8TH INTERNATIONAL ANTALYA

Congress on Scientific Research and Innovative Studies

January 25-27, 2025, Antalya

EDITOR

Assist. Prof. Dr. Zerrin BARUT

ABSTRACTS BOOK

ISBN: 979-8-89695-021-9

8. INTERNATIONAL ANTALYA SCIENTIFIC RESEARCH AND INNOVATIVE STUDIES CONGRESS

January 25-27, 2025- Antalya, Türkiye

20.02.2025

Liberty Publishing House

Water Street Corridor New York, NY 10038

www.libertyacademicbooks.com

+1 (314) 597-0372

ALL RIGHTS RESERVED NO PART OF THIS BOOK MAY BE REPRODUCED IN ANY FORM, BY PHOTOCOPYING OR BY ANY ELECTRONIC OR MECHANICAL MEANS, INCLUDING INFORMATION STORAGE OR RETRIEVAL SYSTEMS, WITHOUT PERMISSION IN WRITING FROM BOTH THE COPYRIGHT OWNER AND THE PUBLISHER OF THIS BOOK.

© Liberty Academic Publishers 2025

The digital PDF version of this title is available Open Access and distributed under the terms of the Creative Commons Attribution-Non-Commercial 4.0 license (http://creativecommons.org/licenses/by-nc/4.0/) which permits adaptation, alteration, reproduction and distribution for noncommercial use, without further permission provided the original work is attributed. The derivative works do not need to be licensed on the same terms.

adopted by Mariam Rasulan

ABSTRACTS BOOK

ISBN: 979-8-89695-021-9

CONGRESS ID

CONGRESS TITLE

8. INTERNATIONAL ANTALYA SCIENTIFIC RESEARCH AND INNOVATIVE STUDIES CONGRESS

DATE AND PLACE

January 25-27, 2025- Antalya, Türkiye

ORGANIZATION

IKSAD INSTITUTE

EDITOR

Assist. Prof. Dr. Zerrin BARUT

COORDINATOR

Samet KUŞKIRAN

PARTICIPANTS COUNTRY (27 countries)

TÜRKİYE, LIBYA, NIGERIA, ROMANIA, TURKISH REPUBLIC OF NORTHERN CYPRUS, MOROCCO, NORTH MACEDONIA, SERBIA, ALGERIA, IRAN, IRAQ, PAKISTAN, INDIA, TUNUSIA, HUNGARY, UKRAINE, INDONESIA, KAZAKHSTAN, MALAYSIA, SPAIN, POLAND, BANGLADESH, VIETNAM, SCOTLAND, USA, FRANCE, THAILAND

Total Accepted Article: 286

Total Rejected Papers: 72

Accepted Article (Türkiye): 127

Accepted Article (Other Countries): 159

ISBN: 979-8-89695-021-9

INTERNATIONAL ANTALYA

SCIENTIFIC RESEARCH AND INNOVATIVE STUDIES CONGRESS-VIII

20.02.2025
REF: Akademik Teşvik

İlgili makama;

8. ULUSLARARASI ANTALYA Bilimsel Araştırmalar ve Yenilikçi Çalışmalar Kongresi, 25-27 Ocak 2025 tarihleri arasında Antalya'da 27 farklı ülkenin (Türkiye 127 bildiri- Diğer ülkeler 159 bildiri) akademisyen/araştırmacılarının katılımıyla gerçekleşmiştir

Kongre 16 Ocak 2020 Akademik Teşvik Ödeneği Yönetmeliğine getirilen "Tebliğlerin sunulduğu yurt içinde veya yurt dışındaki etkinliğin uluslararası olarak nitelendirilebilmesi için Türkiye dışında en az beş farklı ülkeden sözlü tebliğ sunan konuşmacının katılım sağlaması ve tebliğlerin yarıdan fazlasının Türkiye dışından katılımcılar tarafından sunulması esastır." değişikliğine uygun düzenlenmiştir.

Bilgilerinize arz edilir,

Saygılarımla

Mustafa Latif EMEK
On behalf of Organizing Board

T.C.
ÇUKUROVA ÜNİVERSİTESİ
Fen Edebiyat Fakültesi Dekanlığı

Sayı : E-50745110-903.07-1191543 26/12/2024
Konu : Doç.Dr.Mehibe Şahbaz

TARİH BÖLÜM BAŞKANLIĞINA

İlgi : 33475661 - 25/12/2024 tarihli, 1190960 sayılı ve "Doç.Dr.Mevhibe Şahbaz'ın görevlendirmesi" konulu yazı,

Bölümünüz öğretim üyesi Doç.Dr.Mehibe Şahbaz'ın, 25-27 Ocak 2025 tarihlerinde de 8. Uluslararası Bilimsel Araştırmalar ve Yenilikçi Çalışmalar Kongresinin Düzenleme Kurulu ve Bilim ve Danışma Kurulunda görev alması Dekanlığımızca uygun görülmüştür.

Bilgilerinizi ve gereğini rica ederim.

Prof. Dr. Faruk KARADAĞ
Dekan

Bu belge, güvenli elektronik imza ile imzalanmıştır.

Belge Doğrulama Kodu :*BSA1SL5UR2* Pin Kodu :51172
Belge Takip Adresi : https://turkiye.gov.tr/ebd?eK=5540&eD=BSA1SL5UR2&eS=1191543

Adres:Çukurova Üniversitesi Fen Edebiyat Fakültesi 01330 Balcalı, Sarıçam/Adana
Telefