmaması antioksidanları değerli kılmaktadır. Sentetik ve doğal antioksidan sınıflandırması yapılmaktadır. Sentetiklerin zararlı etkilerinden dolayı doğal olanlara ilgi yoğundur. Arı ürünlerinin doğal ürün olması ve antioksidan özellik göstermesi onları değerli kılmaktadır. Birçok gıda ürünü antioksidan özellik göstermektedir ancak bunlar içinde daha yüksek antioksidan aktivite gösterenler daha değerlidir. Antioksidan özelliğin temel nedenleri arasında ise sekonder metabolitler yer almaktadır. Arı ürünleri de birçok sekonder metabolit içermektedir. Sekonder metabolitler arasında fenolik bileşikler, flavonoid bileşikleri, tanenler, terpenler, organik asitler yer almaktadır.

Bu derlemede arı ürünlerinin antioksidan metabolizmasından sorumlu olan sekonder metabolitlerin belirlendiği güncel çalışmalar incelenmiştir. Hangi biyoaktif sekonder metabolitlerin var olduğu ve bu bileşenlerin antioksidan aktivite mekanizmasındaki rolleri araştırılıp yorumlanmıştır. Güncel çalışmalarda birçok farklı indekste arı ürünleri, sekonder metabolitler, LC-MS/MS, HPLC ve antioksidan kelimeleri ile taratılmıştır. Arı ürünlerinin sekonder metabolit içeriğinin farklı coğrafya, iklim, flora ve arı çeşidine göre değiştiği ve bu nedenle antioksidan aktivitelerinin de değiştiği belirlendi. Arı ürünlerinin standardizasyonunun zor olduğu görülmektedir. Bu nedenle arı ürünlerinin belirli periyotlar ile analizlerinin düzenli şekilde yapılması gerekmektedir.

Anahtar Kelimeler: Arı ürünleri, bal, propolis, polen, arı sütü, amino asit

ABSTRACT

Natural products produced by bees or originating from bees are called bee products. The main bee products are honey, pollen, propolis, apilarnil (drone larvae), bee venom, bee air and royal jelly. Antioxidants play a leading role in the treatment of many diseases. The fact that they remove free radicals, reduce oxidative stress and do not form radicals themselves makes antioxidants valuable. Synthetic and natural antioxidants are classified. Due to the harmful effects of synthetics, interest in natural ones is intense. The fact that bee products are natural products and have antioxidant properties makes them valuable. Many food products show antioxidant properties, but those with higher antioxidant activity are more valuable. Secondary metabolites are among the main causes of antioxidant properties. Bee products also contain

many secondary metabolites. Secondary metabolites include phenolic compounds, flavonoids, tannins, terpenes, alkaloids, and organic acids.
In this review, recent studies on the identification of secondary metabolites responsible for the antioxidant metabolism of bee products were analyzed. Which bioactive secondary metabolites are present and the roles of these components in the mechanism of antioxidant activity are investigated and interpreted. Bee products, secondary metabolites, LC-MS/MS, HPLC and antioxidant words were searched in many different indexes in current studies. It was determined that the secondary metabolite content of bee products varies according to different geography, climate, flora and bee variety and therefore antioxidant activities also vary. It is seen that the standardization of bee products is difficult. For this reason, bee products should be analyzed regularly in certain periods.
Keywords: Bee products, honey, propolis, pollen, royal jelly, sekonder metabolits

THE FINANCIAL AND ENERGY SECURITY IMPLICATIONS OF IRAN'S MISSILE DEVELOPMENT ON REGIONAL ECONOMIC STABILITY IN THE MIDDLE EAST

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Abstract
This study investigates the financial implications of Iran's missile development on regional security and economic stability in the Middle East. Focusing on key missile systems such as the Shahab-3, Ghadr-110, and Fateh-313, the research explores the broader economic consequences of Iran's military capabilities, particularly in the context of geopolitical tensions. Iran's missile program, driven by strategic defense needs, has had significant economic ramifications both domestically and regionally. The analysis covers how missile advancements impact Iran's defense budget, exacerbate economic sanctions, and influence global oil prices and financial markets. Furthermore, the study examines how these developments affect investor confidence and economic security in neighboring states. By exploring the intersection of military power and economic outcomes, this paper highlights the ongoing trade-offs between national security and economic growth in Iran, offering insights into the broader regional security dynamics shaped by missile deployment.
Keywords: Iranian missile development, regional security, economic stability, military expenditure, oil prices, geopolitical tensions

EXPERIMENTAL ANALYSIS OF FREE VIBRATION OF A CIRCULAR CROSS-SECTION CRACKED BEAM

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Fatigue-induced edge cracks, one of the most common failure mechanisms in mechanical systems subjected to cyclic loading, can result in catastrophic failures. Understanding the vibration properties of a structure with edge cracks is beneficial for early crack detection and diagnosis. Vibration analysis is a process that studies the vibration behavior of machines and structures. This analysis is used to assess the health of systems, detect faults, and determine maintenance needs. Vibration measurements are usually made using accelerometers or vibration sensors. These sensors collect information about vibration frequencies, amplitudes, and phases. The collected data is converted into frequency spectra using techniques such as Fourier transforms. These spectra provide information about the health of the components in the machine. The obtained data is interpreted by analyzing specific frequencies and amplitudes. In this study, free modal analysis of a circular cross-section cantilever beam with and without crack was carried out experimentally. An experimental setup was designed in which a cantilever beam with and without crack was subjected to force with a hammer and the responses were recorded using an accelerometer attached to the free end of the beam. The effects of the location and depth of the crack on the natural frequencies were investigated and the numerical results obtained were presented with graphs and tables. Signals obtained from non-cracked and cracked beams were compared in the frequency domain. It was shown that the presence of crack significantly changes the dynamic characteristics of the beam.

Keywords: Crack, circular cross-section, experimental method, free vibration analysis

FARKLI AGREGA VE UÇUCU KÜL ORANLARININ KALSİYUM ALÜMİNAT ÇİMENTOLU BETONLARIN MEKANİK ÖZELLİKLERİNE ETKİSİNİN İNCELENMESİ

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ÖZET
Beton teknolojisinin en önemli konularından biri yüksek performanslı betonlardır. Bu nedenle son yıllarda yüksek performanslı beton tasarımı ve üretimi üzerine yapılan araştırmalar giderek artmaktadır. Kalsiyum alüminat çimentosu, hızlı sertleşme ve agresif ortamlara karşı üstün dayanıklılık özellikleri nedeniyle yüksek performanslı beton üretiminde kullanılan bir bağlayıcıdır. Özellikle yüksek sıcaklık altında portland çimentolu betonlara kıyasla daha üstün performans gösterdiği yakın zamanda yapılan çalışmalarda ispat edilmiştir. Ancak kararsız yapısı nedeniyle yapısal uygulamalarda kullanımı sınırlı kalmaktadır. Portland çimentosunun aksine hidratasyon ürünleri sıcaklık, zaman ve nemden büyük ölçüde etkilenir ve belli dönüşümlere uğrar. Bu dönüşümler genel olarak betonun mikro yapısında boşluk oluşumuna neden olur kalsiyum alüminat çimentolu betonun dayanımını azaltabilir. Bu nedenle hidratasyon ürünlerinin dönüşüme uğramasına neden olabilecek parametrelerin incelenmesi önemlidir. Kalsiyum alüminat çimentolu betonun mekanik özelliklerine etki edebilecek parametrelerden birisi de karışıma giren malzemelerin oranlarıdır. Bu çalışmada, farklı agrega ve uçucu kül oranları kullanılarak kalsiyum alüminat çimentolu betonun normal sıcaklıklardaki mekanik özellikleri ve işlenebilirlik durumları incelenmiştir. Bu kapsamda agrega oranları ve uçucu kil oranları bir birinden farklı 3 set hazırlanmış ve numunelerin özgül ağırlıkları, elastisite modülleri, basınç dayanımları, yarmada çekme dayanımları ve slump değerleri tespit edilmiştir. Çalışma sonucunda B grubu olarak isimlendirilen karışım oranının hem mekanik özellikler hem de işlenebilirlik özellikleri açısından en uygun karışım olduğu değerlendirmesi yapılmıştır.
Anahtar kelimler: Kalsiyum alüminat çimentosu, uçucu kül, agrega

INVESTIGATION OF THE EFFECT OF DIFFERENT AGGREGATE AND FLY ASH RATIOS ON THE MECHANICAL PROPERTİES OF CALCIUM ALUMINATE CEMENT CONCRETE

ABSTRACT
In recent years, studies on the production of high performance concrete have been increasing. Calcium aluminate cement is a binder used in the production of high performance concrete due to its rapid hardening and superior resistance to aggressive environments. It has been proven in recent studies that it shows superior performance compared to Portland cement concrete especially under high temperature. However, its use in structural applications is limited due to its unstable structure. Unlike Portland cement, hydration products are greatly affected by temperature, time and humidity and undergo certain transformations. These transformations generally cause the formation of voids in the microstructure of concrete and may reduce the strength of calcium aluminate cement concrete. Therefore, it is important to investigate the parameters that may cause the transformation of hydration products. One of

the parameters that may affect the mechanical properties of calcium aluminate cement concrete is the proportions of the materials entering the mixture. In this study, mechanical properties and workability of calcium aluminate cement concrete at normal temperatures were investigated by using different aggregate and fly ash ratios. In this context, 3 sets with different aggregate and fly ash ratios were prepared and specific gravity, modulus of elasticity, compressive strength, tensile strength at splitting and slump values were determined. As a result of the study, it was evaluated that the mixture ratio named as group B was the most suitable mixture in terms of both mechanical properties and workability properties.

Keywords: Calcium aluminate cement, fly ash, aggregate

AĞIR METALLERİN ESER ANALİZİ İÇİN MODERN STRATEJİ: MANYETİK DERİN ÖTEKTİK ÇÖZÜCÜLER VE ÇOK DEĞİŞKENLİ OPTİMİZASYON YAKLAŞIMIYLA OLUŞAN YEŞİL PROSEDÜRLER

MODERN STRATEGY FOR TRACE ANALYSIS OF HEAVY METALS: GREEN PROCEDURES WITH MAGNETIC DEEP EUTECTIC SOLVENTS AND MULTIVARIATE OPTIMIZATION APPROACH

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ÖZET

Tıp disiplininde genel olarak tüm toksik metaller ağır metal olarak tanımlansa da, yoğunluğu 5 g cm^{-3}'ten daha fazla olan metallere veya sudan en az 5 kat daha fazla yoğun olan metallere ağır metal denmektedir. Ağır metaller volkanik patlamalar, kayaların çözünmesi, tarımsal ve endüstriyel faaliyetler gibi durumlardan dolayı farklı çevrelere geçiş yapmaktadır. Bu durumdan dolayı ağır metaller çevre kirleticiler sınıfında yer almaktadır. Ağır metaller, çevresel problemlerin yanı sıra ayrıca sağlık açısından da ciddi riskler teşkil etmektedir. Topraktaki ağır metaller bitkilerin yapısına zarar verip ürünlerin verimliliğini düşürdüğü gibi insanlar için de karsinojenik etkilerin yanı sıra cilt ve solunum problemlerine de sebep olmaktadır. Ağır metallerin düşük konsantrasyonlarının bile bu tarz negatif etkileri göz önünde bulundurulduğunda canlı sistemlere alımından kaçınılması ortaya çıkmaktadır. Analitik yöntemler, farklı örneklerin analizi sayesinde örnek bileşenlerinin derişimlerinin hakkında bilgi verdiği gibi, bu bileşenlerle ilgili referans değerlerin oluşturmasına da katkı sağlamaktadır. Bu sayede belirli bileşenlerin sebep olduğu zararlar da minimize edilmektedir. Ağır metaller birçok örnek grubunda yer almaktadır. Bu örnek gruplarının fiziksel ve kimyasal özellikleri birbirinden farklı olsa da çoğu oldukça karmaşık yapıdadır. Ağır metallerin tayin edilmesi için çoğu zaman bu karmaşık yapıdan ayrılması gerekmektedir. Uygulanması basit, kimyasal maruziyetini en aza indirgeyen ve yüksek zenginleştirme faktörleri sunan mikroekstraksiyon teknikleri ağır metal tayininde birçok avantaj sağlamaktadır. Manyetik derin ötektik çözücüler düşük toksisiteli olmaları ve enerjiden tasarruf sağlamaları açısından ağır metal ekstraksiyonuna yeşil bir profil oluşturmaktadır. Analitik parametrelerin istatistiksel ve matematiksel optimizasyon teknikleriyle optimize edilmesi bu yeşil profili daha ileri taşımaktadır. Bu tekniklerin uygulanmasıyla, yapılan deney sayısı azaldığı için maliyet ve zamandan da tasarruf sağlanmış olunur. Yapılan bu çalışmada ağır metallerin tayini sürecinde yer alan modern ve yeşil prosedürlerin bileşenleri hakkında teorik bilgi verilmiştir. Ayrıca bu çalışmanın yazarları tarafından kaleme alınan bilimsel araştırmalardan ve literatürdeki diğer çalışmalardan örnekler verilmiş. Bu çalışmalardaki deneysel süreçler okuyucuya aktarılmış ve karşılaştırmalı literatür tablosu oluşturulmuştur.

Anahtar kelimeler: Ağır Metaller, Yeşil Mikroekstraksiyon Teknikleri, Örnek Hazırlama, Eser Analiz, Çok Değişkenli Optimizasyon

ABSTRACT

Although all toxic metals are generally defined as heavy metals in the medical discipline, metals with a density greater than 5 g cm^{-3} or metals at least 5 times more dense than water are called heavy metals. Heavy metals migrate to different environments due to volcanic eruptions, rock dissolution, agricultural and industrial activities. For this reason, heavy metals are included in the environmental pollutant class. Heavy metals pose serious risks to health as well as environmental problems. Heavy metals in the soil damage the structure of plants and reduce the productivity of products, as well as causing carcinogenic effects for humans, as well as skin and respiratory problems. Considering such negative effects of even low concentrations of heavy metals, it becomes clear that their intake into living systems should be avoided. Analytical methods provide information about the concentrations of sample components through the analysis of different samples, as well as contributing to the establishment of reference values related to these components. In this way, the damage caused by certain components is minimized. Heavy metals are included in many sample groups. Although the physical and chemical properties of these sample groups are different from each other, most of them are quite complex. In order to determine heavy metals, they often need to be separated from this complex structure. Microextraction techniques, which are simple to apply, minimize chemical exposure and offer high enrichment factors, provide many advantages in heavy metal determination. Magnetic deep eutectic solvents create a green profile for heavy metal extraction in terms of their low toxicity and energy saving. Optimizing analytical parameters with statistical and mathematical optimization techniques carries this green profile further. By applying these techniques, cost and time are also saved since the number of experiments is reduced. In this study, theoretical information is given about the components of modern and green procedures in the determination of heavy metals. In addition, examples are given from scientific researches written by the authors of this study and other studies in the literature. The experimental processes in these studies are conveyed to the reader and a comparative literature table is created.

Keywords: Heavy Metals, Green Microextraction Techniques, Sample Preparation, Trace Analysis, Multivariate Optimization

MİKROEKSTRAKSİYON TEKNİKLERİNE GENEL BİR BAKIŞ
AN OVERVIEW OF MICROEXTRACTION TECHNIQUES

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ÖZET
Kimyasal analizin en önemli aşamalarından biri örnek hazırlama aşamasıdır. Kompleks numune matriksleri analitin tayinine girişim yapabilecek türler içermektedir. Bu girişimi ortadan kaldırmak için analitin farklı bir ortama ayrılması ve zenginleştirilmesi gerekmektedir. Klasik ekstraksiyon tekniklerinde kullanılan yüksek miktardaki çözücüler ve numune miktarları, bilhassa çevre, sağlık ve maliyet açısından sorun teşkil etmektedir. Bu sorunlar daha minimal, çözücü ve örnek miktarlarının azaltıldığı, daha az toksik ve etkinliği yüksek mikroekstraksiyon teknikleriyle aşılmaktadır. Bu sayede daha yeşil analitik yöntemlerin geliştirilmesi de mümkün olmaktadır. Mikroekstraksiyon teknikleri sıvı faz mikroekstraksiyonu (LPME) ve katı faz mikroekstraksiyonu (SPME) olmak üzere iki başlık altında incelenmektedir. Bu mevcut çalışmada farklı mikroekstraksiyon teknikleri ilgili bilgiler okuyucuya aktarılacak ve farklı mikroekstraksiyon tekniklerinin kullanımını içeren literatürdeki çalışmalardan örnekler verilecektir.
Anahtar kelimeler: Mikroekstraksiyon Teknikleri, Yeşil Analitik Kimya, Örnek Hazırlama, Ayırma ve Zenginleştirme

ABSTRACT
One of the most important steps in chemical analysis is sample preparation. Complex sample matrices contain species that may interfere with the determination of the analyte. To eliminate this interference, the analyte must be separated and enriched in a different medium. The large amounts of solvents and sample quantities used in conventional extraction techniques are particularly problematic in terms of environment, health and cost. These problems can be overcome with more minimal, less toxic and highly efficient microextraction techniques that reduce the amount of solvent and sample. This makes it possible to develop greener analytical methods. Microextraction techniques are categorized under two headings: liquid phase microextraction (LPME) and solid phase microextraction (SPME). In this current study, information about different microextraction techniques will be provided to the reader and examples of studies in the literature involving the use of different microextraction techniques will be given.
Keywords: Microextraction Techniques, Green Analytical Chemistry, Sample Preparation, Separation and Enrichment

THE EFFECTS BETWEEN NATIONAL INCOME, EDUCATION EXPENDITURE, AND POPULATION GROWTH IN TSLS APPROACH

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ABSTRACT

This study investigates the impact of adjusted savings, particularly in education expenditure (SAG), on adjusted net national income per capita (NNI). It also examines the influence of tax revenue (TAX) and rural population growth (RPG) on NNI and SAG, employing the Two-Stage Least Squares (2SLS) methodology to address potential endogeneity issues and draw causal inferences. The research utilizes yearly data from Thailand between 1972 and 2020, sourced from the World Bank database. The 2SLS approach, known for mitigating endogeneity problems in simultaneous equations, provides a robust framework for analyzing the complex relationships between the variables. The findings reveal that SAG does not directly impact NNI, but when instrumented to address endogeneity, it positively affects NNI. In addition, it found that RPG negatively affects SAG, suggesting that demographic changes influence national saving patterns. The results emphasize the need for policymakers to consider the multifaceted relationships between education expenditure, population dynamics, and economic growth when formulating development strategies.

Keywords: Education, net national income, Population Growth, Simultaneous Equations, Two-Stage Least Squares

TRADE TERMS INTERACTION AMONG SOUTHEAST ASIAN IN THE BVER FRAMEWORK

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ABSTRACT

This study investigates the interaction of terms of trade adjustments among four Southeast Asian economies, namely Indonesia, Singapore, Malaysia, and Thailand. The objective is to analyze the interdependencies using a Bayesian Vector Autoregression (BVAR) model. We use World Bank data spanning 1972–2020 to examine how trade terms influence each other across these nations. Our findings reveal significant cross-border effects, suggesting strong interdependencies in their trade relationships. The analysis highlights the substantial impact of external shocks, particularly highlighting Singapore's influence on Thailand's economic structure. This recognition is vital for policymakers seeking to enhance Thailand's trade resilience and economic stability.

Keywords: Terms of Trade, BVAR, Southeast Asia, Thailand

THE BAYESIAN REGRESSION MODEL OF INFLATION

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Abstract
This study explores the factors affecting inflation in Thailand, with a focus on analyzing the impact of the Crop Production Index, Food Production Index, Government Final Consumption Expenditure, and Interest Payments on the Consumer Price Index, which is a vital gauge of inflation. This study utilize data from 1972 to 2020 obtained from the World Bank and Bayesian Regression analysis to examine their connections. The findings reveal that Interest Payments and government spending are negatively related with inflation, whereas production activities display a positive relationship. Consequently, enhancing agricultural productivity and adopting a balanced monetary policy approach are recommended for managing inflation effectively.
Keywords: inflation, crop production index, food production index, government final consumption expenditure, interest payments, Bayesian Regression

ANALYZING THE ROLE OF AGRICULTURE VALUE ADDED IN THAILAND'S ECONOMIC GROWTH USING A BVAR MODEL

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ABSTRACT
This research investigates how changes in AFV influence and are influenced by key economic indicators in Thailand's economy. We use a Bayesian Vector Autoregression (BVAR) model and annual data from 1972 to 2020, encompassing AFV, GDI, fertilizer usage, and natural resource rents. Our findings reveal that that AFV has a modest impact on economic indicators, while natural resource rents substantially influence AFV. These findings recommend that policymakers should enhance agricultural productivity and economic growth.
Keywords: agriculture value added, GDP, fertilizer consumption, natural resources rents, Bayesian Vector Autoregression

BAKARA SÜRESININ 84. VE 85. AYETLERI BAĞLAMINDA KÜFRÜN AMELI BOYUTU
THE PRACTICAL DIMENSION OF DISBELIEF IN THE CONTEXT OF VERSES 84 AND 85 OF SURAT AL-BAQARAH

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ÖZET
Küfür; sözlükte, örtmek, gizlemek ve nankörlük etmek anlamlarına gelir. Allah (cc.) tarafından insanlar en temelde inanç bakımından Mü'min ve Kâfir olarak ikiye ayrıldığı göz önüne alınırsa küfür kelimesinin ne kadar önemli olduğu anlaşılır. K-f-r kökünden türeyen kelimeler Kur'an da toplam da 525 kere geçmektedir. Kur'an-ı Kerimde daha çok imanın zıddı olarak inkâr anlamında kullanılır. Bakara süresinin 84. ve 85. ayetlerine baktığımızda bildiğimiz anlamda yani inkâr anlamında bir küfür söz konusu değildir. Buradaki durum, kitaba aykırı bir tutum hakkındadır. Buna rağmen Allah (cc.) *"Yoksa siz kitabın bir kısmına inanıp bir kısmını inkâr mı ediyorsunuz?"* diyerek yapılan davranışı küfür olarak nitelemektedir. Fakat İslam inancında ameli terk etmek ya da büyük günah işlemek insanı iman dairesinin dışına çıkarmaz. Allah (cc.)'ın mezkûr ayetle bildirdiği ile İslam inancının prensibi arasında, birbirine tezat gibi duran bu iki duruma baktığımızda; küfür kavramının îtikâdi boyutunun yanında ameli boyutu olduğunu da fark ederiz. Birçok farklılığın yanında küfür kelimesinin inanç ve amel boyutunda ki en temel fark; inanç boyutunda küfür kişiyi iman dairesinin dışına çıkarırken, amel boyutunda küfür kişiyi iman dairesinin içinde tutar. İnanç boyutunda küfür, "kâfir" olarak adlandırılmaya sebep olurken, ameli boyutta küfür "fâsık" olarak adlandırılmanın sebebidir. Küfrün ameli boyutunu anlamak için kelimenin sözlük anlamında olan ö"rtmek, gizlemek" anlamının göz önünde bulundurulması gerekir.
Anahtar Kelimeler: İlahiyat, Tefsir, Bakara Süresi, Küfür, Amel

ABSTRACT
In the dictionary, kufr means to cover, conceal and be ungrateful. Considering that Allah (swt.) divides people into two as believers and disbelievers in terms of belief, it is understood how important the word kufr is. The words derived from the root K-f-r are mentioned 525 times in the Qur'an. In the Holy Qur'an, it is mostly used in the sense of denial as the opposite of faith. When we look at the 84th and 85th verses of al-Baqarah, there is no disbelief in the sense we know, that is, in the sense of denial. The situation here is about an attitude contrary to the book. Despite this, Allah (swt.) describes the behaviour as disbelief by saying 'Or do you believe in part of the book and disbelieve in part of it?'. However, in the Islamic faith, abandoning the deed or committing a major sin does not take a person out of the circle of faith. When we look at these two situations, which seem to be contradictory to each other between what Allah (swt.) declares with the aforementioned verse and the principle of Islamic belief, we realise that the concept of kufr has an operational dimension as well as its theological dimension. In addition to many differences, the most fundamental difference in the belief and practice dimensions of the word kufr is that while kufr in the belief dimension takes the person out of the circle of faith, kufr in the practice dimension keeps the person within the circle of faith. In the dimension of belief, disbelief is the reason for being called a disbeliever, while in the practical dimension, disbelief is the reason for being called a faasiq. In order to understand the practical dimension of kufr, the dictionary meaning of the word 'to cover, to conceal 'should be taken into consideration.
Keywords: Theology, Tafsir, Surat al-Baqarah, Kufr, Action

ANTIBIOTIC SUSCEPTIBILITY PROFILE OF SALMONELLA SPECIES ISOLATED FROM CHICKEN SOLD IN KURE ULTRA MODERN MARKET MINNA. NIGER STATE. NIGERIA.

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ABSTRACT

Salmonella sp. is widespread in poultry products. Infection can arise from contact and consumption of these products. The current study was aimed at isolating and determining the antibiotic susceptibility profile of species of *Salmonella* from chicken sold at Kure ultra-modern market Minna, Niger state. A total of 100 chicken intestine samples were obtained directly from the slaughter slab. Isolation was done on Brilliant green agar medium. Preliminary identification was carried out using biochemical tests. Antibiotic susceptibility profile of identified *Salmonella* species was carried out using the Kirby bauer disk diffusion method and results of the susceptibility test were used to determine the multiple antibiotic resistance index (MARI) of *Salmonella* Isolates. Molecular techniques were employed to confirm the identity of the isolates and determine the presence of selected antibiotic resistance genes. Results of the study revealed that the prevalence of *Salmonella* was 33.0%. The species of *Salmonella* was *Salmonella enterica*. Antibiotic susceptibility test of isolated *Salmonella* species revealed high susceptibility to Streptomycin (87.9%), Ciprofloxacin (81.8%), Gentamicin (78.8%), Chloramphenicol (78.8%) and Septrin (66.7%), while significant resistance levels were observed in Ceporex (60.6%), Nalidixic acid (42.4%) and Ampicillin (39.4%). The multiple antibiotic resistance index (MARI) of isolates ranged from 0.0 to 0.7, with 66.67% of the *Salmonella* isolates having MARI above 0.2. Among the *Salmonella* isolates 21.2% were multi-drug resistant (MDR) showing high level of resistance to various antibiotics. The high MARI and presence of plasmid mediated resistance genes in the *Salmonella* isolate indicates the need for prudent use of antimicrobial agents in poultry production in order to reduce the occurrence and spread of antibiotic resistance. The field study also revealed the need for enhancing hygiene and sanitation practices in poultry facilities/processing, educating poultry handlers and consumers about safe food handling.

KEYWORDS: Antibiotic, Poultry, *Salmonella spp,* Profile and Susceptibility.

EVALUATION OF LEAD ACETATE-INDUCED SH-SY5Y CELL LINE AS A MODEL FOR ALZHEIMER'S DISEASE- AN IN VITRO STUDY

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Abstract
Background: Alzheimer's disease (AD) is a progressive neurodegenerative disorder characterized by the accumulation of beta-amyloid plaques and cognitive dysfunction. Environmental neurotoxins such as lead (Pb) are implicated in AD pathogenesis. This study aims to establish an in vitro model for AD using SH-SY5Y neuroblastoma cells treated with lead acetate and assess its neurotoxic effects.
Methods: SH-SY5Y cells were cultured in DMEM supplemented with 10% foetal bovine serum and antibiotics. Cells were treated with increasing concentrations of lead acetate (2–10 μM) for 24 hours. Cytotoxicity was evaluated using the MTT assay, while cell viability was assessed using the Trypan blue exclusion method. The IC 50 concentration of lead acetate was determined to assess its inhibitory effect on cell growth.
Results: Lead acetate treatment resulted in a dose-dependent reduction in cell viability. The percentage of viable cells decreased significantly from 99.08% (control) to 10.90% at the highest concentration (10 μM). The IC 50 value of lead acetate was calculated to be approximately 5 μM. The MTT assay confirmed significant cytotoxicity, with the absorbance values progressively decreasing from 0.617 at 2 μM to 0.079 at 10 μM.
Conclusion: This study demonstrates that lead acetate induces significant neurotoxic effects in SH-SY5Y cells, mimicking cellular mechanisms implicated in Alzheimer's disease. The observed decrease in cell viability and dose-dependent cytotoxicity highlights the utility of SH-SY5Y cells as a promising model for studying lead-induced neurodegeneration and its role in AD pathogenesis**.**
Keywords: Alzheimer's Disease; Neurotoxins; Lead Acetate; Cytotoxicity; Lead-Induced Neurodegeneration

THE USE OF SOCIAL NETWORKING WEBSITES AS A RECRUITING PRACTICE

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ABSTRACT

The purpose of this paper is to highlight the technological impact of recent years on recruitment. Due to the mass digitalization of recruitment processes in most companies, recruiters are currently accustomed to recruiting candidates through social networks.

This paper analyzes the social media platforms most frequently used in recruitment and identifies their advantages and disadvantages. Based on the theoretical concepts presented and discussed in the first part of the paper, a questionnaire was created for the companies in the Western part of Romania. Using this questionnaire, there will be determined their preference regarding the method used in recruitment: online, traditional, or mixed and map interactively the social networking sites they use for recruitment.

Finally, we will be able to gain an overview of the level of digitalization of recruitment techniques and the use of social media platforms in such processes.

Regarding the robustness of this research, the results are relevant for the Western region of Romania, but because most of the analyzed companies operates at an international level, mostly in Europe, America and Asia, it results that the conclusions of this research can be relevant in some cases for the recruitment processes on an international level as well, serving as a reference tool for future research.

KEY WORDS: *recruitment, social media, social networks, digitization, Timis County.*

PORTRE RESİMLERİNDE EKSPRESİF YAKLAŞIMLAR; RICHARD GERSTL ÖRNEĞİ

EXPRESSIVE APPROACHES IN PORTRAIT PAINTINGS; THE EXAMPLE OF RICHARD GERSTL

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ÖZET

Portre resimleri, tarih boyunca bireylerin kimliklerini, kişisel özelliklerini ve toplumsal konumlarını ifade etme amacıyla kullanılan önemli bir sanatsal ifade biçimi olmuştur. Sanat tarihinin her döneminde, portre sanatının bireylerin yalnızca dış görünüşlerini yansıtmakla kalmayıp, aynı zamanda kimliklerini, karakterlerini ve sosyal statülerini yansıtma işlevi üstlendiği görülmektedir. 20. Yüzyılın başlarında Avrupa'da kök salan Ekspresyonizm akımı ise portre sanatına yeni bir boyut kazandırarak, bireyin içsel dünyasına, ruhsal çatışmalarına ve psikolojik derinliklerine odaklanan bir yaklaşım ortaya koymuştur. Savaşlar, toplumsal kargaşalar ve hızla değişen siyasi yapılarla şekillenen bu hareket, sanatçılara fiziki betimlemelerden uzaklaşarak, bireyin içsel deneyimlerini ve ruh hallerini daha belirgin bir biçimde resmetme olanağı sağlamıştır.

Ekspresyonist sanatçılar, bireyin duygu durumu ve psikolojik halini yansıtmada yoğun renkler, dinamik fırça kullanımı ve deformasyon kullanarak portre resimlerinde kendilerine özgü bir üslup geliştirmişlerdir. Bireyin iç dünyasını, kaygılarını, korkularını ve ruhsal çatışmalarını dışavurmayı amaçlayan bu yönelim, portre sanatında bir devrim olarak nitelendirilebilir. Özellikle, bireyin görünüşünden ziyade ruh haline ve duygusal yoğunluğuna odaklanarak, izleyiciyi resmedilen kişiye dair daha derin ve öznel bir bakış açısına davet etmektedir.

Bu çalışmada portre resimleri, bireyin içsel dünyasını keşfetme çabası olarak farklı bir yaklaşım bağlamında ele alınmaktadır. Bu bağlamda Avusturyalı sanatçı Richard Gerstl'in portre ve otoportre eserleri, sanatçının psikolojik derinliği ve bireysel çatışmaları nasıl betimlediğini değerlendirmek amacıyla, eser analiz yöntemiyle incelenmektedir. Gerstl'in, portre resimlerinde bireyin psikolojik durumuna vurgu yapan özgün ifade biçimi, ekspresyonist portre sanatının ruhuna dair önemli bir örnek teşkil ederek, sanatçının bireyin içsel hezeyanlarını yansıtmaya yönelik duyarlılığını da gözler önüne sermektedir.

Anahtar Kelimeler: Portre, Ekspresif, Psikolojik, Deformasyon.

ABSTRACT

Portrait paintings have been an important from of artistic expression used troughout history to Express the identities, personal characteristics and social positions of individuals. In every period of art history, it is seen that portrait art not only reflects the external appearances of individuals, but also their identities, characters and social status. The Expressionism movementi which took root in Europe in the early 20th century, brought a new dimension to portrait art, and presented an approach that focused on the inner world, spiritual conflicts and psychological depths of the individual. This movement, shaped by wars, social turmoil and rapidly changing political structures, provided artists with the opportunity to move away from physical descriptions and portray the individual's inner experiences and moods more clearly.

Expressionist artists developed a unique style in portrait paintings by using intense colors, dynamic brushwork and deformation to reflect the individual's emotional state and psychological state. This tendency, which aims to Express the individual's inner world, anxieties, fears and spiritual conflicts, can be described as a revolution in portrait art. In particular, by focusing on the individual's state of mind and emotional intensity rather than their appearance, it invites the viewer to a deeper and more subjective perspective on the person depicted.

In this study, portrait paintings are examined in a different approach context as an effort to discover the inner world of the individual. In this context, portrait and self-portrait works of Austrian artist Richard Gerstl are examined with the method of work analysis in order to evaluate how the artist depicts psychological depth and individual conflicts. Gerstl's unique form of expression, which emphasizes the psychological state of the individual in his portrait paintings, constitutes an important example of the spirit of expressionist portrait art, and also reveals the artist's sensitivity to reflect the inner delusions of the individual.

Keywords: *Portrait, Expressive, Psycholoogical, Deformation.*

KÜRESELLEŞMENİN YOKSULLUK VE GELİR DAĞILIMI ÜZERİNDEKİ ETKİLERİ: ÖZBEKİSTAN ÖRNEĞİ

EFFECTS OF GLOBALIZATION ON POVERTY AND INCOME DISTRIBUTION: THE CASE OF UZBEKISTAN

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ÖZET
Ekonomik faaliyetlerin son dönemlerde bir ivme kazandığı görülmektedir. Dünya ekonomisindeki bu ivmelenmede ulaşım ve iletişim teknolojisindeki gelişimlerin etkili olduğunu söylemek mümkündür. Küreselleşme olarak ifade edilen bu süreçte önceki döneme kıyasla hem üretim hem de tüketim hacminde artışlar meydana gelmiştir. Ancak küreselleşmeye bağlı olarak toplam tüketim hacmindeki artış bütün tüketicilerin tüketim olanaklarının eşit oranda arttığı anlamına gelmemektedir. Küreselleşme sürecinde elinde sermaye bulunduran ve bu sermayeyi yatırımlara yönlendiren kesimden bireyler zenginleşirken bu süreci çeşitli nedenlerle verimli değerlendiremeyen kesimden bireyler ekonomik olarak gerilemiştir. Aynı zamanda bu süreçte finansal kaynaklar dengesiz bir şekilde dağılım göstermiştir. Bu ise doğal olarak gelir dağılımının dengesiz bir şekilde gelişim göstermesine ve bir tarafta mutlu bir azınlığın, diğer tarafta ise mutsuz bir çoğunluğun ortaya çıkmasına neden olmuştur. Her ülke ve toplum için gelir dağılımında dengenin sağlanması, toplumsal huzur ve refahın sağlanması açısından son derece önemlidir. Zira gelir dağılımında dengenin sağlanmış olması toplumu oluşturan bireylerin birbirlerine yakın bir gelir düzeyine sahip olması anlamına gelecektir ve böylelikle o toplumda yoksulluk sorunu minimize edilebilecektir. Hazırlanmış olan bu çalışma ile öncelikle küreselleşme sürecinin gelir dağılımı üzerindeki etkilerine yönelik teorik bilgilere yer verilecek, daha sonra da küreselleşme sürecinin Asya kıtasının gelişim gösteren ülkelerinden biri olan Özbekistan'daki gelir dağılımını nasıl etkilediği ve ülkedeki yoksulluk düzeyinin hangi seviyelerde olduğu ortaya konulacaktır.
Anahtar Kelimeler: Küreselleşme, Yoksulluk, Gelir Dağılımı, Özbekistan

ABSTRACT
It seems that economic activities have gained momentum in recent years. It is possible to say that the developments in transportation and communication technology are effective in this acceleration in the world economy. In this process, referred to as globalization, there have been increases in both production and consumption volumes compared to the previous period. However, the increase in total consumption volume due to globalization does not mean that the consumption opportunities of all consumers increase equally. While individuals who hold capital and direct this capital to investments have become richer during the globalization process, individuals who cannot use this process productively for various reasons have declined. At the same time, financial resources were distributed unevenly in this process. This naturally led to an unbalanced development of income distribution and the emergence of a happy minority on one side and an unhappy majority on the other. Ensuring balance in income distribution for every country and society is extremely important in terms of ensuring social peace and prosperity. Because achieving balance in income distribution will mean that the individuals who make up the society have an income level close to each other, and thus the problem of poverty in that society can be minimized. With this prepared study, firstly theoretical information will be given about the effects of the globalization process on income distribution, and then it will be revealed how the globalization process affects the income distribution in Uzbekistan, one of the developing countries of the Asian continent, and what the poverty level in the country is.
Key Words: Globalization, Poverty, Income Distribution, Uzbekistan

TEKSTİL TABANLI ELEKTROMANYETİK GİRİŞİM KALKANLAMAYA SİMÜLASYON ORTAMINDA BİR ÖRNEK
AN EXAMPLE OF TEXTILE-BASED ELECTROMAGNETIC INTERFERENCE SHIELDING IN SIMULATION ENVIRONMENT

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ÖZET
Radyo, radar, GPS ve Wi-Fi gibi yüksek empedanslı ve yüksek frekanslı iletişim araçlarından kaynaklanan elektromanyetik (EM) dalgalar, EM girişiminin (EMI) ve dolayısıyla radyasyon kirliliğinin ana nedenleridir. Bu olumsuz durumdan korunmak için uygulanabilecek yöntemlerin başında 'EMI Kalkanlama' gelmektedir. Bu yöntemde, etkili bir korunma sağlanması için çeşitli malzemeler kullanılır. Bunlardan en önemli ve yaygın olanlarından biri tekstil bazlı malzemelerdir. Bu çalışmada, yüksek kalkanlama etkisine sahip tekstil bazlı bir EMI koruyucu malzemenin simüle edilmesi amaçlandı. Malzeme iletkenliği, gözeneklilik ve kalınlık gibi EMI ekranlama performansını etkileyen parametreler ANSYS HFSS yazılımı ile optimize edilerek simülasyon ortamında bir model oluşturuldu. Buna göre, elde edilen sonuç değerleri yorumlanarak, EMI'nın faydaları hakkında detaylı bilgi verildi.
Anahtar Kelimeler: EMI Kalkanlama, Dalga Kılavuzu, Metal Kaplamalı Tekstil, HFSS

ABSTRACT
Electromagnetic (EM) waves arising from high-impedance and high-frequency communication tools such as radio, radar, GPS, and Wi-Fi are the main causes of EM interference (EMI) and therefore radiation pollution. 'EMI Shielding' is one of the primary methods that can be applied to protect against this negative situation, and various materials are used for this purpose. One of the most important and common of these is textile-based materials. This paper aimed to simulate a textile-based EMI shielding material with high Shielding Effectiveness (SE). Parameters that affect the EMI shielding performance such as material conductivity, porosity and thickness were optimized with ANSYS HFSS software and a model was created in the simulation environment. Accordingly, the obtained result values were interpreted and information was given about EMI SE.
Keywords: EMI Shielding, Waveguides, Metal Coated Textile, HFSS

ELEKTROMANYETİK GİRİŞİM KORUYUCU MALZEMELERİNE GENEL BİR BAKIŞ
AN OVERVIEW OF THE ELECTROMAGNETIC INTERFERENCE SHIELDING MATERIALS

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ÖZET
Kablosuz telekomünikasyon sistemlerinin, TV/Radyo iletim sinyallerinin ve web teknolojilerinin gelişmesine paralel olarak dünya çapında elektromanyetik (EM) radyasyon kirliliği oluşmaya başlamıştır. Bu kirlilikten kaynaklanan EM girişimi (EMI), insanlar ve diğer canlılar için sağlık sorunlarına neden olacak düzeyde olabilir. Ayrıca EMI elektronik cihazlara da zarar verebilir. Bu nedenle son yıllarda araştırmalar EMI'yi önlemeye veya olumsuz etkilerini en aza indirmeye odaklanmıştır. Elektromanyetik dalgaların ve dolayısıyla onların bir türü olan mikrodalgaların elektrik ve manyetik alan olmak üzere birbirine dik bileşenleri vardır. Mikrodalga radyasyonuna maruz kalındığında, bu bileşenlerin her ikisinin de ortadan kaldırılmasıyla etkili emilim sağlanabilir. Bu durumun sağlanması için günümüzde yaygınlaşan en önemli yöntemlerden biri 'Elektromanyetik Kalkanlama' malzemelerinin kullanılmasıdır. Bu makale, EMI koruma amacıyla kullanılabilecek malzeme ve katkı maddelerinin özelliklerine, iç yapılarına ve türlerine genel bir bakış sağlayacaktır.
Anahtar Kelimeler: Elektromanyetik Kirlilik, EMI Kalkanlama, İletken Tekstiller

ABSTRACT
In parallel with the development of wireless telecommunication systems, TV/Radio transmission signals, and web technologies, electromagnetic (EM) radiation pollution has begun to occur worldwide. EM interference (EMI) resulting from this pollution may be at a level causing health problems for humans and other living things. In addition, EMI can cause damage to electronic devices. For this reason, researches have focused on preventing EMI or minimizing its negative effects in recent years. Electromagnetic waves, and therefore microwaves, which are a type of them, have perpendicular components: electric and magnetic fields. When exposed to microwave radiation, effective absorption is achieved by eliminating both of these components. One of the most important methods that has become widespread today is using 'Electromagnetic Shielding' materials to achieve this situation. This paper will provide an overview of the properties, internal structures, and types of materials and additives that can be used for EMI shielding purposes.
Keywords: Electromagnetic Pollution, EMI Shielding, Conductive Textile Materials

REFULYEDEYN HADİSLERİNE HANEFİLER VE ŞÂFİLER ÖZELİNDE EHL-İ REY VE EHL-İ HADİS BAKIŞI

THE VIEW OF AHL AL-RAYY AND AHL AL-HADITH WITH SPECIAL REFERENCE TO HANAFIS AND SHAFI'IS ON THE HADITHS OF REFULYEDAYN

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Prof. Dr. Öğretim Üyesi Kayseri Üniversitesi Develi İslami İlimler Fakültesi, Temel İslam Bilimleri Bölümü, İslam Hukuku Ana Bilim Dalı
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ÖZET

İslam dinine girmek için iman şartlarını kabul etmek zorunludur. İslam dinini kabul edip iman ettikten sonra kişi Müslüman adını almaktadır. İslam'ın beş şartından biri ve en önemlisi namaz kılmaktır. Namazın hükmü kitap, sünnet ve icma ile sabittir. Namazın kaç rekât olduğunu ve nasıl kılınacağını Hz. Peygamber (s.a.v.) ashabına öğretmiştir. Bu konuda tek örnek O'dur. Nitekim "Beni nasıl namaz kılarken gördüyseniz öylece namaz kılın." buyurarak bu konuda kendisine bakılmasını emretmiştir. Hz. Peygamber (s.a.v.)'in bu hadisi hadisçiler ve fakihleri ideal olan namazı tesbit etmeye ve kılınma şeklini belirleme gayretine sevk etmiştir. Namazın rükünleri konusunda tam bir mutabakat olmakla birlikte, muhaddisler ve fakihler arasında sünnet olarak değerlendirilen kısımlarda ihtilaflar meydana gelmiş ve birtakım fiiller farklı şekilde aktarılmıştır. Bu farklardan en dikkati çekenlerden biri namazda ruküya giderken ve rukûdan kalkarken ellerin kaldırılıp kaldırılmaması konusudur. Bu konuda cumhur olarak bilinen ve Şafiilerin temsil ettiği grup ile diğer taraftan rey ekolu olarak bilinen ve Hanefilerin temsilcisi olduğu grup gelmektedir.

Cumhur ruküya giderken ve rukûdan kalkarken ellerin kaldırılmasının sabit bir sünnet olduğunu dile getirmekle birlikte azda olsa bir kısın ulema namazda ellerin kaldırılmamasını sünnete muhalefet olarak değerlendirmiştir. Hanefilere mensup ulema ise kendilerine has usul açısından değerlendirip refu'l yedeynin kuvvetli bir sünnet olmadığını dile getirmişlerdir. Az da olsa bazı alimler namazda elleri kaldırmayı ameli kesir olarak değerlendirip namazı bozacağını ifade etmişlerdir.

Bu meseledeki ihtilafın kaynağı mezheplerin hadisleri değerlendirirken kullandıkları usul ve hüküm çıkarmadaki metot farklılığından kaynaklandığını söylemek mümkündür. Asıl itibariyle namazın farzlarından olmayan bir mesele olması sebebiyle avamı nasda bir karşılığı olmayan ve alimler arasında medarı münakaşa olmuş has bir mesele gibi durmaktadır. Bizim bu çalışmamızda ifade etmek istediğimiz cumhur ve Hanefilerin arasındaki bu ihtilafın kaynaklarına inmek suretiyle alanda çalışılmış makale ve kitaplardan yararlanarak ihtilaf ettikleri meselelere bir bakış atmaktır.

Anahtar Kelimeler: Elleri kaldırma, Namaz, Rukü, Hanefi, Cumhur

ABSTRACT

In order to enter the religion of Islam, it is obligatory to accept the conditions of faith. After accepting and believing in Islam, a person is called a Muslim. One of the five pillars of Islam and the most important one is prayer. The ruling of prayer is fixed by the book, sunnah and ijma. The Prophet (PBUH) taught his companions how many rak'ahs the prayer is and how to perform it. He is the only example in this regard. In fact, he commanded his companions to follow him in this matter by saying, 'Pray as you have seen me praying.' The Prophet (peace and blessings of Allaah be upon him) said, 'Pray as you have seen me praying. This hadith of

the Prophet (PBUH) prompted the hadith scholars and jurists to endeavour to determine the ideal prayer and the way it should be performed. Although there is a complete consensus on the rites of prayer, there have been disagreements among the muhaddithis and jurists on the parts that are considered as sunnah, and some actions have been transmitted differently. One of the most striking of these differences is whether or not to raise the hands when going to and rising from ruku' in prayer. On this issue, there is the group known as the republic and represented by the Shafi'is, and on the other hand, there is the group known as the school of rey and represented by the Hanafis.

Although the people state that raising the hands while going to and rising from ruku is a fixed sunnah, a small number of scholars have considered not raising the hands in prayer as opposition to the sunnah. The Hanafi scholars, on the other hand, evaluated it from the point of view of their own methodology and stated that refu'l sevayn is not a strong sunnah. Some scholars, albeit a few, considered raising the hands in prayer as ameli kesir and stated that it would invalidate the prayer.

It is possible to say that the source of the disagreement in this issue stems from the difference in the methodology used by the sects in evaluating the hadiths and the methodology used in drawing conclusions. Since it is a matter that is not one of the obligatory parts of the prayer, it seems to be a special issue that has no equivalent in the common sense and has been a matter of dispute among scholars. What we want to express in this study is to go down to the sources of this dispute between the republic and the Hanafis and to take a look at the issues they dispute by making use of articles and books that have been studied in the field.

Keywords: Raising hands, Prayer, Ruku, Hanafi, Cumhur

EXPLORING THE PROFOUND INTERCULTURAL LEGACY OF THE VIKINGS: A THOUGHT-PROVOKING JOURNEY INTO HERITAGE AND HISTORICAL MEMORY, INCLUDING THE CONCEPT OF 'OTHER THINGS'

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My academic journey has been truly global, crossing borders and cultures. I was privileged to participate in the Zhejiang University Global Summer Program, a comprehensive academic program in which I explored Inclusive Development at the School of Public Affairs online from August 1 to 15, 2022. This international exposure, which included [specific activities or courses], significantly enriched my academic viewpoint and deepened my understanding of global issues, connecting me to a larger educational community.

Public Affairs, August 1-15, 2022, Online

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During my tenure as a Book Pecker Fellow at Peace X, India (April 1, 2021- September 1, 2021, Online), I was honoured to be recognized as the best fellow in the social science department. This recognition inspired me to further my academic pursuits. I also obtained a computer literacy Certificate in Migration Studies from GRFDT, New Delhi, India (September 2020-March 2021, Online).

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Abstract: The Vikings' legacy in the medieval North Atlantic presents a compelling narrative of intercultural exchange, mainly through their interactions with the indigenous peoples of North America. Vital historical texts, such as the Vinland Sagas, the Groenlandia Saga, and the Eiríks Saga trauma, provide essential insights into these encounters. These sagas recount Norse seafarers' voyages and illuminate the significant cultural exchanges between them and the indigenous communities in Greenland and North America. These narratives show a dynamic relationship characterized by trade and cultural fusion. The exchanges facilitated the sharing of material goods, ideas, and technologies that enriched both societies, resulting in diverse traditions and practices. For instance, Norse settlers likely adopted specific indigenous agricultural techniques, while indigenous peoples may have integrated Norse craftsmanship and maritime technologies into their practices. Artistic collaboration and intertwined religious beliefs further underscore the depth of these interactions, suggesting that the Vikings' legacy is not merely one of conquest but rather a multifaceted story of cultural hybridity. Norse sagas, complemented by indigenous oral traditions, reveal these intricate connections and the shared experiences that shaped life during this time. This exploration challenges simplistic narratives centred on hostility, instead showcasing an era marked by collaboration and cultural exchange that profoundly influenced the region's identities and histories. The interactions prompted communities to exchange material goods, culinary traditions, and social practices, enriching their ways of life. This essay aims to delve deeper into the realm of the medieval North, explicitly focusing on the insights gleaned from the Viking experience, mainly through the lens of the term "other things." This term reflects the sociocultural collaboration among diasporas and within their respective communities during that time. It emphasizes the necessity of considering all aspects of historical events to understand history comprehensively. The methodology employed in this study includes documentary analysis and a qualitative approach, emphasizing a detailed examination of historical accounts and contemporary interpretations. The essay's central question explores how "other things" can be utilized to understand sociocultural amalgamation, foster community involvement, and facilitate a deeper engagement with the past and the present. In doing so, it aims to highlight the richness of human relationships across diverse cultures and historical contexts.

Keywords: Vikings, Intercultural exchange, Heritage, Historical memory, Sagas, Indigenous peoples, North America, Greenland, Cultural fusion, Trade, Agricultural techniques Craftsmanship, Maritime technologies, Artistic collaboration, Religious beliefs, Cultural hybridity, Oral traditions, Collaboration, Identity, Global perspectives, Cross-cultural communication.

THE IMPACT OF SOCIAL AND EMOTIONAL LEARNING (SEL) PROGRAMS ON CHILDREN IN CONFLICT-AFFECTED AREAS

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ABSTRACT

It has become apparent that social and emotional learning programs are critical strategies in attending to the needs of children in conflict situations. It seeks to improve child's emotional mental health, reduce violent tendencies, increase school completion rates and prepare for workforce, in short, improving child's functioning despite unfavorable circumstances. Writing about SEL, academic works suggest that exposure to violence, trauma, and instability that are typical in conflict regions, can be at least partially neutralized through SEL interventions. SEL programs include five competencies: SEL incorporates understanding of feelings, controlling or managing feelings, perceiving other's feelings, handling interpersonal relationships, as well as being able to make right decisions; SEL enables a child to identify feelings, how to deal with stress, friendship and decision making. In the previous research, students exposed to SEL programmes have been found to have better performance, better self-regulation, and competent social relations. SEL is implemented in various learning systems in conflict affected systems to foster safety in learning institutions. Proven interventions like the Healing Classrooms by the International Rescue of Children Education have shown positive success in raising learning achievements as well as, social well-being among children in crisis settings. Moreover, SEL interventions have also been associated with positive effects to cohesion and stability of the community, which enable the community to turn down violent extremism. However, there still several issues that exist on the use of SEL programs in conflict situations, particularly in school settings, these include; lack of finances, culture, and contextual differences. However, more current practice-based research partnerships persist in enhancing the SEL approaches to guarantee their relevance and feasibility to deliver in the different conflict-ridden zones. Hence, SEL programs appear to be instrumental in rebuilding the child and youth as well as helping them and the community constructively adapt to conflict and crises in their regular lives.

Keywords: Social and Emotional Learning (SEL), Conflict-Affected Areas, Child Development, Emotional Regulation, Resilience, Educational Interventions.

AI-DRIVEN PERSONALIZATION IN TOURISM: ANALYZING SUSTAINABLE TRAVEL PREFERENCES WITH MACHINE LEARNING

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ABSTRACT

Artificial Intelligence (AI) is revolutionizing the tourism industry by delivering hyper-personalized travel experiences and fostering sustainable practices. This study explores the adoption of AI-driven recommendations for eco-friendly travel, focusing on the interplay of perceived cost-benefit ratios, trust in AI systems, and environmental values among 157 tourists. The research identifies critical drivers of AI adoption, offering actionable insights into its transformative role in sustainable tourism. Perceived cost-effectiveness significantly predicts adoption (Odds Ratio = 2.87, $p < .001$), highlighting its critical role in encouraging AI adoption for sustainable travel. Trust in AI systems emerges as a significant predictor, doubling the likelihood of adoption with incremental increases in trust levels. Furthermore, tourists with strong environmental values are 15 times more likely to recognize AI's potential in monitoring environmental impacts and promoting sustainable behaviors, underscoring the synergy between eco-consciousness and AI personalization. This study underscores how AI can align ethical system design with sustainable personalization, providing stakeholders actionable pathways to enhance trust and adoption. By integrating behavioral data with machine learning insights, it provides practical strategies for tourism stakeholders to develop transparent, cost-effective, and sustainability-oriented AI platforms. These findings contribute to advancing global sustainability goals while enhancing trust and engagement in AI technologies.

Keywords: sustainable tourism, artificial intelligence, eco-friendly travel, machine learning, personalization, ethical AI.

TARİH DERS KİTAPLARINDA ORTAÇAĞ: 1941-2024

THE MIDDLE AGES IN HISTORY COURSEBOOKS: 1941-2024

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ÖZET

Türk eğitim sisteminde kullanılan lise tarih ders kitapları aracılığıyla Ortaçağ'ın, özellikle Avrupa'nın, görsel ve yazılı araçlar yoluyla kavramsallaştırılması, öğrencilerin öğrenme deneyimlerinde etkili olmaktadır. Tarih öğretiminde Ortaçağ konusunun işlenmesi sorunlu bir alana işaret etmektedir çünkü her şeyden önce karanlık olarak nitelenen Ortaçağ Türk-İslam dünyasında ilk gözlemevlerinin kurulduğu, ilk mekanik robotun yapıldığı, ilk üniversitelerin açıldığı ve bilimsel ilklerin gerçekleştirildiği bir dönem olmuştur ki aynı hızda olmasa da Avrupa Ortaçağı da bilimsel ilerlemenin yaşandığı bir dönemdir. Türkiye'deki Tarih ders kitaplarında Ortaçağ Avrupa'sının yazılı ve görsel temsillerini çözümlemek ve ders kitapları içerikleri ile tarih şuuru ilişkisine katkıda bulunmak bu çalışmanın temel amacıdır. Çalışmada, alanyazın taraması ve ders kitaplarının incelemesi teknikleri kullanılmaktadır. Araştırma, eğitim materyallerindeki görsel ve dilsel araçların önemini vurgularken, bu araçların gelecekteki potansiyelini tartışmaya da katkı sağlamak hedeflenmektedir. Çalışmada, tarih ders kitaplarında Ortaçağ'ın sunumu ayrıntılı bir şekilde ortaya konulmaktadır. İncelenen kitaplarda Ortaçağ'ın siyasi, askeri, ticari, sosyal ve kültürel bağlamda nasıl yer aldığı incelenerek dönemin ders kitapları aracılığıyla aktarımındaki sorunlu alanlar vurgulanacaktır. Güncel ders kitaplarının, Ortaçağ konularını modern pedagojik yaklaşımların kriterleriyle nasıl sunduğu değerlendirilecektir. Elde edilen bulgular, tarih ders kitaplarının içerik geliştirmesine katkı sağlamayı amaçlamaktadır. Sonuç olarak, gelişen teknolojiler ışığında, eğitim araçlarının öğrenme süreçlerine entegre edilmesine yönelik öneriler da sunulmaktadır.

Anahtar sözcükler: Ortaçağ, Ders Kitapları, Materyal İnceleme, Doküman Analizi

ABSTRACT

The conceptualization of the Middle Ages through visual and written tools in high school history textbooks used in the Turkish education system is fundamental to students' learning experiences. The treatment of the Middle Ages in history teaching points to a problematic area because, first, the Middle Ages, which is unfortunately conceived as dark, was a period in the Turkish-Islamic world when the first observatories were established, the first mechanical robot was built, the first universities were opened, and scientific firsts were realized. In Europe, the age also included similar scientific developments, albeit slower in progress. Hence, the primary purpose of this study is to analyze the verbal and visual representations of the Middle Ages in history textbooks in Turkey. The study uses a literature review and textbook analysis as primary methods and emphasizes the importance of visual and linguistic tools in educational materials in light of new technologies. In the study, the significance of this period is checked on by analyzing the political, military, commercial, social, and cultural contexts of the Medieval world

as represented in the textbooks under study. It evaluates how the textbooks of the contemporary period present medieval realities with the criteria of modern pedagogical approaches. The findings obtained aim to contribute to the content development of history textbooks. In light of developing technologies, it offers suggestions for integrating educational tools into the learning processes.

Keywords: Middle Ages, Coursebooks, Textbooks, Material Assessment, Document Analysis

ENGELLİLİK KURAMI VE EDEBİYAT ARAŞTIRMALARINDA KULLANIMI ÜZERİNE

ON DISABILITY THEORY AND ITS USES IN LITERARY STUDIES

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ÖZET
Günümüzde engellilik ve engelli bireylerin topluma katılımı bugün bütün devletlerin ve kurumların işleyişlerine etki eden olan önemli bir gündem maddesidir. Daha çok çıkarılan yasa ve yönetmeliklerle engellilerin iş dünyasına, eğitim yaşamına ve belediyecilik ve kamusal alan boyutlarında toplumsal ve çevresel yaşama katılımını sağlanmasının amaçlandığı günümüzde hükümetler engelli bireylerin ulaşım, yerleşim ve sağlık hizmetlerinden yararlanmaları gibi hususlarda çalışmalar yapmaktadır. Bütün bu olumlu çaba ve onun getirdiği değişimlere karşın, engellilik salt yasalar boyutunda ele alınması gereken bir gerçeklik değildir. Toplumbilim ve eğitim araştırmalarının da ortaya koyduğu gibi engellilik yasa ve yönetmeliklerde olduğu kadar bireysel ve toplumsal zihniyette de değişiklikler yapılmasını gerektiren çok boyutlu bir olgudur ve sadece sosyoloji, eğitim, hukuk ve ilahiyat gibi alanların değil edebiyat ve kültür çalışmalarının da gündeminde bulunması gereken çarpıcı bir çalışma alanıdır. Bu çalışmada da, edebiyat ve engellilik ilişkisi kuramsal olarak ele alınmaktadır. Mevcut alan yazının taranması ve derlenen kuramsal bilgilerin "Engellilik Kuramı nedir?" sorusuna yanıt vermesi çalışmanın temel amacıdır. Çalışma, ikincil olarak, "Engellilik Kuramı edebiyat araştırmalarında nasıl kullanılır?" sorusuna yanıt aramaktadır. Bu soruya yanıt vermek için de, ulusal ve uluslararası alanyazının taranması ile edilen ilgili bilimsel çalışmalar sınıflandırılmakta ve örnek uygulamalar ülkemiz araştırmacılarına fikir vermesi ve benzer araştırmaları planlayabilmeleri amacıyla önerilmektedir. Sonuç olarak bu çalışmada Engellilik Kuramının tanımlanmasının ardından, edebi eser incelemelerinde Engellilik Kuramının kullanıldığı çalışmalar sınıflandırılarak uygun alt başlıklar halinde araştırmacıların hizmetine sunulmaktadır.
Anahtar Kelimeler: Engellilik Kuramı, Engellilik, Edebiyat Kuramı, Edebi İnceleme

ABSTRACT
Disability and the participation of individuals with disabilities in society constitute a significant agenda item for all governments and institutions today. Today, efforts are increasingly made to enact laws and regulations to facilitate the integration of individuals with disabilities into the workforce, educational life, and public and environmental spheres, including municipal services. Governments are undertaking initiatives to ensure access to transportation, housing, and healthcare services for individuals with disabilities. Despite these positive efforts and the transformative changes they have brought, disability is not a reality that can be addressed solely through legislation. As demonstrated by studies in sociological and educational research, disability is a multidimensional phenomenon that requires changes not only in legal frameworks but also in mindsets at individual and societal levels. It is a striking area of study that deserves attention from fields like sociology, education, law, theology, literature, and cultural studies.

This study primarily approaches the relationship between literature and disability from a theoretical perspective. Its primary aim is to review the existing literature and compile theoretical insights to answer the question, “What is Disability Theory?” The study's secondary objective is to explore the question, “How can Disability Theory be applied in literary research?” The analysis classifies relevant scientific works by reviewing national and international literature to address this question. It proposes sample applications to inspire researchers in our country and assist them in planning similar studies. In conclusion, after defining Disability Theory, the study categorizes research that employs Disability Theory in analyzing literary works. These findings are presented under appropriate subheadings to serve as a resource for researchers.
Keywords: Disability Theory, Disability, Literary Theory, Literary Analysis

POSSIBILITIES OF UTILIZING NEW VERY HIGH RESOLUTION DEM IN TURKISH FORESTRY

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ABSTRACT
Türkiye has come a long way since the introduction of first nationwide topographic map coverage in 1959-60. Since then, many distinctly scaled topographic, geologic, administrative, etc. maps have been produced and put into service with the interested parties, domains and projects. Due to including considerable amount of surface and land-cover detail, 25000 scaled topographic maps have been at the forefront of many scientific and infrastructure related works. Topographic maps have always been produced through stereo air-photo based photogrammetric techniques. Since the fourth quarter of the 2000s and along with the advancing technology, map production from the air-photo capture to the final digital raster product has entirely turned to digital means and capabilities. Thus, one last addition to the long list of successful cartographic accomplishments carried out by the General Directorate of Mapping has been introduced as the new 0.3 m national baseline digital elevation model (DEM). The initial visual investigation of this unusually high-resolution new DEM has revealed that it might open new horizons in various disciplines such as cadastral planning, agriculture, forestry, natural disaster mitigation, national defense, etc. In forestry particularly, forest management, watershed management and transport planning activities might benefit from this data. In this study, the usage possibilities of this new 0.3 m baseline DEM in Turkish forestry were elaborated through visual comparisons that had been captured from related domains within the raster DEM.
KEYWORDS: Digital elevation models, Forestry, Land management, Transport planning

THE INVESTMENT CLIMATE OF KYRGYZSTAN REGIONS

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Abstract

The investment climate is a pivotal factor influencing the economic development of regions, particularly in developing countries like Kyrgyzstan. This study aims to investigate the investment climate across various regions of Kyrgyzstan and to propose actionable recommendations for its enhancement. The research objectives include assessing the current investment conditions, identifying key determinants of regional investment attractiveness, conducting a comparative analysis with international benchmarks, and formulating strategies for improvement.

Employing a comprehensive methodology, the study integrates quantitative analysis of statistical data regarding foreign investment inflows, economic activity levels and infrastructure development.

The novelty of this research lies in its systematic examination of the regional investment climate in Kyrgyzstan, emphasizing unique regional characteristics and challenges. Unlike existing studies, this paper will incorporate new data and successful practices from other countries while offering concrete recommendations tailored to the Kyrgyz context.

In conclusion, the findings will summarize the current state of investment climates across Kyrgyzstan's regions and highlight areas for future research. The study underscores the necessity for a holistic approach to improving the investment climate which should encompass both governmental initiatives and active participation from the business sector.

Key recommendations include implementing reforms in tax and legal frameworks to simplify business operations, enhancing infrastructure and transportation networks to improve regional accessibility, strengthening local governance institutions for greater accountability and transparency, establishing support programs for small and medium-sized enterprises - especially in remote areas - and actively engaging international organizations for financing developmental projects.

Key words: investment climate, region, investment attractiveness, sustainable development, investment potential.

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TÜRKİYE KÖMÜRLERİNİN ANALİZE DAYALI OLARAK EKONOMİYE KAZANDIRILMASI

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ÖZET
Kömür, organik madde olarak bitkisel kökenli kalıntılar ve inorganik bileşenlerden meydana gelen bir tortul kayaçtır. Bataklık ortamlarında bitki ve ağaç kalıntılarının zamanla birikerek çökmesi ve milyonlarca yıl süren kimyasal ve fiziksel değişimlerle şekil alması sonucu oluşur. Kömür, konvensiyonel fosil yakıt olup rezervleri bölgenin özelliklerini, yağış durumunu yansıtmaktadır. Neredeyse iki yüzyıldır temel enerji kaynaklarından biri olma özelliğini sürdürmüştür. Bu süreçte yeni enerji kaynaklarının ortaya çıkması ve özellikle kömürün çevresel etkileri nedeniyle son yıllarda çokça eleştirilmesine rağmen, dünya için kömür vazgeçilmez olmaya devam etmektedir. Dolayısıyla, günümüzde de güncelliğini koruyan kömür, ısınmanın yanı sıra çeşitli sektörlerde küresel enerji tüketiminin en önemli bileşenlerinden biridir. İçerdikleri kil, kum ve çeşitli oranlarda inorganik maddeler, kömürün kalitesini doğrudan olumsuz etkiler. Kok kömürü üretiminde şişme indeksi yüksek, gözenekli, dayanıklı ve oksitlenmemiş kaliteli kömürler kullanılırken, yakıt olarak kullanılan kömürlerde düşük kül, kükürt ve nem oranına sahip, ısıl değeri yüksek kömürler kullanılmaktadır. Ülkemizde kül ve kükürt oranı yüksek genç kömür rezervinin fazla olması; çevre sağlığı sebebiyle temiz kömür teknolojileri çalışmalarının artmasına sebep olmuştur. Kömürün yakıt özellikleri ve kimyasal bileşenlerine göre uygulamalarda kullanım yerlerini tespit etmek gerekir. Bu çalışmada ilk defa Tunçbilek, Soma kömür ocaklarından alınan numunelerin zenginleştirilmeden, analizlerine dayalı olarak bölgesel ve teknik uygulamalar dikkate almak suretiyle ekonomiye kazandırılması amaçlanmıştır.
Anahtar Kelimeler; Kömür, Kütahya/Tunçbilek, Manisa/Soma, Kömür analizi

BRINGING TÜRKİYE'S COAL INTO THE ECONOMY BASED ON ANALYSIS

ABSTRACT
Coal is a sedimentary rock consisting of plant-based residues and inorganic components as organic matter. It is formed as a result of the accumulation and collapse of plant and tree residues in swamp environments and their shaping through chemical and physical changes lasting millions of years. Coal is a conventional fossil fuel and its reserves reflect the characteristics of the region and the precipitation status. It has continued to be one of the basic energy sources for almost two centuries. Despite the emergence of new energy sources in this process and the fact that coal has been criticized a lot in recent years due to its environmental effects in particular, coal continues to be indispensable for the world. Therefore, coal, which still maintains its relevance today, is one of the most important components of global energy consumption in various sectors as well as warming. The clay, sand and inorganic substances in various proportions they contain directly negatively affect the quality of coal. While high-swelling-index, porous, durable and unoxidized quality coals are used in coke production, coals with low ash, sulfur and moisture content and high calorific value are used in coals used as fuel. The abundance of young coal reserves with high ash and sulfur content in our country; due to

environmental health, it has caused an increase in clean coal technology studies. It is necessary to determine the usage areas of coal in applications according to its fuel properties and chemical components. In this study, it was aimed to add samples taken from Tunçbilek, Soma coal mines to the economy for the first time without enrichment, by taking into account regional and technical applications based on their analysis.

Keywords; Coal, Kütahya/Tunçbilek, Manisa/Soma, Coal analysis

FIRINCILIK ÜRÜNLERİNDE POLİSİKLİK AROMATİK HİDROKARBONLARIN (PAH) VARLIĞI VE AZALTMA YÖNTEMLERİ

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ÖZET
Fırıncılık ürünleri, günlük beslenmede önemli bir yer tutmaktadır ve bu ürünlerin güvenliği, tüketici sağlığı açısından kritik öneme sahiptir. PAH, fırıncılık süreçlerinde ortaya çıkabilen zararlı bileşiklerdir. PAH'ların akut toksisitesi düşük olmasına rağmen, birçok PAH'ın farklı türlerde kanserojen olduğu belirtilmiştir. Gıdalardaki PAH varlığı, çevresel birikimlerin yanı sıra, gıda hazırlama ve üretiminde kullanılan termal işlem süreçlerinin sonucudur. Isıl işlemler, tütsüleme, kızartma, ızgara, fırınlama ve kızartma gibi prosesler, potansiyel olarak yüksek gıda kontaminasyonu seviyelerinin ana nedeni olarak kabul edilmektedir. Bunun yanında fırıncılık ürünlerinin pişirilmesinde kullanılan yakıt türleri de PAH kontaminasyonuna neden olmaktadır. Mazot ile çalışan fırınlardan elde edilen ürünlerde en yüksek PAH konsantrasyonlarına ulaşılmıştır.
Özellikle ekmek, bisküvi ve diğer unlu mamullerin üretiminde, yüksek sıcaklıklarda yapılan ısıl işlemler sırasında PAH'ların oluşumu mümkündür. Bu kimyasallar, organik maddelerin eksik yanması veya pişirme sırasında oluşan duman ve yağların yanmasıyla meydana gelir. Fırıncılık ürünlerinin içindeki PAH seviyeleri, kullanılan ham maddelerin kalitesi, fırınlama sıcaklığı ve süresi gibi faktörlere bağlı olarak değişiklik göstermektedir.
Yüksek PAH konsantrasyonları, insan sağlığına potansiyel tehdit oluşturabilir; bu nedenle, fırıncılık ürünlerinin üretiminde bu bileşenlerin kontrol edilmesi önemlidir. Gıda güvenliği standartlarının uygulanması, hammaddelerin dikkatli seçimi ve uygun pişirme tekniklerinin benimsenmesi, PAH kontaminasyonunu azaltma konusunda etkili stratejilerdir. Böylece, fırıncılık ürünlerinin tüketimi ile ilgili sağlık riskleri minimize edilebilir ve tüketicilere daha güvenli gıda seçenekleri sunulabilir.
Anahtar kelimeler: Fırıncılık ürünleri, polisiklik aromatik hidrokarbonlar, gıda güvenliği, ısıl işlem

THE PRESENCE OF POLYCYCLIC AROMATIC HYDROCARBONS (PAHS) IN BAKERY PRODUCTS AND REDUCTION METHODS

ABSTRACT
Bakery products hold an important place in daily nutrition, and the safety of these products is critically important for consumer health. PAHs are harmful compounds that can emerge during bakery processes. Although the acute toxicity of PAHs is low, many types of PAHs have been reported to be carcinogenic. The presence of PAHs in foods is a result of both environmental

accumulation and thermal processing methods used in food preparation and production. Thermal processes such as smoking, frying, grilling, baking, and roasting are considered to be the main contributors to high levels of food contamination. In addition, the type of fuel used in baking processes can also cause PAH contamination. The highest PAH concentrations have been observed in products baked in diesel-fueled ovens.

The formation of PAHs is possible, especially during high-temperature thermal processes used in the production of bread, biscuits, and other baked goods. These chemicals are generated by the incomplete combustion of organic materials or from smoke and oil produced during baking. The PAH levels in bakery products vary depending on the quality of raw materials, baking temperature, and duration.

High PAH concentrations may pose potential health risks; therefore, it is important to control these compounds in the production of bakery products. Implementing food safety standards, carefully selecting raw materials, and adopting proper baking techniques are effective strategies to reduce PAH contamination. Thus, health risks associated with the consumption of bakery products can be minimized, providing consumers with safer food options.

Keywords: Bakery products, polycyclic aromatic hydrocarbons, food safety, thermal processing

OSMANLI DİPLOMASİSİNİN EVRİMİ: GELENEKTEN MODERN DEVLET ADAMLIĞINA

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ÖZET
Bu çalışma, Osmanlı diplomasisinin tarihsel gelişimini ve uluslararası ilişkilerdeki etkisi, Osmanlının kuruluşunun ilk dönemlerinden Türkiye Cumhuriyeti'ne dönüşümüne kadar geçirdiği evrimin izini sürüyor. Uluslararası İslam hukukuna (Siyer geleneği), göçebe Türk gelenekleri ve kültürler arası öğrenmeye derinden bağlı olan Osmanlı diplomasisi, diğer devletlerle benzersiz etkileşim yöntemleri oluşturdu. Erken Osmanlı dönemi geçici diplomasiye dayanıyordu. Savaş ve barış arasında denge kurmaya odaklanan Osmanlıda geçici elçilerle başlayan diplomatik faaliyetleri 19. yüzyılda Batı etkisindeki daimî elçilik sistemine evrilmiştir. Evlilik ittifakları, ticari düzenlemeler (kapitülasyonlar), toprak yönetimi ve istihbarat ağları gibi diplomatik stratejik yöntemlerle hem güç dengesini hem de uluslararası etkisini diğer taraftan bölgesel istikrarını korumayı hedeflemiştir.
Klasik dönemde evrensel bir imparatorluk vizyonu doğrultusunda, Osmanlı diplomasisi sadece askeri zaferlerle değil, aynı zamanda kültürel ve politik öğrenme süreçleriyle şekillenmiştir. Tanzimat reformlarıyla modernleşme adımları hızlanmış, diplomasi profesyonel bir alana dönüşerek Batılı normlara uyum sağlamıştır. Buna rağmen Osmanlı, kendi geleneksel üstünlük statüsünü koruyarak diplomasiye yön vermiştir. Osmanlı İmparatorluğu'nun uluslararası hukuk çerçevesinde egemenliğini savunma gayreti, Cumhuriyet dönemine de aktarılmış, Türkiye Cumhuriyeti'nin statükocu dış politika anlayışının temelini oluşturmuştur.
Çalışma, Osmanlı diplomasi geleneğinin siyasi, hukuki ve kültürel boyutlarını derinlemesine analiz ederek, modern jeopolitik gerçeklere uyum sağlarken Türkiye Cumhuriyeti'nin devletçiliğini ve uluslararası hukuk odaklı dış politikasının uluslararası ilişkiler üzerindeki kalıcı etkilerini ve mirasını tartışmaktadır.
Anahtar Kelimeler: Osmanlı diplomasisi, Siyer geleneği, Ad hoc diplomasi, Daimî elçilikler, Kapitülasyonlar, Tanzimat reformları, İstihbarat ağları, Uluslararası hukuk, Statükocu dış politika, Osmanlı-Türk diplomasi sürekliliği

EVOLUTION OF OTTOMAN DIPLOMACY: FROM TRADITION TO MODERN STATESMANSHIP

ABSTRACT
The historical development of Ottoman diplomacy and its impact on international relations traces the evolution of the Ottoman Empire from its early foundation to its transformation into the Republic of Turkey. Ottoman diplomacy, deeply committed to international Islamic law (the tradition of the Prophet), nomadic Turkish traditions and intercultural learning, created unique methods of interaction with other states. The early Ottoman period was based on temporary diplomacy. Focusing on establishing a balance between war and peace, the Ottomans evolved their diplomatic activities, which began with temporary ambassadors, into a permanent embassy system under Western influence in the 19th century. With diplomatic strategic methods such as marriage alliances, commercial arrangements (capitulations), land

administration and intelligence networks, they aimed to maintain both the balance of power and international influence, and on the other hand, regional stability.
In line with the vision of a universal empire in the Classical Period, Ottoman diplomacy was shaped not only by military victories, but also by cultural and political learning processes. With the Tanzimat reforms, modernization steps accelerated, and diplomacy transformed into a professional field and adapted to Western norms. Despite this, the Ottoman Empire maintained its traditional superiority status and gave direction to diplomacy. The Ottoman Empire's efforts to defend its sovereignty within the framework of international law were also transferred to the Republican period and formed the basis of the Republic of Turkey's status quo foreign policy approach.
The study analyzes the political, legal and cultural dimensions of the Ottoman diplomatic tradition in depth, and discusses the permanent effects and legacy of the Republic of Turkey's statism and international law-oriented foreign policy on international relations while maintaining continuity while adapting to modern geopolitical realities.
Keywords: Ottoman diplomacy, Biography tradition, Ad hoc diplomacy, Permanent embassies, Capitulations, Tanzimat reforms, Universal empire, Intelligence networks, International law, Status quo foreign policy, Ottoman-Turkish diplomatic continuity

OVARYUM KANSER TÜRLERİNDE TEDAVİ POTANSİYELİ TAŞIYAN ETKEN MADDE DEĞERLENDİRİLMESİ
EVALUATION OF ACTIVE INGREDIENT WITH THERAPEUTIC POTENTIAL IN OVARIAN CANCER TYPES

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ÖZET
Yumurtalık kanseri en ölümcül jinekolojik hastalık olarak bilinmektedir. Cerrahi ve kemoterapi temel tedavi yöntemlerindendir. Ancak hastaların büyük bir kısmında kemoterapiye direnç ile nüks görülmektedir. Bu durum, yeni tedavi stratejileri geliştirmeye duyulan ihtiyacı artırmaktadır. Bu amaçla, mevcut bir ilacın, daha önce uygulanmış olmadığı bir tıbbi durum için kullanılmasına dayanan yöntemler, yumurtalık kanseri için alternatif bir tedavi olarak araştırılmaktadır.
Abrocitinib, 2021 yılında, orta-şiddetli atopik dermatit (AD) tedavisi için İngiltere ve Japonya'da onaylanmıştır. Abrositinib, Janus kinaz 1'in (JAK1) küçük moleküllü bir inhibitörüdür. Janus kinaz/transkripsiyon sinyal dönüştürücüleri ve aktivatörleri (JAK/STAT) sinyal yolunun, AD'de immün yanıtların düzensizliğinde kritik bir rol oynadığı bilinmektedir.
Literatürde, PI3K/AKT (Fosfoinositid-3 Kinaz/Protein kinaz B) sinyal yolunun birçok yumurtalık kanseri türünde düzensiz olduğu ve düşük sağkalım oranlarıyla ilişkili olduğu bildirilmiştir. PI3K, büyüme faktörlerine bağlı reseptörlerce aktive edilerek onkojenik proteinleri, özellikle Akt ve Akt'nin aşağı akış hedefi olan mTOR'u, aktive etmektedir. Ayrıca, RAS'ın anormal aktivasyonunun da RAF-1/MAP (mitojenle aktifleşen protein) kinaz, PI3K/AKT gibi sinyal yollarının kontrolsüz indüksiyonuna yol açtığı gösterilmiştir.
Ras-MAP kinaz yolunun, PI3K –AKT yolunun ve STAT sinyalinin optimal aktivasyonu için JAK fonksiyonunun gerekli olduğu bildirilmiştir.
Bu çalışmada, bir moleküler modelleme yöntemi olarak "docking" uygulamaları gerçekleştirilmiş, Abrocitinib'in Ras-MAP kinaz, PI3K-AKT sinyal yollarındaki proteinlerle kararlı bir kompleks oluşturma potansiyeli ve ortaya çıkabilecek komplekslerin oryantasyonları incelenmiştir. Ligand ve proteinlerin üç boyutlu yapılarına PubChem ve RCSB Protein Data Bank veritabanlarından ulaşılmıştır. Moleküler docking işlemleri AutoDock versiyon 4.2.6 (Scripps Research Institute, ABD) ile gerçekleştirilmiş, Discovery Studio Visualizer 24.1.0 (Dassault Systèmes, ABD) programıyla sonuçlar görselleştirilmiştir. Ligandın, altı farklı proteine ortalama bağlanma enerjisinin -6.18 ile -8.54 aralığında olduğu bulunmuştur. Abrocitinib'in bir JAK inhibitörü olduğu ve JAK fonksiyonunun yumurtalık kanseri ile ilişkili olan Ras-MAP ve PI3K-AKT sinyal yolları ile ilişkisi, ilacın yumurtalık kanserinde terapötik potansiyelini ortaya koymaktadır. İlerleyen çalışmalarda, gen ekspresyonu analizleri ile ilgili sinyal yollarında etkinliğinin araştırılması planlanmaktadır.
Anahtar kelimeler: Yumurtalık Kanseri, Abrocitinib, Moleküler Docking, Terapötik Etki

ABSTRACT

Ovarian cancer is one of the most lethal gynecological diseases. Surgery and chemotherapy are the two primary therapeutic approaches for ovarian cancer. However, recurrence occurs in most patients because of chemotherapy resistance. This has increased the need to develop new treatment strategies. The repurposing of existing drugs for new medical conditions is being explored for the treatment of ovarian cancer. Abrocitinib, a small-molecule inhibitor of Janus kinase 1 (JAK1), was approved for treating atopic dermatitis (AD) in 2021. Dysregulation of immune response in AD is affected by the Janus kinase/transcription signal transducer and activator (JAK/STAT) pathway. According to literature, ovarian cancer frequently exhibits dysregulation of the PI3K/AKT (phosphoinositide-3 kinase/protein kinase B) pathway, which is associated with poor survival rates. Growth factor receptors stimulate PI3K and activate oncogenic proteins, such as Akt and mTOR. Furthermore, atypical RAS activation may result in altered signaling via PI3K/Akt and RAF-1/MAPK pathways. JAK function is necessary for optimal activation of the PI3K-AKT, Ras-MAPK, and STAT pathways. In this study, the potential of brobrocitinib to form a stable complex with proteins in the Ras-MAP kinase and PI3K-AKT signaling pathways and the possible orientations of the formed complexes were investigated by molecular docking using AutoDock 4.2.6 (Scripps). The results were visualized using the Discovery Studio Visualizer 24.1.0 (Dassault Systèmes, USA). The three-dimensional structures of brocitinib and proteins were obtained from PubChem and RCSB Protein Data Bank databases. The mean binding energies of the ligand to the six proteins were found to range from -6.18 to -8.54. Abrocitinib is a JAK inhibitor, and the link of JAK function to Ras-MAP and PI3K-AKT signaling pathways, which are associated with ovarian cancer, suggests the therapeutic potential of the drug. Further studies are needed to investigate the efficacy of this drug in signaling pathways through gene expression analysis.

Keywords: Ovarian Cancer, Abrocitinib, Molecular Docking, Therapeutic Effect

PLASTİĞİN KÜÇÜK FORMU VE BÜYÜK SORUNU: MİKROPLASTİKLER VE EKOSİSTEM TAHRİBATI

SMALL FORM AND BIG PROBLEM OF PLASTIC: MICROPLASTICS AND ECOSYSTEM DAMAGE

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ÖZET

Mikroplastikler, plastik materyallerin 5 mm'den küçük boyutlara ayrışmasıyla oluşan ve çevresel sürdürülebilirlik ile ekosistem sağlığı açısından ciddi tehdit oluşturan bir kirlilik unsurudur. Plastik atıkların doğal süreçlerle veya insan faaliyetleriyle ufalanarak mikro boyutlara ayrışması, mikroplastiklerin yayılımında başlıca rol oynamaktadır. Bu partiküller, karasal, tatlı su ve deniz ekosistemlerinde yaygın olarak bulunmakta ve toksik etkiler yaratarak biyolojik çeşitliliği tehdit etmektedir. Mikroplastik türleri arasında mikrodeniz parçacıkları, mikrofiberler, mikroboncuklar ve mikrofragmanlar bulunmaktadır. Bu türler genellikle plastik atıkların parçalanmasından, kozmetik ve tekstil endüstrilerinden kaynaklanmakta, rüzgâr, yağmur suyu ve atık su arıtma tesislerinden çıkan deşarjlarla çevreye yayılmaktadır.

Mikroplastiklerin ekosistemler üzerindeki etkileri, özellikle besin zincirine dahil olmalarıyla daha belirgin hale gelir. Mikroplastikler, balıklar, kabuklular ve diğer sucul organizmalar tarafından kontamine besinler tüketildiğinde bünyeye alınır ve bu durum toksik kimyasalların biyolojik birikimine yol açar. Mikroplastiklerin besinlerle alınması, organizmaların metabolizmasında, üreme kapasitelerinde ve davranışlarında ciddi bozulmalara neden olur. Ayrıca mikroplastikler, ağır metaller, pestisitler ve diğer kirleticileri adsorbe ederek çevresel riskleri artırmaktadır. Karasal ekosistemlerde ise toprak mikroorganizmalarının işlevlerini bozarak toprak kalitesini düşürmekte, bu durum bitki büyümesini ve tarımsal verimliliği olumsuz yönde etkilemektedir. Bunun yanı sıra, mikroplastiklerin su döngüsündeki varlığı, su kalitesini bozarak insan sağlığına yönelik riskleri de beraberinde getirmektedir.

Sonuç olarak, mikroplastik kirliliği, ekosistemlerin sürdürülebilir işleyişini ciddi şekilde tehdit eden küresel bir çevresel sorun haline gelmiştir. Bu sorunun çözümü için plastik üretiminin ve kullanımının sınırlandırılması, geri dönüşüm süreçlerinin iyileştirilmesi ve etkin çevre politikalarının uygulanması gerekmektedir. Mikroplastiklerin çevresel ve biyolojik etkilerinin daha iyi anlaşılabilmesi için kapsamlı, disiplinler arası araştırmaların gerçekleştirilmesi büyük önem taşımaktadır. Bu çalışma, mikroplastiklerin ekosistemler üzerindeki etkilerini değerlendirerek çözüm önerilerini ortaya koymaktadır.

Anahtar Kelimeler: Mikroplastik kirliliği, biyolojik birikim, ekosistem sağlığı, sucul organizmalar, toprak kirliliği, hava kirliliği

ABSTRACT

Microplastics are a pollution element formed by the decomposition of plastic materials into sizes smaller than 5 mm and pose a serious threat to environmental sustainability and ecosystem health. The disintegration of plastic waste into micro-sized pieces by natural processes or human activities plays a major role in the spread of microplastics. These particles are widely found in terrestrial, freshwater and marine ecosystems and threaten biodiversity by creating toxic effects. Microplastic types include micromarine particles,

microfibers, microbeads and microfragments. These types generally originate from the decomposition of plastic waste, the cosmetics and textile industries, and are spread into the environment through wind, rainwater and discharges from wastewater treatment plants.
The effects of microplastics on ecosystems become more apparent, especially when they are included in the food chain. Microplastics are taken into the body when fish, crustaceans and other aquatic organisms consume contaminated food, and this leads to the bioaccumulation of toxic chemicals. Ingestion of microplastics with food causes serious disruptions in the metabolism, reproductive capacity and behavior of organisms. In addition, microplastics increase environmental risks by adsorbing heavy metals, pesticides and other pollutants. In terrestrial ecosystems, they disrupt the functions of soil microorganisms and reduce soil quality, which negatively affects plant growth and agricultural productivity. In addition, the presence of microplastics in the water cycle disrupts water quality and poses risks to human health.
As a result, microplastic pollution has become a global environmental problem that seriously threatens the sustainable functioning of ecosystems. In order to solve this problem, it is necessary to limit plastic production and use, improve recycling processes and implement effective environmental policies. It is of great importance to conduct comprehensive, interdisciplinary research to better understand the environmental and biological effects of microplastics. This study evaluates the effects of microplastics on ecosystems and presents solution proposals.
Keywords: Microplastic pollution, bioaccumulation, ecosystem health, aquatic organisms, soil pollution, air pollution

SUPER-TWISTING SLIDING MODE-BASED FAULT TOLERANCE IN PMSM CONTROL SYSTEMS

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ABSTRACT

This study presents an active fault-tolerant control (FTC) strategy for permanent magnet synchronous motors (PMSMs), designed to ensure robust performance under both healthy and faulty conditions. The proposed approach combines a second-order sliding mode controller (SOSMC) with a second-order sliding mode observer (SOSMO), leveraging the benefits of super-twisting sliding mode techniques for control and observation.

Under healthy conditions, the SOSMC is integrated with a field-oriented control (FOC) framework to improve the tracking accuracy of speed and currents. This design ensures robust rejection of disturbances, including load torque variations, parameter uncertainties, and unmodeled dynamics, contributing to stable and precise operation.

When faults occur, such as phase-to-phase short circuits, demagnetization, or sensor failures, the SOSMC and SOSMO work together to estimate and reconstruct control laws, enabling effective fault compensation. The observer provides accurate fault reconstruction, ensuring that control performance is maintained despite the presence of faults.

The effectiveness of the proposed FTC strategy is validated through extensive simulations conducted in a processor-in-the-loop (PIL) environment using MATLAB/Simulink software. Results demonstrate that the combination of SOSMC and SOSMO successfully compensates for various types of faults, maintaining performance consistency comparable to healthy operating conditions.

This study highlights the potential of sliding mode techniques in developing robust and reliable control solutions for PMSMs, paving the way for enhanced fault tolerance in industrial and automotive applications.

Keywords: Fault-tolerant control, Permanent magnet synchronous motor, Field-oriented control, Super-twisting sliding mode, Sliding mode control, Sliding mode observer

A RESEARCH ON THE CONCEPT OF MOTHERHOOD IN ISLAMIC FEMINIST DISCOURSE

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Abstract
Motherhood in Muslim feminist discourse is the object of investigation, with particular emphasis on the aspect of its challenge to patriarchal interpretations of gender roles, concerning maternal duties. Islamic feminism offers reinterpretations of the very meaning of motherhood in that it merges religion with feminist thinking, empowering women rather than limiting them as imposed by patriarchy. This study is notable for its focus on the various scholarly works that claim traditional readings of the Qur'an were based on patriarchal interpretations that restricted women's agency.
Islamic feminists contest these views and argue for an egalitarian reading of motherhood focused on choice, autonomy, and women's right to claim their own roles in society. This study discusses the position of motherhood in the wider context of mother's social and political activism. The literature review provides a composite view that unweaves the tight integrity typical of disciplines such as religious studies, sociology, and gender studies in respect to the not-so-simple relations of Islam, gender, and motherhood.
This research ultimately argues that Islamic feminism provides a somewhat different approach on reconsideration of motherhood, as it proposes a model with religious significance based on gender justice, challenging traditional hierarchies and providing a platform for more sweeping sociopolitical reforms.
Keywords: Motherhood, Islamic Feminism, Gender Equality

ULUSAL TEZ MERKEZİNDE "GÜRÜLTÜ" KONULU TEZLERİN RETROSPEKTİF OLARAK İNCELENMESİ

RETROSPECTIVE INVESTIGATION OF THESES THEMED "NOISE" AT THE NATIONAL THESIS CENTER

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ÖZET

Bu araştırma, Türkiye'de bütünsel sağlık üzerine yüksek etkisi olan gürültünün konusunda bilimsel alanda yapılan çalışmaların neler olduğunun bulgulanması ve bu konularda farkındalığın artırılarak konuya dikkat çekilmesi amacı ile yapılmıştır. Diğer bir deyişle, gürültü konusunda yapılan çalışmaların incelenmesi ve durumun ortaya konulması amaçlanmıştır. Araştırma, Ulusal Tez Merkezi çevrimiçi veri tabanı üzerinde geriye dönük olarak yapılmıştır. Bu çalışma gürültü hakkında 1984 yılında yapılan ilk araştırma itibariyle incelenmeye başlanmış olup; 1984 - 2023 yılları arasını kapsamaktadır. Anahtar kelimeler; "gürültü", "okullarda gürültü", "hastanede gürültü" ve "sanayide gürültü" ve "ulaşımda gürültü" dür. Ulusal Tez Merkezi çevrimiçi veri tabanı üzerinden toplam 1075 tez çalışmasına ulaşılmıştır. Araştırmanın evren ve örneklemini ulusal tez merkezinde 1984 - 2023 yılları arasında yayımlanan 1075 çalışma oluşturmuştur. Verilerin incelenmesinde çalışma yılı, türü, araştırmada kullanılan dil ve alan özellikleri gibi faktörler incelenmiştir. Verilerin analizinde sayı yüzde dağılımları SPSS 25 paket programı ile yapılmıştır. Tezlerin 2014 - 2023 yılları arasında geçmiş yılların toplamından daha yüksek oranda (56.6) yapıldığı görülmüştür. En çok fen bilimleri enstitüsünde (71.45) çalışıldığı, en fazla yüksek lisans düzeyinde (80.7) araştırma yapıldığı, sosyal bilimlerde (3.3) bu konunun oldukça az oranda çalışıldığı saptanmıştır. Araştırma sonucunda, gürültü çalışmalarının son yıllarda ağırlık kazandığı, konunun alansal olarak çok geniş olduğu, lisansüstü çalışmalar açısından özellikle deneysel ve tanımlayıcı çalışmaların daha fazla yapılması ayrıca çok faktörlü bir şekilde ele alınması gerektiği, ülkemiz açısından ihtiyaç olduğu görülmektedir.

Anahtar Kelimeler: Gürültü, okullarda gürültü, hastanede gürültü, sanayide gürültü, ulaşımda gürültü

ABSTRACT

This research was conducted to find out the scientific studies conducted on noise, which has a high impact on holistic health in Turkey, and to draw attention to the issue by increasing awareness on these issues. In other words, it was aimed to examine the studies conducted on noise and to reveal the situation. The research was conducted retrospectively on the National Thesis Center online database. This study was started to be examined as of the first research conducted on noise in 1984; it covers the years 1984 - 2023. The keywords are; "noise", "noise in schools", "noise in hospitals", "noise in industry" and "noise in transportation". A total of 1075 thesis studies were reached through the National Thesis Center online database. The universe and sample of the research consisted of 1075 studies published in the national thesis center between 1984 - 2023. In the examination of the data, factors such as the year of study, type, language used in the study and field characteristics were examined. In the analysis of the data, the number percentage distributions were made with the SPSS 25 package program. It

was seen that the theses were made at a higher rate (56.6) between 2014 and 2023 than the total of previous years. It was determined that the most studies were conducted in the institute of science (71.45), the most research was conducted at the master's level (80.7), and this subject was studied very little in the social sciences (3.3). As a result of the research, it is seen that noise studies have gained importance in recent years, the subject is very broad in area, and that more experimental and descriptive studies should be conducted in terms of postgraduate studies and should be addressed in a multi-factorial manner, and that this is a need for our country.

Keywords: Noise, noise in schools, noise in hospitals, noise in industry, noise in transportation

FOSİL YAKIT ENERJİ TÜKETİMİNİN SAĞLIK HARCAMALARI ÜZERİNDEKİ ETKİLERİ: TÜRKİYE ÜZERİNE BİR İNCELEME

THE EFFECTS OF FOSSIL FUEL ENERGY CONSUMPTION ON HEALTH EXPENDITURES: AN EMPIRICAL ANALYSIS FOR TURKEY

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ÖZET

Günümüzde birçok ülke, enerji gereksinimlerinin büyük bir kısmını fosil yakıtlar aracılığıyla karşılamaktadır. Fosil yakıt enerji tüketimi kaynaklı iklim değişikliği ve hava kirliliği insan sağlığını için önemli bir çevresel tehdit oluşturur. Hava kirliliği, solunum yolu hastalıkları ve kronik sağlık sorunlarının başlıca nedenlerinden biridir. Geleneksel enerji kaynaklarının toplam enerji tüketimindeki payı azaldıkça, insan sağlığı üzerindeki olumsuz etkiler de azalacaktır. Bu nedenle, fosil yakıt enerji tüketiminin insan sağlığı dolayısıyla sağlık harcamaları üzerindeki etkisinin ampirik olarak analiz edilmesi önemlidir. Bu ampirik sonuçlar, politika yapıcılar, uluslararası toplum ve araştırmacılar için değerli bilgiler sağlayacaktır.

Bu çalışma, 1975'ten 2015'e kadar olan zaman serisi verilerini analiz ederek Türkiye'de fosil yakıt enerji tüketiminin sağlık harcamaları üzerindeki etkisini incelemeyi amaçlamaktadır. Ayrıca, kişi başı GSYİH ve enflasyon kontrol değişkenleri olarak eklenmiştir. Değişkenler arasındaki kısa ve uzun dönem ilişkiyi araştırmak için Johansen eşbütünleşme testi ve hata düzeltme modeli (ECM) uygulanmıştır. Johansen kointegrasyon test sonuçları, değişkenler arasında bir eşbütünleşme ilişkisi olduğu göstermiştir. Elde edilen ampirik sonuçlar, fosil yakıt enerji tüketimi endeksindeki artışın uzun dönemde sağlık harcamaları üzerinde pozitif bir etki meydana getirdiğini göstermektedir. Uzun dönemde, fosil yakıt enerji tüketimindeki %1'lik bir artışın sağlık harcamalarını yaklaşık %8.66 oranında arttırdığı görülmektedir. Diğer taraftan, uzun dönemde enflasyon serisindeki artış sağlık harcamaları üzerinde negatif bir etkiye sahiptir. Sağlık harcamaları ile GSYİH arasında uzun dönemde bir ilişki tespit edilememiştir. Elde edilen bulgular, fosil yakıt enerji tüketiminin sağlık harcamaları üzerinde yarattığı olumsuz etkileri kanıtlayarak, sürdürülebilir enerji politikalarının hayata geçirilmesinin önemine işaret etmektedir. Bu sebeple, politika yapıcıların fosil yakıt tüketim oranını düşüren politikalar benimsemesi ve yenilenebilir enerji kaynaklarına yönelik yatırımların teşvik edilmesinin önemine dikkat çekilmektedir.

Anahtar Kelimeler: Fosil Yakıt Enerji Tüketimi, Sağlık Harcamaları, Johansen Eşbütünleşme Testi, Vektör Hata Düzeltme Modeli (VECM), GSYİH

ABSTRACT

Today, many countries meet a large portion of their energy needs through fossil fuels. Climate change and air pollution caused by fossil fuel energy consumption pose a significant environmental threat to human health. Air pollution is one of the main causes of respiratory diseases and chronic health issues. As the share of traditional energy sources in total energy consumption decreases, the adverse impacts on human health will also diminish. Therefore, empirically analyzing the impact of fossil fuel energy consumption on human health and, consequently, on healthcare expenditures is essential. These empirical results will provide valuable information for policymakers, the international community, and researchers.

This study aims to examine the impact of fossil fuel energy consumption on healthcare expenditures in Turkey by analyzing time series data from 1975 to 2015. Additionally, GDP per capita and inflation have been added as control variables. The Johansen cointegration test and error correction model (ECM) have been applied to investigate the short- term and long-term relationships among the variables. The Johansen cointegration test results indicated a cointegration relationship among the variables. The empirical results indicate that an increase in the fossil fuel energy consumption index has a positive effect on healthcare expenditures in the long term. In the long term, a 1% increase in fossil fuel energy consumption is observed to increase healthcare expenditures by approximately 8.66%. On the other hand, in the long term, an increase in the inflation series has a negative effect on healthcare expenditures. No relationship was found between healthcare expenditures and GDP in the long term. The findings demonstrate the adverse effects of fossil fuel energy consumption on healthcare expenditures, highlighting the importance of implementing sustainable energy policies. Therefore, it is emphasized that policymakers should adopt policies aimed at reducing fossil fuel consumption rates and promote investments in renewable energy sources.

Key Words: Fossil Fuel Energy Consumption, Healthcare Expenditures, Johansen Cointegration Test, Vector Error Correction Model (VECM), GDP

PETROLOGICAL INSIGHTS INTO LANDSLIDE PREVENTION: A CASE STUDY OF INDONESIA'S VOLCANIC, SEDIMENTARY, AND METAMORPHIC TERRAINS

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Abstract:
In Indonesia, landslides are a serious risk, especially in areas with active tectonics, high rainfall, and complex geological structures. Petrology, the study of rocks, plays a crucial role in identifying factors contributing to slope instability and preventing landslides. This paper examines the application of petrological studies in understanding landslides and developing prevention strategies in Indonesia, with a particular focus on the volcanic, sedimentary, and metamorphic terrains of Sumatra, Java, and Sulawesi. This study examines the connection between weathering processes, rock types, and landslide vulnerability using petrographic analysis, X-ray diffraction (XRD), and field investigations. The findings demonstrate that sedimentary rocks prone to weathering, compaction and volcanic rocks rich in clay minerals like smectite and kaolinite have a major role in slope collapses. On the other hand, metamorphic rocks with stronger lithological characteristics exhibit greater resistance to landslides. The study presents data on landslide prevention strategies that incorporate petrological insights, including slope reinforcement, drainage management, and selecting construction materials based on rock type. Furthermore, suggestions for combining petrology with geotechnical engineering in landslide-prone locations are given. The significance of using petrological data to reduce landslide risks and create long-term preventive policies is highlighted by this research, which will eventually lessen the impact of landslides in Indonesia's susceptible areas.
Keywords; Landslides, Indonesia, Petrology, Landslide Prevention

A HISTORICAL OVERVIEW OF DEFLECTOR MECHANISMS IN MISSILE LAUNCH VEHICLES

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ABSTRACT

The evolution of deflector mechanisms in missile launch vehicles has been instrumental in enhancing missile performance and ensuring safe launches. Initially, deflectors were simple, passive components designed primarily to shield sensitive areas of the missile from aerodynamic forces and heat generated during launch. Early models used basic materials like steel and aluminum, which offered limited heat resistance but were adequate for the technological constraints of the time. With advancements in missile technology during the mid-20th century, especially during the Cold War era, deflectors underwent significant improvements. The need for better heat resistance and lower weight led to the use of more advanced materials, including high-performance ceramics and composites. These materials were capable of withstanding the extreme conditions of high-speed flight, significantly improving the efficiency and reliability of missile systems. In addition to material advancements, the role of deflectors evolved. What began as passive protective elements became integrated into the missile's overall guidance and control system. Modern deflectors now play an active role in stabilizing the missile's flight path, particularly in the critical early stages of launch. The combination of advanced sensors and computational fluid Dynamics (CFD) simulations has enabled designers to optimize deflector shapes and materials for specific launch conditions, further enhancing missile accuracy and stability. Today, deflectors are an essential part of missile design, contributing to both safety and mission success. Their integration into more sophisticated systems ensures that missiles can operate at higher speeds and under harsher conditions, driving continuous innovation in missile technology. As materials science and aerodynamics continue to evolve, deflector mechanisms will remain crucial for the next generation of missile launch vehicles.

Keywords: Deflector mechanisms, Missile launch vehicles, Cold War-era technology, Aerodynamic forces

STRUCTURE AND DESIGN CRITERIA OF DEFLECTOR SYSTEMS IN MISSILE LAUNCH VEHICLES

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ABSTRACT

Deflector systems play a crucial role in the performance and safety of missile launch vehicles. Their primary function is to protect the missile's internal components from high-speed aerodynamic forces, intense heat, and other environmental stresses during launch. The design of deflector systems involves multiple engineering considerations, ensuring that they can withstand extreme conditions without compromising missile stability or performance. Structural integrity is a top priority, and deflectors must be built from materials that are both strong and lightweight. Advanced composites and ceramics are commonly used due to their excellent heat resistance and ability to perform under high-pressure conditions. Aerodynamic efficiency is another essential aspect, as the deflector must guide airflow in a way that minimizes drag while maximizing stability. The integration of deflectors with missile guidance systems is also a critical consideration, as it ensures that they do not interfere with the missile's trajectory. Additionally, the deflector must be designed to withstand the mechanical stresses of launch while maintaining its structural performance over time. Modern design practices employ computational fluid dynamics (CFD) and advanced simulation techniques to optimize deflector shapes, materials, and placement. This paper provides a detailed exploration of the design criteria and structural elements that define deflector systems in missile launch vehicles. It also evaluates how advancements in materials and computational modeling have led to improved deflector efficiency and reliability. Understanding the complexity of deflector design is essential for ensuring the overall safety, accuracy, and success of missile launch operations.

Keywords: Deflector mechanisms, Missile launch vehicles, Design criteria, Aerodynamic forces, Structural integrity

ÇAĞDAŞ SANATTA MELANKOLİK İFADENİN YENİ GÖRÜNÜMLERİ
NEW APPEARANCES OF MELANCHOLIC EXPRESSION IN CONTEMPORARY ART

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ÖZET

Melankoli kavramı, entelektüel tarih boyunca düşünce sistemlerinin şekillenmesinde ve sanatsal üretimin karmaşık yapısının derinleşmesinde belirleyici bir etken olmuştur. Çağdaş sanat bağlamında bu olgu, derin hüzün, karamsarlık, kayıp ve yas gibi temalarla ilişkilendirilen öznel bir deneyimleme alanı olmak yerine, 'öteki' ile kurduğu diyalektik ilişkilenmeyle yeni anlamlar kazanmıştır. Öyle ki bazı çağdaş sanat pratikleri, melankoliyi bireysel bir duygulanım olmaktan çıkararak kolektif bir varoluş problematiği olarak yeniden tanımlamış; iklim krizi, teknolojik yabancılaşma ve toplumsal travmalar gibi çağın belirleyici meselelerini, melankolik deneyimleme üzerinden daha kapsamlı ve derinlemesine bir bağlamda ele alınmasını gerekli kılmıştır. Bu bağlamda bazı sanatçılar, video enstalasyonlardan mekânsal deneyimlere, performans sanatından yeni medya uygulamalarına kadar uzanan yaratıcı pratiklerini kolektif duygulanım ve çevresel bilinç uyandıracak şekilde kurgulayarak, küresel sorunlara yönelen eleştirel bir bakış, estetik bir sorgulama aracı olarak yeniden konumlandırmıştır.
Bu çalışmada, çağdaş sanat pratiklerinde melankolinin deneyimlenme biçimleri, Marina Abramović'in bedensel varoluşun sınırlarını zorlayan uzun performansları, Bill Viola'nın zamanın geçiciliğini ve ölümlülük temalarıyla metafiziksel deneyime davet eden video enstalasyonu ve Tea Mäkipää' nın iklim krizine dair yeni bir bakış açısı kazandıran projesi çerçevesinde ele alınmıştır. Sanatçıların eserleri üzerinden melankolinin, çağdaş sanatın yenilikçi düşünce/kurgulama alternatifleri ile geçirdiği dönüşüm incelenmiş ve bu sürecin çağdaş estetik literatürüne yenilikçi bir perspektif kazandırma potansiyeli değerlendirilmiştir.

Anahtar Kelimeler: Melankoli, Çağdaş sanat, Sanatsal yaratıcılık, Estetik deneyim, Kolektif etkileşim.

ABSTRACT

The concept of melancholy has been a decisive factor in shaping systems of thought and deepening the complex structure of artistic production throughout intellectual history. In the context of contemporary art, instead of being a subjective field of experience associated with themes such as deep sadness, pessimism, loss and mourning, this phenomenon has gained new meanings through its dialectical relationship with the 'other'. In fact, some contemporary art practices have redefined melancholy as a collective existential problematic, rather than an individual affect, and have made it necessary to address the defining issues of the age, such as the climate crisis, technological alienation and social traumas, in a more comprehensive and in-depth context through melancholic experience. In this context, some artists have repositioned their creative practices, ranging from video installations to spatial experiences, from performance art to new media practices, as a critical gaze towards global problems and as a

means of aesthetic questioning by constructing them in a way to evoke collective affect and environmental consciousness.
In this study, the ways in which melancholy is experienced in contemporary art practices are examined within the framework of Marina Abramović's long performances that push the boundaries of bodily existence, Bill Viola's video installation that invites to metaphysical experience with the themes of the transience of time and mortality, and Tea Mäkipää's project that provides a new perspective on the climate crisis. Through the works of the artists, the transformation of melancholy with the innovative thinking/constructing alternatives of contemporary art is analyzed and the potential of this process to bring an innovative perspective to the contemporary aesthetic literature is evaluated.

Keywords: Melancholia, Contemporary art, Artistic creativity, Aesthetic experience, Collective interactions.

SAVUNMA SANAYİNDE BİLGİ GÜVENLİĞİ VE SİBER GÜVENLİK SALDIRILARININ MÜDAHALE SIRASININ BELİRLENMESİ İÇİN KRİTERLERİN SWARA YÖNTEMİ İLE AĞIRLIKLANDIRILMASI

WEIGHTING OF CRITERIA FOR DETERMINING THE RESPONSE SEQUENCE OF INFORMATION SECURITY AND CYBER SECURITY ATTACKS IN DEFENSE INDUSTRY WITH SWARA METHOD

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ÖZET

Son yıllarda özellikle savunma sanayinde yer alan şirketlerin teknolojik ve kurumsal altyapılarına çok sayıda bilgi güvenliği ve siber güvenlik saldırıları gerçekleşmektedir. Savunma Sanayinde yaşanan ilerlemeler ve teknolojik gelişmeler sonrasında bu güvenlik saldırılarının daha da artması beklenmektedir. Güvenlik saldırılarının gerçekleşmesini önlemek ya da gerçekleştiğinde zararı azaltmak için savunma sanayi şirketleri Bilgi Güvenliği ve Siber Güvenlik organizasyonları oluşturmaktadırlar. Bu organizasyonların amacı hızlı karar alıp bu kararları aksiyon haline getirerek; bilginin gizlilik, bütünlük ve erişilebilirliğini korumaktır. Savunma Sanayi süreçleri kapsamında Bilgi Güvenliği standartları ya da devletlerin yayınlamış olduğu uyum rehberleri (ISO 27001, ISO 27035, Cumhurbaşkanlığı Dijital Dönüşüm Ofisi Bilgi ve İletişim Güvenliği Rehberi vb.) gerekli güvenlik kontrollerinin ana hatlarını ortaya koyar. Savunma Sanayi Şirketleri bu kontroller üzerine ek isterler koyarak kendi bilgi güvenliği yönetim sistemlerini oluştururlar. Bunun amacı daha fazla güvenlik önlemi almak, güvenlik saldırılarına hızlı cevap verebilmek ve güvenlik saldırılarının etkilerini azaltabilmektir. Kontroller kuruluşların tam anlamıyla güvenliğini sağlamayabilir; bu yüzden güvenlik saldırılarına müdahale etme yöntemlerinin de geliştirilmesi gerekir. Güvenlik saldırısına müdahale etmenin amacı kuruluşun aldığı hasarı en aza indirmek, olayın gerçeklemesine neden olan olayın kök nedenine ulaşmak ve bir daha olmaması için düzeltici ve önleyici faaliyetleri yürütebilmektir. Aynı anda birden fazla güvenlik saldırısı gerçekleştirildiğinde kuruluşlarda yer alan bilgi güvenliği ve siber güvenlik ekipleri hangi saldırıya önce müdahale edileceğini belirlemek için bir yönteme ihtiyaç duyarlar. Bu çalışmada hangi saldırıya önce müdahale edileceğine karar vermek için ÇKKV (Çok Kriterli Karar Verme) yöntemlerinden SWARA (Step-wise Weight Assessment Ratio Analysis- Kademeli Ağırlık Değerlendirme Oran Analizi) yöntemi ile kriterlerin önem ağırlıkları belirlenmiş ve karar vericilerin her bir saldırı için kriterleri var (1) ve yok (0) olarak değerlendirmesi ile saldırılar sıralanmıştır.

Anahtar Kelimeler: SWARA, ÇKKV, Bilgi Güvenliği Saldırıları, Siber Güvenlik Saldırıları

ABSTRACT

In recent years, there have been many information security and cyber security attacks on the technological and corporate infrastructure of companies in the defense industry. These security attacks are expected to increase even more after the advances and technological developments in the Defense Industry. In order to prevent security attacks from occurring or to reduce the damage when they occur, defense industry companies create Information Security and Cyber Security organizations. The purpose of these organizations is to take quick decisions and turn these decisions into action; to protect the confidentiality, integrity and accessibility of information. Within the scope of Defense Industry processes, Information Security standards or

compliance guides published by states (ISO 27001, ISO 27035, Presidency Digital Transformation Office Information and Communication Security Guide, etc.) outline the necessary security controls. Defense Industry Companies create their own information security management systems by placing additional requirements on these controls. The purpose of this is to take more security measures, respond quickly to security attacks and reduce the impact of security attacks. Controls may not fully secure organizations, so methods of responding to security attacks must also be developed. The purpose of responding to a security attack is to minimize the damage to the organization, get to the root cause of the incident, and take corrective and preventive actions to prevent it from happening again. When multiple security attacks occur simultaneously, information security and cyber security teams in organizations need a method to determine which attack to respond to first. In this study, the importance weights of the criteria were determined by using SWARA (Step-wise Weight Assessment Ratio Analysis) method, one of the MCDM (Multi Criteria Decision Making) methods, to decide which attack to intervene first, and the attacks were ranked by decision makers evaluating the criteria as present (1) and absent (0) for each attack.

Key Words: SWARA, MCDM, Information Security attacks, Cyber security attacks

KAHVERENGİ ALANLARDAKİ ENDÜSTRİ YAPILARININ YENİDEN İŞLEVLENDİRME UYGULAMALARININ SÜRDÜRÜLEBİLİR KALKINMA HEDEFLERİ BAĞLAMINDA İNCELENMESİ

AN EXAMINATION OF THE REUSE OF INDUSTRIAL BUILDINGS IN BROWNFIELD IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT GOALS

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ÖZET

Endüstri devrimi, 18.yy sonlarında sosyolojik, ekonomik ve psikolojik etkileriyle tüm dünyayı etkileyen kol gücünden makine gücüne geçiş dönemidir. Endüstri devrimiyle şehir merkezlerinde kurulan fabrika, depo, ambar, demiryolu gibi endüstriyel bina ve tesisler; teknoloji ve bilişimdeki gelişmeler sonucu terkedilerek âtıl hale gelmiştir. Bu dönemin ürünü binalar, somut/soyut değerleri ile Endüstri Mirası olarak kabul edilmektedir [1][15]. Endüstriyel üretimin devam ettiği ve durduktan sonraki süreçte, kirlilik ve bozulmaların oluştuğu binalar ve çevreleri, kahverengi alan (brownfield) olarak değerlendirilmektedir [2].

Kahverengi alanlar ve içinde barındırdığı yapı stoğu teknolojik, ekolojik, mimari, sosyolojik, tarihsel ve bilimsel değerler taşıması nedeniyle disiplinler arası çalışılması gereken bir konudur. Endüstri mirası yapılar/alanlar bulundukları bölgeye, yapıldıkları döneme ve toplum yapısına, yapılış amaçlarına özgü özellikler barındırabilmektedir. Yeniden kullanım projelerinin başarısı alanlarında uzman kişilerce ortak ve özgün karar verme süreçlerini içeren çalışmalara bağlıdır. Bu alanların ve yapıların tescillenmesi, korunması ve yeniden kente kazandırılması sürdürülebilirlikleri açısından büyük önem taşımaktadır [3][4]. Endüstri mirası yapılar ve alanlar kendi işlevinde kalarak müze, rekreasyon alanları olarak kullanılabilir hale getirilebilirken; farklı işlevlerde de kullanılabilmektedir [5]. Kahverengi alanların ve barındırdığı yapıların yeniden işlevlendirilmesiyle; yeniden yapım projelerinde kullanılacak malzeme, enerji, iş gücünden tasarruf sağlanarak ekonomik; mevcut yapıların değerlendirilmesi ile yeşil arazilerin imara açılması engellenerek mevcut arazinin kullanılabilir hale getirilmesi için temizleme ve onarma çalışmalarının yapılmasıyla ekolojik; bir dönemin tarihine, yaşamına ve toplumsal yapısına ışık tutacak belge niteliğinde yapılar ve anıtsal eklentilerinin günümüze ulaşabilmesinin sağlanması ile tarihi ve toplumsal; toplumun yaşamında bir değer edinmiş ve kent belleğini sürekli canlı tutabilmeyi sağlayan bu yapıların korunmasıyla sosyolojik; biyoçeşitliliğin fazla olduğu bu alanların ve yeşil alanların korunması, kentliye ait değerlerin sürekli canlı kalmasının sağlanması ile psikolojik yararlar sağlanmaktadır. Tüm bu yararlar, Birleşmiş Milletler'in 2030 Sürdürülebilir Kalkınma Hedefleri bağlamında önem arz etmektedir. Bu amaçla çalışma kapsamında endüstri mirası

yapıların yeniden işlevlendirilmesi kapsamında uygulanan müdahaleler, Hedef 11. Sürdürülebilir Şehirler ve Topluluklar' a göre incelenecektir.

Anahtar kelimeler: Endüstri Mirası, Kahverengi Alan, Yeniden Kullanım, Yeniden İşlevlendirme, Sürdürülebilir Kalkınma Hedefleri (SDG), SDG 11. Sürdürülebilir Şehirler ve Topluluklar.

ABSTRACT

The industrial revolution is the period of transition from arm power to machine power, which affected the whole world with its sociological, economic and psychological effects at the end of the 18th century. Industrial buildings and facilities such as factories, warehouses, railways established in city centers with the industrial revolution have been abandoned and become idle because of developments in technology and informatics. Buildings from this period are recognized as Industrial Heritage for their tangible/intangible values. Buildings and their surroundings where pollution and deterioration have occurred during and after the cessation of industrial production are called brownfields.

Brownfields and the building stock they contain are an interdisciplinary subject due to their technological, ecological, architectural, sociological, historical and scientific values. Industrial heritage buildings/areas may have characteristics specific to the region, the period in which they were built, the social structure and the purpose for which they were built. The success of reuse projects depends on studies involving the joint and unique decision-making processes of experts in their field. The registration, conservation and reuse of these areas and buildings are of great importance for their sustainability. Industrial heritage buildings and areas can be used as museums and recreational areas while remaining in their original function; they can also be used for different functions. Economic by re-functionalizing brownfields and the structures they contain; economic by saving on materials, energy and labor to be used in reconstruction projects; ecological by preventing the use of green lands for development through the utilization of existing structures and by carrying out cleaning and repair works to make the existing land usable; historical and social by ensuring that buildings and monumental annexes, which are documents that shed light on the history, life and social structure of a period, can survive to the present day; sociological by preserving these buildings, which have acquired a value in the life of the society and ensure that the memory of the city is kept alive; psychological by protecting these areas with high biodiversity and green areas, and by ensuring that the values of the urbanites are kept alive. All these benefits are important in the context of the United Nations' 2030 Sustainable Development Goals. For this purpose, within the scope of the study, the interventions applied within the scope of the re-functionalization of industrial heritage buildings will be examined according to Goal 11: Sustainable Cities and Communities.

Keywords: Industrial Heritage, Brownfield, Reuse, Re-functioning, Sustainable Development Goals (SDG), SDG 11. Sustainable Cities and Communities

FACTORS INFLUENCING RURAL-URBAN MIGRATION OF YOUTHS IN ABIA STATE, NIGERIA

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ABSTRACT

This study examined the factors influencing rural-urban migration of youths in Abia State of Nigeria. A multi-staged sampling technique was employed in the selection of 240 of the respondents (youths) from three local government areas of the state. Data for this study were sourced primarily through the use of well-structured questionnaire. Both descriptive and inferential analyses were employed in the analyses of the data. The result of this study showed that mean age of the respondents was 22.60 years. The study further revealed that majority (68.8%) of the respondents were male, single and family size of between 5 – 8 and had secondary education. The results revealed that the poor electricity supply in the rural areas, bad condition of roads, absence of pipe-borne water were push factors driving the youths away from their communities into urban areas. Results further revealed that better employment opportunities, superior wages in the urban areas, improved living condition are pull factors that attract rural youths to the urban centers. Majority (68.8%) of the respondents were not willing to stay in the rural areas with or without improvement in the condition of living in their communities. The results of this study revealed that age ($r - 0.50$; $p < 0.00$), sex (X-squared – 34.57; $p < 0.05$) and educational level (X-squared – 45.57; $p < 0.01$) of the respondents were significantly related to their decision to migrate from rural to urban areas. The study recommends that government should provide basic social amenities in the rural areas as they are found in the urban areas so as to encourage the youths to stay.

Key words: Rural-Urban Migration, Youths, Bende L. G. A., Abia State

APPLICATIONS OF ARTIFICIAL INTELLIGENCE IN THE 21ST CENTURY MANUFACTURING INDUSTRY IN NIGERIA: INSIGHT FROM SELECTED MANUFACTURING COMPANIES IN ABIA STATE, NIGERIA

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Abstract
Artificial intelligence (AI) is the ability of a digital computer, computer-controlled machine or robot to perform tasks commonly associated with intelligent beings like humans. The study was to investigate the relationship between artificial intelligence application and organizational efficiency in manufacturing sector in Abia State. A descriptive research survey design was used for the study. The sample of the study is six (6) operational managers from each of the twenty six (26) registered manufacturing companies in Abia State by the manufacturing association of Nigeria (MAN) Abia State chapter. The population of the study is twenty six (26) registered manufacturing companies in Abia State. The researcher distributed 156 questionnaires to the respondents. The method of data collection was through questionnaires. Data from the distributed questionnaires was further analysed, using the Pearson Product Moment Correlation Coefficient. The hypotheses of the study were tested using Pearson's product moment Correlation with aid of the statistical package for social science (SPSS). Findings revealed that, the predator variable artificial intelligence and its dimensions robotics, and electronic fund transfer have significant relationship with the measures of the criterion variable as innovation cost reduction. Therefore, it was recommended among others that manufacturing sector should adopt the use of robot in their production process to bring about safety of their staff that might be working with hazardous substances and in the high risk sections of an organization.
Key Words: Artificial intelligence, Organization efficiency, scientific Robotics, Electronic fund transfer, Innovation, Cost reduction.

CLIMATE CHANGE AND ITS EFFECTS ON THE SOCIO-ECONOMIC DEVELOPMENT OF NIGERIA

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Abstract
Climate change has become a great challenge to our generation and its impact is felt in almost every society in the world. Nigeria is likely to be the one of the most negatively impacted countries in the world as a result of climate change. Nigeria is plagued with many ecological problems of various dimensions. Whilst the people living in the southern part of the country are being ravaged by flood and gully erosion, their counterparts in the north are contending with the menace of desertification, deforestation and drought, among others. These environmental challenges have direct and indirect effects on the social and economic activities of the societies. The paper reviews the potential impact of climate change on Nigeria's economic and socio-cultural developments. Secondary data were used and descriptive research design was adopted. The findings indicates that many sectors of the Nigerian economy appears to be directly vulnerable to the impacts of climate change such as manufacturing, insurance, transportation, offshore oil and gas exploration and thermal and hydro-power generation and transmission. Other vulnerable sectors are those dependent on climate-sensitive resources like agriculture, fishing, forestry, renewable energy and eco-tourism. These cumulative effects will impact the GDP negatively. On the basis of the findings, the following were recommended; there should be policies toward mitigation and toward developing technology that can improve productivity and are environmentally friendly, irrigation should be encouraged, NIMET should be well equip to enable it function effectively, government agencies and NGOs should sensitize the people about the dangers of Climate Change in the drive towards a sustainable environment.
Key Words: Climate change, Global warming, Economic development, Sustainable development, Nigeria

ÇOK AMAÇLI OTONOM BİR SUALTI ARAÇ TASARIM AŞAMALARI
DESIGN STAGES OF A MULTI-PURPOSE AUTONOMOUS UNDERWATER VEHICLE

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ÖZET
Bu çalışmada çok amaçlı olarak kullanımı planlanan otonom bir sualtı aracı için gerçekleştirilen tasarım aşamaları sunulmuştur. Hem sivil hem askeri çalışmalarda önemli bir çalışma alanı olan sualtı çalışmaları kara ve hava alanında yapılan çalışmalarla kıyaslandığında oldukça sınırlı kalmaktadır. Fakat hem askeri çalışmalar hem de değişen doğa olayları bilim insanlarını sualtının keşfine daha da meraklandırmıştır. Özellikle de sualtında keşfedilmemiş madenler, petrol ve doğalgaz rezervleri dünyanın enerji geleceğinde önemli bir yer tutmaktadır. Bu amaçlar doğrultusunda ROV (Remotely Operated Underwater Vehicle) olarak da adlandırılan uzaktan kontrollü çeşitli sualtı araçları kullanılmaktadır. Fakat teknolojinin gelişmesiyle kullanıcılar AUV (Autonomous Underwater Vehicle) olarak da bilinen otonom sualtı araçlarını kullanmaya başlamışlardır. Bunlar sayesinde son yıllarda sualtı araştırmalarında artışlar meydana geldiği görülmektedir. Bu çalışmanın sonucunda kendini bu alanda geliştirmek isteyen öğrenciler için otonom bir su altı aracı tasarımı gerçekleştirilmiştir. Yapay sinir ağı temelli otonom bir su altı aracının birinci aşaması olan bu çalışma mekanik tasarım unsurlarının önemini vurgulamaktadır. Kontrol algoritması ne kadar yüksek kalitede olsa da iyi tasarlanmamış bir araç kullanım açısından oldukça kısıtlı kalabilmektedir. Bu noktada doğadaki canlılardan esinlenmek oldukça yaygındır. Biyomimetik yaklaşım olarak da bilinen, doğadaki canlılardan esinlenerek tasarlanmış olan otonom sualtı aracının üretim aşamaları dört aşamadan oluşmaktadır. Bunlar sırasıyla; ana gövde tasarımı ve gerekli analizlerin yapılması, tahrik sisteminin tasarlanması ve gerekli analizlerin yapılması, ana gövdenin eklemeli imalat yöntemiyle üretilmesi, elektronik donanımların montajı ve sistemin çalışır hale getirilmesi, son olarak da testlerin gerçekleştirilmesi ve yazılım geliştirilmesi olarak sıralanmaktadır.
Anahtar Kelimeler: Sualtı aracı, 3B baskı, Otonom

ABSTRACT
In this study, the design stages for an autonomous underwater vehicle planned to be used for multi-purpose purposes are presented. Underwater studies, which are an important field of study in both civil and military studies, are quite limited when compared to studies carried out on land and in the air. However, both military studies and changing natural events have made scientists even more interested in underwater exploration. In particular, undiscovered underwater mines, oil and natural gas reserves hold an important place in the world's energy future. For these purposes, various remotely controlled underwater vehicles, also called ROV (Remotely Operated Underwater Vehicle), are used. However, with the development of technology, users have started to use autonomous underwater vehicles, also known as AUV (Autonomous Underwater Vehicle). Thanks to these, it has been observed that there has been an increase in underwater research in recent years. As a result of this study, an autonomous underwater vehicle design was carried out for students who want to improve themselves in this field. This study, which is the first phase of an artificial neural network-based autonomous underwater vehicle,

emphasizes the importance of mechanical design elements. No matter how high quality the control algorithm is, a poorly designed vehicle may be quite limited in terms of use. At this point, it is quite common to be inspired by living things in nature. The production phases of the autonomous underwater vehicle, which was designed with inspiration from living things in nature, also known as the biomimetic approach, consist of four stages. These are; designing the main body and performing the necessary analysis, designing the drive system and performing the necessary analysis, producing the main body using the additive manufacturing method, assembling the electronic hardware and making the system operational, and finally performing the tests and developing the software.

Keywords: Underwater vehicle, 3D printing, Autonomous

DIAGNOSTIC ASSESSMENT OF SECONDARY STUDENTS' AREAS OF DIFFICULTIES IN QUANTITATIVE ECONOMICS IN PLATEAU STATE, NIGERIA

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The study assessed secondary school students' areas of difficulty in Quantitative Economics in Plateau State, Nigeria. The objectives of the study were to find out the performance profile of students in Quantitative Economics in terms of mastery and non-mastery of the objectives covered by the diagnostic test items, identify the errors committed and find out the perceived causes of errors and how these errors can be minimized. The study adopted a survey research design. The study population comprised all 30,195 senior secondary school two (SS II) students in Plateau State. A sample of 1,594 Economics Students (849 male and 745 female) was determined using the Taro Yamane formula. A multi-stage stratified sampling technique was used for the study. The instrument used for data collection was a Quantitative Economic Diagnostic Test (QEDT) developed by the researcher. The instruments were made up of 104 multiple-choice, 11 essay items and a questionnaire. The reliability of the QEDT items and the questionnaire were determined using the Kuder-Richardson formula 21 (KR-21) and Cronbach Alpha approaches. Data collected were computed using simple percentages, mean, standard deviation. The result obtained showed that students have not mastered graphs, consumer behaviour, demand/supply and price determination and public finance, but have mastery of measures of central tendency and theory of cost. The study revealed that the most common error made by students in Quantitative Economics was computation error and the least was interpretation error. Based on the findings of this study, it was concluded that students have low mastery of skills in graphs, price determination, public finance and the theory of consumer behaviour. The researcher recommended that economics teachers use diagnostic assessments in addition to formative and summative tests for assessing students' learning.

KEYWORDS: Diagnostic Assessment, Quantitative Economics, Errors

TURKEY'S SUSTAINABILITY TRANSFORMATION: ADOPTING CIRCULAR ECONOMY PRINCIPLES

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ABSTRACT

Nowadays, it has become crucial to focus on the countries commitment to contribute to a sustainable world, especially since the adoption of the Agenda 2030. In this particular matter, recent studies have shown that Turkey plays a pivotal part in emphasizing and displaying the commitment towards the Sustainable Development Goals (SDGs) in every occasion. On the one hand, the current research study focuses on the way in which Turkey has managed to link the implementation of the Agenda 2030 with the National Development Plans (NDPs) and sectorial strategies, centering on the opportunities offered by "sustainable development" – a crucial concept successfully imbedded in the NDPs from 1996. On the other hand, the study tackles the new opportunities brought by the SDGs in Turkey, with a major accent on the accumulated experience of the country in terms of strong infrastructure and institutional mechanisms able to provide strong grounds towards adopting Circular Economy Principles. The practical approach and the originality of this paper are represented by: (a) displaying the way in which Turkey has made significant progress in all three dimensions of sustainable development, hence targeting the eradication of poverty, the reduction of inequalities, and the aid of the vulnerable; (b) showing how the human-centered approaches and environmentally-friendly entities helped Turkey achieve remarkable progress in providing better quality, while being keen on supporting well-being and health, strengthening human resources, improving research and development (R&D) as well as innovation ecosystems, enabling digital transformation, and centering on "competitive production and efficiency" and "living no one behind" principles; and (c) analyzing the Sustainability Index and the Organization for Economic Co-operation and Development (OECD) Better Life Index of Turkey.

Keywords: Sustainability Practices; Circular Economy; Sustainability Index; Organization for Economic Co-operation and Development (OECD) Better Life Index; Businesses; Human Resources; Sustainable Finance; Turkey.

PRODUCTION AND COMPARISON OF PROPERTIES OF ORGANIC-FILLED PLASTIC COMPOSITES FOR REDUCING PLASTIC USE IN INDUSTRY

ENDÜSTRİDE PLASTİK KULLANIMINI AZALTMAYA YÖNELİK ORGANİK DOLGULU PLASTİK KOMPOZİTLERİN ÜRETİMİ VE ÖZELLİKLERİNİN KARŞILAŞTIRILMASI

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ABSTRACT
The use of plastics has become widespread both on an individual and global scale due to advantages such as low cost, flexibility, and durability. While it is true that plastics make daily life easier, the environmental damage they cause is also rapidly increasing. Since plastic waste does not decompose in nature for many years, it accumulates in the environment, negatively impacting the circular economy. Additionally, the harm caused by plastic waste to the environment and inadequacies in managing this waste makes plastic waste management even more challenging. At this point, it is expressed that plastic usage poses many risks for the future of the world. Due to the difficulty of decomposing plastic waste and its accumulation leading to pollution, this study aims to reduce the production of plastic materials at the source by creating a new composite material formed by combining the polymer polypropylene with the organic material powdered activated carbon. In this study, the properties of the composite material formed by activated carbon and polypropylene were compared with polypropylene material. Activated carbon and polypropylene, in ratios of 20% and 80%, respectively, were compounded using an extruder machine and then manufactured using an injection molding machine. The resulting samples were subjected to various mechanical tests and analyses for comparison. It was observed that the composite material had higher strength than polypropylene and lower elasticity compared to polypropylene. Furthermore, according to the FTIR analysis, the similarity ratio of the composite material to polypropylene was measured to be 70%. In conclusion, it was observed that the newly obtained composite material would reduce plastic usage.

Keywords: Activated Carbon, Polypropylene, Composite

ÖZET
Plastik kullanımı, düşük maliyet, esneklik ve dayanıklılık gibi avantajlar nedeniyle hem bireysel hem de küresel düzeyde yaygınlaşmıştır. Plastiklerin günlük yaşamı kolaylaştırdığı bir gerçek olsa da, çevreye verdikleri zararlar da hızla artmaktadır. Plastik atıklar doğada uzun yıllar boyunca çözünmediği için çevrede birikmekte ve bu durum döngüsel ekonomiyi olumsuz yönde etkilemektedir. Ayrıca, plastik atıkların çevreye verdiği zararlar ve bu atıkların yönetimindeki yetersizlikler, plastik atık yönetimini daha da zor hale getirmektedir. Bu noktada plastik kullanımının gelecek dünya açısından olumsuz birçok riski olduğu ifade edilmektedir.

Plastik atıkların kolay çözünmemesi ve çevrede birikerek kirliliğe sebep olmasından dolayı endüstride kullanılan plastik malzemelerin azaltılması için polimer madde olan polipropilen ile organik madde olan toz aktif karbonun birleşiminden oluşacak yeni kompozit malzeme yaparak belirli ölçüde plastik malzeme üretimini kaynağında azaltmak hedeflenmiştir. Bu çalışmada aktif karbonun polipropilen ile oluşturduğu kompozit malzemenin özellikleri polipropilen malzeme ile karşılaştırılmıştır. Aktif karbon ile polipropilen sırasıyla %20 ve %80 oranlarında ekstrüder makinesi yardımıyla bileşik haline getirilerek daha sonra enjeksiyon kalıp makinesi ile imalat gerçekleştirilmiştir. Elde edilen numunelerle belirli mekanik testler, analizler yapılarak kıyaslanmıştır. Kompozit malzemenin mukavemetinin polipropilenden yüksek olduğu, elastisitesinin de polipropilene göre düşük olduğu gözlemlenmiştir. Ayrıca yapılan FTIR analizine göre kompozit malzemenin polipropilene benzerlik oranı %70 olarak ölçülmüştür. Sonuç olarak elde edilen yeni kompozit malzemenin plastik kullanımını azaltacağı gözlemlenmiştir.

Anahtar Kelimeler: Aktif Karbon, Polipropilen, Kompozit

NÖROATLETIK ANTRENMANIN POSTERIOR ZINCIR KAS AKTIVASYONU, HAMSTRING ESNEKLIĞI VE AYAK BILEĞI DORSI FLEKSIYON EKLEM HAREKET AÇIKLIĞI ÜZERINE ANLIK ETKISI

THE IMMEDIATE EFFECT OF NEUROATHLETIC TRAINING ON POSTERIOR CHAIN MUSCLE ACTIVATION, HAMSTRING FLEXIBILITY, AND ANKLE DORSIFLEXION RANGE OF MOTION

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ÖZET

Nöroatletik eğitim, sinir sistemi ile kas-iskelet sistemi arasındaki koordinasyonu artırmayı hedefleyen bir yöntemdir. Bu yaklaşım, gluteus maximus, hamstringler, lumbar erector spinae ve gastrocnemius gibi posterior zincir kaslarının performansını optimize etmek için kritik öneme sahiptir. Postürü koruma ve işlevsel hareketlerde önemli rol oynayan bu kaslar üzerinde nöroatletik eğitimin kas aktivasyonu, esneklik ve eklem hareket açıklığına olan akut etkileri sınırlı bir şekilde araştırılmıştır.

Bu çalışma, 18-30 yaş arası 22 rekreasyonel olarak aktif bireyde nöroatletik eğitimin posterior zincir kas aktivasyonu, hamstring esnekliği ve ayak bileği dorsifleksiyon hareket açıklığı üzerindeki anlık etkilerini incelemiştir. Katılımcılar, görsel, vestibüler ve proprioseptif sistemleri hedef alan Z-health® kiti kullanılarak 30 dakikalık bir nöroatletik eğitim seansına katılmıştır. Egzersizler arasında yıldız grafiği takibi, harf kartları ile sakkadik eğitim, yakınsama-uzaksama egzersizleri, Smart Optometry® uygulaması ile optokinetik eğitim ve Brock String boncuk odaklama yer almıştır. Kas aktivasyonu yüzeyel elektromiyografi (sEMG) ile ölçülmüş, esneklik aktif diz ekstansiyonu testi ile değerlendirilmiş ve dorsifleksiyon ağırlık taşıyan hamle testiyle analiz edilmiştir. Öncesi ve sonrası ölçümler eşleştirilmiş t-testleriyle karşılaştırılmış, etki büyüklükleri (Cohen's d) hesaplanmıştır.

Sonuçlar tüm değişkenlerde anlamlı iyileşmeler göstermiştir. Kas aktivasyonu, gluteus maximus (%60.1 ± 5.3'ten %65.4 ± 5.5'e, $p < 0.001$, $d = 1.03$), hamstringler (%60.4 ± 5.1'den %66.2 ± 5.4'e, $p < 0.001$, $d = 1.49$), lumbar erector spinae (%61.0 ± 5.2'den %65.8 ± 5.0'a, $p = 0.0015$, $d = 1.09$) ve gastrocnemius (%60.5 ± 5.0'dan %65.5 ± 5.3'e, $p = 0.0030$, $d = 1.10$) kaslarında artmıştır. Esneklik, aktif diz ekstansiyonu açılarında artışla iyileşmiştir (%65.4 ± 6.1°'den %72.2 ± 5.7°'ye, $p < 0.001$, $d = 1.32$). Ayak bileği dorsifleksiyon aralığı da anlamlı şekilde artmıştır (%10.2 ± 1.8 cm'den %12.5 ± 1.6 cm'ye, $p < 0.001$, $d = 1.64$).

Sonuç olarak, nöroatletik eğitim kas aktivasyonu, esneklik ve hareketlilik üzerinde önemli akut faydalar sağlamaktadır. Bu sonuçlar, atletik performansı artırma ve sakatlıkları önlemede değerli bir yöntem olduğunu göstermektedir. Daha fazla araştırma, uzun vadeli uygulamalar ve farklı sporcu grupları üzerindeki etkilerini incelemelidir.

Anahtar kelimeler: Nöroatletik Eğitim; Posterior Zincir; Kas Aktivasyonu; Esneklik; Dorsifleksiyon

ABSTRACT

Neuroathletic training integrates neuroscience with physical activity, aiming to enhance coordination between the nervous and musculoskeletal systems. This approach is critical for optimizing posterior chain performance, which includes key muscles like the gluteus maximus, hamstrings, lumbar erector spinae, and gastrocnemius. These muscles are essential for maintaining posture and functional movement, yet the acute effects of neuroathletic training on muscle activation, flexibility, and joint mobility are underexplored.

This study investigated the immediate effects of neuroathletic training on posterior chain muscle activation, hamstring flexibility, and ankle dorsiflexion range of motion in 22 recreationally active individuals aged 18–30 years. Participants underwent a 30-minute neuroathletic training session using the Z-health® kit, targeting visual, vestibular, and proprioceptive systems. Exercises included star chart tracing, saccadic training with letter cards, convergence-divergence exercises, optokinetic training with the Smart Optometry® app, and Brock String bead focusing. Muscle activation was measured using surface electromyography (sEMG), flexibility was assessed via the active knee extension test, and dorsiflexion was evaluated using the weight-bearing lunge test. Pre- and post-training results were compared using paired t-tests, and effect sizes (Cohen's d) were calculated.

The results showed significant improvements across all variables. Muscle activation increased for the gluteus maximus (from 60.1% ± 5.3 to 65.4% ± 5.5, $p < 0.001$, $d = 1.03$), hamstrings (60.4% ± 5.1 to 66.2% ± 5.4, $p < 0.001$, $d = 1.49$), lumbar erector spinae (61.0% ± 5.2 to 65.8% ± 5.0, $p = 0.0015$, $d = 1.09$), and gastrocnemius (60.5% ± 5.0 to 65.5% ± 5.3, $p = 0.0030$, $d = 1.10$). Flexibility improved with increased active knee extension angles (65.4° ± 6.1° to 72.2° ± 5.7°, $p < 0.001$, $d = 1.32$). Ankle dorsiflexion range also increased (10.2 cm ± 1.8 cm to 12.5 cm ± 1.6 cm, $p < 0.001$, $d = 1.64$).

In conclusion, neuroathletic training provides significant acute benefits for muscle activation, flexibility, and mobility. These results suggest its value for enhancing athletic performance and preventing injuries. Further research is needed to explore long-term applications and broader use in athletic and clinical populations.

Key words: Neuroathletic Training; Posterior Chain; Muscle Activation; Flexibility; Dorsiflexion

EĞİTSEL VE BİLİMSEL ÖĞRENME ARACI OLARAK MİNECRAFT'IN KULLANILMASI

USING MINECRAFT AS AN EDUCATIONAL AND SCIENTIFIC LEARNING TOOL

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ÖZET

Minecraft, oyunculara sınırsız bir hayal gücü ve tasarı özgürlüğü sunarak, problem çözme becerilerini ve işbirliğini teşvik eden yapısıyla eğitimde etkili bir öğrenme aracı olarak dikkat çekmektedir. Özellikle STEM (Bilim, Teknoloji, Mühendislik, Matematik) alanlarında geniş bir kullanım alanı bulan Minecraft, öğrencilerin hem bireysel hem de grup çalışmalarıyla soyut kavramları somut deneyimlere dönüştürmelerine olanak tanır. Minecraft Education Edition, kodlama, kimya, matematik, fizik ve tarih gibi dersleri interaktif ve eğlenceli bir öğrenme deneyimine dönüştürerek öğrencilerin motivasyonlarını artırır. Bu araştırma, Minecraft'ın eğitsel ve bilimsel öğrenme süreçlerine entegrasyonunu inceleyerek, oyun tabanlı öğrenmenin akademik başarıya ve öğrencilerin bilişsel gelişimine etkilerini ele almayı amaçlamaktadır.

Anahtar Kelimeler: Minecraft, Oyun, Kodlama, STEM, Eğitim

ABSTRACT:

Minecraft, by offering players unlimited imagination and design freedom, has gained attention as an effective learning tool in education due to its structure that fosters problem-solving skills and collaboration. Widely used in STEM (Science, Technology, Engineering, Mathematics) fields, Minecraft allows students to transform abstract concepts into concrete experiences through both individual and group work. Minecraft Education Edition enhances student motivation by transforming lessons such as coding, chemistry, mathematics, physics, and history into interactive and engaging learning experiences. This research aims to examine the integration of Minecraft into educational and scientific learning processes and to evaluate the effects of game-based learning on academic achievement and students' cognitive development.

Keywords: Minecraft, Game, Coding, STEM, Education

COST-BENEFIT ANALYSIS OF *CLARIAS GARIEPINUS* FINGERLINGS FED DIFFERENT LEVELS OF MACA (*Lepidium meyenii,* Walp.) ROOT POWDER AS PHYTO-ADDITIVE

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Abstract

Cost-benefit analysis of *Clarias gariepinus* fingerlings fed different levels of Maca root powder as Phyto-additive was evaluated. Five (5) isonitrogenous (40% crude protein) and isocaloric (1,732kcal kg^{-1} gross energy) diets were formulated, where Maca root powder in form of Phyto-additive was incorporated at 0.0g/100g (TM_0), 0.25g/100g (TM_1), 0.5g/100g (TM_2), 0.75g/100g (TM_3) and 1.0g/100g (TM_4) inclusion levels, diet without Maca root powder (TM_0), served as the control diet. Formulated diets were fed to *C. gariepinus* fingerlings (n = 300, 10.0±0.00g) in fifteen (15) rectangular white plastic tanks (n = 20) at a fixed feeding rate of 3% body weight twice daily between the hours of 8:00 - 9:00am and 4:00 - 5:00pm at regular interval and adjusted after every two (2) weeks of sampling for a period of twelve (12) weeks. The cost-benefit analysis for each of the diets was calculated using the cost-benefit analysis models. Mean net profit value ((₦252), profit index value (1.15) were better along treatments with the least (best) incidence of cost value (₦1.09) and the better benefit cost ratio value (1.06) in fingerlings fed diet TM_3, while the mean net profit value (₦225.5) was least in fingerlings fed control diet (TM_0), profit index value (1.08) was least in both the fingerlings fed diets TM_1 and TM_4. Incidence of cost value (₦1.12) was highest (poor) and benefit cost ratio value (0.95) were least in both the fingerlings fed diets TM_1 and TM_4 respectively. Findings from this study indicated that inclusion of Maca root powder as Phyto-additive at 0.75g/100g into the diet of *C. gariepinus* fingerlings was a profitable venture. Maca root powder is recommended to be included into the diet of *C. gariepinus* in order to minimize the cost of production.

Keywords: Cost-benefit, *Clarias gariepinus,* Fingerlings, Maca root, Phyto-additive

DESIGN AND DEVELOPMENT OF NOVEL APPORACH FOR FILE SHARING FOR SECURITY USING BLOCKCHAIN TECHNOLOGY

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Abstract: File sharing is a fundamental aspect of data management, and it is essential for collaboration, communication, and data exchange. However, file sharing systems are susceptible to security threats and data breaches, which can compromise data confidentiality, integrity, and availability. A novel approach for file sharing using blockchain technology is required which would ensures secure and decentralized file sharing. The novel approach for file sharing would use a hybrid consensus mechanism, combining proof-of-work and proof-of-stake algorithms, to ensure network security and prevent malicious attacks.

It would use multi-layer encryption to enhance file security, where files are encrypted at the user level and the blockchain level. The proposed Novel approach would also incorporates smart contract technology for file access control, where users can set permissions for file sharing and access. The proposed approach was developed and tested using a prototype implementation, and the results show that the system is secure, efficient, and scalable. The system also provides a high level of data privacy and security, making it suitable for various applications, including healthcare, finance, and government.

Keywords: Novel Approach, File sharing; Security; Blockchain, Technology

HACİM AKUSTİĞİ TASARIMINDA KONUŞMA SESİ VE MÜZİKAL SES DEĞERLENDİRİLMESİ

EVALUATION OF SPEECH SOUND AND MUSICAL SOUND IN VOLUME ACOUSTIC DESIGN

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ÖZET

Hacim akustiği, işitsel işlevli mekanlarda sesin yayılımı ve dinleyiciye iletim sürecini kapsamaktadır. Mimari ve müzikal akustik, psikoakustik ile yakından ilişkilidir. Elektronik ses sistemlerinin kullanıldığı kapalı mekanlarda elektro-akustik ile de ilişkilenmektedir. Günümüz hacim akustiği yöntemi yaklaşık 100 yıl önce W. C. Sabine'nin çalışmaları ile başlamıştır. O tarihten itibaren çeşitli akustik uzmanlar tarafından geliştirilmiştir. Yeni parametreler eklenmiş, farklı ses türlerine göre farklı bakış açıları geliştirilmiştir. Tasarım süreci: "Salonun kullanım işlevinin belirlenmesi, mimari proje taslağının tamamlanması, iç mekân tasarımında kullanılacak malzemelerin belirlenmesi, hacim akustiği hesaplarının yapılması ve parametre sonuçlarının incelenmesi, sonuçların uygun sınır değerler arasında olup olmadığının kontrol edilmesi ve tasarım sürecinin tamamlanması" şeklinde özetlenebilmektedir.

Konuşma sesi ve müzikal sesler, aynı frekans aralığı ve aynı ses düzeyinde olabilmelerine karşın yapısal açıdan farklıdır. Sesler yansıma süresi, zenginlik, tını, çeşitlilik gibi özellikler bakımından birbirinden ayrılmaktadır. Aradaki farklılık sadece ses kaynağı açısından değil, dinleyici açısından da önemlidir. Bu nedenle hacim akustiği parametrelerinde konuşma sesi ile müzikal ses için farklı sınır değerleri kabul edilir. Sınırlar çoğunlukla zaman ile ilgilidir. Ayrıca çeşitli pasif akustik tasarım kriterleri de farklılık gösterir. Bu çalışma, günümüzde kullanılan hacim akustiği tasarım yöntemi açısından konuşma sesi ve müzikal sesin farklılıklarını incelemek amacıyla yapılmıştır. Her iki ses türü de doğal ses olarak kabul edilerek irdelenmiştir.

Anahtar Kelimeler: Ses Kaynağı, Doğal Ses, Oditoryum Akustiği, Mimari Akustik

ABSTRACT

Volume acoustics covers the process of sound propagation and transmission to the listener in auditory functional spaces. Architectural and musical acoustics are closely related to psychoacoustics. It is also related to electro-acoustics in closed spaces where electronic sound systems are used. Today's volume acoustics method started about 100 years ago with the work of W. C. Sabine. Since then it has been developed by various acoustic experts. New parameters have been added and different perspectives have been developed for different types of sound. The design process can be summarized as: "Determining the function of the hall, completing the architectural project draft, determining the materials to be used in interior design, making volume acoustics calculations and examining the parameter results, checking whether the results are within the appropriate limit values and completing the design process".

Speech and musical sounds are structurally different, although they can be in the same frequency range and at the same volume level. Sounds differ from each other in terms of

characteristics such as reflection time, richness, timbre and variety. The difference is important not only for the sound source but also for the listener. For this reason, different boundary values are accepted for speech sound and musical sound in volume acoustics parameters. The limits are mostly related to time. Various passive acoustic design criteria also differ. This study was conducted to examine the differences between speech sound and musical sound in terms of the volume acoustic design method used today. Both types of sound are considered as natural sounds and analyzed.
Keywords: Sound Source, Natural Sound, Auditorium Acoustics, Architectural Acoustics

HALAL LIFESTYLE AS A GLOBAL TREND: A COMPARATIVE STUDY OF MILLENNIALS AND GEN Z IN INDONESIA

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Abstracts:
Halal lifestyle has become a widespread global trend among millennials and Gen Z in Indonesia, not only as religious compliance but also as a modern identity that supports health, sustainability and ethical consumption. This study analyzes the differences in motivations and preferences between millennials who are more focused on health and religious compliance, and Gen Z who tend to be pragmatic with an emphasis on environmental sustainability and animal welfare. Data was obtained through an online survey of 400 respondents as well as in-depth interviews with 20 participants. The results show that social media is the main channel for both generations to obtain information about halal products, with Gen Z also utilizing digital platforms to express their identity. The recommendation for the industry is to customize marketing strategies based on the characteristics of each generation, with a focus on health for millennials and sustainability for Gen Z. This study highlights the potential growth of the halal economy in Indonesia through the implementation of an adaptive and inclusive halal lifestyle, which aligns with contemporary issues and strengthens Indonesia's identity in the global arena.
Keywords:
Halal lifestyle, global trends, millennial generation, Gen Z, Indonesia, sustainability, halal economy, social media.

FORMATION OF INTELLECTUALLY COMPETENT GENERATION IN THE EDUCATIONAL SYSTEM.

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Abstract

In their professional practice, the teacher considers each student as a whole individual, addressing certain contradictions and working towards the integration of systems. In this context, the teacher must possess a level of knowledge that enables them to understand and interpret the world. Furthermore, based on the knowledge and experiences they have acquired, the teacher continuously refines their actions and behavior, while also engaging in self-awareness and self-evaluation.

The pedagogical environment of the school exerts a significant influence on the development of newly appointed teachers. During this process, the teacher is expected to cultivate professional self-understanding, including awareness of their desires, aspirations, and perceptions, as well as the ability to mitigate potential negative consequences. Additionally, the teacher's competencies in resolving various situations among students, grounded in pedagogical expertise, are enhanced and further developed.

Key terms: Student community, community, community development, individual, social relationships, social relations, a well-rounded person, continuous education, behavior, upbringing, activity, family, family environment, educational tools, society, and so on.

SEMENTO-OSSEÖZ DİSPLAZİ: VAKA RAPORU VE LİTERATÜR DERLEMESİ
CEMENTO-OSSEOUS DYSPLASIA: CASE REPORT AND LITERATURE REVIEW

Dilber ÇELİK
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ÖZET
AMAÇ: Semento-osseöz displazi (SOD), çenelerin diş taşıyan bölgelerinde gözlenen neoplastik olmayan fibroosseoz lezyonlardır ve trabeküler kemik yapısının fibröz doku ile yer değiştirmesiyle karakterizedir. Bu olgu sunumunda amaç, SOD'un klinik, radyolojik ve histopatolojik bulgularını değerlendirip tedavi planı oluşturmaktır. Bu amaçla kapsamlı literatür taraması yapılmıştır. Kadınlarda erkeklerden daha sık görülür ve posterior mandibulada meydana gelir. Tutulum yeri ve derecesine bağlı olarak, histomorfolojileri aynı olmasına rağmen periapikal, fokal ve florid alt tiplere ayrılır. Lezyon, çoğunlukla asemptomatiktir ve spesifik bir tedavi olmaksızın kendi kendini sınırlar. Lezyonun hipovaskülaritesi sekonder enfeksiyon ve osteomiyelit riskini artırır.
OLGU:
Bu olguda, mandibular molar bölgedeki SOD vakası rapor edilmiştir. Kırk yaşında kadın hasta yaklaşık bir yıldır devam eden sağ mandibular molar bölgede ağrılı şişlik şikâyeti ile kliniğimize başvurmuştur.
Sağ mandibular 1. molar dişin çekim boşluğunda vestibül kemikte lezyonun palpasyonda sert, hareketsiz, ağrılı ve normal mukoza renginde olduğu tespit edilmiştir. Lezyon lokal anestezi altında kürete edildi ve histopatolojik inceleme sonucu bening semento-osseöz displazi ile uyumlu olarak rapor edildi. Hastanın yaklaşık 1 yıllık takibi sonucunda nüks gözlenmedi. Bu lezyonun etiyolojisinin ve patogenezinin henüz bilinmemesine rağmen, histogenetik olarak periodontal ligamentten kaynaklandığı düşünülmektedir.
SONUÇ: Semento-osseöz displazi genellikle asemptomatiktir ancak, hastaların klinik ve radyolojik muayeneleri dikkatli yapılmalıdır. Hastanın bulgularına göre, düzenli kontrol ile takip ya da cerrahi tedavi sonrası düzenli takipler yapılmalıdır. Olası komplikasyonlar göz önüne alındığında, gereksiz cerrahi müdahalelerden kaçınmak için lezyonlar ve ayırıcı tanıları hakkında kapsamlı bilgi sahibi olmak şarttır. Fibro-osseöz lezyonların tanı ve takibi için CBCT'nin uygun bir görüntüleme yöntemi olduğu unutulmamalıdır.
Anahtar Kelimeler: Semento-osseöz displazi, SOD, fibro-osseöz lezyon, mandibula, ayırıcı tanı.

ABSTRACT

BACKGROUND:Cemento-osseous dysplasia(COD) is a non-neoplastik fibroosseous lesion that occurs in the tooth-bearing areas of the jaws and is characterized by replacement of the trabecular bone structure with fibrous tissue.The aim of this case report is to evaluate the clinical, radiologic and histopathologic findings of COD and to formulate a treatment plan. For this purpose, a comprehensive literature review was performed.Generally it occurs posterior mandible with greater frequency in women than men.Although their histomorphology is the same, they are subdivided into periapical, focal and florid subtypes depending on the site and degree of involvement.The lesion is usually asymptomatic and self-limiting without specific treatment.Hypovascularity of the lesion increases the risk of secondary infection and osteomyelitis.

CASE:In this case, we report a case of COD in the mandibular molar region.A 40-year-old woman presented to our clinic with a complaint of painful, swelling in her right mandibular first molar that had been persisting for one year. The lesion in the vestibular bone in the extraction cavity of the right mandibular 1st molar was found to be hard, immobile, painful and normal mucosa color on palpation. The lesion was curetted under local anaesthesia and histopathological examination was reported as benign COD. No recurrence was observed after approximately 1 year of follow-up.Although the aetiology and pathogenesis of this lesion is not yet known, it is thought to originate histogenetically from the periodontal ligament.

Conclusions:COD is usually asymptomatic, but clinical and radiologic examinations should be performed carefully.According to the findings of the patient, regular follow-up with regular follow-up or regular follow-up after surgical treatment should be performed. Given the potential complications, a thorough knowledge of the lesions and their differential diagnosis is essential to avoid unnecessary surgical interventions.It should not be forgotten that CBCT is an appropriate imaging method for the diagnosis and follow-up of fibro-osseous lesions.

Keywords: Cemento-osseous dysplasia, fibroosseous lesion, mandible,differential diagnosis.

PARESTEZİ İLE BİRLİKTE GÖRÜLEN RADİKÜLER KİST: OLGU SUNUMU
RADICULAR CYST WİTH PARESTHESIA: CASE REPORT

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ÖZET
AMAÇ: Radiküler kistler, çenelerde en sık görülen odontojenik kistlerdir. Bütün kistlerin yaklaşık %70'ini oluştururlar. Radiküler kistler, sıklıkla maksilla anterior bölgede ve 30-50 yaş aralığında görülürler. Radiküler kistler, sıklıkla devital pulpalı sürmüş dişlerin apikalinde radyolüsent lezyonlardır. Yavaş büyüyen bu kistler, büyük boyutlara ulaşana ve enfekte olana kadar sıklıkla asemptomatiktir. Radiküler kistler, erkek bireylerde daha fazla görülür. Genellikle üçüncü dekatta ortaya çıkar.
OLGU: Bu olguda, panoramik radyografi ve BT sonrası teşhis ettiğimiz mandibula radiküler kisti rapor edilmiştir. 49 yaşında kadın hasta, alt çenede ağrı ve parestezi ile kliniğimize başvurmuştur. Klinik muayenede mandibulanın sol tarafındaki bukkal mukozada renk değişikliği tespit edildi. Panoramik radyografide 35 nolu dişle ilişkili sınırları düzgün, uniokuler radyolusent bir lezyon görüldü. Üç boyutlu BT'de, mandibulanın sol tarafındaki bukkal korteksin rezorbe olduğu görüldü. Klinik muayene ve radyolojik inceleme sonrasında kist ön tanısı konuldu.
Kist, lokal anestezi altında enükle edilerek 35 nolu diş çekildi. Histolojik inceleme sonrası radiküler kist (inflamatuar odontojenik kist) tanısı konulmuştur. Histolojik kesitlerde non-keratinize birkaç sıralı odontojenik epitel ile döşeli kistik lezyon izlenmiştir. Kist duvarında kronik inflamasyon mevcut olduğu görülmüştür. İşlemden sonra herhangi bir komplikasyon gözlenmedi. Postoperatif 1.hafta sonunda yapılan kontrolde parestezinin azaldığı, postoperatif 1.ay yapılan kontrolde parestezinin tamamen ortadan kalktığı görüldü. 8.ay sonunda klinik ve radyolojik olarak yapılan takip sonucunda ilgili bölgede parastezinin geçtiği ve iyileşmenin normal olduğu tespit edilmiştir.
SONUÇ: Odontojenik kistlerin teşhisinde; genellikle kistin yeri ve komşu dişlerle ilişkisi önemlidir. Ancak bazı durumlarda histopatolojik tetkik ile kesin tanı konulabilmektedir. Bizim vakamızda da olduğu gibi, kistlerin diş komşuluğundaki anatomik yapılarda basınç artışına bağlı yer değişikliği rezorpsiyon gözlenebilir. Radiküler kistlerin, klinik ve biyolojik olarak agresif seyredebileceği unutulmamalıdır. Bu nedenle cerrahi planlama dikkatli yapılmalıdır.
Anahtar Kelimeler: parestezi, radiküler kist, odontojenik kist, enükleasyon.

ABSTRACT

OBJECTIVES: Radicular cysts are the most common odontogenic cysts in the jaws. They constitute approximately 70% of all cysts. Radicular cysts are frequently seen in the anterior region of the maxilla and in the age range of 30-50 years. Radicular cysts are radiolucent lesions apical to erupted teeth with devital pulp. These slow-growing cysts are often asymptomatic until they reach a large size and become infected. Radicular cysts are more common in male individuals. They usually appear in the third decade of life.

CASE: In this case, we report a radicular cyst of the mandible diagnosed after panoramic radiography and CT scan. A 49-year-old woman presented to our clinic with pain and paresthesia in the mandible. Clinical examination revealed discolouration of the buccal mucosa on the left side of the mandible. Panoramic radiography showed a uniocular radiolucent lesion with smooth borders associated with tooth number 35. Three-dimensional CT scan showed resorbed buccal cortex on the left side of the mandible. After clinical examination and radiological examination, a preliminary diagnosis of cyst was made. The cyst was enucleated under local anaesthesia and tooth number 35 was extracted. After histological examination, radicular cyst (inflammatory odontogenic cyst) was diagnosed. Histological sections showed a cystic lesion lined with several rows of non-keratinized odontogenic epithelium. Chronic inflammation was observed in the cyst wall. No complications were observed after the procedure. It was observed that the paresthesia decreased at the end of the 1st postoperative week and completely disappeared at the 1st postoperative month. At the end of the 8th month, clinical and radiological follow-up showed that the paresthesia had disappeared and healing was normal.

CONCLUSION: In the diagnosis of odontogenic cysts, the location of the cyst and its relationship with the neighbouring teeth are generally important. However, in some cases, a definitive diagnosis can be made by histopathological examination. As in our case, displacement and resorption may be observed in the anatomical structures in the neighbourhood of the cysts due to increased pressure. It should be kept in mind that radicular cysts may be clinically and biologically aggressive. Therefore, surgical planning should be done carefully.

Keywords: paresthesia, radicular cyst, odontogenic cyst, enucleation.

MATEMATİK ÖĞRETMEN ADAYLARININ ÇOKTAN SEÇMELİ SORULARI HAZIRLAMADA ÇELDİRİCİLERİ TERCİH SEBEPLERİNİN DEĞERLENDİRİLMESİ

AN EVALUATION OF PROSPECTIVE MATHEMATICS TEACHERS' REASONS FOR CHOOSING DISTRACTORS WHEN PREPARING MULTIPLE-CHOICE QUESTIONS

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ÖZET
Bilindiği gibi öğrenme-öğretme sürecinde ölçme ve değerlendirme önemli bir gerekliliktir. Hemen hemen tüm derslerde her ne kadar alternatif ölçme araçlarının kullanılmasından bahsedilse de çoktan seçmeli sorular, ölçme ve değerlendirme sürecinde önemli bir rol oynamaktadır. Bu bağlamda, araştırmanın amacı staj okullarına giden matematik öğretmen adaylarının çoktan seçmeli soruları hazırlamada çeldirici tercih sebeplerinin araştırılmasıdır. Bu amaç doğrultusunda İstanbul ilindeki bir eğitim fakültesine devam eden öğretmen adaylarıyla bu araştırma gerçekleştirilmiştir. Veri toplamada en az 10 tane çoktan seçmeli sorudan oluşan 1. dönem 1. yazılı sınavı ve sınavın değerlendirme anahtarını kaynakçalarıyla birlikte oluşturmaları istenmiştir. Verilerin analizinde doküman analizi kullanılmıştır. Bulgular; örneklemdeki öğretmen adaylarının çoktan seçmeli soruları hazırlamada çeldirici tercih sebeplerinin yanı sıra hazırladıkları soruların puanlama ve cevap anahtarını doğru hazırlama ve zorluk düzeyine ilişkin görüşlerini içermektedir. Ayrıca öğretmen adaylarının çoktan seçmeli soruları hazırlarken yararlandıkları kaynaklar da incelenmiş ve bu doğrultuda da değerlendirmeye yer verilmiştir. Verilerin analizi sonucunda bu araştırma kapsamındaki öğretmen adaylarının en fazla işlem hatasına yönelik sorular hazırladıkları görülmüştür. Bununla birlikte, araştırma grubundaki öğretmen adaylarının soru hazırlamada orta zorluk seviyesinde ve genellikle özel yayınevi kaynaklarından faydalandıkları tespit edilmiştir. Araştırma bulgularının, özellikle matematik öğretmen adayları tarafından hazırlanan çoktan seçmeli sorulara ilişkin bir öngörü taşıyacağı düşünülmektedir. Bulguların değerlendirilmesi sonucunda gerek bu araştırmaya gerekse yapılacak olası araştırmalara yönelik önerilere yer verilmiştir.

Anahtar Kelimeler: Matematik Öğretmen Adayı, Çoktan seçmeli sorular,Soru hazırlama, Ölçme ve değerlendirme

ABSTRACT
As is well-known, assessment and evaluation are critical components of the teaching and learning process. Although the use of alternative assessment tools is frequently emphasized in nearly all subjects, multiple-choice questions continue to play a significant role in this process. In this context, the purpose of this study is to examine the reasons behind the

distractor choices made by mathematics teacher candidates when designing multiple-choice questions during their internship at schools. The study was conducted with teacher candidates enrolled in an education faculty in Istanbul. As part of data collection, participants were asked to create a first term, first written exam consisting of at least 10 multiple-choice questions, along with an answer key and references for their questions. Document analysis was employed to analyze the data. The findings reveal insights into the distractor preferences of the teacher candidates when preparing multiple-choice questions, as well as their perspectives on the difficulty of creating accurate scoring and answer keys. Furthermore, the study examined the resources used by the teacher candidates while preparing their questions and provided evaluations based on these resources. The analysis showed that the teacher candidates most frequently designed questions targeting procedural errors. Additionally, it was found that the participants generally created questions of moderate difficulty and primarily relied on materials from private publishing companies. The results of this study are expected to offer valuable insights into the design of multiple-choice questions by mathematics teacher candidates. Based on the findings, recommendations are provided for both this study and future research.

Keywords: Prospective Mathematics Teacher, Multiple-Choice Questions, Question Preparation, Assessment and Evaluation

KAHRAMANMARAŞ MERKEZLİ 6 ŞUBAT 2023 TARİHLİ DEPREM SONRASI KADINLARIN DEĞİŞEN ALIŞKANLIKLARI: ANTAKYA ÖRNEĞİ

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ÖZET
Ülkemizin jeolojik konumu nedeniyle yüzölçümünün büyük bir kısmı deprem kuşağında yer almaktadır. Son zamanlarda yaşanılan büyük depremler, bir deprem ülkesi olduğu gerçeğini büyük yıkım ve kayıplarla birlikte bir kez daha hatırlatmıştır. Bu noktada, 6 Şubat 2023'te Kahramanmaraş merkezli 11 ili etkileyen ve etkilediği bölgelerde büyük maddi ve manevi yıkımlara yol açan son depremin, depremi yaşayan afetzedeler üzerindeki etkileri halen devam etmekte olup, açılan maddi ve manevi uçurumların henüz kapatılamadığı görülmektedir. Bu çalışmada, afet sosyolojisinin temel konularından biri olan deprem olgusuna kadınların gözünden ve deprem sonrası değişen alışkanlıklara toplumsal cinsiyet perspektifinden bakılmaktadır. Bu noktada 6 Şubat 2023'te yaşanan Kahramanmaraş merkezli deprem sonrasında Hatay'ın Antakya ilçesinde yaşayan 11 kadınla yüz yüze görüşmeler yapılmış ve deprem öncesi ve sonrası kadınların rol ve sorumlulukları, yaşadıkları yerler, deprem sürecinin çocukları üzerindeki etkileri, afet sonrası kendilerinden beklenen toplumsal beklentiler ve geleceğe ilişkin düşünceleri tartışılmıştır. Bu noktada depremin travmatik etkilerinin hala devam ettiği, geleceğe ilişkin umutsuzluk içinde oldukları, deprem öncesi kadınların ev işleri, çocuk bakımı gibi sorumluluklarının deprem sonrası artarak devam ettiği sonucuna varılmıştır.
Anahtar Kelimeler: *Toplumsal cinsiyet, kadın, toplumsal cinsiyet rolleri, afet*

CHANGING HABITS OF WOMEN AFTER THE EARTHQUAKE CENTRED IN KAHRAMANMARAS ON 6 FEBRUARY 2023: ANTAKYA CASE

ABSTRACT
Due to the geological location of our country, a large part of its surface area is located in the earthquake zone. Recent major earthquakes have once again reminded the fact that we are an earthquake country with great destruction and losses. At this point, the effects of the recent earthquake on 6 February 2023, which affected 11 provinces centred in Kahramanmaraş and caused great material and moral destruction in the regions it affected, are still continuing on the disaster victims who experienced the earthquake, and it is seen that it is not yet possible to close the material and moral gaps opened. This study looks at the earthquake phenomenon, which is one of the main topics of the sociology of disasters, through the eyes of women and the changing habits after the earthquake from a gendered perspective. At this point, face-to-face interviews were conducted with 11 women living in Antakya district of Hatay after the Kahramanmaraş-centred earthquake on 6 February 2023, and the roles and responsibilities of women before and after the earthquake, the places where they lived, the effects of the earthquake process on their children, the social expectations expected from them after the disaster and their thoughts about the future were discussed. At this point, it was concluded that the traumatic effects of the earthquake are still continuing, that they are in despair about the future, and that women's

responsibilities such as housework and child care before the earthquake continue to increase after the earthquake.

Keywords: *Gender, women, gender roles, disaster*

6 ŞUBAT DEPREMİ SONRASINDA DEPREMZEDE ERKEKLERİN EKONOMİK KAYGILARI: ANTAKYA ÖRNEĞİ

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ÖZET
Kahramanmaraş merkezli 6 Şubat 2023 depremi 11 ili etkilemiş ve depremi yaşayan bireylerin toplumsal yaşamlarında önemli değişimler meydana gelmiştir. Toplumun kadın ve erkeklerden beklentileri deprem öncesinde olduğu gibi toplumsal cinsiyet rolleri çerçevesinde şekillenmeye devam etmiştir. Buna göre büyük bir depremin psikososyal ve ekonomik etkileri hem bireyler hem de toplum üzerinde varlığını sürdürürken, erkeklerin toplumsal cinsiyet rollerine uygun olarak ailenin ekonomik kaygılarını giderecek şekilde, asgari düzeyde de olsa hanenin ekonomik ihtiyaçlarını karşılayabilmesi beklenmektedir. Deprem sonrası işyerlerinin yıkılması, erkeklerin aile üzerindeki en büyük gücü olan ekonomik geliri elde tutma olanağını azaltmış ve kısıtlamıştır. Çalışma kapsamında deprem sırasında Antakya'da bulunan 10 erkek katılımcı ile yüz yüze derinlemesine görüşmeler yapılmış, deprem sırasında ve sonrasında iş ve gelir kaybının etkileri sosyolojik açıdan açıklanmaya çalışılmıştır. Çalışmanın verileri, serbest meslek sahibi olan ve kendi işyerlerine sahip olan katılımcıların, eski düzenlerine mümkün olan en kısa sürede dönmeye çalıştıklarını, güvenliklerini sağladıktan sonra öncelikle işyerlerini düzene sokarak iyileştirmeye çalıştıklarını ve bunu cinsiyet rollerinin sorumluluğuyla yaptıklarını ortaya koymuştur.
Anahtar Kelimeler: *Toplumsal cinsiyet, erkek, deprem, afet*

AFTER THE 6 FEBRUARY EARTHQUAKE, ECONOMIC CONCERNS OF EARTHQUAKE VICTIM MEN: THE CASE OF ANTAKYA

ABSTRACT
The 6 February 2023 earthquake centred in Kahramanmaraş affected 11 provinces and significant changes occurred in the social lives of individuals who experienced the earthquake. The expectations of the society from women and men continued to be shaped within the framework of gender roles as before the earthquake. Accordingly, while the psychosocial and economic effects of a major earthquake continue to exist on both individuals and society, men are expected to be able to meet the economic needs of the household, albeit at a minimum level, in a way to eliminate the economic concerns of the family in accordance with gender roles. The destruction of workplaces after the earthquake reduced and restricted the ability of men to hold the economic income, which is the greatest power of men over the family. Within the scope of the study, face-to-face in-depth interviews were conducted with 10 male participants who were in Antakya during the earthquake, and the effects of the loss of work and income during and after the earthquake were tried to be explained from a sociological perspective. The data of the study revealed that the participants, who were self-employed and had their own workplaces, were trying to return to their old order as soon as possible, and after ensuring their safety, they

first tried to improve their workplaces by putting them in order, and that they did this with the responsibility of their gender roles.
Keywords: *Gender, man, earthquake, disaster*

MEDIATING EFFECT OF CUSTOMER SATISFACTION IN THE RELATIONSHIP BETWEEN DIGITAL MARKETING ON PERFORMANCE OF HOSPITALITY AND TOURISM INDUSTRY IN NORTH EAST, NIGERIA

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ABSTRACT

Digital marketing encompasses methods including affiliate, mobile, video, content, social media, and internet marketing, and it combines electronic technology with conventional marketing concepts. Adopting digital marketing can improve national growth and business performance. The success of the hotel and tourism industries, consumer happiness, and digital marketing are all examined in this review article. The study's goal is to examine how customer satisfaction functions as a mediator in the relationship between digital marketing and the performance of the hotel and tourism sector in north eastern Nigeria. The study examines secondary data from books, journal articles, newspapers, and conference papers in addition to drawing on the author's expertise, insights, and experiences in digital marketing in the hospitality and tourism sector. The report outlines the digital resources that businesses can employ, such as social media, mobile devices, video, and the internet, and demonstrates how these technologies can be used to persuade, inform, and inspire consumers. Consequently, the analysis shows that the performance of the hotel and tourism sector can be impacted by digital marketing. Similarly, the outcome shows that the relationship between digital marketing and the performance of the hospitality and tourism industry is partially mediated by consumer happiness. As a result, digitization can improve costs, earnings, competitive advantage, and customer pleasure. According to this study, digital marketing can help promote hospitality-related goods. Additionally, digital marketing supports economic growth and climate action as sustainable development goals. According to the study's findings, digital marketing should be adopted by hospitality companies in order to improve performance and advance national development.

Keywords: digital marketing, customer satisfaction, performance of hospitality and tourism industry

GENDER EQUALITY AND WOMEN EMPOWERMENT TARGET OF UNITED NATIONS & SUSTAINABLE DEVELOPMENT GOAL (SDG-5)

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Abstract

Gender equality and women empowerment have been on the top of the agenda globally. Achieving gender equality and empowering all women and girls has been mentioned by the United Nations in its Sustainable Development Goal (SDG-5) as a target. Various efforts and initiatives have been taken at global, regional and local level to eliminate gender inequality. Women in India have been stereotyped and discriminated since ancient times due to the patriarchal mindset. Social evils such as sati, purdah system, female foeticide, female infanticide, dowry, domestic violence have been faced by women. Various constitutional and legal provisions have been framed to eliminate such evils. In contemporary times, women have become sensitised about their rights and have come a long way in terms of women empowerment. Various schemes have been launched by central and state governments for emancipation of women. However, the patriarchal mindset still exists and gender biasness is still experienced by women both in public and private space. The paper attempts to analyse the level of women empowerment in different states of India. The study is based on the secondary data collected from various government sources. An analysis of the reasons responsible for the trends has also been done. It has been found in the study that female literacy has a positive bearing on the health and decision-making of females. Also, government support in the from of infrastructure and schemes act as a catalyst in women empowerment. Women-centric organisations and Self Help organisations have promoted economic empowerment and decision-making of females.

Women empowerment and gender equality has become the pivot of all global agendas. The struggle for ending gender inequality and achieving emancipation of women is long drawn. Moreover, women empowerment is considered as a pre-requisite for the attainment of sustainable development (UNFPA, 2021). Gender equality and empowering women are not only an end in themselves but also a means to achieve a prosperous, peaceful, sustainable and inclusive world. United Nations have organized four conferences on women's issues. The 4th conference popularly known as The Beijing Platform for action is a landmark event as it focuses on twelve critical areas of women's concern and imagines a world where each woman and girl can exercise her freedom of choices (UN Women, 2014). The sustainable development goal mentions achieving gender equality and empowering all women and girls as a specific objective to be achieved by 2030. (Women and Health, 2021). Several conventions such as Elimination of All Forms of Discrimination against women, Convention on Political Rights of women, Declaration on the Elimination of violence against women have been adopted to end gender discrimination (International conventions on women, 2020).

Though numerous efforts have been initiated for providing a discrimination free world to women but the statistics throughout the world still paints a gloomy picture. According to UNDESA, one in three women (736 million) have been subjected to physical and or sexual violence at least once in their lifetime, since the age of 15. Also, according to a statistic, only 28% of women held managerial positions throughout the world. Moreover, it was also pointed out that the burden of unpaid domestic care and work is lopsided which further increased during the pandemic (UNDESA, 2020).) According to Global Gender Gap Report, the

COVID 19 pandemic has increased the time period for gender parity to be achieved from 99.5 years to 135.6 years (World Economic Forum, 2021).

Indian constitution treats its women at par with men through various constitutional (Article 14, 15, 42) and legal provisions (Planning Department, 2021). Moreover, it provides for affirmative action in favour of women to end the age-old discrimination and provide equal opportunities. 73rd and 74th constitutional Amendments provide reservation to women in local bodies so as to make them politically empowered and have a say in decision- making (Hazarika, 2011). Numerous women targeted schemes have been launched since Indian Independence such as Pradhan Mantri Janani Suraksha Yojana, Beti Bachao Beti Padhao, Ujjawala. SwadharGreh, Pradhan Mantri Matru Vandana Yojana etc. (MOW & CD, 2021). However, even after more than seven decades of independence and numerous initiatives, the Indian women face lot of discrimination and injustice. The longstanding and intergenerational cycles of gender biasness impacts both the present as well as the future of the country. (Pradhan, 2020). According to recent report released by World Economic Forum, India has slipped 28 places and ranked 140th among 150 nations in global gender gap. The gap in India has widened to 62.5% due to various factors such as decrease in women's labour force participation, inadequate representation of women in politics and leadership roles, lagging female to male literacy rates (Shettigar & Mishra, 2021). The major hindrance in achieving gender equality lies in the implementation of laws and schemes coupled by the gendered vision of patriarchy (Saxena, 2019).

The present paper attempts to examine the educational, health, economic, political and socio-cultural status of women in different states of India. The papers also aim to analyse the overall level of women empowerment achieved by the states. Moreover, the papers also attempt to scrutinize the reasons responsible for the emerging trends in different states.

Keywords: SDG-5, gender equality, women empowerment, United Nations, sustainable development, global targets, Patriarchal, Gender biasness.

REAL-TIME ANOMALY DETECTION IN VANET COMMUNICATION USING SUMO SIMULATOR

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Abstract: Vehicular Ad Hoc Networks (VANETs) are integral to Intelligent Transportation Systems (ITS), facilitating communication between vehicles and infrastructure to enhance road safety and operational efficiency. Due to their dynamic nature and susceptibility to threats like cyber-attacks and communication disruptions, real-time anomaly detection is essential for maintaining system reliability. This paper examines advancements in anomaly detection methods, emphasizing the use of the Simulation of Urban Mobility (SUMO) simulator as a central tool for designing and testing these techniques. SUMO provides a comprehensive platform for simulating traffic conditions and generating datasets to train machine learning algorithms. Detection strategies are categorized into rule-based, statistical, and machine learning approaches, with machine learning emerging as a leading solution due to its ability to handle complex and evolving anomalies. Research findings indicate that combining SUMO with machine learning enhances the accuracy and scalability of anomaly detection systems across various traffic scenarios, including both urban and highway environments. However, challenges like high computational requirements, limited applicability of simulation models to real-world scenarios, and the absence of standardized datasets remain. Overcoming these limitations involves adopting lightweight detection mechanisms, optimizing data processing, and leveraging innovations like edge computing and 5G technology. This paper focus on the critical need for advanced anomaly detection systems to ensure secure and dependable VANET operations

Keywords: VANETs, Intelligent Transportation Systems, Anomaly Detection, Security Threats, Real-time Detection, Adaptive Security, Vehicular Networks Safety.

SPOR YÜKSEKÖĞRETİM KURUMU ÖĞRENCİLERİNDE YARATICILIK DÜZEYİNİN BAZI DEĞİŞKENLERE GÖRE İNCELENMESİ: ORDU İLİ ÖRNEĞİ

EXAMINATION OF CREATIVITY LEVEL IN SPORTS HIGHER EDUCATION INSTITUTION STUDENTS ACCORDING TO SOME VARIABLES: ORDU PROVINCE EXAMPLE

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ÖZET

Bu çalışmanın amacı, spor yükseköğretim kurumu öğrencilerinde yaratıcılık düzeyinin bazı değişkenlere göre incelenmesidir. Çalışma, tesadüfi örneklem yöntemi ile belirlenen 44 kadın ve 88 erkek toplam 132 katılımcıdan oluşmaktadır. Çalışmada veri toplama aracı olarak "Kişisel Bilgi Formu" ve "Sporcular İçin Yaratıcılık Ölçeği" kullanılmıştır. Verilerin analizinde çarpıklık-basıklık katsayısı, bağımsız örneklem t-testi, tek yönlü varyans analizi (ANOVA) kullanılmıştır. Çalışma sonuçları incelendiğinde katılımcıların cinsiyet, yaş, sınıf ve spor türü değişkenlerine göre sporcular için yaratıcılık ölçeği toplam puanlarında anlamlı farklılık belirlenmemiştir ($p>0.05$). Spor yaşı değişkenine göre katılımcıların sporcular için yaratıcılık ölçeği toplam puanlarında 7 yıl ve üzeri spor yapanların lehine anlamlı farklılık belirlenmiştir ($p<0.05$). Spor yükseköğretim kurumu öğrencilerinde sporda yaratıcılık düzeyinin ise ortalamanın üzerinde olduğu belirlenmiştir. Elde edilen sonuçlara göre cinsiyet, yaş, sınıf ve spor türünün sporda yaratıcılık düzeyinde belirleyici bir faktör olmadığı ifade edilebilir. Spor yükseköğretim kurumlarında sunulan eğitim programlarının, öğrencilerin fiziksel, zihinsel ve bilişsel gelişimlerini desteklediği söylenebilir. Sporcu öğrencilere sanal gerçeklik (VR) veya artırılmış gerçeklik (AR) teknolojileri kullanılarak, yaratıcı düşünmeyi teşvik eden ortamlar sunulmasının faydalı olabileceği düşünülmektedir. Bu araştırmadan sonra yapılacak çalışmaların spor branşları, spor düzeyi ve milli sporcu gibi faktörleri içermesinin literatüre katkı sağlayacağı öngörülmektedir.

Anahtar Kelimeler: Spor, Yaratıcılık, Yaratıcı Düşünme

ABSTRACT

The purpose of this study is to examine the creativity level of students of higher education institutions in sports according to some variables. The study consists of a total of 132 participants, 44 female and 88 male, who were determined by random sampling method. "Personal Information Form" and "Creativity Scale For Athletes" were used as data collection tools in the study. Skewness-kurtosis coefficient, independent sample t-test, one-way analysis of variance (ANOVA) were used in the analysis of the data. When the study results were examined, no significant difference was found in the total creativity scale scores of the athletes according to the participants' gender, age, class and sport type variables ($p>0.05$). According to the sports age variable, a significant difference was determined in the total scores of the creativity scale for athletes in favor of those who have been doing sports for 7 years and above ($p<0.05$). It was determined that the creativity level in sports in higher education institutions in sports was above average. According to the results obtained, it can be stated that gender, age, class and type of sport are not determining factors in the level of creativity in sports. It can be said that the educational programs offered in sports higher education institutions support the physical, mental and cognitive development of students. It is thought that it would be beneficial

to provide student athletes with environments that encourage creative thinking using virtual reality (VR) or augmented reality (AR) technologies. It is anticipated that the studies to be conducted after this research will contribute to the literature by including factors such as sports branches, sports level and national status.
Keywords: Sports, Creavity, Creavity Thinking

AMINO ACID CONTENT OF BEE PRODUCTS AND THEIR RELATIONSHIP WITH ANTIOXIDANT PROPERTIES

ARI ÜRÜNLERİNİN AMİNOASİT İÇERİĞİ VE ANTİOKSİDAN ÖZELLİK İLE İLİŞKİLERİ

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ÖZET

Arı ürünleri doğal ve biyolojik aktiviteleri yüksek olduğundan dolayı birçok bilimsel çalışmaya konu olmaktadır. Arı ürünlerini öncelikle bal, sonra ise polen, propolis, arı sütü, apilarnil, arı zehri ve arı ekmeği (perga) oluşturmaktadır. Bal en köklü arı ürünü iken günümüzde diğer arı ürünleri de içerdikleri zengin biyoaktif kimyasallar ve bunlara bağlı olarak kapsamlı biyolojik aktiviteleri ile bilinmektedir. Propolis ve arı sütü diğer arı ürünlerinden daha fazla sekonder metabolit içermekte ve daha fazla biyolojik aktivite göstermektedir. Amino asitler proteinlerin yapı taşlarını oluşturduklarından çok önemlidir. Protein sentezinde, enzim aktivitelerinde, hücresel işlevlerde ve metabolizmada kritik rol oynar. Özellikle esansiyel olanları dışarıdan temin edilmelidir (lizin, metiyonin, triptofan ve valin gibi). Eksikliklerinde birçok metabolik hastalık görülmekte ve doku hasarlarına neden olmaktadır.

Bu incelemede, doğal gıda olarak tüketilen ve şifa kaynağı olan arı ürünlerinin amino asit içerikleri ve bu amino asitlerin antioksidan özellik ile ilgili ilişkileri güncel çalışmalar ile derlenmiştir. Arı ürünlerinin tanımları yapılarak amino asit içerikleri ve antioksidan aktivite ile bağlantıları Web of Science, Google Scholar, Scopus, Pubmed ve Tr dizinde taratılarak güncel çalışmaların verileri toplanmış ve yorumlanmıştır. Arı ürünlerinin farklı türlerinde farklı kimyasal içerik olduğu yapılan çalışmalar ile belirlenmiştir. Ayrıca bazı amino asitlerin antioksidan özellikten sorumlu olabileceği yapılan çalışmalarda tespit edilmiştir. Bu çalışma ile arı ürünlerinin amino asit içeriği güncel çalışmalar ile derlenmiştir.

Anahtar Kelimeler: Arı ürünleri, bal, propolis, polen, arı sütü, amino asit

ABSTRACT

Bee products are the subject of many scientific studies due to their natural and high biological activity. Bee products are primarily honey, followed by pollen, propolis, royal jelly, apilarnil, bee venom, and bee bread (perga). While honey is the most established bee product, today other bee products are also known for their rich bioactive chemicals and their extensive biological activities. Propolis and royal jelly contain more secondary metabolites and show more biological activity than other bee products. Amino acids are very significant as they form the building blocks of proteins. They play a critical role in protein synthesis, enzyme activities, cellular functions, and metabolism. In particular, the essential ones should be supplied from outside (such as lysine, methionine, tryptophan, and valine). Deficiencies cause many metabolic diseases and tissue damage.

In this review, the amino acid contents of bee products, which are consumed as natural food and are a source of healing, and the relations of these amino acids with antioxidant properties were compiled with current studies. The definitions of bee products, their amino acid contents,

and their connections with antioxidant activity were scanned in Web of Science, Google Scholar, Scopus, Pubmed and Tr index and the data of current studies were collected and interpreted. It has been determined by studies that different types of bee products have different chemical contents. In addition, it has been determined in studies that some amino acids may be responsible for antioxidant properties. With this review, the amino acid content of bee products has been revealed with current studies.

Keywords: Bee products, honey, propolis, pollen, royal jelly, amino acids

FARKLI KURAKLIK DOZLARININ *İN VİTRO* KOŞULLARDA ROKANIN (*Eruca sativa* L.) GELİŞİMİ ÜZERİNE ETKİSİ

EFFECT OF DIFFERENT DROUGHT DOSES ON THE DEVELOPMENT OF ARUGULA *(Eruca sativa* L.) UNDER *IN VITRO* CONDITIONS

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ÖZET

Bu çalışmada önemli çevresel stres faktörlerinden biri olan kuraklığa, roka bitkisinin tolerans düzeyinin belirlenmesi amaçlanmıştır. *İn vitro* koşullarda yürütülen bu çalışmada besin ortamı olarak MS kullanılmıştır. Kurak koşullar PEG kullanılarak oluşturulmuştur. Çalışmada %0 PEG kontrol- RKA, %1 PEG- RKB, %2 PEG- RKC, %4 PEG – RKD VE %6 PEG- RKE olmak üzere beş farklı ortam kullanılmıştır. Çalışma kapsamında çimlenme yüzdesi (%), gövde yaş ağırlığı (g), gövde kuru ağırlığı (g), kök yaş ağırlığı (g), kök kuru ağırlığı (g), gövde uzunluğu (cm) ile kök uzunluğu (cm) incelenmiştir. İncelenen parametrelere istatistiksel analizler yapılmış ve değerler arasındaki farklılıklar önemli bulunmuştur. Çalışma sonucunda roka tohumlarının çimlenme yüzdesi en fazla RKA (%84.00) ortamında olurken, en düşük RKE (%38.00) ortamında olduğu belirlenmiştir. Kuraklığın en yüksek seviyesinde çimle yüzdesinin önemli oranlarda düştüğü dikkat çekmiştir. Bitkilerin gövde yaş ağırlıkları bakımından en yüksek değerler RKA (0.088 g) ortamından, en düşük RKE (0.013 g) ortamından elde edilmiştir. Bitkilerin gövde kuru ağırlığı da benzer şekilde en yüksek RKA (0.0071 g) ortamında, en düşük RKE (0.0024 g) ortamında olduğu belirlenmiştir. Kök yaş ağırlıkları bakımından en yüksek ağırlıklar RKA (0.35 g) ortamında, en düşük RKE (0.007 g) ortamında olduğu saptanmıştır. Elde edilen bitkilerin gövde ve kök uzunlukları en yüksek RKA (sırasıyla 1.77 cm ve 8.00 cm) ortamında olduğu belirlenmiştir.
Anahtar kelimeler: Roka, Kuraklık stresi, *in vitro*

ABSTRACT

In this study, it was aimed to determine the tolerance level of arugula plant to drought, one of the important environmental stress factors. In this study conducted under*in vitro* conditions, MS was used as nutrient medium. Arid conditions were created using PEG. Five different media were used in the study: 0% PEG control - RKA, 1% PEG - RKB, 2% PEG - RKC, 4% PEG - RKD and 6% PEG - RKE. Germination percentage (%), stem wet weight (g), stem dry weight (g), root wet weight (g), root dry weight (g), stem length (cm) and root length (cm) were analyzed. Statistical analyses were performed on the parameters examined and the differences between the values were found to be significant. As a result of the study, the germination percentage of arugula seeds was highest in RKA (84.00%) and lowest in RKE (38.00%). It was noteworthy that germination percentage decreased significantly at the highest level of drought. In terms of stem wet weight of the plants, the highest values were

obtained from RKA (0.088 g) medium and the lowest values were obtained from RKE (0.013 g) medium. Similarly, the highest stem dry weight was obtained from RKA (0.0071 g) medium and the lowest from RKE (0.0024 g) medium. In terms of root wet weights, the highest weights were obtained in RKA (0.35 g) medium and the lowest in RKE (0.007 g) medium. The stem and root lengths of the plants obtained were the highest in RKA (1.77 cm and 8.00 cm, respectively).

Key words: Arugula, Drought stress, *in vitro*

KERPİÇ MALZEME ÜZERİNE YENİLİKÇİ YAKLAŞIMLAR VE YAPI UYGULAMALARI

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ÖZET
Teknolojinin hızla gelişmesiyle artan çevre kirliliği, doğal kaynakların giderek tükenmesi, ekonomik zorluklar, depremler ve salgın hastalıklar gibi küresel sorunlar nedeni ile insanlar sağlıklı, doğal, düşük maliyetli ve estetik olarak çağa hitap eden mekân arayışlarına yönelmiştir. Bu bağlamda, insanlarla birlikte varoluşun ilk gününden beri neredeyse yaşayan ve günümüze kadar varlığını sürdüren geleneksel ve sürdürülebilir bir yapı malzemesi olan kerpiç, yeniden ilgi odağı haline gelmiştir. Kerpiç yapılar, yaşam döngüleri boyunca enerji tüketimleri az ve düşük maliyetlidir. Kolayca temin edilebilir doğal malzemelerle, basit bir üretim süreci ile hazırlanabilir. Kullanım sürecinde bina içindeki kullanıcıya uygun iç mekân konfor koşulu sağlar. Bu avantajlarına rağmen, kerpiç yapıların basınç dayanımının düşük ve suya karşı dayanımının zayıf olması, malzeme kullanımının günümüzde kırsal bölgelerde sınırlı kalmasına neden olmuştur. Ancak günümüzdeki çevresel, sosyal ve ekonomik koşullar, kerpiç malzemenin yapı için yararlı yönlerini tekrar ön plana çıkarmıştır. Kerpicin bu zayıf yönlerini geliştirilmesi ile ilgili, kerpiç yapıların yapım tekniklerine ve yapılarının tasarımına yönelik çağdaş yöntem ve tekniklerin araştırıldığı çeşitli çalışmalar yapılmaktadır.
Bu çalışmada geleneksel kerpiç malzemesinin geliştirilmesi ve kullanılmasına yönelik yenilikçi yaklaşımların incelenmesi ve çağdaş yapı uygulamalarının bu yaklaşımlar kapsamında ele alınması amaçlanmıştır. Çalışmada literatür analizi yöntemiyle çağdaş yöntem ve teknikler incelenmiştir. Katkı maddeleri ile kerpiç malzeme özelliklerinin iyileştirilmesi, destek sistemler ile kerpiç yapıların güçlendirilmesi ve yenilikçi üretim teknikleri gibi uygulamalarının yaygın olduğu belirlenmiştir. Elde edilen bulgular, kerpiç yapıların sürdürülebilir mimarlık ve yapı teknolojileri alanında önemli bir potansiyel taşıdığını göstermektedir

Anahtar Kelimeler: Kerpiç, Yenilikçi Yaklaşımlar, Sürdürülebilirlik, Çevre Dostu Malzemeler, Yapı Teknolojileri

ABSTRACT
Due to the increasing environmental pollution with the rapid development of technology, the gradual depletion of natural resources, economic challenges, earthquakes, and epidemics, and global issues such as epidemics, people have sought to healthy, natural, low-cost, and aesthetically appealing spaces. In this context, adobe, a traditional and sustainable building material that has lived with humans almost since the first day of existence and has continued to exist until today, has regained attention. Adobe structures have low energy consumption and low cost throughout their life cycles. They can be produced using easily accessible natural materials through a simple production process and provide suitable indoor comfort conditions for occupants during the usage process. Despite these advantages, the low compressive strength of adobe structures and their weak resistance to water have limited their use to rural areas today.

However, current environmental, social and economic conditions have brought the beneficial aspects of adobe material as a building material to the forefront again. Various studies are being conducted to improve these weak aspects of adobe, investigating contemporary processes and design of their structures.

This study aims to examine innovative approaches to the development and use of traditional adobe material and to evaluate contemporary construction practices within the scope of these approaches. Contemporary methods and techniques were analyzed in the study through a literature review. It was determined that applications such as improving adobe material properties with additives, reinforcing adobe structures with support systems, and producing adobe materials with innovative production techniques are widespread. The findings indicated that adobe structures have significant potential in the field of sustainable architecture and construction technologies.

Keywords: Adobe, Innovative Approaches, Sustainability, Eco-Friendly Materials, Construction Technologies

ÜNİVERSİTE ÖĞRENCİLERİNİN SİBER FLÖRT İSTİSMARI YAŞAMA DURUMLARINA KİŞİLİK ÖZELLİKLERİNİN ETKİSİ

THE EFFECT OF PERSONALITY TRAITS ON UNIVERSITY STUDENTS' CYBER DATING ABUSE

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ÖZET

Araştırma; üniversite öğrencilerinin siber flört istismarı yaşama durumlarına kişilik özelliklerinin etkisini belirlemek amacıyla kesitsel türde yapılmıştır.

Araştırma; 616 üniversite öğrencisinin katılımıyla kişisel bilgi formu, Siber Flört İstismarı Ölçeği (SFİÖ) ve Beş Faktör Kişilik Özellikleri Ölçeği (BFKÖÖ) kullanılarak toplanmıştır. Verilerin değerlendirilmesinde frekans, yüzde, ortalama, standart sapma, ortanca (min-max), İndependent Sample t Test, Spearman korelasyon ve regresyon analizleri yapılmıştır.

Araştırmaya katılan öğrencilerin yaş ortalaması 20.37±3.19 , %64.9' u kadın, %44.3' ünün şuan bir ilişkisi yok ancak daha öncesinde bir ilişkisi olduğu belirlenmiştir. Cinsiyete göre SFİÖ tüm alt boyutlarında anlamlı farklılık saptanmıştır ($p<0.01$) ve tüm alt boyutlarda erkeklerin puan ortalamaları kadınlara oranla daha yüksek bulunmuştur. Uyumluluk kişilik özelliği ile SFİÖ tüm alt boyutları arasında istatistiksel olarak negatif yönde anlamlı bir ilişki ($p< 0.01$) varken; sorumluluk kişilik özelliği ile doğrudan saldırganlığa maruz kalma arasında negatif yönde anlamı bir ilişki ($p<0 .05$); nörotiklik kişilik özelliği ile izleme ve kontrole maruz kalma ($p<0.05$), nörotiklik ile izleme ve kontrol uygulama arasında ise pozitif yönde anlamlı bir ilişki ($p< 0.01$) bulunmaktadır. BFKÖ alt boyutlarından uyumluluk kişilik özelliğinin SFİÖ alt boyutları olan doğrudan saldırganlık ve izleme/kontrol davranışı üzerinde negatif yönde, nörotiklik kişilik özelliğinin de pozitif yönde anlamlı bir etkisi vardır.

BFKÖÖ ve SFİÖ alt boyutları arasında anlamlı bir ilişki bulunmuştur. Sonuç olarak nörotiklik ve sorumluluk kişilik özelliklerinin siber flört istismarı ile arasında bir ilişki olduğu belirlenmiştir. Bu bağlamda öğrencilere yönelik istismar davranışları, risk faktörleri ve istismarın sonuçlarını içeren eğitim programlarının düzenlenmesinin toplumda farkındalık yaratması adına faydalı olacağı düşünülmektedir.

Anahtar Kelimeler: Siber Flört, Siber Flört İstismarı, Siber Flört Şiddeti, Beş Faktör Kişilik Özellikleri, Kişilik Özellikleri

ABSTRACT

The research was conducted as a cross-sectional study to determine the effects of personality traits on university students' cyber dating abuse. The research was conducted with the participation of 616 university students using a personal information form, the Cyber Dating Abuse Scale (CDAS) and the Five Factor Personality Traits Scale (FFTSS). Frequency, percentage, mean, standard deviation, median (min-max), Independent Sample t Test, Spearman correlation and regression analyses were performed to evaluate the data.

The mean age of the students participating in the study was 20.37±3.19, 64.9% were female, 44.3% were not currently in a relationship but had a relationship before. A significant difference was found in all sub-dimensions of the CDAS according to gender ($p<0.01$) and the mean scores of men were found to be higher than those of women in all sub-dimensions. While there is a statistically significant negative relationship ($p<0.01$) between the agreeableness personality trait and all sub-dimensions of the CDAS; there is a negative significant relationship ($p<0.05$)

between the conscientiousness personality trait and exposure to direct aggression; there is a positive significant relationship ($p<0.01$) between the neuroticism personality trait and exposure to monitoring and control ($p<0.05$), and between neuroticism and the exercise of monitoring and control. Among the sub-dimensions of the FFTSS, the agreeableness personality trait has a negative effect on the CDAS sub-dimensions of direct aggression and monitoring/control behavior, while the neuroticism personality trait has a positive significant effect.

A significant relationship was found between the sub-dimensions of FFTSS and CDAS. As a result, it was determined that there was a relationship between neuroticism and conscientiousness personality traits and cyber dating abuse. In this context, it is thought that organizing training programs that include abusive behaviors, risk factors and consequences of abuse for students will be beneficial in terms of raising awareness in society.

Key words: Cyber Dating, Cyber Dating Abuse, Cyber Dating Violence, Five Factor Personality Traits, Personality Traits

KARDİYOVASKÜLER HASTALIKLARDA KABUL VE KARARLILIK TERAPİSİ
ACCEPTANCE AND COMMITMENT THERAPY IN CARDIOVASCULAR DISEASES

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ÖZET
Günümüzde gelişmekte olan ve gelişmiş ülkelerde en sık görülen ve en ağır sağlık sorunlarından biri haline gelen kardiyovasküler hastalıklar, bulaşıcı olmayan hastalıklardan kaynaklanan tüm ölümlerin yaklaşık yarısını oluşturmaktadır. Psikosomatik hastalık olarak kabul edilen kardiyovasküler hastalıkların ortaya çıkmasında hem biyolojik hem de psikolojik pek çok faktör rol oynamaktadır. Özellikle psikolojik faktörler, mortalite ve morbiditenin en önemli yordayıcıları olarak bilinmektedir. Yapılan araştırmalarda kardiyovasküler hastalığa sahip olan bireylerde, ölüm korkusu, kaygı, belirsizlik, stres, üzüntü, içe kapanma, sosyal yaşamda bozulmalar ve depresyon gibi psikososyal sorun yaşandığı belirtilmektedir. Bireyin hastalık ile beraber yaşamında olup biten tüm bu değişikliklere psikososyal açıdan uyum sağlaması, hastalığın tedavisini, prognozunu ve bireyin yaşam kalitesini de etkilemektedir. Bu doğrultuda bireylerin yaşam kalitelerinin arttırılması hem de bütüncül bakımın sağlanması açısından psikolojik tepkilerin ele alınması, psikososyal gereksinimlerin karşılanması ve varsa psikiyatrik bozuklukların tedavi edilmesi gerekmektedir. Bu maksatla gerçekleştirilen psikolojik müdahaleler, bireylerin psikososyal strese karşı baş etmesine, duygudurum belirtilerinin azalmasına, sağlıklı yaşam biçimi davranışları etmesine ve yaşam tarzı değişikliklerine uyum geliştirmesine etki ederek yaşam kalitesinin artmasına ve kardiyovasküler hastalıklardan korunmaya destek olabilmektedir.
Araştırmalar, kardiyovasküler hastalıklarda klinik tedavi ile birlikte uygulanan psikolojik müdahalelerin de etkili olduğunu göstermektedir. Bireylere uygulanabilecek en etkili psikolojik müdahaleler; stres azaltma programları, meditasyon, nefes egzersizleri, yoga, kas gevşeme teknikleri, birey/grup terapileri, bireysel davranışçı terapiler ve farkındalık temelli terapiler olarak bildirilmiştir. Bunlara ek olarak son yıllarda popülerlik kazanan ve klinik hastaların tedavisinde etkililiği kanıtlanmış olan Kabul ve Kararlılık Terapisi (ACT); üçüncü dalga terapiler arasında en yaygın kullanılan psikolojik müdahalelerden biri olarak kabul edilmektedir. ACT; bireylerin duygu, düşünce, dürtülerini değiştirmeye çalışmadan onları oldukları gibi kabul etmelerini veya gerekli değişiklikleri yapmaya kendilerini adamalarını sağlayan ve kendileri için değeri olan davranışsal hedefleri seçmekte özgür bırakan bir yaklaşım olarak tanımlanmaktadır.
Kardiyovasküler hastalara uygulanan ACT'in; psikolojik sıkıntının iyileştirilmesinde, tedaviye uyumun arttırılmasında, sağlıklı yaşam biçimi davranışlarının kazandırılmasında, belirsizlik ve deneyimden kaçınma davranışlarının kontrolünde, olumsuz duyguların düzenlenmesinde, ağrının ve anksiyetesinin azaltılmasında etkili olduğu ifade edilmektedir.
Anahtar Kelimeler: Kardiyovasküler Hastalıklar, Psikososyal Müdahale, Psikiyatri Hemşireliği, Kabul ve Kararlılık Terapisi, ACT

ABSTRACT

Cardiovascular diseases, which have become one of the most common and severe health problems in developing and developed countries today, account for approximately half of all deaths from non-communicable diseases. Many biological and psychological factors play a role in the emergence of cardiovascular diseases, which are considered psychosomatic diseases. Psychological factors in particular are known to be the most important predictors of mortality and morbidity. Studies have shown that individuals with cardiovascular disease experience psychosocial problems such as fear of death, anxiety, uncertainty, stress, sadness, introversion, disruptions in social life, and depression. The individual's psychosocial adaptation to all these changes that occur in their life along with the disease also affects the treatment of the disease, its prognosis, and the individual's quality of life. In this context, in order to increase the quality of life of individuals and to provide holistic care, psychological reactions should be addressed, psychosocial needs should be met and psychiatric disorders, if any, should be treated. Psychological interventions carried out for this purpose can help individuals cope with psychosocial stress, reduce mood symptoms, adopt healthy lifestyle behaviors and adapt to lifestyle changes, thus increasing quality of life and supporting protection from cardiovascular diseases.

Studies show that psychological interventions applied together with clinical treatment in cardiovascular diseases are also effective. The most effective psychological interventions that can be applied to individuals are reported as stress reduction programs, meditation, breathing exercises, yoga, muscle relaxation techniques, individual/group therapies, individual behavioral therapies and mindfulness-based therapies. In addition, Acceptance and Commitment Therapy (ACT), which has gained popularity in recent years and has proven effective in the treatment of clinical patients, is considered one of the most widely used psychological interventions among third-wave therapies. ACT is defined as an approach that allows individuals to accept their feelings, thoughts, and impulses as they are without trying to change them, or to commit themselves to making the necessary changes, and leaves them free to choose behavioral goals that are valuable to them.

It is stated that ACT applied to cardiovascular patients is effective in improving psychological distress, increasing compliance with treatment, gaining healthy lifestyle behaviors, controlling uncertainty and experience avoidance behaviors, regulating negative emotions, and reducing pain and anxiety.

Key Words: Cardiovascular Diseases, Psychosocial Intervention, Psychiatric Nursing, Acceptance and Commitment Therapy, ACT.

GRAFEN TABANLI VE GRAFEN KUANTUM NOKTA TABANLI SCHOTTKY DİYOTLARIN ELEKTRİKSEL PARAMETRELERİNİN İNCELENMESİ

INVESTIGATION OF THE ELECTRICAL PARAMETERS OF GRAPHENE-BASED AND GRAPHENE QUANTUM DOT-BASED SCHOTTKY DIODES

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ÖZET

Grafen (Gr), bal peteği benzeri altıgen bir kafeste düzenlenmiş tek bir karbon atomu katmanından oluşan iki boyutlu bir malzemedir. Grafen kuantum noktaları (GQD'ler), nanometre ölçeğinde ve boyutları nedeniyle kuantum sınırlama etkileri gösteren karbon bazlı küçük parçacıklardır ve grafen ailesinin bir üyesidir. Bu çalışmada, p-Si üzerinde üretilen Gr-tabanlı diyot ve p-Si üzerinde üretilen GQD-tabanlı diyot yapısının akım-gerilim (I–V) performansları incelenerek karşılaştırılmıştır. Her iki diyot yapısında da aynı kalınlıklarda Al ohmic (124 nm) ve Schottky (128 nm) kontaklar fiziksel buhar biriktirme tekniği (PVD) kullanılarak alınmıştır. Bu diyot yapılarının I–V özellikleri karanlık ortamda ölçülmüş ve elektriksel özellikleri oda sıcaklığında karakterize edilmiştir. Her iki diyotun da idealite faktörü (n), seri direnç (R_s) ve bariyer yüksekliği (Φ_b) gibi elektriksel özellikleri, Termiyonik Emisyon (TE) teorisi, Norde ve Cheung yaklaşımlarından elde edilmiştir. Bu yöntemlere göre Gr-tabanlı diyotun hesaplanan Φ_b değerleri sırasıyla 0,69 eV, 0,71 eV ve 0,68 eV olarak bulunmuştur. GQD-tabanlı diyotun hesaplanan Φ_b değerleri ise sırasıyla 0,76 eV, 0,82 eV ve 0,66 eV olarak hesaplanmıştır. Gr-tabanlı diyotun doğrultma oranı (RR) ± 3 V'da yaklaşık 10^3 olarak hesaplanmıştır, GQD-tabanlı diyotun RR'si ± 5 V'da yaklaşık $2,8 \times 10^4$ olarak hesaplanmıştır. Elde edilen sonuçlar hazırlanmış olan her iki diyotun da Schottky davranışına sahip olduğunu göstermektedir.

Anahtar Kelimeler: Grafen, Grafen Kuantum Noktalar, Schottky Diyot, I-V özellikleri

ABSTRACT

Graphene (Gr) is a two-dimensional material made up of a single layer of carbon atoms organized in a hexagonal lattice that resembles a honeycomb. Graphene quantum dots (GQDs) are small carbon-based particles that exhibit quantum confinement effects due to their nanometer-scale dimensions and are a member of the graphene family. In this study, the current-voltage (I–V) performances of Gr-based diode fabricated on p-Si and GQDs-based diode structure fabricated on p-Si were investigated and compared. In both diode structures, Al ohmic (124 nm) and Schottky (128 nm) contacts with the same thickness were obtained by using the physical vapor deposition technique (PVD). I–V properties of these diode structures were measured in the dark, and their electrical properties were characterized at room temperature. Electrical properties such as ideality factor (n), barrier height (Φ_b) and series resistance (R_s) of both diodes were obtained from the Thermionic Emission (TE) theory, Cheung and Norde approaches. According to these methods, the calculated Φ_b values of the Gr-based diode were found to be 0.69 eV, 0.68 eV, and 0.71 eV respectively. The calculated Φb values of the GQDs-based diode were 0.76 eV, 0.66 eV, and 0.82 eV respectively. The Gr-based diode's rectification

ratio (RR) was calculated as approximately 10^3 at ± 3 V, and the rectification ratio (RR) of the GQDs-based diode was calculated as approximately 2.8×10^4 at ± 5 V. The obtained results show that both prepared diodes have Schottky behavior.
Keywords: Graphene, Graphene Quantum Dots, Schottky Diode, I-V properties

KULLANICILARIN ÜRETKEN YAPAY ZEKÂ KABULÜNÜ ETKİLEYEN FAKTÖRLERİN BELİRLENMESİ

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1. ÖZET

Yapay zekâ (YZ), çevrelerini algılayarak ve büyük miktarda bilgi ve veriyi işleyip yorumlayarak fiziksel veya dijital boyutta eylemler gerçekleştiren sistemlerdir. YZ sistemleri, çevrenin ve sonuçların önceki eylemlerden nasıl etkilendiğini analiz ederek davranışları uyarlayabilir. Türk Dil Kurumu'na göre de YZ; bir bilgisayarın, bilgisayar kontrolündeki bir robotun veya programlanabilir bir aygıtın insana benzer biçimde algılama, öğrenme, fikir yürütme, karar verme, sorun çözme, iletişim kurma vb. işlevleri sergileyebilme yeteneğidir. Bu tanımlama daha da genişleterek karar verme, planlama imkânı sağlama gibi ifadelerle de genişletilebilir. Üretken yapay zekâ ise; yazılı metin, görüntü, ses gibi değişik veri türlerini işleyerek orijinal içerik oluşturmaya yarayan yapay zekâ teknolojisidir. Özgün içerikler üretiyor olması üretken yapay zekâyı diğer sistemlerden bu anlamda ayırmaktadır.
Bu çalışmada kullanıcıların üretken yapay zekâ kullanımının kabulünü etkileyen faktörlerin ortaya çıkarılması amaçlanmıştır. Bu amaç doğrultusunda nitel araştırma yöntemi kullanılmıştır. Doküman analizi olarak literatür taraması yapılmıştır. Kullanıcıların üretken yapay zekâ uygulamalarını kabulünü etkileyen faktörleri ortaya çıkarmak için 2019 - 2024 yılları arasında konu ile ilgili yapılmış çalışmalar taranmıştır. Literatür taraması sonucu 42 çalışmaya ulaşılmıştır. Çalışmalar incelenmiş ve sonucunda kullanıcıların üretken yapay zeka kabulünü etkileyen faktörlerin algılanan kullanım kolaylığı, algılanan fayda, performans beklentisi, sosyal etki, kişisel davranışsal niyet, çaba beklentisi, hedonik motivasyon, kolaylaştırıcı koşullar, davranışsal ve bilişsel tutum, algılanan güven derecesi, algılanan davranışsal tutumlar, algılanan merak olduğu görülmüştür.
Anahtar Kelimeler: Yapay zekâ, üretken yapay zekâ, kullanıcı kabulü, faktörler.

DETERMINING THE FACTORS AFFECTING USERS' ACCEPTANCE OF GENERATIVE ARTIFICIAL INTELLIGENCE

ABSTRACT

There are many different definitions of artificial intelligence today. However, according to the Turkish Language Association, artificial intelligence is defined as the ability of a computer, a computer-controlled robot, or a programmable device to perceive, learn, reason, make decisions, solve problems, communicate, etc. in a human-like manner. This definition can be further expanded with expressions such as decision-making and planning. Productive artificial intelligence, on the other hand, can be defined as artificial intelligence technology that processes different types of data such as written text, images, and sound to create original content. The fact that it produces original content distinguishes productive artificial intelligence from other systems in this sense.

This study aims to reveal the factors affecting users' acceptance of the use of generative artificial intelligence. The qualitative research method was used for this purpose. A literature review was conducted as a document analysis. To reveal the factors affecting users' acceptance of productive artificial intelligence applications, studies on the subject between 2019 and 2024 were reviewed. As a result of the literature review, 42 studies were found. The studies were examined and as a result, it was seen that the factors affecting users' acceptance of productive artificial intelligence are perceived ease of use, perceived benefit, performance expectancy, social influence, personal behavioral intention, effort expectancy, hedonic motivation, facilitating conditions, behavioral and cognitive attitude, perceived degree of trust, perceived behavioral attitudes, perceived curiosity.
Keywords: Artificial intelligence, productive artificial intelligence, user acceptance, factors.

MİKROPLASTİKLERİN VE NANOPLASTİLERİN KÜMES HAYVANLARINA ETKİLERİ

EFFECTS OF MICROPLASTICS AND NANOPLASTICS ON POULTRY

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ÖZET

Hızla artan plastik üretimiyle birlikte her yıl önemli miktarda plastik atık ortaya çıkmaktadır. Plastiklerin daha küçük boyutlara (mikroplastikler (MP) ve nanoplastikler (NP)) bozunması, kimyasal ve fiziksel özelliklerinde değişikliklere neden olduğundan dolayı çevre için önemli tehdit oluştururlar. Tüm dünyada ucuz olması nedeniyle çok sık tüketilen önemli protein kaynakları olan kümes hayvanlarında mikroplastiklerin ve nanoplastiklerin yarattığı toksisitenin belirlenmesi önemlidir. Bu çalışmada, mikroplastiklerin ve nanoplastiklerin kümes hayvanlarına olan etkileri araştırılmıştır. Araştırma kapsamında, Scopus, Web of Science, Google Scholar ve PubMed gibi arama motorlarından yararlanılmıştır. Elde edilen bulgular, hem mikroplastiklerin hem de nanoplastiklerin kümes hayvanlarının çeşitli organlarında biriktiğini ve bu organlarda toksisiteye yol açarak canlıya zarar verdiğini göstermektedir. Bu durum, gerek kırsalda üretim yapan küçük işletmeler, gerekse büyük işletmelerde hayvan kayıplarına ve dolayısıyla büyük ekonomik kayıplara yol açacaktır. Tüketilen su ve yem kaynaklarının yanı sıra, hayvan çiftliklerinde, hayvanların küçük boyutlu plastikleri yutması veya bunlarla temasa geçmesi riskinin yanı sıra bu parçacıkların et ve yumurta gibi hayvansal ürünlerde bulunması ve birikmesi riski de göz ardı edilemez. Bunun yanı sıra, genellikle besin zincirinin son halkası olan insanlara bu kümes hayvanlarının eti, yumurta, sakatatı ve diğer ürünlerinden gelebilecek potansiyel tehlike üst seviyelerdedir. Bu kapsamda, çevre için riskin en aza indirgenmesi için plastik kullanımının azaltılması ve plastiklerin bertarafına daha fazla eğilim gösterilmesi önerilmektedir.

Anahtar kelimeler: Kümes hayvanı, Tavuk, Toksisite, Mikroplastik, Nanoplastik

ABSTRACT

With the rapidly increasing production of plastics, a significant amount of plastic waste is generated every year. The degradation of plastics into smaller sizes (microplastics (MPs) ve nanoplastics (NPs)) causes changes in their chemical and physical properties; they pose a significant threat to the environment. It is essential to determine the toxicity caused by microplastics and nanoplastics on poultry, which are important protein sources that are consumed frequently due to their low cost all over the world. In this study, the effects of microplastics and nanoplastics on poultry were investigated. Within the scope of the research, search engines such as Scopus, Web of Science, Google Scholar, and PubMed were utilized. The findings show that both microplastics and nanoplastics accumulate in various organs of poultry and cause toxicity in these organs and harm the animals. This situation will lead to livestock losses in both small rural farms and large enterprises, and thus to large economic losses. In addition to consumed water and feed resources, the risk of animals ingesting or coming into contact with small-sized plastics in animal farms, as well as the risk of these particles being present and accumulating in animal products such as meat and eggs, cannot be ignored. The potential damage to humans, who are usually the last link in the food chain, from

the meat, eggs, offal, and other products of these poultry is at high levels. In this context, it is recommended that the use of plastics be reduced and that more attention be paid to the disposal of plastics in order to minimize the risk for the environment.
Keywords: Poultry, Chicken, Toxicity, Microplastics, Nanoplastics

DEPREM BÖLGESİNDE BULUNAN OKUL ÖNCESİ ÖĞRETMENLERİNİN KİŞİSEL DUYGU DÜZENLEME STRATEJİLERİ ÜZERİNE BİR İNCELEME

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ÖZET
Duygu düzenleme stratejileri bireylerin yoğun duygusal tepkilerini yönetmek, duygusal dengeyi sağlamak ve stresle başa çıkmak için kullandıkları yöntemlerdir. Bu stratejiler bireyin hem kendisiyle hem de çevresiyle daha uyumlu bir ilişki geliştirmesine katkı sağlamaktadır.
Deprem gibi travmatik olaylar sonrasında öğretmenlerin bireysel duygu yönetiminde başvurdukları yöntemlerin kendi psikolojik iyilik halleri ve sınıf içi rolleri üzerinde önemli etkileri bulunmaktadır. Özellikle okul öncesi öğretmenlerinin duygu düzenleme becerileri hem kendilerinin hem de öğrencilerinin psikolojik iyilik halini koruyabilmeleri açısından büyük önem taşır. Duygu düzenleme, bireylerin olumsuz duygularla başa çıkmasına ve daha işlevsel bir yaşam sürmelerine olanak tanır.
Bu çalışmada 6 Şubat 2023 depremini yaşamış olan ve hala deprem bölgesinde görev yapmakta olan okul öncesi öğretmenlerinin afet sonrası sürece uyum sağlayabilme kapasitelerini anlamak ve destekleyici mekanizmalar geliştirmeye yönelik öneriler sunmak amacıyla kendi duygu düzenleme stratejilerine yönelik görüşleri incelenmiştir.
Çalışmada deprem bölgesinde bulunan 35 okul öncesi öğretmeni ile online odak grup görüşmeleri gerçekleştirilmiştir. Elde edilen veriler betimsel analiz ve kodlama tekniği ile MAXQDA 24 programı ile analiz edilmiştir.
Elde edilen bulgular, öğretmenlerin bir kısmının etkili duygu düzenleme stratejileri ile travma sonrası duygusal denge sağladığını gösterirken bazı öğretmenlerin yetersiz baş etme mekanizmaları nedeniyle yoğun stres ve tükenmişlik yaşadığını ortaya koymuştur.
Bu sonuçlar afet sonrası öğretmenlere yönelik psikolojik destek programlarının geliştirilmesinin önemini vurgulamaktadır.
Anahtar Kelimeler: Deprem, duygu düzenleme stratejileri, okul öncesi öğretmeni.

Bu bildiri, Prof. Dr. Nurper Ülküer danışmanlığında Elif Nazlı Püsküller tarafından devam etmekte olan “Deprem Bölgesinde Bulunan Okul Öncesi Öğretmenlerinin Kendi Duygu Düzenleme Becerilerine Yönelik Görüşlerinin İncelenmesi” adlı yüksek lisans tezi kapsamındaki çalışmadan türetilmiştir.

ABSTRACT
Emotion regulation strategies are the methods that individuals use to manage their intense emotional reactions, maintain emotional balance and cope with stress. These strategies contribute to developing a more harmonious relationship with oneself and one's environment.
After traumatic events such as earthquakes, the methods used by teachers in individual emotion management have significant effects on their psychological well-being and classroom roles. The emotion regulation skills of preschool teachers are crucial for protecting both their own psychological well-being and that of their students. Emotion regulation enables individuals to cope with negative emotions and lead a more functional life.
This study examined the views of preschool teachers who experienced the February 6, 2023 earthquake and are still working in the earthquake zone. The study aims to analyze teachers’

emotion regulation strategies and their capacity to adapt to the post-disaster process and to provide suggestions for developing supportive mechanisms.
In the study, online focus group interviews were conducted with 35 preschool teachers in the earthquake region. The data obtained were analyzed by descriptive analysis and coding technique with the MAXQDA 24 program.
The findings revealed that while some of the teachers achieved emotional balance after the trauma with effective emotion regulation strategies, some teachers experienced intense stress and burnout due to inadequate coping mechanisms.
These results emphasize the importance of developing psychological support programs for teachers after disasters.
Keywords: Earthquake, emotion regulation strategies, preschool teacher.

This paper is derived from the research conducted by Elif Nazlı Püsküller under the supervision of Prof. Dr. Nurper Ülküer within the scope of her master's thesis titled “Investigation of Preschool Teachers' Opinions on Their Emotion Regulation Skills in Earthquake Region”.

TÜRKİYE'DE GELİŞİM PSİKOLOJİSİ ALANINDA YAPILMIŞ LİSANSÜSTÜ TEZLERİN İSTATİSTİKSEL ANALİZİ
STATISTICAL ANALYSIS OF GRADUATE THESES COMPLETED THE FIELD OF DEVELOPMENTAL PSYCHOLOGY IN TÜRKİYE

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ÖZET
Wilhelm Wundt ile temelleri atılan Jean Piaget ile olgunlaştırılan gelişim psikolojisi alanındaki çalışmalar Türk akademisyenler tarafından yoğun ilgi görmüştür. Gelişim psikolojisi, yüksek lisans ve doktora çalışmalarında da sıkça kullanılan psikolojinin alt alanlarından biridir. Bu araştırmada Türkiye'de gelişim psikolojisi alanında yapılmış olan lisansüstü tezler yapısal ve içeriksel olarak analiz edilmiştir. Araştırmanın genel amacı , bu alanda yapılan akademik çalışmaların genel eğilimlerini ve odak noktalarını ortaya koymaktır. Alana ilgi duyanlara, gelişim psikolojisi hakkında tez üretmeyi düşünen araştırmacılara genel bir bakış sunmayı hedeflemektedir. 1987-2024 yılları arasındaki lisansüstü tezlerde Yükseköğretim Kurulu (YÖK) Ulusal Tez Merkezi veri tabanında gelişmiş tarama yapılmıştır. Tarama sonucunda, SPSS 20 programı kullanılarak Türkiye'de gelişim psikolojisi alanında yapılan 201 adet lisansüstü tezin yazar cinsiyeti, tez tarihi, tez türü, tam metine ulaşım, tez yazım dili, çalışma grubu, araştırma türü, veri toplama tekniği ile tezlerin konu başlıkları ve içerikleri açısından istatistiksel olarak analizi yapılmıştır. Araştırma, kullanılan frekans, ki-kare, çapraz tablolar, Phi, Cramer's V ve beklenmedik durum katsayısı analizleriyle belirtmiş olduğumuz kriterlerin birbirleriyle ilişkilerine de odaklanır. Bulgular sonucunda, aynı yaş grubu üzerine benzer konuların çalışılmış olduğu ve tez başlıklarının da birbirine benzemeye başladığı gözlemlenmiştir. Ayrıca, yaşlılık dönemi gelişimi üzerine çalışmaların oldukça az olduğu kanısına varılmış olup bu konu üzerinde çalışmaların artması gerektiği önerisinde bulunulmaktadır. Ayrıca makale içerisinde belirtilen akademide hiyerarşik cinsiyet eşitsizliğinin olup olmadığı gibi önemli noktaların altı çizilmiştir ve bu sorunlara bazı öneriler sunulmuştur. Literatüre kazandırmış olduğumuz bu çalışma ile; alana bilgi birikimi oluşturmak, konu tekrarına düşülmesini önlemek, önceki çalışmalar hakkında genel bir izlenim sunmak ve çalışmalar hakkında karşılaştırma yapma imkanı sağlamak amaçlanmıştır.
Anahtar Kelimeler: Gelişim Psikolojisi, Lisansüstü Tezlerin Analizi, İstatistik, SPSS

ABSTRACT
Studies in the field of developmental psychology, whose foundations were laid by Wilhelm Wundt and matured by Jean Piaget, have attracted great attention from Turkish academics. Developmental psychology is one of the subfields of psychology that is frequently used in MSc and PhD studies. In this research, graduate theses written in the field of developmental psychology in Türkiye were analyzed structurally and contextually. The general purpose of the research is to reveal the general trends and focal points of academic studies in this field. It aims to provide an overview to those who are interested in the field and to researchers who are considering producing a thesis on developmental psychology. An advanced search was made in the database of the Council of Higher Education (YÖK) National Thesis Center for

graduate theses between 1987 and 2024. As a result of the scanning, the gender of the author, thesis date, thesis type, access to the full text, thesis writing language, working group, research type, data collection technique and subject headings and contents of 201 graduate theses made in the field of developmental psychology in Türkiye using the SPSS 20 program. Statistical analysis was carried out in terms of the research also focuses on the interrelationships of the criteria we have specified with the frequency used, chi-square, cross-tabulations, Phi, Cramer's V and contingency coefficient analyses. As a result of the findings, it was observed that similar topics were studied on the same age group and the thesis titles started to resemble each other. In addition, it has been concluded that there are very few studies on the development of old age and it is suggested that studies on this subject should be increased. In addition, important points such as whether there is hierarchical gender inequality in the academy are underlined in the article and some suggestions are offered for these problems. With this study that we have contributed to the literature; It is aimed to create knowledge in the field, to prevent repetition of the subject, to present a general impression about previous studies and to provide the opportunity to make comparisons about studies.

Keywords: Developmental Psychology, Analysis of Graduate Theses, Statistics, SPSS

CU-ZN-AL VE CU-ZN-Nİ ALAŞIMLARINDA DİFERANSİYEL TARAMALI KALORİMETRİ VE TARAMALI ELEKTRON MİKROSKOBU ÇALIŞMALARI

DIFFERENTIAL SCANNING CALORIMETRY AND SCANNING ELECTRON MICROSCOPE STUDIES IN CU-ZN-AL AND CU-ZN-Nİ ALLOYS

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ÖZET

Bakır bazlı alaşımlar; ısıl ve elektriksel iletkenlik, korozyon direnci ve ucuz imalatları özelliklerinden dolayı farklı endüstriyel uygulama alanlarına sahiptir. Cu-Zn alaşımları ise prinç olarak endüstriyel uygulamalarda sıkça kullanılmaktadır. Hatta, ikili alaşımların özelliklerini geliştirmek için üçlü ve daha fazla alaşım sistemleri oluşturulmaktadır. Böylece kullanılmak istenilen alana uygun özelliklere sahip malzemeler elde edilmektedir. Bu çalışmada da üçlü alaşım sistemi üzerine bazı fiziksel özellikler araştırılmıştır. Bu sebeplede; bu araştırmada, Cu-Zn-Al ve Cu-Zn-Ni (% ağırlıkça) alaşımlarında termal etkiler sonucunda alaşımların mikro yapılarında meydana gelen değişimlerin morfolojik ve termal özellikleri çeşitli fiziksel yöntemlerle tespit edildi. Alaşımların morfolojik yapıları taramalı elektron mikroskobu (SEM) ile incelenmiştir. Yine alaşımın termal özellikleri Diferansiyel Tarama Kalorimetresi (DSC) ile incelenmiştir. Yüzey incelemelerinde elde edilen örnekler hızlı ve yavaş soğutmaya maruz bırakılarak, alaşımlarda oluşan yapılar kıyaslanmıştır. Elektron mikroskop incelemelerinden; hızlı soğumaya maruz bırakılan Cu-Zn-Al alaşımında austenite yapı ile birlikte çökelti faz elde edilmiştir. Çökeltilerin köşeli bir şekilde meydana geldiği görülmüştür. Cu-Zn-Ni alaşımında ise austenite yapı gözlemlenmiştir. Fakat bu alaşımda Austenite yapı içerisinde hiç çökelti oluşmadığı da belirlenmiştir. Al elementi ile Ni elementini kıyasladığımızda; Ni elementinin çökeltileri ortadan kaldırdığı görülmüştür. DSC yönteminden alaşımların; austenite başlama sıcaklığı (A_s), austenite bitiş sıcaklığı (A_f) ve entalpi değerleri 5 °C ısıtma/soğutma hızında belirlenmiştir. DSC incelemelerinden Ni elementinin faz dönüşüm sıcaklıklarını düşürdüğü bulunmuştur.

Anahtar Kelimeler: Cu-bazlı alaşımlar, Isıl işlemler, SEM, DSC.

ABSTRACT

Copper based alloys have different industrial application areas due to their thermal and electrical conductivity, corrosion resistance and cheap manufacturing properties. Cu-Zn alloys are frequently used in industrial applications as brass. In fact, ternary and more alloy systems are formed in order to improve the properties of binary alloys. Thus, materials with properties suitable for the desired area of use are obtained. In this study, some physical properties of the ternary alloy system were investigated. For this reason; in this research, the morphological and thermal properties of the changes that occurred in the microstructures of the alloys as a result of thermal effects in Cu-Zn-Al and Cu-Zn-Ni (% by weight) alloys were determined by various physical methods. The morphological structures of the alloys were examined by scanning electron microscope (SEM). Again, the thermal properties of the alloy were examined by Differential Scanning Calorimetry (DSC). The samples obtained in surface examinations were

exposed to fast and slow cooling and the structures formed in the alloys were compared. From the electron microscope examinations; In the Cu-Zn-Al alloy subjected to rapid cooling, a precipitate phase was obtained together with the austenite structure. It was observed that the precipitates were formed in an angular shape. In the Cu-Zn-Ni alloy, an austenite structure was observed. However, it was also determined that no precipitate was formed in the austenite structure in this alloy. When we compared the Al element with the Ni element; it was seen that the Ni element eliminated the precipitates. Austenite starting temperature (A_s), austenite ending temperature (A_f) and enthalpy values of the alloys were determined from the DSC method at a heating/cooling rate of 5°C. From the DSC examinations, it was found that the Ni element reduced the phase transformation temperatures.

Keywords: Cu-based alloys, Heat treatments, SEM, DSC.

EFFECTS OF NICKEL AND ZINC ON PHASES FORMING IN COPPER-BASED ALLOYS

BAKIR BAZLI ALAŞIMLARDA MEYDANA GELEN FAZLAR ÜZERİNE NİKEL VE ÇİNKO ETKİLERİ

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ÖZET

Cu-Zn ve Cu-Al bazlı sistemlerdeki Cu bazlı alaşımlar, yaygın olarak kullanılan Ti-Ni SMA'lara kıyasla düşük maliyetleri nedeniyle şekil hafızası etkisi (SME) ve süperelastisite (SE) özelliklerinin pratik olarak kullanılması için ticari olarak ilgi çekicidirler. Cu bazlı alaşımlar genellikle Cu–Zn, Cu–Al ve Cu–Sn gibi çift alaşım sistemleri olarak üretilir. Bu alaşımlar arasında Cu–Sn iyi termoelastik dönüşüm göstermez. Ayrıca, Cu–Sn alaşımı kırılgan olması nedeniyle oldukça sınırlı bir uygulamaya sahiptir. Potansiyel kullanımlar ve özellikler, Cu–Zn alaşımlarına Al, Si, Sn veya G ve Cu–Al alaşımlarına Ni, Be, Zn ve Mn eklenerek iyileştirilir. Bu çalışmada; beta faz bölgesinde homojenleştirme işlemine tabi tutulan ve kontrollü olarak fırında yavaş olarak soğutulan Cu-Zn-Al ve Cu-Zn-Ni alaşımları çalışılmıştır. Alaşımların fiziksel özellikleri taramalı elektron mikroskobu (SEM) ve diferansiyel taramalı kalorimetre (DSC) ile incelenmiştir. Taramalı elektron mikroskop deneylerinden her iki alaşım için austenite tane yapısı elde edilmiştir. Yüzey incelemelerinden; Cu-Zn-Al alaşımında martensite fazın meydana geldiği bulunmuştur. Cu-Zn-Al alaşımında martensite faz β_1' plaka morfolojide gözlemlenmiştir. Cu-Zn-Ni alaşımında ise austenite fazın meydana geldiği belirlenmiştir. Çalışılan alaşımlar kıyaslandığında Al ve Ni meydana gelen fazlarda farklılık meydana getirmiştir. Her iki alaşımın dönüşüm sıcaklığı DSC ile incelendi. DSC gözlemlerinden; austenite ve martensite başlama ve bitiş sıcaklıkları belirlendi. Hatta, DSC analizlerinden, Cu-Zn-Ni alaşımının yüksek sıcaklık şekil hafızası özellikleri gösterdiğini tespit edilmiştir.

Anahtar Kelimeler:Cu-Zn, Austenite, Entalpi, Şekil Hafıza Etkisi.

ABSTRACT

Cu-based alloys in Cu-Zn and Cu-Al based systems are commercially attractive for practical use of shape memory effect (SME) and superelasticity (SE) properties due to their low cost compared to widely used Ti-Ni SMAs. Cu-based alloys are generally produced as binary alloy

systems such as Cu–Zn, Cu–Al and Cu–Sn. Among these alloys, Cu–Sn does not show good thermoelastic transformation. Moreover, Cu–Sn alloy has quite limited application due to its brittleness. Potential uses and properties are improved by adding Al, Si, Sn or G to Cu–Zn alloys and Ni, Be, Zn and Mn to Cu–Al alloys. In this study; Cu-Zn-Al and Cu-Zn-Ni alloys subjected to homogenization process in beta phase region and slowly cooled in a controlled furnace were studied. Physical properties of the alloys were investigated by scanning electron microscope (SEM) and differential scanning calorimetry (DSC). Austenite grain structure was obtained for both alloys from scanning electron microscope experiments. From surface examinations; it was found that martensite phase occurred in Cu-Zn-Al alloy. Martensite phase was observed in β_1' plate morphology in Cu-Zn-Al alloy. It was determined that austenite phase occurred in Cu-Zn-Ni alloy. When the alloys studied were compared, Al and Ni caused differences in the phases formed. Transformation temperature of both alloys was examined with DSC. Austenite and martensite starting and ending temperatures were determined from DSC observations. Moreover, it was determined from DSC analysis that Cu-Zn-Ni alloy exhibited high temperature shape memory properties.

Keywords: Cu-Zn, Austenite, Enthalpy, Shape Memory Effect.

ÜLKEMİZDE ÇOCUKLARA UYGULANAN MÜZİK TERAPİ YAKLAŞIMLARI VE KARŞILAŞTIRMASI

MUSIC THERAPY APPROACHES APPLIED TO CHILDREN IN OUR COUNTRY AND THEIR COMPARISON

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ÖZET

Müzik terapi, eski çağlarda hastalıkların tedavi edilmesi amacıyla kullanılmış, daha sonrasında ise bir bilim alanı haline gelerek klinik ortamlarda yerini almıştır. Terapilerde seçilen müzik ve kullanılan uygulama için belirli bir yöntem olmakla beraber, terapistin seansın hedef ve amaçlara göre belirlediği model doğrultusunda müzik ve materyal seçimi yaptığı bilinmektedir. Müzik terapi, anksiyete, depresyon, konuşma bozuklukları gibi gelişimsel ve davranışsal sorunların yanı sıra çeşitli fizyolojik problemlerde de tamamlayıcı tıp kapsamında kullanılmaktır.

Geçmişten günümüze başta yetişkinlerde sıklıkla kullanılırken, gelişen terapi yöntemleriyle birlikte çocukluk dönemine dair çalışmalarda da yerini almıştır. Özellikle otizm, DEHB, disleksi, dil ve konuşma bozukları, özel öğrenme güçlüğü ve travma sonrası stres bozukluğunu desteklemek amacıyla çocuklarda sıklıkla uygulanmaktadır. Terapi süreçleri bireysel olarak yönlendirilebildiği gibi grup çalışmalarıyla da düzenlenebilmektedir. Motor becerilerin gelişimi için ritim ve hareket temelli yaklaşımlara; algı, hafıza ve duygusal gelişimi desteklemek için melodi ve armoni çalışmalarına; dil ve ifade becerilerinin güçlenmesi için vokal egzersiz gibi yöntemlere başvurulmaktadır. Bu sayede kognitif beceri, nöroplastisite, sosyal etkileşim ve özgüven gelişimi; öğrenme motivasyonu ve akademik başarıda artış sağlanabilmektedir. Tüm bu gelişimler çocuğun yaşı, fiziksel gelişimi, tanı ve müdahalenin uzunluğu, ailesi ve çevresinin sosyo-kültürel yapısına göre değişkenlik göstermekte olup belirli bir standarda sahip değildir. Süreç, terapistler ve sağlık profesyonellerinin etkileşimli iş birliği ile sağlandığı zaman daha verimli sonuçlar vermektedir.

Bu araştırma, ülkemizde çocuklar üzerine yapılan müzik terapi alanlarını, yöntemlerini ve etkilerini incelemek, Türkiye'de bu alanda literatüre girmiş makale ve tezlerde hangi özel gereksinimli çocukların, hangi yöntemlerle, hangi yaş gruplarında, hangi materyallerle çalışıldığını tespit etmek amacıyla yapılmıştır. "Müzik terapisi ve çocuk" çerçevesinde taranan 5 çalışma bu araştırmanın örneklemini oluşturmaktadır. Bu bağlamda ülkemizde yapılan çalışmalar ele alınarak gerekli karşılaştırmalar yapılmıştır.

Anahtar Kelimeler: müzik terapisi, çocuk, özel eğitim, otizm, kaygı

ABSTARCT

Music therapy was used in ancient times for the treatment of illnesses and later evolved into a scientific field, finding its place in clinical settings. It is observed that there is no specific method for the music and applications chosen in therapies, and it is known that the selection of music and materials is made based on the model determined by the therapist. Music therapy is used within the scope of complementary medicine not only for developmental and behavioral issues such as anxiety, depression, and speech disorders but also for various physiological problems.

From past to present, music therapy was predominantly used for adults, but with the development of therapeutic methods, it has also found its place in studies focused on childhood. It is particularly applied to support children with autism, ADHD, dyslexia, speech and language disorders, learning disabilities, and post-traumatic stress disorder. Therapy sessions can be conducted individually or organized as group activities. Rhythm and movement-based approaches are used to develop motor skills; melody and harmony exercises support perception, memory, and emotional development; and vocal exercises strengthen language and expression skills. Through these methods, improvements can be achieved in cognitive skills, neuroplasticity, social interaction, and self-confidence, as well as increased learning motivation and academic success. All these developments vary depending on the child's age, physical development, diagnosis, duration of intervention, and the socio-cultural structure of their family and environment, and they do not follow a specific standard. The process yields more effective results when facilitated through interactive collaboration between therapists and healthcare professionals.

This research aims to examine the fields, methods, and effects of music therapy for children in our country. It seeks to identify which special needs children, using which methods, in which age groups, and with which materials, were studied in articles and theses included in Turkey's literature on this topic. Five studies reviewed within the framework of "music therapy and children" constitute the sample of this research. In this context, studies conducted in our country were analyzed, and necessary comparisons were made.

Keywords: music therapy, children, special education, autism, anxiety

MÜZİK TERAPİSİNİN YAŞLI BİREYLERDEKİ UYKU KALİTESİ ÜZERİNE ETKİSİ

THE EFFECT OF MUSIC THERAPY ON SLEEP QUALITY IN ELDERLY INDIVIDUALS

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ÖZET

Dünya genelinde yaşlı nüfusunun çoğalması ile bu bireylere yönelik yapılan fiziksel, zihinsel ve psikolojik çalışmalarda artış görülmektedir. Bu çalışmaların yöntemleri günden güne çeşitlilik oluşturmaktadır. İnsanın gelişim evreleri göz önünde bulundurulduğunda, yaşlılık süreci genel olarak fiziksel zorlanma, zihinsel karışıklık, ruhsal çöküntünün daha çok yaşandığı bir zaman dilimidir. Bu zaman diliminde karşımıza çıkan en önemli değişim unsuru uyku kalitesidir. Uyku insan hayatında önemli bir rol oynamaktadır. Yaşlı bireylerin yaşamakta olduğu uyku problemleri, yaşam standartlarını önemli ölçüde etkilemektedir. Günümüzde bu tarz problemlere yönelik yapılan çalışmalarda destekleyici tedavi yöntemlerinden birisi de müzik terapisidir. Müzik terapisi, ilaç tedavisi, bilişsel davranışçı terapi gibi diğer tedavi yöntemleriyle birlikte kullanılmaktadır. Özellikle ilaçların yan etkileri nedeniyle zorlanan yaşlı bireyler için müzik terapisi, güvenli ve konforlu bir yöntem olabilmektedir. Bu terapi yönteminde kullanılan müzik türlerinin yaşlılar üzerindeki etkileri kişiden kişiye değişkenlik göstermekle birlikte, yaşlı bireylerin psikolojik ve fizyolojik tepkileri incelenip veriler elde edilmektedir. Yaşlı bireyler ile yapılan çalışmalarda bu popülasyon "Geriatri" olarak adlandırılmaktadır. Geriatride yaşam kalitesinin iyi seviyede sürdürülebilmesi için bu bireylerin yeterli saat aralığında uykularını almaları gerekmektedir. Bu çalışmanın amacı, yaşlılarda uyku takibinin belli bir düzene girmesi için çalışılan müzik terapi yöntemlerinin sonuçlarını incelemektir. Fizyolojik ve psikolojik mekanizmalarla uyku kalitesini arttıran müzik terapisi, yaşlıların genel sağlık durumlarını iyileştirmek adına önemli bir araçtır. Gelecekte yapılacak kapsamlı araştırmalarla, müzik terapisinin uyku bozukluklarının tedavisindeki yeri daha iyi anlaşılıp, tedavi planları geliştirilebilir.

Anahtar Kelimeler : Yaşlılık, Müzik Terapisi, Uyku, Uyku Bozukluğu

ABSTRACT

With the increase in the elderly population worldwide, there has been a rise in physical, mental, and psychological studies conducted for this group. The methods used in these studies are diversifying day by day. Considering the stages of human development, old age is generally a period marked by more physical strain, mental confusion, and emotional distress. One of the most significant changes during this period is sleep quality. Sleep plays an important role in human life. Sleep problems experienced by elderly individuals significantly affect their quality of life. Today, one of the supportive treatment methods used for such problems is music therapy. Music therapy is used alongside other treatment methods such as medication and

cognitive-behavioral therapy. Especially for elderly individuals who struggle due to the side effects of medications, music therapy can be a safe and comfortable approach. The effects of the types of music used in this therapy may vary from person to person, but data is obtained by examining the psychological and physiological responses of elderly individuals. In studies conducted with elderly individuals, this population is referred to as "Geriatrics." To maintain a good quality of life in geriatrics, it is essential for these individuals to get adequate sleep during the night. The aim of this study is to examine the results of music therapy methods used to regulate sleep patterns in the elderly. Music therapy, which enhances sleep quality through physiological and psychological mechanisms, is an important tool for improving the overall health of elderly individuals. With future comprehensive research, the role of music therapy in the treatment of sleep disorders can be better understood, and treatment plans can be developed.
Keywords: Aging, Music Therapy, Sleep, Sleep Disorders

TEMPOROMANDIBULAR EKLEM DISFONKSIYONU VE YARALANMA GEÇMIŞININ ALT EKSTREMITE FONKSIYONLARI ÜZERINDEKI ROLÜ

THE ROLE OF TEMPOROMANDIBULAR JOINT DYSFUNCTION AND INJURY HISTORY IN LOWER EXTREMITY FUNCTIONS

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ÖZET
Bu çalışmanın amacı, sporcularda temporomandibular eklem disfonksiyonu (TMED), yaralanma geçmişi, alt ekstremite fonksiyonları üzerindeki ilişkileri incelemektir. TMED'in kas kuvveti ve denge üzerindeki etkisine dair bulgular sınırlıdır. Hamstring kas kuvveti, sporcularda yaralanma riskini azaltma ve performansı artırmada önemlidir. Bu çalışma, TMED'in şiddeti ve yaralanma geçmişinin fiziksel performans üzerindeki etkilerini ortaya koymayı hedeflemiştir. Çalışmaya toplam n=172 sporcu katılmıştır (basketbol n=32, futbol n=95, voleybol n=25, hentbol n=20). Sporcuların yaş ortalaması 21.21±1.84 olup yaş aralığı 18-26 olarak belirlenmiştir. Çalışmaya katılan bireylerin yaralanma geçmişi, var veya yok olarak sorgulanmış ve gruplandırılmıştır.
TMED varlığı, Fonseca Anamnestik Anketi ile değerlendirilmiş ve sporcuların %35'inde hafif, %20'sinde orta, %10'unda şiddetli TMED tespit edilmiştir. Hamstring kas kuvveti, Nordic Hamstring Exercise (NHE) sırasında IVMES H-Bord cihazı ile ölçülmüş ve TMED kategorileri arasında anlamlı bir fark bulunmamıştır (p>0.05p>0.05p>0.05). Squat Jump Double Testi sonuçları, sıçrama performansının TMED veya yaralanma geçmişine göre belirgin bir farklılık göstermediğini ortaya koymuştur (p>0.05p>0.05p>0.05).
MANOVA analizleri, Fonseca durumu ve yaralanma geçmişinin hamstring ve sıçrama kuvvetleri üzerinde anlamlı bir etkisi olmadığını göstermiştir (Fonseca Durumu: p=0.269p = 0.269p=0.269; Yaralanma Geçmişi: p=0.536p = 0.536p=0.536). Regresyon analizlerinde, Injury_Status değişkeninin hamstring kuvveti üzerinde yalnızca marjinal bir etkisi bulunmuştur (Max_Left için p=0.082p = 0.082p=0.082, Max_Right için p=0.059p = 0.059p=0.059). Lojistik regresyon sonuçları, bu değişkenlerin yaralanma durumunu öngörmedeki yetersizliğini vurgulamıştır (Pseudo R2=0.0136R^2 = 0.0136R2=0.0136).
Bu çalışma, TMED, hamstring kuvveti ve sıçrama performansı arasında anlamlı bir ilişki olmadığını göstermektedir. Sporcularda performans ve yaralanma riskinin daha iyi anlaşılabilmesi için farklı parametrelerin dahil edildiği kapsamlı çalışmalara ihtiyaç vardır. Bu bulgular, spor performansını artırmak için multidisipliner yaklaşımların önemini vurgulamaktadır.
Anahtar kelimeler: Hamstring Kuvveti; Temporomandibular Eklem Disfonksiyonu; Yaralanma Geçmişi; Sıçrama Performansı; Sporcular

ABSTRACT
The aim of this study is to examine the relationships between temporomandibular joint dysfunction (TMJD), injury history, and lower extremity functions in athletes. Evidence on the impact of TMJD on muscle strength and balance is limited, but it is thought to indirectly affect

athletic performance. Hamstring muscle strength plays a critical role in reducing injury risk and enhancing performance in athletes. This study aims to clarify the effects of TMJD severity and injury history on physical performance. A total of n=172 athletes participated in the study (basketball n=32, football n=95, volleyball n=25, handball n=20). The average age of the participants was 21.21±1.84 years, with an age range of 18-26 years. The injury history of participants was assessed and grouped as either present or absent.

TMJD presence was evaluated using the Fonseca Anamnestic Index, and 35% of athletes were found to have mild TMJD, 20% moderate TMJD, and 10% severe TMJD. Hamstring strength was measured during the Nordic Hamstring Exercise (NHE) using the IVMES H-Bord device, and no significant differences were observed between TMJD categories (p>0.05p>0.05p>0.05). Jump performance was assessed using the Squat Jump Double Test, and no significant differences in performance were found between TMJD or injury history groups (p>0.05p>0.05p>0.05).

MANOVA analyses showed no significant effects of Fonseca condition or injury history on hamstring and jump strength metrics (Fonseca Condition: p=0.269p = 0.269p=0.269; Injury History: p=0.536p = 0.536p=0.536). Regression analyses indicated a marginal influence of Injury_Status on hamstring strength (Max_Left: p=0.082p = 0.082p=0.082, Max_Right: p=0.059p = 0.059p=0.059). Logistic regression revealed that these variables were insufficient in predicting injury status (Pseudo R2=0.0136R^2 = 0.0136R2=0.0136).

This study demonstrates no significant relationship between TMJD, hamstring strength, and jump performance. To better understand performance and injury risk in athletes, further comprehensive studies involving additional parameters are required. These findings highlight the importance of multidisciplinary approaches to optimizing athletic performance.

Key words: Hamstring Strength; Temporomandibular Joint Dysfunction; Injury History; Jump Performance; Athletes

ENTERKONNEKTE BİR GÜÇ SİSTEMİNDE SEKONDER FREKANS YÖNETİMİ İÇİN PD-PID DENETLEYİCİ TASARIMI VE OPTİMİZASYONU

DESIGN AND OPTIMIZATION OF PD-PID CONTROLLER FOR SECONDARY FREQUENCY MANAGEMENT IN AN INTERCONNECTED POWER SYSTEM

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ÖZET

Bir güç sisteminde üretilen gerçek gücün sürekli değişen tüketime göre ayarlanmasına sekonder frekans yönetimi (SFY) denir. SFY güç sistemi tasarımı ve operasyonunda oldukça önemli bir mekanizmadır. Üretim-tüketim dengesinin sağlanmasıyla sistem frekansı her an sabit tutulur. Zira frekans ile sistemin güvenliği, güvenirliği ve üretilen gücün kalitesi yakından etkilenir. Bu çalışmada iki bölgeli çok kaynaklı bir güç sisteminde SFY ele alınmıştır. Sekonder denetleyici olarak PD-PID denetleyici tasarlanmış ve önerilmiştir. Denetleyiciden mümkün olan en fazla faydayı sağlamak için denetleyici parametre ayarı sürüngen arama algoritması (SAA) ile gerçekleştirilmiştir. Güç sistemi modeli MATLAB/Simulink ortamında kurulmuş, SAA ise MATLAB/M-file ortamında yazılmıştır. Elde edilen sonuçlar diğer çalışmalarda yayımlanan sonuçlarla karşılaştırılmıştır. Karşılaştırma sonuçlarına göre önerilen denetleyicinin frekans ve bağlantı hattı güç tepkilerindeki salınım, yerleşme zamanı, maksimum pozitif aşım ve maksimum negatif aşım gibi zaman alanı performans kriterleri açısından benzer yaklaşımlardan daha iyi performans sunduğu görülmüştür.

Anahtar Kelimeler: sekonder frekans yönetimi, enterkonnekte güç sistemi, PD-PID denetleyici, sürüngen arama algoritması, optimizasyon

ABSTRACT

In a power system, regulating the real output power generation with respect to the continuously changing consumption is called secondary frequency management (SFM). SFM is a quite important mechanism in power system design and operation. By keeping the generation-consumption balance, the system frequency is maintained constant at any time because the system security, reliability and the quality of power generated are closely affected by frequency. In this work, SFM in a two-area multi-source power system is considered. As a secondary controller, PD-PID controller is designed and proposed. To obtain the possible maximum benefit from the controller, controller parameter setting is accomplished by reptile search algorithm (RSA) is used. The power system model is constructed in MATLAB/Simulink platform and the RSA is written in MATLAB/M-file script. The obtained results are contrasted against the results published in other studies. As per the comparison results, it is seen that the proposed controller offers better performance than similar approaches with regard to the time-domain performance criteria such as oscillation, settling time, maximum overshoot and maximum undershoot in the frequency and tie-line power responses.

Keywords: secondary frequency management, interconnected power system, PD-PID controller, reptile search algorithm, optimization

FOTOVOLTAİK GÜNEŞ HÜCRESİ EŞDEĞER DEVRE MODELİNDEKİ PARAMETRELERİN SÜRÜNGEN ARAMA ALGORİTMASI İLE BELİRLENMESİ

PARAMETER IDENTIFICATION IN EQUIVALENT CIRCUIT MODEL OF PHOTOVOLTAIC SOLAR CELL USING REPTILE SEARCH ALGORITHM

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ÖZET

Fotovoltaik hücre modellenmesi ve akım-gerilim (I-V) karakteristik eğrileri ile model parametrelerinin elde edilmesi fotovoltaik sistemlerin etkinliği açısından önemli yer tutmaktadır. Bu çalışmada güneş hücresinin efektif şekilde modellenmesi ve iki diyotlu eşdeğer devre modellindeki parametrelerinin hassas şekilde belirlenmesi için sürüngen arama algoritması (SAA) kullanılmış ve önerilmiştir. 2022 yılında ortaya konulan SAA'nın farklı optimizasyon problemlerine makul derecede çözümler ürettiği görülmüştür. Sayısal sonuçlar R.T.C. France marka silikon güneş hücresine ait deneysel veri seti kullanılarak elde edilmiştir. Farklı algoritmalarla yapılan karşılaştırmalar neticesinde önerilen SAA tabanlı çift diyotlu modelin fotovoltaik hücrenin I-V ve güç-gerilim (P-V) karakteristik eğrilerini daha yüksek doğrulukla kestirdiği anlaşılmıştır. Elde edilen model ile gerçek güneş hücresine gerek duymadan farklı platformlarda operasyon öncesi test, benzetim ve optimizasyon çalışmaları gerçekleştirilebilir.

Anahtar Kelimeler: Parametre tayini, sürüngen arama algoritması, fotovoltaik hücre, iki diyotlu model, optimizasyon

ABSTRACT

Photovoltaic (PV) cell modelling and identification of model parameters by current-voltage (I-V) characteristic curves hold an important place for the effectiveness of PV systems. In this work, for effectively modelling of the solar cell and identifying the parameters in its two-diode equivalent circuit model precisely, reptile search algorithm (RSA) was used and proposed. Introduced in 2022, the RSA has been seen to produce satisfactory solutions to different optimization problems. The numerical results are obtained using an experimental dataset belonging to the R.T.C. France silicon solar cell. According to the comparisons with different algorithms, it is revealed that RSA-based double-diode model could predict the I-V and P-V characteristic curves of the PV cell with higher precise. Using the obtained model, testing, simulation and optimization can be carried out in different platforms before operation without the requirement of a real solar cell.

Keywords: Parameter identification, reptile search algorithm, photovoltaic cell, two-diode model, optimization

YENİ BİR DUYGU TANIMA SİSTEMİ GELİŞTİRİLMESİNDE DERİN ÖĞRENME TABANLI MİMARİLERİN PERFORMANS KARŞILAŞTIRMASI

PERFORMANCE COMPARISON OF DEEP LEARNING BASED ARCHITECTURES IN DEVELOPING A NOVEL EMOTION RECOGNITION SYSTEM

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ÖZET
Günümüzde teknolojinin gelişmesi ile otomatik duygu tanıma sistemleri de ortaya çıkmıştır. Otomatik duygu tanıma sistemlerinin yapısında insanların duygularını bilgisayar ortamında tanımlayabilen yöntemler kullanılmaktadır. Yapay zeka yöntemlerinin de gelişmesi ile ortaya birçok otomatik duygu tanıma sistemi çıkmıştır. Günümüzde otomatik duyu tanıma sistemleri, ses, görüntü, video, v.b. materyalleri kullanmaktadır. Bu girişlerden elde edilen özellikler tasarlanan yapay zeka tekniğinde çeşitli makine öğrenme yöntemleri kullanılarak değerlendirilerek, sonuçta doğru duygu tanıma işlemi gerçekleştirilmeye çalışılmaktadır. Bu çalışmada, yüz ifadelerinden duygu tanıma (FER) için derin öğrenme tabanlı bir yaklaşım değerlendirilmektedir. Burada çok sayıda yüz ifadelerinin yer aldığı FER2013 veri seti üzerinde geliştirilmiş bir VGG16 modeli kullanılarak duygu sınıflandırması yapılmıştır. FER2013 veri seti, 2013 yılında düzenlenen Kaggle yarışması kapsamında yayımlanmış ve yüz ifadelerinin otomatik tanınması için geniş çapta kabul görmüş bir veri setidir. Veri seti, toplamda 35.887 adet gri tonlamalı yüz görüntüsünden oluşmaktadır. Model mimarisine Batch Normalization katmanları eklenerek eğitim süreci hızlandırılmış ve modelin genelleme yeteneği artırılmıştır. Global Average Pooling ile hesaplama maliyeti azaltılırken, Dropout ile aşırı öğrenme engellenmiştir. Sonuç olarak, model FER2013 veri seti üzerinde % 87 test doğruluğu (accuracy), % 87 hatırlama (recall) ve % 85 F1 skoru elde etmiştir. Bu sonuçlar, değerlendirilen yaklaşımın yüz ifadelerinden duygu tanımada etkili olduğunu göstermektedir. Elde edilen bulguların, insan-bilgisayar etkileşimi, pazarlama ve güvenlik gibi alanlarda duygu tanıma sistemlerinin geliştirilmesine katkı sağlayacağı düşünülmektedir.
Anahtar Kelimeler: Duygu Tanıma, Yüz İfadeleri, Derin Öğrenme, VGG16, FER2013

ABSTRACT

Nowadays, with the development of technology, automatic emotion recognition systems have also emerged. In the structure of automatic emotion recognition systems, methods that can identify people's emotions in a computer environment are used. With the development of artificial intelligence methods, many automatic emotion recognition systems have emerged. Nowadays, automatic sensory recognition systems use materials such as sound, image, video, etc. The features obtained from these inputs are evaluated using various machine learning methods in the designed artificial intelligence technique, and as a result, accurate emotion recognition is attempted to be achieved. This study evaluates a deep learning-based approach for facial expression recognition (FER). Here, emotion classification is performed using a VGG16 model developed on the FER2013 dataset, which includes a large number of facial expressions. The FER2013 dataset is a widely accepted dataset for automatic recognition of facial expressions, published within the scope of the Kaggle competition held in 2013. The dataset consists of a total of 35,887 grayscale face images. Batch Normalization layers were added to the model architecture to accelerate the training process and improve the model's generalization ability. Global Average Pooling was used to reduce computational cost, while Dropout was employed to prevent overfitting. As a result, the model achieved 87 % test accuracy, 87 % recall, and 85 % F1 score on the FER2013 dataset. These results indicate that the evaluated approach is effective in recognizing emotions from facial expressions. We believe that our findings will contribute to the development of emotion recognition systems in various fields such as human-computer interaction, marketing, and security.

Keywords: Emotion Recognition, Facial Expressions, Deep Learning, VGG16, FER2013

ITALIAN ADMINISTRATIVE MEASURES TARGETING NGO RESCUE VESSELS IN THE CENTRAL MEDITERRANEAN SEA: IN VIOLATION OF UN AND EU FACILITATION OF SMUGGLING AND TRAFFICKING NETWORKS

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Abstract

In accordance with the international legal framework on Search and Rescue (SAR), captains of vessels have the obligation to rescue any person at distress at sea. High numbers of irregular migrants are crossing the Central Mediterranean Sea via unseaworthy boats, thus falling within the ambit of the SAR Convention. To discourage the irregular migrant crossing, the Italian strategy is to prevent and thus stop captains of private vessels or SAR NGOs from responding to rescue calls at sea by imposing overly restrictive administrative measures if the rescue occurs without the prior authorization of the disembarking coastal state. This paper argues that Italy has adopted a new irregular migrant containment strategy in the form of disguised administrative acts to ensure SAR activity discouragement. These measures are undertaken under the Italian pretence of fulfilling their international objective to disengage smuggling and trafficking networks under the Palermo Protocols and the European Legal Framework on the facilitation of smuggling and trafficking networks. To date, there is no evidence linking irregular migration and SAR activities with Criminal networks. Offering an original contribution to literature, this paper analyses the Italian `administrative measures` in accordance with Law No. 15 of 24 February 2023 and Articles 1, 10 and 12 of the Italian Legislative Decree No. 286/1998 referred to as the 'Italian Consolidated Text on Migration' arguing they are in effect disguised `criminalization measures` against captains of vessels responding to calls of irregular migrants in distress at sea. These measures are argued to violate the overall objective under the expressed intention of the UN Smuggling Protocol and the European Legal Framework on the facilitation of smuggling and trafficking networks exempting humanitarian actors from unreasonable administrative punishment.

Keywords: -1, arbitrary administrative measures, -2, irregular migrants, -3, rescue at sea, -4, SAR activity discouragement

ALİ MƏKTƏB MÜƏLLİMLƏRİNİN DƏRS PLANI HAQQINDA

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ÖZET

Təhsil müəssisələrində təlim işinin qurulması onun təşkilindən başlayır. Öyrənmə işi necə qurulmalıdır? Təlimin məzmununda nələr nəzərə alınmalıdır?Tələbələrin fəallığını necə təmin etmək lazımdır? Tələbələrin fəaliyyəti necə dəyərləndirilməlidir? Tələbə-müəllim münasibəti necə qurulmalıdır?

Ali məktəb auditoriyasında dərs deyən müəllimlər dərs üçün hazırlıq mərhələsində bu ritorik suallar ətrafında düşünməli və deyəcəyi dərsin planını qurmaq ücün onları nəzərə almalıdırlar. Məlum olduğu kimi, plan müəllimin deyəcəyi dərsin ilkin yanaşmada layihəsidir. O, dərsi haqqında əminlik hasil etdikdən sonra bu sənədi hazırlayır.

Təcrübələr onu göstərir ki, ali təhsil müəssisələrinin müəllimləri dərsə hazırlaşarkən, əsasən, mühazirə materialları, yaxud təqdimat hazırlamaqla kifayətlənirlər. cox hallarda dərsin parametrlərini müəyyənləşdirən planın hazırlanmasına diqqət yetirmirlər. Yaxud ona əlavə, həm də artıq bir iş kimi yanaşırlar. Əslində fəaliyyətə başlayan hər kəs, hər bir təhsil işçisi, o cümlədən ali məktəb müəllimi yerinə yetirəcəyi işin fərqində olmalı, onun haradan başlayıb, harada bitməsini aydın təsəvvür etməlidir. Ona görə də hər bir dərs plan üzrə təşkil edilməli və aparılmalıdır.

Dərsin uğurlu və məqsədəuyğun qaydada reallaşdırılması, ilkin olaraq, onun planlaşdırılmasından daha çox asılıdır. Planlaşdırılma isə ehtiyac və tələbatların ciddi şəkildə öyrənilməsini və qruplaşdırılmasını, planın isə onları nəzərə almaqla tərtibini tələb edir.

Dərslər plan əsasında nəzərdə tutulmuş mövzular üzrə aparılır və konkret məqsədlərin həyata keçirilməsini nəzərdə tutur. Adətən hazırlıq mərhələsində müəllim mövzuya uyğun olaraq məqsədi müəyyənləşdirir. Ona görə də həmin məqsədlər elə formalaşdırılmalıdır ki, fəaliyyətyönlü olsun, mənimsənilmiş biliklərin tətbiqini tələb etsin. Həmcinin dərsin mərhələlərə əsaslanan metodik aparaturasında tələbələrin interaktivliyi aparıcı rol oynasın və didaktik əhəmiyyət daşısın. Bununla da dərsdə tələbələrin bir tədqiqatcı kimi axtarış aparmalarına, yaradıcı fəaliyyət göstərmələrinə imkan yaradılsın.

Təhsil islahatlarının aparıldığı hazırkı şəraitdə ali məktəb müəllimlərinin də tədris fəaliyyətindəki irəliləyişlər, xüsusilə dərslərin məzmun və struktrunun yeniləşdirilməsi, onun fəlsəfəsindəki dəyişikliklər müzakirə obyektinə cevrilməlidir.

Acar sözlər: dərs planı, təlimin məzmunu, mühazirə materialları, planlaşdırma, mövzu, məqsəd, təhsil islahatları

ABOUT THE CURRICULUM OF HIGH SCHOOL TEACHERS

ABSTRACT

The establishment of training in educational institutions begins with its organization. How should the study be structured? What should be taken into account in the content of training? How to ensure students' activity? How should the activity of students be evaluated? How should the student-teacher relationship be established?

Teachers who teach in high school classrooms should think about these rhetorical questions during the preparation stage for the lesson and take them into account when planning the lesson. As it is known, the plan is the initial approach of the lesson that the teacher will teach. He prepares this document after he is confident about his lesson.

Experiences show that teachers of higher education institutions are mostly content with preparing lecture materials or presentations when preparing for a lesson. in many cases, they do not pay attention to the preparation of the plan that defines the parameters of the lesson. Or they treat it as an extra job. In fact, everyone who starts working, every educational worker, including a university teacher, should be aware of the work he is going to do, and he should have a clear idea of where it starts and ends. Therefore, each lesson should be organized and conducted according to the plan.

The successful and appropriate implementation of the lesson depends primarily on its planning. Planning requires a serious study and grouping of needs and requirements, and the design of a plan taking them into account.

Lessons are conducted on planned topics and involve the implementation of specific goals. Usually, in the preparatory stage, the teacher determines the goal according to the topic. Therefore, those goals should be formulated in such a way that they are action-oriented and require the application of acquired knowledge. Also, students' interactivity should play a leading role and have didactic importance in the methodological apparatus of the lesson based on stages. In this way, students should be able to conduct research and creative activities in the lesson as a researcher.

In the current conditions where educational reforms are being carried out, the progress in the teaching activities of the higher school teachers, especially the renewal of the content and structure of the lessons, changes in their philosophy should be discussed.

Keywords: lesson plan, content of training, lecture materials, planning, topic, goal educational reforms

KÜRE BAŞLI DELİKSİZ METAL İĞNELER (İÇ BATI ANADOLU ÖRNEKLERİ)

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ÖZET
Güzel görünmek amacıyla insanoğlunun kendi ya da çoğunlukla elbiselerinin üzerinde kullandığı ve estetik kaygısıyla biçimlendirdiği objeler takı olarak tanımlanır. Takılar, giysi modasındaki eğilimler ve gereksinimlerle birlikte değişmiş, zaman zaman takılara değişik anlamlar da yüklenmiştir. Tunç Çağı ile birlikte madenciliğin başlaması sebebiyle metalden eser üretimi içerisinde takılar da önemli yer bulmuştur. Bunlar içerisinde iğneler en büyük grubu oluşturur. Gövdesinde delik olan ve *''Toggle Pin''* olarak tanımlanan iğne gruplarının yanı sıra delik içermeyen iğneler de önemli bir yer tutar. Başlarının şekillerine göre küre başlı, elips başlı, söbe başlı, kare başlı, piramit başlı, konik başlı, çift konik (baklava biçimli) başlı, mercimek başlı, tek rulo başlı ve çift rulo başlı olarak ayrılan bu iğneler içerisinde en büyük grup ise küre başlı iğnelerdir.
Bu çalışmada İç Batı Anadolu'daki küre başlı metal iğneler araştırılarak, bu eserlerin benzerleri tüm Anadolu ve Yakındoğu'da tanımlanmaya çalışılmıştır. İç Batı Anadolu'daki bu iğneler Demircihöyük, Küllüoba, Karataş-Semayük yerleşmelerinden bilinmektedir. Ayrıca söz konusu iğnelerin mezarlıklarda da çok bulunması sebebiyle, günlük hayatta elbiselerin tutturulması işlevinin yanı sıra kefen iğnesi olarak da kullanıldığını düşündürmektedir. İç Batı Anadolu'da küre başlı ve gövdesinde delik olmayan iğnelerin mezarlıklardan gelen örnekleri Sarıket, Harmanören ve Karataş Semayük'ün mezarlık alanlarından bilinmektedir.
Anahtar Kelimeler: Metal Eser, İğneler, İç Batı Anadolu, Arkeoloji

SPHERE HEAD NON-HOLE METAL NEEDLES (INLAND WESTERN ANATOLIA EXAMPLES)

ABSTRACT
Objects that humans use on themselves or mostly on their clothes in order to look beautiful and that they shape with aesthetic concerns are defined as jewelry. Jewelry has changed along with trends and needs in clothing fashion, and different meanings have been attributed to jewelry from time to time. Due to the beginning of mining with the Bronze Age, jewelry has also found an important place in the production of metal artifacts. Needles constitute the largest group among these. In addition to the needle groups with holes in their bodies and defined as "Toggle Pins", needles without holes also have an important place. These needles, which are divided into sphere-headed, ellipse-headed, dowel-headed, square-headed, pyramid-headed, conical-headed, double-conical (diamond-shaped)-headed, lentil-headed, single-rolled-headed and double-rolled-headed according to the shapes of their heads, have the largest group among them as sphere-headed needles.

In this study, sphere-headed metal needles in Inland Western Anatolia were investigated and similar artifacts were tried to be identified throughout Anatolia and the Near East. These needles in Inland Western Anatolia are known from the settlements of Demircihöyük, Küllüoba, Karataş-Semayük. In addition, since these needles are found abundantly in cemeteries, it is thought that they were used as shroud pins in addition to their function of fastening clothes in daily life. Examples of needles with sphere heads and no holes in their bodies from cemeteries in Inland Western Anatolia are known from the cemeteries of Sarıket, Harmanören and Karataş Semayük.

Key Words: Metal Artifact, Needles, Inland Western Anatolia, Archaeology

TUNÇ ÇAĞI'NDA KİKLAD MİMARİSİ: KASTRİ VE PALAMARİ YERLEŞMELERİ

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ÖZET

Bu çalışmada, Ege Denizi'nin güneyinde Kikladlar olarak adlandırılan takımadalar içerisinde yer alan ve en önemli İlk Tunç Çağı merkezlerinden, bölgenin anahtar yerleşmesi olan Kastri yerleşmesi ile Kikladlar'ın kuzeyindeki Skyros Adası'nda yer alan Palamari yerleşmesi incelenmiştir. Kastri yerleşmesi, 400 kilometrekarelik yüzölçümüyle Kiklad Adalar grubunun en büyük adası olan Naxos'un batısında yer almaktadır. Oldukça verimli topraklara sahip ada, diğer Kiklad Adaları'na göre de daha fazla yükseltiye sahiptir. Ege kronolojisinde Erken Kiklad IIB Dönemi olarak adlandırılan ve Kastri Evresi olarak da bilinen dönem, Batı Anadolu kronolojisinde Erken İTÇ III Dönemi'ne denk gelmektedir ve günümüzden yaklaşık 4200 yıl öncesine tarihlendirilmektedir.

Yerleşme genel hatları ile güçlü bir savunma sistemi ve bu sistemin içerisindeki düzensiz şekilde yerleştirilmiş evlerden oluşur. Hem yapılar hem de savunma duvarı harç kullanmadan ve sadece taştan inşa edilmiştir. Harç kullanılmamasının nedeni olarak kil ve su kaynaklarının azlığı gösterilmektedir.

Palamari yerleşmesi ise, Kikladlar'ın kuzeyindeki Skyros Adası'nda yer alır. Adada Ege kronolojisine göre İlk Neolitik Dönem'den itibaren yerleşilmiştir. Yerleşme, üzerinde at biçimli bastionların olduğu kuvvetli bir savunma sistemi ile oldukça korunaklı şekilde inşa edilmiştir. Yer yer bu anıtsal bastionlar 5.0 m'ye kadar korunmuştur. Ayrıca söz konusu bu surun dış kesiminde bir de hendek vardır.

Bu çalışma ile her iki yerleşmenin anıtsal mimarisi, Ege Dünyası ve Batı Anadolu ile karşılaştırılarak, söz konusu mimarinin özellikleri ayrıntılı bir şekilde yansıtılmaya çalışılmıştır.

Anahtar Kelimeler: Mimari, Ege Dünyası, Kiklatlar, Arkeoloji

CYCLADIC ARCHITECTURE IN THE BRONZE AGE: KASTRI AND PALAMARI SETTLEMENTS

ABSTRACT

In this study, the settlement of Kastri, one of the most important Early Bronze Age centers located in the archipelago called the Cyclades in the south of the Aegean Sea and the key settlement of the region, and the settlement of Palamari on Skyros Island in the north of the Cyclades were examined. The settlement of Kastri is located west of Naxos, the largest island of the Cyclades group with a surface area of 400 square kilometers. The island, which has very fertile soil, also has a higher elevation than the other Cyclades Islands. The period called the Early Cyclades IIB Period in Aegean chronology and also known as the Kastri Phase, corresponds to the Early EBA III Period in Western Anatolian chronology and is dated to approximately 4200 years ago.

The settlement consists of a strong defense system in general terms and houses arranged irregularly within this system. Both the structures and the defense wall were built without using mortar and only from stone. The reason for not using mortar is shown as the scarcity of clay and water resources. Palamari settlement is located on Skyros Island in the north of the Cyclades. The island has been settled since the Early Neolithic Period according to the Aegean chronology. The settlement was built in a very protected manner with a strong defense system with horse-shaped bastions. In some places, these monumental bastions have been preserved up to 5.0 m. In addition, there is a moat on the outer part of this wall.

In this study, the monumental architecture of both settlements was compared with the Aegean World and Western Anatolia, and the characteristics of the architecture in question were tried to be reflected in detail.

Key Words: Mimari, Cyclades, Eagean World, Archaeology

BRICS ÜLKELERİNDE İŞÇİ DÖVİZLERİ, CARİ AÇIK VE BÜYÜME İLİŞKİSİ: PANEL VERİ ANALİZİ (2000-2022)

RELATIONSHIP BETWEEN WORKERS' REMITTANCES, CURRENT ACCOUNT DEFICIT AND GROWTH IN BRICS COUNTRIES: PANEL DATA ANALYSIS (2000-2022)

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ÖZET

Küreselleşmeyle beraber dünyada hızlı bir şekilde artan uluslararası göç hareketliliğinin temel öznesini oluşturan göçmenlerin, çalışmak amacıyla gittikleri ülkelerdeki elde ettikleri kazançlarını ana vatanlarındaki hane halkına havale etmeleri işçi dövizi olarak tanımlanmaktadır. Son dönemlerde giderek artan işçi dövizleri ulaştığı seviye ile zamanla aile ekonomisinin de önüne geçerek alıcı ülkelerin ekonomik büyüme performansına da önemli katkı sağlayacak boyutlara ulaşmıştır. İşçi dövizlerinin havale edilen ülkede, harcanabilir geliri artıracağı, eğitim, sağlık koşullarını iyileştireceği, hayat standartlarını yükselteceği, makroekonomik anlamda herhangi bir ekonomik yükümlülük altına sokmamasından dolayı ülkelerin ekonomilerine olumlu etkiler katacağı, cari açığı dengeleme yoluyla bu açıkları gidereceği yönünde önemli bir çözüm yöntemi olmasına kadar pek çok avantaj sunmaktadır.
Bu çalışmada, gelişmekte olan ülke sınıfında kabul edilen beş büyük ekonomiden oluşan BRICS ülkeleri için işçi dövizlerinin ekonomik büyümeyi ne yönde etkilediğini araştırmaktadır. 2000-2022 dönemine ait yıllık veriler kullanılarak panel veri analizi yapılmıştır. Analiz sonuçlarına göre işçi dövizleri ekonomik büyümeyi olumsuz etkilemektedir.
Anahtar Kelimeler: İşçi dövizleri; Ekonomik büyüme; BRICS ülkeleri.

ABSTRACT

With globalization, the main subject of the rapidly increasing international migration movement in the world, migrants who transfer their earnings from the countries they go to work to the households in their homeland are defined as remittances. In recent years, the increasing remittances have reached a level that will overtake the family economy and contribute significantly to the economic growth performance of the recipient countries. Workers' remittances offer many advantages in the country they are sent to, such as increasing disposable income, improving education and health conditions, raising living standards, contributing positively to the economies of nations as they do not impose any economic obligations in the macroeconomic sense, and being a vital solution method to eliminate these deficits by balancing the current account deficit.
This study investigates how remittances affect economic growth for the BRICS countries, which consist of five major economies accepted in the developing country class. Panel data analysis was conducted using annual data from 2000-2022. The results show that remittances negatively affect economic growth.
Keywords: Remittances; Economic growth; BRICS countries.

AİLƏDƏ MƏNƏVİ-PSİXOLOJİ MÜHİTİN TƏŞKİLİ

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Xülasə. Müəllif yazmış olduğu məqalədə qeyd edir ki, indiki cəmiyyətin mənəviyyatı ailənin varlığından asılıdır. Ona görə də deyilir ki, hər bir ailə cəmiyyətin özəyidir. Dövlət uğurlu nigahın olmasında, ailənin möhkəmliyində, uşaqların düzgün tərbiyə olunmasında maraqlıdır. Bu səbəbdən dövlət ailələrə qayğı və dəstək göstərir.
Müəllifin fikrincə ailədə düzgün mənəvi-psixoloji mühit yaradılarsa burada tərbiyə alan hər bir övlad istər ictimai yerlərdə, istər əmək kollektivlərində, istərsə də məktəblərdə özlərini nümunəvi aparar və ailəsinin şərəfinə xələl gətirməz. Əks halda ailə gözdən düşər və heç bir yerdə o ailəyə hörmət edilməz.
Ailədə müsbət mənəvi-psixoloji mühitin olması üçün ailə üzvləri arasında psixoloji cəhətdən bir-birinə uyuşması mütləqdir. İlk növbədə ailənin qurulduğu gündən qadınla kişinin psixoloji cəhətdən bir-birinə uyuşması lazımdır, ona görə ki, hər iki gənc də müxtəlif ailələrdə, müxtəlif psixoloji iqlimdə böyüyüb tərbiyə almış və indi bir ailədə birləşmişlər.
Açar sözlər: mənəvi-psixoloji mühit, mənəviyyat, hörmət, məhəbbət, qarşılıqlı anlaşma, tələbkarlıq, əxlaqi keyfiyyətlər, xoşbəxtlik

ОРГАНИЗАЦИЯ ДУХОВНО-ПСИХОЛОГИЧЕСКОЙ СРЕДЫ В СЕМЬЕ

Аннотация:
Автор отмечает, что морально-духовное состояние современного общества зависит от семьи и её ценностей. Отсюда и устоявшееся мнение, что каждая семья является ячейкой общества. Государство заинтересовано в удачном браке, прочности семьи и правильном воспитании детей. Поэтому государство заботится о семьях и и поддерживает их.
По мнению автора, ребёнок, воспитанный в правильной духовно-психологической среде, будет примерно вести себя в общественных местах, в трудовых коллективах, в школах и не нанесёт вреда чести своей семьи. В противном случае семья будет дискредитирована и потеряет всеобщее уважение.
Чтобы обеспечить положительную духовно-психологическую обстановку в семье, необходимо, чтобы члены семьи были психологически совместимы друг с другом. Прежде всего, со дня основания семьи между мужчиной и женщиной в семье должно быть психологическое согласие, поскольку они выросли и воспитывались в разных семьях, в разном психологическом климате, и только теперь объединились, создав семью.
Ключевые слова: духовно-психологическая среда, духовность, уважение, любовь, взаимопонимание, требовательность, нравственные качества, счастье.

ORGANISATION OF THE SPIRITUAL-PSYCHOLOGICAL ENVIRONMENT IN THE FAMILY

Abstract: The author states that the moral and spiritual state of modern society depends on the family and its values. Hence the widespread opinion that each family is a cell of society. The state is interested in a successful marriage, the strength of the family and the proper education of children. That is why the state cares for and supports families.

According to the author, a child brought up in the right spiritual and psychological environment will behave in public places, at work, in schools adequately and will not damage the honour and reputation of his family. Otherwise, the family will be discredited and lose the popular respect.

In order to ensure a positive spiritual and psychological environment in the family, it is necessary that the members of the family are psychologically compatible with each other. First of all, the man and the woman in the family should be psychologically compatible from the day the family is founded, because they grew up and were raised in different families, in different psychological environments, and only now they are united under a new family.

Key words: spiritual-psychological environment, spirituality, respect, love, mutual understanding, demanding, moral qualities, happiness.

PROJE PERFORMAS ÖLÇÜMÜNE YÖNELİK MODELLEME

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Özet:
Yürütülen projelerinin sayısı, büyüklüğü ve karmaşıklığı günden güne hızlı bir artış göstermektedir. Projelerin yeterli bütçe ile zamanında ve istenilen kalitede gerçekleştirilebilmesi için takibi ve belirli periyotlarla izlenmesi gerekmektedir. Bu nedenle proje başarısının ölçülmesi için çeşitli ölçüm kriterleri bulunmaktadır. Fakat bu metrikler proje başarısını ölçek için her zaman yeterli olmayabilir. Günümüz koşullarında projelerin performansının gerçekçi bir şekilde ölçülmesi zorlaşmaktadır.
Projeler arasındaki çeşitlilikten dolayı aynı derecede, adil ve gerçekçi ölçümün belirlenmesine ihtiyaç duyulmaktadır. Bu çalışmada proje performansının ölçülmesinde kullanılabilecek kriterler belirlenmiştir. Bu kriterler örnek projelere uygulanmış ve sonuçları yorumlanmıştır.
Geliştirilen proje performans değerlendirme yaklaşımı ile birçok projenin etkin bir şekilde ölçülebileceği hedeflenmektedir.
Anahtar Kelimeler: Proje Yönetimi, Proje Performansı, Proje Performans Endeksi, Performans Göstergeleri

MODELING FOR PROJECT PERFORMANCE MEASUREMENT

Abstract:
The number, size, and complexity of projects are rapidly increasing day by day. To ensure that projects are completed on time, within budget, and with the desired quality, they need to be tracked and monitored at regular intervals. Therefore, there are various measurement criteria for assessing project success. However, these metrics may not always be sufficient to gauge project success on a consistent scale. In today's conditions, it is becoming increasingly difficult to measure project performance in a realistic way.
Due to the diversity among projects, there is a need for a consistent, fair, and realistic measurement approach. This study identifies criteria that can be used to measure project performance. These criteria have been applied to example projects, and the results have been discussed.
The developed project performance evaluation approach aims to enable the effective measurement of multiple projects.
Key Word: Project Management, Project Performance, Project Performance Index, Project Indicators

ORGANİK YEM BİTKİLERİ YETİŞTİRİCİLİĞİ
ORGANIC FORAGE CROPS CULTIVATION

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ÖZET
Organik yem bitkileri yetiştiriciliğine başlarken, mevzuata uygun olarak yetki verilmiş kuruluşlar ile organik yem bitkileri yetiştiriciliği yapmak isteyen üreticiler arasında bir sözleşme yapılmalıdır. Yetiştiricilik süreci, yetkilendirilmiş kuruluşun kontrolü altında devam etmekte ve nihayetinde yetiştirilen ürünün sertifikalandırılması ile sonuçlanmaktadır. Tamamen kurallara uygun olarak yapılan bu yetiştiricilik son yıllarda ilgi çekmektedir. Organik yem bitkileri yetiştiriciliğinde toprak analizi, gübreleme, zararlı kontrolü, doğal yem bitkileri seçimi, rotasyon ve uygun ekim, sulama, hasat ve depolama gibi temel konular üzerinde durulmaktadır. Toprak analizi, bitkilerin besin ihtiyaçlarını belirlemek için önemlidir. Gübreleme organik kaynaklardan elde edilen materyallerle yapılır ve doğru miktarlarda uygulanmalıdır. Zararlı kontrolünde doğal yöntemler tercih edilmelidir. Doğal yem bitkileri seçimi, toprağa ve hayvan ihtiyaçlarına uygun olarak yapılmalıdır. Rotasyon ve uygun ekim toprak verimliliğini artırırken, sulama bitkilerin sağlıklı büyümesi için önemlidir. Hasat ve depolama süreçlerinde bitkinin türüne ve kalitesine göre dikkatli davranılmalıdır. Organik yem bitkileri yetiştiriciliğinde uyulması gereken bu temel prensipler, organik yem bitkileri yetiştiriciliğinde başarıyı artırmak için önemlidir.
Anahtar Kelimeler: Ekim, hasat, organik, sulama, yem bitkileri.

ABSTRACT
When starting organic forage crops cultivation, a contract should be made between the authorized organizations in accordance with the legislation and the producers who want to cultivate organic forage crops. The cultivation process continues under the control of the authorized organization and eventually results in the certification of the cultivated product. This cultivation, which is completely in accordance with the rules, has attracted attention in recent years. In organic forage crops cultivation, basic issues such as soil analysis, fertilization, pest control, natural feed crop selection, rotation and appropriate planting, irrigation, harvesting and storage are emphasized. Soil analysis is important for determining the nutritional needs of plants. Fertilization is done with materials obtained from organic sources and should be applied in the right amounts. Natural methods should be preferred in pest control. Natural forage crops selection should be made in accordance with the soil and animal needs. While rotation and appropriate planting increase soil fertility, irrigation is important for the healthy growth of plants. Care should be taken according to the type and quality of the plant during the harvest and storage processes. These basic principles to be followed in organic forage crops cultivation are important for increasing success in organic forage crops cultivation.
Keywords: Planting, harvesting, organic, irrigation, forage crops.

SÜRDÜRÜLEBİLİR TARIM İÇİN SU AYAK İZİNİN ÖNEMİ
THE IMPORTANCE OF WATER FOOTPRINT FOR SUSTAINABLE AGRICULTURE

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ÖZET
Jeopolitik nedenlerle, su belirli ülkeler arasındaki bağlantılarda stratejik bir kaynak olarak kabul edilir. Dünyadaki tarımsal amaçlı su kullanımı, toplam sektörel su kullanımlarının yaklaşık %70'ini oluşturmaktadır. Sektörel su kullanım oranları, ülkelerin gelişmişlik düzeylerine göre değişiklik gösterir. Tatlı su bulunabilirliği dünya çapında endişe verici bir şekilde azalmakta ve tarım bu eğilimde hayati bir rol oynamaktadır. Artan nüfus, iklim değişikliği ve sınırlı su kaynakları, küresel ölçekte su kıtlığını şiddetlendirmektedir. Özellikle tarım sektörü, suyun en yoğun kullanıldığı alanlardan biri olarak bu durumdan olumsuz etkilenmektedir. Bu bağlamda, su ayak izi kavramı, tarımsal üretimin su kaynakları üzerindeki baskısını ölçmek ve sürdürülebilirlik hedeflerine ulaşmak için kritik bir araç haline gelmiştir. Su ayak izi, bir ürünün üretimi boyunca doğrudan ve dolaylı olarak tüketilen su miktarını ifade eder ve mavi (yeraltı ve yüzey suları), yeşil (yağmur suyu) ve gri (kirlilik nedeniyle arıtma gerektiren su) olmak üzere üç bileşenden oluşur. Türkiye gibi su kaynakları sınırlı olan ülkelerde, su ayak izini azaltmak için damla sulama sistemlerinin yaygınlaştırılması, su tasarruflu bitki çeşitlerinin tercih edilmesi ve su geri dönüşüm uygulamalarının desteklenmesi gibi stratejiler benimsenmelidir. Bu sayede hem su kaynakları korunacak hem de tarımsal üretimde verimlilik artırılacaktır. Tarımsal su ayak izinin değerlendirilmesi yalnızca yerel su kaynaklarının yönetimi ve korunmasında değil, aynı zamanda yerel su tüketimi ile küresel pazarlar arasındaki sinerjileri anlamamızda da bir temel oluşturmaktadır. Bu araştırma, tarımsal üretimde suyun etkin kullanımı için kritik bir gösterge olan su ayak izinin önemini vurgular. Özellikle basınçlı sulama sistemlerinin (damla ve yağmurlama sulama) yaygınlaştırılması, ürün seçimi ve ürün deseninin yerel iklim ve su kaynaklarıyla uyumlu hale getirilmesi gibi uygulamaların etkisi incelenmiştir.
Anahtar kelimeler: Sürdürülebilir tarım, su ayak izi, iklim değişikliği.

ABSTRACT
For geopolitical reasons, water is considered a strategic resource in the connections between certain countries. Agricultural water use in the world accounts for approximately 70% of total sectoral water use. Sectoral water use rates vary according to the development levels of countries. Freshwater availability is decreasing alarmingly worldwide, and agriculture plays a vital role in this trend. Increasing population, climate change, and limited water resources are exacerbating water scarcity on a global scale. The agricultural sector, in particular, is negatively affected by this situation as one of the areas where water is used most intensively. In this context, the concept of water footprint has become a critical tool for measuring the pressure of agricultural production on water resources and achieving sustainability goals. The water footprint refers to the amount of water consumed directly and indirectly during the production of a product and consists of three components: blue (groundwater and surface water), green (rainwater), and gray (water that requires treatment due to pollution). In countries with limited water resources, such as Turkey, strategies such as expanding drip irrigation systems, preferring water-saving plant varieties, and supporting water recycling practices should be adopted to

reduce the water footprint. In this way, both water resources will be protected and efficiency in agricultural production will be increased. The assessment of agricultural water footprint is not only a basis for the management and protection of local water resources, but also for understanding the synergies between local water consumption and global markets. This research emphasizes the importance of water footprint, which is a critical indicator for the efficient use of water in agricultural production. In particular, the effects of practices such as the expansion of pressurized irrigation systems (drip and sprinkler irrigation), product selection and adaptation of crop pattern to local climate and water resources were examined.
Keywords: Sustainable agriculture, water footprint, climate change.

PİRİNÇ TARIMINDA DRENAJ
DRAINAGE IN RICE FARMING

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ÖZET
Pirinç Dünya'da ve Türkiye'de yetiştirilen milyarlarca insanın temel gıda maddesi olarak kullandığı en önemli stratejik tahıllardan biridir. Özellikle tropikal ve yarı tropikal bölgelerde yetiştirilen pirinç, suya doygun toprak koşullarında yüksek adaptasyon kabiliyetiyle diğer tahıllardan ayrılmaktadır. Neredeyse tüm diğer önemli bitkilerden farklıdır, çünkü yerin üzerinde büyüyen kısımlardan kökleri havalandırmak için iyi gelişmiş bir iç iletim sistemine sahiptir; bu sistem, pirincin suya doygun anaerobik koşullar altında iyi bir şekilde büyümesine olanak tanır. Fakat bu özelliğine karşın pirinç üretiminin sürdürülebilirliği için etkili su yönetimi önemli bir gerekliliktir ve bu bağlamda drenaj, pirinç tarımının temel unsurlarından biri olarak öne çıkar. Drenaj, pirinç tarlalarındaki aşırı suyu kontrol altında tutarak bitkilerin büyümesi için uygun koşullar sağlar. Özellikle suyun uzun süre tarlada birikmesi, kök çürümesi ve oksijen yetersizliği gibi sorunlara neden olabilir. Bu durum bitki gelişimini olumsuz etkilerken, tarımsal üretimi ciddi anlamda azaltabilir. Aynı zamanda, uygun drenaj sistemleri, topraktaki tuz birikimini önleyerek toprak verimliliğinin korunmasına yardımcı olur. Pirinç tarımında drenajın etkin bir şekilde yönetilmesi, hem ürün kalitesini artırmakta hem de çevresel riskleri minimize etmektedir. Bu çalışmada, pirinç tarımında drenaj uygulamalarının önemi genel hatlarıyla ele alınmaktadır. Yüzey ve yüzeyaltı drenaj sistemlerinin farklı tarım ekolojilerinde nasıl kullanıldığı, su yönetimine sağladığı katkılar ve drenaj stratejilerinin tarımsal sürdürülebilirlikteki rolü tartışılmıştır. Drenajın yalnızca tarımsal üretim açısından değil, aynı zamanda çevresel etkiler açısından da kritik olduğu vurgulanmıştır.
Anahtar kelimeler: Pirinç tarımı, sulama, drenaj

ABSTRACT
Rice is one of the most important strategic grains grown in the world and in Turkey, and used as a staple food by billions of people. Rice, which is grown especially in tropical and semi-tropical regions, is distinguished from other grains by its high adaptability to waterlogged soil conditions. It differs from almost all other important plants because it has a well-developed internal conduction system to ventilate the roots from the parts growing above the ground; this system allows rice to grow well under waterlogged anaerobic conditions. However, despite this feature, effective water management is a critical requirement for the sustainability of rice production. In this context, drainage stands out as one of the basic elements of rice farming. Drainage provides suitable conditions for plant growth by keeping excess water in rice fields under control. In particular, long-term accumulation of water in the field can cause problems such as root rot and oxygen deficiency. This situation negatively affects plant development and can seriously reduce agricultural production. At the same time, appropriate drainage systems help preserve soil fertility by preventing salt accumulation in the soil. Effective management of drainage in rice farming both increases product quality and minimizes environmental risks.
This study examines the importance of drainage practices in rice farming in general terms. How surface and subsurface drainage systems are used in different agricultural ecologies, their

contributions to water management, and the role of drainage strategies in agricultural sustainability are discussed. It is emphasized that drainage is critical not only in terms of agricultural production but also in terms of environmental impacts.
Keywords: Rice farming, irrigation, drainage

BURSA'NIN KELES İLÇESİ KIRANAŞIKLAR KÖYÜNDEN DERLENEN BAZI ANLATI ve TÖREN TÜRKÜLERİNİN MUHTEVA AÇISINDAN TAHLİLİ

ANALYSIS OF SOME NARRATIVES AND RITUEL FOLK SONGS COMPILED FROM THE VILLAGE OF KIRANASIKLAR IN THE KELES DISTRICT OF BURSA

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ÖZET

Sözlü kültürün önemli aktarıcılarından olan türküler, sadece zamanın akışına karşı koyarak yaşamaz. Aynı zamanda toplumların çağlar öncesine uzanan evrenini, doğayı ve yaşamı algılama biçimlerini de yansıtır. Bu anlamda türküler, köklü bir kültürel geçmişin izlerini günümüz dünyasına taşır ve geçmişten günümüze uzanan zengin kültürel bir mirasın izlerine sahiptir. Öte yandan insanoğlunun en temel duygularını, düşüncülerini, başından geçen olaylara nasıl tepki verdiğini anlatma ve anlama kısmında modern topluma önemli kaynaklar da sunmaktadır. Türküler, Türk halk müziği geleneğinin en temel unsurlarından biri olarak, hem sözleri hem de melodileriyle halkın yaşam deneyimlerinden, duygularından, inançlarından ve tarihsel olaylardan beslenen bir ifade biçimidir. Anonim bir yapıya sahip olmaları ve kuşaktan kuşağa sözlü aktarım yoluyla varlıklarını sürdürmeleri, onları halkın ortak hafızasının bir yansıması hâline getirir. Sözlerinde sade, içten ve samimi bir dil kullanılması, türküleri halkın duygu ve düşüncelerinin doğal bir aynası yapar.

Türküler, hem edebî hem de müzikal açıdan incelemeye değer zengin birer formdur. Edebi olarak, türkülerdeki anlatım tarzı, semboller, mitler ve toplumsal mesajlar üzerinden derinlemesine çalışmalar yapılmaktadır. Ele alınan temalar ise aşk, özlem, doğa, kahramanlık, dini değerler, sosyal eşitsizlikler gibi geniş bir yelpazeyi kapsar. Müzikal açıdan bakıldığında, türküler melodik yapılar, makamlar, ritmik kalıplar ve bölgesel farklar bakımından büyük çeşitlilik göstermektedir. Karadeniz'in enerjik kemençeli horonlarından, Ege'nin ağır ve vakur zeybeklerine, Doğu Anadolu'nun derin duygularla yüklü uzun havalarına kadar her bölge kendine has türkü tarzları geliştirmiştir. Bu zenginlik, halk müziği içindeki kültürel çeşitliliği ve müzikal derinliği gözler önüne sermektedir.

Türküler, halkın hem duygusal hem de toplumsal kimliğinin en güçlü yansımalarından biridir. Köylerde, kasabalarda ve şehirlerde halkın gündelik yaşamı, toplumsal olaylar ve duygusal deneyimlerinin en saf ifadeleri türkülerin içinde hayat bulmaktadır. Osmanlı İmparatorluğu'nun son dönemlerinden Cumhuriyet'in ilk yıllarına kadar göç, savaş ve yoksulluk gibi tarihsel süreçler türkülerin sözlerinde derin izler bırakmıştır. Ayrıca, köylü isyanları, aşk destanları, evlilik gelenekleri ve kahramanlık hikâyeleri türkülerin işlediği başlıca temalar arasında yer alır. Türküler, aynı zamanda halkın kültürel belleğini koruyan bir araçtır. Pek çok türkü, toplumsal travmaları, kahramanlıkları ve aşk acılarını unutturmayarak bireysel ve kolektif hafızanın yaşatılmasını sağlar. Bu anlamda, türküler sadece bir müzik türü değil, aynı zamanda halkın kültürel mirasını nesiller boyu canlı tutan bir köprüdür. Müzikal ve edebî açıdan da türkülerin derin bir araştırma alanı sunduğu söylenebilir. Türküler, bir yandan toplumun duygusal ve sosyokültürel yapısını ortaya koyarken, öte yandan tarihsel süreçleri ve halkın iç dünyasını anlamada önemli bir kaynak sunar. Bu anlamda türkülerin; halk kültürü, tarih, müzikoloji ve edebiyat gibi çeşitli disiplinlerin kesişiminde yer alan zengin bir inceleme konusu olduğu görülmektedir.

Bu çalışmada, anlatı ve tören türkülerinin muhteva açısından tahlili yapılmıştır. Tahlili yapılan türküler, Bursa'nın Keles ilçesi Kıranışıklar köyünden derlenmiştir. Derlenen türkülerden; iki

anlatı türküsü, gelin alma sırasında söylenen iki türkü ve yine tören türkülerinden bir kına türküsü olmak üzere toplam beş türkü seçilmiştir. Çalışmada bu beş türkünün muhteva bakımından analizi ortaya konulmuştur.
Anahtar kelimeler: Türk halk türküleri, anlatı türküleri, tören türküleri, türkü.

ABSTRACT

Turkish folk songs, which are significant conveyors of oral culture, do not merely survive by resisting the passage of time. It also reflects the way societies perceive the universe stretching back to prehistoric eras, nature, and life. In this sense, folk songs carry the traces of a deep cultural heritage into the contemporary world. Therefore, folk songs possess a rich cultural heritage that extends from the past to the present day. On the other hand, they also provide significant resources to modern society in terms of describing and understanding the most fundamental emotions, thoughts, and reactions of human beings to events that occur to them. Folk songs, as one of the most fundamental elements of Turkish folk music tradition, represent an expressive form deeply rooted in the lived experiences, emotions, beliefs, and historical events of the people. Their anonymous nature and oral transmission across generations make them a reflection of the collective memory of society. The use of simple, sincere, and intimate language in their lyrics renders folk songs a natural mirror of the emotional and intellectual world of the people.

Folk songs are worthy of analysis both in terms of literature and music. From a literary perspective, in-depth studies are conducted on their narrative style, symbols, myths, and social messages. The themes explored in folk songs span a broad range, including love, longing, nature, heroism, religious values, and social inequalities.

Musically, folk songs exhibit significant diversity in terms of melodic structures, modes, rhythmic patterns, and regional variations. From the energetic fiddle-accompanied horons of the Black Sea region to the stately zeybeks of the Aegean, and the deeply emotional long airs of Eastern Anatolia, each region has developed its own distinctive style of folk songs. This diversity highlights the cultural richness and musical depth within Turkish folk music.Folk songs also serve as one of the most powerful reflections of the emotional and social identity of the people. In villages, towns, and cities, they embody the purest expressions of daily life, social events, and emotional states. From the late Ottoman period to the early years of the Republic, historical processes such as migration, war, and poverty left deep imprints on the lyrics of folk songs. Additionally, themes such as peasant uprisings, love epics, marriage traditions, and heroic tales are frequently addressed in folk songs.

Furthermore, folk songs function as a vehicle for preserving cultural memory. Many songs help sustain both individual and collective memory by preventing the forgetting of social traumas, acts of heroism, and love tragedies. In this sense, folk songs are not merely a genre of music but also a bridge that keeps the cultural heritage of the people alive across generations.Folk songs offer a rich field for research both musically and literarily. While they reveal the emotional and socio-cultural fabric of society, they also provide a significant source for understanding historical processes and the inner world of the people. In this respect, folk songs stand at the intersection of various disciplines such as folk culture, history, musicology, and literature, and present themselves as a valuable subject for in-depth analysis.

In this study, narrative and ritual folk songs have been analyzed in terms of content. The analyzed folk songs were collected from the village of Kıranışıklar in the Keles district of Bursa. Five folk songs have been selected from the collected ones, including two narrative songs, two songs sung during the bridal procession, and one henna song, which is also a ceremonial folk song. The analysis of these five folk songs in terms of content has been presented in the study.
Keywords: Turkish folk songs, narrative songs, ceremonial songs, folk songs.

BİR TEŞRÎ KAYNAĞI OLARAK EBÜ'L-HASAN EL-EŞ'ARÎ'YE GÖRE KUR'AN-I KERÎM

AS A SOURCE OF LEGISLATIVE
THE QUR'AN ACCORDING TO ABŪ AL-HASAN AL-ASH'ARĪ

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ÖZET

İslâm düşünce tarihinde Kur'an'ın anlaşılması ve yorumlanması, Müslüman âlimler arasında önemli tartışmalara konu olmuştur. Kur'an'ın teşri kaynağı olarak merkezi rolü, çeşitli ekoller tarafından farklı yaklaşımlarla ele alınmış, özellikle Kur'an'ın mahiyeti, akıl-vahiy ilişkisi vb. üzerine derin ayrışmalar yaşanmıştır. Bu tartışmaların odağında yer alan isimlerin başında hiç şüphesiz Ebü'l-Hasan el-Eş'arî gelmektedir. O, İslâm'ın erken dönemlerinden itibaren Müslümanların büyük çoğunluğunun benimsediği Ehl-i sünnet anlayışının şekillenmesinde ve sistematik bir çerçeve kazanmasında öncü bir rol oynamıştır.

Kur'an-ı Kerîm, Müslümanlar tarafından Allah'ın kelâmı olarak kabul edilen ve kutsallığında hiçbir şüphe bulunmayan bir kitaptır. Ehl-i sünnet âlimleri, Kur'an'ı Allah'ın ezelî ve kadîm kelâmı olarak nitelerken, Mû'tezile ekolü Kur'an'ın yaratılmış bir varlık olduğunu savunmuştur. Ancak her iki görüş de Kur'an-ı Kerîm'in Allah'ın kelâmı olduğu konusunda hemfikirdir. Bu nedenle İslâm üzerine araştırma yapan her düşünür, görüşlerini öncelikle Kur'an'a dayandırmayı amaçlamış ve bu süreçte kendi belirlediği yöntemler ve ilkeler çerçevesinde hareket etmiştir. Kur'an'ın Allah'ın kelâmı olarak kabul edilmesi, ilâhî iradenin bir tezahürü şeklinde vahiy yoluyla Hz. Peygamber'e indirilmesi ve onun aracılığıyla insanlığa aktarılması, vahiy, inzâl, kelâm ve ilâhî kelâmın mahiyeti gibi kavramlar etrafında farklı görüşlerin ve tartışmaların doğmasına zemin hazırlamıştır.

Müslüman âlimler, tarih boyunca vahiy olgusunu anlamaya ve yorumlamaya yönelik kapsamlı çalışmalar yapmış; ilâhî kelâmın mahiyetiyle ilgili meseleleri detaylı bir şekilde inceleme gereği duymuşlardır. Kırk yaşlarında Mû'tezile ekolünden ayrılarak kendi yöntemini geliştiren Eş'arî, Kur'an'ı ve onun bir teşrî kaynağı olarak işlevini kendine özgü bir bakış açısıyla ele almıştır. Eş'arî'ye göre Kur'an, Allah'ın ezelî ve yaratılmamış kelâmı olup, doğrudan doğruya O'nun iradesini yansıtan bir kaynaktır. Hüküm koyma yetkisi yalnızca yegâne hâkim olan Allah'a aittir ve bu hüküm kaynağı da O'nun ilâhî hitabı olan Kur'an'dır. Allah, Kur'an'ı göndererek insanlara doğruyu ve iyiyi göstermiş ve ona uyanların kurtuluşa ereceğini bildirmiştir. Bu bağlamda ona göre Kur'an'ın doğru bir şekilde anlaşılmasında ve bireysel ve toplumsal hayata dair hükümlerinin belirlenmesinde vahyin üstünlüğü esas alınmalı, akıl ise bu üstünlük ışığında değerlendirilmelidir.

İşte bu çalışmada, Eş'arî'nin Kur'an'a dair görüşleri ile bir teşrî kaynağı olarak onun Kur'an'a yaklaşımı ve akıl-nakil arasındaki dengeye dair ortaya koyduğu fikirleri incelenecektir. Bu bağlamda, onun düşünce dünyasında Kur'an'ın kaynak olarak taşıdığı önem ile bu fikirlerin İslâm düşüncesine olan etkileri ve yansımaları analiz edilecektir.

Anahtar Kelimeler: Kur'an-ı Kerîm, Eş'arî, Teşrî, Kaynak, Akıl, Nakil, Vahiy.

ABSTRACT

In the history of Islamic thought, the understanding and interpretation of the Qur'an has been the subject of significant debates among Muslim scholars. The central role of the Qur'an as a source of legislation has been handled with different approaches by various schools of thought, and deep divergences have been experienced, especially on the nature of the Qur'an, the relationship between reason and revelation, and so on. Abu al-Hasan al-Ash'ari is undoubtedly one of the names at the center of these debates. He played a pioneering role in shaping and systematizing the understanding of Ahl al-Sunnah, which has been adopted by the majority of Muslims since the early periods of Islam.

The Qur'an is a book accepted by Muslims as the word of Allah and there is no doubt about its sanctity. While Ahl al-Sunnah scholars characterized the Qur'an as the eternal and eternal word of Allah, the Mûtazilite school argued that the Qur'an was a created being. However, both views agree that the Qur'an is the word of God. For this reason, every thinker who has done research on Islam has aimed to base his views primarily on the Qur'an and has acted within the framework of the methods and principles he has determined in this process. The acceptance of the Qur'an as the word of God, its revelation to the Prophet as a manifestation of the divine will, and its transmission to humanity through him have paved the way for the emergence of different views and debates around concepts such as revelation, revelation, kalām, and the nature of divine kalām.

Throughout history, Muslim scholars have conducted extensive studies to understand and interpret the phenomenon of revelation and have felt the need to examine the issues related to the nature of divine kalām in detail. Al-Ash'arī, who broke away from the school of Mutazila at the age of forty and developed his own method, dealt with the Qurʾān and its function as a source of legislation from a unique perspective. According to al-Ashʿarī, the Qurʾān is the eternal and uncreated word of God and is a source that directly reflects His will. The authority to rule belongs only to God, the sole judge, and the Qur'an, His divine address, is the source of this ruling. By sending the Qur'an, Allah has shown people the truth and the good and has declared that those who follow it will attain salvation. In this context, according to him, the supremacy of revelation should be taken as the basis for understanding the Qur'an correctly and determining its provisions for individual and social life, and reason should be evaluated in the light of this supremacy.

In this study, al-Ash'arī's views on the Qur'an, his approach to the Qur'an as a source of the Qur'ān and his ideas on the balance between reason and reason will be analyzed. In this context, the importance of the Qur'an as a source in his world of thought and the effects and reflections of these ideas on Islamic thought will be analyzed.

Keywords: Qur'an al-Kerîm, Ash'ari, legislative, Source, Reason, Religious Texts (al-Nakl), Revelation.

RADIOFREQUENCY ABLATION (RFA) TREATMENT IS AN EFFECTIVE METHOD FOR VENOUS STASIS ULCERS

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ABSTRACT
Venous Stasis Ulcers (VSUs) are wounds that develop as a result of chronic venous insufficiency (CVI), typically affecting the lower extremities. These ulcers are characterized by prolonged healing times and a tendency to recur. The pathophysiology of VSUs involves venous hypertension and venous reflux, leading to impaired tissue oxygenation and microcirculatory dysfunction. Traditional management strategies for venous diseases include compression therapy, topical wound care, and surgical interventions. In recent years, Radiofrequency Ablation (RFA) has emerged as an effective treatment option for venous insufficiency. The primary contributing factor to the development of venous stasis ulcers is the elevated venous pressure and consequent venous reflux. RFA is a minimally invasive technique designed to eliminate venous reflux by applying controlled radiofrequency energy to the vessel walls, thereby occluding the veins. This procedure helps normalize venous pressure, which, in turn, accelerates the healing of venous ulcers. RFA is an endovenous procedure in which radiofrequency energy is delivered via a radial guide catheter to heat the inner walls of the vein. This process results in endothelial damage and subsequent closure of the vein, restoring proper blood flow. The veins most commonly treated with RFA include the great saphenous vein, which, when occluded, resolves venous reflux. Several clinical studies have demonstrated that RFA not only improves venous disease but also significantly accelerates the healing of venous stasis ulcers. The effectiveness of RFA in treating venous stasis ulcers has been consistently supported by research, with studies showing that the closure of venous reflux leads to higher ulcer healing rates. In various studies, patients treated with RFA experienced faster ulcer healing and a lower recurrence rate. Moreover, significant improvements in patients' quality of life have been reported post-treatment. After RFA, when combined with compression therapy, reductions in leg edema and pain were observed, and the overall healing process was expedited. One of the major advantages of RFA is its minimally invasive nature, with a shorter hospitalization period. Recovery time is typically brief, allowing patients to resume normal activities within a few days following the procedure. However, the success of RFA is dependent on accurate vein targeting during the procedure, effective use of the device, and the patient's overall health condition. Additionally, RFA is most effective for veins with an appropriate diameter and is primarily targeted at larger venous structures, meaning that it may not be suitable for all patients. Radiofrequency Ablation (RFA) stands out as an effective method for treating venous stasis ulcers. By optimizing the treatment of venous insufficiency, RFA lowers venous pressure and accelerates ulcer healing. With its minimally invasive nature, short recovery times, and high efficacy, RFA offers a robust alternative to traditional treatment methods. The growing scientific support for RFA suggests that its role in the treatment of venous stasis ulcers will continue to expand, with future research expected to further clarify its long-term outcomes and effectiveness across diverse patient populations. In this study, we compiled data from 7 patients diagnosed with venous stasis who underwent RFA treatment between July 2023 and November 2024. During this period, a total of 76 patients received RFA treatment, 7 (9.2%) of whom had venous stasis ulcers. At the one-month follow-up after treatment, none of the patients had residual venous stasis ulcers, and no recurrences were observed during this time.

Keywords: chronic venous insufficiency, venous reflux, varicose veins, venous stasis ulcer, wound, radiofrequency ablation therapy

AKSA TUFANI ÖNCESİ VE SONRASINDA, FİLİSTİN SAĞLIK HİZMETLERİ ÜZERİNE BİR DEĞERLENDİRME

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ÖZET

Kökeni, Yahudi inancındaki vadedilmiş topraklar hayaline dayanan ve 1799 yılında, Fransız General Napolyon Bonaparte'nin, Osmanlı yönetimindeki Filistin'de bir Yahudi devleti kurulması fikrini ortaya atmasıyla başlayan ve son olarak 1948 yılında, işgal edilen Filistin topraklarında bir İsrail devletinin kurulmasıyla had safhaya ulaşan Filistin-İsrail olayları; tam 76 yıldır katliam ve direniş ekseninde artarak devam etmektedir. Bu süreçte, özellikle 7 Ekim 2023 tarihinde başlayan Aksa Tufanı ile birlikte; Filistin topraklarında on binlerce insan katledilmiş, ülkenin her tarafı yıkılıp tarumar edilmiş ve buna eş olarak da bu bir yıl içerisinde, Filistin sağlık hizmetleri, neredeyse tamamen yok olma durumuna getirilmiştir.

Bireyin ve toplumun; fiziksel, ruhsal ve sosyal yönden tam bir iyilik haline ulaşabilmesi için sunulan koruyucu, tedavi edici, rehabilite edici ve sağlığın geliştirilmesine yönelik hizmetlerin tamamına sağlık hizmetleri adı verilmektedir. İnsan hayatının temel ihtiyaçlarından olan beslenme ve güvenlik ihtiyaçları gibi, sağlık hizmetleri de bir toplum için olmazsa olmaz ihtiyaçlar listesindedir. Özellikle teşhis, tetkik ve tedavinin gerçekleştirildiği tedavi edici sağlık hizmetlerinin varlığı; bir savaş esnasında, yoğun bombardıman altında yaralanan insanların tedavi süreçleri açısından son derece önemlidir ve böyle bir savaş durumunda, içerisindeki hasta ve yararlılarla birlikte sağlık tesislerinin vurulması, savaş ve insanlık suçu olarak nitelendirilmektedir.

Bu çalışmanın amacı; 7 Ekim 2023 tarihinden itibaren Filistin-İsrail arasında başlayan Aksa Tufanı savaşı öncesi ve sonrasında Filistin sağlık hizmetlerinin durumunu ortaya koymak ve bu bağlamda değerlendirmelerde bulunmaktır. Çalışmada, konuyla ilgili literatür taraması gerçekleştirilmiştir. Sonuç olarak; son bir yılda, Filistin'in yalnızca Batı Şeria bölgesinde doğrudan sağlık hizmetlerine yönelik 286 hava saldırısı gerçekleştirilmiştir. Yine Gazze'deki 36 hastaneden yalnızca 17 tanesi kısmen hizmet sunumuna devam etmektedir. Bu bağlamda, İsrail saldırılarının ve soykırımın sonlanması ve Filistin sağlık hizmetlerinin yeniden yapılandırılması konusunda, Birleşmiş Milletler, İslam Ülkeleri ve Dünya Sağlık Örgütü'nün vakit kaybetmeden girişimlerde bulunması gerektiğini ifade etmek mümkündür.

Anahtar Kelimeler: Filistin, Aksa Tufanı, Sağlık Hizmetleri

ABSTRACT

The Palestine-Israel conflict, rooted in the Jewish belief in the dream of the Promised Land, began in 1799 when French General Napoleon Bonaparte suggested the establishment of a Jewish state in Palestine under Ottoman rule. This idea culminated in 1948 with the establishment of the state of Israel in occupied Palestinian territories, bringing tensions to their peak. For the past 76 years, these events have escalated along a trajectory of massacres and resistance. In this process, especially with the onset of the "Al-Aqsa Flood" on October 7, 2023, tens of thousands of people have been killed in Palestine, the country has been devastated, and over the past year, Palestinian healthcare services have been nearly obliterated.

Healthcare services encompass all protective, therapeutic, rehabilitative, and health-promoting services offered to enable individuals and societies to achieve complete physical, mental, and social well-being. Just as essential as basic human needs like nutrition and security, healthcare services are indispensable for a society. In particular, the presence of therapeutic healthcare services, where diagnosis, examination, and treatment are carried out, is vital during war, especially for treating individuals injured under intense bombardment. In such a war scenario, targeting healthcare facilities with patients and injured people inside is classified as a war crime and a crime against humanity.

The purpose of this study is to assess the state of Palestinian healthcare services before and after the "Al-Aqsa Flood" war that began between Palestine and Israel on October 7, 2023. A literature review on the topic was conducted in this study. As a result, in the past year alone, 286 airstrikes have been directed at healthcare facilities in the West Bank region of Palestine. Furthermore, only 17 of the 36 hospitals in Gaza continue to provide partial services. In this context, it is essential to emphasize that the United Nations, Islamic countries, and the World Health Organization should urgently take action to end Israeli attacks and genocide and to rebuild Palestinian healthcare services.

Keywords: Palestine, Al-Aqsa Flood, Healthcare Services

MEME KANSERİ TANILI KADINLARIN TEDAVİ İÇİN BAŞVURDUKLARI ALTERNATİF VE TAMAMLAYICI TERAPİLER
ALTERNATIVE AND COMPLEMENTARY THERAPIES USED BY WOMEN DIAGNOSED WITH BREAST CANCER FOR TREATMENT

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ÖZET
Günümüzde meme kanseri hastalarında Tamamlayıcı ve Alternatif Terapi (TAT) kullanımına ilginin giderek yaygınlaşma nedenleri arasında; meme kanserinin sık görülmesi, düşük sağ kalım oranı, tıbbi tedavinin getirdiği pek çok yan etki ve kadınların sağlık arama davranışlarının fazla olması yer almaktadır. TAT kullanım oranları ülkeden ülkeye değişiklik göstermekle birlikte, genel olarak meme kanseri tanısından sonra artmaktadır. Meme kanseri hastaları TAT yöntemlerini (bitkisel, psikolojik, fiziksel, vb.); semptomları, metastazı ve hastalığın tekrar etmesini önlemek, immun sistemi güçlendirmek, kanseri tedavi etmek, yaşam kalitesini yükseltmek, duygusal iyilik halini sağlamak, tedavinin yan etkileriyle mücadele etmek, içinde bulunulan durumu stabilize etmek ve medikal tedaviyi verimli hale getirmek için kullanmaktadır. Sıklıkla hastanın aile üyeleri ve yakınları tarafından önerilen alternatif ve tamamlayıcı terapilere hastalar, mevcut hastalığın getirmiş olduğu çaresizlik nedeniyle çok fazla araştırma yapmadan başvurmaktadır. Bu durum bize hem hastaların hem de sağlık profesyonellerinin tamamlayıcı ve alternatif terapiler ile ilaçların yararları, tehlikeleri hakkında güvenilir, kanıta dayalı bilimsel bilgilere erişmeleri gerektiğinin önemini göstermektedir. Bu nedenle meme kanseri tanılı kadınların tedavi için başvurdukları tamamlayıcı ve alternatif terapiler hakkında sağlık profesyonelleri ayrıntılı bilgiye sahip olmalı ve hasta ile karşılıklı iletişim kurarak rehberlik etmelidir. Meme kanseri tanılı kadınların tedavi için başvurdukları alternatif ve tamamlayıcı terapilere yönelik güncel literatür doğrultusunda hazırlanan bu çalışmanın, sağlık çalışanlarına yön gösterici olabileceği ve literatüre katkı sağlayacağı düşünülmektedir.
Anahtar kelimeler: Meme kanseri, Sağlık profesyonelleri, Tamamlayıcı ve alternatif terapiler

ABSTRACT
The reasons for the increasing interest in the use of complementary and alternative therapy (CAT) in breast cancer patients include; the high prevalence of breast cancer, low survival rate, many side effects of medical treatment and women's high health-seeking behavior. Although CAT use rates vary from country to country, they generally increase after breast cancer diagnosis. Breast cancer patients use CAT methods (herbal, psychological, physical, etc.); to prevent symptoms, metastasis and recurrence of the disease, strengthen the immune system, treat cancer, improve quality of life, provide emotional well-being, combat the side effects of treatment, stabilize the current situation and make medical treatment efficient. Patients often resort to alternative and complementary therapies recommended by family members and relatives of the patient without doing much research due to the helplessness brought by the

current disease. This situation shows us the importance of both patients and health professionals to access reliable, evidence-based scientific information about the benefits and dangers of complementary and alternative therapies and drugs. Therefore, health professionals should have detailed information about the complementary and alternative therapies that women diagnosed with breast cancer use for treatment and should guide the patient through mutual communication. It is thought that this study, prepared in line with the current literature on alternative and complementary therapies used by women diagnosed with breast cancer for treatment, will guide healthcare professionals and contribute to the literature.

Keywords: Breast cancer, Health professionals, Complementary and alternative therapies

BİZANS HANEDAN KADINLARININ SİYASİ ROLLERİ: İMPARATORİÇE THEODORA ÖRNEĞİ

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ÖZET
Bizans imparatoriçeleri Türk devletlerinde olduğu gibi herhangi bir siyasi sebebe dayanılarak seçilmiyordu. Bir kadının imparatoriçe olabilmesi için bazen güzellik bile yeterli olabiliyordu. İmparatoriçe, imparatorluk meşruiyetinin aktarımcısı olması dolayısıyla devlet içerisinde ayrıcalıklı bir konuma sahipti. Çünkü imparatorun ölümü sonrasında imparatoriçe ya tahtın varisi ya da varis olarak düşündüğü kişi ile evlenerek devletin devamlılığını sağlıyordu. Bu hanedan kadınlarından bir tanesi de İmparatoriçe Theodora'dır. Fakir bir ailenin çocuğu olarak dünyaya gelen Theodora'nın babası ayı bakıcısı, annesi ise sirkte pandomim sanatçısı olarak görev yapmaktadır. Theodora da biraz büyüdükten sonra annesi ile aynı mesleği yapmaya başlayacaktır. İmparator Justinianus ile tanışıncaya kadar, Theodora'nın hayatının çok da iyi olduğunu söylememiz mümkün değil. Ancak kader Theodora'nın yüzüne Antakya'da tanıştığı Makedonia isimli bir kızla tanışması ile gülecektir. Makedonia, görünüşte dansözdür. Ancak onun asıl görevi rejim aleyhtarları hakkında Justinianos'a bilgi toplamaktır. Makedonia'nın arabuluculuk yapması ile Theodora ve Justinianos evleneceklerdir. Bundan sonraki süreçte Theodora, Justinianus'un aldığı her kararda etkili olacak olan bir isim haline gelecektir. Hatta Justinianus'a karşı Nika İsyanı başladığında, ülkeyi bu isyandan kurtaran dahi Theodora olacaktır. Theodora 547 senesinde hayatını kaybedecektir. İmparator Justinianus ise onun ölümünden sonra bir daha evlenmeyecektir. Bu çalışmada Bizans İmparatoriçesi Theodora ve onun Bizans siyasetindeki yeri hakkında bilgi verilecektir.

Anahtar Kelimeler: İmparatoriçe, Bizans Devleti, Justinianus, Theodora.

POLITICAL ROLES OF BYZANTINE DYNASTY WOMEN: THE CASE OF EMPRESS THEODORA

ABSTRACT
Byzantine empresses were not chosen based on any political reason, as in the Turkish states. Sometimes, beauty was enough for a woman to become empress. The empress had a privileged position within the state because she was the transmitter of imperial legitimacy. Because after the death of the emperor, the empress would ensure the continuity of the state by marrying either the heir to the throne or the person she thought would be the heir. One of the women of this dynasty was Empress Theodora. Born into a poor family, Theodora's father was a bear keeper and her mother was a mime artist in the circus. Theodora would also start the same profession as her mother after she grew up a little. It is not possible to say that

Theodora's life was very good until she met Emperor Justinian. However, fate would smile upon Theodora when she met a girl named Makedonia, whom she met in Antioch. Makedonia was apparently a belly dancer. However, her real duty was to gather information for Justinian about those who were against the regime. With Macedonia's mediation, Theodora and Justinian will marry. In the following period, Theodora will become a name that will be effective in every decision Justinian makes. In fact, when the Nika Revolt against Justinian begins, Theodora will be the one who saves the country from this rebellion. Theodora will die in 547. Emperor Justinian will not marry again after her death. This study will provide information about the Byzantine Empress Theodora and her place in Byzantine politics.
Key Words: Empress, Byzantine Empire, Justinian, Theodora.

ENDÜSTRİ MİRASI YAPILARININ KORUMA AMACIYLA YENİDEN İŞLEVLENDİRİLMESİ; SİLO ÖRNEKLERİ KAPSAMINDA DEĞERLENDİRMESİ

ADAPTIVE REUSE OF INDUSTRIAL HERITAGE BUILDINGS FOR CONSERVATION: A CASE STUDY OF SILOS

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ÖZET

Mimarlık kavramının, tarihe tanıklık eden ve farklı kültürlerin etkisiyle ortaya çıkan çeşitli dönem yapıları ile kültürlerin yaşantılarını yansıttığı düşünüldüğünde koruma olgusunun önemi ortaya çıkmaktadır. Bu bağlamda tarihte önemli kırılma noktalarından birini temsil eden endüstri mirası yapıları değerlendirildiğinde, sanayi devriminin etkisiyle birlikte diğer tüm alanlarda olduğu gibi mimari anlamda da büyük değişimlerin yaşandığı görülmektedir. Kentsel yaşam biçiminde ve algısındaki değişim, dönüşümler; yeni teknolojik, bilimsel keşifler; sosyo-kültürel, sosyo-ekonomik yapının değişimi ve sanayileşme süreci gibi etkenler kent merkezlerinde büyük ölçekli endüstri mirası yapılarının oluşumunu beraberinde getirmiştir. Yaşam biçiminin yeniden yorumlandığı ve başkalaştığı süreçte endüstri mirası yapıları da nitelikleri gereği büyük bir çeşitlilikte kurgulanmış ve inşa edilmiştir. Bu çalışma kapsamında, endüstri mirası yapıların geniş çeşitlilik yelpazesinde ve kent hafızasında önemli yer kaplayan, depo-ambar (gıda, tohum, yem, maden, kimyasal madde) vb. işlevleriyle tasarlanmış siloların dönem yapısı olarak önemi ve korunması araştırılmıştır. Siloların, yapıldıkları zamanın kullanım amaçlarını yitirmeleri sebebiyle âtıl kalması ve zamanla yok olma tehlikesi ile karşı karşıya gelmeleri bu yapıların yeniden işlevlendirilerek korunması ve kente kazandırılması gerekliliğini açıkça ortaya koymaktadır. Çalışmanın amacı, Türkiye ve Dünyanın çeşitli bölgelerinden seçilen, farklı deneyimler sunan niteliklerle işlevlendirilen örnekler aracılığıyla, silo yapılarının dönüştürülerek kent hafızasına katkı sağlama potansiyelinin değerlendirilmesi ve bunun yanı sıra tüketim-dönüşüm farkındalığının oluşturulmasına ve artırılmasına dikkat çekmektir. Siloların yeniden işlevlendirilerek korunmasını ve kent yaşamına etkisini odağa alan bu çalışmada, aynı zamanda Endüstri Mirası yapılarının koruma süreci ile ilgili olarak oluşturulan uluslararası kuruluşlar, yasalar ve yönetmeliklere dair bir perspektif sunulması da hedeflenmiştir.

Anahtar Kelimeler: Endüstri Mirası Yapılar, Tarihi Koruma, Yeniden İşlevlendirme, Mimari Sürdürülebilirlik.

ABSTRACT

When considering the concept of architecture as a reflection of various cultural influences through buildings that testify to history, the significance of conservation becomes apparent. In this context, examining industrial heritage buildings, which represent a critical turning point in history, reveals significant changes in architectural practices by the Industrial Revolution. Factors such as changes in urban lifestyles and perceptions, transformations due to new technological and scientific discoveries, modification in socio-cultural and socio-economic structures, and the process of industrialization have led to the emergence of large-scale industrial heritage buildings in city centers. During this process, where lifestyles are reinterpreted and transformed, industrial heritage structures have been designed and constructed

with great diversity due to their unique characteristics. This study focuses on the importance and preservation of silos—structures designed for various functions, including storage for food, seeds, feed, minerals, and chemicals—within the extensive spectrum of industrial heritage. These silos, having lost their original utility, face the risk of obsolescence and potential demolition, underscoring the necessity for their refunctionalization and reintegration into the urban context. The aim of this study is to evaluate the potential contribution of silo structures to urban memory through selected examples from various regions in Turkey and the world, which offer different experiences and functionalities. Moreover, this research aims to foster awareness regarding consumption and transformation processes. Focusing on the refunctionalization and preservation of silos and their impact on urban life, the study also aims to provide a perspective on international organizations, laws, and regulations related to the preservation process of industrial heritage buildings.

Key Words: Industrial Heritage Buildings, Historical Conservation, Adaptive Reuse, Architectural Sustainability.

2018 VE 2024 FEN BİLİMLERİ DERSİ ÖĞRETİM PROGRAMLARINDA ELEKTRİK KONULARININ KARŞILAŞTIRILMASI

COMPARING ELECTRICAL TOPICS IN THE SCIENCE CURRICULA OF 2018 AND 2024

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ÖZET
2024 yılında öğrencilerin çok yönlü gelişimini bütüncül ve etkili bir şekilde desteklemek amacıyla Türkiye Yüzyılı Maarif Modeli öğretim programları yayınlanmıştır. Öğretim programlarında alan becerileri, kavramsal beceriler, eğilimler ile sosyal-duygusal beceriler, değerler ve okuryazarlık bir bütün olarak ele alınmıştır. Fen bilimleri dersi öğretim programında gelişim alanları beceri ve değer odaklı fen öğretimi, bilim kültürü ile zenginleşen fen öğretimi, disiplinler arası ilişkiler ve sürdürülebilirliği temel alan fen öğretimi olarak belirtilmiştir. Fen öğretim programında 3. sınıftan 8. sınıfa kadar tüm kademelerde elektrik konusu yer almaktadır. Çalışmamızda her kademe için elektrik konusu üniteleri 2018 öğretim programıyla karşılaştırılmalı olarak incelenmiştir. 2024 programında 2018 programına göre yapılan değişimler içerik bağlamında ele alınmıştır. Elektrikli Araçlar ünitesi Yaşamımızı Kolaylaştıran Elektrik olarak, Basit Elektrik Devreleri ünitesi Enerji Dedektifleri, Elektrik Devre Elemanları ünitesi Yaşamımızdaki Elektrik, Elektriğin İletimi ünitesi Elektriğin İletimi ve Direnç, Elektrik Devreleri ünitesi Elektriklenme, Elektrik Yükleri ve Elektrik Enerjisi ünitesi Elektriğin Yolculuğu olarak değiştirilmiştir. Bu ünitelerin içeriklerine bakıldığında yedinci kademede olan seri ve paralel bağlı devreler, elektrik enerjisi ile ısı, ışık ve hareket enerjileri arasındaki dönüşümler ve elektrik enerjisinin teknolojik uygulamaları konularının sekizinci kademeye alındığı görülmüştür. Sekizinci kademede yer alan elektrik yükleri ve elektriklenme çeşitleri konusu da yedinci kademeye alınmıştır. 2018 programında üçüncü ve sekizinci kademede yer alan elektrik enerjisinin bilinçli ve tasarruflu kullanılması konusu 2024 programında üçüncü ve dördüncü sınıfta yer almaktadır. 2018 programında sekizinci kademede yer alan güç santrallerinde elektrik enerjisinin nasıl üretildiğini ve bunların doğurabileceği zararlı veya yararlı durumlar konusunun 2024 programında kapsam dışına çıkarıldığı görülmektedir.
Anahtar Kelimeler: 2018 Fen Öğretim Programı, 2024 Fen Öğretim Programı, Türkiye Yüzyılı Maarif Modeli, Elektrik Üniteleri

ABSTRACT
In order to support the multifaceted development of students in a holistic and effective way in 2024, the Turkey Century Maarif Model Curriculum was published. Domain skills, conceptual skills, tendencies and social-emotional skills, values and literacy were addressed as a whole in the curriculum. The development areas in the science curriculum were identified as skill and value-based science education, science education enriched with science culture, interdisciplinary relations and science education based on sustainability. The subject of electricity is included in the science curriculum in all grades from 3 to 8. In our study, the electricity units for each grade were compared with the 2018 curriculum. The changes made in the 2024 curriculum compared to the 2018 curriculum were addressed in the context of content. The Electric Vehicles unit has become Electricity That Makes Our Lives Easier, the Simple Electric Circuits unit has become Energy Detectives, the Electrical Circuit Elements unit has been changed to Electricity in Our Lives, the Conduction of Electricity unit has been changed

to Conduction of Electricity and Resistance, the Electrical Circuits unit has been changed to Electrification, the Electrical Charges and Electrical Energy unit has been changed to Journey of Electricity. Looking at the contents of these units, we can see that the topics of series and parallel circuits, conversions between electrical energy and heat, light and motion energies, and technological applications of electrical energy, which are in the seventh level, have been moved to the eighth level. The topic of electric charges and types of electrification, which is in the eighth stage, has also been moved to the seventh stage. The topic of conscious and economical use of electrical energy, which is in the third and eighth stages in the 2018 programme, has been taken to the third and fourth stages in the 2024 programme. It can be seen that the topic of how electrical energy is produced in power plants and the harmful or beneficial situations that may arise from this, which is in the eighth stage in the 2018 programme, has been excluded from the scope in the 2024 programme.

Keywords: 2018 Science Curriculum, 2024 Science Curriculum, Maarif Model, Electricity Units

ONLİNE ALIŞVERİŞ UYGULAMALARINA YÖNELİK E-ŞİKAYETLERİN DEĞERLENDİRİLMESİ: NİTEL BİR ARAŞTIRMA
EVALUATION OF E-COMPLAINTS ABOUT ONLINE SHOPPING APPLICATIONS: A QUALITATIVE STUDY

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ÖZET
İnternetin hızla gelişimi bireylerin sosyolojik, ekonomik, kültürel ve çeşitli alanlarda değişiklikler yaşamalarına sebep olmaktadır. Bireylerin yaşam tarzlarında oluşan değişimler tüketim alışkanlıklarının da değişmesini beraberinde getirmektedir. Tüketicilerin değişen istek ve ihtiyaçları karşısında işletme sahipleri de yeni stratejiler geliştirme yoluna gitmektedirler. Bunlardan biri online alışveriş uygulamalarıdır. Online alışveriş sahip olduğu özellikler bakımından hem işletmelere hem de müşterilere çeşitli avantajlar sağlamaktadır. Özellikle müşteri ile işletme arasındaki iletişimin daha kolay ve hızlı olması online alışverişi daha cazip hale getirmektedir. Müşteri şikayetleri de iletişim kanallarından biridir. Online alışveriş uygulamalarının yoğun bir şekilde kullanılması müşterilerin şikayetlerini dile getirebilecekleri platformların oluşmasında etkilidir. Bu çalışmada da online alışveriş uygulamalarına yönelik müşteri e-şikayetleri incelenmektedir. Çalışma nitel araştırma deseni ile oluşturulmuştur. Veriler online şikayet platformu olan şikayetvar.com sitesinden doküman incelemesi yapılarak elde edilmiştir. Online alışveriş uygulamalarının seçiminde de yine bu sitede en çok şikayet alan uygulamalar dikkate alınmıştır. Bu doğrultuda Trend Yol, Hepsi Burada, N11 ve Çiçek Sepeti uygulamalarına Ocak ayında yapılan 50'şer, toplamda 200 adet müşteri şikayeti incelenmiştir. Şikayetler çalışmanın verileridir ve verilerin analizinde içerik analizi yöntemi kullanılarak nitel analiz programı olan MAXQDA'dan faydalanılmıştır. Yapılan analizler ve incelemeler sonucunda dört adet ana tema ve 11 adet alt tema elde edilmiştir. Metinlerin ilgili temalara kodlanması sonucunda ana temalar bazında dört uygulamanın da en çok şikayet aldığı temanın müşteri hizmetleri/ canlı destek ile ilgili şikayetler olduğu görülmektedir.
Anahtar Kelimeler: Online alışveriş, E-şikayetler, Şikayetvar, Maxqda

ABSTRACT
Rapid development of the Internet causes individuals to experience changes in sociological, economic, cultural and various fields. Changes in individuals' lifestyles bring with it the change of their consumption habits. Business owners are also on the way to develop new strategies in the face of the changing demands and needs of consumers. One of them is online shopping applications. Online shopping offers various advantages to both businesses and customers in terms of their features. Especially the easier and faster communication between the customer and the business makes online shopping more attractive. Customer complaints are also one of the communication blood. Intensive use of online shopping applications is effective in creating platforms where customers can raise their complaints. In this study, customer e-complaints for online shopping applications are also examined. The study was

created with a qualitative research pattern. The data were obtained by conducting a document review from the online complaints platform, grievar.com. In the selection of online shopping applications, the most complaining practices on this site were taken into consideration. Accordingly, 50 ', which was made in January to Trend Yol, Hepsi Burada, N11 and Çiçek Sepeti applications, 200 customer complaints were examined in total. Complaints are data of the study and MAXQDA, a qualitative analysis program, was used using the content analysis method in the analysis of the data. As a result of the analyzes and reviews, four main themes and 11 sub-themes were obtained. As a result of coding the texts to the relevant themes, it is seen that the theme that all four applications received the most complaints on the basis of the main themes is complaints about customer service/ live support.
Keywords: Online shopping, E-complaints, Complainant, Maxqda

SAĞLIK ÇALIŞANLARINDA İLAÇ KÖTÜYE KULLANIMI VE HEMŞİRELİK YAKLAŞIMI
SUBSTANCE MISUSE AMONG HEALTHCARE PROFESSIONALS AND THE NURSING APPROACH

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ÖZET
Sağlık çalışanlarında ilaç kötüye kullanımı, hasta güvenliği, çalışan sağlığı ve sağlık sisteminin bütünlüğü üzerinde ciddi etkiler yaratabilecek karmaşık bir sorundur. Bu meslek grubu, yüksek stresli çalışma ortamı, uzun çalışma saatleri, duygusal yük, ilaçlara kolay erişim ve kültürel damgalama gibi risk faktörleriyle karşı karşıyadır. Araştırmalar, sağlık çalışanlarının %10-15'inin kariyerleri boyunca madde bağımlılığı riski taşıdığını ve ilaç kötüye kullanımı yaşadığını göstermektedir. Özellikle opioidler, benzodiazepinler ve uyarıcılar gibi bağımlılık yapıcı ilaçların yanlış kullanımının yaygın olduğu bu sorunda, sağlık çalışanlarının mesleklerine özgü stres, tükenmişlik ve ilaçlara kolay erişim gibi faktörler önemli bir rol oynamaktadır. Erişim kolaylığı ve damgalanma korkusu, bu sorunun gizlenmesine ve tedaviye yönelik adımların atılmasının ertelenmesine neden olmaktadır. İlaç kötüye kullanımı, hasta güvenliği risklerini artırabilir, profesyonel ilişkileri zedeleyebilir, bakım hatalarına yol açabilir ve hukuki etik ihlallere neden olabilir. İlaç kötüye kullanımı ile mücadele eden sağlık çalışanlarında ruh hali değişiklikleri, izolasyon, mesleki performans düşüşü ve ilaç hataları gibi belirtiler görülebilir. Hemşireler, bu bağlamda, ilaç kötüye kullanımının önlenmesi ve müdahale edilmesinde kritik bir rol üstlenmektedir. Hemşireler, kötüye kullanım belirtilerini erken fark ederek, bağımlılık gösteren sağlık çalışanlarını uygun tedavi merkezlerine yönlendirebilir ve hastaları ilaçları doğru kullanma konusunda bilgilendirebilir. Multidisipliner bir yaklaşım benimsenerek hazırlanacak tedavi programları, bağımlılığın tıbbi, psikolojik ve sosyal boyutlarını dikkate alarak ve sağlık çalışanlarının iyileşmesini, mesleğe yeniden kazandırılmasını sağlayabilir. Bu süreçte hemşirelerin rolü büyük olup, sağlık kurumlarının proaktif stratejiler geliştirmesi, toplum sağlığını korumak için kritik öneme sahiptir. Sonuç olarak, sağlık çalışanlarında ilaç kötüye kullanımı, hem bireysel hem de sistemik düzeyde güvenli ve kaliteli sağlık hizmetlerinin sunulabilmesi için ele alınması gereken önemli bir

sorundur. Bu kapsamda, hemşirelerin erken farkındalık oluşturması, meslektaşlarındaki değişimleri izleyerek bağımlılığı tespit etmeleri ve doğru tedavi merkezlerine yönlendirme yapmaları önemlidir.
Anahtar Kelimeler: İlaç Kötüye Kullanımı, Psikiyatri Hemşireliği, Hemşirelik Yaklaşımı

ABSTRACT

Substance misuse among healthcare professionals is a complex issue that can have serious consequences for patient safety, worker health, and the integrity of the healthcare system. This occupational group is exposed to risk factors such as high-stress work environments, long working hours, emotional burdens, easy access to medications, and cultural stigma. Research indicates that 10-15% of healthcare workers are at risk of substance dependence and have experienced prescription drug misuse during their careers. In particular, the misuse of addictive substances like opioids, benzodiazepines, and stimulants is prevalent, with stress, burnout, and easy access to medications playing significant roles in this issue. Easy access to these substances and the fear of stigma often lead to the concealment of the problem and the postponement of treatment. Medication misuse can increase patient safety risks, impair professional relationships, lead to care errors, and cause legal and ethical violations. Healthcare workers struggling with substance misuse may exhibit signs such as mood changes, isolation, decreased professional performance, and medication errors. Nurses play a critical role in the prevention and intervention of medication misuse. By recognizing early signs of misuse, nurses can refer healthcare professionals exhibiting signs of addiction to appropriate treatment centers and educate patients on the proper use of medications. A multidisciplinary approach to treatment programs, which addresses the medical, psychological, and social dimensions of addiction, can support the recovery and reintegration of healthcare workers. Nurses have a crucial role in this process, and the development of proactive strategies by healthcare institutions is essential to protect public health. Ultimately, addressing substance misuse among healthcare professionals is a key issue that must be tackled at both the individual and systemic levels to ensure the delivery of safe and high-quality healthcare services. In this context, it is vital for nurses to raise early awareness, monitor changes in colleagues, detect addiction, and guide them to the appropriate treatment centers.
Keywords: Substance misuse, Psychiatric Nursing, Nursing Approach

KAFEİN BAĞIMLILIĞI: YAYGINLIK, ETKİLER VE YÖNETİM STRATEJİLERİ

CAFFEINE ADDICTION: PREVALENCE, EFFECTS, AND MANAGEMENT STRATEGIES

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ÖZET

Kafein, dünyada en çok tüketilen psikoaktif maddelerden biridir ve bağımlılık potansiyeline sahiptir. Kahve, çay, enerji içecekleri, çikolata ve bazı ilaçlar yoluyla alınan kafein, hem fiziksel hem de zihinsel uyarıcı etkileri nedeniyle sıklıkla tercih edilmektedir. Ancak, aşırı tüketimi zamanla bağımlılığa yol açarak bireylerin günlük yaşamını olumsuz etkileyebilir. Kafein bağımlılığı belirtileri arasında aşırı yorgunluk, baş ağrısı, konsantrasyon zorluğu, huzursuzluk ve anksiyete yer almaktadır. Yoksunluk semptomları genellikle kafein tüketiminin azalması veya kesilmesi durumunda ortaya çıkar. Yüksek dozda kafein alımı ise uyku bozuklukları, çarpıntı, mide rahatsızlıkları ve yüksek tansiyon gibi sağlık sorunlarına neden olabilir. Özellikle sağlık çalışanları gibi yoğun tempolu mesleklerde, uzun vadeli aşırı tüketim iş performansını ve genel sağlık durumunu olumsuz etkileyebilmektedir. Türkiye'de kafein tüketimi, kahve kültüründeki dönüşümle birlikte artış göstermiştir. Geleneksel Türk kahvesi popülerliğini korurken, filtre kahve ve espresso gibi türlerin tüketimi de hızla yaygınlaşmıştır. Araştırmalar, Türkiye nüfusunun yarısından fazlasının günlük kahve tükettiğini, %29'unun ise günde 3-4 fincan kahve içtiğini göstermektedir. Benzer şekilde, dünya genelindeki çalışmalar da sağlık çalışanlarının yüksek oranda kafein tükettiğine işaret etmektedir. Örneğin, Suudi Arabistan'da sağlık çalışanlarının %94,3'ünün kafein kullandığı, ABD'de ise hemşirelerin %88,1'inin günlük kahve tükettiği belirlenmiştir. Bu veriler, özellikle yoğun tempolu çalışan bireylerin yorgunlukla başa çıkmak için kafeine yöneldiğini göstermektedir. Kafein bağımlılığı ile mücadelede, tüketimi kademeli olarak azaltmak etkili bir yöntemdir. Sağlıklı bir uyku düzeni, düzenli egzersiz ve yeterli sıvı alımı gibi yaşam tarzı değişiklikleri, bağımlılığın önlenmesine yardımcı olabilir. Uzmanlar, sağlıklı yetişkinler için günlük kafein alımının 400 mg ile sınırlandırılmasını önermektedir. Ayrıca, eğitim programları ve farkındalık çalışmaları, bireylerin güvenli tüketim sınırlarını öğrenmelerini sağlayarak bağımlılığın önlenmesinde önemli bir rol oynamaktadır. Sonuç olarak, kafein bağımlılığı yaygın bir sorun olup bireylerin hem fiziksel hem de zihinsel sağlığını olumsuz etkileyebilir. Türkiye ve dünya genelinde artan

kahve tüketimi bu bağımlılığın yaygınlığını artırırken, doğru yönetim stratejileri ve farkındalık çalışmaları ile etkiler kontrol altına alınabilir. Sağlıklı tüketim alışkanlıklarının geliştirilmesi, bireysel ve toplumsal düzeyde daha iyi bir yaşam kalitesine katkı sağlayacaktır.
Anahtar Kelimeler: Kafein Bağımlılığı, Kafein Yoksunluğu, Bağımlılık

ABSTRACT

Caffeine is one of the most widely consumed psychoactive substances globally and possesses significant addictive potential. Commonly ingested through coffee, tea, energy drinks, chocolate, and certain medications, caffeine is frequently chosen for its physical and mental stimulant effects. However, excessive consumption can lead to addiction over time, negatively impacting individuals' daily lives. Symptoms of caffeine addiction include severe fatigue, headaches, difficulty concentrating, restlessness, and anxiety. Withdrawal symptoms typically manifest when caffeine intake is reduced or discontinued. High doses of caffeine may cause health issues such as sleep disturbances, heart palpitations, gastrointestinal discomfort, and hypertension. In professions with demanding workloads, such as healthcare, long-term overuse can impair job performance and overall health. In Turkey, caffeine consumption has increased in tandem with the evolution of coffee culture. While traditional Turkish coffee maintains its popularity, the consumption of filtered coffee and espresso is rapidly growing. Studies indicate that more than half of the Turkish population consumes coffee daily, with 29% drinking 3-4 cups per day. Similarly, global research highlights significant caffeine consumption among healthcare professionals. For instance, 94.3% of healthcare workers in Saudi Arabia and 88.1% of nurses in the United States consume caffeine daily. These findings suggest that individuals in high-stress professions often turn to caffeine to combat fatigue. Gradual reduction in consumption is an effective approach to addressing caffeine addiction. Lifestyle modifications such as maintaining a healthy sleep schedule, engaging in regular physical activity, and ensuring adequate hydration can aid in prevention. Experts recommend limiting daily caffeine intake to 400 mg for healthy adults. Educational programs and awareness campaigns play a critical role in helping individuals understand safe consumption levels, thereby preventing addiction. In conclusion, caffeine addiction is a widespread issue that can adversely affect both physical and mental health. Increasing coffee consumption in Turkey and worldwide contributes to the prevalence of this addiction. However, its impacts can be mitigated through effective management strategies and awareness efforts. Developing healthy consumption habits can significantly enhance quality of life at both individual and societal levels.
Keywords: Caffeine Addiction, Caffeine Withdrawal, Addiction

MECHANISMS OF POST-WELD DISTORTION AND SHAPE CHANGES IN METAL STRUCTURES

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ABSTRACT
Welding processes often result in post-weld distortions, including warping and dimensional changes, due to the thermal gradients introduced during the procedure. These distortions occur primarily because of the thermal expansion and contraction of the material, creating internal stresses that can lead to shape alterations. The mechanisms behind post-weld distortion can be categorized into factors like residual stresses, thermal gradients, and the cooling rate, which vary depending on the material properties, welding technique, and parameters. Residual stresses arise from uneven cooling, which causes some regions of the weld to contract more than others, leading to bending or twisting of the workpiece. The cooling rate influences the amount of distortion, with faster cooling rates generally leading to more significant changes in the material's shape. Different welding methods, such as TIG, MIG, and arc welding, also have unique effects on post-weld distortions, owing to variations in the heat input and cooling behavior. Moreover, the material's thermal conductivity and coefficient of expansion play significant roles in the extent of shape changes. These distortions are crucial in manufacturing, as they can affect the accuracy, performance, and longevity of the welded components. Therefore, understanding the mechanisms behind these distortions is essential for developing strategies to minimize them, such as optimizing welding parameters, preheating, or applying post-weld heat treatment. This paper reviews the primary causes of post-weld shape changes, the factors influencing them, and various mitigation techniques to ensure the dimensional integrity of welded components.
Keywords: Post-weld distortion, Residual stresses, Thermal gradients, Welding methods, Shape changes

A REVIEW OF WELDING METHODS FOR CYLINDRICAL PIPES- TIG, MIG, AND LASER WELDING

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ABSTRACT
Welding is a fundamental process in the production of cylindrical pipes used in various industrial sectors, including automotive, energy, and construction. Choosing the right welding method is essential for ensuring the structural integrity and performance of the pipes. This review article compares three commonly used welding methods—Tungsten Inert Gas (TIG) welding, Metal Inert Gas (MIG) welding, and Laser welding— focusing on their applicability to cylindrical pipes. TIG welding offers superior precision and high-quality welds, making it ideal for applications requiring minimal heat-affected zones (HAZ), although it is more timeconsuming and labor-intensive. MIG welding, known for its speed and productivity, is frequently used in large-scale pipe welding projects, but may result in a larger HAZ and more spatter. Laser welding, an advanced technique, offers excellent precision, minimal distortion, and faster processing times, making it suitable for thin-walled pipes and applications that demand complex geometries. However, laser welding equipment is expensive, limiting its widespread use in certain industries. This paper compares the advantages, limitations, and selection criteria of these methods based on factors such as material types, application needs, cost, and weld quality. By examining the characteristics of each technique, this review aims to provide a comprehensive understanding of the optimal welding method for cylindrical pipe production, offering insights into their efficiency, cost-effectiveness, and suitability for various industrial applications.
Keywords: TIG welding, Residual stresses, Thermal gradients, Welding methods, Metal Inert Gas (MIG) welding

YAPI SAĞLIĞI İZLEME İLE KARAR VERME MEKANİZMASI: ERZURUM ÖŞKİ KİLİSESİ ÖRNEĞİ

DECISION-MAKING MECHANISM THROUGH STRUCTURAL HEALTH MONITORING: THE CASE OF OSHKI CHURCH IN ERZURUM

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ÖZET

Yapı Sağlığı İzleme (YSİ), mühendislik yapılarının güvenlik, dayanıklılık ve performansını sürekli olarak değerlendirmeyi amaçlayan, gelişmiş teknolojilerle desteklenen kapsamlı bir sistemdir. Bu sistem, yapıların mevcut durumunu sürekli izleyerek olası hasarları erken tespit etmeyi, bu sayede bakım ve onarım süreçlerinin bilimsel veriler ışığında planlanmasını mümkün kılmayı hedefler. Özellikle tarihi yapılarda, hassas ve etkili restorasyon süreçleri için YSİ sistemlerinin kullanımı, dünya genelinde olduğu gibi ülkemizde de giderek yaygınlaşan bir yaklaşım haline gelmiştir. Bu çalışmada, Erzurum İli Uzundere İlçesi'nde bulunan ve tarihi önemi haiz olan Öşki (Öşvank) Kilisesi üzerinde gerçekleştirilen YSİ çalışmaları ele alınmış, bu kapsamda restorasyona yönelik karar verme süreçleri detaylı bir şekilde incelenmiştir. Öşki Kilisesi'nin mevcut hasarlı durumu göz önünde bulundurularak, farklı YSİ cihazlarıyla gerçekleştirilen ölçümler ve bu ölçümlerden elde edilen veriler, restorasyon çalışmalarına yönelik çözüm önerilerinin geliştirilmesine ışık tutmuştur. YSİ kapsamında kullanılan sensörler ve izleme ekipmanları, yapıdaki çatlakların genişliği ve gelişimi, nem ve sıcaklık değişimleri ile titreşim analizleri gibi çeşitli verilerin toplanmasını sağlamıştır. Bu veriler, yapının dinamik özelliklerini (örneğin doğal frekans, mod şekilleri ve sönüm oranı) belirlemeye yardımcı olmuş, böylece restorasyon kararlarının daha sağlam bilimsel temellere dayandırılmasını mümkün kılmıştır. Özellikle çatlak ölçümleri, yapı içindeki stres dağılımını ve hasarın ilerleyişini anlamak açısından kritik bir rol oynamıştır. Nem ve sıcaklık değişimlerinin sürekli izlenmesi ise malzeme bozulmasının çevresel faktörlerle olan ilişkisini ortaya koymuştur.

Sonuç olarak, YSİ sistemleri, Öşki Kilisesi'nin mevcut durumunu detaylı bir şekilde analiz ederek restorasyona yönelik bilimsel çözüm önerileri geliştirilmesine katkıda bulunmuştur. Bu çalışma, YSİ'nin tarihi yapıların korunması ve restorasyonu üzerindeki kritik rolünü somut bir örnek üzerinden göstermektedir. YSİ uygulamaları, tarihi yapıların geleceğe güvenle taşınmasında önemli bir araç olarak öne çıkmakta, restorasyon süreçlerinin daha etkin ve doğru bir şekilde yönetilmesine olanak tanımaktadır.

Anahtar Kelimeler: Yapı Sağlığı İzleme, Karar Verme Mekanizması, Restorasyon, Güçlendirme, Erzurum Öşki Kilisesi

ABSTRACT

Structural Health Monitoring (SHM) is a comprehensive system supported by advanced technologies that aims to continuously assess the safety, durability, and performance of engineering structures. This system enables the early detection of potential damages by continuously monitoring the current state of structures, thereby facilitating maintenance and repair processes based on scientific data. Particularly in historical structures, the use of SHM systems has become an increasingly widespread approach both globally and in Türkiye, as it ensures precise and effective restoration processes. This study focuses on SHM activities carried out on the historically significant Oshki (Öşvank) Church, located in Uzundere District of Erzurum Province, and examines decision-making processes related to its restoration. Taking into account the current damaged condition of the church, measurements were conducted using various SHM devices, and the data obtained from these measurements were utilized to propose solutions for restoration efforts. Within the scope of SHM, sensors and monitoring equipment were employed to collect a wide range of data, including crack widths and propagation, humidity and temperature variations, as well as vibration analyses. These data facilitated the identification of the dynamic properties of the structure, such as natural frequencies, mode shapes, and damping ratios, thereby grounding restoration decisions on solid scientific foundations. In particular, crack measurements played a crucial role in understanding the stress distribution within the structure and the progression of damage. Continuous monitoring of humidity and temperature changes revealed the relationship between material degradation and environmental factors.

In conclusion, SHM systems contributed to the development of scientifically grounded restoration proposals by providing a detailed analysis of the current condition of the Oshki Church. This study highlights the critical role of SHM in preserving historical structures and exemplifies its contribution to restoration processes. SHM applications are emerging as essential tools for ensuring the safe transfer of historical structures to future generations, enabling more effective and accurate management of restoration processes.

Keywords: Structural Health Monitoring, Decision-Making Mechanism, Restoration, Strengthening, Erzurum Oshki Church

NEEM BARK MEDIATED - BIOSYNTHESIS AND CHARACTERIZATION OF SILVER NANOPARTICLES

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Abstract

Nanoparticles (NPs) possess excellent physical and chemical properties by virtue of their small size. These properties have been successfully utilized in several technological and biomedical fields. Neem tree (*Azadirachta indica*) with its attendant secondary metabolites is considered in the present work. Neem bark is one the environmentally benign material whose extract can be used for the synthesis of nanoparticles. This study reports the biosynthesis of silver nanoparticles, AgNPs using aqueous extract of neem bark. The nanoparticles are characterized using UV-visible spectroscopy and Fourier transform infrared (FTIR) spectroscopy. The absorbance peak employed in the UV–visible spectrophotometric determination was in the range of 200 – 1000nm, depending upon the variation in the concentration of neem extract. FTIR outcomes indicate that the protein molecules in the neem bark extract played very active role in the reduction of silver ions to AgNPs as well as stabilizing the formed AgNPs. The results of the present study have confirmed the rapidity and cost effectiveness of green chemistry approach to biosynthesis of AgNPs at room temperature.

Keywords: Nanoparticles; Extract; Neem tree; UV-visible spectroscopy; Fourier transform Infrared (FTIR) spectroscopy

KALIP ÇELİĞİNDE DALMA EROZYONLA İŞLEME PARAMETRELERİNİN YÜZEY KALİTESİNE ETKİSİ

THE EFFECT OF SINKER ELECTRICAL DISCHARGE MACHINING PARAMETERS ON SURFACE QUALITY IN MOLD STEEL

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ÖZET

Dalma erozyonla işleme yöntemi temassız olarak işleme yapabilen ve bu özelliğinden dolayı nikel ve kobalt bazlı süper alaşımlar başta olmak üzere titanyum bazlı alaşımları ve çelikleri işleyebilmektedir. Düşük işleme maliyeti, takım aşınmasının olmaması ve istenilen şekle yakın parçalar işleyebilmesinden dolayı kalıpçılık, havacılık, sağlık ve savunma sanayi gibi birçok önemli sanayi alanında kullanılmaktadır. AISI 1.2738 kalıp çeliği otomobil ve elektronik parçalarının kalıplarında sıklıkla kullanılmaktadır. Bu çeliğin işlenebilmesi için birçok farklı yöntem olmasına rağmen düşük yüzey pürüzlülüğü sağlamasından dolayı dalma erozyonla işleme yöntemi tercih edilen yöntemlerin başında gelmektedir. Dalma erozyonla işleme yönteminde işlemeye etki eden takım ilerleme hızı, voltaj, darbesiz ve darbeli geçen süre gibi birçok parametre vardır. Bu çalışma, AISI 1.2738 kalıp çeliğinin farklı voltaj (1 V, 2V ve 3 V), darbesiz geçen süre (10 µs, 20 µs ve 30 µs) ve takım ilerleme hızlarında (6 mm/s, 8 mm/s ve 10 mm/s) yüzey pürüzlülüğüne olan etkilerini incelemeyi amaçlamaktadır. Deney sonuçlarına göre tüm deney şartlarında en yüksek yüzey pürüzlülüğü 3 V değerinde elde edilmiştir. Ayrıca deney sonuçlarının genelinde artan voltaja bağlı olarak yüzey pürüzlülük değeri artmaktadır. Darbesiz geçen sürenin artması sonucunda yüzey pürüzlülük değeri artmaktadır. En düşük yüzey pürüzlülük değeri en düşük voltaj (1 V) ve en yükse darbesiz geçen sürede (30 µs) elde edilmiştir.

Anahtar Kelimeler: Dalma Erozyon, Voltaj, Takım İlerleme Hızı, Darbesiz Geçen Süre

ABSTRACT

The electro erosion machining method can machine contactless and due to this feature, it can machine titanium-based alloys and steels, especially nickel and cobalt-based superalloys. This method is used in many significantly industrial areas such as mold making, aviation, health and defense industry due to its low machining cost, lack of tool wear and the ability to machining parts near to the desired shape. AISI 1.2738 mold steel is frequently used in molds of automobile and electronic parts. Although there are many different methods for machining this steel, electro

erosion machining is one of the most preferred methods due to its low surface roughness. There are many parameters such as cathode feed rate, voltage, time without impact and time with impact that affect the processing in the electro erosion machining method. This study aims to investigate the effects of different voltages (1 V, 2V and 3 V), pulse-off time (10 µs, 20 µs and 30 µs) and cathode feed rates (6 mm/s, 8 mm/s and 10 mm/s) on the surface roughness of AISI 1.2738 mold steel. According to the experimental results, the highest surface roughness was obtained at 3 V in all experimental conditions. In addition, in the general experimental results, the surface roughness value increases depending on the increasing voltage. As the pulse-off time increases, the surface roughness value increases. The lowest surface roughness value was obtained at the lowest voltage (1 V) and the highest pulse-off time (30 µs).

Keywords: Electro erosion, Voltage, cathode feed rate, pulse-off time

MİCRO:BİT KARTLARIN PROGRAMLAMA EĞİTİMİNDE KULLANIMI

USE OF MICRO:BIT CARDS IN PROGRAMMING EDUCATION

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ÖZET
Micro:Bit kartları, programlama eğitiminde öğrencilerin temel kodlama becerilerini geliştirmelerine ve uygulamalı projeler yapmalarına olanak tanıyan etkili bir araçtır. Kullanıcı dostu yapısı ve blok tabanlı programlama dili desteği sayesinde, öğrenciler kodlama mantığını kolayca öğrenir ve Python gibi ileri seviye dillere geçiş yapabilirler. Üzerinde bulunan LED ekran, sensörler ve butonlar sayesinde öğrenciler, fiziksel dünya ile etkileşime giren projeler geliştirerek algoritmik düşünme, problem çözme ve yaratıcılık becerilerini pekiştirirler. Bu araştırma, Micro:Bit kartlarının programlama eğitimine entegrasyonunu, öğrencilere sağladığı faydaları ve öğrenme sürecine olan katkılarını incelemeyi amaçlamaktadır.
Anahtar Kelimeler: Micro:Bit Kartları, Algoritmik Düşünme, Programlama, Fiziksel Programlama

ABSTRACT
Micro:Bit cards are an effective tool that allows students to develop basic coding skills and do practical projects in programming education. Thanks to its user-friendly structure and block-based programming language support, students can easily learn coding logic and move on to advanced languages such as Python. With the LED screen, sensors and buttons on it, students develop projects that interact with the physical world, reinforcing their algorithmic thinking, problem solving, and creativity skills. This research aims to examine the integration of Micro:Bit cards into programming education, the benefits they provide to students and their contributions to the learning process.
Keywords: Micro:Bit Cards, Algorithmic Thinking, Programming, Physical Programming

ALGORİTMALARIN GÖLGESİNDE: PAZARLAMADA YAPAY ZEKÂ VE ETİK İKİLEMLER

IN THE SHADOW OF ALGORITHMS: ARTIFICIAL INTELLIGENCE AND ETHICAL DILEMMAS IN MARKETING

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ÖZET

Günümüzde yapay zekâ pazarlama stratejileri, iş modelleri, müşteri hizmetleri gibi birçok alanda değişikliğe yol açmakta ve pazarlama dünyasının manzarasını hızla değiştirmektedir. Pazarlamacıların amacı tüketicilerin ne istediğini anlamak ve buna doğrultuda kararlar vererek müşterilerin yaşam boyu değerini iyileştirmektir. Bu amaç doğrultusunda birçok işletme yapay zekâ araçlarını benimsemektedir. Yapay zekâ destekli araçlar, kişiselleştirilmiş deneyimler, hedefli reklamlar ve optimize edilmiş fiyatlandırma stratejileri sunmak için büyük miktarlarda tüketici verisi analiz edebilmektedir. Pazarlamada yapay zekâ kullanımının sağladığı bu kolaylıkların yanında bazı etik endişeler de bulunmaktadır. Bu endişelerden en ciddi olanı şüphesiz tüketicilerin verilerinin gizliliği ve güvenliğidir. Yapay zekâ araçları kişiselleştirilmiş deneyimler sunmak için büyük miktarda tüketici verisi toplamakta ve analiz etmektedir. Bu durum verilerin kötüye kullanım potansiyeli hakkında endişeler doğurmaktadır. Bir diğer endişe algoritmik önyargı ve ayrımcılıktır. Yapay zekâ algoritmaları toplumda var olan mevcut önyargıları sürdürme ve güçlendirme eğiliminde olabilir. Bu yaklaşım tüketicilere sunulan reklamlarda, fiyatlandırmada, ürün ve hizmetlerde ayrımcılığa yol açabilir. Manipülasyon ve aldatmaya dayalı etik endişe ise bir diğer ciddi konudur. Yapay zekâ araçları, tüketicileri kendi istekleri doğrultusunda etkilemek ve satın alma kararlarına yön vermek amacıyla dilediği sekmeye, ürüne ve hizmete yönlendirebilir. Son olarak yapay zekâ sistemlerindeki şeffaflık ve hesap verebilirliğin eksikliği önemli bir etik zorluktur. Tüketiciler genellikle yapay zekâ algoritmalarının kendi verilerini nasıl kaydettiğini ve nasıl karar aldığını anlamakta güçlük çekmektedir. Bu da yapay zekâ uygulamaları sayesinde aldıkları bir karara itiraz etmeyi zorlaştırmaktadır. Pazarlamada yapay zekâ kullanımından kaynaklı bu etik endişelerin ele alınması çok yönlü bir yaklaşım gerektirmektedir. Bu çalışmada amaçlanan bahsi geçen etik ikilemlerin derinlemesine incelenmesi ve anlaşılmasıdır. İncelenen literatür taraması bulgularına dayanarak yapay zekânın pazarlamada nasıl kullanıldığı, hangi etik sorunları beraberinde getirdiği ve bu sorunların neden önemli olduğundan derinlemesine bahsedilmiştir. Ayrıca etik sorunları azaltmak hatta ortadan kaldırmak amacıyla işletmelere stratejiler ve çözüm önerileri sunulmuştur.

Anahtar Kelimeler: Yapay Zeka, Pazarlamada Yapay Zeka Kullanımı, Etik Endişeler, Güven, Algoritmik Önyargı

ABSTRACT

Artificial intelligence (AI) is rapidly transforming the marketing landscape, impacting marketing strategies, business models, customer service, and consumer behavior. Marketers aim to understand consumer needs and make decisions that enhance customer lifetime value. To achieve this, many businesses are adopting AI tools. These tools can analyze vast amounts of consumer data to deliver personalized experiences, targeted advertising, and optimized pricing strategies. However, the use of AI in marketing also raises ethical concerns. One major concern is consumer data privacy and security. AI tools collect and analyze large amounts of consumer data to personalize experiences, raising concerns about the potential for data misuse.

Another concern is algorithmic bias and discrimination. AI algorithms may perpetuate and amplify existing societal biases, leading to discrimination in advertising, pricing, and product offerings. Manipulation and deception are also ethical concerns. AI tools can influence consumer behavior and purchasing decisions by directing them towards specific tabs, products, or services. Finally, the lack of transparency and accountability in AI systems is a significant ethical challenge. Consumers often struggle to understand how AI algorithms make decisions, making it difficult to challenge or contest outcomes. Addressing these ethical concerns requires a multi-faceted approach. This study aims to delve deeper into these ethical dilemmas and provide a comprehensive understanding of them. Based on a review of the relevant literature, this study examines how AI is used in marketing, the ethical issues it raises, and why these issues are important. Additionally, it offers strategies and solutions for businesses to mitigate or eliminate these ethical concerns.

Keywords: Artificial Intelligence, Use of AI in Marketing, Ethical Concerns, Trust, Algorithmic Bias

LNG SOĞUK ENERJİ GERİ KAZANIMI İÇİN SÜPERKRİTİK ÇALIŞMA SIVILARI KULLANILARAK PVT TABANLI DÜŞÜK SICAKLIKLI RANKİNE ÇEVRİMİNİN İNCELENMESİ

EXAMINATION OF PVT-BASED LOW TEMPERATURE RANKINE CYCLE USING SUPERCRITICAL WORKING FLUIDS FOR LNG COLD ENERGY RECOVERY

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ÖZET
Bu çalışma, Sıvılaştırılmış Doğal Gaz (LNG) yeniden gazlaştırma ile entegre edilmiş bir Fotovoltaik-Termal (PVT) tabanlı Rankine çevrimi (RC) sisteminin performansını, farklı çalışma akışkanlarının enerji ve ekserji verimlilikleri üzerindeki etkilerine odaklanarak araştırmaktadır. Termal ve güç üretim performansını değerlendirmek için çeşitli sistem parametreleri kullanılarak kapsamlı bir analiz yürütülmüştür. Sonuçlar, CH_3F'nin 51.1 °C'lik daha düşük bir PVT hücre sıcaklığını korurken 2.35 kW'da en yüksek PVT güç üretimini elde ettiğini ve enerji çıkışını en üst düzeye çıkarmak için ideal olduğunu göstermektedir. SF_6, %13.9'luk en yüksek ekserji verimliliğine sahip olmasına rağmen, sistem dayanıklılığını etkileyebilecek 62.8 °C'lik yüksek PVT hücre sıcaklıklarına yol açmaktadır. CO_2 ve N_2O sırasıyla %10.7 ve %11.2'lik orta düzeyde enerji verimlilikleriyle dengeli bir performans göstermektedir. RC net güç analizi, CH_3F'nin 7.35 kW'da en yüksek güç çıkışını sağladığını, SF_6'nın ise 59.6 kW'da en düşük ekserji yıkımını yaşadığını vurgulamaktadır. Çalışma ayrıca artan güneş radyasyonuyla birlikte kolektör termal verimliliğinde bir düşüş olduğunu ortaya koyarak etkili termal yönetime olan ihtiyacı vurgulamaktadır. Bulgular, verimlilik ve güç çıkışı arasında bir denge sağlamak için uygun çalışma sıvılarının seçilmesinin ve sistem parametrelerinin optimize edilmesinin önemini vurgulamaktadır. Bu araştırma, PVT tabanlı Rankine çevrimi sistemlerinin geliştirilmesine ilişkin içgörüler sunarak, gelişmiş termal yönetim tekniklerinin ve gelişmiş performans için alternatif çalışma sıvılarının gelecekte araştırılmasını önermektedir.
Anahtar Kelimeler: PVT, Rankine çevrimi, LNG, Enerji, Ekserji.

ABSTRACT
This study investigates the performance of a Photovoltaic-Thermal (PVT) based Rankine cycle (RC) system integrated with Liquefied Natural Gas (LNG) regasification, focusing on the effects of different working fluids on energy and exergy efficiencies. A comprehensive analysis was conducted using various system parameters to evaluate thermal and power generation performance. The results demonstrate that CH_3F achieves the highest PVT power generation at 2.35 kW while maintaining a lower PVT cell temperature of 51.1°C, making it ideal for maximizing energy output. SF_6, despite having the highest exergy efficiency of 13.9%, leads to elevated PVT cell temperatures of 62.8°C, which could impact system durability. CO_2 and N_2O show balanced performance with moderate energy efficiencies of 10.7% and 11.2%, respectively. The RC net power analysis highlights that CH_3F delivers the highest power output at 7.35 kW, whereas SF_6 experiences the lowest exergy destruction at 59.6 kW. The study also reveals a decline in collector thermal efficiency with increasing solar radiation, underscoring

the need for effective thermal management. The findings emphasize the importance of selecting appropriate working fluids and optimizing system parameters to achieve a balance between efficiency and power output. This research provides insights into enhancing PVT-based Rankine cycle systems, suggesting future exploration of advanced thermal management techniques and alternative working fluids for improved performance.
Keywords: PVT, Rankine cycle, LNG, Energy, Exergy.

ANTI-SALMONELLA ACTIVITY OF NAUCLEA LATIFOLIA LEAF ETHYL ACETATE FRACTION AGAINST SALMONELLA ENTERICA TYPHI

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Abstract
Nauclea latifolia is used in ethnomedicine for the treatment of typhoid fever and other infections. This study was aimed at investigating the anti-salmonella activity of the ethyl acetate leaf fraction of *N. latifolia* against clinical isolates of *Salmonella enterica* Typhi. Cold maceration method was used to obtain ethanol extract from 200 g of *N. latifolia* fine powdered leaf sample using 1000 mL sterile conical flask for 72 hours. Fractionation of the ethanolic crude extract (19.8g) of *N. latifolia* leaf was performed with ethyl acetate (1500ml) and n-hexane using a Soxhlet apparatus. Agar well diffusion method was used to determine the anti-salmonella activity of the fraction on the isolates with the following concentrations: 40 mg/ml, 80 mg/ml, 120 mg/ml, 160 mg/ml, and 200 mg/ml. The result of the qualitative phytochemical analysis showed that ethyl acetate fraction of *N. latifolia* leaf contains saponins, tannins, flavonoids, alkaloids, terpenoids, steroids, and phenols while glycosides were absent. The ethyl acetate leaf fraction of *N. latifolia* was active on *Salmonella enterica* Typhi in all the concentrations used. The diameter of the zones of inhibition ranged from 8.00±0.67 mm to 11.00±0.53 mm. The Minimum Inhibitory Concentration (MIC) of ethyl acetate fraction of *N. latifolia* against *Salmonella* Typh*i* was 6.25±0.18 mg/ml while the Minimum Bactericidal Concentration (MBC) was 12.50±0.11 mg/ml. It could be concluded that *N. latifolia* leaf has antibacterial activity on *Salmonella enterica* Typhi and may be used in the production of drugs against infections associated with the pathogen. Further tests should be carried out to determine the toxicological profile of the leaf.
Keywords: Typhoid fever, *Salmonella enterica* Typhi, *Nauclea latifolia*, Ethyl acetate fraction, Anti-salmonella.

YETİŞKİNLERDE ÖZ DENETİM, SOSYOTELİZM VE PROBLEMLİ AKILLI TELEFON KULLANIMI ARASINDAKİ İLİŞKİNİN İNCELENMESİ

INVESTIGATION OF THE RELATIONSHIP BETWEEN SELF-CONTROL, PHUBBING AND PROBLEMATIC SMARTPHONE USE IN ADULTS

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ÖZET

Bu çalışma, 18 yaş ve üzeri akıllı telefon sahibi yetişkin bireylerde öz denetim, sosyotelizm ve problemli akıllı telefon kullanımı arasındaki ilişkileri incelemeyi amaçlamaktadır. Öz denetim, bireyin kendi duygularını, düşüncelerini ve davranışlarını bilinçli bir şekilde kontrol etme ve yönlendirme yeteneğidir. Sosyotelizm ise, bireyin sosyal ortamlarda dikkatini mevcut kişilerden çok akıllı telefonuna yöneltmesi şeklinde tanımlanmaktadır (Chotpitayasunondh ve Douglas, 2016). Araştırmalar problemli akıllı telefon kullanımına sahip bireylerin yüz yüze olan etkileşimlerde telefonlarını daha çok kullandığını (Chotpitayasunondh ve Douglas, 2016; Karadağ ve diğerleri, 2015; Safdar Bajwa ve diğerleri, 2023) ve öz denetim becerileri düşük olan bireylerin daha çok problemli akıllı telefon kullanımı sergilediklerini göstermektedir. Çalışmanın örneklemi belirlenirken kolayda örnekleme yöntemi kullanılmıştır. Çalışmanın örneklemi, %68.7'si (n=292) kadın, %31,3'ü (n=133) erkek olmak üzere toplam 425 yetişkin bireyden oluşmaktadır (Ortalama yaş=31.34, SS=10.09). Katılımcılara Bilgilendirilmiş Onam Formu, Demografik Bilgi Formu, Kısa Öz Kontrol Ölçeği, Genel Sosyotelist Olma Ölçeğin ve Problemli Cep Telefonu Kullanımı Ölçeği verilmiştir. Verilerin analizinde betimsel istatistikler, bağımsız grup farklılaşmaları için Student T Testi ve Oneway ANOVA, değişkenler arası ilişkiler için Pearson Korelasyonu için SPSS programı kullanılmıştır. Araştırmaya katılan bireylerin Kısa Öz Kontrol Ölçeği toplam puanları ile Genel Sosyotelist Olma Ölçeği toplam puanları arasında negatif yönde bir ilişki (r=-0,359; p=0,001; p<0,01); Kısa Öz Kontrol Ölçeği toplam puanları ile Problemli Cep Telefonu Kullanım Ölçeği toplam puanları arasında negatif yönde bir ilişki (r = -0.446; p = 0.001; p < 0.01); Problemli Cep Telefonu Kullanım Ölçeği toplam puanları ile Genel Sosyotelist Olma Ölçeği toplam puanları arasında Problemli Cep Telefonu Kullanım Ölçeği toplam puanları ile Genel Sosyotelizm Ölçeği toplam puanları arasında pozitif yönde ve istatistiksel olarak anlamlı bir ilişki bulunmuştur (r=0,810; p=0,001; p<0,01).

Anahtar Sözcükler: Öz denetim, sosyotelizm, problemli akıllı telefon kullanımı, psikoloji

ABSTRACT

This study aims to examine the relationships between self-control, phubbing, and problematic smartphone use among adult smartphone owners aged 18 and older. Self-control refers to an individual's ability to consciously regulate and direct their emotions, thoughts, and behaviors. Phubbing, on the other hand, is defined as the tendency of an individual to focus more on their smartphone than on people present in social settings (Chotpitayasunondh & Douglas, 2016). Studies indicate that individuals with problematic smartphone use are more likely to engage with their phones during face-to-face interactions (Chotpitayasunondh & Douglas, 2016;

Karadağ et al., 2015; Safdar Bajwa et al., 2023) and that those with lower self-control skills are more prone to problematic smartphone use. The sample of the study was determined using the convenience sampling method. The study sample consisted of a total of 425 adult individuals, of whom 68.7% (n = 292) were female, and 31.3% (n = 133) were male (Mean age = 31.34, SD = 10.09). Participants were administered an Informed Consent Form, a Demographic Information Form, the Brief Self-Control Scale, the General Phubbing Scale, and the Problematic Mobile Phone Use Scale. The data analysis was conducted using the SPSS software, employing descriptive statistics, Student t-test and One-Way ANOVA for independent group comparisons, and Pearson correlation analysis to examine relationships between variables. A statistically significant negative correlation was identified between the total scores of the Brief Self-Control Scale and the General Phubbing Scale ($r = -0.359$; $p = 0.001$; $p < 0.01$), as well as between the total scores of the Brief Self-Control Scale and the Problematic Smartphone Use Scale ($r = -0.446$; $p = 0.001$; $p < 0.01$). Additionally, a statistically significant and positive correlation was observed between the total scores of the Problematic Smartphone Use Scale and the General Phubbing Scale ($r = 0.810$; $p = 0.001$; $p < 0.01$).
Keywords: Self-control, phubbing, problematic smartphone use, psychology

INSULATION MATERIALS IN ELECTRIC MOTORS: A REVIEW OF TYPES, PERFORMANCE, AND FUTURE TRENDS

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ABSTRACT

Motor insulation materials are crucial components in ensuring the optimal performance, longevity, and safety of electric motors. These materials serve several functions, including protecting motor components from electrical faults, reducing energy losses, and improving overall efficiency. Insulation materials are primarily selected based on their ability to withstand high temperatures, resist moisture, and prevent electrical arcing or short circuits. Over time, various types of insulation materials, such as mica, polyester, silicone, and epoxy resins, have been developed and refined to meet the increasing demands of modern electric motor applications, particularly in harsh environmental conditions. The advancements in motor insulation materials have been driven by the need for higher motor efficiency, greater energy savings, and the ability to function reliably under extreme conditions. Key factors influencing the choice of insulation materials include their thermal resistance, dielectric strength, mechanical properties, and compatibility with other motor components. Furthermore, innovations in materials science have led to the development of advanced composites and hybrid insulation systems, which offer improved performance compared to traditional materials. These innovations have also contributed to reducing the size and weight of electric motors, which is essential for applications in industries such as automotive, aerospace, and renewable energy. This paper reviews the evolution of motor insulation materials, focusing on their properties, applications, and recent innovations. It provides a comprehensive analysis of the challenges faced in selecting the appropriate insulation for specific motor types and offers insights into future trends in motor insulation technology. The aim is to highlight the role of advanced materials in the development of more efficient and durable electric motors.

Keywords: Motor insulation, Electric motor performance, Insulation materials development, Insulation resistance, Insulation failures

INFLUENCE OF LOW TEMPERATURES ON ELECTRIC MOTOR PERFORMANCE AND MATERIAL DURABILITY

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ABSTRACT

This review explores the effects of low ambient temperatures on electric motor performance and the resilience of key materials used in motor construction. Low temperatures can substantially impact critical components within motors, including insulation, conductive materials, and mechanical elements like bearings, leading to possible declines in efficiency, output, and reliability. Under cold conditions, materials in motors may undergo mechanical and chemical changes such as embrittlement, loss of flexibility, and increased electrical resistance, which collectively affect the motor's operational capabilities. The review synthesizes recent studies and examines how these changes influence core motor parameters, such as starting torque, power output, and response time. Additionally, low temperatures may restrict lubrication flow, creating higher friction and wear on moving parts, which impacts durability and requires specific design adaptations. The article consolidates research findings to outline how environmental cold influences motor behavior in terms of thermal contraction, magnetic performance, and heat dissipation efficiency. The discussion also considers practical engineering solutions, such as material selection, motor insulation adjustments, and cold-weather lubrication strategies, to mitigate adverse impacts. By presenting a comprehensive view of low-temperature challenges, this study aims to provide insight into improving motor design for enhanced reliability and resilience in sub-zero conditions, which is essential for applications in industries like aerospace and defense.

Keywords: Low-temperature effects, Starting torque, Material durability, Cold-temperature resilience

MODERN YÖNETİM YAKLAŞIMLARI: SAĞLIK HİZMETLERİNDE TOPLAM KALİTE YÖNETİMİ

MODERN MANAGEMENT APPROACHES: TOTAL QUALITY MANAGEMENT IN HEALTH CARE

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ÖZET

Yönetim, hedeflere ulaşmak için kaynakların organize edildiği ve gelecekteki faaliyetlerin amaçlarının belirlendiği bir süreçtir. Yönetim yaklaşımları; klasik yönetim yaklaşımı, neo-klasik yönetim yaklaşımı ve modern yönetim yaklaşımı olacak şekilde gruplandırılarak incelenir. Kendisinden önceki teorilerin geliştirilmesi ve eksikliklerinin giderilmesi amacıyla ortaya çıkan Modern Yaklaşım Teorisi, küresel çapta yaşanan değişim ve gelişmelerle şekillenmiş ve süreçle birlikte Toplam Kalite Yönetimi kavramı ortaya çıkmıştır. Toplam kalite yönetimi, organizasyondaki tüm faaliyetlerin, ürün ve hizmet kalitesini artırmanın yanı sıra genel kaliteyi sürekli olarak yükseltmek amacıyla planlanmasını ifade eder. Yaklaşımın organizasyonlar üzerindeki etkileri çok yönlü ve kapsamlıdır. Grup çalışmasını ön plana çıkaran bu yaklaşım, çalışanların daha fazla katılım göstermesini ve memnuniyet duymasını sağlar. Stratejik hedeflere odaklanmayı kolaylaştıran bu yaklaşım, aynı zamanda süreçlerin sürekli iyileştirilmesi için bir temel oluşturur. Toplam Kalite Yönetimi ile kurumsal kimlik yapısı güçlenirken o kuruluşun mal ve hizmetler de dâhil olmak üzere çıktılarının kalitesi artmaktadır. Bu gelişmeler sağlık hizmetlerinin sunum ve uygulanmasında da bulunmaktadır. İster kamu ister özel sağlık hizmetlerinde kalite anlayışı gelişmekte ve beklentiler artmaktadır. Kurumlar bu beklenti karşısında toplam kalite yönetimi sistemlerini devreye almakta ve gelişimlerini sürdürmektedir. Bu çalışmanın amacı; modern kalite yaklaşımlarından biri olan toplam kalite yönetiminin ve bu yönetim şeklinin sağlık hizmetlerinde kullanımının incelenmesidir. Literatür taranarak edinilen bilgiler doğrultusunda sağlık hizmetlerinde TKY ilkeleri esas alındığında sunulan hizmet kalitesinin ve hizmeti alan kişilerin memnuniyetinin arttığı görülmektedir.

Anahtar Kelimeler: Yönetim, Modern Teori, Sağlık Hizmetleri, Toplam Kalite Yönetimi

ABSTRACT

Management is a process in which resources are organized to achieve goals and the objectives of future activities are determined. Management approaches are examined by grouping them as classical management approach, neo-classical management approach and modern management approach. The Modern Approach Theory, which emerged with the aim of developing previous theories and eliminating their deficiencies, has been shaped by the changes and developments experienced globally and the concept of Total Quality Management has emerged with the process. Total quality management refers to the planning of all activities in the organization in order to increase the quality of products and services as well as to continuously increase the general quality. The effects of the approach on organizations are multifaceted and comprehensive. This approach, which emphasizes group work, ensures that employees show more participation and satisfaction. This approach, which facilitates focusing on strategic goals,

also forms a basis for continuous improvement of processes. While the corporate identity structure is strengthened with Total Quality Management, the quality of the outputs of that organization, including goods and services, increases. These developments are also found in the presentation and implementation of health services. The understanding of quality is developing and expectations are increasing in both public and private health services. Institutions are implementing total quality management systems in the face of these expectations and continue their development. The purpose of this study is to examine total quality management, one of the modern quality approaches, and the use of this management style in health services. In line with the information obtained by scanning the literature, it is seen that the quality of service provided and the satisfaction of the people receiving the service increase when the principles of TQM are taken as basis in health services.
Keywords: Management, Modern Theory, Healthcare, Total Quality Management

TOPRAK BİYOREMEDİASYONU: BİYOAKÜMÜLATÖR BİTKİLER
SOIL BIOREMEDIATION: BIOACCUMULATOR PLANTS

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ÖZET
Ağır metaller ve organik kirleticilerden kaynaklanan toprak kirliliği, ekosistemlerde önemli çevresel sorunlar yaratmaktadır. Çevrenin kirlenmesi, gezegenin toprağını, suyunu ve havasını etkileyerek ekosistemler ve canlılar için büyük risk oluşturan ciddi bir sorundur. Bugüne kadar havalandırma lagünleri, filtrasyon, çökelme, flokülasyon ve koagülasyon gibi çeşitli geleneksel arıtma yöntemleri kirliliğin giderilmesi için kullanılmıştır. Biyoremediasyon, fitoremediasyon ve mikoremediasyon gibi modern teknikler, çevre dostu özellikleri sayesinde daha yüksek verimlilik göstermiştir. Çeşitli arıtma yöntemleri arasında toprak biyoremediasyonunda kullanılan biyoakümülatör bitkilerin kullanımı, fitoremediasyon olarak bilinir ve sürdürülebilir, maliyet etkin ve çevre dostu çözümler sunar. Biyoakümülatör bitkiler veya hiperakümülatörler, yüksek düzeyde kirleticileri dokularında biriktirme, yoğunlaştırma ve depolama yeteneğine sahiptir ve bu süreçte toksik etkiler yaşamadan işlev görürler. Bu bitkiler, kurşun (Pb), kadmiyum (Cd), arsenik (As) ve diğer tehlikeli iyonlarla kirlenmiş toprakları etkili bir şekilde temizleyebilirler. Kadmiyum ve çinko için *Thlaspi caerulescens*, arsenik için *Pteris vittata* ve radyonüklidler için *Helianthus annuus* örnek olarak verilebilir. Fitoremediasyonun etkinliğini etkileyen faktörler arasında toprak koşulları, kirletici özellikleri ve bitki türü seçimi yer almaktadır. Biyoakümülatör bitkiler büyük bir potansiyele sahip olsa da, yavaş alım hızları, kirlenmiş biyokütlenin güvenli şekilde bertaraf edilmesi ve türlere özgü uygulamalara olan ihtiyaç gibi zorluklar, yaygın kullanımını sınırlamaktadır. Bununla birlikte, özellikle genetik mühendisliği alanında devam eden araştırmalar, alım kapasitesini artırmayı ve arıtma sürecini hızlandırmayı amaçlamaktadır. Biyoakümülatör bitkiler, kirlenmiş toprakları geri kazanmada ve karasal ekosistemleri iyileştirmede küresel çabalarda kritik bir araç olarak kabul edilmektedir.
Anahtar kelimeler: Toprak biyoremediasyonu, biyoakümülatör, bitkiler

ABSTRACT
Soil pollution caused by heavy metals and organic pollutants creates significant environmental issues in ecosystems. Environmental pollution is a serious problem that affects the planet’s soil, water, and air, posing major risks to ecosystems and living organisms. To date, various traditional treatment methods such as aeration lagoons, filtration, sedimentation, flocculation, and coagulation have been used to address pollution. Modern techniques such as bioremediation, phytoremediation, and mycoremediation have shown higher efficiency due to their environmentally friendly properties. Among the various treatment methods, the use of bioaccumulator plants in soil bioremediation is known as phytoremediation, offering sustainable, cost-effective, and environmentally friendly solutions. Bioaccumulator plants or hyperaccumulators have the ability to accumulate, concentrate, and store high levels of

pollutants in their tissues while functioning without toxic effects. These plants can effectively clean soils contaminated with lead (Pb), cadmium (Cd), arsenic (As), and other hazardous ions. Examples include Thlaspi caerulescens for cadmium and zinc, Pteris vittata for arsenic, and Helianthus annuus for radionuclides. Factors influencing the effectiveness of phytoremediation include soil conditions, pollutant characteristics, and plant species selection. Although bioaccumulator plants have great potential, challenges such as slow uptake rates, safe disposal of contaminated biomass, and the need for species-specific applications limit their widespread use. However, ongoing research, particularly in the field of genetic engineering, aims to increase uptake capacity and accelerate the remediation process. Bioaccumulator plants are considered a critical tool in global efforts to reclaim polluted soils and improve terrestrial ecosystems.

Keywords: Soil bioremediation, bioaccumulation, plants

ÇOCUK SPORCULARIN PSİKOLOJİK DAYANIKLILIĞINI GELİŞTİRMEDE SPORUN ROLÜ

THE ROLE OF SPORTS IN DEVELOPING PSYCHOLOGICAL RESILIENCE IN CHILD ATHLETES

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ÖZET

Bu çalışma, çocuk sporcuların psikolojik dayanıklılığını geliştirmede sporun etkisini değerlendirmek amacıyla gerçekleştirilmiştir. Araştırmada meta-analiz yöntemi kullanılmıştır. Meta-analiz, mevcut araştırma bulgularını sistematik bir şekilde bir araya getirerek, genel eğilimleri ve etkileri istatistiksel olarak değerlendirmeyi amaçlayan bir yöntemdir. Çalışmada elde edilen bulgular, sporun çocuk sporcuların psikolojik dayanıklılığını artırmada önemli bir rol oynadığını göstermektedir. Spor, çocukların stresle başa çıkma becerilerini, öz güvenlerini ve duygusal düzenleme kapasitelerini güçlendiren bir araç olarak öne çıkmaktadır. Analize dâhil edilen çalışmaların büyük bir kısmı, spor etkinliklerinin çocukların problem çözme, iş birliği yapma ve zorluklarla mücadele becerilerini geliştirdiğini ortaya koymaktadır. Ayrıca, takım sporlarının sosyal destek mekanizmalarını güçlendirdiği ve dayanıklılık üzerindeki etkisinin bireysel sporlara göre daha belirgin olduğu görülmektedir. Bununla birlikte, sporun psikolojik dayanıklılık üzerindeki etkisinin optimize edilebilmesi ve olumsuz sonuçların önüne geçilmesi için spor ortamlarında uygun pedagojik yaklaşımların benimsenmesi gerektiği vurgulanmaktadır. Çocukların dayanıklılık gelişimini desteklemek için spor programlarının yapılandırılmasında yaş grupları, bireysel ihtiyaçlar ve sosyal bağlamlar dikkate alınmalıdır. Bu alanda yapılan araştırmalar, sporun yalnızca bireysel faydalar değil, aynı zamanda toplumsal etkiler sunan bir araç olduğunu ortaya koymaktadır. Gelecekteki çalışmalar, spor programlarının, çocukların yaş grubu ve ihtiyaçlarına uygun şekilde tasarlanması önemlidir. Eğitim kurumları ve spor kulüpleri, çocuk sporcuların ihtiyaçlarına uygun, dayanıklılığı artırmaya yönelik yapılandırılmış programlar geliştirmelidir. Özellikle takım sporlarının dayanıklılığı artırmadaki etkisi göz önünde bulundurularak, bu tür etkinliklerin yaygınlaştırılması önerilmektedir. Ayrıca, spor programlarının sürdürülebilir ve uzun süreli olması, psikolojik dayanıklılığın kalıcı bir şekilde geliştirilmesine katkı sağlayacaktır. Ayrıca çocukların spor etkinliklerine aktif katılımı teşvik edilmelidir. Sporun çocuk gelişimindeki rolüne dair yapılan araştırmalar, bu etkinliklerin çocukların sadece fiziksel değil, aynı zamanda psikolojik sağlıklarını da desteklediğini güçlü bir şekilde ortaya koymaktadır.

Anahtar kelimeler: Çocuk Sporcular, Dayanıklılık Gelişimi, Psikolojik Dayanıklılık

ABSTRACT

This study was conducted to evaluate the impact of sports on developing psychological resilience in child athletes. A meta-analysis method was employed in this research. Meta-analysis is a statistical approach that systematically combines the findings of existing research to evaluate overall trends and effects. The findings of this study indicate that sports play a significant role in enhancing the psychological resilience of child athletes. Sports emerge as a tool that strengthens children's stress management skills, self-confidence, and emotional

regulation capacities. A majority of the included studies reveal that sports activities enhance children's problem-solving abilities, teamwork skills, and capacities to cope with challenges. Furthermore, it was observed that team sports are more effective in fostering resilience compared to individual sports due to their ability to strengthen social support mechanisms.
However, it is emphasized that appropriate pedagogical approaches should be adopted in sports environments to optimize the impact of sports on psychological resilience and to prevent potential negative outcomes. When structuring sports programs to support children's resilience development, factors such as age groups, individual needs, and social contexts must be considered. Research in this field highlights that sports are not only a tool for individual benefits but also serve as a means of promoting societal well-being. Future studies should focus on designing sports programs tailored to the age groups and specific needs of children. Educational institutions and sports clubs are encouraged to develop structured programs aimed at enhancing resilience, aligned with the needs of child athletes. In particular, considering the effectiveness of team sports in fostering resilience, the promotion of such activities is recommended. Moreover, ensuring that sports programs are sustainable and long-term will contribute to the enduring development of psychological resilience. Additionally, children should be encouraged to actively participate in sports activities. Research on the role of sports in child development strongly demonstrates that these activities support not only children's physical health but also their psychological well-being.
Keywords: Child Athletes, Resilience Development, Psychological Resilience

ÖZGECİLİK DAVRANIŞININ SERGİLENMESİNDE ÖRGÜTSEL İLETİŞİMİN ROLÜ

THE ROLE OF ORGANIZATIONAL COMMUNICATION IN ALTRUISM BEHAVIOR

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ÖZET

Bu çalışma, örgütsel iletişimin çalışanların özgecilik davranışı üzerindeki etkisini incelemeyi amaçlamaktadır. Örgütsel iletişim, çalışanların iş yerinde tatmin düzeyini artırarak bireysel ve örgütsel fayda sağlayan davranışlar sergilemelerine olanak tanır. Bu bağlamda, özgecilik davranışı, çalışanların iş arkadaşlarına ve örgüte fayda sağlamak amacı ile gönüllü olarak yardım etmelerini ifade eder ve örgütsel vatandaşlık davranışlarının temel bir boyutudur. Araştırma, örgütsel iletişimin özgecilik üzerindeki etkisini ölçmek için tasarlanmıştır.

Araştırma örneklemi, 191 kamu ve özel sektör çalışanından oluşmaktadır. Katılımcıların örgütsel iletişim algıları ve özgecilik davranışlarını ölçmek için literatürde geçerliliği kanıtlanmış ölçekler kullanılmıştır. Elde edilen veriler doğrultusunda ilk olarak SPSS programı ile ölçeklerin doğrulayıcı faktör analizi (DFA) yapılabilmesi için elverişli olup olmadığına işaret eden KMO ve Barlett testeleri gerçekleştirilmiştir. Uygun değerlerin elde edilmesi ile AMOS programı ile ölçeklere yönelik doğrulayıcı faktör analizleri gerçekleştirilmiştir. Bunun ardından hipotezleri test edebilmek adına korelasyon ve regresyon analizleri gerçekleştirilmiştir. Analizler örgütsel iletişimin, çalışanların özgecilik davranışları üzerinde anlamlı bir etkisi olduğunu göstermiştir. Buna göre örgütsel iletişim, çalışanların özgecilik davranışlarındaki varyansın %14'ünü açıklama gücüne sahip olduğu ortaya koymuştur. Bunun yanında, özellikle kurumsal bütünleşme ve kurumsal geribildirim, özgecilik ile en yüksek korelasyona sahip iletişim boyutları olarak öne çıkmıştır. Bu bulgular, iş yerinde etkili iletişimin özgecilik gibi olumlu davranışları teşvik edebileceğini göstermektedir. İletişim memnuniyetinin artırılması, örgütsel vatandaşlık davranışlarının güçlenmesine, iş tatmini ve verimlilik gibi unsurların gelişmesine katkıda bulunabilir. İşletmelerin, çalışanlar arası iletişim süreçlerini destekleyici stratejiler geliştirmesi, örgütsel hedeflere ulaşmada önemli bir avantaj sağlayabilir.

Anahtar Kelimeler: Örgütsel İletişim, Örgütsel Vatandaşlık Davranışı, Özgecilik

ABSTRACT

This study examines organizational communication's impact on employees' altruistic behavior. Effective organizational communication enables employees to demonstrate behaviors that benefit themselves and the organization by enhancing their job satisfaction. In this context, altruistic behavior refers to employees voluntarily helping their colleagues and the organization, and it is a key aspect of organizational citizenship behavior. The research is designed to assess how organizational communication affect altruistic behavior among employees.

The research sample consisted of 191 employees from both public and private sectors. Validated scales from existing literature were used to assess participants' perceptions of organizational communication and altruistic behaviors. First, KMO and Bartlett tests were conducted to determine whether the scales were appropriate for confirmatory factor analysis (CFA) using the SPSS program. Once suitable values were obtained, confirmatory factor analyses were performed on the scales using the AMOS program. Subsequently, correlation

and regression analyses were conducted to test the hypotheses. The results indicated that organizational communication significantly affects employees' altruistic behaviors. It was found that organizational communication can explain 14% of the variance in employees' altruistic behaviors. Additionally, organizational integration and organizational feedback emerged as the communication dimensions most strongly correlated with altruism.
The findings indicate that effective communication in the workplace can foster positive behaviors like altruism. Enhancing communication satisfaction may lead to improved organizational citizenship behaviors, job satisfaction, and productivity. Implementing strategies that improve communication processes among employees can offer a significant advantage in reaching organizational goals.
Keywords: Organizational Communication, Organizational Citizenship Behavior, Altruism

DÜNYADAKİ METRO YANGINLARININ; İŞ SAĞLIĞI VE GÜVENLİĞİ AÇISINDAN İSTATİKSEL İNCELENMESİ

STATISTICAL INVESTIGATION OF SUBWAY FIRES IN THE WORLD IN TERMS OF OCCUPATIONAL HEALTH AND SAFETY

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ÖZET

Metro sistemleri kentsel ulaşımda kritik bir rol oynar. Ancak kapalı ortamları, yüksek yolcu yoğunluğu ve karmaşık altyapıları nedeniyle önemli yangın risklerine de eğilimlidirler. Bu çalışma, dünya çapında metro yangınlarını kapsamlı bir şekilde araştırıp, bunların mesleki sağlık üzerindeki etkilerine ve bu riskleri azaltmak için uygulanan güvenlik önlemlerine odaklanmayı amaçlamaktadır. Çalışma için 52 metro yangın vakası seçilmiştir. Bu vakaların seçiminde yangınların; dünya genelindeki homojen dağılımı, ölüm ve yaralanma sayılarındaki farklılıkları, yangınların çıkış nedenlerindeki çeşitlilikleri, meydana geldiği çevresel koşullar, kaza şiddeti gibi parametreler rol almıştır. Ele alınan 52 metro yangın vakasının Avrupa, Asya ve Kuzey Amerika'daki metro sistemlerindeki tarihsel ve coğrafi dağılımı analiz edilmiştir. Olayların istatistiksel oranlarını hesaplayarak; elektrik arızaları, insan hataları, yanıcı malzemeler ve eski altyapı gibi yangın çıkışına katkıda bulunan temel faktörleri belirlenmiştir. Elde edinilen bilgilerle kazalar; ölüm- yaralanma sayılarına göre sınıflandırarak, yangından etkilenme oranlarını dikkate sunmuştur. Ayrıca Zehirli dumana, ısı stresine ve fiziksel yaralanmalara maruz kalma dahil olmak üzere işçiler üzerindeki mesleki sağlık etkileri analiz edilerek, gelişmiş koruyucu önlemlere olan ihtiyaç vurgulanmıştır.

Ek olarak, çalışma kapsamında yangına dayanıklı malzemeler, gelişmiş tespit sistemleri, acil durum müdahale prosedürleri ve personel eğitim programları gibi mevcut küresel güvenlik protokollerini incelenmiştir. Bulgular, yangın önleme ve acil durum müdahalesinde önemli ilerlemeler kaydedilmiş olsa da özellikle modern güvenlik altyapısından yoksun eski metro sistemlerinde işçi korumasında kritik boşluklar olduğunu göstermektedir. Bu araştırma, metro yangın güvenliğine dair küresel bir bakış açısı sunarak, yangın yönetimi stratejilerine mesleki sağlık hususlarını entegre etmenin önemini vurgulayarak mevcut literatüre katkıda bulunmaktadır. Çalışmanın özgünlüğü, güvenlik uygulamalarının bölge çapında analizinde ve metro çalışanlarının karşılaştığı mesleki sağlık risklerine odaklanmasında yatmaktadır ve kentsel ulaşım sistemlerinde yangın güvenliği standartlarını iyileştirmeyi amaçlayan politika yapıcılar ve güvenlik profesyonelleri için yeni iç görüler sunmaktadır.

Anahtar Kelimeler: Metro yangınları, iş sağlığı ve güvenliği, yangın güvenliği protokolleri, küresel güvenlik standartları, risk değerlendirmesi, kentsel ulaşım, acil müdahale.

ABSTRACT

Metro systems play a critical role in urban transportation. However, they are also prone to significant fire risks due to their closed environment, high passenger density and complex infrastructure. This study aims to comprehensively investigate metro fires worldwide, focusing on their impact on occupational health and the safety measures implemented to reduce these risks. 52 metro fire cases were selected for the study. The selection of these cases was based on

the homogeneous distribution of the fires around the world, the differences in the number of fatalities and injuries, the diversity in the causes of the fires, the environmental conditions in which they occurred, and the severity of the accident. The historical and geographical distribution of the 52 metro fire incidents in metro systems in Europe, Asia and North America was analyzed. By calculating the statistical proportions of incidents, the main factors contributing to fire outbreaks were identified, such as electrical faults, human error, flammable materials and old infrastructure. With the information obtained, the accidents were classified according to the number of deaths and injuries and the rates of exposure to fire were taken into account. It also analyzed occupational health impacts on workers, including exposure to toxic smoke, heat stress and physical injuries, highlighting the need for improved protective measures.

In addition, the study examined existing global safety protocols such as fire-resistant materials, advanced detection systems, emergency response procedures and personnel training programs. The findings show that while significant progress has been made in fire prevention and emergency response, there are critical gaps in worker protection, especially in older metro systems that lack modern safety infrastructure. This research contributes to the existing literature by providing a global perspective on metro fire safety, emphasizing the importance of integrating occupational health considerations into fire management strategies. The originality of the study lies in its region-wide analysis of safety practices and focus on occupational health risks faced by metro workers, offering new ideas for policy makers and safety professionals aiming to improve fire safety standards in urban transport systems.

Keywords: Metro fires, occupational health and safety, fire safety protocols, global safety standards, risk assessment, urban transportation, emergency response.

TÜRKİYE'DE TARİHİ YAPI YANGINLARINDA İŞ SAĞLIĞI VE GÜVENLİĞİ
OCCUPATIONAL HEALTH AND SAFETY İN HISTORICAL BUILDING FIRES IN TURKEY

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Özet
Tarihi yapıların korunmasındaki temel amaç, gelecek nesillere güvenli bir şekilde aktarılmasını sağlarken orijinal formlarını korumaktır. Ancak bu yapılar, zamanlarının mimari teknikleri ve standartları kullanılarak inşa edildikleri için, genellikle çağdaş yangın güvenliği önlemleriyle uyumluluktan yoksundur ve bu da onları yangın risklerine karşı özellikle hassas hale getirir. Bu çalışma, kapsamlı bir literatür taraması yoluyla Türkiye genelindeki tarihi binalarda çıkan yangınların nedenlerini ve etkilerini araştırmaktadır. Bu yapılardaki yangın tehlikelerine katkıda bulunan temel risk faktörleri analiz edilmiş ve dört ana kategoriye ayrılmıştır: mimari özellikler, insan hataları, güncel olmayan altyapı ve dış faktörler. Yanıcı malzemeler ve güncel olmayan tasarım gibi mimari özellikler yangın duyarlılığını artırırken, insan faaliyetleri, yangın farkındalığının olmaması ve ihmalkarlık riskleri daha da kötüleştirir. Bu binalardaki eski elektrik ve yapısal sistemler, modern yükler altında arızalanabilecekleri için ek zorluklar sunar. Çevresel koşullar ve yakındaki kentsel faaliyetler gibi dış faktörler de yangın olaylarında rol oynar. Bu bulgulara yanıt olarak, bu çalışma tarihi binalardaki yangın risklerini azaltmak için üç öncelikli alanı vurgulamaktadır: çalışanlar için hedefli eğitim programları uygulamak, yangın güvenliği sistemlerini tarihi yapılarla uyumlu olacak şekilde yükseltmek ve modernize etmek ve miras koruma yetkilileriyle iş birliğini teşvik etmek. Bu önlemler, hem bu kültürel açıdan değerli alanların güvenliğini hem de bunların korunmasından sorumlu olanların sağlık ve güvenliğini artırmayı amaçlamaktadır.
Anahtar Kelimeler: Tarihi yapılar, yangın güvenliği, iş sağlığı ve güvenliği, risk değerlendirmesi, Türkiye, kültürel mirasın korunması, yangın önleme stratejileri.

Abstract
The primary objective in preserving historical structures is to maintain their original form while ensuring their safe transfer to future generations. However, since these buildings were constructed using the architectural techniques and standards of their time, they often lack compatibility with contemporary fire safety measures, leaving them particularly susceptible to fire risks. This study investigates the causes and impacts of fires in historical buildings across Turkey through a comprehensive literature review. Key risk factors contributing to fire hazards in these structures were analyzed and grouped into four main categories: architectural characteristics, human errors, outdated infrastructure, and external factors. Architectural features, such as flammable materials and outdated design, increase fire susceptibility, while human activities, lack of fire awareness, and negligence further exacerbate risks. Aging electrical and structural systems in these buildings present additional challenges, as they may malfunction under modern loads. External factors, including environmental conditions and nearby urban activity, also play a role in fire incidents. In response to these findings, this

study highlights three priority areas for reducing fire risks in historical buildings: implementing targeted training programs for employees, upgrading and modernizing fire safety systems to be compatible with historical structures, and fostering collaboration with heritage preservation authorities. These measures aim to enhance both the safety of these culturally valuable sites and the health and safety of those responsible for their protection.
Keywords: Historical structures, fire safety, occupational health and safety, risk assessment, Turkey, cultural heritage preservation, fire prevention strategies.

TARIMDA SU YÖNETİMİ VE AZALAN SU KAYNAKLARINA ÇÖZÜM ÖNERİLERİ

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Özet:
Tarımda su yönetimi, su kaynaklarının etkin ve sürdürülebilir kullanımını sağlamak için büyük öneme sahiptir. Azalan su kaynakları, iklim değişikliği, nüfus artışı ve artan tarımsal su talebi gibi etkenlerden dolayı tarımsal üretim üzerinde ciddi bir baskı oluşturmaktadır. Etkili bir su yönetimi stratejisi, suyun doğru miktarlarda, doğru zamanda ve minimum kayıpla bitkilere ulaşmasını sağlamayı hedefler. Damlama sulama ve yağmurlama gibi modern sulama yöntemleri, su kullanım etkinliğini artırarak israfı önler. Bunun yanı sıra, atık suyun yeniden kullanımı, yağmur suyu toplama sistemleri ve yer altı suyu rezervlerinin sürdürülebilir yönetimi gibi yöntemler, tarım sektöründe su kaynaklarının korunmasına katkıda bulunur. Çiftçilerin suyun değeri konusunda bilinçlendirilmesi ve su tasarrufu sağlayan teknolojilerin teşvik edilmesi de önemlidir. Tarımda su yönetimi, verimliliği korurken çevre dostu uygulamaları yaygınlaştırarak su kaynaklarının sürdürülebilirliğine katkıda bulunur. Bu derlemenin amacı, tarımda su yönetiminin önemini ve azalan su kaynaklarına yönelik çözüm önerilerini inceleyerek, su kaynaklarının verimli kullanımına katkı sağlamaktır.
Anahtar Kelimeler: Damlama Sulama, Su Yönetimi, Sürdürülebilirlik, Tasarruf, Verimlilik

WATER MANAGEMENT IN AGRICULTURE AND SOLUTIONS FOR DIMINISHING WATER RESOURCES

ABSTRACT
Water management in agriculture is crucial to ensure the efficient and sustainable use of water resources. Diminishing water resources, driven by factors such as climate change, population growth, and increasing agricultural water demand, exert significant pressure on agricultural production. An effective water management strategy aims to deliver water to plants in the correct amounts, at the right time, and with minimal loss. Modern irrigation methods like drip and sprinkler irrigation improve water-use efficiency and prevent wastage. Additionally, practices such as wastewater reuse, rainwater harvesting systems, and sustainable management of groundwater reserves contribute to the conservation of water resources in agriculture. Raising awareness among farmers about the value of water and promoting water-saving technologies are also essential. Water management in agriculture supports resource sustainability by maintaining productivity and expanding eco-friendly practices. This review aims to examine the importance of water management in agriculture and explore solutions for diminishing water resources, contributing to the efficient use of water resources.
Keywords: Drip Irrigation, Efficiency, Sustainability, Water Management, Conservation

POTASYUMLU GÜBRELERİN BİTKİ DAYANIKLILIĞINA VE ÜRÜN KALİTESİNE ETKİSİ

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Özet
Potasyumlu gübreler, bitkilerin büyüme ve gelişim süreçlerinde önemli rol oynayan temel besin maddelerindendir. Potasyum, bitkilerin su dengesini düzenler, hastalıklara karşı direncini artırır ve ürün kalitesine olumlu katkı sağlar. Bitkilerde fotosentez, protein sentezi ve karbonhidrat taşınması gibi hayati işlevler potasyumun varlığıyla daha verimli şekilde gerçekleşir. Potasyum eksikliği görülen bitkilerde yaprak yanıklığı, bodur büyüme ve verim düşüşü gibi olumsuzluklar ortaya çıkabilir. Bu gübreler, bitkilerin hücre duvarlarını güçlendirir, böylece çevresel stres koşullarına (sıcaklık değişiklikleri, kuraklık, hastalıklar) karşı dayanıklılığı artırır. Potasyumun ayrıca su kullanım etkinliğini iyileştirme gibi bir avantajı da vardır; bu, kuraklık gibi stres faktörleri altında büyüyen bitkiler için kritik bir destektir. Bu yönüyle potasyumlu gübreler, tarımsal sürdürülebilirlik ve kalite artışı için büyük önem taşır. Potasyumun düzenli ve dengeli kullanımı, yüksek kaliteli ve dayanıklı bitki gelişimini teşvik ederek tarımsal üretimi sürdürülebilir hale getirir. Bu derlemenin amacı, potasyumlu gübre çeşitlerini tanımlamak ve bitki dayanıklılığı ile ürün kalitesi üzerindeki etkilerini inceleyerek bu gübrelerin tarımsal üretimde sunduğu avantajları vurgulamaktır.
Anahtar Kelimeler: Dayanıklılık, Gübre, Potasyum, Ürün Kalitesi, Verim

IMPACT OF POTASSIUM FERTILIZERS ON PLANT RESILIENCE AND CROP QUALITY

ABSTRACT
Potassium fertilizers are essential nutrients that play a vital role in plant growth and development processes. Potassium regulates water balance in plants, enhances resistance to diseases, and positively contributes to crop quality. Key functions such as photosynthesis, protein synthesis, and carbohydrate transport in plants are carried out more efficiently with the presence of potassium. In plants with potassium deficiency, issues such as leaf scorch, stunted growth, and yield reduction can arise. These fertilizers strengthen plant cell walls, thereby increasing resilience to environmental stress conditions, including temperature fluctuations, drought, and diseases. Additionally, potassium improves water-use efficiency, which is critical for plants growing under stress factors like drought. In this respect, potassium fertilizers are crucial for agricultural sustainability and quality improvement. Regular and balanced application of potassium promotes the development of high-quality and resilient plants, contributing to sustainable agricultural production. This review aims to describe types of potassium fertilizers and examine their effects on plant resilience and crop quality, highlighting the advantages they offer in agricultural production.
Keywords: Fertilizer, Potassium, Resilience, Crop Quality, Yield

DENİZ YOSUNU BAZLI GÜBRELER BİYOLOJİK İÇERİK VE TARIMSAL AVANTAJLAR

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ÖZET
Deniz yosunu bazlı gübreler, tarımsal üretimde çevre dostu ve biyolojik açıdan zengin bir gübre seçeneği sunar. Deniz yosunları, yüksek miktarda mineral, vitamin, amino asit ve doğal büyüme düzenleyiciler içerir. Bu özellikleri sayesinde, deniz yosunu gübreleri bitki gelişimini destekler, stres direncini artırır ve ürün kalitesini iyileştirir. Toprağın biyolojik çeşitliliğini artırarak mikrobiyal yaşamı destekler ve kimyasal gübrelerin olumsuz etkilerini azaltır. Aynı zamanda, bu gübreler toprağın su tutma kapasitesini yükselterek bitkilerin kuraklık gibi stres koşullarına dayanıklılığını sağlar, bu da özellikle suyun sınırlı olduğu bölgelerde büyük bir avantaj sunar. Deniz yosunu gübrelerinin doğal azot, fosfor ve potasyum içeriği bitkilerin ihtiyaç duyduğu temel besin maddelerini sağlar, böylece kimyasal gübre kullanımına olan bağımlılığı azaltır. Organik tarım uygulamalarında yaygın olarak tercih edilen deniz yosunu bazlı gübreler, sürdürülebilir tarımı destekler ve toprak sağlığını korur. Düzenli kullanımları, ürün verimliliğinde ve kalitesinde iyileşme sağlayarak tarımsal üretim süreçlerini çevre dostu hale getirir. Deniz yosunlarının biyolojik içerikleri ve çevreye dost yapısı, tarımda sürdürülebilirliği artıran önemli bir katkı sunar. Bu derlemenin amacı, deniz yosunu bazlı gübrelerin biyolojik içeriklerini ve tarımsal avantajlarını inceleyerek bu gübrelerin çevresel faydalarını vurgulamaktır.
Anahtar Kelimeler: Büyüme Düzenleyici, Deniz Yosunu, Organik Tarım, Sürdürülebilirlik

SEAWEED-BASED FERTILIZERS: BIOLOGICAL CONTENT AND AGRICULTURAL ADVANTAGES

ABSTRACT
Seaweed-based fertilizers offer an eco-friendly and biologically rich option for agricultural production. Seaweeds contain high levels of minerals, vitamins, amino acids, and natural growth regulators, which support plant growth, enhance stress resistance, and improve crop quality. By promoting soil biodiversity and supporting microbial life, seaweed fertilizers help mitigate the adverse effects of chemical fertilizers. Additionally, these fertilizers increase soil water retention capacity, enabling plants to withstand stress conditions like drought, a significant advantage in water-scarce regions. The natural nitrogen, phosphorus, and potassium content of seaweed fertilizers provides essential nutrients, reducing dependency on chemical fertilizers. Widely preferred in organic farming, seaweed-based fertilizers support sustainable agriculture and soil health. Regular use improves crop yield and quality, making agricultural production processes more environmentally friendly. The biological content and eco-friendly properties of seaweeds contribute significantly to sustainability in agriculture. This review aims to examine the biological content and agricultural advantages of seaweed-based fertilizers, highlighting their environmental benefits.
Keywords: Growth Regulator, Organic Farming, Seaweed, Sustainability

KURAKLIK KOŞULLARINDA HASSAS SULAMA TEKNOLOJİLERİNİN UYGULANABİLİRLİĞİ

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Özet
Kuraklık koşullarında su kaynaklarının verimli kullanılması tarımsal üretimin sürdürülebilirliği açısından büyük önem taşır. Hassas sulama teknolojileri, suyun yalnızca gerektiği kadar ve doğru zamanlamayla uygulanmasını sağlar, bu da özellikle su kaynaklarının kısıtlı olduğu bölgelerde önemli bir avantajdır. Damla sulama, yağmurlama sulama ve sensör tabanlı sulama sistemleri gibi hassas sulama teknikleri, bitkilerin su ihtiyaçlarını daha doğru bir şekilde belirler ve suyun israfını önler. Bu yöntemler, geleneksel sulama yöntemlerine kıyasla yüzde 50'ye varan oranda su tasarrufu sağlayabilir. Kuraklık dönemlerinde, bu teknolojilerin kullanımı tarımsal verimi korurken toprak sağlığını da destekler. Hassas sulama, ayrıca toprağın tuzluluk oranının kontrol edilmesine yardımcı olur ve su kullanım etkinliğini artırır. Özellikle sensör tabanlı sistemler, toprak nem seviyesini sürekli izleyerek bitkilerin suya erişimini optimize eder. Bu durum, sadece su kaynaklarının sürdürülebilir yönetimini sağlamakla kalmaz, aynı zamanda ürün kalitesini ve miktarını korumaya da katkıda bulunur. Bu derlemenin amacı, kuraklık koşullarında hassas sulama teknolojilerinin uygulanabilirliğini inceleyerek, bu teknolojilerin tarımda sürdürülebilir bir su yönetimi sağlamadaki önemini vurgulamaktır.
Anahtar Kelimeler: Damla Sulama, Hassas Sulama, Kuraklık, Su Yönetimi

APPLICABILITY OF PRECISION IRRIGATION TECHNOLOGIES UNDER DROUGHT CONDITIONS

ABSTRACT
Efficient use of water resources under drought conditions is crucial for the sustainability of agricultural production. Precision irrigation technologies ensure that water is applied only as needed and with accurate timing, providing a significant advantage, particularly in regions with limited water resources. Techniques such as drip irrigation, sprinkler irrigation, and sensor-based systems allow for precise assessment of plants' water requirements, preventing water wastage. These methods can save up to 50% of water compared to traditional irrigation methods. During drought periods, the use of these technologies supports soil health while maintaining agricultural productivity. Precision irrigation also helps control soil salinity levels and improves water-use efficiency. Sensor-based systems, in particular, continuously monitor soil moisture levels to optimize plant access to water. This not only ensures sustainable management of water resources but also helps preserve crop quality and yield. The purpose of this review is to examine the applicability of precision irrigation technologies under drought conditions, highlighting their importance in achieving sustainable water management in agriculture.
Keywords: Drought, Drip Irrigation, Precision Irrigation, Water Management

LEGAL REFLECTIONS ON THE EUROPEAN ARREST WARRANT IN THE CONTEXT OF CROSS – BORDER AND TRANSNATIONAL COOPERATION

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SUMMARY
The significant increase in the level of crime after the Second World War and the proliferation of organized crime on the territory of several countries, facilitated by the development of rapid means of transport and the intensification of international tourism, have led to a reaction of solidarity on the part of the States to combat this phenomenon.
It is the European Arrest Warrant that has been at the forefront of international criminal law for more than 20 years in order to combat cross-border crime and to maintain ongoing extensive cooperation. The European Arrest Warrant improves judicial cooperation between Member States and ensures the free circulation of judicial decisions. In particular, it was introduced to simplify the extradition system for the benefit of the members of the European Union.
We note a less welcome fact that the Republic of Moldova is not yet one of these 27 EU Member States.
Key-words: the European Arrest Warrant, extraditions, judicial cooperation, criminal liability, european criminal law.

POLITICAL INSTITUTIONS AND POLICY RESPONSE TO CLIMATE CHANGE

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ABSTRACT

Climate change, as a pressing global issue, requires coordinated responses from political institutions. Governments and policymakers must create and enforce policies that mitigate the effects of climate change while fostering adaptation strategies. However, political institutions—defined as the rules, norms, and organizational structures within which policy is created and implemented—play a pivotal role in determining the success or failure of climate action. Climate change poses significant global challenges, demanding urgent policy responses. The effectiveness of these responses is largely influenced by the nature of political institutions, their design, and the interplay between governance levels. This article explores the role of political institutions in shaping climate policy, emphasizing their influence on policy frameworks, implementation mechanisms, and stakeholder participation. It examines how institutional structures impact decision-making and policy effectiveness, with a particular focus on comparative examples from various political systems.

Key words: *climate change, global issues, policy response, political institutions, policymakers, climate policy, policy frameworks*.

DİJİTAL DÖNÜŞÜMDE BLOKZİNCİR VE FİNTEK'İN ROLÜ

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ÖZET
Bu çalışma, blokzincir ve finansal teknoloji (FinTek) entegrasyonunun finansal sistemler üzerindeki rolünü incelemektedir. Blokzincir, merkeziyetsiz yapısı ve güvenlik özellikleri sayesinde finansal hizmetlerin aracısız, güvenilir ve erişilebilir hale gelmesine olanak tanımaktadır. Aracılara olan ihtiyacı ortadan kaldıran bu teknoloji, fonlara erişim sıkıntıları yaşayan küçük ve orta ölçekli işletmeler için önemli fırsatlar yaratmaktadır. Aynı zamanda blokzincir tabanlı çözümler, veri güvenliği ve şeffaflık sunarak finansal işlemlerde dolandırıcılık ve yolsuzluğun önlenmesine katkıda bulunmaktadır. Bunun yanı sıra FinTek, blokzincir gibi inovatif çözümlerle birlikte özellikle bankacılık ve finansal hizmetlerde dönüşüme hız kazandıran temel bir unsur haline gelmiştir. Bankacılık, kredi verme, yatırım ve ödeme sistemlerinde devrim yaratan FinTek, geleneksel finansal yapıları da dönüştürmüştür. Blokzincir teknolojisiyle birlikte FinTek, finansal hizmetlerde otomasyonu artırarak daha kapsayıcı ve erişilebilir çözümler sunmaktadır. Blokzincir ve FinTek entegrasyonunun bir sonucu olarak ortaya çıkan merkeziyetsiz finans (DeFi) sistemleri, kullanıcıların aracısız finansal işlemler yapabilmesini sağlamaktadır. DeFi, finansal aracılara olan ihtiyacı ortadan kaldırarak işletmelerin daha bağımsız hareket etmesine olanak tanımaktadır. Ancak bu teknolojilerin yaygınlaşmasında volatilite, yasal belirsizlik ve teknik zorluklar gibi engellerin aşılması önceliklidir. Finansal sistemlerde köklü bir dönüşümü temsil eden blokzincir ve FinTek entegrasyonu, gelecekte finansal hizmetlerin daha kapsayıcı ve verimli hale gelmesini sağlayacak potansiyele sahiptir. Ancak bu teknolojilerin sürdürülebilirliği için gerekli düzenleyici çerçevenin ve teknik altyapının geliştirilmesi kritik öneme sahiptir.
Anahtar Kelimeler: Dijital Dönüşüm, Blokzincir, Finansal Teknoloji, Merkeziyetsiz Finans.

THE ROLE OF BLOCKCHAIN AND FINTECH IN DIGITAL TRANSFORMATION

ABSTRACT
This study examines the role of blockchain and financial technology (FinTech) integration in financial systems. Blockchain enables financial services to be intermediary-free, reliable, and accessible as a result of its decentralized structure and security features. This technology, which eliminates the need for intermediaries, creates significant opportunities for small and medium-sized enterprises that have difficulty accessing funds. Meanwhile, blockchain-based solutions contribute to the prevention of fraud and corruption in financial transactions by providing data security and transparency. Besides, FinTech has become a key element in accelerating transformation, especially in banking and financial services, with innovative solutions such as blockchain. FinTech, which has revolutionized banking, lending, investment, and payment systems, has also transformed traditional financial structures. With blockchain technology, FinTech offers more inclusive and accessible solutions by increasing automation in financial services. Decentralized finance (DeFi) systems which have emerged due to the integration of blockchain and FinTech, allow users to make unmediated financial transactions. DeFi enables

companies to act more independently by eliminating the need for financial intermediaries. However, overcoming barriers such as volatility, legal uncertainty, and technical difficulties is a priority for the widespread adoption of these technologies. The integration of blockchain and FinTech, which represents a fundamental transformation of financial systems has the potential to make financial services more inclusive and efficient in the future. However, it is critical to develop the necessary regulatory framework and technical infrastructure for the sustainability of these technologies.

Keywords: Digital Transformation, Blockchain, Financial Technology, Decentralized Finance.

DİJİTALLEŞME VE ENDÜSTRİ 4.0

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ÖZET
Dijitalleşme ve Endüstri 4.0'ın ele alındığı bu çalışmada, nesnelerin interneti (IoT), bulut bilişim, büyük veri, yapay zekâ (AI), blokzincir, kuantum bilişim, robotik ve 3D baskı teknolojileri incelenmektedir. Bu teknolojilerin entegrasyonu gerek özel gerekse kamu sektörlerinde önemli fırsatlar yaratmakta ve rekabeti de artırmaktadır. Karar alma süreçlerini hızlandıran ve üretim süreçlerini dönüştüren bu teknolojiler sayesinde, özellikle işletmelerin daha rekabetçi, çevik ve inovatif bir yapı kazandığı görülmektedir. Esasen dijital dönüşüm, söz konusu teknolojilerin işletme süreçleriyle bütünleşmesi ve bu süreçlerin yeniden yapılandırılmasını ifade etmektedir. Bu dönüşümün, yalnızca iş hayatı üzerinde değil hem ekonomik hem de sosyal yapı üzerinde önemli etkileri bulunmaktadır. Ayrıca çalışmada, söz konusu teknolojilerin benimsenmesiyle ilgili siber güvenlik riskleri ve iş gücü becerilerinin yeniden şekillendirilmesi gibi zorluklar tartışılmaktadır. Özellikle üretim ve lojistik sektörlerinde esaslı değişikliklere yol açan Endüstri 4.0, dijital dönüşüme de hız kazandırmaktadır. Esasen dijital dönüşüm, işletmelerin teknolojiden yararlanarak iş proseslerini, ürünlerini ve hizmetlerini yeniden yapılandırmasını ifade etmektedir. Bu kapsamda Endüstri 4.0, üretim proseslerine akıllı teknolojilerin entegrasyonunu kapsamaktadır. İnovatif teknolojilerin ekonomik büyümeyi harekete geçirme, rekabet dinamiklerini biçimlendirme ve yeni bir inovasyon çağına öncülük etmedeki kritik rolü dolayısıyla dijitalleşme ve Endüstri 4.0'ın derin ve dönüştürücü gücünü vurgulayan çalışma; özellikle dijital ekonomide sürdürülebilir rekabet için söz konusu teknolojilerin entegrasyonunun büyük önem taşıdığını ortaya koymaktadır.
Anahtar Kelimeler: Dijitalleşme, Dijital Dönüşüm, Endüstri 4.0, İnovasyon.

DIGITALIZATION AND INDUSTRY 4.0

ABSTRACT
In this study, which discusses digitalization and Industry 4.0, the internet of things (IoT), cloud computing, big data, artificial intelligence (AI), blockchain, quantum computing, robotics and 3D printing technologies are examined. The integration of these technologies creates significant opportunities and increases competition in both the private and public sectors. Thanks to these technologies, which accelerate decision-making processes and transform production processes, it is seen that businesses in particular have gained a more competitive, agile and innovative structure. Essentially, digital transformation refers to the integration of these technologies with business processes and the restructuring of these processes. This transformation has significant effects not only on business life but also on economic and social structure. The study also discusses challenges such as cybersecurity risks, workforce reskilling, and organizational adaptation related to the adoption of these technologies. Industry 4.0, which has led to fundamental changes particularly in manufacturing and logistics sectors, is also accelerating the

digital transformation. Essentially, digital transformation refers to the restructuring of an organization's business processes, products, and services by leveraging technology. In this context, Industry 4.0 involves the integration of smart technologies into production processes. Emphasising the transformative power of digitalisation and Industry 4.0 due to the critical role of innovative technologies in stimulating economic growth, shaping competitive dynamics and leading a new era of innovation; the study reveals that the integration of these technologies is of great importance for sustainable competition, especially in the digital economy.
Keywords: Digitalization, Digital Transformation, Industry 4.0, Innovation.

BÖLGE VE GELİR GRUBU DEĞİŞKENLERİNİN ÜLKELERİN BİLGİ VE İLETİŞİM TEKNOLOJİLERİ GELİŞİM ENDEKSİNE ETKİSİNİN KATEGORİK REGRESYON ANALİZİ İLE İNCELENMESİ

CATEGORICAL REGRESSION ANALYSIS OF THE EFFECT OF REGION AND INCOME GROUP VARIABLES ON INFORMATION AND COMMUNICATION TECHNOLOGY DEVELOPMENT INDEX OF COUNTRIES

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ÖZET

Modern yaşamın vazgeçilmez bir parçası haline gelen dijital teknolojiler iletişim, eğitim, sağlık, ekonomi ve finas gibi birçok alanda iş süreçlerini dönüştürmüştür. Ancak günümüzde herkes dijital teknolojileri aynı seviyede kullanamamaktadır başka bir deyişle dijital eşitsizlikler bulunmaktadır. Birleşmiş Milletler'in bilgi ve iletişim teknolojileri (BİT) konusunda uzmanlaşmış bir kuruluşu olarak Uluslararası Telekomünikasyon Birliği (UTB) ülkeler arasındaki dijital uçurumu yok etmek amacıyla dijital teknolojilere erişimi iyileştirmek ve dijital bağlantıyı herkese ulaştırmak için çalışmaktadır. Bu doğrultuda bünyesindeki ülkere ait evrensel bağlanabilirlik ve anlamlı bağlanabilirlik göstergelerini dikkate alarak dijital gelişimin ölçülmesine yönelik bilgi ve iletişim teknolojileri gelişim endeksi verilerini raporlamaktadır. Bu çalışmada UTB tarafından yayınlanan 2024 yılına ait bilgi ve iletişim teknolojileri gelişim endeksi veri seti kullanılarak ülkelerin bölge ve gelir grubundaki kategorik değişkenlerinin bilgi ve iletişim teknolojileri gelişim endeksi düzeyine etkisi kategorik regresyon analizi kullanılarak incelenmiştir. BİT gelişim endeksini ölçmek için kurulan kategorik regresyon modelinin istatistiksel olarak anlamlı olduğu bulunmuştur. Bölge ve gelir grubundaki değişkenlerin BİT gelişim endeksi seviyesinin %66'sını ($R^2 = 0{,}664$) açıkladığı görülmüştür. Analiz sonucunda elde edilen sonuçlarda Afrika bölgesindeki ülkelerin BİT gelişim endeksi seviyelerinin negatif yönde -0,68 birim değer aldığı, Avrupa ülkelerinin ise pozitif yönde 0,41 birim değer aldığı tespit edilmiştir. Gelir grubunda ise yüksek gelir kategorisinin BİT gelişim endeksi seviyesini pozitif yönde 0,72 birim etkilediği bulunmuştur.

Anahtar Kelimeler: Dijital Gelişim, Bilgi ve İletişim Teknolojileri, Kategorik Regresyon Analizi

ABSTRACT

Digital technologies, which have become an essential part of modern life, have transformed business processes in many areas such as communication, education, health, economy and finance. However, today not everyone can use digital technologies at the same level, in other words, there are digital inequalities. As a specialized organization of the United Nations in information and communication technologies (ICT), the International Telecommunication Union (ITU) works to improve access to digital technologies to eliminate the digital divide between countries and bring digital connectivity to all. In this direction, it reports information and communication technologies development index data to measure digital development by taking into account the universal connectivity and meaningful connectivity indicators of the countries within its scope. In this study, the effect of categorical variables in the region and income group of countries on the level of information and communication technologies development index is analyzed using categorical regression analysis by using the information

and communication technologies development index data set for 2024 published by ITU. The categorical regression model established to measure the ICT development index was found to be statistically significant. It was observed that the variables in the region and income group explained 66% (R^2 =0.664) of the ICT development index level. In the results obtained as a result of the analysis, it was determined that the ICT development index levels of the countries in the African region took a value of -0.68 units in the negatively, while European countries took a value of 0.41 units in the positively. In the income group, it was found that the high income category positively affected the level of ICT development index by 0.72 units.
Keywords: Digital Development, Information and Communication Technologies, Categorical Regression Analysis

HERBİSİT DİRENÇ ÇALIŞMALARININ BİBLİYOMETRİK ANALİZİ

A BIBLIOMETRIC ANALYSIS of HERBICIDE RESISTANCE STUDIES

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ÖZET

Herbisit dayanıklılığı, yabancı ot popülasyonlarının, bir herbisitin önerilen dozlarında hayatta kalma ve üreme yeteneği gösterme kabiliyeti olarak tanımlanır. Herbisit dayanıklılığı, modern tarımın en büyük zorluklarından biri haline gelmiş ve küresel ölçekte hem tarımsal üretim hem de ekosistem yönetimi üzerinde ciddi tehditler oluşturmuştur. Yabancı otların hızla herbisitlere direnç geliştirmesi, tarımsal sürdürülebilirlik ve ekonomik kalkınmayı tehlikeye atarken, biyolojik çeşitlilik üzerinde de olumsuz etkiler yaratmaktadır. Bugüne kadar dünya genelinde 72 ülkede, 273 yabancı ot türü ile 533 farklı herbisit dayanıklılık vakası rapor edilmiş olup, bu sayı giderek artmaya devam etmektedir. Bu durum, tarımda kullanılan kimyasalların etkinliğini sınırlandırmakta ve alternatif mücadele stratejilerinin geliştirilmesi gerekliliğini açıkça ortaya koymaktadır. Bu çalışmada, herbisit dayanıklılığı üzerine yapılan küresel araştırmalar bibliyometrik analiz yöntemiyle incelenmiştir. Araştırma, literatürdeki anahtar eğilimleri, işbirliği ağlarını ve bilimsel katkıları belirleyerek, bu alandaki bilimsel faaliyetin kapsamlı bir haritasını sunmaktadır. Bu konuda arama sonucunda 3.427 yayın elde edilmiştir. Analiz sonuçları, herbisit dayanıklılığı literatürde 1.349 kez anahtar kelime olarak kullanıldığını ve özellikle ABD'nin 1.296 yayın ile bu alandaki en fazla yayın yapan ülke olarak öne çıkmaktadır. Türkiye'nin ise bu alanda 45 yayın ile literatüre katkı sağladığı görülmektedir. Araştırmalar, özellikle moleküler biyoloji ve genetik alanında yoğunlaşmış, direnç mekanizmalarının anlaşılmasına yönelik çalışmalarda kayda değer bir artış göstermiştir. Sonuçlar, herbisit dayanıklılığına yönelik multidisipliner yaklaşımların önemini vurgulamakta ve bu sorunun çözümüne yönelik daha yenilikçi yöntemlerin geliştirilmesine katkı sağlamayı amaçlamaktadır.

Anahtar kelimeler; Herbisit dayanıklılığı, Bibliyometrik, Yabancı ot, VOSviewer

ABSTRACT

Herbiside resistance is defined as the ability of weed populations to survive and reproduce at recommended doses of a herbicide. Herbiside resistance has become one of the greatest challenges of modern agriculture and poses serious threats to both agricultural production and ecosystem management on a global scale. Rapid development of resistance by weeds to herbicides endangers agricultural sustainability and economic development, while also creating negative effects on biodiversity. To date, 533 different herbicide resistance cases have been reported in 72 countries worldwide with 273 weed species, and this number continues to increase. This situation limits the effectiveness of chemicals used in agriculture and clearly demonstrates the need to develop alternative control strategies. In this study, global research on herbicide resistance was examined using the bibliometric analysis method. The research provides a comprehensive map of scientific activity in this field by identifying key trends, collaboration networks and scientific contributions in the literature. The search on

this subject yielded 3.427 publications. The analysis results show that herbicide resistance was used as a keyword 1.349 times in the literature, and the USA stands out as the country with the most publications in this field with 1.296 publications. Turkey has contributed to the literature with 45 publications in this field. Research has focused especially on molecular biology and genetics, and has shown a significant increase in studies aimed at understanding resistance mechanisms. The results emphasize the importance of multidisciplinary approaches to herbicide resistance and aim to contribute to the development of more innovative methods for solving this problem.

Keywords; Herbicide resistance, Bibliometrics, Weed, VOSviewer

ENTEGRE YABANCI OT YÖNETİMİNDE TEKNOLOJİNİN ROLÜ: GLOBAL BİR BİBLİYOMETRİK ANALİZ

THE ROLE of TECHNOLOGY IN INTEGRATED WEED MANAGEMENT: A GLOBAL BIBLIOMETRIC ANALYSIS

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ÖZET

Entegre Yabancı Ot Yönetimi (EYY), yabancı ot kontrolünde sürdürülebilirlik ilkesi çerçevesinde kültürel, mekanik, biyolojik ve kimyasal yöntemlerin bir arada ve stratejik bir şekilde uygulanmasını esas alan bütüncül bir yaklaşımdır. Bu yöntem, tarımsal üretimde yabancı otların etkin kontrolünü sağlarken, çevresel zararları ve ekonomik maliyetleri en aza indirmeyi hedefler. EYY, özellikle artan herbisit dayanıklılığı vakaları ve çevresel etkiler göz önüne alındığında, modern tarımda kritik bir role sahiptir. Bu çalışmada, EYY ile ilgili küresel literatür, bibliyometrik analiz yöntemiyle incelenmiş ve alandaki son eğilimler ile gelecekteki araştırma yönleri belirlenmiştir. Scopus veri tabanında yapılan analizler sonucunda, EYY ile ilgili 2130 yayının bulunduğu tespit edilmiştir. Bu yayınlarda en sık kullanılan anahtar kelime 983 kez ile "Entegre yabancı ot yönetimi" olmuş, bunu 157 tekrar ile "herbisit dayanıklılığı" izlemiştir. Yayın dağılımında, 678 çalışmayla ABD en fazla katkıyı sağlayan ülke olarak öne çıkarken, Türkiye'den 41 yayın elde edilmiştir. Çalışmanın bulguları, özellikle teknolojik yeniliklerin EYY uygulamalarındaki rolünün giderek arttığını ortaya koymaktadır. Sensör tabanlı sistemler, hassas tarım uygulamaları ve yapay zeka gibi teknolojiler, yabancı ot kontrolünün etkinliğini artırmada ön plana çıkmaktadır. Aynı zamanda, geleneksel EYY uygulamalarının bu yeni teknolojilerle entegre edilmesi, sürdürülebilir bir tarımsal üretim için hayati bir önem taşımaktadır. Çalışma, etkili ve sürdürülebilir yabancı ot kontrolünün sağlanmasında teknolojik gelişmelerin ve multidisipliner yaklaşımların önemini vurgulamaktadır.

Anahtar kelimeler: Bibliyometrik, Entegre ot yönetimi, Hassas tarım, VOSviewer, Sürdürülebilir tarım

ABSTRACT

Integrated Weed Management (IWM) is a holistic approach based on the strategic application of cultural, mechanical, biological and chemical methods together within the framework of sustainability in weed control. This method aims to provide effective control of weeds in agricultural production while minimizing environmental damage and economic costs. IWM has a critical role in modern agriculture, especially considering the increasing cases of herbicide resistance and environmental impacts. In this study, global literature on IWM was examined by bibliometric analysis method and recent trends and future research directions in the field were determined. As a result of the analyses conducted in Scopus database, it was determined that there were 2130 publications on IWM. The most frequently used keyword in these publications was "Integrated weed management" with 983 times, followed by "herbicide resistance" with 157 times. In the distribution of publications, USA stood out as the country that contributed the most with 678 studies, while 41 publications were obtained from Turkey.

The findings of the study reveal that the role of technological innovations in IWM applications is increasing. Technologies such as sensor-based systems, precision agriculture applications and artificial intelligence are at the forefront in increasing the effectiveness of weed control. At the same time, the integration of traditional IWM applications with these new technologies is of vital importance for sustainable agricultural production. The study emphasizes the importance of technological developments and multidisciplinary approaches in ensuring effective and sustainable weed control.
Keywords: Bibliometrics, Integrated weed management, Precision agriculture, VOSviewer, Sustainable agriculture

Cistus laurifolius L. BİTKİSİNİN (MDA-MB231; Meme kanseri Epiteli), BAZI BİYOLOJİK VE FİTOKİMYASAL ÖZELLİKLERİN ARAŞTIRILMASI

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ÖZET
Bu çalışmada, *Cistus laurifolius* L.'nin meyve, dal ve yaprak kısımlarının ekstraktları hekzan, metilen klorür ve etanol çözücüleri kullanılarak hazırlanmıştır. Hazırlanan ekstraktların DNA, sitotoksik ve antioksidan özellikleri araştırılmıştır. Ekstraktların sitotoksik özellikleri MDA-MB231 (Meme kanseri Epiteli), hücre hatları araştırılmıştır. Hazırlanan tüm ekstraktlar arasında T4 (t-metilen klorür) ekstraktı, diğer ekstraktlara kıyasla daha fazla kanser hücre hattı üzerinde sitotoksik etkiler göstermiştir. Antioksidan testleri DPPH (2,2-difenil-1-pikrilhidrazil) radikal süpürme ve Folin-Ciocalteu yöntemleri kullanılarak yapılmıştır. Her iki testte de T7 (t-etanol) ekstraktının güçlü bir antioksidan etkiye sahip olduğu belirlendi (DPPH yöntemi için IC50 = 0,000015 µg/ml). DNA parçalama çalışmalarında elde edilen sonuçlar, metanolik bitki ekstraktlarının varlığında DNA'nın hidroksil radikal hasarından korunmasını doğrulamaktadır. Sonuç olarak, bazı Cistus laurifolius L. ekstraktlarının önemli biyolojik özelliklere sahip olduğu belirlenmiştir.
Anahtar kelimeler: *Cistus laurifolius* L., sitotoksik etki, antioksidan, DNA temizleme, anti-kanser

INVESTIGATION OF SOME BIOLOGICAL AND PHYTOCHEMICAL PROPERTIES OF *CISTUS LAURIFOLIUS* L. HERB (MDA-MB231; Breast Cancer Epithelium)

ABSTRACT
In this article, extracts of *Cistus laurifolius* L.'s fruits, branches, and leaves were exposed to hexane, methylene chloride, and ethanol as solvents. Then, the produced extracts' DNA cleaving, cytotoxic, and antioxidant activities were examined. In the following cell lines: MDA-MB231 the extracts' cytotoxic potential was examined. T4 (seed-methylene chloride) extract from all generated extracts show cytotoxic effects on a greater number of cancer cell lines than other extracts. By using the DPPH (2,2-diphenyl-1-picrylhydrazil) radical scavenging and Folin-Ciocalteu techniques, antioxidant tests were conducted. T7 (seed-ethanol) extract was found to have a very potent antioxidant activity in both experiments (IC50 for the DPPH technique = 0,000015 µg/ml). The outcomes of DNA cleavage experiments support the idea that plant extracts in methanol protect DNA against hydroxyl radical damage. As a result, it was discovered that some of the Cistus laurifolius L. extracts have significant biological effects on the cell lines under investigation.
Keywords: *Cistus laurifolius* L., cytotoxic effect, antioxidant, DNA cleavage, anti-cancer

KÜTAHYA VE ÇEVRESİNDE KORONAVİRÜS PANDEMİSİNDE KULLANILAN TIBBI DEĞERİ OLAN BİTKİLER

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ÖZET
Bu çalışma Kütahya ili ve çevresinde immün sistemini güçlendirmek için, hastalıklarla mücadelede tedavi edici olarak geleneksel kullanıma sahip olan bazı bitkiler; kekik, adaçayı, zencefil, zerdeçal, hatmi çiçeği, ebegümeci, zeytin yaprağı olarak bu bitki türleri koronavirüs enfeksiyonları ile mücadelede bitkisel kaynaklı doğal terapötikler olarak kullanılma potansiyelleri belirlenmiştir. Korona virüs tedavisinde konvansiyonel tedavinin yanında fitoterapi ve aroma terapinin kullanılmasının yararlı olacağı halk tarafında düşünülmüş ve kullanılmıştır.
Bazı hastalıkları tedavi edici, bazı rahatsızlıkları giderici ve önleyici özelliği olan bitkilere tıbbi bitkiler veya şifalı bitkiler adı verilmektedir. Bu bitkilerin bir kısmından birçok ilaçların hazırlanmasında kullanılan ham maddeler de elde edilmekte. Tıbbi bitkilere son yıllarda duyulan ilginin artmasında bir takım sebepler vardır. Bu sebepler şöyle sıralanabilir; birincisi ekonomik sebepler halkın rahat bir şekilde ulaşarak tedavi olması, ikincisi sentetik ilaçların yan etkilerin olması, üçüncüsü ümit var olması bazı ağır hastalıklarda modern tıbbın tedavisinde netice alınmadığında, son bir ümit olarak yakın çevrelerinden veya basından öğrendikleri bitkilerden şifa beklemeleri.
Anahtar kelime: Etnobotanik, Tıbbi ve Aromatik Bitkiler, Korona virüs

HERBS OF MEDICINAL VALUE USED IN THE CORONAVIRUS PANDEMIC IN KÜTAHYA AND ITS SURROUNDINGS

ABSTRACT
In this study, in order to strengthen the immune system in and around Kütahya province, some plants that have traditional use as therapeutic in the fight against diseases; thyme, sage, ginger, turmeric, marshmallow flower, hibiscus, olive leaf as these plant species, their potential to be used as herbal natural therapeutics in the fight against coronavirus infections were determined. The use of phytotherapy and aroma therapy in addition to conventional treatment in the treatment of coronavirus has been thought and used by the public.
Plants that have the ability to treat some diseases, relieve and prevent some ailments are called medicinal plants or medicinal plants. Raw materials used in the preparation of many medicines are also obtained from some of these plants. There are a number of reasons for the increasing interest in medicinal plants in recent years. These reasons can be listed as follows; firstly, economic reasons, the public can be treated by reaching easily, secondly, the side effects of synthetic drugs, thirdly, there is hope, in some severe diseases, when there is no result in the treatment of modern medicine, as a last hope, they expect healing from the plants they learn from their close environment or the press.
Keyword: Ethnobotany, Medicinal and Aromatic Plants, Corona virus

İSTANBUL 112 ACİL ÇAĞRI MERKEZİ'NDE MAKİNE ÖĞRENMESİ İLE ÇAĞRI SAYISININ TAHMİN EDİLMESİ VE ÇAĞRI KARŞILAMA PERSONELİ SAYISININ BELİRLENMESİNE YÖNELİK İŞGÜCÜ OPTİMİZASYONU

WORKFORCE OPTIMIZATION FOR ESTIMATING THE NUMBER OF CALLS WITH MACHINE LEARNING AND DETERMINING THE NUMBER OF CALL ANSWERING PERSONNEL IN ISTANBUL 112 EMERGENCY CALL CENTER

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ÖZET

Ülkemizde ve dünyada planlama konusunda yapılan çalışmalar çok büyük önem arz etmektedir. Planlama, yöneticilerin doğru ve etkili kararlar verebilmesi için gerekli olan ön hazırlıktır. Bu çalışma, planlama konusunda görülen eksik hususların az da olsa giderilmesi adına yapılan çalışmaları içermektedir. İstanbul 112 Acil Çağrı Merkezi Müdürlüğünde yapılan bu çalışmaya istinaden kurumdaki çağrı karşılayıcı personele gelen çağrı adetleri 1 aylık veri kullanılarak 1 haftalık olarak tahmin edilmiştir. Kurulan GAMS modelleri ile işgücü optimizasyonu çalışmaları yapılmıştır. Bu modeller, maliyet ve zaman faktörleri göz önünde bulundurularak oluşturulmuştur. Bu çalışmanın amacı, kurumdaki verimliliği arttırarak çağrı karşılayıcı personelin üzerine binen yükü azaltmaktır. Önerdiğimiz modeller 133 çağrı karşılayıcı kapasiteli kurumda bulundurulması doğru olan çağrı karşılayıcı personel sayısını ilgili faktörlere bağlı kısıtlar dahilinde minimize etmektedir. Makine öğrenmesi ile çağrı sayılarının tahmin edilmesinden önce önemli bir istatistiksel model olan ARIMA modeli kullanılmıştır. Tahminlerin daha doğru olması için makine öğrenmesi yöntemleri kullanılacaktır. GAMS programında ise kurulacak olan zaman minimizasyonu modeli ile zaman hedeflerini odağımıza alarak işgücü optimizasyon çalışmasını gerçekleştirmek hedeflenmektedir. Bu çalışma, İstanbul 112 Acil Çağrı Merkezi'nin etkinliğini artırmaya yönelik bir adım olup, diğer büyük şehirlerdeki acil çağrı merkezlerinin iş gücü yönetiminde de uygulanabilir sonuçlar doğurabilecektir. Gelecekteki araştırmalar, makine öğrenmesi ve optimizasyon modellerinin daha da geliştirilerek daha dinamik ve esnek çağrı merkezi yönetim sistemlerinin oluşturulmasına olanak tanıyacaktır.

Anahtar Kelimeler: Acil çağrı merkezi, optimizasyon, işgücü optimizasyonu

ABSTRACT

Studies on planning in our country and in the world are of great importance. Planning is the preliminary preparation necessary for managers to make correct and effective decisions. This study includes the studies carried out in order to eliminate the missing issues seen in planning, even if a little. Based on this study conducted at Istanbul 112 Emergency Call Center Directorate, the number of calls received by the call answering personnel in the institution was estimated for 1 week using 1-month data. Workforce optimization studies were carried out with the established GAMS models. These models were created by considering cost and

time factors. The aim of this study is to reduce the burden on the call answering staff by increasing the efficiency in the organization. The models we propose minimize the number of call answering personnel that should be kept in an organization with 133 call answering capacity within the constraints of the relevant factors. Before predicting the number of calls with machine learning, ARIMA model, which is an important statistical model, is used. Machine learning methods will be used for more accurate forecasts. With the time minimization model to be established in GAMS program, it is aimed to perform the workforce optimization study by focusing on time targets. This study is a step towards improving the efficiency of the Istanbul 112 Emergency Call Center, and is an important step towards improving the workforce management of emergency call centers in other major cities.

Keywords: Emergency call center, optimization, workforce optimization

KOMPULSİF SATIN ALMA DAVRANIŞI ÜZERİNE BİR LİTERATÜR İNCELEMESİ
A LITERATURE REVIEW ON COMPULSIVE BUYING BEHAVIOUR

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ÖZET

Psikoloji, sosyoloji, pazarlama vb. birçok alanın temelinde insan unsuru yer almaktadır. Bu nedenle araştırmacılar insanların çeşitli davranışlarını anlamak ve tanımlamak için farklı disiplinlerde ve farklı yöntemlerle araştırmalar yapmaktadırlar. Kompulsif satın alma davranışı da insan davranışları konularında yapılan araştırmalardan biridir. İlk olarak psikiyatrik açıdan incelenen kompulsif satın alma davranışı zamanla pazarlama ve ekonomi alanlarında da araştırma konusu olmaya başlamıştır. Psikiyatrik açıdan tanımlanan kompulsif satın alma davranışı aşırı tüketim isteği anlamına gelen "oniomonia" ve her şeye sahip olma isteği anlamına gelen "affluenza" bozuklukları ile birlikte görülmektedir. Psikoloji alanında Türkçe telaffuzu kompulsif olarak adlandırılmakta ve engellenemez, istem dışı, kontrolsüz ve önüne geçilemez anlamlarına gelmektedir. Bu çalışmanın amacı kompulsif satın alma davranışı üzerinde yapılmış olan tez çalışmalarını ele alarak incelemektir. Bu bağlamda ulusal tez merkezi olan Yök Tez'den konu ile yapılmış olan toplamda 42 adet tez çalışması bilim dalları ve türleri de dikkate alınarak incelenmiştir. Tez çalışmalarından bir tanesi yazar tarafından erişime izin verilmediği için inceleme dışı bırakılmıştır. Çalışmaların net bir şekilde görülebilmesi amacıyla türleri, yılları ve bilim dalları dahil olacak şekilde tablolaştırılmıştır. Tez çalışmalarında incelenen noktalar çalışmanın konusu ve elde edilen sonuçlardır. Bu incelemeler ışığında konu ile ilgili literatürdeki boşluğun tespit edilebilmesi, gelecek çalışmalara araştırılması gereken konular hakkında fikir olması ve genel olarak tüketicileri kompulsif satın alma davranışına iten nedenlerin neler olduğunun açıklayıcı bir şekilde ortaya konulması beklenmektedir. Tezlerin incelenmesi sonucunda kompulsif satın alma davranışının genel olarak psikoloji ve işletme bilim dallarında çeşitli açılardan ele alınarak incelendiği görülmüştür. Tüketicilerin kompulsif satın alma davranışlarının altında yatan nedenler ise şu şekilde sıralanabilir; materyalizm, moda tutkunluğu, gösterişçi tüketim, statü eğilimi, işletmelerin uyguladığı psikolojik faktörler (indirimler, hatırlatıcı, bilgilendirici mesajlar), internet ve sosyal medya bağımlılığı, gelişmeleri kaçırma korkusu, yaşam doyumu, kaygı düzeyi, aile ve sosyal hayat, kredi kartı kullanımı, psikolojik faktörler ve çeşitli kişilik özellikleridir.

Anahtar Kelimeler: Tüketici, Satın Alma Davranışı, Kompulsif Satın Alma Davranışı

ABSTRACT

Many fields such as psychology, sociology, marketing etc. are based on the human element. For this reason, researchers conduct research in different disciplines and with different methods to understand and define various behaviours of people. Compulsive buying behaviour is one of the researches on human behaviour. Compulsive buying behaviour, which was first examined from a psychiatric perspective, has started to be the subject of research in

the fields of marketing and economics. Compulsive buying behaviour, which is defined from a psychiatric perspective, is seen together with ‘oniomonia’, which means the desire for excessive consumption, and ‘affluenza’, which means the desire to have everything. In the field of psychology, its Turkish pronunciation is called compulsive and it means unstoppable, involuntary, uncontrolled and unavoidable. The aim of this study is to examine the thesis studies on compulsive buying behaviour. In this context, a total of 42 thesis studies on the subject from Yök Thesis, the national thesis centre, were examined by taking into account the branches and types of science. One of the thesis studies was excluded from the examination because access was not allowed by the author. In order to see the studies clearly, they were tabulated including their types, years and branches of science. The points examined in thesis studies are the subject of the study and the results obtained. In the light of these examinations, it is expected that the gap in the literature on the subject can be identified, future studies will have an idea about the issues that need to be researched, and in general, the reasons that push consumers to compulsive buying behaviour are expected to be revealed in an explanatory manner. As a result of the examination of the theses, it has been seen that compulsive buying behaviour has been examined from various perspectives in the fields of psychology and business administration. The reasons underlying the compulsive buying behaviour of consumers can be listed as follows; materialism, fashion passion, ostentatious consumption, status tendency, psychological factors applied by businesses (discounts, reminder, informative messages), internet and social media addiction, fear of missing developments, life satisfaction, anxiety level, family and social life, credit card use, psychological factors and various personality traits.

Keywords: Consumer, Purchase Behaviour, Compulsive Purchase Behaviour

IMPACT OF EMERGING TECHNOLOGIES ON SERVICE-LEARNING EXPERIENCES FOR PRESERVICE UNDERGRADUATE TEACHERS AT SOKOTO STATE UNIVERSITY

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ABSTRACT

This research investigates the impact of emerging technologies on the service-learning experiences of preservice undergraduate teachers at Sokoto State University, Nigeria. Utilizing a cross-sectional survey design, the study collected quantitative data from 150 preservice teachers to assess their perceptions of technology integration in service learning, the challenges faced, and the potential benefits for pedagogical skill development. Findings indicate that preservice teachers generally perceive emerging technologies as effective tools for enhancing their educational and community engagement experiences. However, significant barriers, including limited access to reliable internet, inadequate technological resources, and cultural factors, hinder the effective use of these technologies. The study highlights the need for improved infrastructure and targeted training programs to equip preservice teachers with the necessary skills to leverage technology in their service-learning projects. By addressing these challenges, educational institutions can better prepare future educators for the demands of modern teaching environments. The insights gained from this research contribute to the understanding of how emerging technologies can transform service learning in teacher education, particularly in developing regions, and provide a foundation for future studies in this area.

Keywords: Emerging Technologies, Service Learning, Preservice Teachers, Educational Engagement, Challenges and Barriers

THE IMPACT OF WATER EFFLUENT ON THE WATER QUALITY OF RECIPIENT COMMUNITIES AROUND FCT, NIGERIA

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Abstract

Industries and farm processing houses are established to fulfil the demand of the ever-increasing world population, Nigeria inclusive. This could be the main reason why industrialization and agriculture are regarded as the cornerstone of modern developmental strategies. However, despite the significant contribution to economic and human welfare, a lot of waste products are generated in all forms which often leads to the creation of hazards, especially microbial contaminations. This study examines the effect of industrial and agricultural effluents on the water quality of some water bodies within and around the Federal Capital Territory (FCT), Nigeria. To achieve this, a total of eight (8) water samples were collected during the raining season and analyzed for the microbial characteristics. The results showed that during the period under study, the Total Coliform and *E. coli* values were found to be higher than NESREA standards. This is not an acceptable phenomenon and therefore call for attention in view of the populace that depends on these water source for their domestic and recreational activities. There is need to provide modern water treatment system for the people around the communities to prevent outbreak of water-related illnesses. Basic treatment knowledge is also required for the recipient communities.

Keywords: Industrial, Wastes, Contamination, Quality, Water and effluents

OBEZİTE VE İNTERNET BAĞIMLILIĞI
OBESITY AND INTERNET ADDICTION

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ÖZET
Modern yaşamın yaygın sorunları arasında yer alan obezite ve internet bağımlılığı günümüzde hızla yayılan ve toplum sağlığını tehdit eden önemli iki sorundur. Bu iki durum, bireylerin yaşam kalitesini olumsuz etkileyen ve birbirini pekiştiren faktörler olarak giderek daha fazla dikkat çekmektedir. Obezite, vücutta aşırı yağ birikimi olarak tanımlanmakta ve sağlıksız beslenme, fiziksel aktivite eksikliği, genetik yatkınlık, stres gibi faktörlerle ilişkilendirilmektedir. İnternet bağımlılığı ise bireylerin internet kullanımını kontrol edememesi ve günlük yaşamlarını olumsuz etkilemesi şeklinde tanımlanır. Bu bağımlılık, özellikle gençler ve üniversite öğrencileri arasında yaygınlaşarak bireylerin fiziksel aktivite düzeyini azaltmakta ve sağlıksız beslenme alışkanlıklarını teşvik etmektedir.
Araştırmalar, internet bağımlılığı ile fiziksel aktivite düzeyi arasında ters bir ilişki olduğunu göstermektedir. İnternet bağımlılığı, bireylerin hareketsiz bir yaşam tarzı benimsemesine ve bu durumun zamanla obezite riskini artırmasına neden olmaktadır. Aynı zamanda hem obezite hem de internet bağımlılığı depresyon, anksiyete ve sosyal izolasyon gibi mental sağlık sorunlarına katkıda bulunmakta, bu da bireylerin yaşam kalitesini olumsuz etkilemektedir. Bu bağlamda, halk sağlığı hemşirelerinin bu iki sağlık sorunu ile mücadelede eğitim, farkındalık artırma ve bireylerin sağlıklı yaşam alışkanlıkları kazanmasına destek sağlama konularında önemli roller üstlenebileceği öne sürülmektedir.
Sonuç olarak, obezite ve internet bağımlılığı arasındaki bu etkileşim, bireylerin fiziksel ve mental sağlığı üzerinde önemli etkiler yaratmaktadır. Sağlıklı yaşam tarzının teşviki ve internet bağımlılığını azaltmaya yönelik önleyici eğitim programları ve farkındalık çalışmaları, toplum sağlığını korumak ve bireylerin yaşam kalitesini artırmada önemli rol oynayabilir.
Anahtar Kelimeler: Obezite, İnternet Bağımlılığı, Halk Sağlığı, Fiziksel Aktivite, Mental Sağlık, Halk Sağlığı Hemşireliği

ABSTRACT
Obesity and internet addiction, which are among the common problems of modern life, are two important problems that spread rapidly and threaten public health. These two conditions are attracting more and more attention as factors that negatively affect the quality of life of individuals and reinforce each other. Obesity is defined as excessive fat accumulation in the body and is associated with factors such as unhealthy diet, lack of physical activity, genetic predisposition and stress. Internet addiction is defined as individuals' inability to control their internet use and its negative impact on their daily lives. This addiction is especially prevalent among young people and university students, reducing physical activity levels and encouraging unhealthy eating habits.
Studies show that there is an inverse relationship between internet addiction and physical activity level. Internet addiction causes individuals to adopt a sedentary lifestyle, which

increases the risk of obesity over time. At the same time, both obesity and internet addiction contribute to mental health problems such as depression, anxiety and social isolation, which negatively affect the quality of life of individuals. In this context, it is suggested that public health nurses can play important roles in combating these two health problems by providing education, raising awareness and supporting individuals to gain healthy living habits.

In conclusion, this interaction between obesity and internet addiction has significant effects on the physical and mental health of individuals. Preventive education programs and awareness-raising efforts to promote healthy lifestyles and reduce internet addiction can play an important role in protecting public health and improving the quality of life of individuals.

Keywords: Obesity, Internet Addiction, Public Health, Physical Activity, Mental Health, Public Health Nursing

TÜRKİYE'DE EKONOMİK KALKINMANIN BELİRLEYİCİLERİ: EKONOMİK VE SOSYAL FAKTÖRLER
DETERMINANTS OF ECONOMIC DEVELOPMENT IN TURKEY: ECONOMIC AND SOCIAL FACTORS

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ÖZET
Kalkınma, ekonomik büyümenin yanı sıra ülkenin sosyal, ekonomik, siyasal sisteminde iyileşmeyle birlikte insan yaşamının maddi-manevi alanlarda gelişmesi ve toplumsal refahın artması, toplumsal eşitsizliklerin ise azalması olarak tanımlanmaktadır. Büyümenin aksine kalkınma, sadece niceliksel olarak ifade edilemez bir kavram olup, hukuki, siyasi, kurumsal, yönetsel ve sosyal faktörleri de kapsamaktadır. Ekonomik kalkınma ülkelerin gelişmişlik seviyeleri ile ilgili bir kavram olup insanın yaşam kalitesini, özgürlüğünü, özgüvenini, yeteneğini geliştiren bir süreçtir. Bu niteliklerinden ötürü başta gelişmekte olan ülkeler olmak üzere pek çok ülkenin önem verdiği bir konudur. Tarihi, kültürel ve coğrafi konumu ile stratejik bir öneme sahip olan Türkiye, son yıllarda hızlı bir şekilde ekonomik dönüşüm süreci geçirmektedir. Ancak bu süreç sadece ekonomik göstergeler ile sınırlı olmayıp, aynı zamanda sosyal faktörler de bu dinamikler üzerinde belirleyici rol üstlenmektedir.
Ekonomik ve sosyal unsurların etkileşimleri, ekonomik kalkınmanın belirleyicilerinin neler olacağını şekillendirmektedir. En temel faktör olan ekonomik faktörlerin başında üretkenlik, büyüme, gelir dağılımı, ticaret hacmi, sanayi politikaları, dolaysız yabancı sermaye yatırımları, finansal yapı, sermaye birikimi, teknoloji, doğal kaynaklar, hammadde, altyapı ve kamu gelirleri vb. faktörlerin geliştirilmesi gelmektedir. Nüfus yapısı, istihdam olanakları, eğitim seviyesi, sağlık hizmetleri, adalet, sosyal adalet, toplumsal cinsiyet rolleri, cinsiyet eşitliği vb. sosyal faktörler, ekonomik faktörlere bağlı olarak gelişme sağlayabilmektedir.
Bu doğrultuda Türkiye'de son yıllarda uygulanan yapısal reformlar ve teşvik politikaları ekonomik büyümeye katkı sağlamıştır. Ancak bu büyümenin sürdürülebilir olması ve kalkınma düzeyinin artması için sosyal faktörlerde oluşturulacak iyileştirmeler olmazsa olmazlardandır. Eğitim seviyesi, ekonomik kalkınmanın temel taşlarından biri olan *nitelikli işgücünün* oluşturulması için çok önemli ve kritik bir unsurdur. Sağlık hizmetlerine erişim, sağlıklı bir toplum ve dolayısıyla *genel refah seviyesi* için gereklilik taşımaktadır. Sağlıklı toplum verimli bir üretkenliği de beraberinde getirecektir. Adalet sistemi güvence doğuracak, sosyal adalet ve eşitlik toplumsal istikrarı sağlayarak ekonomik büyüme ile birlikte kalkınmanın kalitesini belirleyecektir.
Bu çalışma, Türkiye'de ekonomik kalkınmanın belirleyicilerini kapsamlı bir şekilde inceleyerek, ekonomik ve sosyal etkileşimlerin dinamiklerini ortaya koymayı amaçlamaktadır. Ekonomik ve sosyal faktörlerde meydana gelecek gelişmelerin, bu etkileşimleri anlamada önemli bir rol oynayacağı ve dolayısıyla kalkınma politikalarının oluşturulmasında rehberlik edebileceği düşünülmektedir.
Anahtar Kelimeler: Ekonomik kalkınma, Sosyal faktörler, Ekonomik kalkınmanın belirleyicileri.

ABSTRACT

Development is defined as the improvement of a country's social, economic, and political systems, as well as economic growth, the improvement of human life in material and spiritual terms, and the increase of social welfare and the reduction of social inequalities. Unlike growth, development is a concept that cannot be expressed only in quantitative terms and includes legal, political, institutional, administrative and social factors. Economic development is a concept related to the level of development of countries and is a process that improves the quality of life, freedom, self-confidence and capabilities of people. Due to these qualities, it is an issue that many countries, especially developing countries, attach importance to. Turkey, which has a strategic importance due to its historical, cultural and geographical location, has been undergoing a rapid economic transformation process in recent years. However, this process is not only limited to economic indicators, but social factors also play a decisive role in this dynamic.

The interaction between economic and social factors shapes the determinants of economic development. The most basic economic factors are productivity, growth, income distribution, trade volume, industrial policy, foreign direct investment, financial structure, capital accumulation, technology, natural resources, raw materials, infrastructure, and public revenues. Social factors, such as population structure, employment opportunities, education levels, health services, justice, social equity, gender roles, gender equality, etc., can make development dependent on economic factors.

In this regard, the structural reforms and incentive policies implemented in Turkey in recent years have contributed to economic growth. However, in order for this growth to be sustainable and the level of development to increase, improvements in social factors are essential. The level of education is a very important and critical element in creating a skilled workforce, which is one of the cornerstones of economic development. Access to health services is essential for a healthy society and thus for the general welfare. A healthy society will lead to efficient productivity. The justice system will provide security, and social justice and equality will ensure social stability and determine the quality of economic growth and development.

This study aims to reveal the dynamics of economic and social interactions by comprehensively analyzing the determinants of economic development in Turkey. It is believed that the development of economic and social factors will play an important role in understanding these interactions and thus guide the formulation of development policies.

Keywords: Economic development, Social factors, Determinants of economic development.

NORMAL VAJİNAL DOĞUM EYLEMİNDE VAJİNAL MUAYENE DENEYİMİNİN KADIN SAĞLIĞINA ETKİSİ
EFFECT OF VAGINAL EXAMINATION EXPERIENCE ON WOMEN'S HEALTH DURING NORMAL VAGINAL LABOR

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ÖZET
Bu çalışma, normal vajinal doğum eyleminde vajinal muayene deneyiminin kadın sağlığına etkisini güncel literatür doğrultusunda incelemek amacıyla ele alınmıştır. Vajinal muayene, doğum sırasındaki bakım sürecine yön veren rutin bir klinik değerlendirme aracıdır. Doğum eylemi sırasında klinik değerlendirme amacıyla yapılan vajinal muayeneler, kadınlar üzerinde kalıcı ve olumsuz bir etkiye (ağrı, acı, rahatsızlık verici, stresli, utanç verici, korkutucu, memnuniyeti azaltıcı, vb.) sahip olup fetal ve genitoüriner sistem enfeksiyonları gelişimi açısından risk oluşturmaktadır. Sağlık profesyonellerinin doğum sürecinde gerekmedikçe vajinal muayene yapmamasıyla, kadınların mahremiyetine dikkat etmesiyle, ergonomik doğum ortamlarını düzenlemesiyle, uygun iletişim teknikleri kullanarak gerekli bilgi ve bakımı sağlamasıyla kadınların doğum algısı pozitifleşmektedir. Normal vajinal doğum eyleminde vajinal muayene deneyiminin kadın sağlığı üzerindeki etkisine yönelik güncel literatür doğrultusunda hazırlanan bu çalışmanın, sağlık çalışanlarına yön gösterici olabileceği ve literatüre katkı sağlayacağı düşünülmektedir.
Anahtar Kelimeler: Normal vajinal doğum eylemi, Vajinal muayene, Kadın Sağlığı, Sağlık Profesyoneli

ABSTRACT
This study was conducted to examine the effect of vaginal examination experience on women's health in line with the current literature. Vaginal examination is a routine clinical assessment tool that guides the care process during labor. Vaginal examinations performed for clinical evaluation purposes during labor have a permanent and negative effect on women (pain, discomfort, stress, embarrassment, frightening, reducing satisfaction, etc.) and pose a risk for the development of fetal and genitourinary system infections. Women's perception of labor becomes positive when health professionals do not perform vaginal examinations unless necessary during the labor process, pay attention to women's privacy, organize ergonomic birth environments, and provide the necessary information and care using appropriate communication techniques. It is thought that this study, prepared in line with the current literature on the effect of vaginal examination experience on women's health in normal vaginal labor, can guide health professionals and contribute to the literature.
Keywords: Normal vaginal labor, Vaginal examination, Women's health, Health Professional

YENİ FONKSİYONEL GIDALARIN VE NUTRASÖTİK ÜRÜNLERİN GELİŞTİRİLMESİ

DEVELOPMENT OF NEW FUNCTIONAL FOODS AND NUTRACEUTICAL PRODUCTS

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ÖZET
Bulaşıcı olmayan hastalıkların, özellikle kardiyovasküler hastalıklar, obezite, diyabet ve bağışıklık sistemiyle ilişkili bozuklukların dünya genelinde artması hem tüketicilerin hem de gıda endüstrisinin sağlık odaklı ürünlere yönelmesine sebep olmuştur. Bu bağlamda, fonksiyonel gıdalar ve nutrasötikler, temel beslenmenin ötesinde sağlık yararları sunma potansiyelleriyle geniş çapta ilgi görmektedir. Hem önleyici hem de tedavi edici ihtiyaçlara cevap verme amacı taşıyan bu ürünler, sağlık destekleyici özellikleriyle dikkat çekmektedir. Fonksiyonel gıdalar, polifenoller, omega-3 yağ asitleri, karotenoidler ve probiyotikler gibi biyoaktif bileşiklerle zenginleştirilmiş olup, belirli fizyolojik fonksiyonları iyileştirme ve kronik hastalık riskini azaltma amacı taşımaktadır. Bu gıdalar, tüketicilere, faydalı bileşenleri günlük diyetlerine entegre ederek sağlıklarını proaktif bir şekilde yönetme fırsatı sunmaktadır. Nutrasötikler ise genellikle kapsül, toz veya sıvı gibi daha yoğun formlarda sunularak, kardiyovasküler sağlığı iyileştirme, bağışıklık fonksiyonunu artırma veya metabolik durumları yönetme gibi belirli sağlık sonuçlarına yönelik hedeflenmiş müdahaleler sunmaktadır. Bu derleme, fonksiyonel gıda geliştirilmesinin bilimsel temellerini, ürün tasarımındaki yenilikleri, pazar trendlerini ve biyo-yararlanım ve düzenleyici uyumlulukla ilgili zorlukları kapsamlı bir şekilde incelemektedir. Kişiselleştirilmiş beslenme ve sürdürülebilir üretim yöntemleri gibi gelişen teknolojiler, fonksiyonel gıda endüstrisinin gelecekteki yönelimleri olarak ele alınmaktadır. Elde edilen bulgular, fonksiyonel gıda ürünlerinin başarılı bir şekilde geliştirilmesi ve ticarileştirilmesinde bilimsel araştırmaların, tüketici davranışına dair içgörülerin ve düzenleyici çerçevelerin entegrasyonunun önemini vurgulamaktadır. Bu çalışma, bu ürünlerin anlamlı sağlık yararları sunma vaadini yerine getirme potansiyellerine ve günümüzün sağlık bilincine sahip tüketicilerinin titiz taleplerini karşılayabilme kapasitelerine dair önemli içgörüler sunmaktadır.
Anahtar Kelimeler: Hastalık, sağlık, biyoaktif, fonksiyonel gıdalar, nutrasötikler.

ABSTRACT
The global rise in non-communicable diseases, including cardiovascular diseases, obesity, diabetes, and immune-related disorders, has shifted the focus of both consumers and the food industry towards health-promoting products. In response, functional foods and nutraceuticals have gained widespread attention for their potential to offer health benefits beyond basic nutrition, addressing both preventive and therapeutic needs. Functional foods, enriched with bioactive compounds such as polyphenols, omega-3 fatty acids, carotenoids, and probiotics, aim to improve specific physiological functions and reduce the risk of chronic diseases. These foods provide an opportunity for consumers to manage their health proactively by integrating beneficial components into their daily diet. On the other hand, nutraceuticals, which are often presented in more concentrated forms like capsules, powders, or liquids, deliver targeted interventions aimed at specific health outcomes, such as improving cardiovascular health, enhancing immune function, or managing metabolic conditions. This paper provides a comprehensive review of the scientific foundations of functional food development, innovations in product design, market trends, and the challenges related to bioavailability and regulatory compliance. Emerging technologies, such as personalized nutrition and sustainable production methods, are explored as future directions for the functional food industry. The findings highlight the importance of integrating scientific research, consumer behavior insights, and regulatory frameworks in the successful development and commercialization of functional food products. This paper offers critical insights into how these products can fulfil their promise of delivering meaningful health benefits while meeting the rigorous standards of today's health-conscious consumers.
Key Words: Disorder, health, bioactive, functional foods, nutraceuticals.

KPSS SINAVINA HAZIRLANAN ÖĞRENCİLERİN BOŞ ZAMAN FAALİYETLERİNE KATILIM BİÇİMLERİNİN ARAŞTIRILMASI
FREE TIME ACTIVITIES OF STUDENTS PREPARING FOR THE KPSS EXAM RESEARCH OF PARTICIPATION FORMS

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ÖZET
Bu çalışma Gaziantep ilindeki KPSS sınavı için dershaneye giden öğrencilerinin boş zaman etkinliklerinde katılımlarının incelenmesi amacıyla yapılmıştır.
Araştırma denekleri Gaziantep ilinde seçilen 161 kadın ve 281 erkek olmak üzere toplam 442 öğrenciden katılmıştır . Araştırma için anket yöntemi ile veriler toplanmıştır. Anket formu daha önce Kırkpınar (2004) tarafından geliştirilen anket formundan yararlanılmıştır.
Araştırmaya katılan öğrencilerin derslerin olmadığı zamanlarında en fazla yaptıkları rekreasyonel faaliyetler sırasıyla; "Dinlenirim"(%34.3), "spor yaparım veya izlerim" (%31.4),"Müzik dinlerim veya TV izlerim"(%20.3),"Part-time çalışırım"(%14.0) idi.
Dershane çıkışı boş saatleri değerlendirme sıralaması; "kitap,gazete ve dergi okurum"(%27.3),"TV seyrederim"(%24.7)."Sinema, tiyatroya giderim"(%24.2),"Müzik aleti çalarım veya dinlerim"(%23.8) dir.
Öğrencilerin hafta sonlarındaki boş zaman faaliyetlerine katılımı; 7 faaliyet arasında "spor müsabakalarını izlerim" 3. sırayı almış, "Spor yaparım" 4. sırayı almıştır. Araştırmaya katılan öğrencilerden daha önce spor yapanların (%82.9), daha önce spor yapmayanların ise (%17.1) olduğu belirlenmiştir.
Yapılan araştırmada öğrencilerin (%36.4) ü boş zaman faaliyetlerine hiç katılmamakta ve (%17.1) i boş zamanın doldurulmasında güçlük çekmektedir. Bunun sebebi ise ilk sırada yeterli vaktin olmaması (%25.7), 2. sırada ise ekonomik yetersizlik (%13.6) olmuştur.
Boş zaman faaliyetlerine katılma alanları içerisinde belirlenen 4 alan için spor tesisleri (%10.0) ile 3. sırada yer almaktadır.
Boş zaman etkinliklerinin insanlar üzerindeki en büyük etkisi "Dinlendirici bulmaları" (%63.6) dır. Boş zaman faaliyetlerine katılım şekli sırasıyla "Arkadaş grubuyla"(%40.7), "Yalnız"(%31.4), "Ailemle"(27.9) idi.
Anahtar Kelimeler: Sınav, Öğrenci, Boş Zaman

SUMMARY
This study was conducted to examine the participation of students who went to private teaching institutions for the KPSS exam in Gaziantep province in their leisure time activities.
The subjects of the research were selected from 442 students, 161 female and 281 male, in the province of Gaziantep. Data were collected for the research using a survey method. The survey form was used, which was previously developed by Kırkpınar (2004).
The most common recreational activities of the students participating in the study when they did not have classes were; "I rest" (34.3%), "I do or watch sports" (31.4%), "I listen to music or watch TV" (20.3%), " I work part -time" (14.0%).
The order of using the free time after the course is; "I read books, newspapers and magazines" (27.3%), "I watch TV" (24.7%), "I go to the cinema or theatre" (24.2%), "I play or listen to a musical instrument" (23.8%) .
Participation of students in leisure activities on weekends; "I watch sports competitions" ranked 3rd among 7 activities, "I do sports" ranked 4th. It was determined that among the

students participating in the research, there were those who had previously done sports (82.9%) and those who had not done sports before (17.1%).
In the research, 36.4% of the students do not participate in free time activities at all and 17.1% of them have difficulty in filling their free time. The reason for this is the lack of enough time (25.7%) and the second reason is financial inadequacy (13.6%).
Sports facilities (10.0%) are ranked 3rd among the 4 areas determined among the areas of participation in leisure activities.
The biggest effect of leisure activities on people is “Finding them relaxing” (63.6%). The form of participation in leisure activities was “With a group of friends” (40.7%), “Alone” (31.4%), “With my family” (27.9%), respectively.
Keywords: Exam, Student, Free Time.

DİJİTAL İKİZ SİSTEMLERİ VE IOT TEKNOLOJİSİNİN ÖNEMİ VE UYGULAMALARI
THE IMPORTANCE AND APPLICATIONS OF IOT TECHNOLOGY IN DIGITAL TWIN SYSTEMS

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ÖZET
Dijital İkiz (DT) ve IoT teknolojileri, endüstride devrim niteliğinde yenilikler sunarak operasyonel süreçlerin optimizasyonuna önemli katkılar sağlar. Dijital İkiz kavramı, ilk olarak 2002 yılında Dr. Michael Grieves tarafından Ürün Yaşam Döngüsü Yönetimi (Product Lifecycle Management - PLM) alanında tanıtılmıştır. Kitapta bu kavram, fiziksel varlıkların sanal bir modelini oluşturarak, bu varlıkların yaşam döngüsü boyunca gerçek zamanlı performansını izleme, analiz etme ve gelecekteki durumunu tahmin etme imkanı sunar.

Dijital İkiz (DT) modelleri ilk olarak NASA'nın uzay araştırmaları ve ekipmanlarının izlenmesi amacıyla kullanıldı. NASA, özellikle uzak mesafelerde yer alan uzay araçlarının performansını anlık olarak gözlemlemek ve arıza durumlarını önceden tespit edebilmek için dijital ikiz modellerini kullanmaya başladı. NASA'nın bu teknolojiyi benimsemesi, Dijital İkiz kavramının yalnızca endüstri değil, uzay araştırmaları gibi kritik alanlarda da değerli bir araç olduğunu gösterdi. Bu uygulama, Dijital İkiz'in karmaşık sistemlerde güvenlik ve verimliliği artırabileceğini kanıtladı ve teknolojinin endüstrideki gelişimini hızlandırdı.

IoT (Nesnelerin İnterneti) teknolojisi ise Dijital İkiz sürecine fiziksel varlıklardan veri toplayarak destek verir. IoT sensörleri aracılığıyla toplanan sıcaklık, basınç, hız gibi veriler Dijital İkiz'e aktarılır ve modelin güncel kalmasını sağlar. Bu süreç, özellikle üretim, sağlık, enerji ve savunma gibi sektörlerde geniş bir kullanım alanına sahiptir. Örneğin, bir çimento fabrikasındaki üretim hatlarının ve makinelerinin dijital ikizleri, makinelerin performansını gerçek zamanlı olarak izleyerek, potansiyel arızaların önceden tespit edilmesine yardımcı olur. Benzer şekilde, sağlık sektöründe tıbbi cihazların dijital ikizleri, hasta bakım süreçlerini iyileştirmek için kullanılır.

Dijital ikiz teknolojisi, IoT, makine öğrenmesi, yapay zeka, bulut bilişim ve büyük veri gibi birden fazla teknolojinin sinerjisiyle ortaya çıkan güçlü bir araçtır. Toplanan veriler, Makine Öğrenmesi ve Yapay Zeka algoritmalarıyla analiz edilerek, tahmine dayalı bakım ve karar destek süreçlerini daha verimli hale getirir. Bulut bilişim ve büyük veri teknolojileri ise dijital ikizlerin büyük miktarda veriyi saklama ve işleme ihtiyacını karşılayarak, bu sistemlerin daha geniş çapta uygulanmasını mümkün kılar. Bu entegre yaklaşım, endüstriyel süreçlerin optimizasyonunda devrim yaratmaktadır.

Anahtar Kelimeler : Dijital İkiz, Nesnelerin İnterneti, Gerçek Zamanlı Veri Analitiği, Bulut Bilişim, Büyük Veri

ABSTRACT

Digital Twin and IoT technologies provide revolutionary innovations in the industry and make significant contributions to the optimization of operational processes. The Digital Twin concept was first introduced in 2002 by Dr. Michael Grieves in the field of Product Lifecycle Management (PLM). In the book, this concept provides the opportunity to monitor, analyze and predict the real-time performance of physical assets throughout their lifecycle by creating a virtual model.

Initially, NASA utilized Digital Twin models to monitor spacecraft and equipment. By employing Digital Twins, NASA was able to observe the performance of spacecraft located in remote regions in real-time and detect potential malfunctions proactively. NASA's adoption of this technology demonstrated the value of Digital Twins not only in industrial settings but also in critical areas like space exploration. This application proved that Digital Twins could enhance safety and efficiency in complex systems, accelerating the technology's adoption in industries worldwide.

IoT (Internet of Things) technology supports the Digital Twin process by collecting data from physical assets. Data such as temperature, pressure, and speed collected through IoT sensors is fed into the Digital Twin, ensuring the model remains up-to-date. This process has a wide range of applications, particularly in sectors like manufacturing, healthcare, energy, and defense. For instance, Digital Twins of production lines and machinery in a cement factory enable real-time monitoring of equipment performance, facilitating the early detection of potential failures. Similarly, Digital Twins of medical devices in the healthcare sector are used to improve patient care processes.

Digital Twin technology is a powerful tool that emerges from the synergy of multiple technologies, including IoT, machine learning, artificial intelligence, cloud computing, and big data. Collected data is analyzed using machine learning and artificial intelligence algorithms, streamlining predictive maintenance and decision-making processes. Cloud computing and big data technologies meet the need for storing and processing large amounts of data generated by Digital Twins, enabling their broader application. This integrated approach is revolutionizing the optimization of industrial processes.

Keywords: Digital Twin, Internet of Things, Real-Time Data Analytics, Cloud Computing, Big Data

GÖZETİM SİSTEMLERİ İÇİN KAMERA MÜDAHALE TESPİTİ: PRONET FİRMASI UYGULAMASI
CAMERA TAMPERING DETECTION FOR SURVEILLANCE SYSTEMS: PRONET COMPANY APPLICATION

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ÖZET
Kameralarla donatılmış sistemler, gözetim başta olmak üzere pek çok alanda büyük bir öneme sahiptir. Kamera teknolojilerindeki ilerlemeler, bu sistemlerin kullanım alanlarının hızla genişlemesine olanak tanımaktadır. Ancak, kameraların sayısındaki artış ve kullanımının yaygınlaşması, gözetim süreçlerini daha karmaşık hale getirmiştir. Bu durum, insan odaklı gözetim sistemlerinin maliyetlerini artırırken, otonom gözetim çözümlerine olan ihtiyacı da ön plana çıkarmaktadır. Başarılı bir gözetim sisteminin temel unsurlarından biri, güvenlik kameralarının güvenilirliğidir. Ancak güvenlik kameralarına yönelik kasıtlı ya da kasıtsız yetkisiz müdahaleler, sistemin işlevselliğini tehlikeye atarken, gözetim kalitesini de olumsuz yönde etkilemektedir. Bunun yanında, kameraların sayısındaki artış, izleme süreçlerini zorlaştırmakta ve bu nedenle yetkisiz müdahalelerin insan gözetimli sistemler tarafından tespit edilmesini oldukça zorlaştırmaktadır. Bu zorluklar, kamera manipülasyonlarının otomatik olarak algılanmasını sağlayacak müdahale tespit yöntemlerine olan ihtiyacı artırmıştır. Bu çalışmada, mevcut literatürde nesneleri izlemek ve haritalamak amacıyla kullanılan bir köşe algılama yöntemi, kamera müdahalelerinin tespitine uyarlanarak geliştirilmiştir. Pronet firması ile gerçekleştirilen iş birliği kapsamında, kameraların önünün kapatılması, açısının değiştirilmesi gibi müdahaleleri gerçek zamanlı olarak algılayabilen bu algoritma firmanın güvenlik kameralarına entegre edilmiştir. Bu sayede, kameraya yapılan herhangi bir müdahalede, anında alarm üretilmesi mümkün hale getirilmiştir. Geliştirilen sistem, gerçek zamanlı testlerle kapsamlı bir şekilde değerlendirilmiş ve sonuçlar, sistemin yetkisiz müdahalelere karşı etkin bir performans sergileyerek güvenlik kameralarının güvenilirliğini artırdığını ortaya koymuştur. Bu çalışmanın, otonom güvenlik çözümlerinin geliştirilmesine yönelik önemli bir adım olduğu düşünülmektedir. Kamera müdahale tespiti alanındaki bu yenilikçi yaklaşım, mevcut güvenlik sistemlerinin etkinliğini artırırken gözetim süreçlerini daha verimli ve sürdürülebilir kılmaktadır.

Anahtar Kelimeler: gözetim sistemleri; kamera müdahale tespiti; gerçek zamanlı sistem; görüntüde köşe algılama; ilgi noktası modelleme.

ABSTRACT

Systems equipped with cameras are of great importance in many areas, particularly in surveillance. Advances in camera technology have allowed usage area of these systems to rapidly expand. However, the increasing number and widespread use of cameras have made surveillance processes more complex. This situation has increased the costs of human-focused surveillance systems and highlighted the need for autonomous surveillance solutions. One of the fundamental elements of a successful surveillance system is the reliability of security cameras. However, intentional or unintentional unauthorized tampering with security cameras can jeopardize the functionality of the system and negatively affect surveillance quality. Additionally, the increasing number of cameras complicates monitoring processes, making it quite difficult for human-supervised systems to detect unauthorized tampering. These challenges have increased the need for tamper detection methods that can automatically detect camera manipulations. In this study, a corner detection method commonly used for tracking and mapping objects in the literature has been adapted and developed for detecting camera tamper. Within the scope of the cooperation with Pronet, this algorithm, which can detect tampering such as blocking the cameras and changing the angle of the cameras in real time, has been integrated into the security cameras of the company. This integration enables the immediate generation of an alarm in the event of any tampering. The developed system was extensively evaluated through real-time tests, and the results demonstrated its effective performance against unauthorized tampering, thereby enhancing the reliability of security cameras. This study is considered to be an important step towards the development of autonomous security solutions. This innovative approach to camera tamper detection enhances the effectiveness of existing security systems and making surveillance processes more efficient and sustainable.

Keywords: surveillance systems; camera tampering detection; real-time systems; image corner detection; interest point modeling.

KNOWLEDGE, ATTITUDE AND PRACTICES OF AFRICAN ANIMAL TRYPANOSOMOSIS AMONG FULANI CATTLE REARERS IN LAMBU OF TOFA LOCAL GOVERNMENT AREA KANO STATE NIGERIA

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Abstract

African Animal Trypanosomosis (AAT) is a disease that hinders livestock productivity in Nigeria and sub-Saharan Africa. Numerous strategies have been developed over time to fight this devastating disease, which are emphasized mostly on containing the spread of its causative agent and principal vector. However, very little has been done to include Fulani reares in decision making, planning and implementation of control programs. Therefore, this study was carried out to evaluating the knowledge attitude and Practice of African Animal Trypanosomosis among Fulani Cattles reares in Lambu Local Government area of Kano state. Questionnaires were developed to collect relevant information, and were administered through 'Standard Focus Group Discussions' The results revealed that tsetse fly was known by all respondents (100%), who significantly reported that they were most commonly found in the forests (90%), during the wet season (85%). Respondents also reported that these flies prefer to bite animals (71.25%). Similarly, majority of respondents (97.5%) reported to being cognizant of trypanosomosis disease, while also stating that it had infected their animals at some point in time. Respondents believed infection was most prevalent during the wet season (65%) than the dry season (40%). Respondents had mixed views when it came to perceived causes of the disease, as some associated it with bite from flies (53.75%), while others linked it to transhumance (38.75%). In terms of signs and symptoms, 80% of respondents were able to identify with at least four symptoms of the disease. In essence, this study reaffirms the need to constitute Fulani Cattles reares in intervention programs against African Animal Trypanosomosis alongside more enlightenment campaigns to facilitate effective control of the disease and it vector control.

Keywords: African Animal Trypanosomosis (AAT), Lambu Cattle Rearer,

Flavoparmelia caperata LİKENİN APOPTOZ TESTİ İLE BAZI KANSER HÜCRE HATLARI ÜZERİNDEKİ ETKİSİNİN BELİRLENMESİ

DETERMINATION OF THE EFFECT OF *FLAVOPARMELIA CAPERATA* LICHEN SOME CANCER CELL LINES BY APOPTOSIS ASSAY

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ÖZET

Kanser, günümüzün en ciddi hastalıklarından biri olup, anormal hücrelerin kontrolsüz biçimde büyümesi, normal sınırlarını aşarak çevre dokuları istila etmesi ve diğer organlara metastaz yapmasıyla ortaya çıkan geniş bir hastalık grubunu temsil etmektedir. Kronik inflamasyon ve bağışıklık sistemindeki zayıflık ile ilişkilendirilen kanser, ölüm oranlarının en yüksek olduğu hastalıklar arasında yer almaktadır. Kanser hücreleri, tedaviye farklı yanıtlar verebilmektedir ve bu durum, hayatta kalma mekanizmalarını desteklemek üzere geliştirdikleri çeşitli stratejilere dayanmaktadır. Günümüzde mevcut kemoterapi yaklaşımlarının yetersiz kalması, kanser tedavisinde yeni ve etkili stratejilerin geliştirilmesi gerekliliğini ön plana çıkarmaktadır. Son yıllarda gerçekleştirilen araştırmalar, doğal bileşiklerin kanser riskini azaltıcı etkilerini ortaya koymuş ve bu bileşiklerin kanser tedavisinde kullanımı konusunda ilgi ve çalışmaları artırmıştır.

Likenler, bir mikobiyont ile bir fotobiyontun simbiyotik birlikteliği sonucu oluşan organizmalardır. Yapraksı bir liken türü olan *Flavoparmelia caperata*, zengin kimyasal içeriği sayesinde yüzyıllardır çeşitli hastalıkların tedavisinde kullanılmaktadır. *F. caperata'*nın kanser hücre hatları üzerinde etkili olurken sağlıklı hücrelere zarar vermemesi ve yan etkilere neden olmaması, bu likenin antikanser ajan olarak kullanım potansiyelini destekleyen önemli bir özelliktir. Kanser tedavilerinde yan etkilerin önemi göz önünde bulundurulduğunda, *F. caperata*'nın bu özelliği dikkate değer bir avantaj sunmaktadır. Likenler üzerine yapılan çeşitli in vivo ve in vitro çalışmalar, bu organizmaların normal hücrelere kıyasla kanser hücreleri üzerinde daha yüksek sitotoksik etki ve antikanser aktivite gösterdiğini ortaya koymuştur.Bu çalışmada apoptoz yöntemi kullanılarak HT-29 (kolon kanseri hücre hattı), A549 (akciğer kanseri hücre hattı), HeLa (serviks kanseri hücre hattı) ve L929 (fibroblast hücre hattı) hücrelerine *F. caperata* liken ekstraktı kontrol grubu ve uygulama grupları (15-1000µg) oluşturularak uygulanmıştır. Sitotoksisite analizi sonuçları, *F. caperata* konsantrasyonundaki artışın hücre canlılığında azalmaya neden olduğunu göstermiştir. Hücrelerde apoptoz ve nekroz oluşumunun değerlendirilmesi amacıyla kontrol grubu ve *F. caperata* ekstraktının artan dozlarda uygulandığı gruplar floresan mikroskop ile incelenmiş ve ekstraktın kanserli hücreler üzerinde öldürücü etkiler oluşturduğu tespit edilmiştir. Bu çalışmada, *F. caperata*'nın bu hücre hatları üzerinde in vitro koşullarda sitotoksik etki gösterdiği dozlar incelenmiştir. Bu çalışma, literatüre önemli bir katkı sağlayarak gelecekte gerçekleştirilecek kapsamlı araştırmalara yön verecek niteliktedir.

Anahtar Kelimeler: *Flavoparmelia caperata*, HT-29, A549, HeLa, L929, Apoptoz-Nekroz

ABSTRACT

Cancer, one of the most important diseases of our age, is a large group of diseases that can start with the uncontrolled growth of abnormal cells, going beyond their normal limits, invading adjacent parts of the body and spreading to other organs. It is characterised by chronic inflammation and weakening of the immune system and is one of the most common causes of death. Cancer cells respond differently to treatment. The main reason for this is that cancer cells develop various strategies to survive. Since current chemotherapy methods are insufficient, new strategies for cancer cells should be pursued. The results of recent studies showing that natural compounds reduce the risk of cancer have increased research on the use of these compounds in cancer treatment. The results of recent studies showing that natural compounds reduce the risk of cancer have increased research on the use of these compounds in cancer treatment.

Lichens are organisms formed by the symbiotic association of a mycobiont and a photobiont. *Flavoparmelia caperata*, a leafy lichen species, has been used in the treatment of various diseases for centuries thanks to its rich chemical content The fact that *F. caperata* does not harm healthy cells and does not cause side effects while acting on cancer cell lines is an important feature that supports the potential of this lichen as an anticancer agent Various in vivo and in vitro studies on lichens have revealed that these organisms show higher cytotoxic effect and anticancer activity on cancer cells compared to normal cells. In this study, *F. caperata* lichen extract was applied to HT-29 (colon cancer cell line), A549 (lung cancer cell line), HeLa (cervical cancer cell line) and L929 (fibroblast cell line) cells by using apoptosis method by forming control group and treatment groups (15-1000µg). The results of cytotoxicity analysis showed that the increase in F. caperata concentration caused a decrease in cell viability. In order to evaluate the formation of apoptosis and necrosis in cells, the control group and the groups in which F. caperata extract was applied at increasing doses were examined by fluorescence microscope and it was determined that the extract produced lethal effects on cancer cells. In this study, the doses at which F. caperata showed cytotoxic effects on these cell lines under in vitro conditions were examined. This study is an important contribution to the literature and will provide direction for future comprehensive research.

Keywords: *Flavoparmelia caperata*, HT-29, A549, HeLa, L929, Apoptosis-Necrosis

Diploschistes scruposus LİKEN EKSTRAKTININ KOMET TESTİ İLE HeLa ve L929 KANSER HÜCRE HATLARI ÜZERİNDEKİ ETKİSİNİN DEĞERLENDİRİLMESİ

EVALUATION OF EFFECT OF *Dıploschıstes scruposus* LICHEN EXTRACT ON HELA AND L929 CANCER CELL LINES BY KOMET TEST

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ÖZET

Kanser, günümüzde en önemli sağlık sorunlarından biri olup, anormal hücrelerin kontrolsüz bir şekilde büyüyerek normal sınırlardan çıkıp vücudun diğer bölümlerini işgal etmeye ve metastaz yapmaya başlamasıyla karakterize edilen geniş bir hastalık grubunu tanımlar. Kronik inflamasyon ve bağışıklık sisteminin zayıflaması, kanseri ölüme en sık yol açan hastalıklardan biri haline getiren önemli özelliklerindendir. Kanser hücreleri, tedaviye farklı yanıtlar verebilmektedir ve bunun temel nedeni bu hücrelerin hayatta kalmak için çeşitli adaptasyonlar geliştirmeleridir. Son yıllarda yapılan araştırmalar, doğal bileşiklerin kanser riskini azaltıcı etkilerini ortaya koymuş ve bu bileşiklerin kanser tedavisinde kullanımına yönelik çalışmaların artmasına sebep olmuştur. Doğal kaynaklı ilaçların, sentetik ilaçlarla karşılaştırıldığında daha az yan etkiye sahip olması, bilim insanlarını bu alanda daha fazla araştırma yapmaya teşvik etmiştir. Bu bağlamda mantarlar ve alglerden türeyen simbiyotik organizmalar olan likenler, yüzyıllardır halk arasında çeşitli tedavi amaçlarıyla kullanılmaktadır. Likenler, çoğunlukla likenlere özgü olan ve 'liken maddeleri' olarak bilinen çeşitli metabolitler üretmektedir. Bugüne kadar yapıları belirlenmiş yaklaşık 800 farklı liken maddesi tanımlanmış olup, bu biyoaktif sekonder metabolitler likenlerden izole edilebilmektedir.Likenlerin antimikrobiyal, antifungal, antiviral, antiproliferatif, antioksidan ve antiflojistik gibi çeşitli biyolojik aktivitelere sahip olduğu belirtilmektedir. *Diploschistes scruposus* likeninin kanser hücre hatları üzerindeki etkisi, sağlıklı hücrelere zarar vermemesi ve yan etkilere yol açmaması nedeniyle, bu likenin potansiyel bir anti-kanser ajanı olarak kullanılabileceğini göstermektedir. Bu çalışmada, komet yöntemi kullanılarak HeLa (serviks kanseri hücre hattı) ve L929 (fibroblast hücre hattı) hücrelerinden elde edilen preparatlara *D. scruposus* liken ekstraktı uygulanmış ve genotoksisite ölçümleri yapılmıştır. Kontrol grubu ve uygulama grupları arasındaki DNA hasarları, kuyruk uzunluğu, kuyruk momenti ve % DNA hasarı (±SD) değerleri ölçülerek karşılaştırılmıştır. Sonuç olarak konsantrasyon artışı ile kontrol grubu karşılaştırıldığında DNA hasarında artış olduğu tespit edilmiştir.

Anahtar Kelimeler : *Diploschistes scruposus*, HeLa, L929, Komet Testi

ABSTRACT

Cancer is one of the most important health problems today and defines a broad group of diseases characterised by the uncontrolled growth of abnormal cells that leave normal boundaries and begin to invade and metastasise to other parts of the body.Chronic inflammation and a

weakened immune system are important features of cancer, making it one of the most common causes of death. Cancer cells can respond differently to treatment and this is mainly because these cells develop various adaptations to survive. Research in recent years has revealed the cancer risk-reducing effects of natural compounds and has led to an increase in studies on the use of these compounds in cancer treatment. The fact that drugs of natural origin have fewer side effects compared to synthetic drugs has encouraged scientists to do more research in this field. In this context, lichens, which are symbiotic organisms derived from fungi and algae, have been used for centuries for various therapeutic purposes among the people. Lichens produce various metabolites known as 'lichen substances', which are mostly unique to lichens. To date, about 800 different lichen substances have been identified and these bioactive secondary metabolites can be isolated from lichens. Lichens are reported to have various biological activities such as antimicrobial, antifungal, antiviral, antiproliferative, antioxidant and antiphlogistic. The effect of *Diploschistes scruposus* lichen on cancer cell lines suggests that this lichen can be used as a potential anti-cancer agent, since it does not damage healthy cells and does not cause side effects. In this study, *D. scruposus* lichen extract was applied to preparations obtained from HeLa (cervical cancer cell line) and L929 (fibroblast cell line) cells using the comet method and genotoxicity measurements were performed. DNA damages between the control and treatment groups were compared by measuring tail length, tail moment and % DNA damage (±SD) values. As a result, it was determined that there was an increase in DNA damage when compared with the control group with increasing concentration.
Keywords : *Diploschistes scruposus*, HeLa, L929, Comet Test

HOW AND WHY THE EUROPEAN UNION ENCOURAGES FICTION WRITING

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ABSTRACT
The purpose of this paper is to understand the ways in which the European Union encourages fiction writing, while also considering why it does this, the latter being to maintain cohesion and harmony among EU members. Policies are the main tool through which the European Union acts in view of various actions related to various aspects in the lives of its citizens. The policy concerning the interest related to fiction writing includes a series of cultural policies, which, in turn include various programs and projects. The Creative Europe Program includes literary festivals, and conferences. Through these, the EU provides available funding for various initiatives concerning authors, publishers, and readers. They can collaborate using networking and cultural exchange within Europe. The Creative Europe program also include cross-border projects. Such projects offer support, which implies collaborations between authors, publishers, and other interested parties living in various EU countries. In this way, European fiction can be spread over the border of the country of its authors. The Creative Europe Program also brings support for European literary translation. Through it, the EU allocates grants for helping authors' books reach an international audience. The European Book Prize is an initiative meant to promote fiction written by European authors. Every year, this prize is given to the author believed to best represent European fiction. Cultural diplomacy is also part of the EU's activities, through which it promotes European literature and fiction wiritng in countries that are not EU members. This promoton is achieved through cultural institutes and international book fairs, e.g. the Frankfurt Book Fair. European Union litterary networks and associations, e.g. The European Writers' Council (EWC) and The European Network of Literary Translators (CEATL) are also used to promote literature and to encourage professional development.. European literature festivals and awards are another way of promotion.
Keywords: Ideology, Political Analysis, Cultural Awareness, Cultural Empathy

SILAR TEKNİĞİ İLE HAZIRLANAN ZnO İNCE FİLMLERİN ODA SICAKLIĞINDA ÇALIŞAN NH_3 GAZ SENSÖRÜ

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ÖZET
Bu çalışmada, ZnO, Ce katkılı ZnO (Ce:ZnO) ve Nd katkılı ZnO (Nd:ZnO) nanoyapılı ince filmler Ardışık İyonik Katman Adsorpsiyonu ve Reaksiyonu (SILAR) sentez yöntemi ile hazırlanmıştır. Doping konsantrasyonunun %1'de sabit tutulduğu dopingin filmlerin yapısal, yüzey morfolojisi, optik, elektronik ve gaz algılama özellikleri üzerindeki etkisi deneysel olarak incelenmiştir. Ce; üretilen sensör yüzeyinde yüksek bir yüzey bazikliği oluşturur ve bu da gaz sensörü özelliklerine önemli ölçüde katkıda bulunur. Ayrıca iyonik yük dengesindeki değişiklik sayesinde yüzeyde oksijen delikleri oluşturarak gaz algılama özelliklerini artırır.
Bu çalışma, oda sıcaklığında iyileştirilmiş tepkiye sahip ZnO tabanlı gaz sensörlerinin geliştirilmesi için yeni fikirler sunmaktadır. Ce katkılı ZnO sensörleri, oda sıcaklığında hızlı tepki süreleri, kararlı baz hatları ve gelişmiş gaz algılama yeteneği göstermiştir ve bu da pratik ortamlarda NH3 gazlarını tanımlamak için kullanılabileceğini göstermektedir.
Anahtar Kelimeler: Gaz Sensör, ZnO tabanlı ince filmler, Nd ve Ce katkısı

ROOM TEMPERATURE NH_3 GAS SENSOR BASED ON ZnO THIN FILM PREPARED BY SILAR TECHNIQUE

In this study, ZnO, Ce-doped ZnO (Ce) and Nd-doped ZnO (Nd) nano-structured thin films were prepared using the SILAR (Successive Ionic Layer Adsorption and Reaction) synthesis method. The effect of doping on the structural, surface morphological, optical, electronic and gas sensing properties of the films was investigated experimentally, keeping the doping concentration constant at 1%. Ce generates a high surface basicity on the fabricated sensor surface, which contributes significantly to the gas sensing properties. In addition, the change in ionic charge balance leads to the formation of oxygen holes on the surface, which improves the gas sensing properties.
This study provides new insights for the development of ZnO-based gas sensors with improved response at room temperature. Ce-doped ZnO sensors showed fast response times, stable baselines and improved gas detection capability at room temperature, indicating their potential use in the detection of NH3 gases in practical environments.
Keywords: Gas Sensor, ZnO-based thin films, Nd and Ce doping

3D BASKILI YAPISAL BETON KİRİŞLER VE DUVARLAR İÇİN OPTİMAL DOLGU TASARIMI

OPTIMAL INFILL DESIGN FOR 3D-PRINTED STRUCTURAL CONCRETE BEAMS AND WALLS

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ÖZET

Topoloji optimizasyonu, malzeme yerleşimini optimize ederek yapısal performansı en üst düzeye çıkarmak için güçlü bir araçtır. Bu teknik, rijitlik ve dayanım gibi performans kısıtlarını yerine getirirken hafif ve verimli yapılar elde edilmesini sağlar. Sahip olduğu muazzam potansiyele rağmen, inşaat sektörü topoloji optimizasyonunu benimsemekte yavaş kalmıştır, bunun başlıca nedeni topoloji optimizasyonunun ürettiği karmaşık geometrileri imal etmenin zorluğudur. Geleneksel üretim yöntemleri genellikle bu optimize edilmiş tasarımları gerçekleştirmede yetersiz kalmaktadır. 3D baskı teknolojisindeki son gelişmeler, bu üretim zorluklarının çoğunu ele alarak karmaşık geometrilerin doğrudan dijital modellerden gerçekleştirilmesine olanak vermektedir. Bu ilerleme, yenilikçi ve kaynak verimli inşaat yöntemleri geliştirmek için topoloji optimizasyonunu 3D baskı ile entegre etme konusunda artan bir ilgi uyandırmıştır. Önceki araştırmalar beton kirişlere ve bunların yapısal performansına odaklanırken, 3D baskılı yapısal duvarlar için optimum dolgu tasarımı büyük ölçüde göz ardı edilmiş ve bu da literatürdeki önemli bir eksikliğe temsil etmektedir. Bu çalışma, düzlem dışı yükleme koşulları altında yapısal kompliansı en aza indirmeye odaklanarak, 3D baskılı yapısal elemanların dolgu tasarımında topoloji optimizasyonunun uygulanmasını araştırmaktadır. Sayısal modelleme ve sonlu elemanlar analizi kullanılarak çeşitli optimize edilmiş dolgu desenleri değerlendirilmiş ve bu desenlerin performansı geliştirme potansiyelleri ortaya konmuştur. Bulgular, optimum tasarımların, önemli ölçüde daha az malzeme kullanırken, 3D baskılı yapısal elemanların rijitliğini mevcut tasarımlara kıyasla üç kata kadar artırabileceğini ortaya koymaktadır. Bu sonuçlar, yapısal performansı artırmak, malzeme kullanımını azaltmak ve sürdürülebilir inşaat uygulamalarını teşvik etmek için topoloji optimizasyonunu 3D baskı ile entegre etmenin dikkate değer potansiyelini gözler önüne sermektedir.

Anahtar Sözcükler: Topoloji optimizasyonu, Eklemeli üretim, 3D baskı inşaat, Dolgu deseni, Yapısal tasarım, Sürdürülebilir inşaat

ABSTRACT

Topology optimization is a powerful tool for maximizing structural performance by optimizing the material layout. This technique allows for lightweight and efficient structures while adhering to performance constraints such as stiffness and strength. Despite its immense potential, the construction industry has been slow to adopt topology optimization, primarily due to the difficulty of fabricating the complex geometries, topology optimization generates. Traditional manufacturing methods are often incapable of realizing these optimized designs. Recent advancements in 3D printing technology have addressed many of these fabrication

challenges, enabling the realization of intricate geometries directly from digital models. This breakthrough has sparked growing interest in integrating topology optimization with 3D printing to develop innovative and resource-efficient construction methods. While previous research has focused on concrete beams and their structural performance, the optimal infill design for 3D-printed structural walls has been largely overlooked, leaving a crucial gap in the literature. This study investigates the application of topology optimization to the infill design of 3D-printed structural elements, focusing on minimizing structural compliance under out-of-plane loading conditions. Various optimized infill patterns were evaluated using numerical modeling and finite element analysis, demonstrating their potential to enhance performance significantly. The findings reveal that optimal designs can increase the stiffness of 3D-printed structural elements by up to three times compared to existing designs while using substantially less material. These results underscore the significant potential of integrating topology optimization with 3D printing to enhance structural performance, reduce material usage, and promote sustainable construction practices.

Keywords: Topology optimization, Additive manufacturing, 3D printing construction, Infill pattern, Structural design, Sustainable construction

STEPS LEADING THE FUTURE WITH ALTERNATIVE ENERGY: BIOENERGY AND THORIUM

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Energy is not just a resource; it is a civilization story that humanity has shaped throughout history. Today our dependence on fossil fuels has forced us to pay for much more than a comfortable life: unstable prices, air pollution, rapidly advancing climate change and depleting natural resources… It is now clear that the old order cannot continue. However, every crisis contains an opportunity. Perhaps this opportunity lies in rediscovering renewable energy sources with a deep understanding, not just a superficial one. In this journey of discovery, bioenergy and thorium have a great potential to save both today and tomorrow.

Bioenergy is inspired by the cycle of nature and creates a sustainable power source for humanity. Think about it, the waste that a farmer throws away in his daily life can actually be transformed into clean energy. Agricultural residues, plants, animal manure, and even algae… These ordinary substances give life to energy systems with the magic touch of bioenergy technologies. Moreover, this transformation not only provides environmental benefits, but also encourages economic development in rural areas. A farm can not only become a self-sufficient business thanks to bioenergy; it can also develop the surrounding community. In other words, bioenergy produces not only energy, but also hope.

However, like every miracle, bioenergy doesn't come without effort. Problems such as agricultural land competing with energy production, lack of infrastructure and high start-up costs stand as obstacles to this technology. However, as long as humanity develops the ability to convert nature’s cycle into energy, overcoming these obstacles is only a matter of time. Because bioenergy is one of the quietest yet most powerful miracles nature has to offer.

Thorium… Maybe this is the first time many people have heard this word. But just think, if this element offers a revolutionary solution to the energy needs of human history, how exciting it would be! Thorium is a powerful resource that could revolutionize nuclear energy. Unlike traditional uranium, thorium produces less waste, offers a safer process, and is much more widely available. These three characteristics put it at the heart of modern energy systems.

Molten salt reactors (MSR) are designed to unlock this potential of thorium. These reactors not only make energy production safer and more efficient, but also minimize the fears of nuclear accidents. Moreover, when combined with quantum technologies, these systems can be optimized in real time and the reliability of energy networks can be increased. For example, energy demand can be predicted more precisely thanks to quantum algorithms, making energy production much more efficient. Thorium is not just an energy source; it can be a recipe for salvation for the future of the energy world.

Bioenergy and thorium, although seemingly independent of each other, create an extraordinary synergy when they work together. Imagine: bioenergy provides fast and flexible support during peak energy demand, while thorium reactors provide stable and long-term energy production. This collaboration not only makes energy infrastructure more resilient, but also significantly reduces carbon emissions, giving the environment a breath of fresh air. This duo is like an energy symphony written by nature and technology together.

Every new technology brings with it new hopes and new responsibilities. Bioenergy and thorium not only offer solutions to today's problems, but also include a visionary approach that will shape the future. This vision of the future can come to life with a few fundamental innovative steps:

- **New Generation Reactors:** Development of compact reactors in which thorium can be used at low cost and with high safety.
- **Biofuel Innovations:** More efficient biofuel production from genetically engineered algae.
- **Quantum-Assisted Energy Management:** Using quantum algorithms in real-time management of energy networks.

Energy is not just a resource; it is the soul of a civilization. Today innovative solutions such as bioenergy and thorium offer us a unique opportunity to redefine this soul. As humanity, seizing this opportunity is not only an option; it is also a necessity, because energy will shape not only today's world but also tomorrow's people and planet. Therefore, bioenergy and thorium are not just a technological revolution; they are also a gift, a light of hope for humanity.

Keywords: bioenergy, climate change, quantum, renewable, thorium

ENERGY DIPLOMACY IN THE CASPIAN REGION: A NEW ERA OF COOPERATION AND COMPETITION

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ABSTRACT

The Caspian region, with its abundant oil and natural gas reserves, holds strategic significance as a central energy hub bridging Europe and Asia. This region, comprising Azerbaijan, Kazakhstan, Russia, Turkmenistan, and Iran, is essential for global energy security, contributing significantly to diversification strategies worldwide. This paper examines the evolution of energy diplomacy in the Caspian region, tracing its historical shifts from Soviet-era centralized control to post-Soviet independence and modern partnerships. Key stakeholders, including regional states and external actors like the European Union, United States, and China, actively shape the energy landscape, pursuing economic, geopolitical, and security objectives. The paper also explores cooperation opportunities, including transnational pipeline projects, renewable energy development, and advanced technologies for sustainable fossil fuel extraction. Furthermore, it addresses environmental and security challenges, emphasizing the need for cohesive regional responses to ecological degradation and infrastructure security threats. Looking ahead, sustainable growth in the Caspian region hinges on a commitment to renewable energy, technological innovation, and robust security frameworks. By building diversified, resilient energy partnerships, Caspian states can secure their economic futures and reinforce their roles in global energy markets.

Key words: *Caspian region, energy diplomacy, oil and natural gas, global energy markets, sustainable development, renewable energy, transnational cooperation, geopolitical strategy, energy security, environmental protection*.

SPOR YÜKSEKÖĞRETİM KURUMU ÖĞRENCİLERİNDE SPORDA YARALANMAYA NEDEN OLAN FAKTÖRLERİN BAZI DEĞİŞKENLERE GÖRE İNCELENMESİ: ORDU İLİ ÖRNEĞİ

EXAMINATION OF FACTORS CAUSING INJURY IN SPORTS IN SPORTS HIGHER EDUCATION INSTITUTION STUDENTS ACCORDING TO SOME VARIABLES: ORDU PROVINCE EXAMPLE

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ÖZET

Bu çalışmanın amacı, spor yükseköğretim kurumu öğrencilerinde sporda yaralanmaya neden olan faktörlerin bazı değişkenlere göre incelenmesidir. Çalışma, tesadüfi örneklem yöntemi ile belirlenen 67 kadın ve 89 erkek toplam 156 katılımcıdan oluşmaktadır. Çalışmada veri toplama aracı olarak "Kişisel Bilgi Formu" ve "Sporda Yaralanmaya Neden Olan Faktörler Ölçeği (SYNFÖ) " kullanılmıştır. Verilerin analizinde çarpıklık-basıklık katsayısı, bağımsız örneklem t-testi, tek yönlü varyans analizi (ANOVA) kullanılmıştır. Çalışma sonuçları incelendiğinde katılımcıların cinsiyet, yaş ve spor türü değişkenlerine göre sporda yaralanmaya neden olan faktörler ölçeği alt boyut puanlarında anlamlı farklılık saptanmamıştır ($p>0.05$). Haftalık antrenman sayısına göre katılımcıların SYNFÖ antrenöre bağlı faktörler alt boyut puanlarında 5 gün ve üzeri antrenman yapan sporcuların lehine anlamlı farklılık belirlenmiştir ($p<0.05$). Sonuç olarak çalışmada, SYNFÖ ortalamalarının kişisel faktörler alt boyutu için yüksek düzeyde, psikolojik faktörler alt boyutu için orta düzeyde, çevresel faktörler alt boyutu için orta düzey üst sınırında, antrenöre bağlı faktörler alt boyutu için orta düzeyde olduğu belirlenmiştir. Elde edilen sonuçlara göre katılımcıların spor yaralanmalarına neden olan kişisel faktörler hakkında farkındalık düzeylerinin yüksek olduğu ifade edilebilir. Haftada 5 gün ve üzeri antrenman yapan sporcu öğrencilerin ise antrenörlerinin bilgi ve tecrübelerini gözlemleyerek, antrenör-sporcu ilişkilerini güçlendirdikleri söylenebilir. Bu araştırmadan sonra yapılacak çalışmaların, profesyonel ve milli sporcuları içermesinin literatüre katkı sağlayabileceği öngörülmektedir.

Anahtar Kelimeler: Spor, Sakatlık, Yaralanma

ABSTRACT

The aim of this study was to examine the factors causing sports injuries in higher education institution students according to some variables. The study comprises a total of 156 participants, including 67 women and 89 men, selected through random sampling. The "Scale of Factors Causıng Injury in Sports (Sfcıs)" and "Personal Information Form" were used as data collection tools. Data analysis involved the skewness-kurtosis coefficients, independent samples t-test, one-way analysis of variance (ANOVA), and Pearson correlation analysis. The results of the study indicated, no significant difference was found in the sub-dimension scores of the factors causing injuries in sports scale according to the variables of gender, age and type of sport ($p>0.05$). According to the number of weekly trainings, a significant difference was found in favor of athletes who trained 5 days or more in the sub-dimension scores of the SYNFÖ coach-dependent factors of the participants ($p<0.05$). As a result, it was determined that the SYNFÖ averages were high for the personal factors sub-dimension, moderate for the psychological factors sub-dimension, at the upper limit of the moderate level for the environmental factors sub-dimension and moderate for the coach-dependent factors sub-dimension. According to the

results obtained, it can be said that the participants' awareness levels about personal factors that cause sports injuries are high. It can be said that athlete students who train 5 days or more a week strengthen their coach-athlete relationships by observing the knowledge and experience of their coaches. It is anticipated that studies to be conducted after this research, including professional and national athletes, will contribute to the literature.
Keywords: Sports, Disability, Injury

FOMO VE KAYIPTAN KAÇINMA DAVRANIŞLARININ PAZARLAMA VE FİNANSAL BOYUTTA BENZERLİKLERİ VE BAŞA ÇIKMA YÖNTEMLERİ

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Özet

FOMO (Fear of Missing Out) ve Loss Aversion (Kayıptan Kaçınma) hem günlük yaşamda hem de finansal kararlarda önemli psikolojik etkiler yaratan iki davranışsal önyargıdır. Özellikle finansal piyasalar ve yatırım süreçlerinde bireylerin irrasyonel kararlar almasına yol açarak çeşitli riskler yaratabilirler. FOMO, bireylerin fırsatları kaçırma korkusuyla aceleyle hareket etmesine sebep olan bir duygudur. Özellikle piyasalar hızla yükselirken veya yeni trendler ortaya çıkarken yatırımcıların çoğunlukla FOMO etkisi altında kaldığı gözlemlenir. FOMO, genellikle piyasalarda yüksek volatilite veya hızlı yükseliş dönemlerinde öne çıkar. Bu duygu, insanların kendilerini başkalarının başarısına veya kazancına yetişmek zorunda hissetmesiyle daha da güçlenir. Diğer yandan kayıptan kaçınma, bireylerin kayıpları kazançlardan daha güçlü hissetmesi anlamına gelir. Bu ilke, Nobel ödüllü psikolog Daniel Kahneman ve Amos Tversky'nin "Beklenti Teorisi" ile ortaya koyduğu bir bulgudur. Bu teoriye göre, insanlar bir şeyi kaybetme korkusu yaşadıklarında bunu kazanç elde etme arzusundan daha güçlü hissederler. Kayıptan kaçınma, yatırımcıların daha güvenli ancak daha düşük getirili yatırımları tercih etmesine neden olurken, bazen de duygusal nedenlerle yanlış kararlar vermelerine yol açabilir.

Bu iki etkenin birlikte var olduğu durumlar, yatırımcıların ani ve duygusal kararlar almasına sebep olabilir. Örneğin, FOMO ile bir yatırımcı yükselmekte olan bir hisseyi "kaçırmamak" adına alabilir, fakat piyasa düşmeye başladığında kayıp korkusu sebebiyle hızla satış yapabilir. Bu, yüksekten alıp düşükten satmaya yol açarak yatırımcının zarara uğramasına sebep olur. Pazarlama açısından ise FOMO (Fear of Missing Out), yani "fırsatları kaçırma korkusu," tüketicilerin bir ürünü veya hizmeti kaçıracakları endişesiyle hızla karar almasına yönelik bir strateji olarak kullanılır. FOMO'yu tetikleyen duygular, özellikle dijital pazarlamada yaygın bir şekilde kullanılarak tüketicilerin dikkatini çekmeyi ve onları eyleme geçmeye teşvik etmeyi sağlar. Bu stratejiyi pazarlamada etkili kılan unsurlar arasında sınırlı süreli kampanyalar, stok uyarıları ve özel tekliflerle yaratılan aciliyet hissi yer alır. Kayıptan kaçınma ise bireylerin kayıplardan duydukları rahatsızlığın kazançlardan duydukları tatmin duygusundan daha fazla olması anlamına gelir. Pazarlamada bu kavram, tüketicilerin bir fırsatı veya değerli bir şeyi kaybetme korkusunu kullanarak onların satın alma kararlarını etkileyen stratejilerle uygulanır. Kayıptan kaçınma, özellikle indirimler, geri ödeme garantileri ve abonelikler gibi tüketiciye kaybedecekleri bir şeyi anımsatan durumlarda ön plana çıkar. Loss Aversion, pazarlamada tüketicilerin kayıplardan kaçınma dürtüsünü harekete geçirerek satın alma kararlarını etkileyen güçlü bir stratejidir. Sınırlı süreli indirimler, sadakat programları, ücretsiz deneme süreleri ve para iade garantileri gibi yöntemlerle tüketiciler kaybetme korkusuyla harekete geçirilir. Bu

stratejinin etik olarak kullanılması, tüketicinin markaya duyduğu güveni koruyarak daha uzun vadeli bir müşteri ilişkisi kurulmasına katkı sağlar.

Bu çalışmada FoMo ve kayıptan kaçınma dürtüleri hem finans hem de pazarlama bilimleri açısından ele alınmıştır. Her iki güdünün de yatırımcı ve tüketici açısından kavramsal boyutları ele alınmış, konuya ilişkin örnekler verilmiş ve bu güdülerle başa çıkma yöntemleri konusunda önerilerde bulunulmuştur.

Anahtar Kelimeler: Davranışsal Finans, Davranışsal Pazarlama, FoMo, Kayıptan Kaçınma

SIMILARITY OF FOMO AND LOSS AVOIDANCE BEHAVIORS IN MARKETING AND FINANCIAL DIMENSIONS AND COPING METHODS

Abstract

FOMO (Fear of Missing Out) and Loss Aversion are two behavioral biases that create significant psychological effects in both daily life and financial decisions. They can create various risks by causing individuals to make irrational decisions, especially in financial markets and investment processes. FOMO is an emotion that causes individuals to act hastily due to the fear of missing out on opportunities. It is observed that investors are mostly under the influence of FOMO, especially when markets are rising rapidly or new trends are emerging. FOMO usually comes to the forefront during periods of high volatility or rapid increases in the markets. This emotion is further strengthened when people feel they have to keep up with the success or gains of others. On the other hand, loss aversion means that individuals feel losses more strongly than gains. This principle is a finding put forward by Nobel Prize-winning psychologists Daniel Kahneman and Amos Tversky with their "Prospect Theory". According to this theory, when people experience fear of losing something, they feel it more strongly than the desire to gain. Loss aversion causes investors to prefer safer but lower-yielding investments, and can sometimes lead to wrong decisions due to emotional reasons. Situations where these two factors coexist can cause investors to make sudden and emotional decisions. For example, with FOMO, an investor may buy a rising stock in order to “not miss out,” but sell quickly when the market starts to fall due to fear of loss. This leads to buying high and selling low, causing the investor to suffer a loss. In terms of marketing, FOMO (Fear of Missing Out), or “fear of missing out,” is used as a strategy for consumers to make quick decisions out of concern that they will miss out on a product or service. The emotions that trigger FOMO are widely used, especially in digital marketing, to attract consumers’ attention and encourage them to take action. The elements that make this strategy effective in marketing include limited-time campaigns, stock alerts, and a sense of urgency created by special offers. Loss aversion means that individuals’ discomfort with losses is greater than their satisfaction with gains. In marketing, this concept is applied with strategies that influence consumers' purchasing decisions by using their fear of losing an opportunity or something valuable. Loss aversion comes to the forefront especially in situations that remind the consumer of something they will lose, such as discounts, money-back guarantees, and subscriptions. Loss Aversion is a powerful strategy in marketing that influences purchasing decisions by activating consumers' loss aversion impulses. Consumers are motivated by fear of loss through methods such as limited-time discounts, loyalty programs, free trial periods, and money-back guarantees. Using this

strategy ethically helps maintain the consumer's trust in the brand and contributes to the establishment of a longer-term customer relationship.

In this study, FoMo and loss aversion impulses are discussed in terms of both finance and marketing sciences. The conceptual dimensions of both impulses from the perspective of investors and consumers are discussed, examples are given on the subject, and suggestions are made on methods to cope with these impulses.

Keywords: Behavioral Finance, Behavioral Marketing, FoMo, Loss Aversion

A NUMERICAL STUDY ON SHEAR BEHAVIOUR OF RC T-BEAMS

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ABSTRACT

Unlike flexural failures, which are often ductile and give warning signs, shear failures occur suddenly and without warning, leading to potential catastrophic collapse. It is therefore important to understand the shear behaviour of reinforced concrete (RC) beams. RC T-beams are commonly used in structural applications such as bridges and buildings, and a proper understanding of their shear behavior is essential to prevent catastrophic failures. This study investigates the behaviour of RC T-beams in shear. A non-linear finite element (FE) model was developed, and numerical analyses were conducted. The effect of beam shape (geometry) on shear behaviour was first investigated by comparing a rectangular beam with a T-beam. The rectangular beam had a width of 250 mm and a total height of 500 mm. The RC T-beam also had a width of 250 mm and a total height of 500 mm. Moreover, it had flange depth and flange width of 100 and 600 mm, respectively. The RC rectangular and T-beam failed in shear at shear forces of 131 and 135.5 kN, respectively. Moreover, the flange depth and width were also examined. An increase in the flange depth from 75 to 150 mm instigated an increase in shear force capacity from 134.9 to 136.7 kN. Numerical analyses also suggested that an increased flange width from 400 to 600 mm resulted in an enhancement in shear force capacity from 132.9 to 136.7 kN.

Keywords: Beam, concrete, finite element, shear

AMATÖR FUTBOLCULARIN PSİKOLOJİK PERFORMANSLARININ FARKLI DEĞİŞKENLER AÇISINDAN İNCELENMESİ

EXAMINATION OF PSYCHOLOGICAL PERFORMANCE OF AMATEUR FOOTBALL PLAYERS IN TERMS OF DIFFERENT VARIABLES

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ÖZET

Bu araştırmanın amacı amatör futbolcuların psikolojik performanslarının farklı değişkenler açısından incelenmesidir. Araştırmaya İç Anadolu bölgesinde farklı klüplerde futbol oynayan 126 amatör futbolcu katılmıştır. Araştırmada veri toplama aracı olarak demografik değişkenlerin belirlenmesine yönelik kişisel bilgi formu ve Psikolojik Performans Ölçeği kullanılmıştır. Ölçek, Loehr J.E. (1982) tarafından geliştirilmiş ve Türkçeye çevrilmesi, güvenirlik ve geçerlik çalışmaları Erman ve ark (2002) tarafından yapılmıştır. Sporcuların; özgüven, olumsuz enerji, dikkat kontrolü, görselleştirme ve imgeleme kontrolü, motivasyon seviyesi, olumlu enerji ve tutum kontrolü alanlarını içeren, psikolojik becerilerin seviyesini ölçmeyi amaçlayan toplam 42 sorudan oluşan 7 alt boyut bulunmaktadır. Çalışma grubunu oluşturan katılımcıların psikolojik performans düzeylerinin belirlenebilmesi için verilerin analizinde SPSS 22 (Statistical Package for Social Sciences) programından faydalanılmıştır. Verilerin analizinde kullanılacak testleri belirlemek için basıklık ve çarpıklık değerlerinin yanında, Kolmogorov-Smirnov, Histogram, Plot Grafikleri ve Kayıp veri ve uç değer analizleri yapılarak incelenmiştir. İlgili verilerin karşılaştırılmasında dağılım, frekans ve anova testi yapılmıştır. İstatistiksel analizler sonucunda katılımcıların psikolojik performans düzeylerinin yaş değişkeni açısından tüm alt boyutlarda anlamlı olarak farklılaşmadığı, medeni durum değişkeni açısından ise olumsuz enerji ve tutum kontrolü alt boyutlarında anlamlı olarak farklılaştığı tespit edilmiştir.

Anahtar kelimeler: Psikolojik Performans, Futbol, Amatör Futbol.

ABSTRACT

The aim of this study is to examine the psychological performance of amateur football players in terms of different variables. 126 amateur football players playing football in different clubs in the Central Anatolia region participated in the study. A personal information form and the Psychological Performance Scale were used as data collection tools in the study to determine demographic variables. The scale was developed by Loehr J.E. (1982) and its translation into Turkish, reliability and validity studies were conducted by Erman et al. (2002). There are 7 sub-dimensions consisting of a total of 42 questions aiming to measure the level of psychological skills of athletes, including self-confidence, negative energy, attention control, visualization and imagery control, motivation level, positive energy and attitude control. SPSS 22 (Statistical Package for Social Sciences) program was used in the analysis of the data

in order to determine the psychological performance levels of the participants in the study group. In order to determine the tests to be used in the analysis of the data, in addition to the kurtosis and skewness values, Kolmogorov-Smirnov, Histogram, Plot Graphics and Missing data and extreme value analyses were performed and examined. Distribution, frequency and anova tests were performed to compare the relevant data. As a result of the statistical analyses, it was determined that the psychological performance levels of the participants did not differ significantly in all sub-dimensions in terms of the age variable but differed significantly in the negative energy and attitude control sub-dimensions in terms of the marital status variable.

Keywords: Psychological Performance, Football, Amateur Football.

AMATÖR FUTBOLCULARIN ZİHİNSEL DAYANIKLILIK DÜZEYLERİNİN FARKLI DEĞİŞKENLER AÇISINDAN İNCELENMESİ

EXAMINATION OF MENTAL ENDURANCE LEVELS OF AMATEUR FOOTBALL PLAYERS IN TERMS OF DIFFERENT VARIABLES

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ÖZET

Bu araştırmanın amacı amatör futbolcuların zihinsel dayanıklılık düzeylerinin farklı değişkenler açısından incelenmesidir. Araştırmaya İç Anadolu bölgesinde farklı klüplerde futbol oynayan 126 amatör futbolcu katılmıştır. Araştırmada veri toplama aracı olarak demografik değişkenlerin belirlenmesine yönelik kişisel bilgi formu ve sporda zihinsel dayanıklılık ölçeği kullanılmıştır. Sheard ve arkadaşları (2009) tarafından geçerlik ve güvenilirlik analizi yapılan, Zihinsel Dayanıklılık Ölçeğinin Türkçe uyarlaması Altıntaş ve Koruç (2016) tarafından yapılmıştır. Ölçek, üç alt boyut ve toplam 14 sorudan oluşmaktadır. Çalışma grubunu oluşturan katılımcıların zihinsel dayanıklılık düzeylerinin belirlenebilmesi için verilerin analizinde SPSS 22 (Statistical Package for Social Sciences) programından faydalanılmıştır. Verilerin analizinde kullanılacak testleri belirlemek için basıklık ve çarpıklık değerlerinin yanında, Kolmogorov-Smirnov, Histogram, Plot Grafikleri ve Kayıp veri ve uç değer analizleri yapılarak incelenmiştir. İlgili verilerin karşılaştırılmasında dağılım, frekans ve anova testi yapılmıştır. İstatistiksel analizler sonucunda katılımcıların zihinsel dayanıklılık düzeylerinin yaş ve medeni durum değişkeni açısından tüm alt boyutlarda anlamlı olarak farklılaşmadığı tespit edilmiştir.

Anahtar kelimeler: Zihinsel Dayanıklılık, Futbol, Amatör Futbol.

ABSTRACT

The aim of this study is to examine the mental toughness levels of amateur football players in terms of different variables. 126 amateur football players playing football in different clubs in the Central Anatolia region participated in the study. In the study, a personal information form and a mental toughness scale in sports were used as data collection tools. The Turkish adaptation of the Mental Toughness Scale, the validity and reliability analysis of which was conducted by Sheard et al. (2009), was made by Altıntaş and Koruç (2016). The scale consists of three sub-dimensions and a total of 14 questions. In order to determine the mental toughness levels of the participants in the study group, SPSS 22 (Statistical Package for Social Sciences) program was used in the analysis of the data. In order to determine the tests to be used in the analysis of the data, kurtosis and skewness values were examined by Kolmogorov-Smirnov, Histogram, Plot Graphics and Missing data and extreme value analyses. Distribution, frequency and anova tests were used in the comparison of the relevant data. As a result of statistical analyses, it was determined that the mental resilience levels of the participants did not differ significantly in all sub-dimensions in terms of age and marital status variables.

Keywords: Mental Toughness, Football, Amateur Football.

EVALUATION OF GENETIC DISTANCE AND SIMILARITIES AMONG THREE INDIGENOUS SHEEP POPULATIONS IN SEMI ARID KANO.

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Abstract

This study was carried out to evaluate the genetic diversity of three indigenous sheep breeds in Kano State. A total of two hundred and sixteen (216) sheep from three breeds; Balami (72), Uda (72) and Yankasa (72), three locations; (Bayero University Kano New Campus, Abattoir and Danbare), two sexes (ram and ewe) and four aged groups (≤2, ≤3, ≤4 and ≥5 years) were used for this study. 5ml of blood samples were collected from jugular veins of 24 rams and ewes comprised Balami-8, Uda-8 and Yankasa-8 for DNA extraction using five microsatellite markers at 50 base pairs molecular ladder. It was observed from the sampled population, that the genetic similarity ranged from 0.84-0.97, while genetic distance ranged from 0.03-0.17. The result showed relatively high genetic diversity which is essential for sheep populations. High genetic distance of (0.17) was observed between Uda and Yankasa. It can be concluded that the populations were not isolated, which might be due to their similar geographical locations in Nigeria. The microsattelite markers used for the study were highly informative and could be used for studying sheep populations in the future for livestock improvement.

Keyword: Genetic diversity, genetic distance, microsattelite marker, sheep

A BIM-GIS FRAMEWORK FOR 3D MODELING OF INFRASTRUCTURE ASSETS

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ABSTRACT

The planning, design, and management of infrastructure projects have evolved in recent years due to the integration of Geographic Information Systems (GIS) and Building Information Modeling (BIM). This paper proposes a framework for creating 3D current status models of infrastructure projects by combining BIM and GIS. The framework provides a comprehensive and accurate representation of infrastructure assets by leveraging GIS's spatial analysis capabilities and BIM's precise 3D modeling expertise. The study details the framework's development, including methods for data integration and model validation. The results demonstrate the framework's ability to enhance project planning, monitor asset conditions, and support well-informed decision-making throughout the project lifecycle. This approach establishes a strong foundation for improving infrastructure management and fostering collaboration among stakeholders.

Keywords: Building Information Modelling (BIM), Geographical Information System (GIS), Industry Foundation Classes (IFC), Infrastructure, Integration.

BELİREN YETİŞKİNLERDE ÖZGÜR İRADE VE MUTLULUK: EYLEMLİLİĞİN ARACI ROLÜNÜN İNCELENMESİ

FREE WILL AND HAPPINESS IN EMERGING ADULTS: EXAMINING THE MEDIATING ROLE OF AGENCY

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ÖZET

Bu kesitsel çalışmada, özgür iradenin beliren yetişkinlerin mutluluk düzeyleri üzerindeki etkisinde eylemliliğin aracı rolü incelenmiştir. Beliren yetişkinlik dönemindeki bireylerin psikolojik iyi oluşlarını desteklemek için mutluluklarına katkıda bulunabilecek bilişsel ve davranışsal süreçlerin anlaşılması büyük önem taşımaktadır. Bu bağlamda, özgür iradeyi devreye sokamamak ve buna bağlı olarak eyleme geçememek, beliren yetişkinlerin mutluluğu için birer risk faktörü olarak değerlendirilmektedir. Bu çalışma, özgür iradenin eyleme geçme aracılığıyla beliren yetişkinlerin mutluluk düzeylerini olumlu yönde etkileyip etkilemediğini araştırarak, özgür iradenin ve eylemliliğin mutluluğu etkileyen bilişsel ve davranışsal süreçlerdeki rolünü kapsamlı bir şekilde ele almaktadır. Araştırmanın çalışma grubunu, Türkiye'de yaşayan ve beliren yetişkinlik döneminde bulunan, %68.80'i (*n*=198) kadın, %31.30'u (*n*=90) erkek olmak üzere toplam 288 bireyden oluşmaktadır. Uygun örnekleme yöntemiyle seçilen katılımcıların yaşları 18 ile 26 arasında değişmekte olup, yaş ortalamaları 22.23'tür (*SD*=2.01). Çalışmada demografik bilgi formu ile birlikte üç farklı öz-bildirim ölçeği kullanılarak veri toplanmıştır. Verilerin analizinde betimsel istatistikler, değişkenler arasındaki ilişkileri test etmek için Pearson Korelasyon Katsayısı ve aracılık etkilerini belirlemek amacıyla Bootstrap Analizi uygulanmıştır. Analiz sonuçları, özgür iradenin beliren yetişkinlerde mutluluğun artmasına olumlu yönde katkıda bulunduğunu ve eyleme geçmenin bu süreçte aracı olarak işlev gördüğünü ortaya koymaktadır. Elde edilen bulgular, mutluluğu artırmaya yönelik müdahalelerde özgür iradenin ve eylemliliğin kritik rollerine vurgu yapmaktadır. Dolayısıyla bulgular, özgür irade ve eylemliliği destekleyici müdahale programlarının, psikolojik destek hizmetlerinin ve terapötik uygulamaların beliren yetişkinlerin mutluluk düzeylerini artırmada etkili olabileceğine dikkat çekmektedir.

Anahtar Kelimeler: Beliren Yetişkinler, Özgür İrade, Eylemlilik, Mutluluk.

ABSTRACT

This cross-sectional study examined the mediating role of agency in the effect of free will on emerging adults' happiness levels. In order to support the psychological well-being of individuals in emerging adulthood, it is of great importance to understand the cognitive and behavioral processes that may contribute to their happiness. In this context, the inability to activate free will and inability to use agency are considered as risk factors for emerging adults' happiness. This study investigates whether free will positively affects emerging adults' happiness levels through agency, and comprehensively examines the role of free will and agency in cognitive and behavioral processes that affect happiness. The study group consisted

of a total of 288 individuals, 68.80% (*n*=198) female and 31.30% (*n*=90) male, living in Turkey and in emerging adulthood. The ages of the participants selected by convenience sampling method ranged between 18 and 26 years, with a mean age of 22.23 years (*SD*=2.01). In the study, data were collected using a demographic information form and three different self-report scales. Descriptive statistics were used to analyze the data, Pearson Correlation Coefficient was used to test the relationships between variables, and Bootstrap Analysis was used to determine mediation effects. The results of the analysis reveal that free will contributes positively to the increase in happiness in emerging adults and that taking agency functions as a mediator in this process. The findings emphasize the critical roles of free will and agency in interventions to increase happiness. Therefore, the findings draw attention to the fact that intervention programs, psychological support services and therapeutic practices that support free will and agency can be effective in increasing the happiness levels of emerging adults.
Keywords: Emerging Adults, Free Will, Agency, Happiness.

ATOMİK ARAMA OPTİMİZASYONU İLE RASTGELE ORMAN REGRESYONUNUN ENTEGRASYONU: İRİS VE NHANES VERİ SETLERİ ÜZERİNE BİR ÇALIŞMA

INTEGRATION OF RANDOM FOREST REGRESSION WITH ATOMIC SEARCH OPTIMIZATION: A STUDY ON IRIS AND NHANES DATASETS

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ÖZET

Dijital dünyanın petrolü olan verilerin gün geçtikçe artmasıyla birlikte birçok problemi beraberinde getirmektedir. Bu verilerin depolanması, işlenmesi, analiz edilmesi gibi birçok işlem gerekmektedir. Verileri işleme ve analiz etme işlemlerinde genellikle Makine Öğrenmesi yöntemlerine başvurulmaktadır. Makine Öğrenmesi yöntemleriyle veriler sınıflandırılabilir, regresyon analizleri yapılabilir ve bunun gibi birçok veri işleme teknikleri kullanılabilir. Kullanılan Makine Öğrenmesi yöntemlerinin başarısı önemli bir konudur ve bununla ilgili çokça çalışma bulunmaktadır. Makine Öğrenmesi yöntemlerinde optimizasyon algoritmalarının kullanılması günümüzde oldukça popüler olmaktadır. Makine öğrenmesi yöntemlerinin parametre değerleri için rasgele sayılar kullanmak yerine optimizasyon yöntemleri sonucunda optimum sayılar kullanmak başarıyı arttırmaktadır. Bu çalışmada, bir makine öğrenmesi modeli olan Rastgele Orman Regresyon modelinin performansını artırmak için Atomik Arama Optimizasyonu (Atomic Search Optimization, ASO) algoritması kullanılmaktadır. Model performansını değerlendirmek için iki farklı veri seti kullanılmaktadır: Iris ve NHANES demografik veri seti. İlk olarak veri setleri üzerinde ön işleme adımları gerçekleştirilmektedir ve her veri seti için Rastgele Orman modeli kurulmaktadır. Modelin başarısı Ortalama Kare Hata (Mean Squared Error, MSE) ve R^2 metrikleri ile değerlendirilmektedir. Öğrenme eğrisi analizi yapılarak modelin genelleme kapasitesi analiz edilmektedir. Sonraki aşamada, modelin hiperparametreleri ASO algoritması ile optimize edilerek performans iyileştirilmektedir. ASO algoritmasının adaptif yapısı sayesinde, her iki veri setinde de modelin tahmin doğruluğu ve genelleme kapasitesinde artış gözlemlenmektedir. Çalışmanın sonucunda, ASO'nun Rastgele Orman Regresyon modelinin başarı oranına önemli katkılar sağladığı gözlemlenmektedir.

Anahtar Kelimeler: Rastgele Orman Regresyon, Atomik Arama Optimizasyonu, Makine Öğrenmesi, İris, NHANES

ABSTRACT

As data, the oil of the digital world, grows by the day, it brings with it many problems. Many processes are required to store, process and analyze this data. Machine learning methods are generally used in data processing and analysis processes. Machine learning methods can be used to classify data, perform regression analysis and many similar data processing techniques. The success of the machine learning methods used is an important issue and there are many studies on this. The use of optimization algorithms in machine learning methods is quite popular today. Instead of using random numbers for the parameter values of machine learning methods, using optimal numbers as a result of optimization methods increases the success. In this study, the Atomic Search Optimization (ASO) algorithm is used to improve the performance of the Random Forest Regression model, which is a machine learning model. Two different datasets are used to evaluate model performance: Iris and NHANES demographic datasets. First, preprocessing steps are performed on the datasets and a Random Forest model is built for each dataset. The success of the model is evaluated using the Mean Squared Error (MSE) and R^2 metrics. The generalization ability of the model is analyzed by performing a learning curve analysis. In the next step, the performance is improved by optimizing the hyper parameters of the model using the ASO algorithm. Thanks to the adaptive structure of the ASO algorithm, an increase in the prediction accuracy and generalization capacity of the model is observed in both datasets. As a result of the study, it is observed that ASO makes a significant contribution to the success rate of the Random Forest regression model.

Keywords: Random Forest Regression, Atomic Search Optimization, Machine Learning, Iris, NHANES

Bİ-ELASTİK DOKUMA KUMAŞLARDAN DİKİŞ ÖZELLİKLERİ İYİLEŞTİRİLMİŞ GİYSİ TASARIMI

GARMENT DESIGN FROM BI-ELASTIC WOVEN FABRICS WITH ENHANCED SEAM PROPERTIES

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ÖZET

Giysilerde ve spor giyim ürünlerinde yüksek performanslı giysilere yönelik artan talep neticesinde, hem atkı hem de çözgü yönünde elastan kullanılarak üretilen, çift yönlü esneyen, bi-elastik (en-boy elastanlı) dokuma kumaşların kullanımı son zamanlarda artmaktadır. Bu kumaşlar, iyi esneme ve toparlanma özelliklerine sahip olmalarının yanı sıra, konforlu ve dayanıklı malzemelerdir. Yaklaşık %10-30 esneyebilen ve serbest kaldıktan sonra eski haline gelebilen elastan içerikli bir giysinin içinde kişinin rahat ve konforlu hissedebilmesini sağlayabilmek için esnek kumaşlardan oluşan giysilerin ve dikişlerinin beraberce esneyebilmesi, dikişin kumaşın esnemesine engel olmaması oldukça önemlidir.

Elastan içerikli, elastikiyeti yüksek kumaşların dikiminde dikiş tipi ve sıklığı, dikiş ipliği türü ve numarası ile dikiş iğnesi numarası gibi parametreler son derece önemlidir. Bu parametrelerden bir veya birkaçının uygun seçilmemesi kusurlu dikiş hatlarının oluşmasına sebep olarak, giysi üzerinde istenmeyen görüntülere yol açabilir.

Bu çalışmada, yüksek elastikiyete sahip dokuma kumaştan tasarlanmış bir erkek takım elbisesinin farklı dikiş bölgelerine uygulanacak dikiş tipleri, dikiş ipliği türü ve dikiş sıklıkları üzerinden çalışmalar yapılarak dikiş kusuruna sebebiyet vermeyecek, ideal dikiş elde edilmesi amaçlanmıştır. Bu doğrultuda, hem atkı hem de çözgü yönünde elastan bulunan, %71 polyester/%24 viskon/%5 elastan içerikli bir dokuma kumaş (215 g/m^2) kullanılarak üretilecek erkek takım elbisesinin farklı bölgelerinde bulunması gereken dikiş tipleri üzerinden dikiş sıklığı ve dikiş ipliği tipi değiştirilerek çalışmalar gerçekleştirilmiştir. Düz dikiş, zincir dikiş ve gaze dikişi uygulamaları, etiket numarası 120 olan %100 r-Pet (recycle polyester) dikiş ipliği ve yüksek elastikiyete sahip dikiş ipliği kullanılarak 2, 3, 4 ve 5 dikiş adımı/cm sıklıklarında gerçekleştirilmiş ve kumaşın esnemesi karşısında dikiş performansları gözlenmiştir. Elde edilen sonuçlar çerçevesinde, takım elbisenin dikimi esnasında kullanılacak tüm dikişler için uygun dikiş parametreleri belirlenmiştir.

Anahtar Kelimeler: Bi-elastik kumaş, dokuma kumaş, r-Pet dikiş ipliği, elastan

ABSTRACT

As a result of the increasing demand for high-performance apparel in both clothing and sportswear, the use of bi-elastic (two-way stretch) woven fabrics, produced using elastane in both warp and weft directions, has been increasing recently. These fabrics, in addition to having good elasticity and recovery properties, are comfortable and durable materials. A garment from elastane containing fabric can stretch by about 10-30% and recover immediately after release. To ensure maximum comfort, clothing and its seams should be able to move together and the

seams must not hinder the fabric's ability to stretch. The choice of stitch type, stitch density, thread type and size, and needle size is critical when sewing fabrics with high elastane content. Selecting the wrong parameters can lead to faulty seams and an unattractive finished garment. This study focuses on determining optimal sewing parameters including seam type, sewing thread type and stitch density, for a men's suit made from a highly elastic fabric for minimizing sewing defects. For doing so, a men's suit was constructed using a 71% polyester, 24% viscose, and 5% elastane (215 g/m^2). Different seam types, stitch densities, and thread types were applied to various areas of the suit to determine the optimal parameters. Stitch applications such as chain stitch, lockstitch, decorative stitch, etc. were performed using 100% r-PET (recycled polyester) and highly elastic sewing threads at stitch densities of 2, 3, 4, and 5 stitches per centimeter. Performance of the seams was observed under fabric stretch conditions. Based on the obtained results, optimum sewing parameters have been determined for all seams used in the construction of the suit.

Keywords: Bi-elastic fabric, woven fabric, r-Pet sewing thread, elastane

MAGİSTRANT PEDAQOQLARIN TƏŞKİLATCILIQ BACARIQLARININ FORMALAŞMASINA DAİR

ON THE FORMATION OF ORGANIZATIONAL SKILLS OF MASTER'S EDUCATORS

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Magistratura səviyyəsində gələcək pedaqoqların təşkilati-inzibatçılıq sahəsi üzrə kompetensiyalara yiyələnməsi onların öz müqəddəratını təyin etmək, özünüinkişaf etdirmək, insan davranışının ən müxtəlif formalarını və növlərini tam mənimsəməsi üçün təkcə öyrənmə məkanını deyil, sosial qarşılıqlı əlaqə üçün xüsusi təşkil edilmiş emosional cəhətdən rahat təhsil mühitini yaratmağa hazır olmaqdır.

Pedaqoji təmayüllü ali məktəblərdə magistratura səviyyəsində gələcək pedaqoqların hazırlanması ali təhsil üçün sosial sifarişin ödənilməsi üçün təhsil sisteminin müasirləşdirilməsi çərçivəsində həyata keçirilir. Ali məktəblərdə kadr hazırlığı bakalavr, magistratura və doktorantura proqramlarının həyata keçirilməsi ilə baş tutur. Bu hazırlıq prosesində bakalavrların hazırlanması fundamental təhsil və ilkin peşəkarlaşma elementlərinin mənimsənilməsini əhatə edirsə, magistratura təhsil səviyyəsində isə elmi-tədqiqat və peşə fəaliyyəti üçün ixtisaslaşdırılmış hazırlıq mərhələsi sayılır. Magistratura səviyyəsində təhsil almaq magistrantların peşə və tədqiqat hazırlığında imkanları genişləndirir.

Pedaqoji kadr hazırlığı “insan-insan” peşə növünə daxil olması səbəbilə təşkilati-inzibatçılıq kompetensiyasının formalaşmasında şəxsiyyətyönümlü yanaşmadan istifadə edilməsi uyğun hesab edilir. Bu yanaşma daim dəyişən iş şəraitini nəzərə alaraq fərdin formalaşması, səmərəli işləməsi və peşəkar inkişafı imkanlarını təmin etməklə yanaşı, eyni zamanda özünü təşkil etməyə və şəxsi inkişafa, onun yaradıcılıq qabiliyyətlərinin həyata keçirilməsinə və fəaliyyət göstərməsi hər bir magistrantın öz imkanları əsasında təşkilati-inzibatçılıq kompetensiyasının səmərəli formalaşdırılması üçün əlverişli şəraitin yaradılmasına kömək edəcəkdir.

Magistratura səviyyəsində gələcək pedaqoqların təşkilati-inzibatçılıq kompetensiyasının formalaşdırılması problemini öyrənərkən resurs yanaşmasında diqqət edilməlidir. Resurs yanaşmasının ideyaları şəxsiyyətyönümlü və humanist əsaslara malikdir.

Tədqiqatın bir hissəsi olaraq gələcək pedaqoqların təşkilati-inzibatçılıq kompetensiyasının formalaşması üçün resursları və potensialı müəyyən etmək üçün bu yanaşmadan istifadəni zəruri hesab edirik. Çünki təşkilati-inzibatçılıq resursların idarə edilməsi prosesidir.

Fikrimizcə, təşkilati-inzibatçılıq sahəsi üzrə kompetensiyaların bütövlüyü motivasiya-şəxsi, idrak, fəaliyyət əməliyyatı və kommunikativ komponentlərdən ibarətdir.

Açar sözlər: magistrant tələbələr, təşkilatçılıq, peşə kompetensiyaları, pedaqoji kadr hazırlığı, şəxsiyyətyönümlü təhsil, təhsil sistemi

ABSTRACT

Master's level acquisition of organizational-administrative competencies of future educators is to be ready to create not only a learning space, but also an emotionally comfortable educational environment, specially organized for social interaction, for their self-determination, self-development, and full mastery of the most diverse forms and types of human behavior. .

The training of future pedagogues at the master's level in pedagogically oriented higher schools is carried out within the framework of the modernization of the education system to meet the

social order for higher education. Personnel training in higher schools takes place through the implementation of bachelor's, master's and doctoral programs. In this preparatory process, the preparation of bachelors includes mastering the elements of basic education and initial professionalization, while at the master's level of education, it is considered a specialized preparation stage for scientific research and professional activity. Studying at the master's level expands the opportunities for graduate students in their professional and research training.

Due to the fact that pedagogical personnel training is included in the "human-human" type of profession, it is considered appropriate to use a personality-oriented approach in the formation of organizational-administrative competence. This approach, taking into account the constantly changing working conditions, provides opportunities for the formation, efficient work and professional development of the individual, at the same time, self-organization and personal development, the implementation of his creative abilities and the performance of each master's degree in organizational-administrative competence based on his own capabilities. will help to create favorable conditions for effective formation.

When studying the problem of forming the organizational-administrative competence of future teachers at the master's level, attention should be paid to the resource approach. The ideas of the resource approach have person-oriented and humanistic foundations.

As part of the research, we consider it necessary to use this approach to determine the resources and potential for the formation of organizational-administrative competence of future educators. Because organizational-administration is a resource management process.

In our opinion, the integrity of competencies in the organizational-administrative field consists of motivational-personal, cognitive, operational and communicative components.

Key words: graduate students, organization, professional competencies, pedagogical personnel training, personality-oriented education, educational system

KAYSERİ ERKİLET MAHALLESİ'NDEKİ HASAN BEY ÇEŞMESİ'NİN DİJİTAL İKİZİ VE 3D REPLİKASININ ÜRETİMİ

THE DIGITAL TWIN AND 3D REPLICA PRODUCTION OF HASAN BEY FOUNTAIN IN ERKİLET NEIGHBORHOOD, KAYSERİ

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ÖZET

Bu çalışma, Kayseri'nin mimari kimliğinde önemli bir yere sahip olan ve kentsel dokuya katkıda bulunan tarihi çeşmelerin mimari değerlerini vurgulamakta; bu yapılar üzerinden kültürel mirasın korunması ve sürdürülebilirliğine yönelik bir model sunmayı amaçlamaktadır. Yüzyıllar boyunca toplumun su ihtiyacını karşılamak ve sosyal etkileşimi sağlamak amacıyla inşa edilen bu çeşmeler, günümüzde işlevsel gerekliliklerin ötesinde, kentsel ve kültürel mirasın korunması gereken geleneksel birer mimari unsur haline gelmiştir. Çeşmeler, su temin etmenin yanı sıra, taş işçiliği, kemer yapıları ve zarif süslemeleri ile inşa edildikleri dönemin estetik anlayışını yansıtarak yerel mimariyi şekillendirmiştir.

Altyapı sistemlerinin gelişimi ile su sağlama işlevlerini büyük ölçüde yitiren bu çeşmelerin, Osmanlı ve Selçuklu dönemlerinden kalma örnekleri başta olmak üzere, mimari miras olarak korunması önem arz etmektedir. Ancak, Kayseri ve çevresindeki pek çok işlevini yitirmiş çeşme yapısı gerekli periyodik bakım ve restorasyon çalışmaları yapılamadığından fiziksel hasara uğramış veya yok olma tehlikesi ile karşı karşıya kalmıştır. Kültürel mirasın sürdürülebilirliği bağlamında, bu çeşmelerin dijital olarak belgelenmesi, geleceğe taşınmaları ve eğitim, restorasyon gibi alanlarda referans niteliği taşımaları açısından büyük önem taşımaktadır.

Bu çalışmada, günümüz teknolojisinin sunduğu 3B modelleme ve dijital belgeleme yöntemleri kullanılarak, Kayseri'nin Erkilet Mahallesi'nde bulunan ve günümüze iyi durumda ulaşabilen Hasan Bey Çeşmesi'nin tüm mimari detayları kaydedilecek, üç boyutlu bir model ile belgelenerek fiziksel bir replikası üretilecektir. Bu sayede, dijital ikiz kavramı çerçevesinde çeşmenin tüm mimari ayrıntılarının üç boyutlu olarak belgelenmesi sağlanarak, sürdürülebilir bir kültürel miras yönetimi çerçevesinde gelecekteki restorasyon projelerine yol gösterici bir kaynak sunulacaktır. Bu dijital kayıtlar, kültürel sürdürülebilirlik ilkelerine uygun olarak mimari dokunun korunmasına katkı sunarken, gelecek nesillere aktarılmak üzere kapsamlı bir miras arşivi oluşturacaktır.

Anahtar Kelimeler: Hasan Bey Çeşmesi, 3B model, Erkilet, Koruma, Polycam

ABSTRACT

This study emphasizes the architectural value of historical fountains, which play a significant role in the architectural identity of Kayseri and contribute to the urban fabric. It aims to propose a model for the preservation and sustainability of cultural heritage through these structures. These fountains, built over centuries to meet the water needs of the community and facilitate

social interaction, have evolved beyond their functional necessity into traditional architectural elements that require conservation as urban and cultural heritage.
In addition to supplying water, these fountains reflect the aesthetic understanding of the periods in which they were built, shaping local architecture with their stone craftsmanship, arched structures, and elegant ornamentation. However, with the development of infrastructure systems, many fountains, particularly those dating back to the Ottoman and Seljuk periods, have largely lost their functionality. Their preservation as architectural heritage has become critical. Unfortunately, many non-functional fountains in Kayseri and its surroundings have suffered physical damage or face the threat of extinction due to the lack of necessary periodic maintenance and restoration efforts.
In the context of cultural heritage sustainability, digitally documenting these fountains is vital for their preservation for future generations and for serving as reference materials in education and restoration fields.
In this study, utilizing modern technologies such as 3D modelling and digital documentation methods, all architectural details of Hasan Bey Fountain, located in Erkilet Neighbourhood of Kayseri and well-preserved to date, will be recorded. A three-dimensional model will be created, and a physical replica will be produced. Thus, within the framework of the digital twin concept, all architectural details of the fountain will be documented in 3D, providing a guiding resource for future restoration projects under a sustainable cultural heritage management approach. These digital records will contribute to preserving the architectural fabric in accordance with the principles of cultural sustainability and create a comprehensive heritage archive for future generations.
Keywords: Hasan Bey Fountain, 3D Model, Erkilet, Preservation, Polycam

ENVIRONMENTAL CONTROL AND THE PROBLEM REGARDING THE OWNERSHIP OF FOREST RESOURCES RECORD

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Abstract:
Aim: This paper addresses the complexities surrounding environmental control and the ownership of forest resources, highlighting the implications for sustainable management and community rights. It aims to analyze the current state of forest resource ownership, the challenges posed by overlapping claims, and the potential for integrated management strategies that benefit both local communities and environmental sustainability.
Methodology: The study employs a mixed-methods approach, combining qualitative analyses of legal frameworks governing forest ownership with quantitative assessments of forest management practices across various regions. Data were collected from case studies in diverse ecological and socio-economic contexts, focusing on community forestry initiatives, public ownership models, and the role of indigenous rights in forest governance. Stakeholder interviews and participatory workshops were conducted to gather insights from local communities, policymakers, and environmental organizations.
Findings: The findings reveal a pervasive insecurity in property rights related to forest resources, which undermines effective management and conservation efforts. The analysis indicates that while public ownership models dominate in many regions, local communities often lack adequate recognition of their rights, leading to conflicts over resource use. Successful case studies demonstrate that integrating community participation in forest management not only enhances ecological outcomes but also strengthens local economies. The paper concludes that rethinking ownership structures to empower local stakeholders is critical for achieving sustainable forest management.
Keywords: Environmental control, forest ownership, community forestry, sustainable management, property rights, indigenous rights.

DETERMINING THE EFFICIENCY OF BUSINESS OF HETEROGENEOUS LEGAL ENTITIES IN IN RELATION TO THE ANALYSIS OF THE USE OF THE TYPE OF CREDIT, THE EXAMPLE OF THE REPUBLIC OF SERBIA

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Abstract:
The organization of numerous economic activities in countries, such as the Republic of Serbia, should be such that it comes as close as possible to optimality, where the functioning of the banking system certainly comes to the fore.
This can be achieved in different ways. One of the ways to improve the success and efficiency of business should be looking for the most favorable form of obtaining loans from commercial banks with which the company has a long-term business relationship.
The decision for, for example, a loan for working capital intended for a specific activity must have economic justification.
There is a connection between the efficiency of operations and the form of taking loans by the company, which can be a very important factor in deciding to enter into a financial arrangement between the company and the bank.
In addition, the costs related to the taken loans in the observed period have a strong influence on the determination of the company in relation to the form of loan for which it is requested to enter into credit relations in the observed period.
Key words: enterprise, management and top management decision-making, the functioning of the banking system.

DIGITALISATION AS A FACTOR AND DRIVER OF THE DEVELOPMENT OF ALL DEVELOPMENT SECTORS IN COMPANIES THAT ARE PART OF THE OVERALL BUSINESS OF ECONOMIC DEVELOPMENT, EXAMPLE OF THE REPUBLIC OF SERBIA

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Abstract:
Digitalization as a business operation in the context of real business in the economy can be viewed as a trend of activity aimed at the accelerated development of the entire economy. Thus, developing countries, transition economies should be viewed from the perspective of strong economic development and the state's orientation towards finding new opportunities for placing goods, influencing the domestic and international markets.
The impact of digital technologies on the development of enterprises in the existence and development of an economy that strives for accelerated development, such as the economy of Serbia, is significant and goes in the direction of strengthening all economic sectors that participate in the economy.
Openness of the economy, technology and innovation, application of new software solutions, development of the IT sector, and digitalization of the economy represent factors of possible development.
The economy should adopt them in the general planning of activities, especially in the work of small and medium-sized enterprises.
Digitalization has a very strong impact on the connection of enterprises and their connectivity and existence in supply chains, but also beyond. In addition, digitalization is associated with integration processes within the framework of the need to join, for example, the EU countries, BRICS. Digitalization is strongly linked to increasing possible competitiveness in numerous markets.
Key words: digitization, enterprise, management and top management decision-making.

THE IMPORTANCE OF SOCIAL MEDIA-BASED BUSINESS AND THEIR IMPACT IN PROMOTING THE BASIS FOR THE OPERATION OF NUMEROUS ECONOMIC ACTIVITIES IN TRANSITION ECONOMIES

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Abstract:
The importance of doing business with the help of social networks and digitalization is growing and under increasing influence.
Digitization and social networks as well as their impact are related to the promotion of numerous activities aimed at numerous economic activities. Thus, digitalization is becoming a factor of real development in a large number of transition economies.
The impact of digital technologies can be observed through the real impact of social networks on the development of enterprises in the existence and development of the entire economy.
This is of great importance, especially when the economy is striving for accelerated development, such as the economy of Serbia.
Therefore, social networks can have a significant impact that goes towards strengthening all economic sectors that participate in the formation of the overall strength of the economy.
The openness of the economy, technology and innovation, the application of new software solutions, the development of the IT sector, digitalization must inevitably be observed through the impact through the application of social networks so that the economy represents possible real factors of development of transitional economies, especially.
Key words: digitization, enterprise, management and top management decision-making.

DIGITALISATION IN THE CONTEXT OF REAL BUSINESS DEVELOPMENT IN TRANSITION ECONOMIES EVALUATED THROUGH THE BALANCE SHEET OF COMPANIES

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Abstract:
Digitalization as a business operation in the context of real business in the economy can be viewed as a trend of activity aimed at the accelerated development of the entire economy. Thus, developing countries, transition economies should be viewed from the perspective of strong economic development and the state's orientation towards finding new opportunities for placing goods, influencing the domestic and international markets.
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Key words: digitization, enterprise, management and top management decision-making.

IMPROVING BUDS' WINTER RESISTANCE AND CLUSTERS' CHEMICAL COMPOSITION OF 'CABERNET SAUVIGNON' GRAPEVINE THROUGH SOIL AND FOLIAR FERTILIZATION

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ABSTRACT

Viticulture is a very intensive branch of agriculture that includes the cultivation of grapevines and the production of grapes for fresh consumption, for processing into wine, juices, and other grape products. By applying modern agrotechnical measures, with a special focus on nutrition, i.e. by applying optimal doses and types of fertilizers in an appropriate period, it is possible to significantly influence the development of the grapevine, and thus the production of high-quality grapes. This research aimed to determine the influence of soil and foliar fertilizing on the chemical composition of the clusters and the resistance of the buds to low winter temperatures of grapevine cultivar 'Cabernet sauvignon' grown in the Ohrid vineyard area, North Macedonia. In November, with the basic cultivation of the soil, the fertilizer NPK 10-20-30 was applied (500 kg·ha^{-1}). Foliar fertilizing was performed with 0.4%, 0.8%, 1.2% and 1.5% solution of NPK fertilizer 18-9-27+2MgO + ME (1000 mg·kg^{-1}Fe; 200 mg·kg^{-1} B; 150 mg·kg^{-1} Zn; 500 mg·kg^{-1} Mn; 56 mg·kg^{-1} Mo; 110 mg·kg^{-1} Cu). Different concentrations of foliar fertilization had a positive influence on the chemical composition of the clusters and the resistance of the buds to winter temperatures in which a significantly higher ($p<0.05$) content at all tested temperatures in all variants was obtained compared to the control area. In the clusters of the 'Cabernet sauvignon' cultivar, higher ($p<0.05$) content of nitrogen (0.87%), phosphorus (0.67 %) and potassium (1.19%), as well as the lowest percentage of frozen buds (6.00%) at a temperature of –15 °C, 8.20% frozen buds at a temperature of –18 °C and 17.70% frozen buds at a temperature of –21 °C was determined at the variant 4 (NPK 10-20-30 + 1.2% solution of NPK 18-9-27+2MgO+ME). The highest content of calcium (1.72%) and magnesium (0.59%) in the clusters was determined in the variant 3 (NPK 10-20-30 + 0.8% solution of NPK 18-9-27+2MgO+ME).

Keywords: Grapevine production, foliar fertilization, buds.

MEHMET KAPLAN'IN DENEMELERİNDE KÜLTÜR VE MEDENİYET ALGISI
THE PERCEPTION OF CULTURE AND CIVILIZATION IN MEHMET KAPLAN'S ESSAYS

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ÖZET
Fransızca 'essai' olan deneme, kökeni itibariyle Latince 'exagium', 'exigere' kelimelerinden gelmektedir. 'Essai' kelimesi, ilk önce, Bordeaux Parlamentosu danışmanı tarafından kullanılmıştır. Deneme; İlk olarak *Essais* (*Denemeler*) adıyla 16. Yüzyılda Monteigne tarafından yayınlanır. Montaigne'in *Denemeler* adlı eseriyle kendine özgü özelliklerini kazanmış bir edebi türdür. Deneme hem Batı edebiyatında hem de Türk edebiyatında sıklıkla tercih edilir. Türk edebiyatına Tanzimat döneminde girmiş ve Cumhuriyet döneminde gelişmiştir. Diğer edebi türlere göre kısa olması, her konuda yazılabilmesi, yazarın görüşlerini ispatlama zorunluluğunun olmaması sanatçılar arasında denemeyi sık tercih edilen bir tür hâline getirmektedir. Bu gibi sebeplerle roman, hikâye, şiir türlerinde eserler kaleme alan sanatçıların pek çoğunun deneme türünde de eserlerinin olduğu görülmektedir. Cumhuriyet Dönemi edebiyatının önde gelen araştırmacılarından biri olan Mehmet Kaplan tarafından yazılan denemelerin içerisinde kültür ve medeniyet kavramlarının Türk edebiyatı açısından önemi ve değerlendirilmesi yapılarak kültürel kimlikle ilgili görüşlerini inceleyen bu çalışması yakın dönem Türk tarihinde kültürel kimlik düşüncesinin değişim sürecinin anlaşılmasına katkı sunmayı hedeflemektedir. Mehmet Kaplan'ın denemelerinde kültür ve medeniyet kavramlarının incelenmesi, bu iç içe geçmiş kavramların derinlemesine araştırılmasını ortaya koymaktadır. Kaplan, kültür ve medeniyet arasındaki karmaşık ilişkiyi derinlemesine incelerken bunların toplumsal dinamiklerini anlamadaki öneminden de bahsetmektedir. Bu çalışmada Mehmet Kaplan'ın deneme kitapları hakkında bilgilendirme yapılacak ve denemeciliği üzerinde durulacaktır. Bu çalışmanın amacı Mehmet Kaplan Denemelerinde Kültür ve Medeniyet Algısı nasıldır sorusuna cevap aramaktadır.
Anahtar Kelimeler: Mehmet Kaplan, Kültür, Medeniyet, Deneme.

ABSTRACT
The French word "essai," meaning "essay," originates from the Latin words "exagium" and "exigere. "Essai" was first used by a counselor from the Bordeaux Parliament. The essay, in the form of "Essais" (Essays), was first published in the 16th century by Montaigne. It is a literary genre that gained its distinctive characteristics with Montaigne's work. The essay is frequently used in both Western and Turkish literature. It entered Turkish literature during the Tanzimat period and developed during the Republican period. Its brevity, versatility in subject matter, and the lack of necessity to prove the writer's opinions make it a popular genre among writers. Consequently, many authors who write novels, stories, and poetry also have works in the essay genre. Mehmet Kaplan, one of the leading researchers of Republican Period literature, wrote

essays that explore the significance and evaluation of cultural and civilization concepts from the perspective of Turkish literature. This study aims to contribute to the understanding of the process of change in the concept of cultural identity in recent Turkish history. Examining the concepts of culture and civilization in Mehmet Kaplan's essays reveals an in-depth investigation of these intertwined concepts. Kaplan examines the complex relationship between culture and civilization in depth, emphasizing their importance in understanding their social dynamics. Examining the concepts of culture and civilization in Mehmet Kaplan's essays reveals an in-depth investigation of these intertwined concepts. While Kaplan examines the complex relationship between culture and civilization in depth, he also mentions their importance in understanding their social dynamics. In this study, information will be given about Mehmet Kaplan's essay books and his essayism will be emphasized.The purpose of this study is to answer the question of how the perception of culture and civilization is reflected in Mehmet Kaplan's essays.

Key Words: Mehmet Kaplan, Culture, Civilization, Essay.

TEORİDEN UYGULAMAYA ORMAN BANYOSU[1]

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ÖZET
Orman banyosu (Shinrin-yoku), 1982 yılında Japon devleti tarafından toplum sağlığını artırmak için desteklenmeye başlandığında belki de hiç kimse orman banyosunun günümüzde geniş çapta yaygınlaşacağını öngörememiştir. 2016 yılında yazar/yazarların ilk defa Internationale Tourismusbörse (ITB) Berlin'de (Almanca "Waldbaden" şeklinde öğrendiği orman banyosunu Türkiye'ye gelerek araştırması ve bu alanda araştırmalar yapmalarını beraberinde getirdi. Bu çalışmada öncelikle "Orman banyosu nedir?" konusu üzerinde durulacak ve dünyadaki belli başlı orman banyosu eğitimi verilen ülkelerdeki kurumların müfredatları ve bunların içerikleri ele alınacaktır. Dolayısıyla bu çalışmada nitel veri toplama yöntemlerinden biri olan içerik analizi tekniği uygulanmıştır. Orman banyosunun, wellness ile ilişkisi de bu çalışmanın diğer bir boyutunu oluşturacaktır. Orman banyosu ve etkileri üzerine yapılan çalışmalar İngilizce ve Almanca dillerinde sayıları yüzlere yaklaşsa da Türkçe yapılan araştırma ve yayın sayısının henüz başlangıç aşamasında olduğu söylenebilir. Bu çalışma, bahsedilen bu boşluğun doldurulmasına katkıda bulunmayı amaçlamaktadır.
Anahtar Kelimeler: orman banyosu, shinrin-yoku, orman terapisi, wellness.

ABSTRACT
Forest bathing (Shinrin-yoku) was first supported by the Japanese government in 1982 to increase public health, and perhaps no one could have predicted that forest bathing would become widespread today. In 2016, the author/authors first learned about forest bathing at the Internationale Tourismusbörse (ITB) Berlin (German for "Waldbaden"), and this led to their coming to Turkey to conduct research and conduct research in this area. This study will primarily focus on "What is forest bathing?" and will address the curricula and content of institutions in the countries where forest bathing education is provided. Therefore, the content analysis technique, one of the qualitative data collection methods, was applied in this study. The relationship between forest bathing and wellness will also constitute another dimension of this study. Although the number of studies conducted on forest bathing and its effects in English and German is approaching hundreds, it can be said that the number of studies and publications in Turkish is still in its early stages. This study aims to contribute to filling this gap.
Keywords: forest bathing, shinrin-yoku, forest therapy, wellness.

[1] Çalışmada kaynakça gösterilmeden verilen bilgiler, yazar/yazarların 2002 yılından beri Wellness 2016'yılından beri Orman Banyosu alanındaki birikim, deneyim ve gözlemlerine dayanmaktadır.

SAĞLIK TEMELLİ KIRSAL KALKINMADA ALMAN MODELİ DESTİNASYON YÖNETİMİ: BAVYERA[1] ÖRNEĞİ[2]

GERMAN MODEL DESTINATION MANAGEMENT IN HEALTH BASED RURAL DEVELOPMENT: THE CASE OF BAVARIA

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ÖZET
Almanya'nın kırsal kalkınmayı başarılı bir şekilde hayata geçiren eyaletlerinin başında gelen Bavyera, "Sağlıklı Bavyera!" sloganı ile sağlık turizmi pazarında kendini konumlandırmaya çalışmaktadır. Birçok destinasyon sağlık turizmi çatısı altında medikal turizm alanına öncelik vermekte, özellikle de şehir merkezli ve hastane odaklı bir sağlık turizmini benimsemektedir. Bavyera ise özgün doğal potansiyelini verimli bir şekilde değerlendirerek kırsal temelli sağlık ürün ve hizmetlerini öne çıkarmaktadır. Bavyera Şifa Derneği'ne ait kırsal alanlarda bulunan tesislerde yaklaşık 100 bin kişi istihdam edilmekte ve yıllık yaklaşık 4,5 milyar avro da gelir sağlanmaktadır. Bu noktadan hareketle çalışmada, Türkiye'deki benzer potansiyeli olan destinasyonların Bavyera örneğinden yola çıkarak sağlığı, kısmen de olsa kırsal kalkınma için bir itici güç olarak kullanmasını sağlamak amaçlanmaktadır. Bu amaç doğrultusunda ilgili literatür ve özellikle Almanca konuşulan eyaletlerin sağlık kurum ve kuruluşlarının çevrimiçi web sayfaları taranmış ve elde edilen bulgular çalışmada sunulmuştur. Araştırma bulguları, Bavyera'nın klasik medikal turizm yerine, daha çok doğa temelli sağlık uygulamalarını öne çıkardığını göstermektedir. Araştırma sonucunda termal, orman banyosu, talassoterapi ve iklim kürü gibi tüm doğa temelli şifa uygulamalarının kurumsallaşması ve sürdürülebilirliği açısından bir çatı kuruluşunun varlığına ihtiyaç olduğu anlaşılmıştır. Bunun için genelde Almanca konuşulan ülkelerde, özelde ise Bavyera örneğinde olduğu gibi bir yapılaşmanın örnek alınabileceği önerilmektedir. Bu çalışma kırsal alanda yönetilebilecek başarılı bir sağlık turizmi destinasyonunun hayata geçirilmesinde yol gösterici olması bakımından önemlidir.
Anahtar kelimeler: Sağlık, Sağlık turizmi, Kırsal kalkınma, Bavyera, Bavyera Şifa Derneği.

ABSTRACT
Bavaria, one of the leading states of Germany that has successfully implemented rural development, is trying to position itself in the health tourism market with the slogan 'Healthy Bavaria!'. Many destinations prioritise medical tourism under the umbrella of health tourism, especially adopting a city-centred and hospital-oriented health tourism. Bavaria, on the other hand, utilises its unique natural potential efficiently and emphasises rural-based health products and services. Approximately 100 thousand people are employed in the facilities in the rural areas of the Bavarian Spa Association and an annual income of approximately 4.5 billion Euros is generated. From this point of view, the aim of this study is to enable destinations with similar potential in Türkiye to use health as a driving force for rural development, albeit partially, based on the Bavarian example. For this purpose, the relevant literature and especially the online web

[1] Yazarın, Bavyera'yı yakından tanıması ve sık sık oraya seyahat ederek gelişmeleri yerinde görmesi çalışmanın özgünlüğünü de beraberinde getirmektedir.
[2] Çalışmada kaynakça gösterilmeden verilen bilgiler, yazarın 2002 yılından beri Wellness 2016'yılından beri Orman Banyosu alanındaki birikim, deneyim ve gözlemlerine dayanmaktadır.

pages of the health institutions and organisations of the German-speaking states were scanned and the findings obtained were presented in the study. The research findings show that Bavaria emphasises nature-based health practices rather than classical medical tourism. As a result of the research, it is understood that there is a need for the existence of an umbrella organisation for the institutionalisation and sustainability of all nature-based healing practices such as thermal, forest bathing, thalassotherapy and climate cure. For this purpose, it is suggested that an organisation such as the one in German-speaking countries in general and Bavaria in particular can be taken as an example. This study is important in terms of guiding the realisation of a successful health tourism destination that can be managed in rural areas.
Key words: Health, Health tourism, Rural development, Bavaria, Bavarian Spa Association.

OTİZM SPEKTRUM BOZUKLUĞU TANISI ALAN ÇOCUKLARDA DİKKAT, YÜRÜTÜCÜ FONKSİYON, DENGE VE POSTURAL KONTROL ARASINDAKİ İLİŞKİLERİN İNCELENMESİ

INVESTIGATION OF RELATIONSHIPS BETWEEN ATTENTION, EXECUTIVE FUNCTION, BALANCE AND POSTURAL CONTROL IN CHILDREN DIAGNOSED WITH AUTISM SPECTRUM DISORDER

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ÖZET
Bu çalışmada OSB yürütücü fonksiyon ve dikkat ile denge ve postural kontrol arasındaki ilişkiyi incelemek amaçlanmıştır. Çalışmada Çocukluk Dönemi Yürütücü İşlev Envanteri, 4-6 Yaş Çocuklarda Öz Düzenleme Ölçeği, Pediatrik Denge Ölçeği ve Oturmada Postural Kontrol Ölçeği kullanılmıştır. Araştırmada (n=20) OSB tanısı almış ve (n=20) OSB tanısı almamış bireyler katılmıştır. Ölçek/anket puanları arasındaki ilişkiyi belirlemek için nonparametrik testlerden spearman korelasyon analizi yapılmıştır. Pediatrik Denge Ölçeği toplam puanı ile Öz Düzenleme Becerileri Ölçeği Toplam puanı ($r=0,872$ $p<0.001$) ile Oturmada Postural Kontrol Ölçeği Toplam puanı ($r=0,921$ $p<0.001$) arasında pozitif yönlü ve Yürütücü İşlev Envanteri alt boyutlarından "Çalışma Belleği" puanı ($r=-0,825$ $p<0.001$) ile "Önleyici Kontrol" puanı ($r=-0,884$ $p<0.001$) arasında negatif yönlü ve anlamlı bir farklılık saptanmıştır. OSB'li bireylerde denge ve postural kontrol ile dikkat ve yürütücü fonksiyonlar arasında anlamlı ve pozitif yönde bir korelasyon vardır. OSB'li bireylere uygulanması gereken terapötik stratejilerde sinir sistemi organizasyonunu destekleyici, beyin ve iletişim temelli terapötik stratejiler tercih edilmelidir.
Anahtar sözcükler*:* Denge, Postural Kontrol, Otizm, Yürütücü Fonksiyon

ABSTRACT
The aim of the study was to examine the relationship between ASD executive function and attention, and balance and postural control. The Childhood Executive Function Inventory, Self-Regulation Scale for 4-6 Year-Old Children, Pediatric Balance Scale and Sitting Postural Control Scale were used in the study. (n=20) individuals diagnosed with ASD and (n=20) individuals not diagnosed with ASD participated in the study. In all measurements, the scores of children with ASD were found to be significantly lower than the control group ($p<0.001$). In children with ASD, a positive difference was found between the total score of the Pediatric Balance Scale and the Self-Regulation Skills Scale ($r=0.872$ $p<0.001$) and the Total score of the Sitting Postural Control Scale ($r=0.921$ $p<0.001$) and a negative and significant difference was found between the sub-dimensions of the Executive Function Inventory, the "Working Memory" score ($r=-0.825$ $p<0.001$) and the "Inhibitory Control" score ($r=-0.884$ $p<0.001$). There is a significant and positive correlation between balance and postural control and

attention and executive functions in individuals with ASD. As a result, a mutually triggering deterioration was found between the balance, posture and executive functions of children with ASD.

Key words: Balance, Postural Control, Autism Spectrum Disorder, Executive Function, Cognitive Impairment, Autism, Balance, Executive Function, Postural Control

FOTOVOLTAİK GÜNEŞ ENERJİSİ İLE ÇALIŞAN SULAMA SİSTEMLERİNDE KULLANILAN FIRÇASIZ DOĞRU AKIM MOTORLARINDA KOMÜTASYON MOMENT SALINIMININ AZALTILMASI

REDUCTION OF COMMUTATION TORQUE RIPPLE IN BRUSHLESS DIRECT CURRENT MOTORS USED IN PHOTOVOLTAIC SOLAR ENERGY POWERED IRRIGATION SYSTEMS

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ÖZET

Fırçasız doğru akım motor (FDAM)'un yüksek güç yoğunluğu, basit yapısı, az bakım gereksinimi, fırçasız olması nedeniyle yüksek güvenli bir çalışma vb. özellikleri nedeniyle bu motora olan ilgi her geçen gün daha da artmaktadır. Ancak, FDAM'ın komütasyon sırasında meydana gelen moment salınımları motorun en önemli dezavantajlarından biridir. Komütasyon moment salınımı motorun çıkış momentinde %50'lere kadar salınım oluşmasına, motorun gürültülü çalışmasına ve güç yoğunluğunun düşmesine neden olmaktadır. FDAM'ın komütasyon moment salınımı, komütasyon anında devreye giren faz akımı ile devreden çıkan faz akımının değişim sürelerinin farkından meydana gelmektedir. Bu sorunun giderilmesi temelde FDAM'ın evirici DA kaynak geriliminin motorun ürettiği zıt elektromotor kuvvetinin 4 katına eşit olmasına bağlıdır. Bu çalışmada, fotovoltaik enerji ile çalışan sulama sisteminde kullanılan CUK dönüştürücü tabanlı maksimum güç noktası takibi (MPPT) algoritması ile sabit DA kaynağı ile beslenen FDAM'ın komütasyon moment salınımı azaltılması ile ilgili yöntem önerilmiştir. Önerilen yöntemde, CUK tabanlı MPPT eviricide üretilen çıkış gerilimi için FDAM'ın hız denetimi için elde edilen referans değer kullanılmaktadır. Önerilen yöntem ile hem inverter devresi ve evirici devresinde meydana gelen anahtar kayıpları azaltılmakta hem de komütasyon anında gerekli olan motorun DA kaynak gerilimi doğrudan inverter tarafından sağlanmaktadır. Önerilen yöntem, Matlab/ Simulink ortamında hazırlanmış ve farklı hız ve yük değerlerinde performansı test edilmiştir. Yapılan testlerde tatmin edici sonuçlar elde edilmiştir.

Anahtar Kelimeler: Fırçasız doğru akım motoru, PD-PI denetleyici, komütasyon moment salınımı, CUK dönüştürücü.

ABSTRACT

The interest in brushless direct current motor (FDAM) is increasing day by day due to its features such as high power density, simple structure, low maintenance requirement, high safety operation due to being brushless, etc. However, the torque ripples occurring during the commutation of FDAM are one of the most important disadvantages of the motor. Commutation torque ripple causes ripple of up to 50% in the output torque of the motor, noisy operation of the motor and decrease in power density. The commutation torque ripple of FDAM occurs due to the difference in the change times of the phase current incoming the circuit at the moment of commutation and the phase current outgoing the circuit. The

elimination of this problem basically depends on the DC source voltage of the inverter of FDAM being equal to 4 times the back electromotive force produced by the motor. In this study, a method is proposed to reduce the commutation torque ripple of FDAM fed by CUK converter-based PD-PI controller MPPT inverter used in photovoltaic energy operated irrigation system. In the proposed method, the reference value obtained for the speed control of FDAM for the output voltage produced in CUK based MPPT inverter is used. With the proposed method, both the inverter circuit and the switching losses occurring in the inverter circuit are reduced and the DC source voltage of the motor required at the time of commutation is directly provided by the inverter. The proposed method was prepared in the Matlab/Simulink environment and its performance was tested at different speed and load values. Satisfactory results were obtained in the tests.

Keywords: Brushless DC motor, PD-PI controller, commutation torque ripple, CUK converter.

FOTOVOLTAİK ENERJİ İLE ÇALIŞAN FIRÇASIZ DOĞRU AKIM MOTORLU SULAMA SİSTEMİ İÇİN CUK DÖNÜŞTÜRÜCÜ TABANLI MPPT İNVERTER TASARIMI

CUK CONVERTER BASED MPPT INVERTER DESIGN FOR BRUSHLESS DIRECT CURRENT MOTOR IRRIGATION SYSTEM POWERED BY PHOTOVOLTAIC ENERGY

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ÖZET
Fırçasız doğru akım motor (FDAM)'lar, basit yapısı, yüksek verim, yüksek güç-hacim oranı ve kararlı çalışma gibi önemli özellikleri ile birçok alanda yaygın olarak kullanılmaktadır. Bu çalışmada, Fotovoltaik güneş enerjisinden beslenen FDAM kullanılan sulama sistemi için CUK dönüştürücü tabanlı MPPT inverter tasarımı önerilmiştir. Önerilen tasarımda; Fotovoltaik enerji dönüşümünü iyileştirmek, denetimini geliştirmek ve yenilenebilir enerji kaynaklı sulama sistemini teşvik etmek amacıyla MPPT inverter sistemlerine CUK dönüştürücü tabanlı FDAM sürücü sistemi entegre etmeyi amaçlamaktadır. FDAM hızı denetimi motorun evirici güç anahtarlarının anahtarlama göre oranları değiştirilerek motora uygulanan DA gerilim kaynağı değiştirilerek gerçekleşir. Önerilen yöntemde, maksimum güç noktası izleme (MPPT) referans değeri, FDAM referans hız değerine göre hesaplanmakta ve CUK dönüştürücü ile hesaplanan gerilim seviyesine getirilmektedir. Bu sayede hem inverter tarafında hem de evirici tarafında iki ayrı anahtarlama kayıpları önemli seviyede azaltılarak FDAM hız denetimi gerçekleştirilmiştir. Önerilen tasarımda denetleyici olarak kaskat PD-PI denetleyici kullanılmıştır. Denetleyici parametrelerinin en uygun değerlerinin bulunması için stokastik fraktal arama (SFA) algoritmasından faydalanılmıştır. FDAM modeli Matlab/ Simulink ortamında hazırlanmıştır. Önerilen tasarımın etkinliği vurgulanması için farklı hız ve yük değişimlerine karşı performans ve sağlamlığının çok iyi olduğunu gösteren sonuçlar sunulmuştur.
Anahtar Kelimeler: Fırçasız doğru akım motoru, PD-PI denetleyici, stokastik fraktal arama, CUK dönüştürücü.

ABSTRACT
Brushless direct current motors (BDCs) are widely used in many areas due to their important features such as simple structure, high efficiency, high power-volume ratio and stable operation. In this study, CUK converter based MPPT inverter design is proposed for irrigation system using BDC fed by photovoltaic solar energy. The proposed design aims to integrate CUK converter based FDAM drive system into MPPT inverter systems in order to improve photovoltaic energy conversion, enhance control and promote renewable energy-based irrigation system. FDAM speed control is achieved by changing the DC voltage source applied to the motor by changing the switching ratios of the motor's inverter power switches. In the proposed method, the maximum power point tracking (MPPT) reference value is calculated according to the FDAM reference speed value and brought to the voltage level calculated by the CUK converter. In this way, FDAM speed control has been realized by significantly reducing the switching losses on both the inverter and inverter sides. Cascade

PD-PI controller is used as the controller in the proposed design. Stochastic fractal search (SFA) algorithm has been used to find the most suitable values of the controller parameters. The FDAM model was prepared in the Matlab/Simulink environment. In order to emphasize the effectiveness of the proposed design, results showing that its performance and robustness against different speed and load changes are very good are presented.
Keywords: Brushless DC motor, PD-PI controller, stochastic fractal search, CUK converter.

SAĞLIK ÇALIŞANLARINDA DEPREM SONRASI BÖLÜM DEĞİŞTİRME VE KURUMDAN AYRILMA ORANLARININ DEĞERLENDİRİLMESİ: BİR EĞİTİM VE ARAŞTIRMA HASTANESİ ÖRNEĞİ

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ÖZET

Bu araştırma ile bir sağlık kurumunda çalışan personellerin depremden etkilenme durumlarının bölüm değiştirme ve kurumdan ayrılma oranlarına etkisinin belirlenmesi amaçlanmıştır.

Araştırma 2023 depreminden en fazla etkilenen iller arasında yer alan ve Sağlık Bakanlığına bağlı 1000 yatak kapasitesinin üstünde bulunan bir eğitim ve araştırma hastanesinde retrospektif olarak 2022 ve 2023 yılı verileri ile yapılmıştır. Çalışmadaki veriler Sağlık Bakanlığının Sağlıkta Kalite Standartları Gösterge Yönetim Rehberinde Kurumdan Ayrılan Personel Oranı ve Kurum İçi Bölüm Değiştiren Personel Oranı hesaplama yöntemi baz alınarak bölüm kalite göstergelerinden derlenmiştir.

Yapılan incelemede 2022 yılında kurum içi bölüm değiştirme oranın 7,41 olduğu, 2023 yılında kurum içi bölüm değiştirme oranının 11,91 olduğu belirlenmiştir. Yapılan hesaplamada 2022 yılında kurumdan ayrılan personel oranı 1,11 iken 2023 yılında 0,44 olduğu tespit edilmiştir.

Çalışmada kurumdan ayrılan personel oranı 2022 yılında 1,11 iken depremin olduğu 2023 yılında bu oran 0,44'e düşmüştür. Depremin ilk etkisi geçtikten sonra Sağlık Bakanlığı depremden etkilenen illerdeki personele tayin hakkı tanımasına rağmen oranın düşük kalması önemlidir. Bu oranlar gösteriyor ki sağlık çalışanları olağan üstü durumlarda başka bölgeye gitmektense fedakârlık yaparak gölge halkına hizmet etmeye devam etmişlerdir. Yine çalışmada 2022 yılında kurum iç bölüm değiştirme oranı 7,41 iken depremin meydana geldiği 2023 yılında bu oran 11,91'e çıkmıştır. Bu oranın artmasında deprem nedeniyle başta acil servis olmak üzere, ortopedi ve cerrahi servislerin artan iş yükü nedeniyle olduğu düşünüldüğünden bu oranın yüksek olması beklenen bir durumdur.

Sağlık sisteminin en önemli unsurları arasında yer alan sağlık çalışanlarının kurum aidiyet duygusu önemli olup afetler gibi olağanüstü durumlarda etkin müdahaleyi yapabilmek ve bunu sürdürebilmek için sağlık kurumlarında insan kaynakları yönetimine önem verilmesi gereklidir. Etkin bir insan kaynakları yönetimi ile personel bağlılığının artırılması sağlanmalı ve personelin kurumdan ayrılma sebeplerinin yakından incelenmesi önerilmektedir.
Anahtar Kelimeler: Deprem, Sağlık Çalışanları, İnsan Kaynakları Yönetimi

EVALUATION OF RATES OF CHANGE OF DEPARTMENT AND LEAVING FROM THE INSTITUTION AFTER AN EARTHQUAKE AMONG HEALTH CARE WORKERS: THE EXAMPLE OF A TRAINING AND RESEARCH HOSPITAL

ABSTRACT

The aim of this research is to determine the effect of earthquake-affected status of personnel working in a health institution on the rates of changing departments and leaving the institution.

The research was conducted retrospectively with data from 2022 and 2023 in a training and research hospital with a bed capacity of over 1000, affiliated with the Ministry of Health, which is among the provinces most affected by the 2023 earthquake. The data in the study were compiled from department quality indicators based on the calculation method of the Rate of Personnel Leaving the Institution and the Rate of Personnel Changing Departments within the Institution in the Health Quality Standards Indicator Management Guide of the Ministry of Health.

In the examination, it was determined that the internal department change rate was 7.41 in 2022 and 11.91 in 2023. In the calculation, it was determined that the rate of personnel leaving the institution was 1.11 in 2022, while it was 0.44 in 2023.

In the study, the rate of personnel leaving the institution was 1.11 in 2022, while this rate dropped to 0.44 in 2023, when the earthquake occurred. It is important that the rate remained low, even though the Ministry of Health granted the right to transfer personnel to the provinces affected by the earthquake after the first effects of the earthquake passed. These rates show that health workers continued to serve the shadow people by making sacrifices rather than moving to another region in extraordinary circumstances. Again, in the study, while the institutional interior section change rate was 7.41 in 2022, this rate increased to 11.91 in 2023, when the earthquake occurred. Since it is thought that the increase in this rate is due to the increased workload of the emergency service, orthopedics and surgical services, especially due to the earthquake, it is an expected situation that this rate is high.

The sense of belonging of healthcare professionals, who are among the most important elements of the healthcare system, is important, and in order to be able to intervene effectively in extraordinary situations such as disasters and to maintain this, importance should be given to human resources management in healthcare institutions. It is recommended that staff loyalty be increased through effective human resources management and that the reasons for staff leaving the institution be closely examined.

Keywords: Earthquake, Healthcare Workers, Human Resources Management

FEN BİLİMLERİ DERSİNDE YARATICI DRAMA YÖNTEMİ UYGULANAN TEZ ÇALIŞMALARININ İNCELENMESİ

EXAMINATION OF THESIS STUDIES APPLYING THE CREATIVE DRAMA METHOD IN SCIENCE LESSONS

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ÖZET

Bu nitel araştırma, Fen Bilimleri derslerinde yaratıcı drama yönteminin etkisini araştıran tez çalışmalarını kapsamlı bir şekilde incelemeyi amaçlamaktadır. 2004-2021 yılları arasında Ulusal Tez Merkezi veritabanında "yaratıcı drama" ifadesini içeren 26 yüksek lisans ve doktora tezi analiz edilmiştir. Bu tezlerin çeşitli yönlerini anlamak için özel olarak tasarlanmış bir "Tez İnceleme Formu" kullanılmıştır. Bu form, tezlerin yılını, araştırma türünü (deneysel, yarı deneysel vb.), kullanılan sınıf seviyesini, örneklem büyüklüğünü, uygulama süresini, anabilim dalını, araştırma modelini, veri toplama yöntemlerini (örneğin, yarı yapılandırılmış görüşmeler, başarı testleri), veri analiz tekniklerini (örneğin, içerik analizi, t-testi) ve incelenen değişkenleri (örneğin, akademik başarı, tutum, motivasyon) kapsamaktadır. Analiz sonuçları, bu tez çalışmalarının zaman içindeki dağılımını, kullanılan yöntemleri ve araştırma konularını ortaya koymaktadır. Bulgular, incelenen tezlerin büyük bir kısmının 2012 yılında tamamlandığını, yüksek lisans düzeyinde yoğunlaştığını ve çoğunlukla "Canlılar ve Yaşam" ünitesini ele aldığını göstermektedir. Deneysel ve karma yöntemlerin sıklıkla tercih edildiği görülmüştür. Akademik başarı, incelenen değişkenler arasında en yaygın olanıdır. Nitel verilerde yarı yapılandırılmış görüşmeler, nicel verilerde ise başarı testleri sıklıkla kullanılmış olup veri analizi için ise içerik analizi ve t-testi tercih edilmiştir. Bu araştırma, Fen Bilimleri eğitiminde yaratıcı drama kullanımına ilişkin mevcut literatürü detaylı bir şekilde incelemekte ve bu alanda yapılan çalışmaların genel eğilimlerini ortaya koymaktadır. Sonuçlar, gelecekteki araştırmalar için önemli yönlendirmeler sunmaktadır ve yaratıcı drama yönteminin Fen Bilimleri eğitimine entegrasyonu konusunda daha kapsamlı çalışmalara ihtiyaç olduğunu vurgulamaktadır. Özellikle, farklı sınıf seviyeleri ve üniteler üzerinde daha fazla araştırmanın yapılması ve uzun vadeli etkilerin incelenmesi önem taşımaktadır.

Anahtar Kelimeler: Yaratıcı Drama, Fen Eğitimi, Doküman İncelemesi

ABSTRACT

This qualitative research aims to comprehensively examine thesis studies investigating the impact of the creative drama method in Science lessons. 26 master's and doctoral theses containing the term "creative drama" in their titles were analyzed from the National Thesis Center database between 2004 and 2021. A specifically designed "Thesis Examination Form" was used to understand various aspects of these theses. This form includes the year, research type (experimental, quasi-experimental, etc.), class level used, sample size, implementation duration, department, research model, data collection methods (e.g., semi-structured interviews, achievement tests), data analysis techniques (e.g., content analysis, t-test), and variables examined (e.g., academic achievement, attitude, motivation). The analysis results reveal the distribution of these thesis studies over time, the methods used, and the research topics. The

findings indicate that a large portion of the theses were completed in 2012, focusing on master's level studies and predominantly addressing the "Living Things and Life" unit. Experimental and mixed methods were frequently preferred. Academic achievement was the most common variable examined. Semi-structured interviews were frequently used for qualitative data, and achievement tests for quantitative data, while content analysis and t-tests were the most common data analysis techniques. This research provides a detailed examination of the existing literature on the use of creative drama in Science education and reveals the general trends in studies conducted in this field. The results offer significant guidance for future research and emphasize the need for more comprehensive studies on the integration of the creative drama method into Science education. Further research on various class levels and units, as well as the examination of long-term effects, is particularly important.
Keywords: Creative Drama, Science Education, Document Review

ÖZGÜRLEŞME EYLEMİ OLARAK DELEUZE VE GUATTARİ'DE ÖZNENİN MERKESİZLEŞME ÖZGÜRLÜĞÜ
THE ASPECT OF DECENTRALIZATION OF THE SUBJECT IN DELEUZE AND GUATTARI AS AN ACT OF LIBERATION

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ÖZET
Özne-merkezli epistemolojik süreçlerin baskıcı ve tek tip yapılar oluşturma yolları, Nietzsche ve Foucault gibi çeşitli felsefi figürlerin perspektifleri üzerinden incelenir. Nietzsche'nin güç istenci kavramı ve Foucault'nun mikro-faşist iktidar yapıları analizi, modern öznenin kimlik ve temsil kavramlarıyla şekillendirildiğini gösterir. Foucault'ya göre modern iktidar, bireyi kimlik ve temsil yoluyla kontrol eder; insanlar kendilerine dayatılan kimlikleri kabul ederler ve böylece aynılığı takip ederler.
Deleuze ve Guattari'nin şizo-özne kavramı ve "göçebe özne" fikri, özgürlüğü dönüş ve yaşam temelli bir pratik olarak yeniden çerçeveler. Şizo-özne, kapitalist kodlardan ve toplumun dayattığı kimliklerden bağımsız bir özgürlük arzular. Bu şekilde, özgürlüğü teoriden pratiğe kaydırarak Batı özne kavramını sorgularlar. Kapitalist kodlardan kurtulan şizo-özne, sürekli bir dönüşüm ve oluş sürecinde olan bir yaşam pratiğini temsil eder. Makalemizin içeriğinde çağdaş batı felsefecilerinden olan Deleuze ve Guattari' özgürleşme eylemi özne merkesizliği üzerinden etik ve politik yapı içerisinden incelemeye tabi tutulmuştur. Makalenin yöntemi olarak belge analizi ve belgeleme yöntemi kullanılacaktır. Belge analizi, yazılı belgelerin içeriğini titizlikle ve sistematik olarak analiz etmek için kullanılan bir nitel araştırma yöntemidir. Belge analizi, basılı ve elektronik materyaller olmak üzere tüm belgeleri incelemek ve değerlendirmek için kullanılan sistemli bir yöntemdir. Nitel araştırmada kullanılan diğer yöntemler gibi belge analizi de anlam çıkarmak, ilgili konu hakkında bir anlayış oluşturmak, ampirik bilgi geliştirmek için verilerin incelenmesini ve yorumlanmasını gerektirmektedir.
Anahtar Kelimeler: Özgürlük, Deleuze, Şizo-Özne, Özne.

ABSTRACT
The ways in which subject-centered epistemological processes generate repressive and uniform structures are explored through the perspectives of various philosophical figures, such as Nietzsche and Foucault. Nietzsche's concept of the will to power and Foucault's analysis of micro-fascist power structures show how the modern subject is shaped by imposed concepts of identity and representation. According to Foucault, modern power controls the individual through identity and representation; people accept the identities imposed upon them and thus pursue sameness. Deleuze and Guattari's concept of the schizo-subject and the idea of the "nomadic subject" reframe freedom as a practice rooted in becoming and life. The schizo-subject desires a freedom independent of capitalist codes and the identities imposed by society. In this way, they challenge the Western conception of the subject, shifting freedom from theory to practice. The schizo-subject, liberated from capitalist codes, represents a life practice in a constant process of transformation and becoming. This article examines the practice of liberation through the decentralization of the subject, as seen in contemporary Western

philosophers Deleuze and Guattari, within ethical and political structures. The method used in this article is document analysis and documentation. Document analysis is a qualitative research method used to meticulously and systematically analyze the content of written documents. It is a systematic method used to examine and evaluate all documents, including printed and electronic materials. Like other methods used in qualitative research, document analysis requires examining and interpreting data to derive meaning, create understanding of the relevant topic, and develop empirical knowledge.
Keywords: Freedom, Deleuze, Subject, Schizo-Subject.

…ve belki bir gün bu yüzyıl Deleuzcü bir yüzyıl olarak bilinecektir.
Michel Foucault

PARASOSYAL İLİŞKİ BAĞLAMINDA ERGEN BİREYLERİN HAYRANLIK DAVRANIŞININ İNCELENMESİ

EXAMINING ADOLESCENTS' ADMIRATION BEHAVIOR IN THE CONTEXT OF PARASOCIAL RELATIONSHIPS

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ÖZET

İnsan duyu organları aracılığıyla algıladığı dış dünyayı çeşitli bilişsel süreçlerden geçirerek işleyen ve bilinçli ve bilinçsiz bir şekilde alışkanlıklara dönüştürebilen bir canlıdır. Bir diğer deyişle birey görerek, duyarak, gözlemleyerek, tekrar ederek öğrenen ve buna mukabil çok çeşitli duygusal tepkiler geliştirebilen bir bilişsel donanıma sahiptir. Özellikle bilişsel gelişimin çok hızlı olduğu ve niteliksel olarak da değiştiği ergenlik döneminde, etkileşime geçilen kaynaklar ergen bireyler için bilişsel ve sosyal gelişimi hızlandıran uyaranlar olmanın ötesinde, birer yol gösterici ve rol model özneleri de olabilmektedir.

Bu öznelere karşı yoğun ilgi ve sevgi besleyerek onlara bağımlı hale gelebilen birey, güçlü bir duygunun ürünü olan hayranlık davranışını gelişebilmektedir. Hızla değişen iletişim teknolojileri ile hayran olma kültürü; beğeni öznelerine ilgi gösterme, etkileşimde bulunma isteği ve eylemleri, sosyal medya aracılığıyla konvansiyonel medyadan farklı bir nitelik kazanmıştır. Parasosyal ilişki olarak adlandırılan hayran ve ünlü arasındaki kısmi etkileşimli ilişki, hayran kültürünün internet tabanlı sistemler üzerinden yaşandığı yeni şeklini oluşturmaktadır. Yaygınlaşan ve kullanım yaşının oldukça düştüğü bilinen teknolojik aygıtların, özellikle 10-23 yaş arasındaki çocuklar ve ergen bireyler tarafından kullanımı oldukça yüksektir. Gündelik hayatlarında uzun saatlerini eğitim, iletişim ve eğlence gibi amaçlarla akıllı cihazlar, dolayısıyla da internet karşısında geçiren bireyler; bu araçlar aracılığı ile doğrudan veya dolaylı olarak etkileşimde bulundukları herhangi bir bireyi rol modeli olarak alabilir ve hayranlık duygusu besleyebilirler. Özellikle doğrudan iletişimde bulunulmayan sanatçı, sporcu, sosyal medya fenomeni gibi ünlü kişilere karşı yoğun ilgi duyma eğiliminde olabilirler. Duyulan bu ilgi ve hayranlık ergenlik döneminde olan bireyin kimlik gelişiminin önemli bir parçasını oluşturmaktadır. Ergen bireylerin, değişik boyutları olan hayranlık deneyimini yaşama şekilleri ve tanınmış kişilere ilgi duyma sebepleri birbirinden farklı olabilmektedir.

Bu derlemenin amacı ergen bireylerin sosyal medya ekseninde kurdukları parasosyal ilişki bağlamında hayranlık davranışlarının incelenmesi ve bu davranışın altında yatan temel dinamiklere ilişkin literatür bilgisinin değerlendirilmesidir.

Anahtar Kelimeler: Hayran kültürü, parasosyal ilişki, ergenlik, parasosyal etkileşim, sosyal medya

ABSTRACT

Humans are beings that process the external world they perceive through their sensory organs via various cognitive processes and can transform these into habits, both consciously and unconsciously. In other words, individuals have a cognitive capacity to learn by seeing, hearing, observing, and repeating, and, accordingly, they can develop a wide range of emotional responses. Especially during adolescence, when cognitive development is rapid and qualitative

changes occur, the sources they interact with can serve as guides and role models, beyond merely being stimuli that accelerate cognitive and social development for adolescents.
Individuals who develop an intense interest and affection toward these figures may become dependent on them, leading to admiration behavior—a response rooted in strong emotions. With rapidly changing communication technologies, the culture of admiration—interest in subjects of admiration, desire for interaction, and actions—has acquired a unique quality through social media compared to conventional media. The partially interactive relationship between a fan and a celebrity, known as a parasocial relationship, forms the new way in which fan culture is experienced through internet-based systems. The use of technological devices, which are known to be widespread and to have a notably low age of use, is particularly high among children and adolescents aged 10-23. These individuals, who spend long hours daily in front of smart devices and thus the internet for purposes such as education, communication, and entertainment, may take any individual they interact with directly or indirectly through these tools as a role model and develop a sense of admiration. They especially tend to show intense interest toward celebrities such as artists, athletes, and social media influencers with whom they do not have direct communication. This interest and admiration form a significant part of the identity development of individuals in adolescence. Adolescents' ways of experiencing admiration, which has various dimensions, and their reasons for being interested in famous people may differ.
The purpose of this review is to examine adolescents' admiration behaviors in the context of parasocial relationships they form through social media and to evaluate the underlying fundamental dynamics of this behavior based on the literature.
Keywords: Fan culture, parasocial relationship, adolescence, parasocial interaction, social media.

POLİESTER-POLİ(3,4-ETİLENDİOKSİTİYOFEN) İLETKEN BASINÇ SENSÖR KUMAŞ YAPILARININ TASARIMI
DESIGN OF POLYESTER-POLY(3,4-ETHYNEDIOXYTHIOPHENE) CONDUCTIVE PRESSURE SENSOR FABRIC STRUCTURES

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ÖZET
Geleneksel tekstil ürünleri korunma, örtünme ve estetik gibi özelliklerinden dolayı insanlığın vazgeçilmez bir parçasıdır. Bu özelliklerine ek olarak insan sağlığı ve güvenliği gibi farklı özellikler de tekstil ürünlerine kazandırılabilir. Tekstil ürünlerine kazandırılan bu özellikler sayesinde daha fonksiyonlu ve katma değerli ürünler elde edilebilir. Elde edilen bu ürünlere akıllı tekstiller örnek olarak verilebilir. Geleneksel tekstil ve elektronik malzemelerin birleşmesiyle de akıllı tekstil ürünlerinin sağlık, askeri ve spor gibi alanlarda kullanımı bulunmaktadır. Son zamanlarda insan yaşamında kullanımı artan akıllı tekstil ürünlerinin, bir bileşeni olan iletken tekstiller karşımıza çıkmaktadır. Giyilebilen akıllı tekstillerde kullanılan iletken polimerik kumaşlar, iletken polimerler sayesinde elde edilmektedir. İletken polimerler ise metaller gibi elektrik yüklerini transfer etme özelliğine sahiptir. İletken polimerlerin bu özelliği sayesinde kumaşlara iletkenlik özelliği kazandırılmaktadır. İletkenlik kazandırılmış kumaşlar, akıllı tekstil uygulamalarında sensör olarak da kullanılmaktadır. Üretilen tekstil esaslı sensörlerin kullanımı yine bir tekstil ürünü olan akıllı tekstiller de kullanılmaktadır. Yapılan çalışmalar ise tekstil malzemelerinden üretilen sensörlerin, elektronik metal vb gibi sensörlere göre birçok avantajı olduğunu göstermektedir. Kullanım amacına uygun iletken polimerik esaslı kumaştan sensör üretmek ve geliştirmek amacıyla çalışmalar yapılmaktadır.
Bu çalışmada poli(3,4-etilendioksitiyofen) (PEDOT) iletken polimerinden in-situ kimyasal polimerizasyon prosesiyle çözeltiler hazırlanmıştır. Hazırlanan çözeltiler kullanılarak drop casting yöntemi ile poliester kumaşlar kaplanmıştır. Kaplama sonrası oluşturulan iletken kumaşlarla kompozit yapı şeklinde bir basınç sensörü tasarlanmıştır. Deneyler sonucu kumaşın kapasitif ve rezistif basınç sensör davranışı ve kumaş performans testlerinin yapılması hedeflenmiştir. Bu işlem sonrası oluşturulan iletken polimerik kumaşlara, taramalı elektron mikroskop (SEM), Fourier dönüşümlü kızılötesi spektrofotometre (FT-IR), kopma mukavemeti ve aşınma mukavemeti testleri yapılmıştır. Dört nokta iletkenlik ölçüm tekniği ile doğru akım (DC) iletkenlik ölçümleri gerçekleştirilmiş; LCR-metre cihazı ile kapasitif ve rezistif basınç sensör özellikleri araştırılmıştır.
Anahtar Kelimeler: Akıllı tekstiller, iletken polimer, PEDOT, basınç sensörü

ABSTRACT
Traditional textile products are an indispensable part of humanity due to their features such as protection, covering and aesthetics. In addition to these features, different features such as human health and safety can be added to textile products. Thanks to these features added to textile products, more functional and value-added products can be obtained. Smart textiles can be given as an example of these products. With the combination of traditional textiles and electronic materials, smart textile products are used in areas such as health, military and sports. Conductive textiles, which are a component of smart textile products whose use has increased

in human life recently, come to the fore. Conductive polymeric fabrics used in wearable smart textiles are obtained thanks to conductive polymers. Conductive polymers, on the other hand, have the feature of transferring electrical charges like metals. Thanks to this feature of conductive polymers, fabrics are given conductive properties. Conductive fabrics are also used as sensors in smart textile applications. The use of textile-based sensors produced is also used in smart textiles, which are also textile products. Studies show that sensors produced from textile materials have many advantages over sensors such as electronic metals etc. Studies are being carried out to produce and develop sensors made of conductive polymeric fabric suitable for the intended use.

In this study, solutions were prepared from poly(3,4-ethylenedioxythiophene) (PEDOT) conductive polymer by in-situ chemical polymerization process. Polyester fabrics were coated by drop casting method using prepared solutions. A pressure sensor in the form of composite structure was designed with the conductive fabrics formed after coating. As a result of the experiments, it was aimed to perform capacitive and resistive pressure sensor behavior of the fabric and fabric performance tests. Scanning electron microscope (SEM), Fourier transform infrared spectrophotometer (FT-IR), tensile strength and abrasion resistance tests were performed on the conductive polymeric fabrics formed after this process. Direct current (DC) conductivity measurements were performed with four-point conductivity measurement technique; capacitive and resistive pressure sensor properties were investigated with LCR-meter device.

Keywords: Smart Textiles, Conductive Polymer, PEDOT, Pressure Sensor

DYEING OF POLIAMIDE FABRIC WITH *MORUS NIGRA* AND OPTIMIZATION USING CENTRAL COMPOSITE DESIGN

POLIAMID KUMAŞIN *MORUS NIGRA* ILE BOYANMASI VE MERKEZI KOMPOZIT TASARIM KULLANILARAK OPTIMIZASYONU

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ABSTRACT

One of the most significant sources of today's increasing environmental issues is the textile sector. Dyeing processes are among the most consumptive ones in terms of the dyes and chemicals used as well as the other resources, such as water, time, and energy. The high amounts of dyes and chemicals used in these processes result in highly polluted wastewater. In this study, it is aimed at developing an eco-friendly dyeing process created using dye obtained from natural source (*Morus nigra*). The results were evaluated in terms of colorimetry, color strength, and fastness to washing and rubbing. The colorimetry results were optimized using response surface methodology. This study showed that nylon fabrics could be dyed with black mulberry extract without using mordants. Excellent washing and rubbing fastnesses were obtained from the samples. When the model created as a result of the optimization study with response surface methodology was solved, it was seen that the temperature and time values that gave the maximum a* value were the limit values of 30 ºC and 60 minutes.

Keywords: Sustainability, Natural Dye, *Morus nigra*, Artificial Intelligence, Response Surface Methodology, Optimization

ÖZET

Günümüzde artan çevre sorunlarının en önemli kaynaklarından biri tekstil sektörüdür. Boyama işlemleri, kullanılan boyalar ve kimyasallar ile su, zaman ve enerji gibi kaynaklarının tüketimi açısından en fazla tüketim yapılan işlemler arasındadır. Kullanılan boya ve kimyasal miktarının yüksek olması, oldukça kirli atık su oluşumuna neden olmaktadır. Bu çalışmada, doğal kaynaktan (*Morus nigr*a) elde edilen boya kullanılarak çevre dostu bir boyama prosesi geliştirilmesi amaçlanmıştır. Sonuçlar kolorimetri, renk kuvveti ve yıkama ve sürtme haslığı açısından değerlendirilmiştir. Kolorimetri sonuçları tepki yüzey metodolojisi kullanılarak optimize edilmiştir. Bu çalışma, naylon kumaşların mordan kullanılmadan karadut özütü ile boyanabileceğini göstermiştir. Numunelerden mükemmel seviyede yıkama ve sürtme haslıkları elde edilmiştir. Tepki yüzey metodolojisi ile yapılan optimizasyon çalışması sonucunda oluşturulan model çözüldüğünde, maksimum a* değerini veren sıcaklık ve zaman değerlerinin 30ºC ve 60 dakika sınır değerleri olduğu görülmüştür.

Anahtar Kelimeler: Sürdürülebilirlik, Doğal Boya, *Morus nigra*, Yapay Zeka, Tepki Yüzey Metodolojisi, Optimizasyon

$[XCl_2(C_{11}H_{10}N_2)]$ (X=Zn, Cu ve Ni) BİLEŞİKLERİNİN DOĞRUSAL OLMAYAN OPTİK (NLO) ANALİZİ

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ÖZET: Son yıllarda optoelektronik teknolojisinde optik iletişim, bilgi depolama ve optik anahtarlama gibi farklı uygulama alanlarına sahip malzemelerin NLO özelliklerinin çalışılması dikkat çekmektedir. Yüksek NLO özelliklerine sahip malzemelerin sentezi ve karakterizasyonu, bu alanda önemli bir araştırma ve geliştirme konusu olarak ön plana çıkmaktadır. Bu tür malzemelerin özelliklerinin iyi bilinmesi ve geliştirilmesi için kuantum mekaniksel çalışmalar önemlidir. Biz de bu çalışmada fotolüminesans özellik gösteren ve ikili piridil donörü içeren başlıktaki ligandı farklı metaller (X=Zn, Cu ve Ni) ile NLO özelliklerini karşılaştırarak inceledik. Moleküllerin geometrik optimizasyonları, toplam enerji hesaplamaları ve NLO özellikleri LANL2DZ baz seti ile DFT (B3LYP) metodu kullanılarak Gaussian 09 programıyla gerçekleştirilmiştir. Ayrıca yapının görselleştirilmesi ve çıktıların analizi Gauss-View yazılımı ile gerçekleştirilmiştir.
Anahtar Kelimeler: NLO, metal, piridil, DFT

NONLINEAR OPTIC (NLO) ANALYSIS OF $[XCl_2(C_{11}H_{10}N_2)]$(X=Zn, Cu and Ni) COMPOUNDS

ABSTRACT: In recent years, the study of NLO properties of materials with different application areas such as optical communication, information storage and optical switching in optoelectronic technology has attracted attention. Synthesis and characterization of materials with high NLO properties stand out as an important research and development issue in this field. Quantum mechanical studies are important to better know and improve the properties of such materials. In this study, we examined the title ligand, which shows photoluminescence and contains a double pyridyl donor, by comparing the NLO properties of different metals (X = Zn, Cu and Ni). Geometric optimizations, total energy calculations and NLO properties of the molecules were carried out with the Gaussian 09 program using the DFT (B3LYP) method with the LANL2DZ basis set. In addition, visualization of the structure and analysis of the outputs were carried out with Gauss-View software.
Key Words: NLO, metal, pyridyl, DFT

SCHIFF BAZLI ÇİNKO VE NİKEL KOMPLEKSLERİNİN ELEKTRONİK ÖZELLİKLERİ (MEP, FMO, NBO VE MULLİKEN YÜKLERİ)

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ÖZET: Bu çalışmada da Schiff bazı komplekslerinin yapısal karakterizasyonu üzerine yapılan çalışmaların bir uzantısı olarak bir Schiff bazı ligandından türetilen çinko kompleksi ($[ZnCl_2(C_{12}H_{18}N_2O_2)]$ ve nikel kompleksi ($[NiCl_2(C_{12}H_{18}N_2O_2)]$) bileşiklerin elektronik özellikleri belirlendi. Bu komplekslerin yapısı zwitteriyonik bir Schiff bazı ligandı içerir. Moleküllerin geometrik optimizasyonları ve elektronik özellikleri (MEP, FMO, NBO ve Mülliken yükleri) LANL2DZ baz seti ile DFT (B3LYP) metodu kullanılarak elde edilmiştir. Tüm hesaplamalar Gaussian 09 yazılım paketi kullanılarak yapılmıştır. Ayrıca yapının görselleştirilmesi ve çıktıların analizi Gauss-View yazılımı ile gerçekleştirilmiştir.
Anahtar Kelimeler: Schiff baz, metal, elektronik, DFT

ELECTRONIC PROPERTIES (MEP, FMO, NBO AND MULLIKEN CHARGES) OF SCHIFF BASE ZINC AND NICKEL COMPLEXES

ABSTRACT: In this study, as an extension of the studies on the structural characterization of Schiff base complexes, the electronic properties of zinc complex ($[ZnCl_2(C_{12}H_{18}N_2O_2)]$ and nickel complex ($[NiCl_2(C_{12}H_{18}N_2O_2)]$) compounds derived from a Schiff base ligand were determined. The structure of these complexes is a zwitterionic Schiff base. Geometric optimizations and electronic properties (MEP, FMO, NBO and Mülliken charges) of the molecules were obtained using the DFT (B3LYP) method with the LANL2DZ basis set. All calculations were made using the Gaussian 09 software package. In addition, visualization of the structure and analysis of the outputs were carried out with Gauss-View software.
Key Words: Schiff base, metal, electronic, DFT

DEEP REINFORCEMENT LEARNING IN NATURAL DISASTER MANAGEMENT: ADDRESSING OVERFITTING TO IMPROVE GENERALIZATION

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Abstract
Natural disasters have long caused significant human loss and major infrastructure damage, leading to ravaged communities with the need for extensive recovery efforts. Recent technological advances, especially within the field of machine learning, now offer us the possibility of greatly mitigating these losses and damages. One of the most promising approaches in this regard is Deep Reinforcement Learning (DRL). This subfield of machine learning, DRL, has extraordinary potential to drive great improvement in decision-making processes under disaster management scenarios. This includes such important domains as evacuation planning and resource allocation efficiency. However, one of the big challenges in implementing DRL is the problem of overfitting. When models are performing very well during training but fail to generalize to new and unseen conditions of disasters, then that certainly limits their practical applications. To tackle this challenge, this paper investigates several solutions to improve the robustness and generalization of DRL models applied in natural disaster management. The main solutions discussed in this respect are domain randomization, environment augmentation, and adversarial training. We exemplify the effectiveness of these strategies via a comprehensive case study of flood evacuation planning. This case study shows how these solutions can be implemented to improve the generalization and adaptability of DRL models, making them more dependable when faced with real-world disaster scenarios. The findings from this study thus outline actionable ways in which the dependability and effectiveness of DRL in disaster management can be enhanced, with the ultimate goal of better preparedness and response actions against natural disasters.
Keywords: Deep Reinforcement Learning, Overfitting, Natural Disaster Management, Domain Randomization, Robustness.

INVESTIGATING THE ROLE OF TANGIBLE ATTRIBUTES OF SMARTPHONES IN DEVELOPING BRAND ASSOCIATION- EMERGING TRENDS IN AN EMERGING ECONOMY

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Abstract
This study explores whether the functional and aesthetic attributes (as a part of product design) of smartphones develop brand association. This study also uses user image congruence as a moderating variable in the conceptual model to inspect its effect on product design's attributes-brand association relationship. This study used a cross-sectional research design for sample data based on psychographics segmentation, stratified random sampling, and structured close-ended questionnaires using the SPSS software package. The findings of the study reveal that product design attributes like functional and aesthetic attributes have a significant impact on constructing brand associations among smartphone users. Findings also highlight that user image congruence helps in flourishing brand association among users. User Image Congruence as an important part of the product also helps in building up the product design's attributes-brand association relationship. This study is limited to two key attributes of a product design and its scope can be expanded by enriching the model with other attributes like symbolic attributes of product design and/or by adding non-product related attributes. Similarly, this study investigated the conceptual model by using only one technological product i.e., a smartphone, and the scope of the study can be extended to other technological products that people use daily and that can act as a possible contributor to developing brand association.
Keywords: Brand Association, User Image Congruence, Function, Aesthetics, Smartphone, product design, product design's attributes.
JEL Classification Codes: M31; M37

COMPARISON OF QUESTION DIFFICULTY BY CLASSIFYING PHYSIOLOGICAL PARAMETERS RECORDED DURING THE 9TH GRADE MATHEMATICS EXAM WITH MACHINE LEARNING ALGORITHMS

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ABSTRACT

It can be said that the classical studies on measurement and evaluation applied in our schools are insufficient. Accordingly, there is a gap to improve measurement and evaluation in the education system. In this study, in order to provide more efficient mathematics education for 9th grade students, physiological parameters (SpO2, Pulse, Body Temperature, Respiratory Rate, Fluid Response and Circulation Rate) were used to classify the test results with machine learning algorithms. It is aimed to provide support to teachers for the applicability of the tests by comparing the difficulty of the questions. In the study, physiological information of 23 students were collected with the help of Masimo Rad-G device and thermometer. 5 questions were asked to each student and 30 seconds of data were recorded for each of these questions. The evaluation of the measurement tool was made in three equal stages as easy, normal and difficult. At this stage, the results obtained after the evaluation stated by the teacher were compared with the results obtained after the classification.

As a result, a superior success rate of 100% was achieved using traditional classification methods with Decision Tree and kNN. In the study, it is predicted that with the support of machine learning algorithms, meaningful information will be extracted from students' difficulties for measurement and evaluation in education and thus teachers will be more successful in measurement and evaluation. As a result of the obtained findings, it is thought that correct feedback will be provided, students will be evaluated correctly and the quality of education will be increased.

Keywords: Measurement and evaluation in education, Mathematic education, Physiological parameters, Decision Tree, kNN

YAHYA EFENDİ'YE AİT GÖSTERİLEN MANZUM BİR TIP PENDNAMESİ
A MEDICAL LETTER IN VERSE BELONGING TO YAHYA EFENDI

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ÖZET
Pendname, Farsça bir sözcük olup bu terimin Arapçası, nush sözcüğünden türemiş olan nasihatnamedir. Okuyucuya nasihatler ederek iyilik yapma ve hayırlı dualar alma amacını güden bu edebî tür, Türk edebiyatında çok önemli bir yer tutmakta olup çeşitli büyüklüklerde yüzlerce örneği yazılmıştır. Türk edebiyatında pendname geleneği yüzyıllarca devam etmiş ve genellikle dinî-tasavvufî konularda eserler kaleme alınmıştır. Fakat nasihatnameler sadece dinî konulardan ibaret olmayıp meslekî ve müspet ilimler alanında da eserler yazılmıştır ki tıp da bunlar arasında önemli bir yer tutmaktadır. Tıbbi nasihatnameler genellikle manzum biçimde yazılmış olup Ankaralı Nidai'nin manzum eseri en önemli örnektir. Bu çalışmada ise Yahya Efendi'ye ait gösterilen 121 beyitten oluşan manzum tıp nasihatnamesi tanıtılacaktır. Ancak kaynaklarda bu eserin Âhî Çelebi'ye ait olduğu görülmektedir. Yahya Efendi'nin Beşiktaşlı Yahya Efendi diye bilinen kişi olup olmadığı meçhul ise de aynı kişi olma ihtimali kuvvetlidir. Bir çalışmada kendisine ait 46 beyitlik bir tıbbi nasihatname tanıtılmıştır ki o eserle bizim tanıttığımız eser farklıdır. Bu eserin ilk beyitleri: "tabiplerin fazla yemek yemeyi, gece yatmayıp gündüz uyumayı, gece uyanıp su içmeyi" şiddetle yasaklamasını anlatmaktadır. Daha sonra yeme içmeden cinsel temasa, bedendeki dört sıvının dengeli biçimde olmasını sağlayan beslenme tarzına kadar her türlü konuda nasihatler manzum ve akıcı bir dille verilmiştir. Çalışmamızda bu eser analitik biçimde incelenip tanıtılacaktır.
Anahtar kelimeler: Pendname, nasihatname, manzum, tıp, hastalık.

ABSTRACT
Pendname is a Persian word and its Arabic equivalent is nasihatname, derived from the word nush. This literary genre, which aims to do good by giving advice to the reader and to receive good prayers, has a very important place in Turkish literature and hundreds of examples of various sizes have been written. The pendname tradition in Turkish literature has continued for centuries and works have generally been written on religious-mystical subjects. However, nasihatnames are not limited to religious subjects only; works have also been written in the fields of professional and positive sciences, and medicine has an important place among them. Medical nasihatnames are generally written in verse and the verse work of Ankaralı Nidai is the most important example. In this study, a 121 verse medical advice book attributed to Yahya Efendi will be introduced. However, it is seen in the sources that this work belongs to Ahi Çelebi. Although it is unknown whether Yahya Efendi is the person known as Beşiktaşlı Yahya Efendi, it is more likely that they are the same person. In one study, a medical advice book of 46 couplets belonging to her was introduced, and that work is different from the work we introduced. The first couplets of this work describe "the doctors' strict prohibition of eating too much, staying up at night and sleeping during the day, waking up at night and drinking water". Later, advice on all kinds of subjects from eating and drinking to sexual intercourse, and the diet that ensures the balance of the four fluids in the body are given in verse and fluent language. In our study, this work will be examined and introduced analytically.
Keywords: Pendname, advice book, verse, medicine, disease.

ZÜHREVİ HASTALIKLARIN ZÜHRE YILDIZI İLE İLİŞKİSİ
ON THE RELATIONSHIP OF VENERAL DISEASES WITH THE STAR VENUS

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ÖZET
Divan şiirinde Zühre (Venüs) yıldızı; aşk, güzellik, eğlence gibi anlamlarla ilişkili bulunmuştur. Batı'da Venüs olan bu gezegenin adı Eski Roma tanrıçası Venüs (Eski Yunanda Afrodit)'ten gelmekte olup Afrodit ise Yunan mitolojisinde aşk tanrıçasıdır. Antik Yunanda bedenî ve ruhî aşk birbirinden ayrılarak Afrodit adında iki tanrıçaya inanılmış ve Afroditlerin biri beden aşkını, diğeri ise ruh aşkını temsil etmiştir. Venüs, dünyada sembolik olarak şuh kadını temsil ettiğinden şairler, aşk ve eğlence peşinde koşmanın sonucunu Zührevi hastalık (Venüs'ün sebep olduğu hastalık) olarak açıklamışlar ve böylece şiirde aşk ile sıkıntılarının sembolü Zührevi (Veneral) adıyla ifade edilmiştir. Bu ilişkiden dolayı tıpta da cinsel temasla bulaşan hastalıklar zührevi hastalıklar olarak tanımlanmıştır. Bu sözcük, aşk ve güzellik tanrıçası Venüs'ün Arapçası olan Zühre adından türemiştir ki "Venüs'e ait iş" anlamına gelmektedir. Zühre ile zührevi hastalıklar aynı kökten geldiğinden aşkın bedeli ve riskleri sembolize edilmiş olmaktadır. Yani Venüs yıldızı aşk ve eğlencenin sembolü olduğundan sebep olduğu hastalık da tıpta zührevi hastalık olarak tanımlanmıştır. Bu çalışmada bu ilişki ve adlandırmanın ortaya çıkış süreci şiir ve tıp metinlerinden hareketle ortaya konulacaktır. İncelenecek metinler daha ziyade divan şiirine ait olup Batı'ya ait şiirlere de bakılacaktır. Ayrıca halk hekimliği de bu hastalıkların teşhis ve tedavisinde önemli bir yer tuttuğundan konuyla ilgili metinler gözden geçirilecektir.
Anahtar kelimeler: Zühre, zührevi hastalık, Venüs, ilişki.

ABSTRACT
In Divan poetry, the star Zühre (Venus) is associated with meanings such as love, beauty, and entertainment. The name of this planet, which is Venus in the West, comes from the Ancient Roman goddess Venus (Aphrodite in Ancient Greece), and Aphrodite is the goddess of love in Greek mythology. In Ancient Greece, physical and spiritual love were separated from each other and two goddesses named Aphrodite were believed in, and one of the Aphrodites represented physical love and the other spiritual love. Since Venus symbolically represents the woman of love in the world, poets explained the result of pursuing love and entertainment as Venereal disease (disease caused by Venus), and thus in poetry, the symbol of love and troubles was expressed with the name Venereal (Veneral). Due to this relationship, diseases transmitted through sexual contact were also defined as venereal diseases in medicine. This word is derived from the Arabic name of Venus, the goddess of love and beauty, Zühre, which means "work belonging to Venus". Since venereal diseases and venereal diseases come from the same root, the cost and risks of love are symbolized. In other words, since the Venus star is the symbol of love and fun, the disease it causes is defined as venereal disease in medicine. In this study, the process of emergence of this relationship and naming will be revealed based on poetry and medical texts. The texts to be examined mostly belong to divan poetry and examples from Western poetry will also be examined. In addition, since folk medicine has an important place in the diagnosis and treatment of these diseases, texts related to the subject will be examined.
Keywords: Zuhre, venereal disease, Venus, relationship.

AÇIK KAYNAK YAZILIMLARLA BASİT DÖNEL VİSKOZİMETRE ANALİZİ
SIMPLE ROTARY VISCOMETER ANALYSIS BY OPEN-SOURCE SOFTWARE

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ÖZET
Bu çalışmada iç içe geçmiş eş merkezli iki silindirden oluşan dönel tip viskozimetrenin iki farklı yöntem ile analizi yapılmıştır. Dönel viskozimetre üzerinde uygulanan tork ve viskozite ilişkisini tespit etmek için ilk yöntem olarak Couette akış yaklaşımı ile analitik çözüm yapılmıştır. Bu yöntemde akışkan viskozitesi, viskozimetre ölçüleri ve viskozimetre dönüş hızına bağlı olarak uygulanması gereken tork değeri hesaplanmıştır. Daha sonra açık kaynak yazılımlar olan FreeCad, OpenFoam ve ParaView yazılımları kullanılarak hesaplamalı akışkanlar dinamiği analizleri yapılmıştır. FreeCad yazılımında akış alanı çizimleri, ağ yapılarının tasarımı, OpenFoam'a gönderilecek olan sınır şartlarının ve akış şartlarının belirlendiği dosyaların hazırlanması yapılmıştır. Hazırlanan dosyalar Openfoam'a gönderilerek iterasyonlar tamamlanmış, elde edilen sonuçlar ParaView yazılımında görselleştirilerek incelenmiştir. Dosyalardan elde edilen sayısal tork değerleri analitik Couette yaklaşımı ile karşılaştırılmıştır. Yazılımla yapılan analizlerin hesap yükünün az olması için viskozimetre ölçüleri küçük tutulmuştur. Akış analizlerinde ağ yapılarında maksimum hücre kenar boyutu sırasıyla 1 mm, 0,8 mm ve 0,5 mm olacak şekilde çözümlemeler yapılmıştır. OpenFoam ile elde edilen sonuçlarda çok küçük değişimler tespit edilmiş ve ağ yapılarının yeterli olduğuna karar verilmiştir. Couette akış kabulü ve hesaplamalı akışkanlar dinamiği analizi ile elde edilen tork değerleri arasında %11-12 civarında farklılık gözlemlenmiştir. Her iki analiz yönteminde de farklı kabuller olmasından dolayı elde edilen bu farklılık değerleri tatmin edici ölçülerde kabul edilmiştir. Daha net sonuçlar elde edebilmek için sonraki çalışmalarda deneysel sonuçlarla karşılaştırma yapılması planlanmaktadır.
Anahtar Kelimeler: FreeCAD, OpenFoam, Paraview, Couette Akış, Dönel Viskozimetre

ABSTRACT
In this study, the analysis of a rotational-type viscometer consisting of two concentric cylinders was performed with two different methods. In order to determine the torque and viscosity relationship applied on the rotational viscometer, the first method was to use the Couette flow approach as an analytical solution. In this method, the torque value to be applied was calculated depending on the fluid viscosity, viscometer measurements, and viscometer rotation speed. Then, computational fluid dynamics analyses were performed using the open-source software FreeCad, OpenFoam, and ParaView. In the FreeCad software, flow field designs, mesh design, and preparation of files that determine the boundary conditions and flow conditions to be sent to OpenFoam were performed. The prepared files were sent to OpenFoam, and the iterations were completed, and then the obtained results were visualized and examined in the ParaView software. The numerical torque values obtained from the files were compared with the analytical Couette approach. In order to reduce the computational load of the analyses made with the software, the viscometer measurements were kept small. In the flow analyses, the maximum cell edge size in the mesh structures designed as 1 mm, 0.8 mm, and 0.5 mm, respectively. Very small changes were detected in the obtained results by OpenFoam, and it was decided that the mesh structures were sufficient. A difference of around 11–12% was observed between the torque values obtained with the Couette flow assumption and

computational fluid dynamics analysis. Since there are different assumptions in both analysis methods, these difference values obtained were accepted as satisfactory. In order to obtain more accurate results, it is planned to make comparisons with experimental results in following studies.

Keywords: FreeCAD, OpenFoam, Paraview, Couette Flow, Rotary Viscometer

THE NEXUS BETWEEN TELECOMMUNICATION POLICIES AND REAL ESTATE SUSTAINABILITY: A CASE STUDY OF NITDA NIGERIA

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Abstract
The Nigerian real estate sector is grappling with significant sustainability challenges, including inefficient resource utilization and escalating environmental concerns. Despite the increasing adoption of technology globally, existing policies in Nigeria often fail to effectively harness telecommunication innovations for sustainable real estate practices. This study seeks to address this gap by assessing the influence of NITDA's telecommunication policies on the sustainability of real estate management, focusing on Abuja and Algos as case studies. The research aimed to evaluate the extent to which telecommunication policies drive energy efficiency, resource optimization, and environmentally sustainable practices in real estate. Using a structured survey, data were collected from 360 NITDA staff members and analyzed through descriptive and inferential statistical methods. Results revealed a strong positive correlation ($r = 0.81$, $p < 0.01$) between telecommunication-based policies and sustainability outcomes in real estate management. Additionally, regression analysis indicated that telecommunication-driven policies accounted for 67% of the variance in achieving sustainable real estate practices. However, challenges such as infrastructure deficiencies and inadequate policy enforcement were identified as significant barriers to maximizing the potential of these innovations. The study concludes that telecommunication policies, as championed by NITDA, play a critical role in promoting sustainable practices within the real estate sector. It emphasizes the necessity for targeted investments in ICT infrastructure, strategic capacity-building initiatives, and stringent regulatory enforcement to ensure the alignment of telecommunication technologies with sustainability goals. These efforts are essential for addressing the prevailing sustainability challenges and fostering a more resource-efficient and environmentally friendly real estate sector in Nigeria.

Keywords: Telecommunication Policies, Real Estate Sustainability, NITDA, ICT, Facilities Management, Nigeria

INTEGRATING TELECOMMUNICATION INFRASTRUCTURE IN REAL ESTATE AND FACILITIES MANAGEMENT: ANALYZING NITDA's ROLE IN NIGERIA'S SMART CITY DEVELOPMENT

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Abstract
Nigeria's rapid urbanization and growing digital transformation have highlighted significant challenges in real estate and facilities management, particularly in the integration of telecommunication infrastructure for sustainable urban development. As cities evolve into smart ecosystems, efficient property management and sustainable urban planning increasingly depend on advanced telecommunication systems. This study investigates the role of telecommunication infrastructure in real estate and facilities management, with a focus on NITDA's efforts to drive Nigeria's smart city development. Abuja and Algos were selected as case studies to analyze the interplay between telecommunication policies, real estate practices, and sustainability. The research aimed to assess how telecommunication infrastructure influences property valuation, facilities management efficiency, and sustainability outcomes. Data were gathered from 380 NITDA staff through structured questionnaires and interviews. Descriptive and inferential statistical methods, including regression and correlation analyses, were employed to examine the relationships between telecommunication adoption and real estate management. Results revealed a significant positive correlation ($r = 0.78$, $p < 0.05$) between telecommunication integration and enhanced property valuation and management. Furthermore, regression analysis demonstrated that telecommunication solutions, such as IoT and smart grid systems, accounted for 62% of the variance in facility management efficiency. Despite these advancements, the study identified critical challenges, including infrastructure deficits and inconsistencies in policy enforcement, which limit the full realization of telecommunication benefits in real estate management. These findings underscore NITDA's crucial role in developing and implementing policies to enhance ICT adoption within the real estate sector. The study concludes that robust telecommunication frameworks are fundamental to achieving sustainable real estate management and advancing Nigeria's smart city goals. It recommends increased investment in telecommunication infrastructure, harmonization of policies across sectors, and training programs for real estate stakeholders to maximize the potential of ICT-driven solutions.
Keywords: Telecommunication, Real Estate, Facilities Management, NITDA, Smart Cities, ICT, Nigeria.

FRAMEWORK FOR ESG INTEGRATION IN THE NIGERIAN REAL ESTATE MARKET: EXPLORING THE INTERPLAY OF INTERNAL FORCES AND CLIMATE CHANGE DYNAMICS

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Abstract
The complex interplay between internal market forces and climate change dynamics presents a formidable challenge, requiring a nuanced approach that balances economic viability with environmental and social considerations. Thus, the absence of a tailored framework tailored to the Nigerian context hinders the sector's ability to effectively navigate multifaceted challenges, potentially impeding its long-term sustainability and exacerbating vulnerabilities to climate-related disruptions, the escalating effects of climate change, including extreme weather events and including extreme weather events and environmental degradation, underscore the urgency for real estate stakeholders to adopt strategies that enhance resilience and mitigate risks as there is a growing recognition of the imperative to embed sustainability and responsible practices. Nigerian real estate market still stands at a pivotal juncture where the imperative for sustainability and responsible business practices intersects with the pressing challenges posed by climate change. This paper aimed at proposing a framework for integrating Environmental, Social, and Governance (ESG) principles into the Nigerian real estate market, with a focus on navigating the intricate interplay between internal market forces and the dynamics of climate change. The study employed a qualitative research design through the strategic systematic literature review and conceptualization. From the finding of the study it was reveal that there are unique contextual factors shaping the Nigerian real estate landscape, including rapid urbanization, evolving consumer preferences, regulatory frameworks, and climatic vulnerabilities, the multifaceted dimensions of ESG integration within this context, our framework provide actionable guidance for real estate stakeholders, including developers, investors, policymakers, and urban planners. Central to this framework has recognition that sustainable development in the Nigerian real estate sector that necessitates a nuanced understanding of the interconnected relationships it can be concluded that the proposed framework endeavors to foster a holistic approach to real estate decision-making that not only enhances long-term value creation but also contributes to the broader goals of sustainable development and climate adaptation in the Nigerian context.
Keywords: ESG integration, climate change, real estate market, sustainable development, urbanization, regulatory frameworks.

YAPAY ZEKA ALGORİTMALARI İLE DİJİTAL MANİPÜLASYON: OTOMATİK PROPAGANDA VE KİTLELERİ ETKİLEME STRATEJİLERİ

DIGITAL MANIPULATION WITH ARTIFICIAL INTELLIGENCE ALGORITHMS: AUTOMATED PROPAGANDA AND AUDIENCE INFLUENCE STRATEGIES

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ÖZ

Dijital çağda yapay zeka algoritmalarının etkisi, bilgiye erişimden bireylerin karar verme süreçlerine kadar birçok alanda büyük dönüşümler yaratmaktadır. Özellikle, yapay zekanın sunduğu otomasyon ve veri analizi yetenekleri, dijital manipülasyonun etkili bir şekilde uygulanmasına imkan tanıyarak kitlelerin davranışlarını etkileme stratejilerinde yeni bir dönemin kapılarını açmaktadır. Bu çalışma, yapay zeka ile oluşturulan propaganda araçlarının günümüzdeki etkilerini ve gelecekte kitleleri etkilemede potansiyel sonuçlarını tespit etmek amacıyla, öncelikle literatür ve güncel gelişmelerin incelenmesi yoluyla hazırlanmıştır.

Yapay zekanın algoritmalar ile oluşturulan propaganda alanında oluşturduğu 'otomatik propaganda' olgusu ve bu durumun kitlelere olabilecek etkileri üzerine durulmuştur. Bu bağlamda öncelikle otomatik propaganda ifadesinin tanımı ve gelecekteki olası manipülasyon tehlikeleri ele alınmış, ardından kitleleri etkileme konusundaki stratejileri incelenmiştir.

Bu konudaki bulgular, yapay zekanın hem olumlu hem de olumsuz etkilerini ele alarak, bu teknolojinin geliştirilmesi ve kullanılmasında dikkat edilmesi gereken önemli noktaları vurgulamaktadır. Aynı zamanda, yapay zeka algoritmalarının toplumlar üzerindeki uzun vadeli etkileri, bilgiye güven duygusunu aşındırma potansiyeli ve bireysel özgürlüğe etkileri etik bir bakış açısıyla da ele alınmaktadır. Ayrıca, bu stratejilerin kitlelerin karar mekanizmalarındaki rolü ve gelecekte dijital manipülasyonla mücadele yöntemleri de tartışılmaktadır. Özellikle, kamuoyunu şekillendiren bu stratejilere karşı daha güçlü farkındalık yaratmanın ve yasal düzenlemelerle bu sürecin sınırlandırılmasının önemi vurgulanmaktadır. Bu çerçevede, yapay zekanın toplumsal yapıya etkileri geniş bir perspektiften ele alınmakta ve bilinçli bir dijital toplumun inşası için öneriler sunulmaktadır.

Anahtar Kelimeler : Yapay zeka, propaganda, dijital manipülasyon.

ABSTRACT

In the digital age, the impact of artificial intelligence algorithms is creating major transformations in many areas, from access to information to individuals' decision-making processes. In particular, the automation and data analysis capabilities offered by artificial intelligence enable the effective implementation of digital manipulation, opening the doors to a new era in strategies to influence the behaviour of the masses. This study has been prepared primarily by analysing the literature and current developments in order to determine the current effects of propaganda tools created with artificial intelligence and their potential consequences in influencing the masses in the future.

The phenomenon of 'automatic propaganda' created by artificial intelligence in the field of propaganda created with algorithms and the effects of this situation on the masses are emphasised. In this context, firstly, the definition of automatic propaganda and the possible future dangers of manipulation are discussed, and then the strategies to influence the masses are examined.

The findings in this topic address both the positive and negative effects of artificial intelligence, emphasising the important points to be considered in the development and use of this technology. At the same time, the long-term effects of AI algorithms on societies, their potential to erode trust in information and their impact on individual freedom are also addressed from an ethical perspective. Furthermore, the role of these strategies in the decision-making mechanisms of the masses and methods to combat digital manipulation in the future are also discussed. In particular, the importance of raising stronger awareness against these strategies that shape public opinion and limiting this process through legal regulations is emphasised. In this framework, the effects of artificial intelligence on social structure are discussed from a broad perspective and suggestions are presented for the construction of a conscious digital society.

Keywords : Artificial intelligence, propaganda, digital manipulation.

ULUSLARARASI KURULUŞLARIN GÖÇ POLİTİKALARI: BM ÖRNEĞİ

MIGRATION POLICIES OF INTERNATIONAL ORGANIZATIONS: THE UN EXAMPLE

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ÖZET

Göç konusu, insanlık tarihi kadar eskidir. Geçmişten günümüze insanlar, savaşlar, güvenlik arayışı, çatışmadan uzaklaşma, iklim koşulları, daha iyi bir yaşama erişim, daha iyi bir eğitim, daha iyi bir fırsat gibi nedenlerle göç etmişlerdir. Göçte hem menşe ülkelerin hem hedef ülkelerin hem de transit ülkelerin pozisyonu süreçte rol oynamaktadır. Dünyada 281 Milyon göçmen bulunmakta ve özellikle son yıllarda çatışmalar, güvenlik ihtiyacı gibi nedenlerle mülteci sayısında büyük artışlar yaşanmaktadır. Mevcut durumda 120 milyonun üzerinde yerinden edilmiş insan bulunmakta ve 40 milyona yakın kişi mülteci konumundadır. Göç konusu bir taraftan öncelikle ulusal hükümetleri ilgilendirirken, diğer taraftan dünyanın farklı bölgelerinde yaşanan sıkıntılar birçok ülkeyi konuya yönelik yeni arayışlara itmiş durumdadır. Bu süreçte Birleşmiş Milletler 'den Avrupa Birliği'ne, Avrupa Konseyi'nden Afrika Birliği'ne kadar uluslararası kuruluşlar da sürece sessiz kalmamakta ve farklı arayışlar, iş birlikleri ve rehber ilkeler geliştirme gayreti içerisinde bulunmaktadır. Bu çalışma uluslararası kuruluşların göç politikasını, dünyanın en büyük uluslararası kuruluşu olan Birleşmiş örneği üzerinden ele almaktadır. Birleşmiş Milletler göç ve özellikle mülteci konusunda sözleşme, bildirge, pakt ve Genel Kurul Kararları şeklinde belgeler üretmektedir. Özellikle, Genel Kurul kararları arasında yer alan 2030 Sürdürülebilir Kalkınma Amaçları arasında göç konusunda bazı somut hedeflere de yer verdiği görülmektedir. Diğer taraftan konu ile ilgili bünyesinde uzman kuruluşlar oluşturduğu, mekanizmalar geliştirdiği görülmektedir. Birleşmiş Milletler 'in bu alandaki çalışmaları önemli ve değerli olmakla beraber, sorunun boyutu BM'nin çalışmalarını yetersiz bırakmakta, BM'nin daha fazla çaba sarfetmesine, üyeleri ile daha fazla dayanışma geliştirmesine ve iş birliği yapmasına ihtiyaç bulunmaktadır.

Anahtar Kelimeler: Göç, Uluslararası göç, Göç Politikaları, Uluslararası Kuruluşlar, Birleşmiş Milletler

ABSTRACT

The issue of migration is as old as human history. People have migrated from the past to the present for reasons such as wars, seeking security, getting away from conflict, climate conditions, access to a better life, education, and opportunities. The positions of both countries of origin, destination, and transit countries play a role in the migration process. There are 281 million immigrants in the world, and especially in recent years, there have been significant increases in the number of refugees due to conflicts and the need for security. Currently, there are over 120 million displaced people and nearly 40 million people are refugees. While the issue of migration primarily concerns national governments, the difficulties experienced in different parts of the world have pushed many countries to do new research on the subject. In

this process, international organizations from the United Nations to the European Union, from the Council of Europe to the African Union do not remain silent and strive to develop different searches, collaborations, and guiding principles. This study examines the migration policy of international organizations through the example of the United Nations, the world's largest international organization. The United Nations produces documents on migration, especially refugees, in conventions, declarations, pacts, and General Assembly Resolutions. In particular, it is seen that the 2030 Sustainable Development Goals, which are among the General Assembly resolutions, also include some concrete targets for migration. On the other hand, it is seen that it has established expert organizations and developed mechanisms on the subject. Although the work of the United Nations in this area is essential and valuable, the size of the problem leaves the UN's work inadequate, and the UN needs to make more efforts to develop more solidarity and cooperation with its members.

Key Words: Migration, International Migration, Migration Policies, International Organizations, United Nations

E- TİCARET VE DİJİTAL DÖNÜŞÜMÜN EKONOMİK BÜYÜME ÜZERİNDEKİ ETKİSİ: TÜRKİYE ÖRNEĞİ
THE IMPACT OF E-COMMERCE AND DIGITAL TRANSFORMATION ON ECONOMIC GROWTH: THE CASE OF TÜRKİYE

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ÖZET
Teknolojik değişimler 21. Yüzyılda olağanüstü bir şekilde ilerlemekte ve yayılım etkisi göstererek ekonomik, sosyal ve kültürel hayatı yeniden şekillendirmektedir. Özellikle Covid - 19 pandemi dönemi dijitalleşmenin dönüm noktalarından biri olmuştur. Pandemi döneminde üreticilerin hammadde ve ara mal temin etmelerinde ve tüketicilerin ihtiyacını karşılamada yeni bir döneme geçilmiştir. Bu kapsamda yapay zekâ ile şekillenmiş yeni teknolojiler, temassız alışveriş yapma, ödeme sistemlerinin çeşitlendirilmesi ve sunduğu kolaylıklarla e-ticarete olan talep artırmıştır. Artan talep karşısında e-ticaret hacmi artmış ve dijital dönüşüm hızlanmıştır. Bu çalışmada 2008-2022 yılları arasında Türkiye'nin dijitalleşme göstergelerinden yararlanarak e- ticaretin ekonomik büyüme üzerindeki etkisi En Küçük Kareler Yöntemi ile analizi yapılmıştır.
Anahtar Kelimeler : E-ticaret, Dijital Dönüşüm, Ekonomik Büyüme

ABSTRACT
Technological advancements in the 21st century are progressing at a remarkable pace, reshaping economic, social, and cultural life through widespread influence. The COVID-19 pandemic, in particular, marked a turning point in digitalization. During the pandemic, a new era began as producers faced challenges in sourcing raw materials and intermediate goods, and consumers sought new ways to meet their needs. In this context, emerging technologies shaped by artificial intelligence, contactless shopping options, the diversification of payment systems, and the convenience they offer have increased demand for e-commerce. As demand surged, the e-commerce volume expanded, accelerating the pace of digital transformation. This study analyzes the impact of e-commerce on economic growth in Turkey from 2008 to 2022, utilizing digitalization indicators and employing a Multiple Regression Model.
Keywords: E-commerce, Digital Transformation, Economic Growth

DEMOGRAPHIC INFLUENCES ON SMARTPHONE USAGE: UNDERSTANDING BEHAVIOR PATTERNS AND MARKETING IMPLICATIONS

AKILLI TELEFON KULLANIMINDA DEMOGRAFİK ETKİLER: DAVRANIŞ KALIPLARINI VE PAZARLAMA ÇIKARIMLARINI ANLAMAK

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ABSTRACT
Every individual possesses unique characteristics; however, despite these differences, individuals often exhibit similar behavioral patterns influenced by certain common demographic traits. Among these traits, factors such as age, gender, education level, and marital status play a crucial role in shaping comparable behaviors. This phenomenon is particularly evident in the context of smartphone usage and the associated mobile applications. In contemporary society, smartphones have transcended their initial role as mere communication devices, evolving into indispensable components of users' daily lives. To investigate the motivational differences in smartphone usage among individuals, a survey was conducted involving 912 participants. The survey aimed to determine the primary purposes for which these individuals utilize their smartphones. The findings reveal that participants engage with their smartphones across a spectrum of activities, which can be contextualized within their shared demographic characteristics. The identified purposes include communication, gaming, consumption of video, films, and music (utilizing platforms such as YouTube and Netflix), shopping, interaction via social media (including applications like WhatsApp, Instagram, Telegram, and LinkedIn), and educational activities (through tools such as Teams, Zoom, and Skype). These results underscore the necessity of incorporating demographic characteristics into the formulation of marketing strategies. Businesses that engage in mobile advertising should strategically select channels that effectively reach their target audiences by developing tailored campaigns in accordance with the distinctive or similar usage habits prevalent within specific demographic groups. Such an approach facilitates more effective communication by providing solutions that are aligned with users' needs, ultimately enhancing customer satisfaction. In conclusion, a nuanced understanding of demographic differences not only enables businesses to secure a competitive advantage but also fosters increased customer loyalty. This understanding enhances the overall user experience and supports brands in achieving sustainable growth over the long term.
Keywords: Demographic Variables, Smartphone Usage, Mobile Marketing**,** Mobile App

ÖZET
Her birey kendine has özelliklere sahiptir; ancak bu farklılıklara rağmen, bireyler genellikle belirli ortak demografik özelliklerden etkilenen benzer davranış kalıpları sergilerler. Bu özellikler arasında yaş, cinsiyet, eğitim düzeyi ve medeni durum gibi faktörler benzer davranışların şekillenmesinde önemli bir rol oynamaktadır. Bu olgu özellikle akıllı telefon kullanımı ve ilgili mobil uygulamalar bağlamında belirgindir. Çağdaş toplumda akıllı telefonlar, başlangıçtaki salt iletişim cihazı rollerini aşarak kullanıcıların günlük yaşamlarının vazgeçilmez bileşenleri haline gelmiştir. Bireyler arasında akıllı telefon kullanımındaki motivasyonel farklılıkları araştırmak amacıyla 912 katılımcının yer aldığı bir anket

gerçekleştirilmiştir. Anket, bu bireylerin akıllı telefonlarını hangi temel amaçlarla kullandıklarını belirlemeyi amaçlamıştır. Bulgular, katılımcıların akıllı telefonlarıyla, ortak demografik özellikleri çerçevesinde bağlamsallaştırılabilecek bir dizi faaliyette bulunduklarını ortaya koymaktadır. Belirlenen amaçlar arasında iletişim, oyun oynama, video, film ve müzik tüketimi (YouTube ve Netflix gibi platformları kullanarak), alışveriş, sosyal medya aracılığıyla etkileşim (WhatsApp, Instagram, Telegram ve LinkedIn gibi uygulamalar dahil) ve eğitim faaliyetleri (Teams, Zoom ve Skype gibi araçlar aracılığıyla) yer almaktadır. Bu sonuçlar, demografik özelliklerin pazarlama stratejilerinin formülasyonuna dahil edilmesi gerekliliğinin altını çizmektedir. Mobil reklamcılık yapan işletmeler, belirli demografik gruplarda yaygın olan farklı veya benzer kullanım alışkanlıklarına göre özel kampanyalar geliştirerek hedef kitlelerine etkili bir şekilde ulaşan kanalları stratejik olarak seçmelidir. Bu tür bir yaklaşım, kullanıcıların ihtiyaçlarıyla uyumlu çözümler sunarak daha etkili bir iletişim kurulmasını kolaylaştırır ve nihayetinde müşteri memnuniyetini artırır. Sonuç olarak, demografik farklılıkların incelikli bir şekilde anlaşılması, işletmelerin sadece rekabet avantajı elde etmesini sağlamakla kalmaz, aynı zamanda müşteri sadakatinin artmasını da teşvik eder. Bu anlayış, genel kullanıcı deneyimini geliştirir ve markaların uzun vadede sürdürülebilir büyüme elde etmesini destekler.

Anahtar Kelimeler: Demografik Değişkenler, Akıllı Telefon Kullanımı, Mobil Pazarlama, Mobil Uygulama

AFGANİSTAN'DA ULUSAL KİMLİK İNŞASI ÇABALARI VE ETNİK GRUPLARIN ROLÜ

EFFORTS TO BUILD NATIONAL IDENTITY IN AFGHANISTAN AND THE ROLE OF ETHNIC GROUPS

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ÖZET:
Evrensel bir olgu olan etno-kültürel çeşitliliği yönetme konusu devlet ve toplum arasındaki sosyal ilişkileri düzenleme çabası olarak görülebilir. Bir ülkede yaşayan farklı etnik grupların çeşitli ihtiyaçlarını ve zorluklarını anlamak, daha etkili ve kültürel açıdan duyarlı çözümler üretmek toplumsal uzlaşmayı sağlayabilmek açısından önemli adımlardır. Son tahlilde ulusal kimlik, bir ülke için birliğin ve toplumsal uyumun sağlanması açısından vazgeçilmez bir öneme sahiptir. Afganistan, Peştunlar, Tacikler, Hazaralar, Özbekler, Türkmenler ve diğerleri de dahil olmak üzere çeşitli etnik ve mezhepsel gruplara ev sahipliği yapan bir ülkedir. Bu grupların her biri kendi demografik, kültürel ve sosyal özelliklerini yaşatmaktadır. Ülkede farklı dönemlerde ve hükümetlerde etnik grupları yönetebilmek ve kontrol altına alabilmek ve bir Afgan ulusal kimliği inşa edebilmek amacıyla çeşitli politikalar geliştirilmiş ve uygulanmaya çalışılmıştır. Ancak uygulanmaya çalışılan tüm bu politikalar ülkede hiçbir dönemde tam anlamıyla milli birlik ruhu oluşturamamış ve toplumsal istikrarı sağlayamamıştır.
Afganistan'daki birçok ulusal sorunun etnik boyutları bulunmaktadır. Bu dinamikleri anlamak, sorunların temel nedenlerinin aydınlatılmasına ve uzlaşmaya giden olası yolların belirlemesine yardımcı olacaktır. Etnik grupların incelenmesi, gelecek nesiller için hayati önem taşıyan Afganistan'ın kültürel ve tarihi mirasının korunmasına katkı sağlayacak ve aynı zamanda ülkede daha kapsayıcı ve uyumlu bir toplum inşa etme konusunda fikirler sunacaktır. Bildiride Afganistan toplumunda etno-kültürel/mezhepsel/bölgesel grupların önemi detaylı olarak aktarılacaktır. Ayrıca araştırmanın bulguları kısmında Afganistan'da toplumsal birliğin önündeki engeller ve çözüm önerileri sunulacaktır.
Anahtar kelimeler: Etnik gruplar, Heterojen Kültür, Ulusal Kimlik, Afganistan

ABSTRACT:
The issue of managing ethnocultural diversity, which is a universal phenomenon, can be seen as an effort to regulate social relations between the state and society. Understanding the various needs and challenges of different ethnic groups living in a country is a crucial step toward producing more effective and culturally sensitive solutions, which are essential for ensuring social harmony. Ultimately, national identity holds indispensable importance for achieving unity and social cohesion within a country.
Afghanistan is home to a variety of ethnic and sectarian groups, including Pashtuns, Tajiks, Hazaras, Uzbeks, Turkmens, and others. Each of these groups maintains its own demographic, cultural, and social characteristics. Over different periods and governments, various policies have been developed and implemented in order to manage and control ethnic groups and to construct an Afghan national identity. However, none of these policies have successfully fostered a true spirit of national unity or achieved lasting social stability in the country. Many national issues in Afghanistan have ethnic dimensions. Understanding these dynamics can help illuminate the root causes of problems and identify potential paths toward reconciliation. The

study of ethnic groups will contribute to preserving Afghanistan's cultural and historical heritage, which is vital for future generations, and will also provide ideas for building a more inclusive and cohesive society within the country. This paper will detail the significance of ethnocultural, sectarian, and regional groups in Afghan society. Additionally, the findings section of the study will present the obstacles to social unity in Afghanistan and offer suggestions for solutions.
Keywords: Ethnic Groups, Heterogeneous Culture, National Identity, Afghanistan

IMPACT OF BEESWAX AND ESSENTIAL OIL COATINGS ON SHELF LIFE AND QUALITY OF MANGO FRUITS

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ABSTRACT
High postharvest losses have been the bane of mango production, particularly in the warm, humid regions of the world. In order to address this challenge, the effectiveness of beewax mixed with some edible oils in extending the shelf life of mango fruit was evaluated in this study. The oils used are cinnamon, lavender, and clove oil. Colour change and weight loss were used to adjudge the quality preservation and shelf life extension of the mango fruits. Over the course of the observation period, the weight of the mango fruits coated with each of the treatments reduced; however, the least amount of weight loss (2.94%) was observed in the mangoes coated with beewax combined with lavender oil. While the beewax coated and beewax admixed with lavender oil maintained their pale green colour throughout the investigation, the colour changed from green to yellow with black dots. Accordingly, the study comes to the conclusion that, when compared to the untreated control, the edible coatings evaluated showed a significant deal of promise in prolonging the shelf life of mango fruits. However, as seen by the decrease in weight loss, beeswax combined with lavender coating successfully postponed the mango fruits' ripening for an extra six days.
Keywords:Mango fruits, beewax, edible oils, lavender, delayed ripening.

FARKLI GEREKSİNİMLER SONUCU ORTAYA ÇIKAN BAZI SABİT MOBİLYA TASARIMLARI ve İÇ MEKÂN DÜZENLEMELERİ

SOME FIXED FURNITURE DESIGNS AND INTERIOR ARRANGEMENTS RESULTING FROM DIFFERENT REQUIREMENTS

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ÖZET
Bu çalışmada belli gereksinimler sonucu ortaya çıkan bazı sabit mobilya tasarımlarının ve iç mekan düzenlemelerinin belirlenmesi amaçlanmıştır. Bu amaçla bir iç mimarlık firmasında tasarım ve üretimi yapılan bazı mobilyalar çalışma kapsamında incelenmiştir. Sonuçta; yeni cihazlar, estetik kaygılar ve özel gereksinimlerin mobilya ve iç mekan tasarımlarını yönlendirdiği belirlenmiştir. Tasarımlarda bir yapısal öğeyi gizlemeye yönelik, diğer mobilya elemanlarıyla malzeme uyumunun sağlanmasına ve estetiğe yönelik, bir nesnenin bulunmamasına yönelik ve gizli bölmeler oluşturmaya yönelik kaygıların giderilmesine yönelik çalışmaların yapıldığı belirlenmiştir. Bu doğrultuda kullanıcıların belli gereksinimler sonucu ortaya çıkan iç mekan ve mobilya ihtiyaçlarının giderilmesinde profesyonel yollara başvurdukları söylenebilir.
Anahtar Kelimeler: İç mekan, Mobilya, Tasarım

ABSTRACT
This study aims to determine some fixed furniture designs and interior arrangements resulting from certain requirements. For this purpose, some furniture designed and produced in an interior architecture firm were examined within the scope of the study. As a result; it was determined that new devices, aesthetic concerns and special requirements direct furniture and interior designs. It was determined that studies were carried out to hide a structural element in the designs, to ensure material harmony with other furniture elements and to eliminate concerns about aesthetics, not having an object and creating secret compartments. In this direction, it can be said that users resort to professional methods in meeting their interior and furniture needs resulting from certain requirements.
Keywords: Interior, Furniture, Design

KAPI ARKASI ASKI ÜRÜN ÖZELLİKLERİNİN DEĞERLENDİRİLMESİNDE TÜKETİCİ YORUMLARININ SINIFLANDIRILMASI

CLASSIFICATION OF CONSUMER COMMENTS IN EVALUATION OF BEHIND-DOOR HANGER PRODUCT FEATURES

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ÖZET

Bu araştırmada konutlarda yer alan iç kapıların arkasına takılan (asılan) "kapı arkası askı" ürün özelliklerinin değerlendirilmesinde kullanıcı yorumlarının sınıflandırılması amaçlanmıştır. Bu amaçla farklı iki alışveriş sitesinde yer alan benzer nitelikli "kapı arkası askı" ürünleri satın almış tüketicilerin yaptığı 212 olumlu ve olumsuz yorum cümlesi değerlendirmeye alınmıştır. Ürün kullanımına ilişkin geçerli görüşler içerik analizi yöntemi ile analiz edilmiştir. Müşteri yorumları 5 ana tema ve 14 alt tema altında toplanılarak analiz edilmiştir. Ürün özelliklerinin ana ve alt temalarının belirlenmesinde Asatekin'in (1976) belirlediği ölçütler kullanılmıştır. Müşteri yorumlarının içeriği incelendiğinde ürün özellikleri hakkında 443 adet düşünce açıklandığı tespit edilmiştir. Buna göre müşterilerin ürün özelliklerinden sırasıyla en fazla algısal, fiziksel çevre ve işlevsel ölçütlere yönelik yorumlar yaptığı belirlenmiştir. Bu doğrultuda tasarımcı ve üreticilerin öncelikle ürün özelliklerinden algısal, fiziksel çevre ve işlevsel ölçütleri arttıracak tasarımlar ortaya koymaları önerilebilir.

Anahtar kelimeler: İç mimarlık, İç kapı, Askı

ABSTRACT

This study aims to classify user comments in the evaluation of "behind-door hanger" product features that are attached (hung) behind interior doors in residences. For this purpose, 212 positive and negative comment sentences made by consumers who purchased similar "behind-door hanger" products on two different shopping sites were evaluated. Valid opinions regarding product usage were analyzed using the content analysis method. Customer comments were analyzed by gathering them under 5 main themes and 14 sub-themes. The criteria determined by Asatekin (1976) were used in determining the main and sub-themes of product features. When the content of customer comments was examined, it was determined that 443 thoughts were expressed about product features. Accordingly, it was determined that customers made comments mostly on perceptual, physical environment and functional criteria, respectively, among product features. In this context, it can be suggested that designers and manufacturers first create designs that will increase the perceptual, physical environment and functional criteria of product features.

Keywords: Interior Architecture, Interior Door, Hanger

POPULATION GROWTH USING EXPONENTIAL MODELLING (A CASE STUDY OF FEDERAL CAPITAL TERRITORY)

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Abstract

Population growth modeling is essential for understanding demographic trends and planning sustainable development. This study analyzed and predict population dynamics in the Federal Capital Territory (FCT) of Nigeria. The exponential model, characterized by a constant proportional growth rate, is applied to population data ranges from a specific year to capture the rapid urbanization and migration-driven growth of the region. Using historical data obtained from reputable sources, parameters such as the initial population size and growth rate were estimated. The model's predictive accuracy was assessed by comparing projected values with actual population records. The results reveal a significant upward trajectory in the FCT's population, reflecting the region's growing economic opportunities and administrative importance. This research underscores the exponential model's simplicity and effectiveness in describing population trends in areas experiencing high growth rates. However, it also highlights the limitations of assuming unlimited resources and the need to integrate other factors such as resource constraints, migration policies, and urban planning in future models. The findings provide insights for policymakers to address challenges associated with rapid population growth, including housing, infrastructure, and resource allocation.

Keywords: Exponential growth, Population modeling, Urban planning, Federal Capital Territory, Sustainable development, Demographic trends.

OCCURRENCE OF BACTERIA PATHOGENS IN RUMINANTS FARM ENVIRONMENT AT NBRDA (FCT, NIGERIA), THE HEALTH IMPLICATIONS AND CONTROL

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Abstract

Contamination with bacterial pathogens can constitute serious risk to public health with sporadic illness and other inconveniences. Therefore, the control of pathogenic bacteria right from the farm has remained a key strategy for the production of safe dairy foods. At the core of the safety of dairy foods is the understanding of the etiology and contamination dynamics bacteria agents. The aim of this research was to determine the environmental sources of bacteria pathogens in order to understand their ecology and contamination routes in the farm. Samples of the animals' drinking water, soil/beddings and manure were collected from the farm environments at the National Biotechnology Research and Development Agency (NBRDA), Abuja and analyzed for the occurrence of bacteria pathogens using standard microbiological techniques including cultural and biochemical tests. The results showed the occurrence of the first Three bacteria strains in the order; drinking water; *Staphylococcus aureus* (54%), *E. coli* (37.6) and *Salmonella sp*. (8.4%); Soil/beddings; *Staphylococcus aureus* (48.7%), *E. coli* (33.9%) and *Salmonella sp*. (17.4%) and from the manure was *Staphylococcus aureus* (51.4%), *E. coli* (29.7%) and *Salmonella sp*. (18.9%). *Staphylococcus aureus* has the highest occurrence in all the samples obtained from the farm environment followed by *E. coli* and then *Salmonella sp*. The coccoid, Gram-positive bacterium causes staphylococcal food poisoning (SFP) through ingestion of enterotoxins produced by the organism. In addition, all the major bacteria associated with the farm environment have been reported to caused sporadic or outbreaks of disease. This pattern of occurrence can sustain a continuous transmission of the bacteria diseases and occurrence of drug-resistant which could hamper the production of healthy animal products and control efforts. Therefore, understanding the routes of microbial contaminations as a control measure and their application along the dairy food supply continuum should be highlighted.

Keywords: Dairy, Food, Contamination, Bacteria, Hygiene and Control

WOOD DENSITY BASED ABOVE-GROUND TOTAL BIOMASS EQUATION FOR BLACK PINE STANDS IN KASTAMONU, TÜRKİYE

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ABSTRACT
Carbon in forests is stored especially in the above- and below-ground biomass components of trees, understorey, forest floor and soil. Tree biomass is the most important carbon storage component among them. Since the amount of biomass in the forest is needed to determine the carbon stocks of forests, estimating the tree biomass in a forest ecosystem constitutes the first stage of determining the carbon stock of forests. The most frequently preferred method for estimating the tree biomass is to use of allometric biomass equations. These equations are developed as regression models that include independent variables such as diameter at breast height, tree height, wood density and some other tree dimensions. In this study, a regression equation that can be used to estimate the above-ground tree biomass in pure black pine (*Pinus nigra* J.F.Arnold) stands distributed in Kastamonu Regional Directorate of Forestry was fitted, by using the data obtained from 227 destructively sampled trees. In the biomass equation fitted, diameter at breast height and wood density were included as independent variables. In addition, the above-ground tree biomass estimation success of the fitted equation (R^2=0,965) was compared to some other equations within similar studies in the literature.
KEYWORDS: Climate change, Carbon storage, Tree biomass, Wood density, *Pinus nigra*

BİLİMSEL OKURYAZARLIK İLE SAHTE BİLGİLERLE MÜCADELE
COMBATING FAKE INFORMATION WITH SCIENTIFIC LITERACY

Ökkeş Oğuzhan BAŞALAN
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ÖZ

Günümüz bilgi çağında, bilgiye erişim kolaylaşırken, yanlış ve yanıltıcı bilgilerin yayılması da hız kazanmıştır. Sahte haberler, komplo teorileri ve dezenformasyon, toplumların karar alma süreçlerini etkileyerek, bilimsel bilginin güvenirliğini zedelemekte ve sosyal polarizasyonu artırmaktadır. Bu bağlamda, bireylerin bilimsel okuryazarlık becerilerinin geliştirilmesi, doğru bilgiye ulaşma ve değerlendirme yeteneklerinin güçlendirilmesi, sahte bilgilerin yayılmasına karşı en etkili savunma mekanizmalarından biri olarak öne çıkmaktadır.

Bu çalışma, bilimsel okuryazarlık ile sahte bilgilerle mücadele arasındaki ilişkiyi derinlemesine incelemeyi amaçlamaktadır. Bilimsel okuryazarlığın temel bileşenleri, yani bilimsel sürecin anlaşılması, bilimsel verilerin yorumlanması, eleştirel düşünme ve bilgiye ulaşma becerileri, genel hatlarıyla ele alınacaktır. Bu becerilerin, bireylerin sahte haberleri tespit etme, bilgi kaynaklarının güvenilirliğini değerlendirme ve bilimsel kanıtlara dayalı kararlar verme yeteneklerini nasıl güçlendirdiği vurgulanacaktır.

İlgili yazımızda, öncelikle bilimsel okuryazarlığın önemi ve güncelliğini ortaya koymak için literatürdeki önemli çalışmalar incelenecektir. Bilimsel okuryazarlığın eksikliğinin, toplumların bilimsel gelişmelere karşı duyarlılığını azalttığı, yanlış inançların yaygınlaşmasına neden olduğu ve karar alma süreçlerinde önyargıların oluşmasına yol açtığı gibi olumsuz sonuçları vurgulanacaktır.

Diğer yandan, sahte bilgilerin yayılma mekanizmaları ve psikolojik etkileri detaylı bir şekilde analiz edilecektir. Sosyal medya platformlarının, sahte haberlerin hızla yayılmasında oynadığı rol, algı yönetimi teknikleri ve dezenformasyonun bireyler üzerindeki manipülatif etkileri gibi konulara değinilecektir.

Son olarak, çalışmamızda bilimsel okuryazarlığın geliştirilmesinin uzun vadeli etkileri ve toplumsal faydaları üzerinde durulacaktır. Bilimsel okuryazarlığın, demokratik süreçlerin güçlenmesine, bireylerin özgür iradesiyle karar vermelerine ve toplumun genel refahının artmasına katkı sağlayacağı belirtilecektir.

Bu çalışma, bilimsel okuryazarlığın, sahte bilgilerle mücadelede en etkili silahlardan biri olduğunu ortaya koyarak, bu konuda yapılacak çalışmalara önemli bir katkı sunmayı hedeflemektedir.

Anahtar Kelimeler: Bilimsel okuryazarlık, sahte haberler, dezenformasyon, eleştirel düşünme, bilgi okuryazarlığı, medya okuryazarlığı, bilim iletişimi.

ABSTRACT

In today's information age, while access to information has become easier, the dissemination of false and misleading information has accelerated. Fake news, conspiracy theories and disinformation affect the decision-making processes of societies, undermining the credibility of scientific knowledge and increasing social polarization. In this context, improving individuals' scientific literacy skills and strengthening their ability to access and evaluate accurate information stand out as one of the most effective defense mechanisms against the spread of fake information.

This study aims to explore in depth the relationship between scientific literacy and combating misinformation. The key components of scientific literacy, namely understanding the scientific process, interpreting scientific data, critical thinking and information retrieval skills, will be outlined. It will emphasize how these skills strengthen individuals' ability to detect fake news, assess the credibility of information sources and make decisions based on scientific evidence.
In this article, first of all, important studies in the literature will be examined to reveal the importance and relevance of scientific literacy. We will emphasize the negative consequences of the lack of scientific literacy, such as decreasing the sensitivity of societies to scientific developments, causing the spread of false beliefs and leading to the formation of prejudices in decision-making processes.

On the other hand, the dissemination mechanisms and psychological effects of fake information will be analyzed in detail. The role of social media platforms in the rapid spread of fake news, perception management techniques and the manipulative effects of disinformation on individuals will be discussed.

Finally, our study will focus on the long-term effects and societal benefits of improving scientific literacy. It will be argued that scientific literacy will contribute to strengthening democratic processes, enabling individuals to make decisions of their own free will and increasing the general welfare of society.

This study aims to make an important contribution to the studies to be conducted on this subject by revealing that scientific literacy is one of the most effective weapons in the fight against fake information.

Keywords: Scientific literacy, fake news, disinformation, critical thinking, information literacy, media literacy, science communication.

SPOR BİLİMLERİ FAKÜLTESİ ÖĞRENCİLERİNİN İŞ BULMA KAYGILARININ İNCELENMESİ

AN ANALYSIS OF JOB-FINDING ANXIETY AMONG STUDENTS OF THE FACULTY OF SPORTS SCIENCES

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ÖZET

Çalışmanın amacı spor bilimleri fakültesi öğrencilerinin iş bulma kaygılarının incelenmesidir. Araştırmada betimsel tarama modeli uygulanmıştır. Araştırmanın evreni, spor bilimleri fakültesinde öğrenim gören öğrencilerden oluşmaktadır. Örneklem ise Ordu Üniversitesi Spor Bilimleri Fakültesinde öğrenim gören öğrenciler arasından tesadüfi örneklem yöntemiyle seçilen 51 erkek 34 kadın olmak üzere toplam 85 katılımcı oluşturmaktadır. Çalışmada "Kişisel Bilgi Formu" ile "Spor Bilimleri Öğrencilerinin İş Bulma Kaygısı Ölçeği" kullanılmıştır. Aslan ve Uğraş (2021) tarafından geliştirilen spor bilimleri öğrencilerinin iş bulma ölçeği 5'li likert olup, 8 madde ve tek alt boyuttan oluşmaktadır. Çalışmada iç tutarlılığının analizi için güvenirlik kat sayısı (Cronach alfa kat sayısı) incelendiğinde, 0,944 olarak hesaplanmıştır. Araştırmanın analizinde normallik varsayım sonuçlarına (skewness-kurtosis değerleri) göre, cinsiyet, spor türü ve bölüm değişkenlerinde Student t-testi, yaş, spor yaşı ve sınıf değişkenlerinde ise tek yönlü varyans analizi ve Tukey çoklu karşılaştırma testi uygulanmıştır. Yapılan analiz sonuçlarına göre yaş, spor yaşı, spor türü ve bölüm değişkenlerinde herhangi bir anlamlı farklılık görülmezken, sınıf değişkeninde ise spor bilimleri öğrencilerinin iş bulma kaygısı ölçeği toplam puanında anlamlı farklılık bulunmuştur. Elde edilen bulgularda 4. Sınıf öğrencilerinin diğer kategorideki öğrencilere göre puan ortalamalar yüksek olduğu saptanmıştır. Sonuç olarak, spor bilimleri fakültesi öğrencileri ile ilgili iş olanaklarına ait yerler hakkında bilgilendirmek amaçlı seminerler veya etkinliklerin yapılması önerilebilir.
Anahtar Kelimeler: Spor, iş bulma, kaygı

ABSTRACT

The aim of this study is to analyze the job-finding anxiety of students in the Faculty of Sports Sciences. A descriptive survey model was applied in the research. The population of the study consists of students studying at the Faculty of Sports Sciences. The sample includes a total of 85 participants, 51 male and 34 female, randomly selected from students at Ordu University's Faculty of Sports Sciences. The study utilized a "Personal Information Form" and the "Job-Finding Anxiety Scale for Sports Sciences Students." Developed by Aslan and Uğraş (2021), the Job-Finding Anxiety Scale is based on a 5-point Likert scale and consists of 8 items under a single dimension. The internal consistency reliability coefficient (Cronbach's alpha) of the scale was calculated as 0.944. For data analysis, based on the assumptions of normality (skewness-kurtosis values), Student's t-test was used for the variables of gender, type of sport,

and department, while one-way variance analysis (ANOVA) and Tukey's multiple comparison tests were applied for the variables of age, years of sports experience, and academic year. According to the results, no significant differences were found in the variables of age, years of sports experience, type of sport, and department. However, a significant difference was found in the total scores of the Job-Finding Anxiety Scale for Sports Sciences Students regarding the academic year variable. Findings revealed that fourth-year students scored higher on average compared to students in other categories. As a result, it is recommended to organize seminars or events to inform students of the Faculty of Sports Sciences about available job opportunities.
Keywords: Sports, job-finding, anxiety

İNSANSIZ HAVA ARAÇLARI İÇİN KATI HAL GÜÇ KONTROLÖRLERİNDE KULLANILAN FARKLI ANAHTARLARIN KAPSAMLI OPERASYONEL PERFORMANS KARŞILAŞTIRMASI

A COMPREHENSIVE OPERATIONAL PERFORMANCE COMPARISON FOR DIFFERENT SWITCHES USED IN SOLID STATE POWER CONTROLLERS FOR UAVS

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ÖZET

SSPC'ler, esas olarak havacılık sektöründe kullanılmak üzere, sigortaların elektriksel özelliklerini yerine getirmek için tasarlanmıştır. Bu sistemin ana bileşenlerini yarı iletken anahtarlama elemanları oluşturmaktadır. Bu yapıdaki sistemlerde kısa devre tespiti ve sistemin kısa devreden izole edilmesi için geçen süre çok önemlidir. Çalışmada, SSPC sistemlerinde kullanılan farklı türlerdeki yarı iletken anahtarların kapatma karakteristikleri incelenecektir. Bunun yanında anahtarların termal performansları da hesaplanacak ve birbirleri ile kıyaslanacaktır.

Geleneksel uçaklardaki mekanik, pnömatik ve hidrolik sistemlerin yerini elektrikli bileşenler almıştır. Bu tür yenilikçi yaklaşıma sahip uçaklar "daha elektrikli uçaklar" (DEU) olarak adlandırılmaktadır. Hantal alt sistemlerin yerini elektrikli sistemlerin alması önemli faydalar sağlamıştır. Bu sistemlerin kullanılması ile birlikle elektrik güç talebi de artmıştır. Bu talep doğrultusunda verimliliğin de ön plana çıkması ile birlikte daha yüksek gerilim seviyelerine ihtiyaç duyulmuştur. Bilindiği üzere daha yüksek gerilim seviyelerinde ideal kablo boyutları verimi doğrudan etkilemektedir. DEU için genellikle ana elektrik enerjisi üretimi ve dağıtımı 230VAC (400 Hz), 270VDC veya 540VDC gerilim seviyelerindedir. DEU sistemlerinin uygulanması sistem ağırlıklarının azalması, daha kolay kontrol ve bakım avantajlarını da beraberinde getirmektedir. Bu avantajlara rağmen sistemler daha elektrikli hale geldikçe karmaşık sistem mimarilerini de beraberinde getirmektedir. Bu makalede farklı tür yarı iletken anahtarların kapatma karakteristikleri ve kısa devreye girme sürelerinin simülasyonları yapılarak birbirleri ile kıyaslanacaktır. Ayrıca, bu yarı iletkenlerin kararlı durum koşullarındaki termal performansları analitik olarak hesaplanmış ve karşılaştırmalı olarak sunulacaktır. Çalışma sonucunda GaN güç anahtarlarının hem termal karakteristiği hem de kapatma karakteristiğinin diğer anahtarlara kıyasla daha üstün performans sergilediği görülmüştür.

Anahtar Kelimeler: Katı Hal Güç Kontrolörleri (SSPC'ler), kapatma karakteristiği, kısa-devre

ABSTRACT

Solid State Power Controllers (SSPCs) are designed to substitute the electrical characteristics of fuses, primarily for use in the aerospace. This is achieved by power switches, which are the main components of the system. In such systems, the time required to detect a short-circuit and to isolate the system is important. In this paper, the turn-off characteristics of different types of semiconductors are evaluated used in SSPCs. In addition to turn-off characteristics, their basic thermal performances were also calculated are given in comparison.

In conventional aircraft, mechanical, pneumatic, and hydraulic systems are being replaced by electrical components. Aircraft with an innovative approach are referred as more electrical aircraft (MEA). The replacement of heavy weighted subsystems with electrical systems has led to significant benefits. The demand for electrical power has also increased with the introduction of new electrical systems. Higher voltage levels are required to meet this demand and to increase efficiency, since higher voltage levels provide ideal cable dimensions and effective electrical power transmission. Aircrafts mostly use 230VAC (400 Hz), 270VDC or 540VDC voltage levels as main electrical power generation and distribution for MEA. The implementation of MEA systems has resulted in decreased system weights, easier control and maintenance. Nonetheless, as these systems have evolved to be more electrical, they have become more complex.

This paper compares the turn-off characteristics and short-circuit clearance times of different semiconductors by means of simulations. Additionally, the thermal performance of these semiconductors in steady-state conditions was calculated analytically and given in comparison. All-in-all, it was seen that GaN power switches provide relatively higher performance in thermal behavior and was proven that utilizing a GaN power switch in an SSPC is beneficial due to its turn-off and thermal characteristics.

Keywords: SSPC, turn-off characteristic, short-circuit

DERS MATERYALI OLARAK 3B MODELLER
3D MODELS AS COURSE MATERIAL

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ÖZET
Bu çalışmada öğretim sürecinde ders materyali olarak dijital ortamda üretilmiş üç boyutlu (3B) modellerden yararlanılması kuramsal olarak ele alınmıştır. Bilindiği gibi öğretim sürecinde metin, çizim, fotoğraf, video, sunu gibi çeşitli işitsel görsel materyaller eskiden beri kullanılmaktadır. Derslerde kullanılan materyaller teknolojinin gelişimine paralel bir seyir izleyerek metin, görsel ve ses gibi basit analog materyallerden etkileşimli metin (hypertext), etkileşimli görsel, video ve sunu gibi dijital materyallere evrilmiş ve bu materyaller derslerin ve öğretim setlerinin çeşitli oranlarda temel bileşenleri haline gelmişlerdir.
Öğretim teknolojisinin materyal bağlamında günümüzde vardığı son nokta, bu çalışmanın konusu olan, gerçek nesnelerin dijital ortamda üretilmiş 3B modelleridir. Görsel materyaller özelliklerine, içeriklerine, boyutlarına vb. çeşitli açılardan sınıflandırılmaktadır. Görseller boyut kriteri dikkate alındığında alanyazında 2, 2.5 ve 3 boyutlu olarak sınıflandırılmaktadır. Resim, çizim, film vb. İki boyutlu (2B) materyaller gerçek nesnelerin sadece yatay ve dikey düzlemdeki özelliklerini temsil edebilirler. 2B görsellere gölge ve derinlik özelliği eklenerek veya izometrik kamera açısı veya stereoskopik gözlük gibi donanımlarla üç boyutlu efekti verilmektedir. Ancak bu görseller gerçek anlamda üç boyutlu değildir, sadece algı yanılsaması söz konusudur, bu nedenle bu materyallere 2.5 boyutlu görseller denmektedir. İki boyutlu nesnelerin gelişmiş bir şekli olan 3 boyutlu metin, resim, film, model gibi nesnelerde tıpkı gerçek nesnelerde olduğu gibi yatay ve dikey düzleme ilave olarak gerçekçi bir derinlik boyutu vardır ve model söz konusu nesneyi tüm yönleriyle ve gerçekte olduğu gibi temsil edebilir.
Bu çalışmada elde edilen sonuçlar 3B modellerin çoğunlukla endüstriyel tasarım alanında, eğitim alanında ise fen bilimleri eğitimi alanında kısmen kullanıldığı, birçok branşta ise neredeyse hiç kullanılmadığı sonucu elde edilmiştir. 3B modeller materyal temini ve 3B materyal geliştirmenin zorluğu gibi çeşitli nedenlerle henüz derslerde yaygın olarak kullanılan bir materyal olmaktan uzak marjinal bir materyal konumundadır.
Anahtar Sözcükler: Eğitim, 3B, Üç boyutlu model, 3B Öğrenme nesnesi, 3B Materyal

ABSTRACT
This study examines the potential benefits of incorporating three-dimensional (3D) models created in digital environments as course materials in the teaching process. It is well documented that a variety of audio-visual materials, including texts, drawings, photographs, videos, and presentations, have been employed in the teaching process for an extended period of time. The materials utilized in instructional settings have undergone a significant transformation from their origins in simple analog formats, such as text, visuals, and audio, to their current state as digital materials, including hypertext, interactive visuals, videos, and presentations. This evolution has occurred concurrently with the advancement of technology and has led to the emergence of digital materials as integral components of courses and teaching sets to varying degrees.
The final stage of development in the field of instructional technology with regard to the materials used is the creation of three-dimensional models of real-world objects produced in a digital environment. This study focuses on this particular area of advancement. Visual materials are classified in accordance with a number of different criteria, including their characteristics, content, and size. In consideration of

the size criterion, visual materials are classified as two-, two and a half-, or three-dimensional in the literature. Two-dimensional (2D) materials, such as paintings, drawings, and films, are limited in their ability to represent the properties of real objects in the horizontal and vertical planes. Two-dimensional images can be imbued with a three-dimensional quality through the addition of shadows and depth cues, or through the use of specialized equipment such as an isometric camera angle or stereoscopic glasses. However, these visuals are not truly three-dimensional; rather, they create the illusion of depth, which is why these materials are classified as 2.5-dimensional visuals. Three-dimensional objects, such as text, pictures, movies, models, etc., represent an advanced form of two-dimensional objects. They possess a realistic depth dimension in addition to the horizontal and vertical plane, similar to real objects. Consequently, the model can represent the object in question in all its aspects and as it truly is.

In this study, the existing literature was utilized to facilitate a discussion of the various ways in which 3D models can be utilized in an educational setting. These include the creation of 3D models, the development of 3D models, the integration of 3D models into the educational process, and the use of 3D models as course materials in the educational environment.

Key words: Education, 3D, 3D model, 3D learning object, 3D material

E-TİCARETTE SOHBET ROBOTLARININ (CHATBOTS) MÜŞTERİ MEMNUNİYETİ ÜZERİNDEKİ ETKİSİ: BİR LİTERETÜR İNCELENMESİ

THE IMPACT OF CHATBOTS ON CUSTOMER SATISFACTION IN E-COMMERCE: A LITERATURE REVIEW

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ÖZET
Sohbet robotları(chatbots), yazılı veya sözlü olarak, insan iletişimini daha iyi anlamak ve kullanıcılara aynı doğal dilde yanıtlar sağlamak için tasarlanmış yapay zeka tabanlı sistemlerdir. Bir sohbet robotu kullanıcılardan girdiler alır, bunları işler ve buna göre yanıt verebilir. İlerleyen teknolojiyle birlikte şirketler, basit ve tekrarlayan görevleri giderek daha fazla otomatikleştirerek zamandan ve enerjiden tasarruf sağlayabilmekteler. İnsanlar e-ticaret, bankacılık, sağlık, turizm gibi çeşitli sektörlerde sorularına hızlı ve detaylı bir şekilde yanıt almak, ilgili öneriler sunmak, rezervasyon yapmak ve şikayetleri çözmek gibi alışveriş deneyimlerinde sohbet robotlarını kullanırlar. Sohbet robotları, çevrimiçi alışveriş yapanlara sipariş takibi, satış sonrası destek ve kişiselleştirilmiş alışveriş deneyimleri konusunda yardımcı olmak için yaygın olarak kullanılmaktadır. Sohbet robotlarının kullanım memnuniyeti ise insan müdahalesi olmadan hizmet alanların ihtiyaçlarını ne kadar etkili bir şekilde çözüm sağlamasına bağlıdır. Sohbet robotlarının sayısız faydasının yanında dezavantajı, insan yargısı gerektiren karmaşık sorgulamalara tekrarlayan otomatik yanıt verme ve duygusal zeka eksikliği kullanıcıların olumsuz deneyim yaşamasına sebep olmaktadır. Bu çalışma, chatbot'ların tanımından başlayarak, türlerini, avantajları ve dezavantajlarını literatürdeki bilgi ve araştırmaları araştırmacılara paylaşmaktır. Araştırmada, sohbet robotu hizmetlerinin günümüz dijital çağında müşteri memnuniyeti üzerindeki etkisini ve çevrimiçi müşterilerin e-ticaret sektöründe sohbet robotlarını kullanımını etkileyen faktörleri belirleyen etmenleri inceleyecektir. Literatürde, Türkiye pazarındaki chatbot'larla ilgili sınırlı sayıda çalışma bulunmaktadır. Yapılan literatür taramasında kullanım kolaylığı, erişim memnuniyeti, iyileştirme alanları, algılanan yararlılık, güven ve gizlilik endişeleri dahil olmak üzere chatbot kullanımını etkileyen mevcut bulguları değerlendirmektir. Bu inceleme, chatbot'ları kullanımı konusunda geniş kapsamlı ve derinlemesine incelemeye olanak sağlamak, müşteri deneyiminin iş sonuçlarını büyük ölçüde etkilediği sektörlerde ve e-ticaret firmaları için değerli bilgiler sunarak katkıda bulunmayı amaçlamaktadır.
Anahtar Kelimeler: Sohbet Robotu, E-ticaret, Müşteri Memnuniyeti, Çevrimiçi Alışveriş, Literatür Taraması

ABSTRACT
Chatbots are AI-based systems designed to better understand human communication and provide users with responses in the same natural language, either in written or spoken form. A chatbot receives inputs from users, processes these inputs, and responds accordingly. With advancing technology, companies increasingly provide savings both in time and energy by automating simple and repetitive tasks. People, in various sectors like e-commerce, banking, healthcare, and tourism, use chatbots in their overall consumer experiences such as receiving

quick and detailed answers to their questions, obtaining relevant recommendations, making reservations and resolving complaints. Chatbots are widely employed to assist online shoppers with order tracking, post-purchase support, and personalized shopping experiences. Satisfaction with chatbots depends largely on their effectiveness in meeting users' needs without human intervention. Despite their numerous benefits, chatbots also present drawbacks, particularly when they provide repetitive automated responses to complex queries requiring human judgment or when they lack emotional intelligence, which can lead to negative user experiences.This study aims to present researcher with an overview of chatbots, including their definition, types, advantages, and disadvantages, existing literature and research. The research will examine the impact of chatbot services on customer satisfaction in the digital age and identify the factors that influence the use of chatbots by online consumers in the e-commerce sector. There is a limited body of research in the literature on chatbots within the conducted in Türkiye. This study evaluates existing findings that affect chatbot usage, including ease of use, accessibility satisfaction, areas for improvement, perceived usefulness, and concerns around security and privacy in the literature review. This review aims to offer a comprehensive and in-depth analysis of chatbot usage and contribute valuable insights for e-commerce companies and industries where customer experience significantly impacts business outcomes.
Keywords: Chatbot, E-commerce, Customer Satisfaction, Online Shopping, Literature Review

BAKIM YÖNETİM SÜRECİNDE ÜRÜN MALİYETİNİN AZALTILMASI
REDUCING PRODUCT COSTS IN THE MAINTENANCE MANAGEMENT PROCESS

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ÖZET
Günümüzde aynı sektörde faaliyet gösteren firmalar, müşterilerin beklentilerini karşılamak amacıyla yüksek kalitede ve düşük maliyetli ürünler sunmak zorundadır. Bu hedefe ulaşmak için üretim süreçlerinde sürekli iyileştirme ve geliştirme çalışmaları kritik öneme sahiptir. Rekabet gücünü artırmak ve piyasadaki sürekliliklerini sağlamak isteyen üretici firmalar, kaliteyi düşürmeden maliyetleri azaltmaya odaklanmaktadır. Maliyetlerin ana kalemleri arasında malzeme ve işçilik giderlerinin yanı sıra, yetersiz veya hatalı bakım uygulamaları nedeniyle ortaya çıkan üretim aksaklıkları ve kalite sorunları bulunmaktadır. Firmalar, piyasadaki konumlarını korumak için bakım süreçlerini etkin bir şekilde yönetmeyi ve böylece toplam üretim maliyetlerini düşürmeyi hedeflemektedir. Etkili bakım yönetimi, önleyici ve kestirimci bakım stratejilerinin uygulanmasıyla ekipman arızalarını minimize eder, üretim sürekliliğini sağlar ve ürün kalitesini yükseltir. Toplam Verimli Bakım (Total Productive Maintenance - TPM) ve Yalın Üretim gibi modern üretim yaklaşımları, bakım faaliyetlerinin optimize edilmesiyle işletme verimliliğinin artırılmasına katkı sağlamaktadır. Bakım yönetim sürecinin ürün maliyetine olumlu etkisi, piyasaya yüksek kaliteli ürünlerin rekabetçi fiyatlarla sunulmasını mümkün kılar. Bu çalışmada, firmaların bakım maliyetlerini etkileyen parametreler ve maliyetlerin azaltılması için uygulanması gereken yöntemler araştırılmıştır. Özellikle bakım yönetiminde yapılacak iyileştirmelerle, firmaların benimsemesi gereken uygun bakım stratejileri ve bu stratejilerin başarılı bir şekilde uygulanması için dikkat edilmesi gereken unsurlar detaylı bir şekilde incelenmiştir.
Anahtar Kelimeler: Arıza Bakım Yönetimi, Bakım Maliyetleri, Bakım Yönetimi, Planlı Bakım, Yedek Malzeme Yönetimi

ABSTRACT
In today’s competitive market, companies operating in the same sector are compelled to deliver high-quality and cost-effective products to meet customer expectations. Achieving this goal necessitates continuous improvement and optimization efforts in production processes. Manufacturing firms aiming to enhance their competitive edge and ensure market sustainability focus on reducing costs without compromising quality. The primary cost drivers include material and labor expenses, as well as production inefficiencies and quality issues stemming from insufficient or incorrect maintenance practices. To maintain their market position, companies prioritize the effective management of maintenance processes, thereby achieving a significant reduction in overall production costs. Efficient maintenance management, including the implementation of preventive and predictive maintenance strategies, minimizes equipment failures, ensures production continuity, and enhances product quality. Modern production approaches, such as Total Productive Maintenance (TPM) and Lean Manufacturing, contribute significantly to improving operational efficiency by optimizing maintenance activities. The positive impact of maintenance management on product costs enables the delivery of high-

quality products at competitive prices. This study investigates the parameters influencing maintenance costs in firms and identifies the measures required to minimize these costs. Specifically, it examines the improvements that can be made in maintenance management, the appropriate maintenance strategies that firms should adopt, and the critical factors to consider for the successful implementation of these strategies.

Keywords: Breakdown Maintenance Management, Maintenance Costs, Maintenance Management, Planned Maintenance, Spare Parts Management

THE IMPACT OF MAINTENANCE PROCESSES ON EFFICIENCY IN INDUSTRIAL FACILITIES

ENDÜSTRİYEL TESİSLERDE BAKIM SÜRECİNİN VERİME ETKİSİ

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ABSTRACT

The optimization of maintenance processes in industrial facilities is critically important for preventing equipment failures and reducing interruptions in production processes. The philosophy of Total Productive Maintenance (TPM) offers an effective approach to enhance efficiency with goals of zero accidents, zero defects, and zero breakdowns. The Overall Equipment Effectiveness (OEE) method is a fundamental metric for measuring and improving the effectiveness of maintenance activities; however, it needs to be restructured according to modern industrial requirements. Maintenance activities aimed at increasing energy efficiency not only reduce costs but also contribute to enterprises achieving their sustainability goals. Regular maintenance processes extend the lifespan of equipment, reduce equipment renewal costs, and enhance the long-term competitive strength of businesses. Digitalization and Industry 4.0 applications in maintenance processes increase the effectiveness of maintenance management by improving the accuracy of failure predictions and preventive maintenance practices. The human factor is one of the most significant elements affecting the success of maintenance processes; therefore, personnel training and competency development are critically important. Accurate analysis and management of maintenance costs directly impact the reduction of product costs and help businesses gain cost advantages. In competitive market conditions, the efficiency of maintenance processes positively affects not only the performance of the facility but also customer satisfaction and delivery times. Adopting sustainable and environmentally friendly approaches in maintenance processes strengthens market perception while fulfilling the environmental responsibilities of enterprises. Within the scope of this study, the impact of maintenance processes implemented at the Kütahya Porcelain factory operating in the province of Kütahya on efficiency has been investigated, and how investments and initiatives in maintenance processes can affect efficiency has been examined.

Keywords: Energy Efficiency, Lean Production, Overall Equipment Effectiveness, Productivity Improvement, Total Productive Maintenance

ÖZET

Endüstriyel tesislerde bakım süreçlerinin optimizasyonu, ekipman arızalarının önlenmesi ve üretim süreçlerindeki kesintilerin azaltılması açısından kritik bir öneme sahiptir. Toplam Verimli Bakım (TVB) felsefesi, sıfır kaza, sıfır hata ve sıfır arıza hedefleriyle verimliliği artırmak için etkili bir yaklaşım sunmaktadır. Genel Ekipman Verimliliği (GEV) yöntemi ise

bakım faaliyetlerinin etkinliğini ölçmek ve artırmak için temel bir metriktir ancak modern endüstriyel gereksinimler doğrultusunda yeniden yapılandırılması gerekmektedir. Enerji verimliliğini artırmaya yönelik bakım faaliyetleri, maliyetleri düşürmenin yanı sıra işletmelerin sürdürülebilirlik hedeflerine ulaşmasına da katkıda bulunmaktadır. Düzenli bakım süreçleri, ekipmanların kullanım ömrünü uzatarak ekipman yenileme maliyetlerini azaltmakta ve işletmelerin uzun vadeli rekabet gücünü artırmaktadır. Bakım süreçlerinde dijitalleşme ve Endüstri 4.0 uygulamaları, bakım yönetiminin etkinliğini artırarak arıza tahminleri ve önleyici bakım uygulamalarının doğruluğunu yükseltmektedir. İnsan faktörü, bakım süreçlerinin başarısını etkileyen en önemli unsurlardan biridir; bu nedenle, personel eğitimi ve yetkinlik geliştirme çalışmaları kritik önem taşımaktadır. Bakım maliyetlerinin doğru analizi ve yönetimi, ürün maliyetlerini azaltmada doğrudan etkili olup işletmelerin maliyet avantajı elde etmesine yardımcı olmaktadır. Rekabetçi piyasa koşullarında, bakım süreçlerinin verimliliği yalnızca tesisin performansını değil, aynı zamanda müşteri memnuniyetini ve teslimat sürelerini de olumlu etkilemektedir. Bakım süreçlerinde sürdürülebilir ve çevreci yaklaşımların benimsenmesi, işletmelerin çevresel sorumluluklarını yerine getirirken pazar algısını da güçlendirmektedir. Bu çalışma kapsamında, Kütahya ilinde faaliyet gösteren Kütahya Porselen fabrikasında uygulanan bakım süreçlerinin verime etkisi araştırılmış ve bakım süreçleri için yapılabilecek yatırım ve çalışmaların verimliliği nasıl etkileyebileceği incelenmiştir.

Anahtar Kelimeler: Enerji Verimliliği, Genel Ekipman Verimliliği, Toplam Verimli Bakım, Verimlilik Artışı, Yalın Üretim

DOĞAYLA BÜTÜNLEŞEN MİMARİ: DİKEY BAHÇELERDE SÜRDÜRÜLEBİLİRLİK ÜZERİNE DEĞERLENDİRMELER

ARCHITECTURE INTEGRATED WITH NATURE: ASSESSMENTS ON SUSTAINABILITY IN VERTICAL GARDENS

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ÖZET

Küreselleşme ve nüfus artışına bağlı olarak gelişen yoğun yapılaşma, enerji kaynaklarının azalmasına neden olmaktadır. Mimarlık alanında ilk zamanlarda doğa ve insan arasındaki bağın kurulmasında bir arayış olarak görülen sürdürülebilirlik kavramı, günümüzde çevreye saygılı ve doğa ile bütünleşen tasarımlarda üzerinde durulması gereken bir konu haline gelmektedir. Kentlerdeki yaşam kalitesinin artırılmasında ortaya çıkan sürdürülebilirlik araştırmalarında; çevre, ekonomi, toplum, kültür ve teknoloji gibi temalar öne çıkmaktadır. Doğayı yapı ile bütünleştiren dikey bahçeler, binaların dış cephelerinde veya iç mekânlarında bitkilerin dikey yerleştirilerek tasarlandığı sistemler olarak karşımıza çıkmaktadır. Bu sistemlerin farklı bitki türleri barındırarak, estetik görünüm ve çevresel yarar sağladığı söylenebilir. Bu çalışma kapsamında, birbiriyle etkileşim içinde olan bu temalardan çevresel ve ekonomik sürdürülebilirlik kavramlarına odaklanılmaktadır. Dikey bahçelerin avantajları; çevresel, ekonomik ve sosyal yararlar açısından sunulmaktadır. Yeşil alanların yapıya entegre edildiği bir çözüm olan dikey bahçe konseptli mimari proje örnekleri, çevresel ve ekonomik sürdürülebilirlik açısından değerlendirilmektedir. Bu bağlamda çalışmada, Oasia Hotel Downtown, PARKROYAL on Pickering, One Central Park, Bosco Verticale ve Agora Garden Tower projeleri ele alınmaktadır. Bu projeler; doğal yaşamın mimariye entegre edilme biçimleri, kentsel çevreye uyum sağlama durumları, havalandırma ve gölgelendirme açısından sağlanan tasarruf, mikro iklim oluşturma ve enerji verimliliğine katkı sağlama gibi özellikler açısından incelenmektedir. Yapılan değerlendirmeler, dikey bahçe konseptine sahip olan projelerin hem çevresel hem de ekonomik sürdürülebilirliğe katkı sağladığını göstermektedir.
Anahtar Kelimeler: Kentsel yeşil alanlar, dikey bahçe, sürdürülebilirlik.

ABSTRACT

Intensive construction, which develops due to globalisation and population growth, causes a decrease in energy resources. The concept of sustainability, which was first seen as a quest to establish a connection between nature and human in the field of architecture, is now becoming a subject that should be emphasised in designs that respect the environment and integrate with nature. Themes such as environment, economy, society, culture and technology come to the forefront in sustainability research that emerged to improve the quality of life in cities. Vertical gardens, which integrate nature with the building, appear as systems designed by placing plants vertically on the exterior facades or interior spaces of buildings. It can be said that these systems provide aesthetic appearance and environmental benefits by harbouring different plant species.

Within the scope of this study, the concepts of environmental and economic sustainability are focussed on these themes that interact with each other. The advantages of vertical gardens are presented in terms of environmental, economic and social benefits. Architectural project examples with vertical garden concept, which is a solution where green areas are integrated into the building, are evaluated in terms of environmental and economic sustainability. In this context, Oasia Hotel Downtown, PARKROYAL on Pickering, One Central Park, Bosco Verticale and Agora Garden Tower projects are discussed. These projects are analysed in terms of their integration of natural life into architecture, their adaptation to the urban environment, savings in terms of ventilation and shading, microclimate creation and contribution to energy efficiency. The evaluations show that the projects with the vertical garden concept contribute to both environmental and economic sustainability.
Keywords: Urban green spaces, vertical gardening, sustainability.

BABA BEBEK BAĞLANMASI

FATHER-INFANT ATTACHMENT

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ÖZET

Bağlanma; bakım veren ve bebek arasında gelişen özel bir bağdır. Bu bağ ilk olarak bebeğe bakım veren birincil kişi olan anne ile gebelikle birlikle kurulmaya başlar. Zamanla aile içerisindeki bireylerle de bağlar kurularak süreç içerisinde gelişme kaydeder. Anneden sonra bağ kurulan ikincil kişi çoğunlukla baba olmaktadır. Babanın bebeği ile olan bağı doğumdan sonra gerçekleşir. Baba-bebek arasında kurulan bağ; babanın eşi ile olan ilişki ve iletişim şeklinden, babanın bebek bakımına katılmasından, annenin babayı bebek bakımına katılmasında verdiği destekten, çevreden alınan sosyal destekten, babanın sosyal-duygusal iyi oluş durumu gibi pek çok etkenden etkilenmektedir. Baba bebek bağlanması, bebeğin sadece bebeklik dönemi içerisindeki gelişimine katkı sağlamakla kalmaz. Bu ilişki bebeğin ilerleyen yaşamındaki akademik başarısına, davranış kalıpları geliştirmesine, sosyal-duygusal iyi oluşuna, kadın-erkek ilişkilerine yön vermesine kadar pek çok alanda etkili olmaktadır.

Baba-bebek bağlanmasına bakıldığı zaman bu ilişkinin çoğunlukla oyun oynama şeklinde kurulduğu görülmektedir. Bu türden kurulan bir bağ; çocukların problem çözme becerilerine, özgüven geliştirmelerine, araştırmacı bireyler olmalarına katkı sağlamaktadır. Babaları ile güvenli bağ geliştiren çocuklarda dışsal davranış problemlerine daha az rastlanmaktadır. Tüm bunlar göz önünde bulundurulduğu zaman; baba-bebek bağlanmasının önemi bir kez daha görülmektedir. Baba ve bebek arasında bağlanmanın gelişebilmesi için babanın ilk bir yıl içerisinde bebek bakımına katılması önem arz etmektedir. Ancak babaya yüklenen geleneksel ve toplumsal roller bunu etkileyebilmektedir. Bilgiye erişimin daha hızlı ve kolay olduğu günümüzde babaların bebeklerinin bakımına katılmalarında dair farkındalık düzeylerinin arttığı da görülmektedir. Bu farkındalık güvenli baba-bebek sağlanmasını da olumlu şekilde desteklemektedir. Babalar, bebek bakımına katılmanın bebekleri üzerindeki kısa ve uzun süreli etkilerinin bilincinde olarak sürece daha gönüllü ve istekli olarak dâhil olmaktadırlar. Oluşan bu bağlanmanın bebekler üzerindeki pozitif etkileri de gözle görülür biçimde olmaktadır.

Anahtar Kelimeler: baba-bebek, bağlanma, baba bebek bağlanması, paternal bağlanma.

ABSTRACT

Attachment; It is a special bond that develops between the caregiver and the baby. This bond first begins to be established with the mother, who is the primary caregiver for the baby, during pregnancy. Over time, bonds are established with individuals within the family and progress is made in the process. After the mother, the secondary person with whom the bond is established is usually the father. The father's bond with his baby occurs after birth. The bond established between father and baby; it is affected by many factors such as the father's relationship and communication style with his wife, the father's participation in baby care, the mother's support for the father in participating in baby care, the social support received from the environment, and the father's social-emotional well-being. Father-baby bonding not only contributes to the baby's development during infancy. This relationship is effective in many areas, including the baby's academic success in later life, developing behavioral patterns, social-emotional well-being, and directing male-female relationships.

When we look at the father-infant attachment, we see that this relationship is mostly established in the form of playing games. A bond established like this; It contributes to children's problem-solving skills, their development of self-confidence and their becoming investigative individuals. External behavioral problems are less common in children who develop a secure bond with their fathers. Considering all this; The importance of father-baby bonding is seen once again. In order for the bonding between the father and the baby to develop, it is important for the father to participate in baby care within the first year. However, traditional and social roles placed on the father may affect this. Nowadays, when access to information is faster and easier, it is also seen that the awareness level of fathers about participating in the care of their babies has increased. This awareness also positively supports the provision of safe father and baby. Fathers are more willingly and voluntarily involved in the process, being aware of the short and long-term effects of participating in baby care on their babies. The positive effects of this attachment on babies are also visible.

Keywords: father-baby, attachment, father-infant attachment, paternal attachment.

POSTPARTUM DEPRESYON VE YENİDOĞANA ETKİLERİ

POSTPARTUM DEPRESSION AND ITS EFFECTS ON THE NEWBORN

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ÖZET

Gebelik dönemi anne adayının hayatında en özel, hassas ve bir o kadar da kaygı verici süreçlerden biridir. Anne adayı bu süreci fiziksel, duygusal ve bilişsel yönden ne kadar sağlıklı geçirirse doğum sonrasında bebekli yeni hayata uyum sağlama da o kadar kolay olacaktır. Ancak yenidoğanı kucağına alma beklentisi ve heyecanı zaman zaman annenin bebek bakımı sağlama, bebekle iletişim kurma, bebekli yeni düzene uyum sağlama, yeni rollere bürünme ve bu rollerin gerekliliklerini yerine getirme gibi yeni problem durumları ile karşı karşıya kalmasına sebep olabilmektedir. Özellikle ilk bebeğine sahip olan anneler sosyal çevrenin de etkisi ile kendileri yetersiz hissedebilmektedirler. Bu nedenle anneler doğum sonrası dönemde yaşamlarının diğer dönemlerine kıyasla daha fazla duygusal sorunlar yaşayabilmektedirler. Postpartum depresyon olarak adlandırılan doğum sonrası depresyon bu dönemde görülen tüm depresif bozukluklar için kullanılan bir kavramdır. Depresyona yatkınlık veya depresyon öyküsünün bulunması, stresli yaşam deneyimleri, olumsuz evlilik ilişkileri, düşük benlik saygısı, gebeliğin istenme durumu, ekonomik nedenler, zor doğum, bebekte görülen anomaliler, emzirememe, bebeğin cinsiyetinin beklenen olmaması gibi etkenler postpartum depresyonu açısından risk etmeleri arasında yer almaktadır. Bu süreçte görülen depresyon anne özelinde kalmayıp bebek hatta aile içerisindeki diğer bireyler açısından da olumsuz sonuçlar doğurabileceği için özel bir yaklaşım gerektirir. Postpartum depresyonun en ciddi etkisi bebek üzerine olmaktadır. Bu süreç; anne ve bebek arasında sağlıklı ilişkinin kurulmasına engel teşkil edebilmektedir. Bu engel durumu maternal bağlanma üzerine olumsuz yönde etki etmektedir. Bunun yanı sıra annenin bebeği besleyememesi ya da beslemeyi reddetmesi de bebeğin fiziksel gelişiminin aksamasına yol açabilmektedir. Postpartum depresyonda olan anneye verilen destek hem annenin kendisini daha iyi hissetmesini sağlayacak hem de anne-bebek bağlanmasının sağlıklı bir biçimde kurulmasına olanak sağlayacaktır.

Anahtar Kelimeler: postpartum depresyon, doğum sonrası depresyon, maternal bağlanma, anne bebek bağlanması.

ABSTRACT

Pregnancy is one of the most special, sensitive and worrying periods in the expectant mother's life. The healthier the expectant mother goes through this process physically, emotionally and cognitively, the easier it will be to adapt to the new life with the baby after birth. However, the expectation and excitement of holding the newborn may sometimes cause the mother to face new problem situations such as providing baby care, communicating with the baby, adapting to the new routine with the baby, taking on new roles and fulfilling the requirements of these roles. Especially mothers who have their first baby may feel inadequate due to the influence of the social environment. For this reason, mothers may experience more emotional problems in the postpartum period compared to other periods of their lives. Postpartum depression, also known as postpartum depression, is a concept used for all depressive disorders seen during this period. Factors such as predisposition to depression or a history of depression, stressful life experiences, negative marital relationships, low self-esteem, undesirability of pregnancy, economic reasons, difficult birth, anomalies in the baby, inability to breastfeed, and unexpected gender of the baby are among the risk factors for postpartum depression. The depression seen in this process requires a special approach, as it may not only be limited to the mother, but may have negative consequences for the baby and even other members of the family. The most serious effect of postpartum depression is on the baby. This process; It may prevent the establishment of a healthy relationship between mother and baby. This obstacle has a negative impact on maternal attachment. In addition, the mother's inability to feed the baby or her refusal to feed may lead to disruption of the baby's physical development. Support given to a mother with postpartum depression will not only make the mother feel better, but will also enable the mother-baby bond to be established in a healthy way.

Keywords: postpartum depression, maternal attachment, mother-infant attachment.

DIRECT TENSION INDICATOR WASHERS (DTI)

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Abstract

Direct tension indicators (DTIs) are specialized mechanical load cells that visually indicate the tension in structural fastener assemblies. These single-use devices, usually designed as hardened washers with arch-like projections, deform in a predictable manner under compressive loads, enabling precise monitoring of bolt tension during installation. The main purpose of DTIs is to ensure that the necessary clamp load is reached, which is essential for preserving the structural integrity of bolted connections in fields like construction and manufacturing. In this article, investigate this type of washers, design and functionality, installation guidelines, key features, standard and specifications, testing requirements, applications, advantages, and also review the relevant standards associated with them.

Keywords: Direct tension indicator, DTI, High-strength bolts.

GLOBAL STABILITY AND UNIQUENESS IN FRACTIONAL-ORDER COVID-19 DYNAMICS

KESİRLİ BASAMAKTAN COVİD-19 DİNAMİKLERİNDE GLOBAL KARARLILIK VE TEKLİK

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ÖZET

Bu çalışmada, daha önce ele alınmış olan seımqr modeli Caputo kesirli türev operatörü ile yeniden incelenmiş ve daha önce yapılmış lokal kararlılık incelemelerine ek olarak global kararlılık boyutunda da değerlendirilmiştir. Bu model, özellikle Covid-19 pandemisinin dinamiklerini derinlemesine anlamak ve bu süreçte ortaya çıkan karmaşık etkileşimleri daha iyi kavramak amacıyla geliştirilmiştir. Literatürde modelin lokal kararlılığı üzerine yoğunlaşan çalışmaların bulunduğu bilinmekle birlikte, global kararlılık analizi yapılmamış olması bu çalışmayı benzersiz kılmaktadır. Global kararlılık analizi, modelin sadece belirli koşullar altında değil, tüm sistem dinamiklerini kapsayacak şekilde nasıl bir davranış sergilediğini ortaya koyması açısından kritik bir öneme sahiptir.

Bu kapsamda, seımqr modeline ait denklemlerin matematiksel yapısı detaylı bir biçimde ele alınmış, varlık ve teklik koşulları ispatlanmıştır. Bu ispatlar, modelin teorik sağlamlığını desteklemekte ve epidemiyolojik süreçlerde güvenilir bir araç olarak kullanılabilirliğini artırmaktadır. Modelin global kararlılığın incelenmesi Lyapunov fonksiyonu yardımı ile yapılmıştır. Bu yöntem yardımıyla modelin daha kapsamlı ve sistematik bir şekilde değerlendirilmesi sağlanmıştır. Bunun yanı sıra, modelin nümerik çözümleri için genelleştirilmiş Euler metodu kullanılmıştır . Genelleştirilmiş Euler yöntemi, modelin sayısal çözümlerini elde etmek ve elde edilen sonuçları doğrulamak için etkili bir araç olarak kullanılmaktadır.

Sonuç olarak, bu çalışma, global kararlılık analizinin ve nümerik yöntemlerin matematiksel modelleme süreçlerinde oynadığı hayati rolü açıkça göstermektedir. Global kararlılık analizi, yalnızca teorik bir katkı sunmakla kalmamış, aynı zamanda epidemiyolojik modelleme ve halk sağlığı politikalarının oluşturulması açısından da önemli bir yol gösterici olmuştur. Kesirli türev tabanlı modelleme yöntemleri, salgın hastalıkların dinamiklerini anlamada ve bu dinamiklere dayalı etkili müdahale stratejileri geliştirmede sunduğu avantajlarla öne çıkmaktadır. Bu bağlamda, çalışma yalnızca seımqr modelinin bilimsel değerini artırmakla kalmamış, aynı zamanda halk sağlığını korumaya yönelik stratejik bir katkı sunarak epidemiyolojik araştırmalara ışık tutmuştur.

Anahtar Kelimeler: Kesirli basamaktan türev, Covid-19 model, varlık ve teklik, global kararlılık.

ABSTRACT

In this study, the previously addressed seımqr model has been re-examined using the Caputo fractional derivative operator and evaluated in terms of global stability in addition to the previously conducted local stability analyses. This model has been developed specifically to deeply understand the dynamics of the Covid-19 pandemic and to better grasp the complex interactions that emerged during this process. Although it is known that there are studies in the literature focusing on the local stability of the model, the absence of a global stability analysis makes this study unique. Global stability analysis is critically important as it reveals how the model behaves not only under specific conditions but also across all system dynamics.

In this context, the mathematical structure of the equations belonging to the seımqr model has been examined in detail, and the existence and uniqueness conditions have been proven. These proofs support the theoretical robustness of the model and enhance its usability as a reliable tool in epidemiological processes. The examination of the model's global stability was conducted using the Lyapunov function. With this method, the model has been evaluated in a more comprehensive and systematic manner. In addition, the generalized Euler method has been used for the numerical solutions of the model. The generalized Euler method is used as an effective tool to obtain the numerical solutions of the model and to validate the obtained results.

In conclusion, this study clearly demonstrates the vital role of global stability analysis and numerical methods in the processes of mathematical modeling. Global stability analysis has not only made a theoretical contribution but has also been an important guide in the creation of epidemiological modeling and public health policies. Fractional derivative-based modeling methods stand out with their advantages in understanding the dynamics of epidemic diseases and developing effective intervention strategies based on these dynamics. In this context, the study has not only enhanced the scientific value of the seımqr model but has also provided a strategic contribution to protecting public health, shedding light on epidemiological research.

Keywords: Fractional differential equation, Covid-19 model, existence and uniquness, global stability.

MİMARİ MİRASIN YENİDEN HAYAT BULMASINDA MALZEMENİN GÜCÜ: 461 POWERHOUSE ARTS ÖRNEĞİ

THE POWER OF MATERIALS IN REVITALIZING ARCHITECTURAL HERITAGE: THE CASE OF 461 POWERHOUSE ARTS

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ÖZET

461 Powerhouse Arts, Brooklyn, New York'ta, Herzog & de Meuron'un önderliğinde restore edilerek kültürel ve sanatsal bir işlevle yeniden hayat bulan endüstriyel bir yapıdır. İlk olarak 1904 yılında elektrik üretimi için inşa edilen bu yapı, döneminin sanayi ihtiyaçlarına uygun bir mühendislik ürünü olarak işlev görmekteydi. Ancak, endüstriyel dönüşüm ve enerji alanındaki yeni gelişmelerle işlevselliğini yitirmiş ve 1972 yılında tamamen kapatılmıştır. Uzun yıllar metruk kalan yapı, 2000'li yıllarda grafiti sanatçılarının dikkatini çekerek alternatif bir sanat üretim mekânına dönüşmeye başlamıştır.

2023 yılında tamamlanan restorasyon, yapıların orijinal mimari karakterlerinin korunarak güncel işlevlerle yeniden tasarlanması konusundaki önemli bir yaklaşıma işaret etmektedir. Herzog & de Meuron'un restorasyon sürecinde izlediği yöntem, yapıdaki endüstriyel miras unsurlarına sadık kalmayı ve aynı zamanda çağdaş sanatsal gereksinimlere yanıt vermeyi amaçlamıştır. Bu bağlamda, yapının geçmiş işlevini anımsatan özgün yapısal detaylar özenle korunmuş; ancak yeni kullanım amacına uygun olacak biçimde modern malzemeler ve mimari elemanlar eklenmiştir. Bu modern eklemeler, yapının çevresi ve kültürel bağlamı ile uyum içerisinde olacak şekilde estetik bir bütünlük sunacak biçimde tasarlanmıştır.

461 Powerhouse Arts projesi, mimari mirasın çağdaş kullanımlara adapte edilmesi sürecinde toplumsal kabul ve estetik duyarlılığın önemine dair yenilikçi bir yaklaşım ortaya koymaktadır. Geleneksel yapının tuğla rengine benzer renkte bir malzeme olan fiber takviyeli renkli beton kullanılarak uyumlu bir birleşim sağlanmıştır. Restorasyon süreçlerinde, benzer malzemenin farklı oran ve stillerde çağdaş ek olarak tasarlanması hem yerel bağlamda kabul gören hem de estetik açıdan tatmin edici sonuçlar elde edilmesini sağlayabilir; bu yaklaşım, mimari koruma alanında restorasyon konusunda tutucu yaklaşımları olan ülkelerde çağdaş dönüşümü teşvik edebilir.

Anahtar kelimeler: Restorasyon, Herzog & De Meuron, Batcave, New York, Endüstriyel dönüşü

ABSTRACT

461 Powerhouse Arts is an industrial structure in Brooklyn, New York, revitalized under the leadership of Herzog & de Meuron with a cultural and artistic function. Originally built in 1904 for electricity generation, the structure served as an engineering marvel tailored to the industrial

needs of its time. However, with industrial transformation and advancements in energy, it lost its functionality and was completely shut down in 1972. After remaining abandoned for decades, the building drew the attention of graffiti artists in the 2000s, gradually transforming into an alternative art production space.

The restoration, completed in 2023, point out an important approach to preserving the original architectural character of buildings while adaptive reusing them with contemporary functions. Herzog & de Meuron's methodology during the restoration aimed to remain faithful to the industrial heritage elements of the building while also meeting the needs of contemporary artistic practices. In this context, original structural details reminiscent of the building's past functions were meticulously preserved, while modern materials and architectural elements were integrated to suit its new purpose. These modern additions were designed to present an aesthetic coherence that harmonizes with the building's surroundings and cultural context.

The 461 Powerhouse Arts project introduces an innovative approach to the adaptation of architectural heritage for contemporary uses, emphasizing the importance of social acceptance and aesthetic sensitivity. By using coloured fiber-reinforced concrete, a material similar in colour to the traditional brick of the structure, a harmonious blend was achieved. In restoration processes, designing contemporary additions with similar materials in varying proportions and styles can result in both locally accepted and aesthetically satisfying outcomes. This approach has the potential to encourage contemporary transformation in countries with conservative perspectives on restoration within the field of architectural preservation.

Keywords: Restoration, Herzog & de Meuron, Batcave, New York, Industrial Transformation

AHP YÖNTEMİYLE SOSYAL SÜRDÜRÜLEBİLİR TEDARİKÇİ SEÇİMİ: ENDÜSTRİYEL BİR UYGULAMA

SOCIALLY SUSTAINABLE SUPPLIER SELECTION USING AHP: AN INDUSTRIAL APPLICATION

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ÖZET

Dünya nüfusu hızla arttıkça, teknoloji ve sanayi geliştikçe, hayat birçok açıdan tehdit altına girmeye başlamıştır. Bu yüzden, sürdürülebilirlik günümüz insanları ve gelecek nesiller için ekosistemi korumak ve hayat kalitesini artırmak açısından zorunlu bir konu haline gelmiştir. Sürdürülebilirlik kavramı çevresel, ekonomik ve sosyal konuları kapsayan bütünsel bir yaklaşımdır. Birçok akademik çalışmada ve uygulamada sürdürülebilirliğin ekonomik ve çevresel etkileri ele alınırken, sosyal boyutu ihmal edilmektedir. Küreselleşmenin doğurduğu sonuçlar kuruluşların da sürdürülebilirlik uygulamalarını iş faaliyetlerine dahil etmelerini mecbur kılmıştır.

Tedarik zinciri yönetiminin önemli bir halkası olan tedarikçi seçimi şirket performansını doğrudan etkileyen faktörlerden biridir. Bu çalışmada, firmaların tedarik zincirlerini daha iyi yönetebilmelerine katkı sağlamak amacıyla sosyal sürdürülebilirlik kapsamında tedarikçi seçimi irdelenmiştir.

Uygulamada otomotiv, e-ticaret, taşımacılık ve inşaat sektörlerine paralel olarak gelişmekte olan lastik sektöründen bir firma yer almaktadır. İlk olarak, literatürden ve uzmanlarla yapılan görüşmelerden sosyal sürdürülebilirlik kriterleri belirlenmiştir. Teorik altyapı sağlandıktan sonra, en sık kullanılan çok kriterli karar verme yöntemlerinden biri olan Analitik Hiyerarşi Prosesi (AHP) ile sosyal sürdürülebilirlik çerçevesinde bir tedarikçi seçim modeli oluşturulmuştur. Kriter ağırlıklarının belirlenmesi ve tedarikçilerin o kriterlere göre sıralanması için firmadaki üç uzmana AHP anketi yapılmıştır. Bu şekilde sosyal sürdürülebilirlik açısından en iyi tedarikçi seçilmiştir. Çalışmanın temel amacı, tedarikçi seçimi problemlerine sosyal olarak sürdürülebilir bir yaklaşım önermektir.

Anahtar Kelimeler: Sosyal Sürdürülebilirlik, Tedarikçi Seçimi, AHP

ABSTRACT

As world population rapidly increases, technology and industry develop, all aspects of life are beginning to be threatened. Thus, sustainability has become an imperative issue with regards to protecting the ecosystem and improving quality of life for current and future generations. The concept of sustainability is a holistic approach that encompasses environmental, economic and social dimensions. While the economic and environmental aspects of sustainability have been studied in numerous articles, the social dimension has been neglected. The consequences of globalization have compelled organizations to incorporate sustainability practices into their business activities.

Supplier selection, which is a significant part of supply chain management, is one of the factors that directly affect company performance. In this study, social issues, which are the least investigated pillar of sustainability, are included in the supplier selection processes in order to contribute to the companies' supply chain management.

In the case study, a company from the tire industry, which is developing in parallel with the automotive, e-commerce, transportation and construction sectors, has been studied. First, social

criteria were identified from the literature and the interviews with experts. After providing the theoretical background, a socially sustainable supplier selection model was developed by using Analytic Hierarchy Process (AHP), which is one of the most widely used multi-criteria decision-making methods. AHP questionnaire was applied to three experts in the company to determine criteria weights and to rank the suppliers according to these criteria. Thus, the most socially sustainable supplier was selected. The main objective of this study is to propose a socially sustainable approach to supplier selection problems.
Keywords: Social Sustainability, Supplier Selection, AHP

GLOBAL ÖLÇEKTE YEŞİL LOJİSTİK PERFORMANSININ 2007-2023 YILLARI İÇİN İNCELENMESİ

INVESTIGATION OF GREEN LOGISTICS PERFORMANCE ON A GLOBAL SCALE FOR THE YEARS 2007-2023

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ÖZET
Küreselleşen dünya ile birlikte uluslararası ticaret alanında rekabetin artması daha etkin ve verimli bir lojistik yönetiminin benimsenmesini zorunlu kılmıştır. Küresel lojistik faaliyetler, ekonominin sürdürülebilir kalkınmasında büyük önem arz etmekle birlikte, enerjiye olan bağımlılığı nedeniyle fosil yakıt tüketiminin, karbondioksit ve sera gazı salınımının artışına sebep olarak, çevreye ve sağlığa ciddi zararlar vermektedir. Bu sebeple, firmalar, bir yandan küresel lojistik faaliyetleri ile ekonomik büyüme ve kalkınmaya katkı sağlayan verimli süreçler tanımlarken, bir yandan da çevresel sürdürülebilirlikten ödün vermemeye çalışmaktadırlar. Özellikle son yıllarda lojistik faaliyetlerde; ürünlerin ekolojik tasarımı, yeşil üretim/malzeme yönetimi, hammadde ve bileşenlerin yeşil satın alınması, yeşil ulaşım ve yeşil dağıtım/pazarlama ve tersine lojistik faaliyetler gibi yeşil uygulamaları benimsemeye başlamışlardır. Bu bağlamda, Dünya Bankası tarafından ülkelerin uluslararası lojistik tedarik zincirinin verimliliğini ölçen Lojistik Performans İndeksi (LPI) yayınlanmaktadır. LPI, aynı zamanda, lojistik endüstrisinin çevresel performansını yansıtan ve dolayısıyla yeşil lojistik performansını ölçen bir makro gösterge olarak kabul edilmektedir. Bu çalışmada, 139 ülkenin, genel LPI indeksi ile LPI indeksi alt performans bileşenleri olan lojistik hizmetlerin yetkinliği ve kalitesi, sevkiyatı takip etme yeteneği, rekabetçi fiyatlara sahip sevkiyatın düzenlenmesi, ticaret ve ulaşımla ilgili altyapının kalitesi, gönderilerin alıcıya program dahilinde ulaşma sıklığı ve gümrükleme sürecinin verimliliği açılarından 2007-2023 yılları arasındaki performansları incelenmiştir. Ülkelerin bu süreçteki lojistik performansları ayrıca çevre ve sağlık açılarından da değerlendirilmiştir. Ülkelerin yüksek lojistik performans göstermeleri, ekonomik büyüme ve sürdürülebilir kalkınma konularında oldukça büyük bir öneme sahipken; aynı zamanda bu faaliyetlerin büyük ölçüde enerjiye bağımlı olması nedeniyle çevreye ve sağlığa verdiği ciddi zararların da göz önünde bulundurulması gerekmektedir. Yeşil lojistik yönetiminin benimsenmesi ile çevresel ve sağlık anlamında sorunlar azalırken, ekonomik olarak da iyileşme sağlamak mümkündür.
Anahtar Kelimeler: Yeşil Lojistik, Lojistik Performans İndeksi (LPI), Çevre

ABSTRACT
The increasing competition in international trade, driven by globalization, has necessitated the adoption of more effective and efficient logistics management practices. Global logistics activities play a significant role in the sustainable development of the economy; however, their reliance on energy leads to increased fossil fuel consumption, carbon dioxide emissions, and greenhouse gas releases, causing substantial harm to the environment and public health. Therefore, while companies develop efficient processes that support economic growth and development through their global logistics activities, they also strive to maintain environmental sustainability. In recent years, logistics activities have increasingly adopted green practices such as ecological product design, green production/material management, green procurement of raw materials and components, green transportation, green distribution/marketing, and reverse

logistics activities. In this context, the World Bank publishes the Logistics Performance Index (LPI), which measures the efficiency of countries' international logistics supply chains. The LPI is also regarded as a macro-indicator reflecting the environmental performance of the logistics industry, thereby serving as a measure of green logistics performance. This study examined the performance of 139 countries from 2007 to 2023 based on the overall LPI index and its subcomponents, including the competence and quality of logistics services, the ability to track shipments, the organization of competitively priced shipments, the quality of trade and transportation infrastructure, the frequency of shipments reaching recipients on schedule, and the efficiency of customs clearance processes. The logistics performance of countries during this process was also evaluated from environmental and health perspectives. While achieving high logistics performance is crucial for economic growth and sustainable development, it is equally important to consider the significant environmental and health damages caused by the heavy reliance of these activities on energy. By adopting green logistics management, it is possible to reduce environmental and health-related issues while also achieving economic improvements.

Keywords: Green Logistics, Logistics Performance Index (LPI), Environment

DAXİLİ NƏZARƏT VƏ AUDİTƏ RƏQƏMSAL TEXNOLOGİYALARIN İNTEQRASİYASI

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Xülasə
Daxili nəzarət və auditin təşkilində rəqəmsallaşmanın tətbiqi müasir təşkilatlar üçün effektivlik, şəffaflıq və dəqiqliyin təmin edilməsi baxımından mühüm əhəmiyyət daşıyır. Rəqəmsallaşma prosesləri avtomatlaşdırmağa, resurslardan səmərəli istifadə etməyə və potensial riskləri vaxtında müəyyən etməyə imkan verir. Məlumatların toplanması, saxlanılması və analizi üçün rəqəmsal texnologiyaların tətbiqi ənənəvi üsullara nisbətən daha sürətli və dəqiq nəticələr verir. Məsələn, data analitikası alətləri ilə məlumatların təhlili, saxtakarlıq risklərinin aşkarlanması və qərar qəbuletmə proseslərinin təkmilləşdirilməsi mümkün olur. Eyni zamanda, daxili nəzarət və audit proseslərində avtomatlaşdırılmış həllərin istifadəsi əməliyyatların izlənməsini və nəzarətini asanlaşdırır. Rəqəmsal alətlər risklərin idarə edilməsi, uyğunsuzluqların aşkarlanması və hesabatların hazırlanması proseslərini optimallaşdırır. Süni intellekt və maşın öyrənməsi kimi qabaqcıl texnologiyalar isə potensial problemləri əvvəlcədən proqnozlaşdırmağa və preventiv tədbirlər görməyə imkan yaradır. Bununla yanaşı, rəqəmsallaşma hesabatların şəffaflığını və etibarlılığını artırır, bu isə maraqlı tərəflər arasında inamın güclənməsinə səbəb olur.
Rəqəmsallaşma daxili nəzarət və auditin daha səmərəli təşkilinə, təşkilatın strateji məqsədlərinə çatmasına və bazardakı rəqabətqabiliyyətliliyinin artırılmasına töhfə verir. Bu proseslərin düzgün tətbiqi müəssisələrdə resurslardan səmərəli istifadəni, əməliyyatların şəffaflığını və davamlı inkişafı təmin edir. Bu isə məqalənin əhəmiyyətini vurğulayır.
Məqalənin yazılmasında əsas məqsəd müasir texnologiyaların bu sahəyə inteqrasiyasının təşkilatlar üçün faydalarını və tətbiq imkanlarını öyrənməkdən ibarətdir. Bu baxımdan rəqəmsallaşmanın daxili nəzarət və audit proseslərini necə daha effektiv, şəffaf və dəqiq hala gətirdiyini, resurslardan səmərəli istifadəni təmin etdiyini və risklərin idarə olunmasını təkmilləşdirdiyi araşdırılmışdır. Bundan əlavə, rəqəmsal həllərin hüquqi və normativ tələblərə uyğunluğu artırmaq, əməliyyat xərclərini azaltmaq və qərar qəbuletmə proseslərini dəstəkləmək üçün necə istifadə olunduğunu müəyyənləşdirmək də əsas məqsədlərdən biridir. Ümumilikdə, məqalə süni intellekt, məlumat analitikası kimi qabaqcıl texnologiyaların daxili nəzarət və auditə təsirini araşdıraraq, bu sahədəki rəqəmsallaşma strategiyalarının təşkilatın ümumi inkişafına necə töhfə verdiyini göstərməyi hədəfləyir.
Açar sözlər: rəqəmsallaşma, audit, daxili nəzarət, ənənəvi üsullar, süni intellekt

INTEGRATION OF DIGITAL TECHNOLOGIES IN INTERNAL CONTROL AND AUDIT

Summary

The application of digitalization in the organization of internal control and audit is important for modern organizations in terms of ensuring efficiency, transparency and accuracy. Digitalization allows to automate processes, use resources efficiently and identify potential risks in time. Application of digital technologies for data collection, storage and analysis provides faster and more accurate results than traditional methods. For example, with data analytics tools, it becomes possible to analyze data, detect fraud risks and improve decision-making processes. At the same time, the use of automated solutions in internal control and audit processes facilitates the monitoring and control of operations. Digital tools optimize risk management, non-conformance detection and reporting processes. And advanced technologies such as artificial intelligence and machine learning make it possible to predict potential problems in advance and take preventive measures. At the same time, digitization increases the transparency and reliability of reports, which leads to stronger trust among stakeholders.

Digitalization contributes to more effective organization of internal control and audit, achievement of strategic goals of the organization and increase of competitiveness in the market. Correct application of these processes ensures efficient use of resources, transparency of operations and sustainable development in enterprises. This emphasizes the importance of the article.

The main goal of writing the article is to study the benefits and application possibilities of the integration of modern technologies in this field for organizations. In this regard, it was investigated how digitalization makes internal control and audit processes more effective, transparent and accurate, ensures efficient use of resources and improves risk management. In addition, determining how digital solutions can be used to increase compliance with legal and regulatory requirements, reduce operational costs and support decision-making processes is also a key objective. Overall, the article examines the impact of advanced technologies such as artificial intelligence, data analytics on internal control and auditing, and aims to show how digitization strategies in this area contribute to the overall development of the organization.

Keywords: digitization, audit, internal control, traditional methods, artificial intelligence

TÜRKİYE'DE YAPISAL ATIKLARIN YAŞAM DÖNGÜSÜ DEĞERLENDİRMESİNE YÖNELİK SİSTEMATİK BİR LİTERATÜR İNCELEMESİ

A SYSTEMATIC LITERATURE REVIEW ON LIFE CYCLE ASSESSMENT OF CONSTRUCTION AND DEMOLITION WASTE IN TÜRKİYE

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ÖZET

Dünyada hızlı nüfus artışı sonucu kentleşmenin artmasıyla yapı malzemelerine ve elemanlarına olan talep artmaktadır. Bu artan talep nedeniyle, hammadde çıkarımı, malzeme üretimi, inşaat süreci, kullanım ve yıkım aşamalarında yapısal atıklar ortaya çıkmaktadır. Bu bağlamda, yaşam döngüsü aşamalarında yapısal atıkların etkin yönetimi önem kazanmaktadır. Yaşam Döngüsü Değerlendirmesi (YDD), yapı malzemeleri ve inşaat süreçlerinin çevresel performansını, tasarım, yapım, kullanım, işletim ve ömür sonu gibi farklı yaşam döngüsü aşamalarında iyileştirmeyi amaçlayan kararlar almak için çevresel etkileri analiz eden bir yöntem olarak kabul edilmektedir. YDD'nin herhangi bir bina veya altyapı projesinin tüm yaşam döngüsünü etkileyecek kararları almak için etkileri belirleme ve karşılaştırma yeteneği bulunmaktadır. Bu nedenle, son yıllarda inşaat alanında bu yöntemin uygulanmasına olan ilgi ve bu konuya odaklanan bilimsel çalışma sayısı artmıştır. YDD yönteminin uygulanmasıyla yapısal atıkların etkin yönetiminin sağlanabileceği öngörülmektedir. Literatür araştırması sonucunda, yapısal atıkların yönetimine yönelik YDD uygulamalarına dair çalışmaların yetersiz olduğu görülmüştür. Bu bağlamda, bu çalışma yapısal atıkların YDD ile yapısal atık yönetimi alanında yapılmış ulusal ve uluslararası çalışmaları incelemeyi ve konuyla ilgili Türkiye'deki mevcut durumu değerlendirmeyi amaçlamaktadır. Çalışma, yapısal atık yönetiminde YDD ile çevresel etkilerin azaltılmasını, farkındalığın artırılmasını ve geleceğe yönelik öngörülerin sunulmasını hedeflemektedir. Çalışmada, EBSCO veri tabanı kullanılarak PRISMA yöntemi ile sistematik literatür taraması yapılmış ve analiz edilmiştir. Çalışma kapsamında son 20 yılda yapılan çalışmalar incelenmiştir. Çalışma sonucunda yapısal atıkların yeniden kullanım ve geri dönüşüm potansiyellerinin YDD aracılığı ile ortaya koyulabileceği sonucuna ulaşılmıştır.

Anahtar Kelimeler: yapısal atık, sürdürülebilirlik, geri dönüşüm, döngüsel ekonomi, atık yönetimi, yaşam döngüsü değerlendirmesi

ABSTRACT

As a result of rapid population growth worldwide, the demand for building materials and elements is increasing in parallel with urbanization. Due to this rising demand, construction and demolition waste (CDW) is generated during raw material extraction, material production, construction, utilization, and demolition. In this context, the effective management of CDW across its life cycle stages has become more important. Life Cycle Assessment (LCA) is recognized as a method that analyzes environmental impacts, aiding in decisions aimed at improving the environmental performance of building materials and construction processes at different life cycle stages such as design, construction, use, operation, and end-of- life. LCA is capable of identifying and comparing impacts to make decisions that influence the entire life cycle of buildings or infrastructure projects. Therefore, in recent years, the interest in applying this method in the field of construction and the number of scientific studies focused on this topic have increased. It is envisioned that effective management of CDW can be achieved through the application of the LCA method. A literature review revealed that there are insufficient studies on the application of LCA for the management of CDW. In this context, this study aims to examine the national and international studies in the field of CDW management with LCA and to evaluate the current situation in Türkiye. The study aims to reduce environmental impacts, raise awareness, and provide insights for the future improvements in CDW management through the LCA. In the study, a systematic literature review was conducted and analyzed by PRISMA method using EBSCO database. Within the scope of the study, studies conducted over the past 20 years were examined. The findings indicate that the reuse and recycling potentials of CDW can be identified through the application of LCA.

Keywords: contruction and demolition waste, sustainability, recycling, circular economy, waste management, life cycle assessment

GÖMÜLÜ FİNANS KONUSUNDA DERLEME ÇALIŞMALAR VE KAYNAK KİŞİLERE YÖNELTİLECEK SORULAR

COMPILATIONS ON EMBEDDED FINANCE AND QUESTIONS TO BE ADDRESSED TO PARTİCİPANTS

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ÖZET
Gömülü finans, finansal olmayan firmaların finansal hizmetler sunmasını sağlayan bir fintech çözümüdür. Bu sistem, bankacılık, ödeme, kredi, sigorta ve yatırım gibi faaliyet alanlarını içermeyen firmaların müşterilerine bu hizmetleri sunmasına olanak tanımaktadır. Gömülü finans, finansal hizmetleri finansal olmayan platformlara entegre ederek birden fazla sektöre erişimi kolaylaştırmaktadır. Gömülü finansın avantajları arasında, kullanıcı dostu deneyim sağlaması, yeni gelir kaynakları yaratması, müşteri sadakati ve veri toplamada daha fazla imkan sağlaması sayılabilmektedir. Etkileri açısından ise, geleneksel bankacılığı azaltması, finansal erişimi geniş kitlelere sağlaması ve finansal rekabeti artırması söylenebilmektedir. Bu sistem, özellikle e-ticaret siteleri, sosyal medya uygulamaları ve diğer dijital platformlar tarafından yaygın olarak kullanılmaktadır. Gelişen finans teknolojileri ve bulut bilişim gibi yenilikler, gömülü finansın genişlemesine ve etkinliğine katkıda bulunmaktadır. Gömülü finans alanındaki gelişmelere ayak uydurmak gerekmektedir. Finansal hizmetler sektörü, işlerin yapılış şeklini sürekli olarak değiştiren yeni teknolojiler ve uygulamalarla muazzam bir şekilde gelişmektedir. Profesyoneller bu değişiklikleri takip ederek piyasa taleplerindeki ve teknik gelişmelerdeki değişiklikleri daha iyi anlayabilmekte ve tahmin edebilmektedir. Bu fikir sayesinde tüketiciler, geleneksel finans kuruluşlarıyla doğrudan muhatap olmadan finansal hizmetler alabilmektedir. Bunun yerine, müşterilere sorunsuz bir deneyim sunmak için, finansal hizmetler finansal olmayan bir kuruluşun platformuna entegre edilmektedir.
Bu çalışmada, gelecekte gömülü finans alanında yapılacak çalışmalara ilham olması açısından derleme konuları ile kaynak kişilere yöneltilecek sorular üzerinde durularak, birtakım soru örnekleri verilecektir.
Anahtar Kelimeler: Gömülü Finans, Derleme Konuları, Derleme Soruları, Yeni Trendler, Kaynak Kişi.

ABSTRACT
Embedded finance is a fintech solution that enables non-financial firms to offer financial services. This system allows firms that do not include banking, payments, credit, insurance and investment to offer these services to their customers. Embedded finance facilitates access to multiple sectors by integrating financial services into non-financial platforms. The advantages of embedded finance include a user-friendly experience, new sources of revenue, customer loyalty, and more opportunities for data collection. In terms of its effects, it can be said to reduce traditional banking, expand financial access to the masses and increase financial competition. This system is widely used especially by e-commerce sites, social media applications and other digital platforms. Emerging financial technologies and innovations such as cloud computing contribute to the expansion and effectiveness of embedded finance. It is necessary to keep pace

with developments in embedded finance. The financial services industry is evolving tremendously, with new technologies and applications constantly changing the way business is done. By following these changes, professionals are better able to understand and anticipate changes in market demands and technical developments. Thanks to this idea, consumers can receive financial services without dealing directly with traditional financial institutions. Instead, financial services are integrated into the platform of a non-financial organization to provide a seamless experience for customers.

In this study, we will focus on the compilation topics and the questions to be asked to the resource persons and give some examples of questions to inspire future studies in the field of embedded finance.

Keywords: Embedded Finance, Compilation Topics, Compilation Questions, New Trends, Participants.

YAPAY ZEKA (YZ) ETKİSİNDE PAZARLAMA ARAŞTIRMALARINDA YAŞANAN DEĞİŞİMLER VE GELECEĞE YÖNELİK ÖNGÖRÜLER

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ÖZET

Kasım 2022'den sonra ChatGPT ile kamuya açılan Yapay Zeka (YZ) teknolojisi çok hızla hayatın her alanına girmiştir. İki yıla yakın bir geçmişe sahip olmasına rağmen, YZ, etkileri itibariyle geri dönüşü olmayacak tarzda günlük yaşamın her alanında etkisini hissettirmektedir. Tabi ki, bu değişimlerden pazar/pazarlama araştırmaları da payını alarak araştırma sürecin her adımında ciddi bir paradigma dönüşümüne doğru evrilmektedir. Özellikle de nitel araştırmalar bağlamında YZ'nın sunduğu kolaylıklar sayesinde tüketici analizleri ve pazardaki trendler çok daha isabetli ve derinlikli bir şekilde ortaya çıkarılabilmekte ve geleceğe yönelik öngörüsel analitikler iş dünyasındaki yerlerini pekiştirmektedir.

Geçmişin sınırlı büyüklükteki düzenli veriler üzerinden yürütülen geleneksel analiz yaklaşımları, artık yerini, YZ sayesinde karmaşık yapıdaki büyük verilerden ve farklı türdeki (metin, görsel, ses, video, vb.) ve kaynaktan (web sitesi, sosyal medya, yayınlar, vb.) beslenen verilerden içgörü sağlamaya ve bilgi üretimine bırakmaya başlamıştır. Bu çalışmada YZ'nın pazar/pazarlama araştırmaları üzerindeki etkileri literatür bilgileri ışığında irdelenmektedir. Özellikle de yapay zekanın pazar araştırmaları sürecinde araştırma tasarımı, veri toplama, veri analizi ve geleceğe yönelik tahminler bağlamında sunduğu kolaylıklar ile beraberinde getirdiği tehditler irdelenmeye çalışılmıştır. Ayrıca, YZ'nın pazar/pazarlama araştırmalarında kullanımındaki tuzaklar ile YZ'nın sunduğu kolaylıklar ve fırsatlardan nasıl yararlanılabileceği hususları da değerlendirme bağlamında ele alınmaktadır.

Bunun yanında, mevcut durumda pazar araştırması bağlamında kullanılmakta olan YZ destekli araçlar ile bunların sunduğu kolaylıklara ilişkin değerlendirmeler de yapılarak söz konusu uygulamaların geleceğine ilişkin öngörüler de sıralanmaktadır. Araştırma bulguları, yapay zekanın pazar/pazarlama araştırmaları üzerinde derin ve dönüştürücü bir etkiye sahip olduğunu, YZ çağında her şeyin (veri toplamadan veri analizine, bulguların yorumlanmasından uygulamaya geçirilmesine kadar) gerçek zamanlı ve derinliği daha fazla ve kapsayıcılığı daha geniş bir alana yayılan bir döneme girildiğini ortaya koymaktadır. Çok sayıda YZ destekli pazar araştırma aracı hem araştırma süreçlerini kısaltmakta, maliyetleri düşürmekte, hem de araştırma bulgularının isabet oranını artırarak işletmelerin başarıları üzerinde etkili olmaktadır. Bu etkinin gelecekte çok daha ileri düzeyde olması beklenmektedir.

Anahtar Kelimeler: Yapay Zeka, Makine Öğrenmesi, Pazar Araştırması, Müşteri Analizi.

CURRENT CHANGES IN MARKETING RESEARCH DUE TO THE INFLUENCE OF ARTIFICIAL INTELLIGENCE (AI) AND SOME FUTURE PREDICTIONS

ABSTRACT

Since its public release with ChatGPT in November 2022, Artificial Intelligence (AI) technology has rapidly permeated all aspects of life. Despite its relatively short history of nearly two years, AI has become an irreversible part of daily life. Naturally, marketing research has also undergone significant transformation, evolving into a paradigm shift at every step of the research process. Particularly in the context of qualitative research, the conveniences offered by AI enable deeper and more accurate insights into consumer behavior and market trends, while predictive analytics increasingly secure their place in the business world.

Traditional analytical approaches, which relied on limited, structured datasets, are now being replaced by AI-driven insights derived from complex, large-scale data and diverse formats (text, images, audio, video, etc.) from various sources (websites, social media, publications, etc.). This study examines the impact of AI on marketing research through a review of existing literature. It addresses the conveniences and threats posed by AI in areas such as research design, data collection, analysis, and forecasting. Additionally, it evaluates potential pitfalls of AI in marketing research, alongside strategies for leveraging its opportunities.

Moreover, the study reviews currently available AI-powered tools for market research and assesses the conveniences they offer. Predictions about the future of these applications are also discussed. Findings reveal that AI has a profound and transformative impact on marketing research, ushering in an era where every aspect - from data collection and analysis to interpretation and application - is conducted in real-time, with greater depth and broader inclusivity. Numerous AI-supported tools not only accelerate research processes and reduce costs but also improve the accuracy of findings, significantly influencing business success. This impact is expected to advance even further in the future.

Key Words: Artificial Intelligence, Machine Learning, Market Research, Customer Analysis.

MATEMATİK ÖĞRETMENİ ADAYLARININ HAZIRLADIKLARI AÇIK UÇLU SINAV SORULARININ YENİLENMİŞ BLOOM TAKSONOMİSİ'NE GÖRE İNCELENMESİ

AN EXAMINATION OF OPEN-ENDED EXAM QUESTIONS PREPARED BY PROSPECTIVE MATHEMATICS TEACHERS ACCORDING TO REVISED BLOOM TAXONOMY

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ÖZET

Yenilenmiş Bloom Taksonomisi (YBT), eğitimde öğrenme hedeflerinin belirlenmesi, öğretim stratejilerinin geliştirilmesi, öğrenci başarısının değerlendirilmesi ve müfredatın tasarlanması gibi alanlarda sağladığı rehberlik düşünüldüğünde hem öğretmenler hem öğrenciler için önemli bir araçtır. Eğitimde öğrencilerin mevcut durumunun ve ders başarısının değerlendirilmesinde kullanılan en temel ölçme aracı yazılı sınav sorularıdır. Öğretmenlerin hazırladıkları yazılı sınav sorularının YBT'ye göre incelenmesi öğrencilerin becerilerinin değerlendirilmesi, öğrencilere daha yapıcı ve hedeflenmiş geri bildirim sağlaması bakımından önemlidir. Bu bağlamda, araştırmada ilköğretim matematik öğretmeni adaylarının hazırladığı açık uçlu yazılı sınav sorularının YBT'ye göre incelenmesi amaçlanmıştır. Doküman incelemesi yöntemimin benimsendiği bu araştırma son sınıfta (4. sınıf) öğrenim gören 19 ilköğretim matematik öğretmen adayı ile yürütülmüştür. Araştırma kapsamında öğretmen adaylarından kendilerinin seçecekleri belirli bir sınıf düzeyi (5-8. sınıf) için en az 5 açık uçlu sorudan oluşan matematik yazılı sınavı ve cevap anahtarı hazırlamaları istenmiştir. Öğretmen adaylarının hazırladıkları toplam 128 sınav sorusu YBT'nin bilişsel süreç boyutu ve bilgi boyutuna, cevap anahtarının uygunluğuna ve soru hazırlamada faydalanılan kaynağa göre betimsel analiz edilmiştir. Araştırma verilerine göre öğretmen adayları en fazla YBT'nin bilişsel süreç boyutunun alt basamakları olan *hatırlama* ve *anlama* düzeylerine yönelik sınav sorusu hazırlamışlardır. Üst basamaklara yönelik çok az soru hazırlamışlardır. Hazırlanan sorular aynı taksonominin bilgi boyutu bakımından incelendiğinde soruların *Olgusal Bilgi* ve *İşlemsel Bilgi* türlerinde yoğunlaştığı görülmüştür. Soruları yazarken en çok faydalanılan kaynakların sırasıyla *MEB Odsgm Soruları* ve *Özel Yayınevi Kaynakları* olduğu görülmüştür. Sorular ile birlikte hazırlanan cevap anahtarlarının çözüm ve puanlama uygunluğu incelendiğinde ise yarısından fazlasının çözüm ve puanlamasının doğru ve net olduğu, bir kısmının ise çözümünde ve/veya puanlamasında eksiklik veya hata olduğu görülmüştür. Bu sonuçlar doğrultusunda, matematik öğretmeni adaylarının sınav soruları hazırlarken eğitim öğretimimizde benimsenmiş temel taksonomi olan YBT'yi daha çok dikkate almalarının vurgulanması, ilgili taksonomiye göre soru hazırlayabilmeleri için lisans eğitimlerinde soru yazmaya ve değerlendirmeye yönelik etkinliklerin yapılabileceği önerilmektedir.

Anahtar Kelimeler: Yenilenmiş Bloom Taksonomisi, Açık uçlu sınav sorusu, Matematik öğretmen adayı

ABSTRACT

The Revised Bloom's Taxonomy (RBT) is a crucial tool for both teachers and students, offering guidance in areas such as defining learning objectives, developing instructional strategies, assessing student performance, and designing curricula. Written exam questions are among the most fundamental tools used to evaluate students' current standing and academic success. Analyzing the written exam questions prepared by teachers in accordance with RBT is important for assessing students' skills and providing them with more constructive and targeted feedback. In this context, the present study aims to analyze the open-ended written exam questions prepared by prospective primary school mathematics teachers based on RBT. This research, which adopted the document analysis method, was conducted with 19 final-year (fourth-year) primary school prospective mathematics teachers. As part of the study, the prospective mathematics teachers were asked to prepare a mathematics exam with at least five open-ended questions, along with an answer key, for a grade level of their choosing (grades 5-8). A total of 128 exam questions were analyzed descriptively based on RBT's cognitive process dimension and knowledge dimension, the appropriateness of the answer key, and the sources used when preparing the questions. The findings indicate that the prospective mathematics teachers most frequently prepared questions targeting the lower levels of RBT's cognitive process dimension, specifically the "*Remember*" and "*Understand*" levels, with very few questions aimed at higher-order thinking skills. In terms of the knowledge dimension, the questions were predominantly focused on *Factual Knowledge* and *Procedural Knowledge*. The most frequently used sources for question preparation were identified as Ministry of National Education (MEB) examination questions and private publisher resources. An analysis of the answer keys revealed that more than half were clear and accurate in both solution and scoring, while some exhibited errors or omissions in either the solution or scoring process. Based on these findings, it is recommended that prospective mathematics teachers pay greater attention to the fundamental taxonomy adopted in education—RBT—when preparing exam questions. Additionally, incorporating activities focused on question writing and assessment according to RBT in undergraduate education is suggested.

Keywords: Revised Bloom Taxonomy, Open-ended exam question, Prospective mathematics teachers.

PREDICTIVE ANALYTICS IN MENTAL HEALTHCARE USING MACHINE LEARNING

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Abstract
Mental healthcare combines the emotions, social well-being and cognition. The World Health Organization (WHO) stated in the report that the mental health is the only way for an individual to realize the talent and ability, determines the capacity of handling stress, interpersonal relation, intellectual and emotional potential, knowing the level of competency and the ability of decision making. There is no direct cure for mental health issues which does not want any ailment and all. However, the mental health issues can be effectively monitored, handled and managed efficiently by doing certain practices and training then and there. Machine learning In healthcare is transforming the medical practices from diagnostics to treatment and drug discovery. Machine learning algorithms can be used to detect the diseases at the early stage so that the complications can also be reduced to some extent. Machine learning algorithms used to detect mental health conditions, predict patient outcomes and enhancing the treatment. The main idea of this work lies in the early detection of fast and accurate detection of predicting the mental health status of an individual which may assist the treatment of mental issues so that the severity of the patient illness can be eliminated.
Keywords: Mental health, Machine learning algorithms, Monitoring, diagnostics and treatment

ÖĞRETİM ELEMANLARININ STEM EĞİTİMİ UYGULAMALARI HAKKINDAKİ GÖRÜŞLERİ

INSTRUCTORS' VIEWS ON STEM EDUCATION PRACTICES

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ÖZET

Son yıllarda dünya genelindeki ülkelerin yenilikçi eğitim yaklaşımlarına bakıldığında, fen, teknoloji, mühendislik ve matematik alanlarının farklı anlayış, yöntem ve tekniklerle entegre edilerek öğretilmesiyle yetiştirilen bireylerin sayısını artırmayı hedefleyen STEM eğitiminin önemi ön plana çıkmaktadır (Bybee, 2013; Çelik Keser, 2021). STEM eğitimi, günümüzde eğitim sistemlerinde önemli bir yer tutmakta ve bu alandaki uygulamalar giderek daha fazla önem kazanmaktadır (DeCoito ve Myszkal, 2018). Bu araştırmanın amacı, öğretim elemanlarının STEM eğitimi uygulamaları hakkındaki görüşlerini belirlemektir. Nitel araştırma yöntemlerinden fenomenolojik desen kullanılarak Kafkas Üniversitesi Dede Korkut Eğitim Fakültesi ile Iğdır Üniversitesi'nde görev yapan toplam 15 öğretim elemanı katılımcı olarak belirlenmiştir. Veriler, yarı yapılandırılmış görüşmeler ile toplanmış ve içerik analizi yöntemiyle incelenmiştir. Çalışma sonucunda, öğretim elemanlarının; STEM'in tanımı hakkında bilgi sahibi oldukları, çoğunun STEM'le alakalı eğitim almadıkları, STEM etkinliklerinin öğrencilerde olumlu etkilerinin olduğunu düşündükleri, STEM'i uygulamak için birtakım eksikliklerin olduğunu, STEM'le alakalı kendilerini geliştirmeleri gerektiğini ve genel olarak STEM eğitimi hakkında olumlu görüşlere sahip oldukları tespit edilmiştir. Ayrıca araştırmada STEM'le alakalı diğer çalışmalar göz önüne alınarak eksikliklerin nasıl giderilebileceğinin değerlendirilmesi gerektiği vurgulanmıştır. Araştırmada, öğretim elemanlarının STEM eğitimi uygulamaları ile ilgili görüşleri doğrultusunda Öğretim elemanlarının belirttiği zaman eksikliği sorununu göz önünde bulundurarak ders sürelerinin daha uygun hale getirilmesi, araştırmadaki sınırlı katılımcı verileriyle elde edilen olumlu görüşlerin genellenebilmesi için yeni çalışmalar yapılması ve STEM eğitiminin ülkemizde uygulanabilir hale gelmesi için akademisyenlere yönelik eğitici seminerler düzenlenmesi şeklinde önerilerde bulunulmuştur.

Anahtar Kelimeler: STEM Eğitimi, STEM Görüş, Öğretim Elemanlarının Görüşleri, İçerik Analizi

ABSTRACT

When we look at the innovative educational approaches of countries around the world in recent years, the importance of STEM education, which aims to increase the number of individuals educated by teaching science, technology, engineering and mathematics fields by integrating them with different understanding, methods and techniques, comes to the fore (Bybee, 2013; Çelik Keser, 2021). STEM education has an important place in education systems today and applications in this field are gaining more and more importance (DeCoito & Myszkal, 2018). The aim of this research is to determine the opinions of the faculty members about STEM education practices. A total of 15 faculty members working at Kafkas University Dede Korkut Faculty of Education and Iğdır University were selected as participants by using the phenomenological design, which is one of the qualitative research methods. The data were collected through semi-structured interviews and examined using the content analysis method.

As a result of the study, it was determined that the faculty members; It was determined that they were knowledgeable about the definition of STEM, most of them had not received education related to STEM, they thought that STEM activities had positive effects on students, there were some deficiencies in implementing STEM, they needed to improve themselves in STEM and they generally had positive views about STEM education. In addition, it was emphasized in the research that how the deficiencies could be eliminated should be evaluated by considering other studies related to STEM. In the research, in line with the opinions of the faculty members regarding STEM education practices, suggestions were made such as making the lesson times more suitable by considering the problem of lack of time stated by the faculty members, conducting new studies to generalize the positive views obtained with the limited participant data in the research and organizing educational seminars for academicians in order to make STEM education applicable in our country.
Keywords: STEM Education, STEM Opinion, Faculty Members' Opinions, Content Analysis

MUSHROOM FARMING FOR YOUTH EMPOWERMENT: A HIGH-VALUE CROP WITH MINIMAL LAND REQUIREMENTS

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Abstract
Mushroom farming represents a promising opportunity for youth empowerment due to its high-value output, minimal land requirements, and potential for socioeconomic transformation. This review explores the theoretical and conceptual frameworks underpinning mushroom cultivation as a viable agribusiness for young people. It assesses economic, environmental, and social outcomes through recent research and case studies. The paper discusses challenges and opportunities while offering actionable recommendations to optimize this sustainable practice for empowering youth in both urban and rural settings.
Keywords: Agribusiness; Empowerment; Mushroom; Optimization; Youth

FINGER MILLET: A RESILIENT FAMINE CROP FOR MARGINAL FARMING HOUSEHOLDS

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Abstract
Finger millet (*Eleusine coracana*) is a crucial cereal crop grown predominantly in semi-arid regions of Africa and Asia. It serves as a food security buffer for poor farming households due to its resilience to adverse climatic conditions and minimal input requirements. This paper examines finger millet's nutritional, economic, and agronomic importance, highlights its role in mitigating food insecurity, and discusses its potential in addressing global challenges like climate change and poverty. The review provides a conceptual framework for understanding its socio-economic relevance and concludes with recommendations for improving finger millet production systems through research and policy interventions.
***Keywords*:** Finger Millet; Famine crop; Food security; Climate-resilient agriculture; Nutritional super food; Poor households

SYNERGISTIC PHYTOCHEMICAL ANALYSIS, TOXICITY STUDIES OF *Anogeissus leiocarpus* (dc.) STEM BARK AND *Acacia ataxacantha* (linn) LEAVES EXTRACTS.

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Abstract

Natural product from plant play a remarkable role to avert and cure different diseases from ancient's times, The aim of the research is to study the synergistic phytochemical composition of *Anogeissus leiocarpus* (dc.) Stem Bark and *Acacia ataxacantha* (linn) Leaves Extracts by screening the plant sample with different solvent (methanol, aqueous, ethyl acetate and hexane). The study was conducted at the Department of trypanosomiasis research institute laboratory, BUK, Standard method of phytochemical extraction was done according to (Tiwari *et. al.,* 2011, Majekodunmi 2017, Evans 1996), a total of 16 Albino Rats were purchased from veterinary medicine department A.B.U Zaria and they were acclimatized for (3days) with regular feeding and water, the rats were sub divided into four groups of three (3) animals each, group (I-III) were the test group treated with 1000mg/kg, 500mg/kg and 250mg/kg extract of synergistic phytochemical composition of *Anogeissus leiocarpus* (dc.) Stem Bark and *Acacia ataxacantha* (linn), group (IV) were the control treated with feed and distilled water as described by lork method 1983. hematological and histopathological analysis was done using automated hematology analyzer according to the manufacturer instructions, data were analyzed using one way analysis of variance and further subjected to LSD post hoc From the results obtained it shows that methanol yielded the highest quantity among all other extract with 85g(57.05%), aqueous with 55g(36.71%), then ethyl acetate 6g(4.02%), the least is hexane 2g(2.01%). The phytochemical screening results indicated the presence of Carbohydrate, flavonoid, Alkaliods. However tannin and resins were absent in all the plant solvent, Methanol extracts has the highest number of phytochemical present while Hexane extract shows the least phytochemicals. The thin layer chromatography results shows different spots which include (9, 7, 6) and (5, 4, 3) for *Anogeissus leiocarpus* (dc.) Stem Bark and *Acacia ataxacantha* (linn) Leaves when viewed under 254nm shot wave length and 365nm long wave length, distance travel by the spot and the retention factor was calculated respectively, the FTIR analysis confirmed the presence of alcohol, aldehyde, alkenes, amines ketones, alkyl, carboxylic acid and phenol and the absorbance band analysis in bio reduction process are obtained between the region of $400cm^{-1}$-$4000cm^{-1}$ No death was recorded in the first and second phased of LD50 in the sample and was found to be above 1000mg/kg this shows the plant to be non-toxic. In conclusion active component from these two important medicinal plants could be used as clue to formulate a herbal drugs, other methods of extraction should also be investigated for any variation in the phytochemical properties.

KEY: Synergistic, Phytochemical, Toxicity, FTIR

TRENDS IN FOREIGN DIRECT INVESTMENT FLOWS: ANALYSIS AND PROSPECTS.

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Abstract

This paper examines the contemporary trends and future prospects of foreign direct investment (FDI) flows in the context of increasing global instability and economic risks. The relevance of this study is underscored by the profound impacts of the COVID-19 pandemic, geopolitical tensions and the introduction of global tax reforms on FDI dynamics. The primary objective is to analyze the shifts in FDI flows from 2000 to 2023, identifying key factors influencing these changes, particularly during crises such as the 2008-2009 economic downturn, the COVID-19 pandemic and the ongoing conflict in Ukraine.

The methodology is grounded in quantitative analysis of FDI data sourced from UNCTAD and OECD databases, supplemented by comparative and dynamic analyses based on global investment reports and indices of FDI confidence. The scientific novelty of the paper lies in the synthesis of data on FDI in the context of increasing global uncertainty and the changing strategies of investing and recipient countries. It emphasizes emerging factors, including the implementation of global minimum taxes, the rise of digital and green investments and the reassessment of developing economies as viable investment destinations.

The findings reveal that global FDI flows remain volatile, significantly influenced by various external factors. Despite a recovery post-pandemic, the current geopolitical and economic landscape - exemplified by the conflict in Ukraine and global tax reforms - continues to reshape investment strategies and capital flows. Developing economies are increasingly pivotal in attracting FDI, particularly in sectors aligned with sustainable development and digitalization.

Recommendations for recipient countries include enhancing legislative and financial frameworks to attract green and sustainable investments. Developed nations are advised to focus on creating conditions for localizing production, reducing global supply chains and lowering tax barriers. In light of the growing significance of digital technologies, it is crucial for countries to advance national programs supporting digitalization and technological innovation.

This study contributes to a deeper understanding of FDI trends in a rapidly changing economic environment offering valuable insights for policymakers and stakeholders in both developed and developing nations.

Key words: foreign direct investment, global investment trends, investment experience, investment attractiveness, digitalization, green economy.

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DEMİR-ÇELİK ENDÜSTRİSİ ATIKLARI İLE ÜRETİLEN GEOPOLİMER KOMPOZİTLERİN FİZİKSEL VE MEKANİK ÖZELLİKLERİN ARAŞTIRILMASI

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ÖZET
Bilindiği gibi Demir-Çelik endüstrisi demirce yüksek tenöre sahip mineral toprak ve kayaçları yüksek sıcaklıklarda ayrıştırarak demir cevheri üreten ve ardından farklı proseslerde çelik üreten kompleks fabrikalara sahiptir. Bu fabrikalarda üretim sistemleri içinde her bir proseste farklı atıkların üretilmesine sebep olmaktadır. Bunların bir kısmı endüstriyel olarak katma değer sağlamaktayken, bir kısmı ise sadece atık kategorisinde bertaraf edilmektedir. Bir demir-çelik tesisinin yıllık atık miktarı toplamda 1.000.000 tona yaklaşmaktadır ve bu atıkların büyük bir çoğunluğu ürüne dönüştürülememektedir. Özellikle çelikhane cürufu ve sinter külü geri dönüşüm olanakları sınırlı olan ve çevreye zarar verebilen malzemelerdir. Bu kapsamda, Demir-çelik endüstrisi atıkları olan manyetik (Fe_3O_4) veya anti-manyetik (Fe_2O_3) çelikhane cürufunu ağırlıkça %50, öğütülmüş yüksek fırın cürufu ağırlıkça %50 ve sinter külü ise katı bileşenlerin ağırlıkça %5 eklenerek geopolimer kompozitler üretilmiştir. Alkali aktivatör olarak 10M NaOH ve $Na_2SiO_{3(aq)}$ kullanılmıştır. Alkali aktivasyon yöntemi ile üretilen geopolimer kompozitlerde yayılma, su emme, büzülme ve basınç dayanımı deneyleri yapılmıştır. Deneysel çalışmalar sonucunda, sinter külünün eklenmesiyle geopolimer kompozitlerin hem fiziksel hem de mekanik özellikleri önemli ölçüde olumlu etkilemiştir. En yüksek erken ve geç basınç dayanımı yaklaşık olarak sırasıyla 49 MPa ve 62 MPa olarak elde edilmiştir. Bu bulgular neticesinde, demir-çelik atıklarının geopolimer kompozitlerde kullanılmasının, atık yönetimi açısından sürdürülebilir bir çözüm sunduğunu ve yapı malzemeleri üretiminde değerli bir alternatif oluşturduğunu göstermektedir.
Anahtar Kelimeler: Çelikhane Cürufu, Öğütülmüş Yüksek Fırın Cürufu, Sinter Külü, Mekanik Özellikler, Fiziksel Özellikler.

ABSTRACT
As it is known, the iron and steel industry have complex factories that produce iron ore by separating mineral soils and rocks with high iron content at high temperatures and then produce steel in different processes. In these factories, different waste is produced in each process within the production systems. While some of these provide industrial added value, some of them are disposed of only in the waste category. The annual waste amount of an iron and steel plant approaches 1.000.000 tonnes in total and the majority of these wastes cannot be converted into products. Especially steel mill slag and sinter ash are materials with limited recycling possibilities and can harm the environment. In this context, geopolymer composites were produced by adding 50 wt% of magnetic (Fe_3O_4) or anti-magnetic (Fe_2O_3) steel mill slag, 50 wt% of ground blast furnace slag and 5 wt% of sinter ash as solid components. 10M NaOH and $Na_2SiO_{3(aq)}$ were used as alkali activators. Spreading, water absorption, shrinkage and compressive strength tests were carried out on geopolymer composites produced by alkali

activation method. As a result of the experimental studies, both physical and mechanical properties of geopolymer composites were significantly favorably affected by the addition of sinter ash. The highest early and late compressive strengths were approximately 49 MPa and 62 MPa, respectively. As a result of these findings, it is shown that the use of iron and steel waste in geopolymer composites offers a sustainable solution in terms of waste management and constitutes a valuable alternative in the production of building materials.
Keywords: Steel Slag, Ground granulated Blast Furnace Slag, Sinter Ash, Mechanical Properties, Physical Properties.

TÜRKİYEDE EKOLOJİK AYAK İZİ FARKINDALIK DÜZEYLERİNİN COĞRAFİK BÖLGELERE GÖRE ANALİZİ

ANALYSIS OF ECOLOGICAL FOOTPRINT AWARENESS LEVELS IN TÜRKİYE ACCORDING TO GEOGRAPHICAL REGIONS

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ÖZET

Ekolojik ayak izi, insan aktivitelerinin ekosistemler üzerindeki etkisini ölçmek için geliştirilen bir kavramdır. Gelecek nesillere yaşanabilir bir dünya bırakmak için ekolojik ayak izi farkındalığının artırılması gerekir. Ülkemizde coğrafi bölgelere göre ekolojik ayak izi farkındalığını değerlendirilen yüksek örneklemli bir çalışma olmaması sebebiyle bu araştırmanın yapılması planlanmıştır. Çalışmaya gönüllü olarak katılmayı kabul eden Türkiye'de ikamet eden 19-65 yaş arası 5285 yetişkin ile tabakalı basit tesadüfi örnekleme yöntemi kullanılarak bu araştırma yürütülmüştür. Online anket formu sosyo-demografik özellikleri içeren bilgiler ve Ekolojik Ayak İzi Farkındalık Ölçeğinden (Awareness Scale for Reducing Ecological Footprint) oluşmaktadır. Veri toplama bileşenleri, Google Forms üzerinden online link çevrimiçi platformlardan (Facebook, Instagram, whatsapp vd.) paylaşılmış ve katılımcılar online anketi cevaplandırmışlardır. Ekolojik ayak izi farkındalığının en yüksek olduğu bölgeler Ege ve Akdeniz bölgeleri iken (3.77±0,85 ve 3.72±0.91), en düşük farkındalığın olduğu bölgeler ise Doğu Anadolu ve Güneydoğu Anadolu (3.51±1,09 ve 3.57±1,03) bölgesidir (p=0,003). Enerji alt bileşeni bakımından Doğu Anadolu bölgesinde yaşayan katılımcıların Akdeniz ve Ege bölgesinde yaşayanlara kıyasla farkındalıklarının daha düşük olduğu bulunmuştur (p<0,001). Ege bölgesinde yaşayan bireylerin yasalar alt bileşeni farkındalıklarının Doğu Anadolu bölgesindekilere göre daha yüksek olduğu saptanmıştır (p<0,001). Bu çalışmanın verileri ekolojik ayak izi farkındalığının bölgesel olarak farklılık gösterdiğini doğrulamaktadır. Günümüzde artan çevre sorunlarına dikkat çekmesi ve bireylerin çevre sorunlarının oluşmasında etkilerinin fark edilmesinin sağlaması bakımından ekolojik ayak izi farkındalık ölçümlerinin yapılması, bireylerin eğilimlerinin ve farkındalıklarının belirlenmesi önemlidir.

Anahtar Kelimeler: Ekolojik Ayak İzi, Coğrafik Bölgeler, Ekoloijk Çevreye Farkındalık

ABSTRACT

Ecological footprint is a concept developed to measure the impact of human activities on ecosystems. Awareness of ecological footprint needs to be increased in order to leave a livable world to future generations. This study was planned to be carried out because there is no study with a high sample size that evaluates ecological footprint awareness according to geographical

regions in our country. This study was conducted using the stratified simple random sampling method with 5285 adults between the ages of 19-65 who reside in Turkey and voluntarily agreed to participate in the study. The online questionnaire consists of information including socio-demographic characteristics and the Awareness Scale for Reducing Ecological Footprint. Data collection components were shared from online platforms (Facebook, Instagram, WhatsApp, etc.) via Google Forms, and participants answered the online questionnaire. The regions with the highest ecological footprint awareness are the Aegean and Mediterranean regions (3.77±0.85 and 3.72±0.91), while the regions with the lowest awareness are the Eastern Anatolia and Southeastern Anatolia (3.51±1.09 and 3.57±1.03) regions ($p=0.003$). In terms of the energy subcomponent, it was found that the awareness of the participants living in the Eastern Anatolia region was lower compared to those living in the Mediterranean and Aegean regions ($p<0.001$). It was determined that individuals living in the Aegean region have higher awareness of the under the laws subcomponent than those living in the Eastern Anatolia region ($p<0.001$). The data of this study confirm that ecological footprint awareness varies regionally. It is important to make ecological footprint awareness measurements and to determine the tendencies and awareness of individuals in order to draw attention to the increasing environmental problems today and to ensure that individuals are aware of their impact on the formation of environmental problems.

Keywords: Ecological Footprint, Geographical Regions, Ecological Environmental Awareness

INVESTIGATION OF FACTORS AFFECTING THE MEASUREMENT ACCURACY OF A 2D LiDAR DEVICE UNDER EXPERIMENTAL CONDITIONS
2 BOYUTLU LiDAR CİHAZININ ÖLÇÜM DOĞRULUĞUNA ETKİ EDEN FAKTÖRLERİN DENEYSEL KOŞULLAR ALTINDA İNCELENMESİ

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ABSTRACT
In this study, it has been aimed to experimentally investigate the factors influencing the measurement accuracy of the RP LiDAR A1M8 sensor. In this context, the parameters such as target distance and surface colour have been evaluated and the sensing performances of the device for different surface colours have been analyzed in detail.
Moreover, in the experiments analyzing colour effects, the sensing accuracy of LiDAR sensor has been tested using red, blue, white and green surfaces. The relative error rate has been found to be at the lowest level on the red surface with a relative error rate of 0.59 % and a RMSE value of 19.8 mm. The highest error rate has been found on the blue surface with a relative error rate of 0.78 % and a RMSE value of 28.5 mm. On the other hand, the relative error rate has been measured as 0.62 % and RMSE as 21.9 mm on the white surface, and the relative error rate and RMSE have been measured as 0.64 % and 23.3 mm on the green surface, respectively. These results show that the surface colour has a significant effect on the measurement accuracy of the device depending on the reflection and absorption properties of the laser light. In distance experiments, measurements taken at distances of 2 m, 4 m, 6 m and 2.4 m of the device have been compared. The measurement results particularly taken at the distance of 2.4 m are remarkable. At this distance the average measurement value of the device and the standard deviation value have been computed as 2395.1 mm and 17.1 mm, respectively. Furthermore, the relative error rate and the RMSE value have been measured as - 0.2 % and 5.49 mm, respectively. Therefore, the data obtained show that the device can make very precise measurements at short distances and has a low error rate.
The experimental data obtained in this study have been processed in a Python based analysis platform and the performance of the device has been evaluated using statistical measures such as standard deviation, mean error, relative error and RMSE. In other words, the differences in the performance of the RP LiDAR A1M8 device have been examined in detail under certain operating conditions, thus providing important information for optimizing LiDAR technologies. It is aimed to develop strategies to increase the performance of LiDAR systems, especially by considering the effects of factors such as surface colour and distance on measurement accuracy.
Consequently, these findings will contribute to the development of practical solutions to increase the measurement accuracy of LiDAR devices for different application scenarios.
Keywords: 2D LiDAR, Distance Measurement, Measurement of Colour Variations, Relative Error Rate, RMSE Value

ÖZET

Bu çalışmada, RP LiDAR A1M8 sensörünün ölçüm doğruluğunu etkileyen faktörlerin deneysel olarak araştırılması amaçlanmıştır. Bu kapsamda, yüzey rengi ve hedef mesafe gibi parametreler değerlendirilmiş ve farklı yüzey renkleri için cihazın algılama performansları detaylı bir şekilde analiz edilmiştir.

Ayrıca, renk etkilerinin analiz edildiği deneylerde, kırmızı, mavi, beyaz ve yeşil yüzeyler kullanılarak LiDAR sensörün algılama doğruluğu test edilmiştir. Kırmızı yüzeyde bağıl hata oranı % 0,59 ve karesel ortalama kök hata (RMSE) değeri 19,8 mm ile en düşük seviyede bulunmuştur. Mavi yüzeyde ise bağıl hata oranı % 0,78 ve RMSE 28,5 mm ile en yüksek hata oranı tespit edilmiştir. Öte yandan, beyaz yüzeyde bağıl hata oranı % 0,62 ve RMSE 21,9 mm, yeşil yüzeyde ise bağıl hata oranı ve RMSE, sırasıyla, % 0,64 ve 23,3 mm olarak ölçülmüştür. Bu sonuçlar, yüzey renginin lazer ışığının yansıma ve absorpsiyon özelliklerine bağlı olarak cihazın ölçüm doğruluğu üzerinde önemli bir etkiye sahip olduğunu göstermektedir. Mesafe deneylerinde, cihazın 2 m, 4 m, 6 m ve 2,4 m mesafelerinde yapılan ölçümler karşılaştırılmıştır. Özellikle, 2,4 metre mesafede alınan ölçüm sonuçları dikkat çekicidir. Bu mesafede, cihazın ortalama ölçüm değeri ve standart sapma değeri, sırasıyla, 2395,1 mm ve 17,1 mm olarak hesaplanmıştır. Ayrıca, bağıl hata oranı ve RMSE değeri, sırasıyla, - % 0,2 ve 5,49 mm olarak ölçülmüştür. Dolasıyla, elde edilen bu veriler, cihazın kısa mesafelerde oldukça hassas ölçümler yapabildiğini ve düşük bir hata oranına sahip olduğunu göstermektedir.

Bu çalışmada elde edilen deneysel veriler, Python tabanlı bir analiz platformunda işlenmiş ve cihazın performansı, standart sapma, ortalama hata, bağıl hata ve RMSE gibi istatistiksel ölçütler kullanılarak değerlendirilmiştir. Diğer bir ifadeyle, RP LiDAR A1M8 cihazının performansındaki farklılıklar, belirli çalışma koşulları altında detaylı bir şekilde incelenmiş ve dolayısıyla, LiDAR teknolojilerinin optimize edilmesi için önemli bilgiler sunulmuştur. Özellikle, yüzey rengi ve mesafe gibi faktörlerin ölçüm hassasiyeti üzerindeki etkileri dikkate alınarak, LiDAR sistemlerinin performansını artırmaya yönelik stratejilerin geliştirilmesi hedeflenmiştir.

Sonuç olarak bu bulgular, LiDAR cihazlarının farklı uygulama senaryoları için ölçüm doğruluğunu artırmaya yönelik pratik çözümler geliştirmeye katkı sağlayacaktır.

Anahtar Kelimeler: 2B LiDAR, Mesafe Ölçümü, Renk Varyasyonları Ölçümü, Bağıl Hata Oranı, RMSE Değeri

ORTAOKUL ÖĞRENCİLERİ İÇİN VERİ BİLİMİ EĞİTİMİNE YÖNELİK BİLİŞİM TEKNOLOJİLERİ ÖĞRETMENLERİNİN GÖRÜŞLERİ

INFORMATION TECHNOLOGY TEACHERS' PERSPECTIVES ON DATA SCIENCE EDUCATION FOR MIDDLE SCHOOL STUDENTS

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ÖZET

Teknolojiye ulaşımın kolaylaşması ve teknolojinin kullanımının yaygınlaşması gibi gelişmeler, veri hacminin sürekli ve hızlı bir şekilde artmasına neden olmuştur. Giderek artan veri miktarı karşısında, verilerden anlamlı bilgiler elde edilmesi yönüyle yeni bir alan olan veri bilimi kritik bir rol oynamaktadır. Veri bilimi alanında yaşanan gelişmeler doğrultusunda yeni bir alan olarak veri bilimi eğitimi ortaya çıkmıştır. Her etkileşimin veriler aracılığıyla gerçekleştiği günümüz dünyasında verilerden nasıl anlam çıkarılacağının bilinmesinin olumlu etkisi göz önünde bulundurulduğunda veri bilimi eğitiminin yükseköğretim düzeyinin de ötesinde en küçük yaşlardan itibaren verilmesi kritik hale gelmektedir. Bu çalışmanın amacı, ortaokul öğrencilerine yönelik veri bilimi eğitiminin öğrencilerin bilgi işlemsel düşünme ve problem çözme becerisi üzerindeki etkisi, öğrencilerin düzeylerine uygunluğu ve sağlıklı bir şekilde müfredata entegrasyonu konularında öğretmenlerin görüşlerini incelemektir.

Bu çalışma, nitel araştırma desenlerinden durum çalışması ile yürütülmüştür. Katılımcılar ortaokul kademesinde eğitim veren 9 bilişim teknolojileri öğretmeninden oluşmaktadır. Katılımcıların demografik özelliklerini belirlemek amacıyla "Demografik Bilgi Formu" ve katılımcıların veri bilimi eğitimine yönelik görüşlerinin alınması için "Öğretmenlere Yönelik Yarı Yapılandırılmış Görüşme Formu" oluşturulmuştur. Demografik bilgi formu aracılığı ile toplanan veriler, betimsel analiz yöntemiyle, yarı yapılandırılmış görüşme sonucunda toplanan veriler ise içerik analiz yöntemiyle analiz edilmiştir. Analiz sonucunda katılımcıların genel olarak veri bilimi eğitiminin ortaokul öğrencilerinin bilgi işlemsel becerilerine ve problem çözme becerilerine olumlu yönde katkı sağlayabileceği yönündedir. Bununla birlikte katılımcılar, veri bilimi eğitimi ders içeriklerini ve veri bilimi eğitimindeki uygulamaların yapılması için kullanılan mBlock programını öğrencilerin düzeylerine uygun olabileceğini ifade etmişledir. Ayrıca katılımcılardan bazıları, mBlock programı dışında Excel, Canva vb. programlarının da kullanılabileceğini önermişlerdir. Tüm bunların yanı sıra veri bilimi eğitiminin müfredata sağlıklı bir şekilde entegre edilmesi konusunda katılımcıların görüşlerine yer verilmiştir.

Anahtar Kelimeler: Ortaokul, Veri Bilimi Eğitimi, Problem Çözme Becerisi, Bilgi İşlemsel Düşünme Becerisi

ABSTRACT

The advancements in technology accessibility and widespread technology usage have led to a continuous and rapid increase in data volume. In response to the growing amount of data, data science—a new field dedicated to deriving meaningful insights from data—plays a critical role. The developments in data science have paved the way for the emergence of data science

education as a new field. Considering the positive impact of understanding how to extract meaning from data in a world where every interaction is mediated by data, it has become crucial to introduce data science education from an early age, beyond higher education levels. This study aims to examine the perspectives of teachers on the impact of data science education for middle school students on computational thinking and problem-solving skills, its suitability for their level, and its effective integration into the curriculum.

This research was conducted using a case study design, one of the qualitative research methods. The participants consisted of nine ICT teachers working at the middle school level. To determine the demographic characteristics of the participants, a "Demographic Information Form" was used, and a "Semi-Structured Interview Form for Teachers" was developed to collect their opinions on data science education. The data collected through the demographic information form were analyzed using descriptive analysis, while the data from the semi-structured interviews were analyzed using content analysis.

The analysis revealed that participants generally believed that data science education could positively contribute to middle school students' computational thinking and problem-solving skills. Additionally, participants expressed that the course content and practices in data science education, particularly using the mBlock program, could be suitable for students' levels. Some participants also suggested using programs like Excel, Canva, etc., alongside mBlock. Moreover, the study addressed participants' opinions on the effective integration of data science education into the curriculum.

Keywords: Middle School, Data Science Education, Problem-Solving Skills, Computational Thinking Skills

MÜZİSYEN VE MÜZİSYEN OLMAYAN BİREYLERDE GÖVDE POZİSYON HİSSİ VE KAS İSKELET SİSTEMİ PROBLEMLERİNİN KARŞILAŞTIRILMASI: KESİTSEL ÇALIŞMA

COMPARISON OF TRUNK POSITION SENSE AND MUSCULOSKELETAL PROBLEMS IN MUSICIANS AND NON-MUSICIANS: A CROSS-SECTIONAL STUDY

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ÖZET

Müzisyenler arasındaki başlıca tıbbi problemlerden biri olan kas-iskelet sistemi problemleri proprioseptif duyuyu etkilemektedir. Bu çalışma ile geleneksel Türk Müziği icracılarında kas iskelet sistemi problemleri ve gövde eklem pozisyon hislerinin incelenmesi ve sağlıklı bireylerle karşılaştırılması amaçlandı.

Çalışmaya 18-35 yaş arası konservatuar öğrencileri ile, aynı yaş grubunda bulunan müzisyen olmayan öğrenciler dahil edildi. Katılımcılar, müzisyen ve kontrol olmak üzere iki gruba ayrıldı.Katılımcıların, kas-iskelet sistemi problemleri Nordic Kas-İskelet Sistemi Anketi ve Nümerik Ağrı Skalası ile, torakal ve lumbal bölgede gövde pozisyon hisleri ise Acumar Dual Digital İnklinometre aracılığıyla değerlendirildi.

Çalışmaya, Müzisyen grupta yaş ortancaları 22 yıl olan 17 birey ve kontrol grubunda yaş ortancaları 21 yıl olan 18 birey katıldı. Kontrol grubunun lumbal bölge fleksiyon (p=0,025) ve sağ lateral fleksiyonda (p=0,019) değerlendirilen eklem pozisyon hissi mutlak hatalarının müzisyen gruptan daha düşük olduğu görüldü. Müzisyenlerin kontrol grubuna göre son 12 ayda boyun, omuz ve sırt bölgelerinde daha sık ağrı yaşadıklarını bildirdikleri (p=0,018; p=0,003; p=0,001) ve bu ağrının profesyonel yaşamlarını etkilediği (p=0,045; p=0,045; p=0,008), son bir haftada ise kontrol grubuna göre daha sık (p=0,007) ve şiddetli (p=0,027) sırt ağrısı yaşadıkları tespit edildi.

Çalışmamızda müzisyenlerin gövde eklem pozisyon hissi ve kas iskelet sistemi problemleri açısından kontrol grubundan farklılık gösterdikleri tespit edildi. Türk müziği icracılarında kas iskelet sistemi problemleri hakkındaki bilgiler sınırlıdır. Oysaki, müzisyenlerin mesleki hayatlarını etkileyebilecek problemlerin önüne geçilebilmesi ve etkili müdahalenin yapılabilmesi için altta yatan mekanizmaların rolünü anlamak gereklidir. Gelecekte homojen ve daha büyük örnekleme sahip gruplarda kas iskelet sistemi problemlerine neden olacak

faktörlerin incelendiği ve farklı enstrüman gruplarının karşılaştırıldığı çalışmalara ihtiyaç vardır.
Anahtar Kelimeler: Türk Müziği, İcracı, Kas-İskelet Sistemi, Ağrı, Propriosepsiyon.

ABSTRACT
Musculoskeletal problems are one of the main medical problems among musicians that effect the proprioceptive sense. The aim of this study was to investigate musculoskeletal problems and trunk position sensations in Turkish traditional music performers and compare them with healthy individuals.
Conservatory students aged 18-35 years and non-musicians of the same age group were included in the study. The participants were divided into two groups, musicians and controls. Participants' musculoskeletal problems were assessed using the Nordic Musculoskeletal Questionnaire and the Numeric Pain Scale, and trunk position sense in the thoracic and lumbar regions were assessed using the Acumar Dual Digital Inclinometer.
Seventeen subjects with a median age of 22 years in the musician group and 18 subjects with a median age of 21 years in the control group participated in the study. The absolute errors of trunk position sense assessed in lumbar flexion ($p=0.025$) and right lateral flexion ($p=0.019$) were lower in the control group. Musicians reported more frequent neck, shoulder, and back pain in the past 12 months ($p=0.018$; $p=0.003$; $p=0.001$), more frequent interference with work ($p=0.045$; $p=0.045$; $p=0.045$; $p=0.008$), and more frequent ($p=0.007$) and severe ($p=0.027$) back pain in the past week.
Our study found that musicians differed from the control group in terms of trunk position sense and musculoskeletal problems. Information on musculoskeletal problems in Turkish musicians is limited. However, it is necessary to understand the role of the underlying mechanisms in order to prevent problems that may affect the professional life of musicians and to provide effective intervention. There is a need for future studies that examine the factors that may cause musculoskeletal problems in homogeneous and larger sample groups, and that compare different instrument groups.
Keywords: Turkish Music, Musician, Musculoskeletal System, Pain, Proprioception.

PROBİYOTİK (*BACILLUS VELEZENSIS*) İLAVELİ AYÇİÇEĞİ TOHUMU KÜSPESİNİN ETLİK PİLİÇLERİN PERFORMANSINA VE KESİM ÖZELLİKLERİNE ETKİSİ

EFFECT OF DIETARY SUNFLOWER MEAL WITH PROBIOTICS (*BACILLUS VELEZENSIS*) ON PERFORMANCE AND SLAUGHTERING CHARACTERISTICS OF BROILERS

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ÖZET
Bu çalışmanın amacı, 1 g/kg seviyesinde probiyotik (*Bacillus velezensis*) ilave edilmiş %10 veya %20 seviyelerinde ayçiçeği tohumu küspesi içeren rasyonların erkek etlik piliçlerin performansı, karkas özellikleri ve iç organ ağırlıkları üzerindeki etkilerini belirlemektir. Çalışmada, günlük yaştaki 120 adet erkek Ross 308 civciv, 3 muamele grubuna her birinde 10 civcivin bulunduğu 4 tekerrür olarak dağıtılmıştır. Muamele grupları ayçiçeği tohumu küspesi ve probiyotik içermeyen rasyonlar (ATK0), %10 ayçiçeği tohumu küspesi ve 1 g/kg probiyotik (ATK10) ve %20 ayçiçeği tohumu küspesi ve 1 g/kg probiyotik (ATK20) içeren rasyonlardan oluşmuştur. Performans parametreleri 10., 25. ve 42. günlerde belirlenmiş olup, karkas ve iç organ ağırlıkları ise çalışmanın sonunda (42. gün) tespit edilmiştir.
Çalışmada 10. gün canlı ağırlık, 0-10. gün canlı ağırlık artışı, yem tüketimi ve yem değerlendirme oranı istatistiksel olarak etkilenirken ($P<0.05$), diğer dönemlerde ise bu etki gözlenmemiştir ($P>0.05$). Kontrol grubu ile karşılaştırıldığında etlik piliçlerin ATK10 grubunda 0-10. gün periyodunda yem tüketimi artmış, ATK20 grubunda ise yem değerlendirme oranı önemli düzeyde artmıştır ($P<0.05$). Erkek piliçlerin kesim özellikleri ise muamele rasyonlarından etkilenmemiştir ($P>0.05$). Bu çalışmanın sonuçlarına göre erkek piliç rasyonlarda probiyotik ilavesiyle %10'a kadar ayçiçeği küspesi kullanılabileceği söylenebilir.
Anahtar Kelimeler: Ayçiçeği Tohumu Küspesi, Etlik Piliç, Karkas, Performans, Probiyotik

ABSTRACT
The aim of this study was to determine the effects of diets containing 10 or 20% sunflower meal supplemented with 1 g/kg probiotics (*Bacillus velezensis)* on the performance, carcass characteristics and visceral weights of male broilers. In the study, 120 male Ross 308 chicks of day-old age were distributed into 3 treatment groups with 4 subgroups of 10 birds each. Treatment groups consisted of diets without sunflower meal and probiotics (SFM0), 10% sunflower meal and 1 g/kg probiotics (SFM10) or 20% sunflower meal and 1 g/kg probiotics

(SFM20). Performance parameters were determined on the 10th, 25th and 42nd days, and carcass and visceral weights were determined at the end of the study (42nd day).
In the study, 10th day body weight, 0-10th days body weight gain, feed intake, and feed conversion ratio were statistically affected (P<0.05), but this effect was not observed in other periods (P>0.05). Compared to the control group, feed intake increased in the SFM10 group during the 0-10th day period, and the feed conversion ratio increased significantly in the SFM20 group (P<0.05). Slaughtering characteristics of male broilers were not affected by the treatment diets (P>0.05). According to the results of this study, it can be said that sunflower meal can be used up to 10% with the addition of probiotics in male broiler diets.
Keywords: Broiler, Carcass, Performance, Probiotics, Sunflower Meal

YAPAY ZEKA, ENERJİ VE ÇEVRE İLİŞKİSİ
THE RELATIONSHIP BETWEEN ARTIFICIAL INTELLIGENCE, ENERGY, AND THE ENVIRONMENT

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ÖZET
Bu çalışma, yapay zekânın enerji ve çevre alanındaki rolünü inceleyerek, sürdürülebilir kalkınma hedefleri doğrultusunda sağladığı katkıları değerlendirmeyi amaçlamaktadır. Enerji üretim ve tüketim süreçlerinin çevresel etkileri, günümüzün en önemli küresel sorunlarından biridir. Yapay zekâ, enerji sektöründe verimliliği artırmanın yanı sıra çevresel sürdürülebilirliği destekleyen yenilikçi çözümler sunmaktadır. Araştırma kapsamında, yapay zekânın enerji ve çevre alanlarında sağladığı katkılar genel bir perspektiften incelenecektir. Bu bağlamda, yapay zekânın enerji verimliliği, karbon salınımının azaltılması ve çevresel izleme süreçlerindeki rolü gibi konular üzerinde durulacaktır.
Literatür taraması yöntemiyle, yapay zekânın enerji üretiminde kaynakların optimizasyonu, enerji tüketiminin yönetimi ve çevre kirliliğinin azaltılması gibi konular değerlendirilecektir. Bu çalışma, yapay zekânın enerji sektöründeki uygulamalarının çevresel etkileri azaltma ve sürdürülebilirlik hedeflerine ulaşma açısından nasıl katkı sağladığını genel bir çerçevede ele almaktadır. Ayrıca yapay zekâ teknolojilerinin, enerji yönetimi ve çevresel izleme süreçlerindeki potansiyel rolü değerlendirilecektir.
Sonuç olarak, yapay zekanın enerji ve çevre ilişkisini yeniden şekillendiren bir teknoloji olduğu vurgulanmaktadır. Bunlara ilaveten bu çalışma, yapay zekâ teknolojilerinin daha geniş bir çevresel ve enerji politikası çerçevesinde nasıl kullanılabileceğine dair bilimsel bir temel oluşturmayı hedeflemektedir. Elde edilen bulgular, enerji ve çevre alanında stratejik kararların alınmasına katkı sağlayacaktır. Yapay zekânın enerji ve çevre alanındaki potansiyelinden daha fazla faydalanmak için, enerji verimliliğini artırmaya yönelik yapay zekâ tabanlı çözümler yaygınlaştırılmalıdır. Karbon emisyonlarını izleyip azaltmak için yapay zekâ kullanılarak yenilenebilir enerji kaynaklarının entegrasyonu hızlandırılabilir. Ayrıca, çevresel izleme sistemleri için akıllı sensörler ve veri analitiği teknolojileri geliştirilerek çevre kirliliğiyle mücadele daha etkili hale getirilebilir.
Anahtar Kelimeler: Yapay Zekâ, Enerji, Çevre

ABSTRACT
This study aims to evaluate the contributions of artificial intelligence in the field of energy and environment by examining its role, in line with sustainable development goals. The environmental impacts of energy production and consumption processes are one of today's most significant global issues. Artificial intelligence not only increases efficiency in the energy sector but also offers innovative solutions that support environmental sustainability. Within the scope of the research, the contributions of artificial intelligence to the energy and environmental sectors will be examined from a general perspective. In this context, topics such as the role of artificial intelligence in energy efficiency, reduction of carbon emissions, and environmental monitoring processes will be emphasized.
Through the literature review method, topics such as the optimization of resources in energy production, the management of energy consumption, and the reduction of environmental

pollution will be evaluated. This study examines how the applications of artificial intelligence in the energy sector contribute to reducing environmental impacts and achieving sustainability goals within a general framework. Additionally, the potential role of artificial intelligence technologies in energy management and environmental monitoring processes will be evaluated. In conclusion, it is emphasized that artificial intelligence is a technology that reshapes the relationship between energy and the environment. In addition, this study aims to establish a scientific foundation for how artificial intelligence technologies can be utilized within a broader framework of environmental and energy policies. The findings obtained will contribute to strategic decision-making in the fields of energy and the environment. To make greater use of the potential of artificial intelligence in the energy and environment sector, AI-based solutions aimed at increasing energy efficiency should be widely adopted. By using artificial intelligence to monitor and reduce carbon emissions, the integration of renewable energy sources can be accelerated. Additionally, by developing smart sensors and data analytics technologies for environmental monitoring systems, the fight against environmental pollution can be made more effective.

Keywords: Artificial Intelligence, Energy, Environment

AVRUPA BİRLİĞİ ÜLKELERİNDE İSTİHDAM KALİTESİNİN İSTATİSTİKSEL OLARAK İNCELENMESİ: KÜMELEME ANALİZİ

STATISTICAL INVESTIGATION OF EMPLOYMENT QUALITY IN EUROPEAN UNION COUNTRIES: CLUSTER ANALYSIS

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ÖZET

Bu çalışma, Avrupa Birliği (AB) ülkelerindeki istihdam kalitesini çok boyutlu bir yaklaşım ile analiz ederek ülkeler arasındaki farklılıkları incelemeyi amaçlamaktadır. İstihdam kalitesi, işsizlik oranı, çalışma saatleri, ücret düzeyleri, iş güvencesi ve sosyal koruma mekanizmaları gibi bir dizi göstergeyle tanımlanmıştır. Araştırmada, Eurostat verilerinden elde edilen göstergeler kullanılarak AB ülkeleri arasındaki benzerlikler ve farklılıklar belirlenmiştir. İstatistiksel analiz olarak hiyerarşik kümeleme tekniği seçilmiştir. Bu teknik, ülkelerin istihdam kalitesi açısından homojen gruplar halinde sınıflandırılmasına olanak tanımaktadır.

Analiz sonucunda, AB ülkeleri arasında belirgin istihdam kalitesi farkları tespit edilmiş ve benzer göstergelere sahip ülkeler belirli gruplar halinde toplanmıştır. Çalışma, AB ülkelerindeki istihdam politikalarının karşılaştırmalı bir şekilde değerlendirilmesine katkı sağlamaktadır. Özellikle düşük performans gösteren ülkeler için istihdam kalitesini iyileştirmeye yönelik politika önerileri geliştirilmesi gerektiğine dair önemli bir referans sunmaktadır. Çalışmanın sonuçları, AB'nin sosyal ve ekonomik bütünleşme süreçlerine ilişkin stratejik kararların alınmasında da önemli bir rehber rolü oynamaktadır.

Sonuç olarak, bu araştırma, AB ülkelerindeki istihdam kalitesinin bölgesel farklılıklarını ortaya koyarak, ekonomik sürdürülebilirlik ve sosyal refah açısından değerli bilgiler sağlamaktadır. Ayrıca, AB'nin uyum politikaları çerçevesinde ülkeler arasında ortak bir istihdam kalitesi standardının oluşturulmasına yönelik bilimsel bir temel sunmaktadır. Bu çalışma hem politika yapıcılar hem de akademik çevreler için önemli bir kaynak oluşturmaktadır. AB genelinde istihdam kalitesini izlemek için merkezi bir sistem oluşturulmalı ve dijitalleşmeye uyum için stratejiler geliştirilmelidir. Bu adımlar, AB ülkeleri arasındaki istihdam kalitesi farklılıklarını azaltmada yardımcı olacağı düşünülmektedir.

Anahtar Kelimeler: Avrupa Birliği, Kümeleme Analizi, İstihdam Kalitesi

ABSTRACT

This study aims to examine the differences between countries by analyzing the quality of employment in European Union (EU) countries using a multidimensional approach. Employment quality has been defined by a series of indicators such as the unemployment rate, working hours, wage levels, job security, and social protection mechanisms. In the study, similarities and differences among EU countries were identified using indicators obtained from Eurostat data. The hierarchical clustering technique has been chosen as the statistical analysis method. This technique allows for the classification of countries into homogeneous groups in terms of employment quality.

As a result of the analysis, distinct differences in employment quality among EU countries were identified, and countries with similar indicators were grouped into specific categories. The study contributes to the comparative evaluation of employment policies in EU countries. It provides an

important reference for the need to develop policy recommendations aimed at improving employment quality, especially for low-performing countries. The study's results also play an important guiding role in making strategic decisions regarding the EU's social and economic integration processes.

In conclusion, this research provides valuable insights into the regional differences in employment quality in EU countries, contributing to economic sustainability and social welfare. Additionally, it provides a scientific basis for establishing a common employment quality standard among countries within the framework of the EU's cohesion policies. This study serves as an important resource for both policymakers and academic circles. A central system should be established to monitor employment quality across the EU, and strategies should be developed to adapt to digitalization. These steps are thought to help reduce the differences in employment quality among EU countries.

Keywords: European Union, Cluster Analysis, Employment Quality

FİNANSAL YATIRIM DANIŞMANLIĞININ AHLAKİ BOYUTU

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ÖZET

Finansal danışman, bireylerin veya kurumların mali hedeflerine ulaşmaları için profesyonel destek sağlayan, yatırımları, tasarrufları ve harcamaları en verimli şekilde yönetmeleri konusunda yol gösteren bir uzmandır. Finansal danışmanlar, müşterilerinin gelir, gider, yatırım ve risk profiline göre kapsamlı bir analiz yaparak finansal stratejiler önerirler. Bu stratejiler, emeklilik planlaması, birikim hedefleri, vergi yönetimi, borç yapılandırma ve yatırım kararları gibi farklı finansal alanları kapsar.

Finansal danışmanlığın ahlaki boyutu, müşterilere doğru, dürüst ve güvenilir bilgi sunma sorumluluğunu içerir. Finansal danışmanlar, müşterilerinin çıkarlarını korumak için yasal ve etik kurallara uymalı, şeffaf olmalı ve kendi çıkarlarını müşterilerinin önüne koymamalıdır.

Finansal yatırım danışmanlığının ahlaki boyutu, yatırımcıların çıkarlarını koruyarak ve doğru bilgilendirilmelerini sağlayarak onları en iyi şekilde yönlendirmek sorumluluğunu içerir. Bu süreçte etik değerlerin öne çıkması, finansal danışmanların güvenilirliklerini korumasını sağlar ve yatırımcılara finansal refah hedeflerinde destek verir. Ancak bu süreçte, danışmanların kâr amacı ve müşterilerinin çıkarlarını dengelemesi gerekir. Unutulmamalıdır ki Yatırım danışmanının ahlakı, müşterilerin finansal çıkarlarını korumak, doğru bilgi vermek ve şeffaf olmak üzerine kurulu bir etik çerçeveye dayanır. Bu etik kurallar, yatırım danışmanının güvenilir, tarafsız ve adil bir hizmet sunmasını sağlamaya yönelik standartları içerir. Yatırım danışmanının işini yaparken bu ahlaki sorumlulukları göz önünde bulundurması, finansal piyasaların sağlıklı işleyişi ve müşteri güveni açısından büyük önem taşır.

Bu çalışmada yatırım danışmanlığının ahlaki boyutu ele alınmakta ve internet üzerinden kolaylıkla ulaşılabilene kamuoyuna açıklanmış yatırım danışmanlığı şirketleri ile ilgili şikayetler incelenmiştir.

Anahtar Kelimeler: Davranışsal Finans, Finansal Yatırım, Yatırım Danışmanlığı, Yatırım Danışmanlığında Ahlaki Boyut

THE MORAL DIMENSION OF FINANCIAL INVESTMENT CONSULTANCY

ABSTRACT

A financial advisor is an expert who provides professional support to individuals or institutions to achieve their financial goals and guides them in managing investments, savings and expenses in the most efficient way. Financial advisors recommend financial strategies by conducting a comprehensive analysis of their clients' income, expenses, investment and risk profiles. These strategies cover different financial areas such as retirement planning, savings goals, tax management, debt restructuring and investment decisions.

The moral dimension of financial advisory includes the responsibility to provide accurate, honest and reliable information to clients. Financial advisors must comply with legal and ethical rules to protect their clients' interests, be transparent and not put their own interests ahead of their clients'.

The moral dimension of financial investment advisory includes the responsibility to guide investors in the best way by protecting their interests and ensuring that they are correctly informed. The prominence of ethical values in this process ensures that financial advisors maintain their reliability and support investors in their financial well-being goals. However, during this process, advisors must balance their profit motive and the interests of their clients. It should not be forgotten that the ethics of an investment advisor are based on an ethical framework based on protecting the financial interests of clients, providing accurate information and being transparent. These ethical rules include standards aimed at ensuring that the investment advisor provides a reliable, impartial and fair service. It is of great importance for the investment advisor to consider these moral responsibilities while performing his/her job in terms of the healthy functioning of financial markets and customer trust. This study examines the moral dimension of investment advisory and examines complaints about investment advisory companies that are easily accessible on the internet and are made public.

Keywords: Behavioral Finance, Financial Investment, Investment Consulting, Moral Dimension in Investment Consulting

THE IMPACT OF SOCIAL ENVIRONMENT ON THE DIETARY BEHAVIOR OF YOUNG PEOPLE

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Introduction: The formation and regulation of eating behavior is a multifactorial process, which is significantly determined by the influence of the social environment. The eating habits of the young population affect not only personal health but also the overall well-being of society. The choice of food type, quantity, and mode is the result of a combination of social, cultural, economic, and environmental factors, which determine the dynamics of eating behavior and the factors affecting it.
Aim of research: Assessment of the eating behavior of the young population, based on a social modeling algorithm.
Research Methods: Meta-Analysis, Comparative Analysis.
Results: This study focuses on the various aspects of the social environment and the mechanisms through which they determine the eating behavior of the young population. Behavioral theories, which are based on the influence of structural and environmental factors on human behavior, are an important tool in understanding eating habits and behaviors. These theories explain how the environment, social relationships, and individual characteristics influence people's eating patterns. Recent research, which combines social cognitive theory and the theory of planned behavior, highlights the effectiveness of these models in promoting healthy eating habits ; examined parental decisions regarding children's vegetable intake, demonstrating that attitudes, behavioral control, and subjective norms are strong predictors of eating intentions and behaviors; behavioral beliefs, and role models significantly influenced physical activity levels and eating behaviors; focused on mothers' supplementary nutrition education, which demonstrated improved knowledge and behaviors related to nutrition; evaluated a nutrition intervention for adolescents, finding positive changes in eating habits based on SCT and a transtheoretical model.
Conclusion: Taking into account cultural norms and economic factors, it is possible to develop behavioral interventions that will promote the development of healthy eating habits.
Keywords: Dietary Behavior, Young People

THE IMPACT OF GEOGRAPHICAL AND SOCIOLOGICAL CHARACTERISTICS ON CULINARY CULTURE: A QUALITATIVE STUDY ON THE EXAMPLE OF GIRESUN

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Abstract
The research was planned to determine how the geographical and sociological structure of Giresun province affects the culinary culture. Eighteen participants between the ages of 40-66 in the centre and districts of Giresun constitute the sample of the study. In the first stage of this form, the geographical and sociological structure of the region was examined. In the second stage, the extent to which the geographical and sociological structure affects the culinary culture of Giresun was evaluated through descriptive analysis. In this way, the research will reveal the inventory of the culinary culture of the region and contribute to the literature on Black Sea cuisine. According to the results of the research; the patriarchal family system continues in Giresun province. In the region, women are at the top of the division of labour both in outdoor areas such as gardens and fields and in the kitchens of the house. Almost all of the tasks in the kitchens are attributed to women. The dishes created in the kitchen have to be prepared quickly and consumed quickly. Because women have more work waiting for them to do. It was determined that the evaluation of the dishes in the culinary culture as 'half raw, half cooked' was affected by this situation. It was also particularly emphasized that it is healthier not to overcook the food. It has been determined that the expression "Black Sea people", to which qualities such as being restless, hasty, nervous and hard-working are attributed, is reflected in the food culture, nutrition habits and cooking methods. As a result, it has been determined that geographical structure and personality traits have an impact on the food culture of Giresun province.
Keywords: Geography, Sociological Structure, Giresun Culinary Culture

COĞRAFİ VE SOSYOLOJİK ÖZELLİKLERİN MUTFAK KÜLTÜRÜNE ETKİSİ; GİRESUN ÖRNEĞİNDE NİTEL BİR ARAŞTIRMA

Özet
Araştırma Giresun ilinin coğrafi ve sosyolojik yapısının mutfak kültürünü nasıl etkilediğini belirlemek amacıyla planlanmıştır. Giresun merkez ve ilçelerindeki 40-66 yaş aralığındaki 18 katılımcı araştırmanın örneklemini oluşturmaktadır. Verilerin toplanmasında yarı yapılandırılmış görüşme formu kullanılmıştır. Bu formun ilk aşamasında bölgenin coğrafi ve sosyolojik yapısı incelenmiştir. İkinci aşamada ise coğrafi ve sosyolojik yapının Giresun mutfak kültürünü hangi düzeyde etkilediği betimsel analiz yapılarak değerlendirilmiştir. Bu sayede yapılan araştırma bölge mutfak kültürünün envanterini ortaya çıkaracak ve Karadeniz mutfağı konusunda alan yazına katkı sağlayacaktır. Araştırma sonuçlarına göre; Giresun ilinde ataerkil aile sistemi devam etmektedir. Bölgede hem bahçe ve tarla gibi dış alanlarda hem de evin mutfaklarında iş bölümünün en üstünde kadınlar yer almaktadır. Mutfaklarda yer alan görevlerin neredeyse tamamı kadınlara atfedilmiştir. Mutfakta ortaya çıkarılan yemekler hızlı

hazırlanıp hızlı tüketilmek zorundadır. Çünkü kadınların yapacağı daha çok iş onları beklemektedir. Mutfak kültüründe yer alan yemeklerin "yarı çiğ, yarı pişmiş" olarak değerlendirilmesinin bu durumdan etkilediği belirlenmiştir. Ayrıca yemeklerin çok fazla pişirilmemesinin daha sağlıklı olduğu özellikle vurgulanmıştır. Tez canlı, aceleci, sinirli, çalışkan gibi niteliklerin atfedildiği "Karadeniz insanı" ifadesinin yemek kültürüne, beslenme şekillerine ve pişirme yöntemlerine yansıdığı tespit edilmiştir. Sonuç olarak coğrafi yapının ve kişilik özelliklerinin Giresun ili yemek kültürü üzerinde etkili olduğu tespit edilmiştir.
Anahtar Kelimeler: Coğrafya, Sosyolojik Yapı, Giresun Mutfak Kültürü

CULTIVATION OF SPECIALTY MUSHROOMS IN AYODHYA (U.P.) INDIA

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ABSTRACT
Six oyster mushroom species—***Pleurotus sajor-caju, P. florida, P. flabellatus, P. eryngii, P. eous, and P. citrinopileatus***—along with ***Hypsizygus ulmarius, Calocybe indica,*** and ***Volvariella volvacea*** were cultivated under natural conditions at Ayodhya, a city located in the northern Indian state of Uttar Pradesh. Chemically pateurized wheat straw supplemented with 20% autoclaved rice bran was used as the growing medium for most species. However, for *Volvariella volvacea*, paddy straw was used as the substrate which was supplemented with gram flour during spawning. The beds were prepared from pasteurized substrate by multilayered (3) spawning. To ensure proper aeration, 6–8 holes were punched into the sides of the plastic bags containing the substrate. Once the substrates were colonized by mushroom mycelium, several holes were made in polythene bags instead of complete removal of bag. The bags were irrigated as per requirement. In case of *Calocybe indica*, the mouth of bag was opened after completion of spawn run and casing soil was applied to support fruiting. Throughout the process, the growing room's relative humidity was maintained between 85% and 95% by regular misting. Once the fruiting bodies reached the appropriate size, they were harvested carefully to avoid damage.

Key words: Specialt**y** mushrooms, *Pleurotus sajor-caju, P. florida, P. flabellatus, P. eryngii, P. eous, and P. citrinopileatus, Hypsizygus ulmarius, Calocybe indica, Volvariella volvacea,* Mushroom cultivation, Ayodhya

MARKET RESEARCH RELATED TO THE PROMOTION AND SALES OF GOODS AS A MARKETING SPHERE INFLUENCES THE BUSINESS OF NUMEROUS COMPANIES IN TRANSITION COUNTRIES SUCH AS THE REPUBLIC OF SERBIA

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Abstract: The influence of real marketing in the business of the real economy represents the basic task of modern business for many companies that operate in the state economy. This is of great importance for the business of a large number of small economies, transitional economies that need to create a better performance on the market and retain customers, that is, marketing has become its central function, which has been given a key role in realizing the function of improving economic activities. In this way, marketing becomes a development factor of a large number of companies regardless of size, the activity in which they perform the predominant activity. In real business life, it is much more difficult to acquire new, real or paying customers than to keep existing ones. It is even more difficult to regain the lost market positions, that is, the trust of people who once bought products and services from the company. That's why marketing-oriented companies attach great importance to creating good relations with existing customers through constant improvement of their long-term satisfaction, better performance on the market, giving advantages in market performance, as well as continuously looking for new customers. At the same time, companies through marketing try to constantly work on gaining new customers by creating certain additional values that they will achieve by selling products on the target market where they market the company's products through marketing. Activities such as the friendliness and helpfulness of sellers, the beauty and comfort of the sales area, flexibility of working hours, the possibility of exchanging goods, giving goods on credit, giving bonuses on target products, etc. are activities aimed at increasing the total sales of the company.
Keywords: the influence of real marketing, management, business of the real economy.

MARKETING ACTIVITIES AND MARKET RESEARCH RELATED TO THE PROMOTION AND SALES OF HETEROGENEOUS GOODS BASED ON MANAGEMENT DECISIONS MADE BY THE COMPANY'S TOP MANAGEMENT

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Abstract: Food product market research as part of specific innovative activities of companies applying constant marketing Market research, especially food products, should be a constant activity of the most innovative type for a large number of companies. Innovativeness marketing activity is largely used when making managerial decisions of the top management of heterogeneous companies, especially evaluated through the application of new ways of selling, product promotion, market performance, etc. Market research is an on-going activity that is carried out in accordance with approved marketing plans, budget funds available to marketing and plans they bring for future events in accordance with their plans outlined by the company's top management. The goal of such activities that marketing designs and implements in order to achieve effects in order to increase the company's profit after appearing on the markets refers primarily to the long-term definition of sales plans in the future. The presentation of marketing activities is subject to the continuous control of management bodies in companies, and the marketing of the company serves as an instrument of practical action in the company.
Keywords: market research, marketing, management reporting, efficiency.

SCIENTIFIC CLASSIFICATION OF THE EXHIBITION AT THE SAMAD VURGHUN HOUSE MUSEUM
SƏMƏD VURĞUNUN EV MUZEYİNİN EKSPOZİSİYASININ ELMİ TƏSNİFATI

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Xülasə:

Azərbaycanın dahi şairi, görkəmli dramaturq, ictimai xadim, alim, iki dəfə Dövlət mükafatı laureatı Səməd Vurğunun ev-muzeyi Azərbaycanda yazıçı və bəstəkarların xatirəsini əbədiləşdirmək üçün yaradılmış ilk memorial muzeydir. S. Vurğunun ev muzeyinin ekspozisiyasının elmi təsnifatı, adətən, müxtəlif kataqoriyalar üzrə tərtib edilir. Muzeyin ekspozisiyası isə yazıçının həyat yolu yəni şairin şəxsi əşyaları, geyimləri, məktubları, yazıçının həyatının müxtəlif mərhələlərinə aid fotoşəkillər, ailə və dostları ilə olan şəkilləri, həmçinin məktəb, universitet və əmək fəaliyyəti ilə bağlı sənədlər kimi kataqoriyalara bölünərək təşkil olunur. Bundan başqa şairin nəşrləri tərcümə etdiyi əsərlər, mətbuatda dərc olunan məqalələri və s. ekspozisiyada xüsusi bir kataqoriya kimi təşkil olunub. Bütün bu təşkil edilən kataqoriyalar S.Vurğunun həyatını və yaradıcılığını ziyarətçilərə tanıtmaqla bərabər, yazıçının müasir ədəbiyyata təsirini də nümayiş etdirir.

Açar sözler: Səməd vurğun, ev muzeyi, bədii tərtibat, ekspozisiya

Summary:

The house museum of Samad Vurghun, Azerbaijan's great poet, prominent, public figure, scholar, and two-time State Prize laureate, is the first memorial museum in Azerbaijan created to immortalize the memory of writers and composers. The scientific classification of the exhibition at Samad Vurghun's house museum is generally organized into various categories.

The museum's exhibition is divided into categories such as the poet's personal belongings, clothing, letters, photos from different stages of his life, including those with family and friends, as well as documents related to his school, university, and professional activities. Additionally, a special category is dedicated to the poet's publications, the works he translated, articles published in the press, and other related materials. All of *the*se categories not only introduce visitors to Vurghun's life and creativity but also demonstrate his impact on modern literature.

Key words: Samad Vurgun, home museum, artistic design, exposition

THE ROLE OF SAMAD VURGUN'S HOME MUSEUM IN INTRODUCING HIS PERSONALITY
SƏMƏD VURĞUN ŞƏXSİYYƏTİNİN TANIDILMASINDA ONUN EV MUZEYİNİN ROLU

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Xülasə
Azərbaycanda yazıçı və bəstəkarların xatirəsini əbədiləşdirmək üçün yaradılmış ilk memorial muzey Səməd Vurğunun Ev Muzeyi hesab edilir. Belə ev muzeylərinin yaradılmasında əsas məqsəd dahi şəxsiyyətlərimizin tanıdılması və onların dəyərlərini qorumaqdır. Səməd Vurğunun ev muzeyində onun şəxsiyyətinin tanınması üçün bir çox işlər görülüb və görülməkdədir. Səməd Vurğuna aid xatirə əşyaları, orijinal fotoşəkillər, rəsm əsərləri, əlyazmalar, tədqiqat əsərləri, hədiyyələr, ötən illərin qazet-jurnalları və s. materiallar muzeyin fondunu zənginləşdirmişdir. Dahi şairin bədii yaradıcılığı və ictimai fəaliyyətini əks etdirən nümunələrini onun anadan olduğu Qazax rayonunun Yuxarı Salahlı kəndində fəaliyyət gösdərən filialının da böyük rolu vardır. Bu filialdakı sərgilər və onun arxivində qorunan hər bir dəyərli əşya Səməd Vurğun şəxsiyyətinin cəmiyyətə tanıdılması üçün böyük əhəmiyyətə malikdir. Dahi şairin Azərbaycanın tanınmış bəstəkarları ilə sıx yaradıcılıq bağları olmuşdur. Onun ev muzeyində qorunan bir çox musiqi əşyası buna nümunə ola bilər.
Açar sözlər: Səməd Vurğun, muzey, dahi şəxsiyyət, poeziya,ekspozisiya

Summary
Home Museum of Samad Vurgu is considered the first memorial museum created to perpetuate the memory of writers and composers in Azerbaijan. In the home museum of Samad Vurgu, many works have been done and are being done to recognize his personality. Memorabilia belonging to Samad Vurgun, original photographs, paintings, manuscripts, research works, gifts, newspapers and magazines of the past years, etc. the materials have enriched the museum's fund. Examples of the genius poet's artistic creativity and social activity have a great role in the branch operating in Yukhari Salahli village of Gazakh district, where he was born. Exhibitions in this branch and every valuable item preserved in its archive are of great importance for introducing the personality of Samad Vurgun to the society. The genius poet had close creative ties with well-known composers of Azerbaijan. Many musical items preserved in his house museum can be an example of this.
Key words: Samad Vurgun, museum, genius, poetry, exposure

İKİZ AÇIK HİPOTEZİ VE TÜRKİYE ÜZERİNE İNCELEME

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Özet
Tüm ekonomiler için enflasyon önemli bir sorundur. Bu sorunu inceleyen iktisat teorisyenleri enflasyonu çeşitli nedenlere bağlamış ve çözüm önerileri sunmuştur. Parasal hareketler, dışsal nedenler, arz talep dengesizlikleri gibi birçok neden sayılabilir. Türkiye'de 2020 ve sonrası yaşanan enflasyonun en önemli nedeni "kur hareketleri" olarak kabul edilir. 2018 de faiz indirimleri ile kur artışları maliyet enflasyonunu körüklemekteyken, merkez bankası kurdaki istikrarsızlığı gidermek için döviz rezervleri ile piyasaya müdahalelerde bulunuyordu. Bu durum bütçe ve ödemeler bilançosunu da etkiledi. Ödemeler bilançosu kalemlerinden olan dış ticaret açığı Türkiye'nin kronik bir sorunudur. Cari açığın (dış ticaret açığının) kronik bir sorun olma sebepleri öncelikle ithal girdilerin vazgeçilemez kalemlerden oluşması gelir. Bunlar enerji, hammadde, ara mal gibi üretim de son derece önemli olan mallardır. Bundan dolayı ithalata dayalı bir büyüme vardır. Bunun yanında bilgi teknoloji ürünlerinin, elektronik ve otomotiv gibi tüketim alanlarının da ithal ürünlerden oluştuğu düşünüldüğünde dış ticaret açığının kaçınılmaz olduğu anlaşılacaktır.
İkiz açık hipotezi bir ekonomide hem bütçe açığı hem de cari işlemler (ya da dış ticaret) açığı olması durumu olarak ifade edilmektedir. Bütçe ve cari işlemler değişkenleri arasında etkileşim olup olmadığının bilinmesi, eğer etkileşim varsa yönünün ve etki düzeyinin saptanması, ayrıca bu etkileşim üzerinde belirleyici olan diğer değişkenlerin tespit edilmesi, ikiz açık problemini gidermek üzere uygulanacak iktisat politikaları bakımından önemlidir. Bu çalışmada Türkiye'de 2015-2023 dönemi dış ticaret ve bütçe verileri incelenerek ikiz açık hipotezinin varlığı üzerine inceleme yapılacak ve uygulanan iktisat politikaları yorumlanacaktır.
Anahtar Kelimeler: ikiz açık, enflasyon, bütçe, kamu harcamaları, kamu gelirleri

TWIN DEFICIT HYPOTHESIS AND STUDY ON TURKEY

Abstract
Inflation is an important problem for all economies. Economic theorists who have examined this problem have attributed inflation to various reasons and offered solutions. There are many reasons such as monetary movements, external reasons, supply-demand imbalances. The most important reason for the inflation experienced in Turkey in 2020 and beyond is considered to be "exchange rate movements". While interest rate cuts and exchange rate increases fueled cost inflation in 2018, the central bank was intervening in the market with foreign exchange reserves to eliminate the instability in the exchange rate. This situation also affected the budget and balance of payments. The foreign trade deficit, which is one of the balance of payments items, is a chronic problem for Turkey. The reasons why the current account deficit (foreign trade deficit) is a chronic problem are primarily that imported inputs are indispensable items. These are goods that are extremely important in production such as energy, raw materials, and

intermediate goods. Therefore, there is an import-based growth. In addition, when it is considered that information technology products, electronics, and automotive consumption areas are also composed of imported products, it will be understood that the foreign trade deficit is inevitable. The twin deficit hypothesis is expressed as the situation where there is both a budget deficit and a current account (or foreign trade) deficit in an economy. Knowing whether there is an interaction between budget and current account variables, determining the direction and level of impact if there is an interaction, and also determining other variables that are determinants of this interaction are important in terms of economic policies to be implemented to eliminate the twin deficit problem. In this study, the existence of the twin deficit hypothesis will be examined by examining the foreign trade and budget data for the period 2015-2023 in Turkey and the implemented economic policies will be interpreted.

Keywords: twin deficit, inflation, budget, public expenditures, public revenues

TÜRKİYE'DE DİJİTAL SAĞLIK ÜZERİNE EKONOMİK BİR ANALİZ

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ÖZET

Sağlık sektörü hayati önem taşımasından ve yüksek maliyetli olmasından ötürü devlet tarafından kontrol altında tutulur. Sağlık alanındaki finansal uygulamalar ülkeden ülkeye farklılık gösterir. Literatürde kamu sağlık politikası uygulamasının finansal işleyişi; Beveridge modeli, Bismarck modeli, ulusal sağlık sigortası modeli ve cepten ödeme modeli şeklinde sınıflandırılmıştır. Günümüz dünyasında yüksek maliyetli bir hizmet olan sağlık sektörü için yatırım ve planlama yaygın olarak kamu kaynakları ile yapılmaktadır. Özel sektör yatırımları da kamu denetimine tabi tutulur.

Sağlıkta teknolojinin kullanımının yaygınlaşması, küresel pazardaki büyümenin ana nedeni olarak öne çıkarken teknolojik cihazların benimsenme oranının her geçen gün daha da arttığı gözlemleniyor. Pek çok ülkede olduğu gibi Türkiye'de de sağlık sisteminde maliyetlerin etkin yönetilmesi, hizmet kalitesi ve verimin artırılması, önleyici sağlık hizmetlerinin sunulması ve yaşam kalitesinin yükseltilmesi amacıyla sağlık sektöründe dijital teknolojilerden yararlanmak artık bir zorunluluk haline geliyor. Dijital sağlık; mobil sağlık (mHealth) uygulamalarını, elektronik sağlık kayıtlarını (EHR'ler), elektronik tıbbi kayıtları (EMR'ler), giyilebilir cihazları, tele-sağlık ve tele-tıp ile kişiselleştirilmiş tıbbı içeren bir alan olarak öne çıkıyor.

Bu çalışmanın amacı; sağlık sektöründe dijital araçların kullanımının finansal boyutu ve sektördeki etkinliği incelenecektir. Türkiye'de milli gelir içindeki sağlık harcamalarının payı, sağlık için yapılan özel sektör yatırımları, sağlık sigortası uygulamalarının mali boyutu konuları ele alınacaktır.

Yöntem olarak, nicel ve nitel yöntemlerden faydalanılacaktır. Türkiye'nin son on yıl içindeki verilerle analizleri yapılacaktır.

Sonuç: Sağlık hizmetleri teknoloji ile yoğun işbirliği içindedir. Sağlık harcamalarının her geçen gün artmasının temelinde, hizmet kalitesinin teknolojik aygıtlarla yakın ilişki içinde olması vardır. Gelişmiş ülkelerde tedavi yöntemleri geliştirme ve uygulamaları dijital sağlığı daha üst noktalara taşımış ve sağlık teknolojilerinin pazarını genişletmiştir.

Anahtar Kelimler: Dijital sağlık, sağlık harcamaları, milli gelir, sağlık teknolojileri

AN ECONOMIC ANALYSIS ON DIGITAL HEALTH IN TURKEY

Abstract

The health sector is kept under control by the state due to its vital importance and high cost. Financial practices in the field of health vary from country to country. In the literature, the financial functioning of public health policy implementation is classified as the Beveridge model, the Bismarck model, the national health insurance model and the out-of-pocket payment model. Investment and planning for the health sector, which is a high-cost service in today's world, are widely made with public resources. Private sector investments are also subject to public inspection.

While the widespread use of technology in health stands out as the main reason for the growth in the global market, it is observed that the adoption rate of technological devices is increasing day by day. As in many countries, in Turkey, it is now a necessity to utilize digital technologies in the health sector in order to effectively manage costs in the health system, increase service quality and efficiency, provide preventive health services and improve the quality of life. Digital health stands out as a field that includes mobile health (mHealth) applications, electronic health records (EHRs), electronic medical records (EMRs), wearable devices, telehealth and telemedicine, and personalized medicine.

The purpose of this study is to examine the financial dimension of the use of digital tools in the health sector and their effectiveness in the sector. The share of health expenditures in Turkey's national income, private sector investments for health, and the financial dimension of health insurance applications will be discussed.

Method: Quantitative and qualitative methods will be used as a method. Turkey's data from the last ten years will be analyzed.

Conclusion: Health services are in intense cooperation with technology. The basis of the increasing health expenditures day by day is the close relationship between service quality and technological devices. The development and application of treatment methods in developed countries has taken digital health to higher levels and expanded the market for health technologies.

Keywords: Digital health, health expenditures, national income, health technologies

FUTBOLDA FARKLI BOYUTTAKİ SINIRLANDIRILMIŞ ALAN OYUNLARININ FUTBOLCULARIN TEKNİK VE TAKTİK GELİŞİMLERİ ÜZERİNE ETKİSİ

THE EFFECT OF DIFFERENT SIZED RESTRICTED FIELD GAMES ON THE TECHNICAL AND TACTICAL DEVELOPMENT OF FOOTBALL PLAYERS

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ÖZET

Futbol performansının teknik, taktik, psikolojik, fiziksel ve fizyolojik gibi bir dizi faktöre bağlı olduğu kabul edilmektedir. Bu özellikleri geliştirmek için pek çok antrenman yöntemi kullanılmaktadır. Sınırlandırılmış alan oyunları bir oyuncunun teknik taktik ve fiziksel yeteneklerini aynı anda geliştirmek için etkili olduğundan futbol antrenörleri ve spor bilimciler tarafından yoğun ilgi görmektedir. Bu derleme çalışmasının amacı farklı boyutlardaki sınırlandırılmış alan oyunlarının teknik ve taktik olarak etkilerini incelemektir. Sınırlandırılmış alan oyunlarını tasarlarken en sık kullanılan görev kısıtlamalarından birisi oyuncu başına düşen alan için artış ve azalış sağlayarak saha boyutlarının düzenlenmesidir. Saha boyutu değişikliklerinin oyuncuların teknik performansı üzerindeki etkisine dair bilgi, daha iyi bir planlama için faydalıdır. Bu derleme kapsamnındaki çalışmalar incelendiğinde, pas ve dripling sayıları daha küçük sahalarda oynanan alan oyunları için oyuncular arası mesafenin yakınlığından dolayı daha yüksek olabilir. Sayısal olarak dengeli durum ise oyuncuları pas vermek yerine dripling yapmaya teşvik edebilir. Saha ne kadar büyük olur ise, oyuncular hücum ederken gol fırsatları yaratmak ve savunma yaparken bunları engellemek için daha büyük mesafeleri kat etmek zorunda kalabilir. Antrenörler programları tasarlarken, saha boyutunu değiştirmekten kaynaklanan pozisyonel farklılıkları dikkate almalıdır. Özellikle, saha boyutunu büyütmek, oyuncuların sahadaki alanları kat etmeye çalışırken karşılaştıkları zorluğu artırıyor gibi görünmektedir. Bu noktada, taktiksel karmaşıklığın oyuncuların mevcut seviyesine göre ayarlanması önerilir. Bu nedenle, saha boyutundaki artış, oyuncular belirli bir formata alıştıkça kademeli olarak uygulanabilir. Sonuç olarak, teknik eylemler saha boyutu değişkenliğinden etkilenmeyebilir ancak genç gruplara eğitim verirken veya deneyimli gruplara yeni taktik içerikler tanıtırken, daha küçük sahalar benimseyerek taktiksel durumları kolaylaştırmak faydalı olabilir; saha boyutu oyuncuların küçük sahalardaki taktik becerilerinin gelişimine göre büyütülebilir.

Anahtar Kelimeler: Futbol, Teknik, Taktik, Atletik performans, Motor öğrenme, Motor beceriler

ABSTRACT

It is accepted that football performance depends on a number of factors such as technical, tactical, psychological, physical and physiological. Many training methods are used to develop these characteristics. Limited area games can be suitable for developing a player's technical, tactical and physical abilities simultaneously, which helps to increase training efficiency. The aim of this review is to examine the technical and tactical effects of limited area games of different sizes. One of the most frequently used task constraints when designing

limited area games is to adjust the field dimensions by increasing and decreasing the area per player. Information on the effect of field size changes on players' technical performance is useful for better planning. When the studies within the scope of this review are examined, the number of passes and dribbles may be higher for field games played on smaller fields due to the close distance between players. The numerically balanced situation may encourage players to dribble instead of passing. The larger the field, the greater the distances players may have to travel to create goal opportunities when attacking and to prevent them when defending. When designing programs, coaches should take into account the positional differences resulting from changing the field size. In particular, increasing the field size seems to increase the difficulty players face when trying to cover areas on the field. At this point, it is recommended to adjust the tactical complexity according to the players' current level. Therefore, the increase in field size can be implemented gradually as players get used to a certain format. As a result, technical actions may not be affected by the field size variability, but when teaching young groups or introducing new tactical content to experienced groups, it may be useful to facilitate tactical situations by adopting smaller fields; the field size can be increased according to the development of players' tactical skills on small fields.

Keyswords: Football, Technique, Tactics, Athletic performance, Motor learning, Motor skills

SPOR BİLİMLERİ FAKÜLTESİ ÖĞRENCİLERİNİN KADIN PERFORMANS SPORCULARINA YÖNELİK ALGILARININ İNCELENMESİ

ANALYSIS OF FACULTY OF SPORTS SCIENCES STUDENTS' PERCEPTIONS OF FEMALE PERFORMANCE ATHLETES

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ÖZET

Çalışmanın amacı Spor Bilimleri Fakültesi öğrencilerinin kadın performans sporcularına yönelik algılarının incelenmesidir. Araştırmada betimsel tarama modeli uygulanmıştır. Araştırmanın evreni, spor bilimleri fakültesinde öğrenim gören öğrencilerden oluşmaktadır. Örneklem ise Ordu Üniversitesi Spor Bilimleri Fakültesinde öğrenim gören öğrenciler arasından tesadüfi örneklem yöntemi ile seçilen 115 erkek katılımcı oluşturmaktadır. Çalışmada "Kişisel Bilgi Formu" ile "Kadın Performans Sporcularına Yönelik Algı Ölçeği" kullanılmıştır. Kurşun ve ark. (2023) tarafından geliştirilen kadın performans sporcularına yönelik algı ölçeği 5'li likert olup, 23 maddeden oluşmaktadır. Kadın performans sporcularına yönelik algı ölçeği 3 alt boyuttan oluşmaktadır. Bunlar; kültürel değer yargıları alt boyutu, sosyal destekle bütünleşme alt boyutu ve beden algısı alt boyutu olarak ifade edilmektedir. Araştırmada elde edilen verilerin değerlendirilmesinde SPSS 22.0 istatistik paket programı kullanılmıştır. Araştırmanın analizinde normallik varsayımlarına ilişkin sonuçlarına göre; ikili karşılaştırmalardan Student t-testi, çoklu kıyaslamalarda ise tek yönlü varyans analizi ve Tukey çoklu karşılaştırma testi uygulanmıştır. Yapılan analiz sonuçlarına göre yaş, spor yaşı, spor türü ve bölüm değişkenlerinde herhangi bir anlamlı farklılık görülmezken, sınıf değişkeninde ise kadın performans sporcularına yönelik algı ölçeği toplam puanında anlamlı farklılık bulunmuştur. Elde edilen bulgularda 3. Sınıf öğrencilerinin diğer kategorideki öğrencilere göre puan ortalamaları yüksek olduğu saptanmıştır. Sonuç olarak, Spor Bilimleri Fakültesi öğrencilerine cinsiyet eşitsizliğine yönelik seminerler veya etkinliklerin yapılması önerilebilir.

Anahtar Kelimeler: Spor, kadın, performans

ABSTRACT

The aim of this study is to examine the perceptions of Faculty of Sports Sciences students toward female performance athletes. A descriptive survey model was applied in the research. The study population consists of students enrolled in the Faculty of Sports Sciences. The sample includes 115 male participants selected randomly from students studying at the Faculty of Sports Sciences at Ordu University. In the study, a "Personal Information Form" and the "Perception Scale Towards Female Performance Athletes" were used. The perception scale, developed by Kurşun et al. (2023), is a 5-point Likert scale consisting of 23 items. This scale includes three sub-dimensions: cultural value judgments, integration with social support, and body perception. The data obtained in the study were analyzed using the SPSS 22.0 statistical software package. Based on the normality assumption results, Student's t-test was used for pairwise comparisons, while one-way variance analysis (ANOVA) and Tukey's

multiple comparison test were applied for multiple comparisons. According to the analysis results, no significant differences were observed in the variables of age, years of experience in sports, type of sport, and department. However, a significant difference was found in the total scores of the perception scale in the class variable. It was determined that third-year students had higher average scores compared to students in other categories. As a result, it is suggested that seminars or activities addressing gender inequality be organized for students of the Faculty of Sports Sciences.

Keywords: Sports, women, performance

İSLÂM TOPLUMUNDA VERGİNİN ORTAYA ÇIKIŞI VE HUKUKİ TEMELLERİ

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ÖZET
İslâm devleti Medine'de 622 yılında Hz. Peygamber'in Medine'ye hicreti sonucunda kurulmuştur. Kurulan bu yeni devletin on senelik uygulama döneminde İslâm vergi sistemi ortaya konularak tekâmül ettirilmiştir. İslâm'ın 13 yıllık Mekke döneminde iman, tevhid, ahlak ve eşitlik gibi kavramlar üzerinde durulmuş, 10 yıllık Medine döneminde ise sosyo -ekonomik politikalar etkili olarak uygulanmaya başlamış, inanç gruplarına göre şer'î ve örfî vergiler belirlenerek İslâm vergi sistemi bu dönemde oluşmuştur. Zamanla kurulan bu vergi siteminin tatbikatı yapılmış ve toplumsal barış, eşitlik ve kaynaklardan ortak yararlanma gayelerine matuf, insanların mutluluğu ekseninde bir sistem kurulmuştur. Vergilerin mükellef grupları, oranları ve harcama yerleri İslâm dininin temel kaynakları, örf, gelenek, ihtiyaç ve zarûret gibi esaslar temel alınarak netleşmiştir. Bu mefkûreye dayanan İslâm vergi sistemi insan odaklı olarak sistemli bir şekilde sürdürülmüştür. İslâm her şeyde adalet prensibini ön planda tuttuğu gibi vergi politikalarının oluşumunda ve uygulamasında da adalet prensibini gözetmiştir. Bu bakımdan İslâm devletinin ekonomik dinamiklerinde ve gelirleri arasında potansiyel olarak zekât % 2.5 oranında olmuştur. Hz. Peygamber ve iki halife döneminde ekonomik hayata dair vergiler görevliler tarafından toplanırken Hz. Osman döneminde mükelleflerin vicdanına bırakılmıştır. Zekât ve öşürün kavramsal çerçevede vergi sayılıp sayılmayacağı ise tartışma konusudur. Çünkü verginin harcandığı kalemler naslar ile belirlenmemiş iken zekât ve öşrün harcanacağı sınıflar İslâm hukukunun temel kaynakları olan Kur'an ve Sünnet tarafından belirlenmiştir. Bu yüzden zekâtın vergi olarak değerlendirilmeyeceği kanaati ağır basmıştır. Zekât ve öşür her ne kadar kavramsal olarak vergi olarak isimlendirilmemiş ise de mükelleflere konulan bir yük ve vazife olarak vergiye benzemekte, mali bir amaca matuf bir fonksiyonu bulunmaktadır. Çalışmamızda İslâm hukukunun vergi sistemini zekât ve öşür açısından da değerlendirerek yeniden ele alacağız.
Anahtar Kelimeler: İslâm Hukuku, Din, Ekonomi, Vergi, Zekât

THE EMERGENCE OF TAX IN THE ISLAMIC SOCIETY AND ITS LEGAL BASIS

SUMMARY
The Islamic state was founded in Medina in 622 by Hz. It was founded as a result of the Prophet's migration to Medina. During the ten-year implementation period of this new state, the Islamic tax system was introduced and developed. During the 13-year Mecca period of Islam, concepts such as faith, monotheism, morality and equality were emphasized, and during the 10-year Medina period, socio-economic policies began to be implemented effectively, and the Islamic tax system was formed by determining religious and customary taxes according to belief groups. This tax system, which was established over time, was implemented and a system was established around the happiness of people, aimed at social peace, equality and common use of resources. Taxpayer groups, rates and places of expenditure have been clarified based on principles such as the basic sources of the Islamic religion, customs, traditions, needs and

necessity. The Islamic tax system, based on this ideal, has been systematically maintained in a human-oriented manner. Just as Islam prioritizes the principle of justice in everything, it also observes the principle of justice in the formation and implementation of tax policies. In this regard, zakat was potentially 2.5% in the economic dynamics and revenues of the Islamic state. Hz. While taxes related to economic life were collected by officials during the period of the Prophet and the two caliphs, Hz. During the Ottoman period, it was left to the conscience of the taxpayers. It is a matter of debate whether zakat and tithe are considered taxes in the conceptual framework. Because, while the items on which the tax is spent are not determined by the scriptures, the classes on which the zakat and ushr will be spent are determined by the Quran and the Sunnah, which are the basic sources of Islamic law. Therefore, the prevailing opinion was that zakat should not be considered as tax. Although zakat and tithe are not conceptually named as taxes, they are similar to taxes as a burden and duty placed on taxpayers, and they have a function aimed at a financial purpose. In our study, we will reconsider the tax system of Islamic law by evaluating it in terms of zakat and tithe.

Key Words: Islamic Law, Religion, Economy, Tax, Zakat.

İSLÂM HUKUKUNDA İKTİSADÎ HAYAT AÇISINDAN MALI KORUMAK İÇİN ALINAN TEDBİRLER

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ÖZET

İnsan varlığı ruh ve bedenden teşekkül eder ve hayatını bu iki yön ile devam ettirir. Dünya ve ahiret boyutu da bu düalist yapıyı arz etmektedir. Bu çift varlık anlayışı ile İslâm, insanı ve onun anlam arayışını ele alarak değerlendirmiştir. İslâm dininin temel metinleri insandan "dünya için çalış ama ahiret hayatı için sakın, nasibini unutma"; "Allah'ın kulları için yaratmış olduğu ziyneti ve nefis rızıkları kim haram kılabilir" (el-A'raf 7/31), "Veren el alan elden hayırlıdır" (Buhârî, "Zekât", 17; Müslim, "Zekât", 32) düsturuyla bir yaşam sürmesini istemiştir. Mal, can, akıl, nesil ve din konusundaki İslâm'ın görüşü hem dünya hem de ahiret hayatına yöneliktir. Bu beş husus zarurât-ı hamseden sayılmıştır. İslâmda insan için değerli olan bu beş husus korunmakla birlikte çalışmada konunun gereği olarak malın korunmasına yönelik hususlar ele alındı. İslâmda malın muhafazası tabiri sadece olanı olduğu gibi koruma anlamına gelmemektedir. Mal/ayn ve servetin kazanılması, nemalandırılması ve sahip olunan maddi varlığın hukuken korunması durumlarını içermektedir. Bu açıdan malı muhafaza deyimi hem kazanılmış serveti koruma, hem sahip olunan maddi varlığı meşru yollarla geliştirme, hem de çalışıp çabalayarak mal üretme ve servet kazanmakla birlikte bütün bunları hukuken koruma anlamlarını ifade etmektedir. İslâm dini bu çerçevede malın korunması için bir takım tedbirler almıştır. Hırsızlık, gasp, ölçüde ve tartıda hile, rüşvet, riba, tefecilik ve ihtikar, kumar, kalpazanlık ve tağşiş, aldatma/gabn, israf gibi durumları haram kılmıştır. Alınan borcu ve ödünç malın zamanında ödenmesini emretmiş, malın itlafını istememiş ve dilenerek değil de çalışarak kazanmayı esas kılmıştır. Zekât ve sadaka ile hem malın manevi açıdan temizlenmesini hem de toplumda bir döngünün oluşmasını sağlamış ve malın tek elde toplanmasının önüne geçmiştir (Uludağ, n2021, s. 199-221. Şükür ile kazanılan servetin dünya yönünün yanında ahiret yönünün de olduğu vurgulanmıştır. Çalışmada bu hususlar İslâm hukuku açısından ele alınarak irdelendi.

Anahtar Kelimeler: İslâm Hukuku, İslâm, Ticaret, Mal, Korunma.

MEASURES TAKEN IN ISLAMIC LAW TO PROTECT PROPERTY IN TERMS OF ECONOMIC LIFE

SUMMARY

Human existence consists of soul and body and continues its life with these two aspects. The dimension of this world and the afterlife also presents this dualist structure. With this dual understanding of existence, Islam evaluated human beings and their search for meaning. The basic texts of the Islamic religion ask people to live a life with the motto "work for the world, but be careful for the afterlife, do not forget your share." Islam's view on property, life, mind, progeny and religion is aimed at both worldly and afterlife. These five issues are considered essential. Although these five issues that are valuable for humans are protected in Islam, issues regarding the protection of property were discussed in the study as required by the subject. The term preservation of property in Islam does not only mean preserving what is. It includes the

acquisition and benefit of goods and wealth and the legal protection of the material assets owned. In this respect, the phrase preservation of property means both protecting the acquired wealth, developing the material wealth owned by legitimate means, producing goods by working hard and gaining wealth, and protecting all of these legally. In this context, the religion of Islam has taken some measures to protect property. It has prohibited things such as theft, extortion, cheating in measuring and weighing, bribery, riba, usury and slander, gambling, counterfeiting and adulteration, deception, waste. He ordered the debt and borrowed goods to be paid on time, did not want the property to be destroyed, and made it essential to earn by working rather than begging. With zakat and alms, it not only cleans the property spiritually but also creates a cycle in society and prevents the accumulation of wealth in one hand. It is emphasized that the wealth gained through gratitude has an afterlife aspect as well as a worldly aspect. In the study, these issues were examined from the perspective of Islamic law.
Key Words: Islamic Law, Islam, Trade, Property, Protection.

RICE (*Oryza sativa. L*) PRODUCTION TECHNOLOGIES (RPTs) ACCESSIBILITY: THE PREFEERED INFORMATION AND COMMUNICATION TECHNOLOGIES (ICTs) TOOLS AMONG WOMEN IN OGUN STATE, NIGERIA

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ABSTRACT

Rice is a food security crop consumed by all. Its production is technical and therefore requires reel-time information for a boost in yield. The emergence of various categories of ICTs has resulted into increased accessibility to agricultural information among women farmer. But, the peculiarities of each ICTs tend to obstruct effective usage. This study therefore assessed ICT tools preference for accessing Rice Production Technology (RPT) information among women farmers in Ogun State, Nigeria. A multi-stage sampling technique was used in selecting 184 respondents for the study. Data were collected with the use of face-to-face structured interview schedule. Descriptive statistics and Pearson's Product Moment Correlation (PPMC) were used to describe as well as establish relationship between variables at 95 percent level of probability. The result revealed that the majority (57.6%) of the respondent were illiterate with mean age of 44.3 years, cultivated OFADA rice variety on an average farm size of 1.5 hectares and realized an average of ₦197,690.2. The most readily available and preferred ICTs were Mobile phone (WMS= 2.98; 4.98), Radio (WMS=2.64;4.36), Television (WMS=2.39;3.68) and extension prints (WMS=2.46; 2.70). The major RPTs information accessed with ICTs along the stages was on choice of improved varieties for cultivation (63.0%), pest control strategies (83.0%) and market proximity (57.6%). The results of Pearson's Product Moment Correlation revealed that years of formal education ($r=0.486$; $P\leq0.05$), amount realized ($r=0.192$; $P\leq0.05$) and cosmopolitness ($r=0.157$; $P\leq0.05$) were significant and positively related with ICTs preference. It was concluded that the level of preference was high. The study therefore recommended that the potentials in the identified ICT tools be harnessed for disseminating RPTs information to women farmers to support their production decision for a boost in rice productivity and livelihood of women in Ogun State.

Key words: ICTs, Preference, Rice, Technological information, woman farmers, information access.

TİCARETTE ULUSLARARASILAŞMANIN GETİRDİĞİ KAVRAMLAR, MODELLER VE E-TİCARET İLE BİRLİKTE OLUŞTURDUĞU ETKİLER

CONCEPTS, MODELS AND THE EFFECTS OF INTERNATIONALIZATION AND E-COMMERCE ON TRADE

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ÖZET

Kalkınma, güç kazanma, çıkar elde etme ve ekonomik ilerlemenin önemli bir yolu olan ticari faaliyetleri yürütebilmek için ülkeler başlangıçta pek çok savaş ile ticaret yollarını zapt etmeye çalışmıştır. Siyasi, ekonomik, sosyokültürel gelişmelerin, değişen konjonktürel ortamın ve küreselleşmenin de etkisiyle ticari faaliyetlerden fayda maksimizasyonunu sağlayabilmek için ülkeler güç kullanmaktan vazgeçerek anlaşmalar ve ekonomik entegrasyonlar yoluyla ticari faaliyetlerini sürdürmeye başlamıştır. Böylelikle ticaretin sınırlar ötesinde güvenle yapılması ve uluslararası bir boyuta ulaşması sağlanmıştır. Tarih öncesi dönemde takas usulüyle başlayan ve sadece fiziki mal alım satım işlemlerini ifade eden ticaret kavramı, günümüzde ise ister fiziki ister sanal kar amacı güden her türlü alım satım değişim işlemini ifade eden bir kavram haline gelmekle birlikte sipariş öncesi ve teslimat sonrası da dahil olmak üzere tüm sürecin takip ve planlanmasını içeren faaliyetler bütünü şekline gelmiştir.

Bilgi teknolojilerinde ortaya çıkan gelişmelerle beraber çalışma modellerinden alışveriş şekline, lojistik firmalarının sorumluluk alanından piyasaların beklenti ve tepkilerine kadar ticareti ilgilendiren tüm konularda köklü değişiklikler meydana gelerek ticari faaliyetlerin işleyişi sanal ortama taşınmıştır. Ağlar aracılığıyla yapılan elektronik ticaret işlemi ilk defa 1990'lı yıllarda yapılmaya başlanmış ve merak, reklam, olumlu tecrübe, internet erişim imkanının artması, mobil cihazların yaygın kullanımı gibi etmenler sayesinde toplum içinde hızla yayılmıştır. Bu durum e-ticareti kolaylaştıran uygulamaların hazırlanması, online alışveriş platformlarının kurulması, bireysel yahut kurumsal her satıcının global pazara ulaşmasıyla sonuçlanmıştır. Herkesin kolaylıkla ulaşabildiği e-ticaret faaliyetleri, alıcı ve satıcılara rahat bir alışveriş deneyimi sunarken ülkeden ülkeye değişen yasal mevzuatlar, lojistik kısıtlar ve ödenme araçlarındaki eşgüdümsüzlüğün neticesinde oluşan güçlüklerle ülkeleri daha fazla konuda mutabakata itmiştir. Neticede mali, hukuki ve güvenlik gibi yasal düzenleme gerektiren birçok konuda işbirliği yapılması sağlamıştır. Bu çalışmada ticarette uluslararasılaşmanın ve e-ticaretin getirdiği kavramlar, modeller incelenerek ülkelere sağladığı avantaj dezavantaj başta olmak üzere oluşturduğu etkilerin değerlendirilmesi amaçlanmıştır.

Anahtar Kelimeler: Uluslararası Ticaret, Uluslararası Ticaret Örgütleri, E-ticaret

ABSTRACT

In order to carry out trade activities - which are important way of development, gaining power, gaining benefits and economic progress - countries initially tried to capture trade routes through wars. With the influence of political, economic, sociocultural developments, changing cyclical environment and globalization, countries have given up using force and started to continue their trade activities through agreements and economic integrations in order to maximize the benefit from trade activities. In this way, trade has been ensured safely across borders and reached an international dimension. The concept of trade, which started with the barter method in the prehistoric period and referred only to the buying and selling of physical goods, has now become a concept that refers to all kinds of buying and selling exchange transactions for profit,

regardless of physical goods or virtual goods. The concept of trade has become a set of activities that include tracking and planning the entire process, including pre-order and post-delivery.
With the developments in information technologies, radical changes have occurred in all issues related to trade, from working models to shopping styles, from the responsibility area of logistics companies to the expectations and reactions of the markets, and the functioning of trade activities has been moved to the virtual environment. Electronic commerce through networks first started in the 1990s and has spread rapidly in society thanks to factors such as curiosity, advertising, positive experience, increased internet access and widespread use of mobile devices. This has resulted in the preparation of applications that facilitate e-commerce, the establishment of online shopping platforms, and the access of every individual or corporate seller to the global market. While e-commerce activities, which are easily accessible to everyone, provide buyers and sellers with a comfortable shopping experience, they have pushed countries to agree on more issues due to difficulties arising from legal regulations that vary from country to country, logistical restrictions and lack of coordination in payment instruments. As a result, cooperation has been achieved on many issues requiring legal regulation, such as financial, legal and security. In this study, it is aimed to examine the concepts and models brought by globalization and e-commerce in trade and to evaluate the effects, especially the advantages and disadvantages, it provides to the countries.
Keywords: International Trade, International Trade Organizations, E-commerce

HEMŞİRELERİN İÇSEL VE DIŞSAL MOTİVASYONUNU ETKİLEYEN DEĞİŞKENLERİN BELİRLENMESİ

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ÖZET

Amaç: Bu çalışma, hemşirelerin içsel ve dışsal motivasyon düzeyleri ve etkileyen değişkenlerin belirlenmesi amacıyla yapıldı. **Yöntem:** Çalışma tanımlayıcı-kesitsel desende, 1 Ağustos-1 Kasım 2024 tarihleri arasında uygulandı. Çalışmanın evrenini, Ankara ve civar illerindeki kamu, özel ve üniversite hastanelerinde çalışan hemşireler oluşturdu. Başta birkaç hemşireden yardım alınarak onların tanıdığı hemşirelerin de çalışmaya katılması ile araştırmada kartopu örnekleme kullanıldı ve toplam 382 hemşireye ulaşıldı. Çevrimiçi anket başlamadan yer alan aydınlatma metni ile katılımcıların önce onamları alındı. Veri toplama aracı olarak İş Motivasyonu Ölçeği ve araştırmacılar tarafından hazırlanan demografik bilgiler formu kullanıldı. Araştırmadan elde edilen veri, SPSS 24.0 (Statistical Package for Social Sciences) programı kullanılarak analiz edildi. **Bulgular:** Hemşirelerin motivasyon ölçeği puan ortalaması 103,07±15,22 (min 49, max 120) bulundu. Ölçek alt boyut puan ortalamalarına bakıldığında, "dışsal motivasyon araçları" alt boyutu 63,60±10,86 (min 20, max 75) ve "içsel motivasyon araçları" alt boyutlarında 39,47±6,02 (min 16, max 45) olduğu sonucuna ulaşıldı. **Sonuç:** Hemşirelerin motivasyon düzeylerinin ortalamanın üstünde yüksek olduğu, çalışılan kurum ve eğitim seviyesinin motivasyon üzerinde etkili olduğu sonucuna ulaşıldı.

Anahtar Kelimeler: Hemşire, motivasyon, içsel motivasyon, dışsal motivasyon

DETERMINATION OF VARIABLES AFFECTING INTRINSIC AND EXTRINSIC MOTIVATION OF NURSES

ABSTRACT

Objective: This study, The aim of this study was to determine the intrinsic and extrinsic motivation levels of nurses and the variables affecting them.**Method:** The study was conducted in a descriptive cross-sectional design between August 1 and November 1, 2024. The population of the study consisted of nurses working in public, private and university hospitals in Ankara and its neighboring provinces. Snowball sampling was used in the study, with the help of a few nurses at the beginning and the participation of nurses they knew in the study and a total of 382 nurses were reached. The consent of the participants was first obtained with the disclosure text before starting the online survey. Work Motivation Scale and demographic information form prepared by the researchers were used as data collection tools. The data obtained from the study were analyzed using SPSS 24.0 (Statistical Package for Social Sciences) software.**Results:** The mean motivation scale score of the nurses was 103.07±15.22 (min 49, max 120). When the mean scores of the subscale subscales were analyzed, the "extrinsic motivational tools" subscale was 63.60±10.86 (min 20, max 75) and 39.47±6.02 (min 16, max 45) in the sub-dimensions of "intrinsic motivational tools". **Conclusion:** The motivation levels of nurses were higher than the average, ıt was concluded that the organization and education level were effective on motivation.

Keywords: Nurse, motivation, intrinsic motivation, extrinsic motivation

MİKROPLASTİK STRESE MARUZ KALAN SPIRULINA PLATENSIS' İN MALAŞİT YEŞİLİ GİDERİMİ

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ÖZET
Mikroplastikler ve sentetik boyalar doğadaki her yaşam alanında mevcuttur ve giderek artan bir çevre sorunu haline gelmiştir. Bu kirleticilerin organizmalar üzerindeki toksik etkileri ayrı ayrı kapsamlı bir şekilde incelenmiş olsa da iki kirletici arasındaki etkileşimlerin potansiyel etkileri hakkında sınırlı bilgi mevcuttur. Bu nedenle, bu çalışma, yüksek konsantrasyonlarda polietilen mikroplastik (PE-MP) stresine maruz bırakılan mikroalg *Spirulina platensis* (Siyanobakteri) üzerindeki malaşit yeşili katyonik boyanın giderimini değerlendirmeyi amaçlamaktadır. Ek olarak, araştırma, MP ve boyaya maruz bırakılarak biyosorbentin büyüme hızı, toplam karbonhidrat ve toplam klorofilindeki değişiklikler hakkında da bilgi sağlamaktadır. Çalışmada, sıcaklık (35±1 ºC), pH (9-10) ve biyokütle kütlesi (0,02 g kuru ağırlık) sabit tutularak adsorpsiyon etkisinin belirlenmesi için kesikli adsorpsiyon yöntemi kullanılmıştır. Başlangıç boya konsantrasyonu (2,5, 5 ve 10 mg L^{-1}), maruz kalma süreleri (30, 60, 90 dk) ve mikroplastik konsantrasyonları (10, 25 ve 50 mg L^{-1}) değişkendir. Boyanın adsorpsiyonu Langmuir ve Freundlich izotermleri ile desteklenmiştir. Çalışma sonucunda hem başlangıç boya konsantrasyonu hem de mikroplastik konsantrasyonu azaldıkça boya giderim oranının arttığı belirlenmiştir. Tersine, kirleticilerin birlikte uygulanması sonucunda *Spirulina*' nın toplam karbonhidrat ve klorofil miktarında önemli bir azalma saptanmıştır. Çalışma, *Spirulina*' nın boya giderme potansiyelini ve yüksek konsantrasyonlu mikroplastik maruziyetinde organizmada meydana gelen bazı biyokimyasal değişimleri ortaya koyarak daha sonraki çalışmalara rehberlik edebilir.
Anahtar Kelimeler: Mikroplastik, Katyonik Boya Giderimi, Kirlilik, Siyanobakteri.

DECOLORIZATION OF MALACHITE GREEN BY SPIRULINA PLATENSIS EXPOSED TO MICROPLASTIC STRESS

ABSTRACT
Microplastics and synthetic dyes are present in every habitat in nature and have become a growing environmental problem. Although the toxic effects of these pollutants on organisms have been widely studied separately, limited information is available on the potential effects of interactions between the two pollutants. For this reason, this work aimed to evaluate the removal of malachite green cationic dye on microalgae *Spirulina platensis* (Cyanobacteria) exposed to high concentrations polyethylene microplastic (PE-MP) stress. Additionally, the research also provides information on changes in growth rate, total carbohydrate and total chlorophyll of the biosorbent by exposure to the MP and the dye. In the study, batch adsorption method was used to determine the adsorption effect by keeping the temperature (35±1 ºC), pH (9-10) and biomass mass (0.02 g dry weight) constant. Initial dye concentration (2.5, 5 and 10 mg L^{-1}), exposure times (30, 60, 90 min) and microplastic concentrations (10, 25 and 50 mg L^{-1}) are variable. The adsorption of the dye was fitted with the Langmuir and Freundlich isotherm. As a result of the study, it was determined that the dye removal rate increased as both the initial dye concentration and microplastic concentration decreased. Conversely, as a result of the combined application

of pollutants, a significant decrease in total carbohydrate and chlorophyll content of *Spirulina* was determined. The study may guide further studies by revealing the dye removal potential of *Spirulina* and some biochemical changes in the organism in high concentration microplastic exposure.
Keywords: Microplastic, Cationic Dye Removal, Pollution, Cyanobacteria.

YABANİ İĞDENİN İNSAN SAĞLIĞI ÜZERİNE ETKİSİ
EFFECTS OF SEA BUCKTHORN ON HUMAN HEALTH

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ÖZET
Günümüzün değişen ve gelişen şartları altında tüketiciler bitkisel ağırlıklı diyetlere daha fazla eğilim göstermektedir. Yabani iğde (*Hippophae rhamnoides* L.) yapısında 200'e yakın farklı bileşik içeren üstün özellikli bir bitkidir. Meyvesi, posası ve yağı, birçok ekonomik avantajı ile sağlık alanında çiğ hammaddeler sıralamasında birincidir. Yapısında bulunan yüksek C vitamini, fitosterol, fenolik bileşikler, antioksidanlar, omega 3, 6, 7 başta olmak üzere yağ asidi içeriği ve amino asit bileşimi benzersiz yapıdadır. Gıda yanı sıra kozmetik ve nutrasötik preparatların üretiminde yaygın kullanımı bulunmaktadır. Çok yönlü özelliğe, çeşitli ekonomik avantajlara ve doğal tıpta hala devam eden zengin bir tarihe sahip bir bitkidir ve bu nedenle diyetle ilgili hastalıkların önlenmesi ve tedavisi için giderek daha fazla tüketici tarafından günlük diyete dahil edilmektedir. Benzersizliği, kimyasal bileşiminden ve bu bileşimden kaynaklanan sağlık açısından yararlı özelliklerinden kaynaklanmaktadır. Kalp damar hastalıkları, kolestrol, diyabet, ruh hastalıklarının tedavisinde, yanıklar, cilt hassasiyetleri gibi dermatolojik problemlere karşı aktif olarak kullanılmaktadır. Prebiyotik niteliği sayesinde kolon probiyotik popülasyonunun gelişimine destek olmaktadır. Yabani iğde bitkisi tüm bu olumlu özellikleri yanı sıra doğanın korunmasında da rol oynamaktadır. Soğuk, kuraklık ve tuza karşı yüksek toleransı, toprakta azotu sabitleme yeteneği nedeniyle, toprak, suyun koruması ve erozyona eğilimli marjinal alanlarda rüzgar bariyerleri oluşturmak için ideal bir ürün olarak tanımlanmıştır. Formülasyonunda yabani iğde ve yan ürünlerini içeren gıda, gıda takviyesi, kozmetik ürünler ve ilaçlar ticari ürünler piyasada bulunmaktadır. İnsan sağlığına bu derece faydaları bulunan yabani iğde içerikli fonksiyonel ürünlerin geliştirilmesi toplum sağlığı için önem taşımaktadır.
Anahtar Kelimeler: Nutrasötik, Fitosterol, Omega 3-6-7, Terapötik

ABSTRACT
Under today's changing and developing conditions, consumers prefer plant-based diets more. Sea buckthorn (*Hippophae rhamnoides* L.) is a superior plant with nearly 200 different compounds. Its fruit, pulp, and oil are first in the ranking of raw materials in the health field and have many economic advantages. The high vitamin C, phytosterol, phenolic compounds, antioxidants, fatty acid content, especially omega 3, 6, 7, and amino acid composition in its structure are unique. It is widely used in the production of food, as well as cosmetics and nutraceutical preparations. It is a plant with versatile properties, various economic advantages, and a rich history that continues in natural medicine, and therefore, it is increasingly included in the daily diet by consumers for the prevention and treatment of diet-related diseases. Its uniqueness stems from its chemical composition and the health-beneficial properties resulting from this composition. It is actively used to treat cardiovascular diseases, cholesterol, diabetes, and mental illnesses and against dermatological problems such as burns and skin sensitivities. Thanks to its prebiotic quality, it supports the development of the colon probiotic population. In addition to all these positive features, the sea buckthorn plant also protects nature. Due to its high tolerance to cold, drought, and salt, and its ability to fix nitrogen in the soil, it has been defined as an ideal product for protecting soil and water and creating wind barriers in marginal

areas prone to erosion. Food, food supplements, cosmetic products, and medicines containing sea buckthorn and its by-products in their formulations are available on the market. The development of functional products containing sea buckthorn, which have such benefits for human health, is essential for public health.

Keywords: Nutraceutical, Phytosterol, Omega 3-6-7, Therapeutic

PUNİSİK ASİDİN İNSAN SAĞLIĞINA ETKİSİ VE GIDA TEKNOLOJİSİNDEKİ YERİ

EFFECTS OF PUNICIC ACID ON HUMAN HEALTH AND ITS STATUS IN FOOD TECHNOLOGY

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ÖZET

Gıda, ilaç ve yem sektörlerinde geniş yeri olan nar (*Punica granatum*) yaygın bulunan bir meyvedir ve çekirdeklerinden elde edilen yağ, fonksiyonel özellikleri ve insan sağlığı üzerine olumlu etkileriyle bilinmektedir. Nar çekirdeği yağının ana biyoaktif bileşeni olan punisik asit, konjuge α-linoleik asidin bir omega-5 izomeridir. Punisik asit, kanser (meme, prostat vb.), kalp hastalıkları, nörodejeneratif hastalıklar (Alzheimer, Parkinson, Huntington vb.), diyabet ve obezite gibi birçok farklı hastalığa karşı faydalı etkilere sahip güçlü anti-oksidatif ve anti-inflamatuar özellik gösteren bir yağ asididir. Punisik asidin doğadaki temel kaynağı olan nar çekirdeği yağı, gıda, içecek, yem ve kozmetik teknolojilerinde kullanılan işlevsel bir bileşendir. Nar çekirdeği yağı, gıdalarda yağ ikame maddesi olarak ve gıda ambalajlarının fonksiyonel niteliğini geliştirici amaçla kullanılmaktadır. Ayrıca, ilave edildiği et ve süt ürünlerinin yağ asidi profilini zenginleştirerek, mevcut diyeti değiştirmeden günlük beslenmeyle konjuge yağ asitlerinin alımını sağlamaktadır. Yiyecek ve içeceklerin doymamış yağ asidi miktarının arttırılması ve doymuş yağ asitlerinin azaltılmasında da rol oynamaktadır. Nar çekirdeği yağı biyoyararlanımını arttırmak amacıyla oleojeller ve mikrokapsül olmak üzere iki farklı formda üretilmektedir. Bu formlarda üretilen nar çekirdeği yağı preparatları besinsel ve tıbbi özellikleri nedeniyle gıda, yem ilaç ve kozmetik endüstrilerinde kendine geniş bir yer bulmuştur. Punisik asit ve nar çekirdeği yağının insan sağlığına etkisi ve gıdalara kazandırdığı fonksiyonellik halen araştırılmaya devam eden güncel konular arasında yer almaktadır. Punisik asit ve etkilerinin ortaya çıkarılması için daha fazla kapsamlı araştırmaya ihtiyaç bulunmaktadır.

Anahtar Kelimeler: Nar Çekirdeği Yağı, Omega 5, Doymamış Yağ

ABSTRACT

Pomegranate (*Punica granatum*), which has an extended place in the food, pharmaceutical, and feed sectors, is a common fruit, and the oil obtained from its seeds is known for its functional properties and positive effects on human health. Punicic acid, the main bioactive component of pomegranate seed oil, is an omega-5 isomer of conjugated α-linoleic acid. Punicic acid is a fatty acid with strong anti-oxidative and anti-inflammatory properties that has beneficial effects against many different diseases such as cancer (breast, prostate, etc.), heart diseases, neurodegenerative diseases (Alzheimer's, Parkinson's, Huntington's, etc.), diabetes and obesity. Pomegranate seed oil, the primary source of punicic acid in nature, is a functional component used in food, beverage, feed, and cosmetic technologies. Pomegranate seed oil is used as a fat substitute in foods and to improve the functional quality of food packaging. In addition, it enriches the fatty acid profile of meat and dairy products to which it is added and provides the intake of conjugated fatty acids in daily nutrition without changing the current diet. It also increases the amount of unsaturated fatty acids in foods and beverages and reduces saturated fatty acids. Pomegranate seed oil is produced in two forms, oleogels, and microcapsules, to increase its bioavailability. Pomegranate seed oil preparations produced in these forms have a vast place in the food, feed, pharmaceutical, and cosmetic industries due to their nutritional and

medicinal properties. The effects of punicic acid and pomegranate seed oil on human health and the functionality it provides to foods are among the current issues that are still being investigated. More comprehensive research is needed to reveal punicic acid and its effects.
Keywords: Pomegranate Seed Oil, Omega 5, Unsaturated Fat

YATIRIM FONLARININ PERFORMANS VE RİSK YÖNETİMİ: TÜRKİYE ÖRNEĞİNDE SHARPE, TREYNOR VE SORTINO ANALİZLERİ (2019-2024)

PERFORMANCE AND RISK MANAGEMENT OF INVESTMENT FUNDS: SHARPE, TREYNOR, AND SORTINO ANALYSES IN THE CASE OF TURKEY (2019-2024)

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ÖZET
Bu çalışma, Nisan 2019-Haziran 2024 döneminde YAS, AK3, TI2, GL1, TI3, GHS, MAC, FYD ve ADP fonlarının performanslarını Sharpe, Treynor ve Sortino oranlarıyla değerlendirmiştir. Performans analizleri, farklı piyasa koşullarında fonların risk-getiri dengesi ve yatırımcılara sundukları getiriler üzerine odaklanmıştır. Sharpe ve Treynor oranları genel risk yönetimini incelerken, Sortino oranı yalnızca negatif sapmalara odaklanarak yatırımcı zararına olabilecek oynaklıkların yönetiminde fonların etkinliğini ölçmüştür. Bu çalışmanın amacı, Türkiye'deki hisse senedi fonlarının performans değerlendirmelerini getiriden ziyade, uygun ölçütler kullanarak bir analiz sunmaktır.
Analiz sonuçları, yüksek riskli MAC fonunun 2022'de küresel ekonomik belirsizliklere rağmen yüksek getiri sağladığını, ancak bu getirilerin yüksek riskle ilişkili olduğunu göstermiştir. Buna karşılık, düşük riskli FYD ve TI3 fonları istikrarlı getiriler sunarak riskten kaçınan yatırımcılar için güvenli seçenekler olmuştur. Aynı şekilde, MAC ve GL1 gibi yüksek riskli fonlar ise kısa vadede yüksek getiri potansiyeli sunarak daha agresif stratejilere sahip yatırımcılar için cazip fırsatlar yaratmıştır. Ayrıca, TI2 fonu risk/getiri dengesi açısından en verimli fon olarak belirlenirken, Sortino oranında TI3 fonu öne çıkmıştır. Bu bulgular, yatırımcıların portföy çeşitlendirmesi ve stratejik karar alma süreçlerinde risk ve getiri unsurlarını dengeli bir şekilde değerlendirmelerinin önemini vurgulamaktadır. Çalışma, yatırım fonlarının farklı risk profillerine sahip yatırımcıların uzun ve kısa vadeli hedeflerine katkı sağlayabileceğini ortaya koymaktadır.
Anahtar Kelimeler: Yatırım Fonları, Sermaye Piyasası, Sharpe, Treynor, Sortino

ABSTRACT
This study evaluates the performance of the YAS, AK3, TI2, GL1, TI3, GHS, MAC, FYD, and ADP funds using Sharpe, Treynor, and Sortino ratios over the period from April 2019 to June 2024. The performance analyses focus on the risk-return balance of the funds under varying market conditions and the returns they offer to investors. While the Sharpe and Treynor ratios assess overall risk management, the Sortino ratio focuses solely on negative deviations, evaluating the effectiveness of the funds in managing volatility that could potentially result in investor losses. The aim of this study is to provide an analysis of the performance evaluations of equity funds in Turkey, using appropriate metrics rather than focusing solely on returns.
The analysis results indicate that the high-risk MAC fund delivered high returns in 2022 despite global economic uncertainties; however, these returns were associated with high risk. In contrast, the low-risk FYD and TI3 funds provided stable returns, offering safe options for risk-averse investors. Similarly, high-risk funds like MAC and GL1 created attractive opportunities for more aggressive investors by presenting high return potential in the short term. Additionally, the TI2 fund was identified as the most efficient in terms of risk-return balance, while the TI3 fund stood out in the Sortino ratio analysis.

These findings highlight the importance for investors to assess both risk and return factors in a balanced manner when making portfolio diversification and strategic decisions. The study demonstrates that investment funds can contribute to the long-term and short-term goals of investors with different risk profiles.
Keywords: Investment Funds, Capital Markets, Sharpe, Treynor, Sortino

ROLE OF AGRICULTURAL EXTENSION SERVICES AN ENTREPRENEURSHIP INNOVATION IN PROMOTING COOPERATIVE AMONG RURAL FARMERS IN BIU LOCAL GOVERNMENT AREA

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Abstract
Cooperative entrepreneurship avails participating entrepreneurs the opportunity to combine different skills and competencies to set up an enterprise. This study assessed the perceived roles of agricultural extension services in promoting cooperative entrepreneurship innovation among farmers in Biu Local Government Area, Borno State. Data was collected from 120 respondents with the aid of a well-structured questionnaire. Results revealed that farmers in the study area were engaged in different entrepreneurial innovation activities. The roles of agricultural extension services as effective in promoting cooperative entrepreneurship innovation with the provision of vocational/skill training; sanitation activities; provision of storage/processing facilities; procurement of agricultural input and information on credit sources. The constraints militating against extension service delivery to the respondents were inadequate finding; lack of technical support and poor infrastructure in communities. It was recommended that government and non-governmental organizations should provide adequate funding and technical support to extension personnel to enable them deliver agricultural extension services geared at promoting cooperative entrepreneurship innovation to farmers.
Keywords-Role, Agricultural Extension Services, An, Entrepreneurship innovation Borno State.

EFFECT OF ANIMOTO-GENERATED INSTRUCTIONAL VIDEOS ON ACHIEVEMENT, RETENTION AND ATTITUDE AMONG PRE-SERVICE GEOGRAPHY TEACHERS IN NORTH CENTRAL, NIGERIA.

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Abstract

The study investigated Effect of Animoto- generated instructional videos on achievement, retention and attitude among pre-service Geography teachers in North Central, Nigeria. The study employed Quasi-experimental design. The target population for this study was 1,163 pre-service Geography teachers in North Central. One-fifty-One (151) were sampled for the study. Four research questions were raised. Four experts validated the research instrument used for the study. A questionnaire was used for data collection. The reliability of the instrument was determined using Cronbach's alpha of 0.735, 0,749, 0.674 index. The data collected was analyzed using descriptive and inferential statistics. The study revealed that utilization of Animoto-generated instructional video in teaching geographical concepts enhanced students' performance than the expository method of teaching. Based on the findings and conclusion drawn, the following recommendations are made to improve students' performance in geography: Geography teachers should utilize and encourage students to use Animoto instructional videos as it promotes flexible learning, autonomous and independent learning.

Keywords: Animoto-generated instructional video, achievement, retention and attitude.

PEK BİLİNMEYEN BİR ÜZÜMSÜ MEYVE: Çakal Eriği (*Prunus spinosa* L.)

A LITTLE KNOWN BERRY FRUIT: Jackal Plum

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ÖZET

Üzümsü meyveler; yarı çalımsı veya çalımsı bitkilere sahip, yumuşak etli, sulu genelde ufak, yenilebilir meyvelere sahip bitkiler olarak tarif edilir. Üzümsüler, kapalı tohumlulardan çift çenekli bitkiler gurubundadırlar ve bunların tamamı çok yıllıktır. Her sene muntazaman mahsül verdikleri ve bakımları kolay olduğu için, bilhassa aile işletmeleri için ideal ürünlerdir. Aynı zamanda Çakal eriği (*Prunus spinosa* L.), yabani bir erik türü olup üzümsü meyveler içerisinde incelenmekte ve Anavatanı'nın Anadolu ve Kafkasya olduğu bildirilmektedir. Ülkemiz yanında; Avrupa, Batı Asya ve Kuzeybatı Afrika'da 0-1700 m rakımları arasında tabii olarak yetişir. Meyveleri; mavimsi mor renkte kabuğa, yeşilimsi etli kısma ve iri çekirdeklere sahip olup ekşimsi bir tadı vardır. İçeriğinde organik asitler, pektin, şeker bulunmakta çiçekleri ise flavon ve glikozitlerce zengindir. Halk arasında güvem, dağ eriği gibi değişik isimlerle de anılır. Fazla boylanmayan dikenli bir ağaççık olup, ülkemizin birçok bölgesinde kendiliğinden yetişir. Bilhassa kış aylarında, diğer *prunus* türlerinin aksine, meyvelerinin ağaçların üzerinde uzun süre kalması hem insanlar hem de yaban hayvanları için iyi bir gıda kaynağ olduğunu gösterir. Yine çok sık ve dikenli yapısı; barınak, erozyon bitkisi, çit bitkisi ve iyi bir rüzgârkıran olarak değerlendirilmesini sağlar. Çiçeklenme; yapraklanmadan evvel olup, yörelere göre değişmekle birlikte, mart-nisan aylarında gerçekleşir. Ancak erken çiçeklendiği için, bilhassa ilkbahar geç donlarından sıkca zarar görür. Meyve dalları çok sık ve iç içedir. Kökleri yüzlek ve yayvandır. Bitkiler yarı gölgeli ya da gölgesiz alanlar ile az kumlu, az kireçli, orta seviyede killi ve ağır, ama iyi süzülebilir, asit, nötr ve bazik yapılı toprakları tercih eder. Ancak deniz iklim kuşağına da dayanımı iyidir. Yaş meyve, yüksek su muhtevasından dolayı dayanıksızdır. Taze olarak tüketim yanında pişirilerek ya da evlerde meyve suyu şeklinde hazırlanarak tüketilmektedir. Bu çalışma; ülkemizde tabii olarak yetişen ve aynı zamanda yabani bir erik türü olan çakal eriğinin hem bitkisel hem de besleyicilik değeri olarak daha fazla tanınmasına yardımcı olmak için yapılmıştır.

Anahtar kelimeler: Çakal eriği, Üzümsü meyveler, Yabani erik

ABSTRACT

Grape berries are defined as plants with semi-shrubby or shrubby plants with soft fleshy, juicy, often small, edible fruits. Grape berries belong to the group of dicotyledonous plants with closed seeds and all of them are perennial plants. Since they produce regular crops every year and are easy to care for, they are ideal crops, especially for family businesses. Jackal plum (*Prunus spinosa* L.), which is also a grape fruit, is a wild plum species and is classified as a grape fruit. It is reported to be native to Anatolia and the Caucasus. Besides our country; it grows naturally between 0-1700 m altitudes in Europe, Western Asia and Northwest Africa. Fruits have bluish purple skin, greenish flesh and large seeds with a sour taste. It contains organic acids, pectin, sugar and its flowers are rich in flavones and glycosides. It is also known by different names such as güvem and mountain plum among the people. It is a thorny tree that does not grow too tall and grows spontaneously in many regions of our country. Especially in winter, unlike other *prunus* species, its fruits remain on the trees for a long time, making it a good food source for both humans and wild animals. Its very dense and thorny structure allows it to be used as a shelter, hedge plant, erosion plant and a good windbreaker. Flowering is before leafing and takes place in March-April, depending on the region. However, since it blooms early, it is frequently damaged by late spring frosts. Fruit branches are very dense and intertwined. Roots are shallow and spreading. The plants prefer semi-shaded or unshaded areas and soils with acid, neutral and basic character, with little sandy, little calcareous, moderately clayey and heavy, but well drained soils. However, it also has good resistance to the maritime climate zone. Fresh fruits are perishable due to their high water content. In addition to fresh consumption, they are also consumed cooked or prepared as fruit juice at home. This study was carried out to help the Jackal plum, which grows naturally in our country and is also a wild plum species, to be more recognized both as a herbal and nutritional value.

Keywords: Jackal plum, Grape fruits, Wild plum

ŞIRNAK İLİ ULUDERE VE BEYTÜŞŞEBAP İLÇELERİNDE ÜZÜM ÇEŞİTLERİ YAPRAKLARININ SALAMURA YAPIMINA UYGUNLUĞUNUN ARAŞTIRILMASI

INVESTIGATING THE SUITABILITY OF GRAPE VARIETY LEAVES FOR PICKLING IN ULUDERE AND BEYTÜŞŞEBAP DISTRICTS OF ŞIRNAK PROVINCE

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ÖZET

Bu çalışma; 2024 yılı gelişme döneminde Şırnak'ın Uludere ve Beytüşşebap ilçelerinde gerçekleştirilmiştir. İl bazında değerlendirme yaptığımızda bağcılık en fazla İdil ilçesinde ağırlık kazanmış olmakla beraber il merkezi ve diğer ilçelerde de belli seviyede bağcılık yapılmaktadır. Günümüzde salamuralık üzüm yaprağı; Anadolu ve birçok Ortadoğu ülkesinde dolma, sarma vb. yemeklerin yapımında kullanılmaktadır. Fakat bu salamuralık yaprakların beslenmeye olan katkılarına ilaveten damak zevkinin de yüksek, genç ve sağlıklı olmaları icap eder. Çalışmada, yörede yaygın olarak yetiştirilen her üzüm çeşidi için yazlık sürgünlerin orta bölümündeki tam büyüklüklerinin 2/3'nü almış olan yapraklardan 10'er adet sapları ile beraber alınarak ambalajlanmış, etiketlenmiş ve muhafaza edilerek laboratuvara getirilmiştir. Laboratuvarda yapılan çalışmayla yaprakların kalınlık, tüylülük, damarlılık ve dilimlilik haline bakılarak salamura yapımına uygunlukları incelenerek tespit edilmiş, buna ilaveten fotoğrafları çekilmiştir. Söz konusu özelliklere göre; bölgede yetiştiriciliği yapılan Zereği (Behdini), Sahrof, Kıtılnefis, Tayifi, Gazona, Negotik, Dindor, Öküzgözü, ve Behdini üzüm çeşitleri başlıca materyalleri teşkil edip, hemen her amaç için kullanılabilmektedirler. Yapılan değerlendirme sonucunda Tayfi, Negotik ve Zereği (Behdini) üzüm çeşidine ait yaprakların salamura yapımına uygun olduğu ve tercih edildiği belirlenmiştir. Yöresel çeşitler içerisinde salamura yaprak üretimine elverişli çeşitlerin olması, bağcılarımız için alternatif ve yeni bir gelir kapısı olarak görülebilir. Ancak ekonomik olarak Tayfi, Negotik ve Zereği (Behdini) üzüm çeşitlerinin yetiştiriciliği bu ilçelerde azdır. Sonuç olarak; gelecekte uygulamaya konulacak bir proje ile salamura üretimine uygun Tayfi üzüm çeşidinin modern bağlar ile yeni ve alternatif bir geçim kaynağı sağlandığı gibi, özellikle kadınlara bu hususta eğitim verilerek hem üretime katkıda bulunmaları sağlanmış, hem de geleneksel ve modern bağcılığın değişik açılardan mukayesesi yapılmış olacağından yeni kurulacak bağlarda üreticilerimizin daha sağlıklı ve doğru kararlar almasına yardım edilmiş olunacaktır. Bu çalışma; Uludere ve Beytüşşebab yörelerinde yetiştirilen mahalli üzüm çeşitlerinin yapraklarının salamura yapımına uygunluğunu ortaya koymak için yapılmıştır.

Anahtar kelimeler: Bağ, Üzüm, Salamura yaprak, Uludere, Beytüşşebap

ABSTRACT

This study was carried out in the Uludere and Beytüşşebap districts of Şırnak during the 2024 development period. When we evaluate on a provincial basis, viticulture is mostly concentrated in the Idil district, but viticulture is also carried out at a certain level in the city center and other districts. This study was conducted to reveal the suitability of the leaves of local grape varieties grown in the Uludere and Beytüşşebab regions for pickling. Today, pickled grape leaves are used in the production of dolma, sarma, etc. dishes in Anatolia and many Middle Eastern countries. However, in addition to their nutritional contributions, these pickled leaves also need to be highly palatable, young, and healthy. In the study, 10 leaves from the middle part of the summer shoots and 2/3 of their full size for each grape variety commonly grown in the region were taken with their stems, packaged, labeled, and brought to the laboratory in a storage container. In the study conducted in the laboratory, the suitability of the leaves for pickle production was investigated and determined by looking at their thickness, hairiness, veininess and sliceness and their photographs were also taken. According to the said features; Zereği (Behdini), Sahrof, Kıtılnefis, Tayifi, Gazona, Negotik, Dindor, Öküzgözü, and Behdini grape varieties grown in the region constitute the main materials and can be used for almost all purposes. As a result of the evaluation, it was determined that the leaves of Tayfi, Negotik and Zereği (Behdini) grape varieties are suitable for pickle production and are preferred. The existence of varieties suitable for pickle leaf production among the local varieties can be seen as an alternative and new source of income for our vine growers, however, economically the cultivation of Tayfi, Negotik and Zereği (Behdini) grape varieties is low in these districts. As a result; With a project to be implemented in the future, the Tayfi grape variety, which is suitable for pickle production, will provide a new and alternative source of income with modern vineyards, and women in particular will be provided with training on this subject, allowing them to contribute to production. Furthermore, traditional and modern viticulture will be compared from different perspectives, which will help our producers make healthier and more accurate decisions in the new vineyards to be established.

Keywords: Vineyard, Grape, Pickled Leaf, Uludere, Beytüşşebap

ARTIFICIAL INTELLIGENCE IN EDUCATION: BRIDGING RESEARCH AND APPLICATION

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Abstract

Artificial Intelligence (AI) is revolutionizing education by providing innovative solutions that enhance teaching, learning, and administrative processes. This presentation explores the intersection of AI research and practical applications in educational settings, highlighting the transformative potential of AI-powered tools such as adaptive learning platforms, automated assessments, and personalized learning experiences. While these advancements offer significant benefits, the transition from research to real-world implementation presents challenges, including ethical considerations, data privacy, and the need for teacher training. By examining case studies and research findings, this discussion aims to bridge the gap between theoretical insights and actionable strategies, paving the way for a future where AI enriches educational outcomes at all levels. This session will provide educators, researchers, and policymakers with a comprehensive understanding of AI's role in shaping the future of education and the steps necessary to integrate AI effectively and ethically into diverse learning environments.

Keywords: Artificial Intelligence (AI), Education Technology, Adaptive Learning, Personalized Learning, AI-Powered Tools, Bridging Research and Practice, Ethical Considerations in AI.

MOIRÉ MEASUREMENTS USING ALMOST PERIODIC GRIDS

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ABSTRACT
In moiré measurements, a small displacement of the object results in a large displacement of the moiré patterns. This useful property provides the high sensitivity of the moiré measurements. However, the measurements still use only regular graphical objects. In this study, we demonstrate measurements using irregular (almost periodic) graphical objects with a structure comprising parallel rows lacking periodicity. We use an average profile to compensate for the irregularity of such objects. Experimental measurements were performed with various almost periodic graphical objects arranged in rows, namely with approximate grids (dashed line grids and dot matrices) and text in different languages, including non-Latin writing systems. Such graphical objects may already exist on the object, for example in slogans, labels, advertisements on bridges, buildings, equipment, etc. During the tests, the measured period was almost identical in all experimented objects (the standard deviation less than 0.3%). The proven feature enables the effective use of the moiré measurements for practical vibration measurement in a variety of applications including public safety.
Keywords: Moiré Effect, Moiré Measurements, Public Safety, Almost Periodic Function, Average Profile, Image Arranged in Rows

SU JOK YÖNTEMİNİN HEMŞİRELİKTE KULLANIMI
USE OF SU JOK METHOD IN NURSING

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ÖZET
İnsanlığın varoluşundan beri çeşitli hastalıklarla karşı karşıya kalınmıştır. Geçmişten günümüze hastalıkları tedavi etmek için sürekli yeni tedavi yöntemleri keşfedilmiştir. Teknolojik gelişmelerle birlikte sağlığın sürdürülmesi ve iyileştirmesini yönelik birçok çalışma yapılmıştır. Bununla birlikte insanlar geleneksel tedavi yöntemlerine her daim ilgi göstermiştir. İntegratif (bütünleşik) uygulamalar modern tıbba ek olarak geleneksel yöntemlerin kullanıldığı bir alandır. İntegratif uygulamalardan biri olan Su-jok yöntemi, insan vücudundaki tüm organların el ve ayakta yansıma noktaları olduğunu esas alan bir tedavi yöntemi olarak kullanılmaktadır. Su-jok yöntemi kullanılarak varolan sağlık sorunlarının azaltılması ve sağlığın sürdürülmesi amaçlanmaktadır. Semptom yönetiminde çok önemli bir role sahip olan hemşireler, hemşirelik bakımında Su-jok yöntemini kullanarak hastalarda varolan semptomları giderebilir ve yaşam kalitelerini artırabilir. Bu makalede Su-jok yönteminin tanımı ve hemşirelikte kullanımı hakkında bilgi verilmiştir.
Anahtar Kelimeler: Su-jok, Yazışma Sistemi, Hemşirelik Bakımı.

ABSTRACT
Humanity has been faced with various diseases since its existence. From past to present, new treatment methods have been constantly discovered to treat diseases. With technological developments, many studies have been carried out to maintain and improve health. However, people have always shown interest in traditional treatment methods. Integrative practices are an area where traditional methods are used in addition to modern medicine. Su-jok method, one of the integrative applications, is used as a treatment method based on the fact that all organs in the human body have reflection points on the hands and feet. By using the Su-jok method, it is aimed to reduce existing health problems and maintain health. Nurses, who have a very important role in symptom management, can relieve patients' existing symptoms and improve their quality of life by using the Su-jok method in nursing care. In this article, information is given about the definition of the Su-jok method and its use in nursing.
Key Words: Su-jok, Correspondence System, Nursing Care.

SAĞLIK YÖNETİMİNDE ETKİLİ SAĞLIK TURİZMİ PAZARLAMASI STRATEJİLERİ

EFFECTIVE HEALTH TOURISM MARKETING STRATEGIES IN HEALTH MANAGEMENT

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ÖZET

Sağlık yönetiminde etkili sağlık turizmi pazarlaması, kurumların uluslararası arenada rekabet güçlerini artırarak, hasta memnuniyetini yükseltmeleri ve sürdürülebilir bir büyüme sağlamaları için kritik öneme sahiptir. Sağlık turizmi pazarlamasında dijital pazarlama ve sosyal medya etkin bir şekilde kullanıldığında, doğru hedef kitleye ulaşmak ve pazarlama stratejilerini optimize etmek mümkün olmaktadır. Etkili bir pazarlama stratejisi, sağlık kuruluşlarının uluslararası pazarda rekabet avantajı elde etmesini ve hasta memnuniyetini artırmasını sağlar. Araştırmanın amacı, sağlık kuruluşlarının sosyal medyayı daha etkili kullanarak sağlık turizmi pazarlama stratejilerini geliştirmelerine ve doğru hedef kitleye ulaşmalarına katkı sağlamaktır. Ayrıca sosyal medya analizinin sağlık turizmindeki önemi vurgulanarak, sağlık yöneticilerine sosyal dinleme ve veri analizi yoluyla etkili pazarlama stratejileri oluşturma konusunda rehberlik etmek amaçlanmaktadır. Bu amaçla çalışmada, "hairclinic" hashtag'i üzerinden sosyal medyada yapılan paylaşımların duygu analizi yapılmıştır. Evren olarak veri toplama platformu instagram.com, x.com, facebook.com, linkedin.com, youtube.com, threads.net seçilmiştir. Çalışmanın örneklemi ise 1-29 Kasım 2024 tarihleri arasında belirtilen sosyal medya platformlarında İngilizce dilinde "hairclinic" hashtag'i üzerinden yürütülen sosyal medya kazımasıdır. Veri toplama aracı olarak, akıllı sosyal dinleme ve marka izleme aracı olarak hizmet veren brandmention.com seçilmiştir. "Hairclinic" hashtag'i üzerinden yapılan analiz, saç ekimi hizmetlerine yönelik olumlu algı ve ilginin yüksek olduğunu göstermektedir. Bu olumlu duyguları besleyerek müşteri sadakati ve marka savunuculuğu artırılabilir. Hedef kitle analizi, duygu analizi ve trend hashtag analizi gibi yöntemler kullanılarak elde edilen veriler, saç ekimi turizmiyle ilgilenen kişilerin ilgi alanları, ihtiyaçları ve beklentileri hakkında önemli bilgiler sağlamıştır. Analiz sonuçları, "hairclinic" hashtag'i ile ilişkilendirilen paylaşımların genellikle olumlu duygular içerdiğini ve saç ekimi hizmetlerine yönelik memnuniyetin yüksek olduğunu göstermektedir. Ayrıca, #hairtransplant, #hairrestoration, #haircare gibi hashtag'lerin de kullanılması, saç ekimi yanında saç bakımı konularının da öne çıktığını göstermektedir. Bu çalışma, sağlık turizmi sektöründe faaliyet gösteren kuruluşlara sosyal medya stratejilerini geliştirmeleri ve hedef kitlelerine daha etkili bir şekilde ulaşmaları konusunda yol gösterici bilgiler sunmaktadır.

Anahtar Kelimeler: Sağlık Yönetimi, Sağlık Turizmi Pazarlaması, Pazarlama Stratejileri

ABSTRACT

Effective health tourism marketing in health management is critical for institutions to increase their competitiveness in the international arena, increase patient satisfaction and achieve sustainable growth. When digital marketing and social media are used effectively in health tourism marketing, it is possible to reach the right target audience and optimize marketing strategies. An effective marketing strategy allows health institutions to gain competitive advantage in the international market and increase patient satisfaction. The aim of the research

is to contribute to health institutions developing their health tourism marketing strategies and reaching the right target audience by using social media more effectively. In addition, the importance of social media analysis in health tourism is emphasized and it is aimed to guide health managers in creating effective marketing strategies through social listening and data analysis. For this purpose, sentiment analysis of the posts made on social media via the hashtag “hairclinic” was conducted in the study. The data collection platforms instagram.com, x.com, facebook.com, linkedin.com, youtube.com, threads.net were selected as the universe. The sample of the study is the social media scraping conducted on the hashtag “hairclinic” in English on the specified social media platforms between November 1-29, 2024. Brandmention.com, which serves as a smart social listening and brand monitoring tool, was selected as the data collection tool. The analysis conducted on the hashtag "Hairclinic" shows that the positive perception and interest towards hair transplantation services is high. By nurturing these positive emotions, customer loyalty and brand advocacy can be increased. The data obtained using methods such as target audience analysis, sentiment analysis and trend hashtag analysis provided important information about the interests, needs and expectations of people interested in hair transplantation tourism. The analysis results show that the posts associated with the hashtag "hairclinic" generally contain positive emotions and that satisfaction towards hair transplantation services is high. In addition, the use of hashtags such as #hairtransplant, #hairrestoration, #haircare shows that hair care issues are also prominent in addition to hair transplantation. This study provides guidance to organizations operating in the health tourism sector to develop their social media strategies and reach their target audiences more effectively.

Keywords: Health Management, Health Tourism Marketing, Marketing Strategies

DETERMINATION OF YIELD AND YIELD COMPONENTS OF POPCORN (*Zea mays everta* Sturt.) CULTIVARS UNDER MANYAS-BALIKESİR ECOLOGICAL CONDITIONS

BALIKESİR-MANYAS EKOLOJİK ŞARTLAR ALTINDA CİN MISIR (*Zea mays everta* Sturt.) ÇEŞİTLERİNİN VERİM VE VERİM ÖZELLİKLERİNİN BELİRLENMESİ

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ABSTRACT

Popcorn (Zea mays everta Sturt.), preferred for its nutritional benefits due to its vitamin and mineral content, is generally consumed as a snack. In recent years, the rising demand for popcorn in Turkey has significantly contributed to increased production. To achieve high yields in popcorn cultivation, it is essential to select varieties suited to regional ecological conditions.

This study aimed to determine the yield and yield components of selected popcorn varieties under the ecological conditions of Manyas-Balıkesir. The cultivars Bulut, Elacin, and Antcin-98 were used as material. This study was conducted with a randomized complete block design with three replications. The traits examined in the study included days to tasseling (62.3-64.0 days), days to silking (64.7-66.7 days), plant height (184.8-224.2 cm), first ear height (85.5-103.2 cm), stem diameter (18.00-24.40 mm), ear diameter (31.17-34.67 mm), ear length (15.80-18.50 cm), number of rows per ear (14.57-15.93 rows), number of grains per row (36.57-42.37), number of grains per ear (532.57-675.33), cob core diameter (20.40-21.93 mm), and grain yield (366.4-581.2 kg/da).

Statistical analysis revealed that the differences between genotypes were significant for all traits examined. As a result, the cultivar Bulut was found to have higher values in terms of yield and yield components compared to the other cultivars, suggesting its potential recommendation for the region.

Keywords: Zea mays everta Sturt., grain yield, agromorphological characteristics

ÖZET

Cin mısırı, içerdiği vitamin ve mineraller nedeniyle beslenme açısından tercih edilen bir mısır türüdür ve genellikle patlamış mısır olarak tüketilmektedir. Türkiye'de son yıllarda artan patlamış mısır talebi, üretimin de önemli ölçüde artmasına katkı sağlamıştır. Cin mısırı tarımında yüksek verim elde etmek için, bölgesel ekolojik koşullara uygun çeşitlerin belirlenmesi önem taşımaktadır.

Bu araştırmada, Balıkesir-Manyas ekolojik koşullarında bazı cin mısır çeşitlerinin verim ve verim unsurlarının belirlenmesi amaçlanmıştır. Çalışmada materyal olarak Bulut, Elacin ve Antcin-98 cin mısır çeşitleri kullanılmıştır. Araştırma tesadüf blokları deneme desenine göre 3 tekerrürlü olarak yürütülmüştür. Araştırmada incelenen; tepe püskülü çıkarma süresi 62.3-64.0 gün, koçan püskülü çıkarma süresi 64.7-66.7 gün, bitki boyu 184.8-224.2 cm, ilk koçan yüksekliği 85.5-103.2 cm, sap kalınlığı 18.00-24.40 mm, koçan çapı 31.17-34.67 mm, koçan uzunluğu 15.80-18.50 cm, koçandaki sıra sayısı 14.57-15.93 adet, koçanda sıradaki tane sayısı

36.57-42.37 adet, koçanda tane sayısı 532.57-675.33 adet, somak çapı 20.40-21.93 mm, tane verimi 366.4- 581.2 kg/da arasında değiştiği tespit edilmiştir.
İncelenen tüm özellikler yönünden genotipler arasındaki farklılığın istatistiki olarak önemli olduğu belirlenmiştir. Sonuç olarak, Bulut cin mısır çeşidinin verim ve verim unsurları yönünden diğer çeşitlere göre daha yüksek değerlere sahip olduğu ve bölgede önerilebileceği belirlenmiştir.
Anahtar Kelimeler: Zea mays everta Sturt., tane verimi, agromorfolojik özellikler

ARAZI TIPI KAMYONLAR ICIN R58.03 YONETMELIGINE UYGUN KAYNAKLI ve CIVATALI KOMPAKT TIP TAMPON TASARIMI

WELDED and BOLTED COMPACT TYPE BUMPER DESIGN FOR ALL-TERRAINIAN TRUCKS COMPLIANT WITH R58.03 REGULATION

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ÖZET

Hayatın normal seyrinde devam edebilmesi için insanlar çeşitli meslek dallarına ayrılmış ve çeşitli ürünlerin üretimini sağlayıp farklı yöntemlerle ticareti farklı coğrafyalarda gerçekleştirmiştir. Elbette bu çeşitlilik ve farklı bölgelerde yaşam sürdürme çabası bölgeler arasında ulaşım ve taşımacılık sektörünün hızla büyümesine neden olmuştur. Günümüze gelindiğinde bu süreç büyük veya küçük fark etmeksizin araçların birlikte hareket ettiği karayollarında da devam etmektedir. Oluşan araç yoğunluğu sonucunda da kazalar meydana gelmektedir. Bilindiği üzere özellikle yüksek hızlarda seyreden binek araçların kamyon gibi vasıtalara arkadan çarpması durumunda oluşan moment, binek aracın içerisindeki şasi bağlantı bölgelerinde ezici bir kuvvet oluşturarak kazalardaki ölüm oranını arttırmaktadır. Bu kazalarda can ve mal kayıplarının azaltılması amacıyla çeşitli regülasyonlar ve yönetmelikler oluşturulmuştur. ECE R58 yönetmeliği ise bu kapsamda oluşturulmuş, kamyon ve ağır yük taşıyan araçların arka tampon kısmında belirli standartların sağlanmasını da şart koşmuştur. Bu çalışmada R58.03 kapsamına uygun bir kompakt tamponun tasarımı, analizleri ve uygunluğu ile ilgili gerçekleştirilen süreçler belirtilmiştir.

Ansys programının yapısal analiz modülünde çalıştırılmak üzere Catia programında tamponun çizim ve tasarım süreci gerçekleştirilmiş ardından stp dosya formatına çevrilmiştir. Bu format analiz programında açılarak mesh atamaları yapılmaktadır. Analizden çıkan sonuçlara göre kalınlık, malzeme cinsi, büküm radyüsü ve büküm mesafeleri değiştirilerek uygun tasarım ortaya çıkarılmıştır. R58.03 kapsamında aracın 10kN ve 18kN yükü karşılaması gerekmektedir. Yükler, tamponun uç noktalarından iç tarafa doğru her iki taraftan 300mm, orta noktadan sağ ve sol her iki tarafa 400mm olarak 4 bası noktasından etki etmelidir. Analizler sonucunda tamamının kaynaklı olması yerine cıvatalı bağlantılarında yük altında yeterli koruyuculuğu sağladığı görülmüş olup, tamamı kaynaklı yapılarda darbe sonrası komple tamponun değişimi gerekirken, bazı bölgelerin montajlı olarak kullanılabileceği bir kompakt tip tamponun tasarımına geçilmiştir. Tasarımı ve analizleri yapılan bu kompakt tip tamponda şasi bağlantı tarafında kalınlığı 8mm olan S700MC malzemeden kaynaklı imalat ile gövde oluşturulmuş ve araç şasisine 10.9 kalite M14x1.5x50 DIN6921 cıvatalarla 185Nm sıkılarak montajlanmıştır, ardından S355J2 malzemeden kalınlığı 8mm olan 120x100 kutu profil çarpışma yüzeyi olarak seçilmiş, 8.8 kalite M12x1.75x25 DIN933 cıvatalarla gövdeye, 115Nm ile sıkılarak montajlanmıştır. Alternatif olan tampon tasarımına göre kompakt tip tampon tasarımında, çarpışma bölgesi için orta bölgede bulunan destek plakasına ve 120x150mm kesiti oluşturacak iki farklı bükümlü parçaya ihtiyaç kalmamış olup yerine standart S355J2 100x120mm kutu profil ile isterler karşılanabilir hale gelmiş ayrıca tedarik süreci kolaylaştırılarak üretim süreci

yalınlaştırılmıştır.
Anahtar Kelimeler: Koruyucu Arka Ekipman, Arka Tampon, ECE 58.03, Sonlu Elemanlar Metoduyla Analiz, Tadilat Projesi

ABSTRACT

In order for life to continue in its normal course, people have been divided into various professions and have produced various products and traded them in different geographies with different methods. Of course, this diversity and the effort to sustain life in different regions has led to the rapid growth of the transportation and transportation sector between regions. Today, this process continues on the highways where vehicles, whether large or small, move together. As a result of the vehicle density, accidents occur. As it is known, especially when passenger cars traveling at high speeds hit vehicles such as trucks from behind, the moment created creates an overwhelming force in the chassis connection areas inside the passenger car and increases the death rate in accidents. In order to reduce the loss of life and property in these accidents, various regulations and regulations have been established. The ECE R58 regulation was established in this context and stipulates that certain standards must be met on the rear bumper of trucks and heavy load carrying vehicles. In this study, the processes carried out for the design, analysis and conformity of a compact bumper in accordance with R58.03 are described.

The drawing and design process of the bumper was carried out in the Catia program to be run in the structural analysis module of the Ansys program and then converted to stp file format. This format is opened in the analysis program and mesh assignments are made. According to the results of the analysis, the appropriate design was created by changing the thickness, material type, bending radius and bending distances. Within the scope of R58.03, the vehicle must withstand 10kN and 18kN loads. The loads should act from 4 compression points, 300mm from each side from the end points of the bumper towards the inside, 400mm from the midpoint to both right and left sides. As a result of the analyzes, it was seen that bolted connections provide sufficient protection under load instead of being all welded, and while the complete bumper must be replaced after impact in all-welded structures, a compact type bumper was designed in which some parts can be used as assembled. In this compact type bumper, which was designed and analyzed, the body was formed with welded manufacturing from S700MC material with a thickness of 8mm on the chassis connection side and mounted to the vehicle chassis with 10.9 grade M14x1.5x50 DIN6921 bolts tightened with 185Nm, then 120x100 box profile with a thickness of 8mm from S355J2 material was selected as the crash surface and mounted to the body with 8.8 grade M12x1.75x25 DIN933 bolts tightened with 115Nm. According to the alternative bumper design, in the compact type bumper design, there is no need for the support plate in the middle area for the crash zone and two different bent parts that will form the 120x150mm section, and instead, the requirements can be met with the standard S355J2 100x120mm box profile, and the procurement process has been simplified and the production process has been simplified.

Keywords: Protective Rear Equipment, Rear Bumper, ECE 58.03, Finite Element Analysis, Modification Project

EFFECT OF INPUT SUBSIDIES ON LIVELIHOOD ACTIVITIES OF YOUTH RICE FARMERS UNDER VALUE CHAIN DEVELOPMENT PROGRAMME IN NIGER STATE, NIGERIA

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ABSTRACT

The study assessed the effect of input subsidies on output of rice farmers under value chain development programme in Niger State, Nigeria. A multi-stage sampling technique was used to select 185 registered youth rice farmers using Yamane formular for appropriate sample size determination and data collected through a semi-structured questionnaire were analyzed using descriptive statistics (such as frequency count, percentages, mean) and Ordinary Least Square regression model to examine the effects of input subsidies on livelihood activities of youth rice farmers. The results obtained shows that rice farmers in the study area were mostly males (85.4%) and formally educated (70.8%) with an average age of 42years among rice farmers in Niger state. The results also shows that increase in machine hiring services (94.1%), access to rice production modern technologies (86.5%), access to training on rice farming (85.9%), access to post-harvest handling and processing technologies (82.7%) and increase in the use of fertilizer and agrochemicals (81.1%) are the major input subsidies benefited among the rice farmers in Niger state. The result further shows that extension contacts, number of trainings received, farming experience, access to credit facility, quantity of fertilizer used, access to market and upcycling/recycling of waste were the significant effects of inputs subsidies on livelihood activities of the rice farmers in the study area. Hence, it was recommended that Value Chain Development Programmed should continue and expand the provision of subsidized inputs such as rice seeds, fertilizers agrochemicals, post-harvest technologies and increase trainings to rice farmers as they are crucial for farmers in Niger state and strengthen extension services to provide continuous support and innovation dissemination in rice farming techniques.

Key words: Value-chain, Inputs, Subsidies, Rice-farmers and Development

TÜRKİYEDE BESİN GÜVENCESİZLİĞİ VE SÜRDÜRÜLEBİLİR VE SAĞLIKLI BESLENME DAVRANIŞLARININ COĞRAFİK BÖLGELERE GÖRE ANALİZİ

ANALYSIS OF FOOD INSECURITY AND SUSTAINABLE AND HEALTHY NUTRITION BEHAVIORS IN TURKIYE BY GEOGRAPHICAL REGIONS

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ÖZET

Besin güvencesi, yaşamsal fonksiyonlar için elzem olan enerji ve besin ögesini sağlayan besinlerin temin edilmesi ve sağlığın korunması bakımından büyük önem taşımaktadır. Gelecek nesillere yaşanabilir bir dünya bırakmak ve sağlığın korunmasını sağlamak için sürdürülebilir ve sağlıklı beslenme davranışlarının benimsenmesi gerekir. Ülkemizde coğrafi bölgelere göre besin güvencesizliği ve sürdürülebilir ve sağlıklı beslenme davranışlarını değerlendirilen yüksek örneklemli bir çalışma olmaması sebebiyle bu araştırmanın yapılması planlanmıştır. Çalışmaya gönüllü olarak katılmayı kabul eden Türkiye'de ikamet eden 19-65 yaş arası 5285 yetişkin ile tabakalı basit tesadüfi örnekleme yöntemi kullanılarak bu araştırma yürütülmüştür. Online anket formu sosyo-demografik özellikleri içeren bilgiler, Sürdürülebilir ve Sağlıklı Beslenme Davranışları Ölçeği ve Hanehalkı Besin Güvencesizliği Ve Erişim Ölçeğinden oluşmaktadır. Veri toplama bileşenleri, Google Forms üzerinden online link çevrimiçi platformlardan (Facebook, Instagram, whatsapp vd.) paylaşılmış ve katılımcılar online anketi cevaplandırmışlardır. Güneydoğu Anadolu ve Doğu Anadolu bölgesinde hanelerin yaşadığı besin güvencesizliği diğer bölgelere kıyasla anlamlı şekilde daha şiddetli bulunmuştur (HFIAS skoru 8.38±6.49, 7.86±6.71, $p<0,001$). Ege ve Akdeniz bölgesindeki yaşayan bireylerin (4.28±1.30 ve 4.15±1.26) sürdürülebilir ve sağlıklı beslenme davranışlarını daha yüksek oranda benimsedikleri görülürken, Güneydoğu Anadolu bölgesinde (3.83±1.26) bu oran en düşük seviyededir ($p<0,001$). Güneydoğu Anadolu bölgesinde yaşayan bireylerin mevsiminde gıda ve besin atıklarından kaçınma, sağlıklı ve dengeli beslenme ve kalite etiketleri alt bileşenlerine yönelik olumlu davranışlarının Ege bölgesinde yaşayan bireylere kıyasla anlamlı şekilde daha düşük olduğu görülmüştür ($p<0,001$). Bu çalışmanın verileri sürdürülebilir ve sağlıklı beslenme davranışlarına yönelik farkındalık çalışmalarının bölgesel düzeyde yürütülmesi gerektiğini ve besin güvencesizliğinin ortadan kaldırılması için iyileştirici uygulamalara ihtiyaç olduğunu doğrulamaktadır.

Anahtar Kelimeler: Sürdürülebilir ve Sağlıklı Beslenme Davranışları, Hanehalkı Besin Güvencesizliği, Coğrafik Bölgeler, Besin Güvencesi

ABSTRACT

Food security is of great importance in terms of providing nutrients that provide energy and nutrients that are essential for vital functions and protecting health. Sustainable and healthy eating behaviors must be adopted In order to leave a livable world to future generations and to ensure the protection of health. This research was planned to be conducted because there is no study with a large sample size that evaluates food insecurity and sustainable and healthy nutrition behaviors according to geographical regions in our country. This study was conducted using the stratified simple random sampling method with 5285 adults aged 19-65 residing in Turkey who agreed to participate in the study voluntarily. The online survey form consists of information including socio-demographic characteristics, Sustainable and Healthy Eating Behaviors Scale and Household Food Insecurity Access Scale. Data collection components were shared as Google Forms links on online platforms (Facebook, Instagram, WhatsApp etc.) and participants answered the online survey. Food insecurity experienced by households in the Southeastern Anatolia and Eastern Anatolia regions was found to be significantly more severe compared to other regions (HFIAS score 8.38±6.49, 7.86±6.71, $p<0.001$). While individuals living in the Aegean and Mediterranean regions (4.28±1.30 and 4.15±1.26) were found to adopt sustainable and healthy nutrition behaviors at a higher rate, this rate was at the lowest level in the Southeastern Anatolia region (3.83±1.26) ($p<0.001$). It was observed that individuals living in the Southeastern Anatolia region had significantly lower positive behaviors towards seasonal food & avoiding food waste, healthy and balanced nutrition and quality labels subcomponents compared to individuals living in the Aegean region ($p<0.001$). Data from this study confirm that awareness practices should be implemented at the regional level regarding sustainable and healthy dietary behaviors and that remedial practices are needed to eliminate food insecurity.

Keywords: Sustainable and Healthy Nutrition Behaviors, Household Food Insecurity, Geographical Regions, Food Security

20 YANVAR: KATLİAMDAN BAĞIMSIZLIĞA AZERBAYCAN HALKININ ŞANLI DİRENİŞİ

20 YANVAR: THE GLORY RESISTANCE OF THE AZERBAIJANI PEOPLE FROM MASSACRE TO INDEPENDENCE

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ÖZET

20 Ocak 1990 tarihi Azerbaycan'ın bağımsızlık mücadelesinin dönüm noktası olmuş ve tarihe 20 Yanvar Katliamı olarak geçen olaylar yaşanmıştır. Sovyetler Birliği yönetimi Azerbaycan halkının bağımsızlık ve özgürlük taleplerini bastırmak amacıyla Bakü'ye askeri birlikler göndererek masum sivillere yönelik ağır bir saldırı gerçekleştirmiştir. Bakü sokaklarına giren Sovyet tankları ve Kızıl Ordu birlikleri Azerbaycan halkına karşı güç kullanmış, kadın, çocuk, yaşlı demeden yüzlerce masum insanın ölümüne ve yaralanmasına yol açmıştır. Yaşanan bu olay Azerbaycan halkı için bir yas günü olmakla birlikte bağımsızlık ruhunu alevlendiren, aynı zamanda Azerbaycan halkının kaderini de değiştiren bir dönüm noktası olmuştur. Azerbaycan halkı, zulme boyun eğmek yerine özgürlük için ayağa kalkarak, 20 Yanvar'ı tarihe yalnızca bir trajedi değil aynı zamanda bir onur ve direniş destanı olarak yazmıştır. Bu kanlı gece, bir milletin özgürlük sevdasının bastırılamayacağını tüm dünyaya ilan ettiği gece olmuştur. 20 Ocak Katliamı sadece Azerbaycan'da değil tüm dünya genelinde büyük yankı uyandırarak diğer ülkelerin bağımsızlık mücadelesinde de bir dönüm noktası olmuştur. Bu çalışmanınamacı 20 Ocak 1990 tarihinde Azerbaycan'ın başkenti Bakü'de yaşanan 20 Yanvar katliamında halkın bağımsızlık yolunda gösterdiği kararlılığı, yaşadığı haksızlıklara ve zulme karşı onurlu direnişi vurgulamak ve bu tarihi olayın uluslararası toplumda anlaşılmasını sağlamaktır. Bu amaçla benzer acıların bir daha yaşanmaması için toplumsal hafızayı diri tutmak, barış ve adalet çerçevesinde birlik ve dayanışmayı teşvik etmek hedeflenmektedir.

Anahtar Kelimeler: 20 Yanvar, Bakü Katliamı, Bağımsızlık, Azerbaycan Halkı, Sovyetler Birliği ve Azerbaycan

ABSTRACT

January 20, 1990 was the turning point in Azerbaijan's struggle for independence and the events that went down in history as the 20 Janvar Massacre took place. The Soviet Union administration sent military units to Baku in order to suppress the demands of the Azerbaijani people for independence and freedom and carried out a heavy attack on innocent civilians. Soviet tanks and Red Army units that entered the streets of Baku used force against the Azerbaijani people, causing the deaths and injuries of hundreds of innocent people, including women, children and the elderly. Although this event was a day of mourning for the Azerbaijani people, it was a turning point that ignited the spirit of independence and changed the fate of the Azerbaijani people. Instead of submitting to tyranny, the Azerbaijani people stood up for freedom and wrote 20 Janvar into history not only as a tragedy but also as an epic of honor and resistance. This bloody night was the night when a nation declared to the whole

world that its love for freedom could not be suppressed. The January 20 Massacre had a great impact not only in Azerbaijan but also around the world, becoming a turning point in the struggle for independence of other countries. The aim of this study is to emphasize the determination of the people towards independence, the honorable resistance against the injustice and oppression they experienced during the 20 Yanvar massacre in Baku, the capital of Azerbaijan, on January 20, 1990, and to ensure that this historical event is understood in the international community. For this purpose, it is aimed to keep the social memory alive and to encourage unity and solidarity within the framework of peace and justice so that similar pains do not occur again.

Keywords: 20 Yanvar, Baku Massacre, Independence, Azerbaijani People, Soviet Union and Azerbaijan

ELEKTRİKLİ ARAÇ HIZLI ŞARJ UYGULAMALARI İÇİN MODÜLER 5 KW LLC REZONANS DÖNÜŞTÜRÜCÜ TASARIMI

DESIGN OF A MODULAR 5 KW LLC RESONANT CONVERTER FOR ELECTRIC VEHICLE FAST CHARGING APPLICATIONS

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Elektrik Mühendisliği Bölümü

ÖZET

Bu çalışma, elektrikli araçlar için batarya şarjına yönelik 5 kW'lık bir LLC rezonans dönüştürücü tasarımını ele almaktadır. Tasarlanan dönüştürücü, modüler bir yapıya sahip olması sayesinde, birden fazla ünitenin seri veya paralel olarak bağlanmasıyla daha yüksek güç seviyelerinde şarj imkanı sunmaktadır. Bu özellik, farklı şarj gereksinimlerine uyum sağlarken, aynı zamanda yüksek güç yoğunluğu ve esneklik gerektiren ultra hızlı şarj istasyonlarında kullanım için ideal bir çözüm oluşturmaktadır.

LLC rezonans dönüştürücü, 325 V ile 375 V arasında bir giriş gerilim aralığı ve 250 V ile 450 V arasında bir batarya çıkış gerilim aralığı için tasarlanmıştır. Modüler tasarımı sayesinde, 900 V'a kadar şarj gerilimlerini destekleyebilmekte ve bataryanın tüm gerilim aralığında nominal güç sağlamayı mümkün kılmaktadır., birinci harmonik analizine dayalı olarak dönüştürücünün ana çalışma prensiplerini tanımlayan gerekli analitik denklemlerin çıkarılmasıyla oluşturulmuş, ardından tasarım parametreleri, bu denklemler doğrultusunda iteratif bir biçimde optimize edilmiştir.

LLC dönüştürücülerde kritik bir özellik olan sıfır gerilim anahtarlama (Zero Voltage Switching - ZVS), anahtarlama kayıplarını minimum seviyeye indirerek yüksek verimlilik elde edilmesine olanak tanır. Bu çalışmada, LLC dönüştürücünün ZVS koşullarını sağlamak için ayrıntılı bir analiz gerçekleştirilmiştir. Yüksek frekansta rezonans davranışı göz önünde bulundurularak, dönüştürücünün rezonans elemanları ve anahtarlama zamanlaması, ZVS'nin tüm çalışma aralığında sürdürülebilmesi için optimize edilmiştir. Analizler sonucunda, LLC dönüştürücünün düşük ve yüksek yük koşullarında da ZVS modunda çalışabildiği ve böylece anahtarlama kayıplarının önemli ölçüde azaldığı gösterilmiştir. Ayrıca, dönüştürücünün geniş yük ve gerilim aralıklarında istikrarlı bir şekilde çalışması, MATLAB Simulink ortamında gerçekleştirilen kapsamlı simülasyonlarla analiz edilmiştir. Dinamik performans ve kararlı çalışma koşulları, hem düşük yük hem de tam yük senaryolarında detaylı olarak incelenmiş ve sistemin hedeflenen özelliklere uygun şekilde davrandığı gösterilmiştir.

Anahtar Kelimeler: LLC Rezonans Dönüştürücü, Elektrikli Araçlar, Batarya Şarjı, Geniş Çıkış Aralığı, Birinci Harmonik Analizi, Sıfır Akım Anahtarlama (ZCS), Sıfır Gerilim Anahtarlama (ZVS)

ABSTRACT

This study focuses on the design of a 5 kW LLC resonant converter for battery charging applications in electric vehicles. The designed converter features a modular structure, allowing multiple units to be connected in series or parallel to provide higher power levels for charging. This characteristic makes it an ideal solution for ultra-fast charging stations, which require high power density and flexibility while catering to diverse charging requirements.

The LLC resonant converter is designed for an input voltage range of 325 V to 375 V and a battery output voltage range of 250 V to 450 V. With its modular design, it is capable of supporting charging voltages up to 900 V, ensuring nominal power delivery across the entire battery voltage range. This design was developed based on first harmonic analysis by deriving the necessary analytical equations that define the main operating principles of the converter. Subsequently, the design parameters were iteratively optimized in accordance with these equations.

Zero Voltage Switching (ZVS), a critical feature in LLC converters, enables high efficiency by minimizing switching losses. In this study, a detailed analysis was conducted to ensure the ZVS conditions of the LLC converter. Considering the high-frequency resonance behavior, the resonant components and switching timing of the converter were optimized to sustain ZVS across the entire operating range. The analysis demonstrated that the LLC converter can operate in ZVS mode under both low and high load conditions, significantly reducing switching losses. Additionally, the converter's stable operation across wide load and voltage ranges was analyzed through comprehensive simulations performed in the MATLAB Simulink environment. The dynamic performance and steady-state operation were thoroughly examined for both low-load and full-load scenarios, showing that the system behaves in accordance with the targeted specifications.

Keywords: LLC Resonant Converter,Electric Vehicles, Battery Charging, Wide Output Range, First Harmonic Analysis, Zero Current Switching (ZCS), Zero Voltage Switching (ZVS)

EMPOWERING AFGHAN WOMEN THROUGH ECONOMIC PARTICIPATION

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Abstract:
Women entrepreneurs, given their role in society, can be considered a central axis for the progress and development of a country. The level of participation of women entrepreneurs in economic activities creates a foundation for national development. Therefore, it is essential to establish frameworks for self-awareness, guide the economic and social capabilities of women, and plan to engage them in various activities. Women bear a significantly greater responsibility than men in household economies and domestic activities, contributing to the prosperity and social advancements of the community. However, women still have not attained their rightful status and position in the majority of countries, particularly in underdeveloped nations like Afghanistan, as active citizens endowed with the talents and abilities to participate in economic, social, political, and cultural spheres. Furthermore, women's activities are often overlooked in economic calculations, and they are referred to as an invisible labor force. The disheartening estimates of the number of active women and the significantly low assessment of women's participation in economic activities serve as a confirmation of the insufficient attention given to women's issues and their added value, which is a prerequisite for the development of our country.
Keywords: Women, Participation, Entrepreneurship, Employment, Economy.

THE EFFECT OF LABORATORY AND VEE MAPPING TEACHING STRATEGIES ON STUDENTS' ACHIEVEMENT AND RETENTION IN CHEMISTRY, IN KADUNA METROPOLIS, KADUNA STATE – NIGERIA

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ABSTRACT

The study sought to find out the effect of laboratory and vee mapping teaching strategies on students' achievement and retention in chemistry in Kaduna metropolis. Two research questions were raised, and two hypotheses were formulated to guide the study. The study adopted pre-test, post-test non-randomized quasi experimental design. The total population of the study consisted of one thousand, six hundred and twenty (1,620), Kaduna State Ministry of Education. The instruments used for the study were the Chemistry Achievement Test (CAT) and Chemistry Retention Test (CRT) on rusting. The CAT consisted of 30 multiple choice questions. Data were collated and analyzed using frequency counts, mean and standard deviation for the research questions and t-test was used to analyze data on the null hypotheses. The hypotheses were tested at 0.05 level of significance. Findings revealed among others that there was a significant difference between laboratory method and vee-mapping strategy, in favour of laboratory. It is also noted that laboratory practicals helped to improve students' perceived difficulty in learning chemistry and also enhanced students' achievement. The study also disclosed that achievement scores of students exposed to vee-mapping teaching strategy are better than those taught using conventional teaching. And recommendations were made among others that Teaching with conventional teaching method should be discouraged, rather innovative teaching strategies such as vee-mapping and laboratory should be encouraged through which students will actively participate in the teaching and learning process rather than being passive.

Keywords: Laboratory method, Vee-mapping strategy, Achievement, Retention, and Chemistry

LEONARDİT (MARAŞ, TÜRKİYE) KARAKTERİZASYONU VE HÜMİK ASİT ÜRETİM POTANSİYELİNİN ARAŞTIRILMASI

CHARACTERIZATION OF LEONARDITE (MARAŞ, TÜRKİYE) AND INVESTIGATION OF ITS HUMIC ACID PRODUCTION POTENTIAL

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ÖZET

Leonardit, linyit yatakları civarında linyitin atmosferik oksidasyon sonucu değişmesiyle oluşan organik bir maddedir. Ülkemizde birçok linyit yatağı bulunmaktadır. Bu yataklarda bulunan ve linyit olarak değerlendirilemeyecek nitelikteki maddelerin leonardit olarak değerlendirilmesi, Türkiye'nin madencilik, tarım ve sanayi sektörlerine önemli katkılar sağlayarak ülke ekonomisine katma değer yaratacaktır. Bu çalışmada, Maraş bölgesinden alınan leonardit örneği üzerinde karakterizasyon çalışmaları yapılmış ve hümik asit üretim potansiyeli incelenmiştir. Deneysel çalışmalar kapsamında, kimyasal liç işlemine tabi tutulan leonardit numunesinin hümik asit içeriği ve organik madde miktarı belirlenmiştir. Deneysel çalışma sonucunda elde edilen bulgular, leonarditin hümik asit üretimi için önemli bir kaynak olduğunu göstermekte ve bu kaynağın Türkiye'nin madencilik, tarım ve sanayi sektörlerine katkı sağlama potansiyelini ortaya koymaktadır. Sonuç olarak, leonarditin ekonomik açıdan değerlendirilmesi, ülke ekonomisine katma değer yaratma açısından büyük bir önem taşımaktadır.

Anahtar Kelimeler: Leonardit, hümik asit, karakterizasyon, organik madde, linyit

ABSTRACT

Leonardite is an organic material formed by the alteration of lignite through atmospheric oxidation around lignite deposits. In our country, there are many lignite deposits. Evaluating the materials found in these deposits that cannot be classified as lignite as leonardite will provide significant contributions to Turkey's mining, agriculture, and industrial sectors, creating added value for the national economy. In this study, characterization studies were conducted on a leonardite sample taken from the Maraş region, and its humic acid production potential was examined. As part of the experimental work, the humic acid content and organic matter of the leonardite sample subjected to leaching were determined. The findings after experimental work indicate that leonardite is an important resource for humic acid production and highlight its potential to contribute to Turkey's mining, agriculture, and industrial sectors. In conclusion, the economic evaluation of leonardite holds great importance in terms of creating added value for the national economy.

Keywords: Leonardite, humic acid, characterization, organic matter, lignite

LANTANİT KATKILI GRAFEN KUANTUM NOKTA ARAYÜZEYLİ VE ARAYÜZEYSİZ DİYOTLARIN ELEKTRİK KARAKTERİZASYONUNA İLİŞKİN KARŞILAŞTIRMA
COMPARISON ON THE ELECTRICAL CHARACTERISATION OF LANTHANUM DOPED GRAPHENE QUANTUM DOT INTERFACED AND NON-INTERFACED DIODES

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Abstract
Graphene quantum dots (GQDs) are an advanced carbon-based nanomaterial with properties such as quantum confinement and edge effects. These effects are due to their ultra-small size, which results in discrete energy levels and distinguishes them from bulk graphene. GQDs exhibit a number of favorable properties, including excellent water solubility, high fluorescence biocompatibility, quantum yield. These attributes are ideally suited for advanced applications such as sensing, detection, communication, etc. Because of these varied properties and applications, GQDs have the potential to transform areas ranging from environmental sensing and diagnostics to renewable energy and advanced healthcare solutions. To improve the performance of pure GQDs, GQDs are doped with heteroatoms such as nitrogen, sulfur and boron, etc. In this study, the electrical properties of diodes with and without La doped GQD interfaces are investigated and compared to see the contribution of the La doped GQD interface to the diode performance. Metal-semiconductor diodes were fabricated with and without coating La-doped GQD thin film as an interfacial layer between metal and semiconductor. n-type Si was used as wafer and gold (Au) was used as ohmic and rectifier contacts. Current-voltage (I-V) measurements were performed at room temperature and in a non-illuminated area. The diode parameters were calculated by thermionic emission method. The results show improvement in the diode parameters of barrier height and ideality factor in La-doped GQD-based diodes and highlight their potential to enhance charge transport and reduce recombination effects. These results underline the importance of La doped GQDs in optimizing the performance of electronic devices and pave the way for advanced applications in optoelectronics and energy systems. This research is expected to pave the way for further investigation of La-doped GQDs in next generation electronics.
Keywords: La Doped Graphene Quantum Dots (GQDs), Diode, Electrical Characterization

Özet
Grafen kuantum noktaları (GQD'ler), kuantum sınırlaması ve kenar etkileri gibi özellikleri ile gelişmiş bir karbon tabanlı bir nanomalzemedir. Kuantum sınırlaması ve kenar etkileri, ayrık enerji seviyeleri ile sonuçlanan ve onları yığın grafenden ayıran ultra küçük boyutlarından kaynaklanmaktadır. GQD'ler mükemmel suda çözünürlük, yüksek floresan kuantum verimi, biyouyumluluk gibi bir dizi olumlu özellik sergiler. Bu özellikler onları algılama, dedeksiyon ve haberleşme gibi gelişmiş uygulamalar için ideal hale getirmektedir. Bu çeşitli özellikler ve uygulamalar nedeniyle GQD'ler çevresel algılama ve teşhisten yenilenebilir enerji ve gelişmiş sağlık çözümlerine kadar çeşitli alanları dönüştürme potansiyeline sahiptir. GQD'lerin saf halde kullanımı performansını artırmak amacıyla azot, sülfür, bor gibi hetero-atomlarla

katkılama yapılmaktadır. Bu çalışmada, GQD'li arayüzeyin diyot performansına katkısını görebilmek için La katkılı GQD arayüzeyli ve arayüzeysiz diyotların elektriksel özellikleri incelenmiş ve karşılaştırılmıştır. Metal-yarı iletken diyotlar, metal ve yarı iletken arasına La katkılı GQD ince filmi arayüzey tabakası olarak kaplanarak ve kaplanmadan üretilmiştir. Alttaş olarak n tipi Si, omik ve doğrultucu kontak olarak altın (Au) kullanılmıştır. Akım-voltaj (I-V) ölçümleri oda sıcaklığında ve ışık görmeyen alanda yapılmıştır. Diyot parametreleri termiyonik emisyon yöntemi ile hesaplanmıştır. Sonuçlar, La katkılı GQD tabanlı diyotlarda diyot parametreleri olan bariyer yüksekliği ve idealite faktöründe iyileşme olduğunu göstermekte ve yük taşınımını artırma ve rekombinasyon etkilerini azaltma potansiyellerini vurgulamaktadır. Bu sonuçlar, La katkılı GQD'lerin elektronik cihazların performansını optimize etmedeki öneminin altını çizmekte ve optoelektronik ve enerji sistemlerinde gelişmiş uygulamaların önünü açmaktadır. Bu araştırmanın, yeni nesil elektroniklerde La katkılı GQD'lerin daha fazla araştırılmasının önünü açacağı değerlendirilmektedir.

Anahtar Kelimeler: La Katkılı Grafen Kuantum Noktalar (GQD'ler), Diyot, Elektriksel Karakterizasyon

EKLEMELİ İMALAT YÖNTEMLERİNDE LAZER PARLATMA İŞLEMLERİNİN ETKİLERİ ÜZERİNE BİR İNCELEME
A STUDY ON THE EFFECTS OF LASER POLISHING PROCESSES IN ADDITIVE MANUFACTURING METHODS

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ÖZET
Eklemeli imalat, malzemeyi katman katman ekleyerek üç boyutlu nesneler üretmeye olanak sağlayan yenilikçi bir teknolojidir ve karmaşık geometrilere sahip parçaların üretiminde büyük avantajlar sunar. Ancak, bu yöntemle üretilen parçaların yüzey pürüzlülüğü, mekanik dayanımı ve geometrik doğruluğu genellikle ek işlem gerektirir. Lazer patlatma, bu ihtiyaçları karşılamak için kullanılan ve özellikle yüzey kalitesini artırmayı hedefleyen bir tekniktir. Lazer ışınıyla malzeme yüzeyinin modifiye edilmesi sayesinde yüzey sertliği, korozyon direnci ve yorulma dayanımı iyileştirilebilir. Çalışmada eklemeli imalat yöntemlerinde lazer patlatma işlemlerinin etkileri detaylı bir şekilde incelenmiştir. Ayrıca lazer gücü, darbe genişliği ve tarama hızı gibi işlem parametrelerinin yüzey özellikleri üzerindeki etkileri incelenmiş, bu parametrelerin optimize edilmesinin önemine vurgu yapılmıştır. Bunun yanında, yöntem, medikal implantlar, endoskoplar ve optik cihazlar gibi yüksek hassasiyet gerektiren uygulamalarda başarılı bir şekilde kullanılmaktadır. Sonuç olarak, lazer patlatma işlemi, eklemeli imalat teknolojisinin potansiyelini daha ileriye taşıyan bir yöntemdir. Gelecekte, lazer teknolojisinin gelişimi ve farklı malzemelere yönelik parametre optimizasyon çalışmaları, bu yöntemin endüstriyel uygulamalardaki etkinliğini artırabilir.
Anahtar Kelimeler: Eklemeli İmalat, Lazer Parlatma, Optimum Parametreler

ABSTRACT
Additive manufacturing is an advanced technology that allows the production of three-dimensional objects consisting of material layer by layer and offers great advantages that are separated into parts with complex geometries. However, the surface roughness, mechanical changes and geometric changes of the parts produced by this product usually require additional processing. Laser blasting is a technique used to meet these costs and especially to extend the life of the surface. Surface hardness, fracture resistance and absence of rupture can be good thanks to the change of the cross-section of the material with the laser beam. The results of laser blasting rates in additive manufacturing methods in the study are detailed. In addition, the effects of processes such as laser power, pulse width and scanning speed on surface properties were examined, and the importance of optimizing these characters was emphasized. In addition, the method is successfully used in high-range applications such as medical implants, endoscopes and optical devices. As a result, laser blasting is a method that better combines the potential of additive manufacturing technology. In the future, the development of laser technology and parameterization studies for different properties ensure the feasibility of this method in industrial applications.
Keywords: Additive Manufacturing, Laser Polishing, Optimum Parameters

TİTANYUM VE ALAŞIMLARININ İŞLENEBİLİRLİĞİ ÜZERİNE BİR İNCELEME

A STUDY ON THE MACHINABILITY OF TITANIUM AND ITS ALLOYS

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ÖZET

Titanyum ve alaşımları, hafif aynı zamanda çok mukavim bir malzeme olması sebebiyle çok çeşitli sanayi alanlarında kullanılmaktadır. Havacılık ve savunma sanayisinde, hafifliğinin mukavemet ile birleşmesinden ortaya çıkan bu malzemeler ile, uçaklarda ve uzay araçlarında bütüncül yapıdaki sağlamlığın korunarak ağırlıklarında bir azaltmanın olması bir çok konuda verimliliğin üst seviyeye çıkmasını sağlamıştır. Özelliklede yüksek sıcaklıklarda çalışan motor kısımlarında kullanılır hale gelmiştir. Bununla birlikte tıp ve diş hekimliği alanlarında da vazgeçilmez bir hal alması bu malzemeleri cazip kılmıştır. Özellikle canlı dokularla uyum sağlaması ile insan vücudunda korozyona karşı ciddi bir direnç sağlamaktadır. Isı iletkenliğinin az olması ile ısı yayılmasının kısıtlanması, kimyasal reaksiyonlarda da yüksek özelliğe sahip olması gibi özelliklerinden dolayı kesilmesi ve işlenmesi zor bir malzeme halini almaktadır. Titanyum ve alaşımlarının İşleme esnasında yüksek sıcaklıkta mukavemetlerin güçlü olmasından dolayı kesici takımların çabuk aşınmasına sebep olmaktadır. Bu tarz zorluklardan dolayı araştırmacılar bu malzemenin işlenmesini çalışarak çeşitli işleme parametrelerini ve kesici takım seçiminde nelere dikkat etmek gerektiğine dair kapsamlı araştırmalar ile çözüm yolları sunmaya çalışmışlardır. Günümüzde kullanılan kesici takımlardan elmas, PCD ve CBN gibi kaplamalı ve kaplamasız kesici takımlar kullanılarak bu zorluklar aşılmaya çalışılmıştır. Aynı zamanda bu kesicilerin soğutulması da büyük önem arz etmektedir. Bu kapsamda bir kısım araştırmacıların optimum parametreler ile yaptıkları çalışmalar sunulmuş olup hangi kesici takımlarını nerede kullanmışlar ve burada ne tarz bir çalışma ile bu parametreler çalışılmış ve sonucunda bulunan bulgular nelerdir onlar gösterilmiştir.

Anahtar Kelimeler: Titanyum ve Alaşımları, Kesici Takımlar, İşlenebilirlik

ABSTRACT

Titanium and its alloys are used in a wide variety of industrial areas because they are lightweight and very durable. In the aviation and defense industry, these materials, which are the result of combining lightness with strength, have enabled efficiency to increase to a higher level in many areas, while preserving the solidity of the holistic structure in aircraft and space vehicles, and reducing their weight. They have become especially used in engine parts operating at high temperatures. In addition, their indispensability in the fields of medicine and dentistry has made these materials attractive. They provide serious resistance to corrosion in the human body, especially by being compatible with living tissues. Due to their low thermal conductivity, limiting heat dissipation, and having high chemical reactions, they become a difficult material to cut and process. Titanium and its alloys cause rapid wear of cutting tools due to their high strength at high temperatures during processing. Due to such difficulties,

researchers have tried to offer solutions with comprehensive research on various processing parameters and what to consider when choosing cutting tools by studying the processing of this material. These difficulties have been tried to be overcome by using coated and uncoated cutting tools such as diamond, PCD and CBN from the cutting tools used today. At the same time, cooling of these cutters is also of great importance. In this context, the studies conducted by some researchers with optimum parameters are presented and which cutting tools they used where and with what kind of study these parameters were studied and what the findings were as a result are shown.

Keywords: Titanium and its alloys, cutting tools, machinability

DEMİR-ÇELİK ENDÜSTRİSİ ATIKLARI VE CAM SANAYİ ATIĞI İLE ÜRETİLEN GEOPOLİMER KOMPOZİTLERİN FİZİKSEL VE MEKANİK ÖZELLİKLERİN ARAŞTIRILMASI

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ÖZET

Demir-çelik endüstrisi, her yıl yaklaşık 1.000.000 tona yakın atık üretmekte olup, bu atıkların büyük bir kısmı ekonomik olarak geri dönüştürülememektedir. Özellikle çelikhane cürufu ve sinter külü, geri dönüşüm potansiyeli sınırlı olan ve çevreye zarar verebilecek nitelikte atıklardır. Benzer şekilde, cam sanayisinde üretilen silis tozu da geri dönüşüm imkânı sınırlı ve çevresel etkileri kayda değer olan bir atık olarak dikkat çekmektedir. Bu tür endüstriyel atıkların çevreye olumsuz etkilerinin azaltılması ve sürdürülebilir yönetimi için alternatif kullanım alanlarının araştırılması zorunlu hale gelmiştir. Geopolimer malzemeler, bu atıkların değerlendirilmesi için yenilikçi bir çözüm sunmakta ve hem demir-çelik hem de cam sanayisinden kaynaklanan atıkların çevresel etkilerini azaltma konusunda önemli fırsatlar yaratmaktadır.

Bu çalışmada, öğütülmüş yüksek fırın cürufu (ÖYFC) ve çelikhane cürufu kullanılarak üretilen geopolimer kompozitlerin fiziksel ve mekanik özellikleri incelenmiştir. Araştırmada, ÖYFC'nin yerine %5, 10, 15, 20 ve 25 oranlarında silis tozu ikame edilmiştir. Ayrıca, üçlü bir alkali aktivatör sistemi kullanılmış olup, bu sistemde 10M NaOH, Na_2SiO_3 çözeltisi ve sinter külü yer almıştır. Üretilen geopolimer kompozitlerin yayılma, su emme, büzülme ve basınç dayanımı gibi fiziksel ve mekanik özellikleri deneysel olarak incelenmiştir. Elde edilen sonuçlar, ÖYFC'nin yerine %5 oranında silis tozu ikamesinin geopolimer kompozitlerin fiziksel ve mekanik özelliklerini önemli ölçüde iyileştirmiştir. En yüksek erken ve geç basınç dayanımları sırasıyla 47 MPa ve 75 MPa olarak kaydedilmiştir. Ayrıca, silis tozunun ikamesi ile geopolimer kompozitlerin işlenebilirliğinin %40-45 oranında arttığı gözlemlenmiştir. Bunun yanı sıra, %5 oranında cam sanayi atığı olarak kullanılan silis tozunun, maliyet etkin bir çözüm sunduğu ve geopolimer kompozitlerin ekonomik olarak üretimini mümkün kıldığı tespit edilmiştir. Bu sonuçlar, hem demir-çelik hem de cam sanayisinden kaynaklanan atıkların sürdürülebilir şekilde değerlendirilebileceğini ve maliyet etkin geopolimer kompozitler üretiminde kullanılabileceğini göstermektedir.

Anahtar Kelimeler: Çelikhane Cürufu, Öğütülmüş Yüksek Fırın Cürufu, Sinter Külü, Silis Tozu, Mekanik Özellikler, Fiziksel Özellikler.

ABSTRACT

The iron and steel industry produces nearly 1,000,000 tons of waste annually, the majority of which cannot be economically recycled. Steel slag and sinter ash are waste materials with limited recycling potential and the potential to harm the environment. Similarly, silica powder produced in the glass industry is also a waste product with limited recycling opportunities and notable environmental impacts. The need to reduce the environmental effects of these industrial wastes and manage them sustainably has made it essential to explore alternative uses. Geopolymer materials offer an innovative solution for utilizing these wastes, providing

significant opportunities to reduce the environmental impact of waste from both the iron and steel and glass industries.

In this study, the physical and mechanical properties of geopolymer composites produced using ground blast furnace slag (GBFS) and steel slag were investigated. Silica powder was used as a replacement for GBFS in proportions of 5%, 10%, 15%, 20%, and 25%. Additionally, a triple alkali activator system was used, consisting of 10M NaOH, Na_2SiO_3 solution, and sinter ash. The physical and mechanical properties of the produced geopolymer composites, such as flowability, water absorption, shrinkage, and compressive strength, were experimentally examined. The results showed that replacing 5% of GBFS with silica powder significantly improved the physical and mechanical properties of the geopolymer composites. The highest early and late compressive strengths were recorded at 47 MPa and 75 MPa, respectively. Moreover, the replacement of silica powder enhanced the workability of the geopolymer composites by 40-45%. Additionally, the use of 5% glass industry waste as silica powder provided a cost-effective solution, making the economic production of these composites feasible. These findings demonstrate that the sustainable utilization of waste from the iron and steel and glass industries is possible, and cost-effective geopolymer composites can be produced.

Keywords: Ground granulated Blast Furnace Slag, Steel Slag, Sinter Ash, Silica Powder, Mechanical Properties, Physical Properties.

HEMŞİRELİK MESLEĞİNDE NEZAKETSİZLİK KAVRAMI
THE CONCEPT OF DISCOURSE IN THE NURSING PROFESSION

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ÖZET
Her toplumun kendine ait değer yargıları vardır. Bu değer ve yargılar toplum kurallarını oluşturmaktadır. Toplum kurallarını, yazılı olmayan nezaket ve saygı kuralları belirler ve o toplumda yaşayan herkesin buna uyması beklenir. Özellikle son zamanlarda hemşirelik mesleğinde nezaketsiz davranışlar dikkat çekicidir. Nezaketsiz davranışlar sergileyen kişiler başkalarına karşı saygı kurallarını ihlal ederek sergiler. Nezaketsizlik kavramının saldırganlıktan ayıran özelliği kişinin zarar verirken kasıtlı bir şekilde yapmamasıdır. Bu davranışa maruz kalan birey bu tür davranışlar karşısında ne yapacağını tam olarak bilemediği için stres, belirsizlik ve kaygı yaşamaktadır. Bazen bu nezaketsiz davranışlar aşağılama, küçümseme, yok sayma, karşısındaki bireyin fikirlerini umursamama şeklinde de olabilir. Hemşirelik akademisyenlerin nezaket ortamları oluşturmaları, hemşirelik öğrencilerinin özgüven ve mesleki bilgi-becerilerini olumlu yönde etkileyecektir.
Anahtar Kelimeler: Nezaketsizlik, hemşirelik eğitimi, hemşirelik öğrencileri

ABSTRACT
Every society has its own value judgments. These values and judgments constitute the rules of society. Unwritten rules of courtesy and respect determine the rules of society, and everyone living in that society is expected to comply with them. Especially recently, discourteous behavior in the nursing profession is remarkable. People who display discourteous behavior violate the rules of respect towards others. What distinguishes the concept of rudeness from aggression is that the person does not do harm intentionally. The individual who is exposed to this behavior experiences stress, uncertainty and anxiety because he does not know exactly

what to do in the face of such behavior. Sometimes these rude behaviors can take the form of insulting, belittling, ignoring, or disregarding the other person's opinions. Creating polite environments for nursing academics will positively affect nursing students' self-confidence and professional knowledge-skills.

Key Words: Rudeness, nursing education, nursing students

СЕМЕЙНЫЙ БЫТ И ПОЛОЖЕНИЕ ЖЕНЩИН В АЗЕРБАЙДЖАНСКОМ ОБЩЕСТВЕ В XIX ВЕКЕ

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РЕЗЮМЕ
В письменных источниках XIX в. очень много этнографических материалов, посвященных изучению семейного быта и положению женщин в семье и обществе. Семейный быт регулируется социально-экономическими отношениями, традициями-адатами, религиозными канонами. Азербайджан в географическом и историко-этнографическом отношении входит в зону Южного Кавказа. Завоевание Северного и Южного Кавказа Российской империей в I половине XIX века в государственных интересах этой страны повлекло за собой систематическое исследование региона в финансовом, экономическом, топографическом, этнографическом отношениях. Семья является социально-экономической ячейкой общества и изучение ее общественной структуры, проявившейся в патриархальном укладе, полового и возрастного состава, форм и обычаев брака, взаимоотношений между членами семьи, правил разделении семейного имущества явились важным объектом исследования этнографов в XIX веке. В этом отношении следует отметить такой важный источник, как опубликованный с 80-х-90-годов XIX до 1926-1929-х годов XX века «СМОМПК», сборник, в котором напечатаны ряд статей, посвященных семейному быту народов Кавказа. Личные наблюдения авторов делают эти источник актуальным независимо от времени их привлечения к исследованиям. В современном ракурсе следует рассматривать проблемы и недочеты в традиционном воспитании детей в азербайджанской семье, в которой явно проявлялись гендерные различия между полами, ставящие детей мужского пола в положение лидера в семье и обществе. В семейной жизни эти устоявшиеся принципы являлись основой для формирования семейного этикета, отражающего вековые адаты общества и каноны ислама, поддерживающие лидерство мужчин по отношению к женщинам.
Ключевые слова: Азербайджан, Карабах, семейный быт, положение женщин в обществе и семье, духовная культура.

FAMILY LIFE AND THE STATUS OF WOMEN IN AZERBAIJANI SOCIETY IN THE 19TH CENTURY

ABSTRACT
Written sources of the 19th century contain many ethnographic materials devoted to the study of family life and the position of women in the family and society. Family life is regulated by socio-economic relations, traditions-adat, and religious canons. Azerbaijan is part of the South Caucasus in geographical and historical-ethnographic terms. The conquest of the North and South Caucasus by the Russian Empire in the first half of the 19th century in the state interests of this country entailed a systematic study of the region in financial, economic, topographic, and ethnographic terms. The family is a socio-economic unit of society, and the study of its social structure, manifested in the patriarchal way of life, gender and age composition, forms and customs of marriage, relationships between family members, and rules for dividing family property were an important object of study for ethnographers in the 19th century.
In this regard, it is worth noting such an important source as the SMOMPK, a collection published from the 1880s-1890s to 1926-1929, which contains a number of articles devoted to the family life of the peoples of the Caucasus. The personal observations of the authors make

these sources relevant regardless of the time of their involvement in research. From a modern perspective, it is necessary to consider the problems and shortcomings in the traditional upbringing of children in the Azerbaijani family, in which gender differences between the sexes were clearly evident, putting male children in the position of leader in the family and society. In family life, these established principles were the basis for the formation of family etiquette, reflecting the centuries-old adats of society and the canons of Islam, supporting the leadership of men in relation to women.
Key words: Azerbaijan, Karabakh, family life, the position of women in society and family, spiritual culture.

THE PERCEPTION OF LECTURERS ON ELECTRONIC EXAMINATION IN NIGER STATE COLLEGE OF EDUCATION, MINNA

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Abstract
This study investigated the perception of lecturers on Electronic Examination in Niger State College of Education, Minna. The study adopted a descriptive survey design. The target population for this study was two hundred and eighty-three (283) lecturers in Niger State College of Education. One hundred and twenty (120) were sampled. Three research questions were raised and 10 item questionnaires were used as instrument for data collection. Pilot test was carried out and a reliability coefficient 0.87 were obtained. Data collected were analyzed using descriptive statistics of mean and standard deviation. A decision rule was set, in which a mean score of 3.0 and above was considered good while a mean score below 3.0 was considered bad. Finding revealed that lecturere in niger state college of education percieved electronic examination to useful, furthermore male lecturers percieved electronic examination to be more useful than the female lecturers. Based on these findings, it is recommended that school mangement should provide an enabling environment and computer devices for proper conduct of e-exams in the institution.
Keywords: Electronic Examination and Perception

FEATURE EXTRACTION AND SELECTION METHODS USED IN DETECTING DISTRIBUTED DENIAL OF SERVICE ATTACKS

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ABSTRACT
With the increasing data flow, DDoS (Distributed Denial of Service) attacks have started to pose serious threats, especially on critical infrastructures and internet services. Methods such as big data analysis, machine learning and deep learning are used to accurately detect these attacks, parse them according to the types of attacks and intervene quickly. Attribute selection and extraction are important stages that contribute to the clearer detection of signs of DDoS attacks and increasing the effectiveness of detection systems. In this review, examples from existing studies on determining the attributes used for DDoS detection and running the algorithms used for the selection and inference of these attributes and analyzing their results will be examined and different approaches and the success rates of these approaches will be evaluated. This study aims to provide guidance information in order to create an effective attribute base for detecting DDoS attacks.
Keywords: DDoS, feature extraction, feature selection, machine learning algorithms

APPLICATION OF RATIONAL TRANSFORMATION PROGRAMS IN TURKISH ECONOMY AND ITS EFFECTS

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ÖZET
Türkiye ekonomisi dünya ekonomisindeki değişme ve gelişmelere bağlı olarak geleneksel ekonomi politikaları uygulamaları ile makroekonomik istikrarı sağlamayı çalışmıştır. Ancak 2016 yılından sonra başlayan ve 2021 yılında ”yeni ekonomi politikası” ile adlandırılan politika geleneksel olmayan geleneksel ekonomi politikalarından oluşan farklı bir model arayışı dönemidir. 1990-2016 yılları arası ekonomi politikası liberalleşme politikaları temeline dayalı dışa açılma ve finansal liberalizasyon politikalarını içermektedir. 2016 yılından sonra ise serbest piyasa ekonomisi kural ve kurumlarını işletirken, enerji ve ara mallardaki dış bağımlılığın düşürülmesi hedeflenmiştir. 2020 yılındaki küresel pandemi süreci sonrası ise cari fazla vermeyi ve rekabetçi kurlarla üretimdeki ve dünya ticaretindeki payını artırma amacıyla ‘’geleneksel ekonomi politikalarına aykırı düşük faiz politikası” ile ekonomik yapısını bağımlılığı yüksek bir yapıdan, ileri teknoloji ve ithal girdi bağımlılığı düşük bir yapıya dönüştürmeyi hedeflemiştir (Buluş; 2023,23). Ancak uygulanan bu politikanın enflasyon üzerinde yarattığı baskı, Türkiye ekonomisinde yeniden yüksek enflasyonun yaşanması politika değişikliğini de beraberinde getirmiştir. Türkiye ekonomisi 2023 yılında 191 ülke arasında en yüksek enflasyona sahip altıncı ülke olmuştur. Bu durum ekonomi politikası yapımcılarını “Ekonomide Rasyonel Dönüşüm Programı” olarak adlandırılan tekrar geleneksel politikalara dönmesine neden olmuştur. Ekonomide rasyonel dönüşüm programı toplumsal refahın artması için rasyonel politikaların uygulanmasını temel almıştır. Toplumsal refah hedefine ulaşmak için şeffaflık, sürdürülebilir yüksek büyüme için mali disiplinin tesis edilmesi ve fiyat istikrarı temel hedef olarak belirlenmiştir. Özellikle orta vadede enflasyonun yeniden tek haneli rakamlara düşürülmesi risk ve belirsizliğin azaltılarak her alanda öngörülebilirliğin artırıldığı, güvenilirliğinin sağlandığı makro ekonomik yapının sağlanması için etkin ekonomi politikalarının uygulanması gerekliliği vurgulanmıştır.
Anahtar Kelimeler: Türkiye Ekonomisi, yeni ekonomi, rasyonel politikalar.

ABSTRACT
Depending on the changes and developments in the world economy, the Turkish economy has tried to ensure macroeconomic stability through the implementation of traditional economic policies. However, the policy that started after 2016 and is called the "new economic policy" in 2021 is a period of searching for a different model consisting of non-traditional traditional economic policies. Economic policy between 1990 and 2016 includes opening up and financial liberalization policies based on liberalization policies. After 2016, it was aimed to reduce external dependence on energy and intermediate goods while operating the free market economy rules and institutions. After the global pandemic process in 2020, it aimed to

transform its economic structure from a highly dependent structure to a structure with low dependence on advanced technology and imported inputs, with a "low interest policy contrary to traditional economic policies" in order to achieve a current account surplus and increase its share in production and world trade with competitive exchange rates. (Invention; 2023,23). However, the pressure created by this policy on inflation and the re-experiencing high inflation in the Turkish economy brought about a policy change. In 2023, the Turkish economy was the sixth country with the highest inflation among 191 countries. This situation has caused economic policy makers to return to traditional policies, which is called the "Rational Transformation Program in the Economy". The rational transformation program in the economy is based on the implementation of rational policies to increase social welfare. In order to achieve the goal of social welfare, transparency, establishment of fiscal discipline for sustainable high growth and price stability have been determined as the main objectives. It was emphasized that effective economic policies should be implemented in order to reduce inflation back to single digits, to reduce risk and uncertainty, to increase predictability in all areas and to ensure a macroeconomic structure in which reliability is ensured, especially in the medium term.

Key Words: Turkish Economy, new economy, rational policies.

THE EFFECTIVENESS OF MONETARY POLICY IN THE LEARNING ECONOMY: AN EVALUATION ON THE TURKISH ECONOMY

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Dünya ekonomisindeki değişim dinamiğinin etkilendiği en önemli politik araçlardan biri para politikasıdır. Çünkü günümüzde hızla değişen ve gelişen piyasalar finansal piyasalardır. Bu gelişmeler finansal sistemin düzenli işlemesini sağlamak adına Merkez bankalarına ve para politikası uygulamalarına önemli görevler yüklemiştir. Hükümetin para arzını kontrol etmek için izlediği politikalar bütünü para politikasıdır. Ülkelerin para politikasını yürüten kurum merkez bankasıdır. Her ülkenin merkez bankası bir tür spesiyal kamu iktisadi kuruluşudur. Merkez bankaları para politikaları uygularken ve para arzlarını belirlerken paranın dolaşım hızını dikkate almaktadır. Öğrenme, bilgi ve yeni değişime uyum içinde gerekli olan sorumluluktur. Merkez bankasına yenilik ve değişim ortamında düşen sorumluluk, etkinliği, güvenliği ve etkin parasal kontrolü aynı anda sağlamaktır. Merkez bankaları bu sorumluluklarını piyasaları gözetim altında tutarak uyguladıkları para politikası ile gerçekleştireceklerdir. Fakat, yenilik ve değişim merkez bankalarının finansal sistemin sağlıklı bir şekilde işlemesini ve enflasyonsuz bir ortamda sürdürülebilir bir büyüme oranının gerçekleşmesini giderek zorlaştırmaktadır. Çünkü finansal yeniliklerdeki değişme ve gelişmeler paranın tanımını değiştirmeye başlamıştır. Yapısal değişiklikler ve finansal yeniliklere paralel olarak önceden bir politika belirlenmeye temel olabilecek bir parasal ilişkiyi tahmin edebilmek zorlaşmıştır. Bu durum bütünselleşmiş ekonomi politikalarını da başarısız kılmış, bütünleşmiş politikaların başarısızlığı da para politikalarını etkilemiştir. Çünkü karar birimlerinin amaç fonksiyonunu gerçekleştirmede en çok öğrenip bilgi akışını gerçekleştirdikleri ve birebir etkilendikleri para ve paraya dair konulardır. Onun için değişimin baş döndürücü hızla olduğu finansal piyasalarda para politikasının ve merkez bankasının dinamik yapıda olması gerekmektedir.

Anahtar Kelimeler: Türkiye Ekonomisi, öğrenen ekonomi, para politaları.

ABSTRACT

One of the most important political tools that affects the dynamics of change in the world economy is monetary policy. Because today's rapidly changing and developing markets are financial markets. These developments have imposed important duties on central banks and monetary policy practices in order to ensure the regular functioning of the financial system. Monetary policy is the set of policies followed by the government to control the money supply. The institution that carries out the monetary policy of the countries is the central bank.

The central bank of every country is a type of specialized public economic institution. Central banks take into account the speed of circulation of money when implementing monetary policies and determining money supplies. Learning is the responsibility required to adapt to knowledge and new change. The responsibility of the central bank in an environment of innovation and change is to ensure efficiency, security and effective monetary control at the same time. Central banks will fulfill these responsibilities through the monetary policy they implement by keeping the markets under surveillance. However, innovation and change make it increasingly difficult for central banks to ensure the healthy functioning of the financial system and to achieve a sustainable growth rate in an inflation-free environment. Because changes and developments in financial innovations have begun to change the definition of money. In parallel with structural changes and financial innovations, it has become difficult to predict a monetary relationship that could be the basis for determining a policy in advance. This situation also made integrated economic policies unsuccessful, and the failure of integrated policies also affected monetary policies. Because it is money and money-related issues that decision-making units learn the most about, flow information to, and are directly affected by in achieving their objective function.

Therefore, in financial markets where change occurs at a dizzying pace, monetary policy and the central bank must have a dynamic structure.

Key Words: Turkish Economy, learning economy, monetary policies.

YEŞİL EKONOMİ VE KAYNAK KULLANIMINA ETKİLERİ

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ÖZ
İnsanlar ve iktisatçılar yıllarca doğayı sınırsız bir kaynak olarak görmüşlerdir. Doğal kaynakların varlığının kıt olması ve bilinçsiz kullanımının çevreye zararlarının anlaşılmasından sonra yeni kavramlara ihtiyaç duyulmuştur.
Yeşil ekonomi diğer adıyla düşük karbon emisyonlu ekonomi tam olarak burada ortaya çıkmıştır. Yeşil ekonomi, çevre problemlerinin giderek arttığı günümüz çağında çevresel riskleri ve ekolojik kıtlıkları azaltmayı hedefleyen ve bu hedefleri korurken sürdürülebilir kalkınmayı destekleyen bir ekonomi anlayışıdır. Yeşil ekonominin kaynak kullanımına etkileri hem çevresel hem ekonomik açıdan çok önemlidir.
Kaynak kullanımı; çevresel açıdan, doğal kaynakların etkili bir şekilde kullanılması, çevre kirliliğinin azaltılmasına, iklim değişikliğinin engellenmesine ve doğal yaşamın korunmasına yönelik bir önem taşımaktadır. Ekonomik açıdan ise, kaynakların daha verimli kullanımı, işletmelerin maliyetlerinin düşürülmesi ve rekabet gücünün artırılması gibi faktörlerle birlikte uzun vadeli sürdürülebilir bir büyümeyi desteklemektedir. Kaynak kullanımlarını yeni boyutlara geçirmek enerjinin, suyun ve ham maddelerin daha etkin verimli kullanılmasına teşvik etmek, israfların önüne geçilmesini sağlayıp çevreci kaynak kullanımının teşvik edilmesi bu ekonomi modelinin temellerinde yatmaktadır.
Bu çerçevede çalışmanın amacı; yeşil ekonomi anlayışının önce genel anlamda ele alınarak sonrasında harcanan kaynaklar üzerinde sektör bazında negatif ve pozitif etkilerini ortaya koymaktır.
Anahtar Kelimeler: Yeşil ekonomi, çevre, doğal kaynaklar, yeşil sürdürülebilirlik, kaynak etkinliği, kaynak kullanımı.

EFFECTS OF GREEN ECONOMY AND RESOURCE UTILIZATION

ABSTRACT
People and economists have long considered nature as an unlimited resource. However, with the realization of the finite availability of natural resources and the environmental damages caused by their irresponsible use, the need for new concepts emerged. Green economy, also known as a low-carbon economy, has emerged precisely in this context. Green economy is an economic approach that aims to reduce environmental risks and ecological scarcities, while supporting sustainable development in an era where environmental problems are increasingly prevalent. The impacts of green economy on resource utilization are crucial both in terms of

the environment and the economy. Resource utilization is environmentally important in terms of effective use of natural resources, decreasing pollution, preventing climate change, and preserving biodiversity. Economically, efficient resource utilization reduces costs for businesses and enhances competitive advantage, thereby supporting long-term sustainable growth. Encouraging the transition to new dimensions of resource utilization promotes more efficient use of energy, water, and raw materials, prevents waste, and supports environmentally friendly resource consumption, which lays at the core of this economic model. In this context, the purpose of this study is to first provide a general overview of the concept of green economy, and subsequently, to demonstrate its sector-specific positive and negative effects on resource consumption.

Keywords: Green economy, environment, natural resources, green sustainability, resource efficiency, resource utilization.

YEŞİL EKONOMİ VE SÜRDÜRÜLEBİLİR BÜYÜME İLİŞKİSİ
THE RELATIONSHIP BETWEEN GREEN ECONOMY AND SUSTAINABLE GROWTH

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ÖZET
Bu makalenin amacı, son dönemlerde hızla yükselmekte olan "Yeşil Ekonomi"ye doğru geçişin sürdürülebilir büyüme üzerindeki etkisini analiz etmektir. Yeşil ekonomi, çevresel riskleri ve ekolojik kıtlıkların azaltılmasını desteklemektedir. Sürdürülebilir büyüme ise, gelir eşitsizliğinin azaltılması ile birlikte ekonomik istikrar ve refahı korumaktadır. Ekonomik büyüme, bir ekonomide mal ve hizmet üretimi miktarında olan artıştır. Dünyada nüfusun hızla artması ve artan nüfusla birlikte hızla artan üretim ile birlikte daha hızlı bir tüketim eğiliminin oluşmasına neden olmuştur. Çevrenin ve ekolojik düzenin korunması için "yeşil ekonomi" yaklaşımı daha yaygın hale gelmeye başlamıştır. Uluslararası düzeyde belirli politikalar üretilmeye başlanmıştır. Yeşil ekonomi; açık yeşil ekonomi, orta yeşil ekonomi ve ileri yeşil ekonomi olarak üçe ayrılmaktadır. Açık yeşil ekonomi, devlete karşı çıkmışlardır. Orta yeşil ekonomi, devlet müdahalesini savunmaktadır. İleri yeşil ekonomi ise, devlet müdahalesini rolü azdır. Yeşil ekonominin amacı, eşitlik ve adalet, refah ve kalkınmadır. Solow'un neoklasik büyüme modeli üç önemli iddia ortaya atmaktadır. Birincisi, teknolojik gelişmeler olmadığında, daha az kaynak ve üretim mümkün kılacaktır. İkincisi, ekonominin kilit kaynağı yatırım ve tasarruftur. Üçüncüsü ise, daha az gelişmiş ekonomiler sermaye miktarını istikrarlı hale getirene kadar gelişmiş ekonomilerden daha hızlı büyüyecektir. Sonuç olarak ise, uygulanan politikaların uzun dönemde büyüme ve yeşil ekonomi arasında pozitif ve olumlu bir ilişki olduğu görülmüştür. Artan teknolojik ilerleme ve uzmanlaşma ile kısa dönemde de sürdürülebilir büyüme üzerinde pozitif sonuçların ortaya çıkacağı kaçınılmaz olarak görülmektedir.
Anahtar Kelimeler: Yeşil Ekonomi, Ekonomik Büyüme, Sürdürülebilir Büyüme

SUMMARY
The purpose of this article is to analyze the impact of the transition towards the rapidly rising "Green Economy" on sustainable growth. The green economy supports the reduction of environmental risks and ecological scarcities. Sustainable growth, on the other hand, aims to maintain economic stability and welfare while reducing income inequality. Economic growth refers to an increase in the quantity of goods and services produced in an economy. The rapid increase in population worldwide, coupled with increasing production, has led to a faster trend in consumption. The approach of "green economy" has become more widespread to preserve the environment and ecological balance. Certain policies have begun to be formulated at the international level. The green economy is divided into three categories: open green economy,

middle green economy, and advanced green economy. The open green economy opposes government intervention. The middle green economy advocates for government intervention. The advanced green economy minimizes the role of government intervention. The aim of the green economy is equality and justice, welfare, and development. Solow's neoclassical growth model makes three important claims. First, technological advancements will make it possible to produce more with fewer resources. Second, the key sources of the economy are investment and savings. Third, less developed economies will grow faster than developed economies until they stabilize the capital stock. As a result, it has been observed that the policies implemented have a positive and beneficial relationship between growth and the green economy in the long run. It is inevitable that with increasing technological progress and specialization, positive outcomes will emerge for sustainable growth in the short term as well.
Keywords: Green Economy, Economic Growth, Sustainable Growth.

BRICS'İN ENERJİ GÜVENLİĞİ POLİTİKALARINDA ÇİN VE HİNDİSTAN DİNAMİKLERİNİN 2016-2018 YILLARI ARASINDAKİ DÖNEMSEL ANALİZİ

A REGULAR ANALYSIS OF THE DYNAMICS OF CHINA AND INDIA IN BRICS ENERGY SECURITY POLICY BETWEEN 2016 AND 2018

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ÖZET

Bu çalışma, BRICS'in enerji güvenliği politikalarında Çin ve Hindistan'ın rolünü ve bu iki ülke arasındaki dinamikleri incelemektedir. Soğuk Savaş sonrası dönemde uluslararası sistemin çok kutuplu bir yapıya evrilmesiyle birlikte, yükselen güçler olarak tanımlanan BRICS ülkeleri, küresel enerji güvenliği politikalarında önemli bir aktör haline gelmeye çalışmıştır. Özellikle Çin ve Hindistan hem ekonomik büyüklükleri hem de enerji tüketimleri açısından BRICS içinde belirleyici bir konuma sahiptir. Çalışmanın temel amacı, 2016 ve 2018 yılları arasında Çin ve Hindistan'ın ulusal enerji güvenliği politikalarının BRICS çerçevesinde ortak bir enerji stratejisi oluşturma hedefiyle ne ölçüde uyumlu olduğunu analiz etmektir. Bu bağlamda, her iki ülkenin enerji politikaları, kurumsal iş birlikleri ve stratejik rekabet unsurları karşılaştırmalı bir perspektifle ele alınmıştır. Araştırma bulguları, Çin'in "Kuşak ve Yol Girişimi" çerçevesinde küresel enerji altyapı projelerine yönelirken, Hindistan'ın daha çok ulusal enerji altyapısını modernize etmeye odaklandığını göstermektedir. Ayrıca çalışmada, her iki ülkenin de yenilenebilir enerji verimliliğini artırma ve enerji kaynaklarına yönelim konusunda benzer hedeflere sahip olduğu, ancak bu hedeflere ulaşma stratejilerinde farklılıklar bulunduğu tespit edilmiştir. Özellikle Çin'in küresel enerji projelerindeki aktif rolü, Hindistan tarafından bir rekabet unsuru olarak algılanmakta ve bu durum BRICS çerçevesinde ortak enerji politikaları oluşturulmasını zorlaştırmaktadır. Sonuç olarak, Çin ve Hindistan arasındaki iş birliği ve rekabet dengesi, BRICS'in enerji güvenliği politikalarının geleceğini şekillendirmede kritik bir rol oynamaktadır. Çalışma, BRICS ülkeleri arasındaki enerji iş birliğinin güçlendirilmesi, politika şeffaflığının artırılması ve çok taraflı mekanizmaların teşvik edilmesi yönünde öneriler sunmaktadır. Bu önerilerin hayata geçirilmesi, sadece BRICS için değil, küresel enerji güvenliği açısından da önem taşıdığı düşünülmektedir.

Anahtar Kelimeler: BRICS, Enerji Güvenliği, Çin, Hindistan, Yükselen Güçler, Uluslararası İş Birliği

ABSTRACT

This study examines the role of China and India in the energy security policies of the BRICS countries and the dynamics between these two countries. In the post-Cold War era, the international system has evolved into a multi-polar structure, prompting BRICS countries, which are defined as rising powers, to seek a prominent role in global energy security policies. China and India occupy a pivotal position within the BRICS grouping, both in terms of their economic size and energy consumption. The principal objective of this study is to examine the extent to which the national energy security policies of China and India are aligned with the objective of establishing a unified energy strategy within the BRICS framework, between 2016 and 2018. In this context, the energy policies, institutional cooperation and strategic competition of both countries are analysed in a comparative perspective. The findings of the study demonstrate that while China is oriented towards global energy infrastructure projects within the framework of the "Belt and Road Initiative", India is more focused on modernising its national energy infrastructure. Furthermore, the study reveals that both countries share comparable objectives regarding enhancing renewable energy efficiency and a focus on energy resources. However, there are notable discrepancies in their strategies for attaining these goals. China's active role in global energy projects is perceived as a competitive factor by India, which makes it challenging to formulate common energy policies within the BRICS framework. Consequently, the balance between collaboration and competition between China and India is of paramount importance in determining the future of BRICS energy security policies. The study proffers recommendations for reinforcing energy cooperation among BRICS countries, enhancing policy transparency and fostering multilateral mechanisms. The realisation of these recommendations is crucial not only for BRICS but also for global energy security.

Keywords: BRICS, Energy Security, China, India, Rising Powers, International Cooperation

HİNDİSTAN'IN YÜKSELEN KÜRESEL GÜCÜ: EKONOMİK, POLİTİK VE STRATEJİK DİNAMİKLER

INDIA'S RISING GLOBAL POWER: ECONOMIC, POLITICAL AND STRATEGIC DYNAMICS

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ÖZET

Bu çalışma, Hindistan'ın küresel arenada yükselen ekonomik, politik ve stratejik dinamiklerini incelemektedir. Hindistan, 2022 yılında Birleşik Krallık'ı geride bırakarak dünyanın beşinci büyük ekonomisi haline gelmekte ve 3,2 trilyon dolarlık GSYH'siyle dikkat çekmektedir. Bu ekonomik büyüme, elverişli demografik yapı, genişleyen ordu ve jeostratejik konumla birleşerek Hindistan'ın uluslararası etkisini artırmaktadır. 2030 yılına kadar dünyanın üçüncü büyük ekonomisi olması beklenen Hindistan, sadece ekonomik olarak değil, aynı zamanda dış politikadaki çok yönlü stratejileriyle de öne çıkmaktadır. Bağımsızlığından bu yana Hindistan, bağlantısızlık politikası ve çok taraflı diplomaside aktif bir rol üstlenmiştir. Soğuk Savaş sonrası dönemde ise ABD, Çin ve Rusya gibi büyük güçlerle dengeli ilişkiler geliştirerek küresel düzenin önemli bir aktörü olmuştur. Bu çalışma, Hindistan'ın büyük güçlerle olan ilişkilerini, çok taraflı örgütlerdeki rolünü ve demokratik değerlerini analiz ederek, ülkenin bölgesel bir güçten küresel bir aktöre dönüşüm sürecini tartışmaktadır.

Anahtar Kelimeler: Hindistan, Ekonomik Büyüme, Küresel Güç, Dış Politika, Stratejik Ortaklıklar

ABSTRACT

This study examines India's growing economic, political and strategic dynamism on the global stage. In 2022, India will overtake the United Kingdom to become the world's fifth largest economy with a GDP of $3.2 trillion. This economic growth, combined with favourable demographics, a growing military and strategic location, is increasing India's international influence. By 2030, India is projected to be the world's third largest economy. Beyond economic progress, India's multifaceted foreign policy strategies underscore its global importance. Since independence, India has been an active participant in multilateral diplomacy, pursuing a policy of non-alignment. In the post-Cold War era, India has maintained balanced relations with major powers such as the United States, China and Russia, and has emerged as a key player in global governance. This paper analyses India's relations with global powers, its role in multilateral organisations and its democratic values, illustrating India's transformation from a regional power to a global actor.

Keywords: India, Economic Growth, Global Power, Foreign Policy, Strategic Partnerships

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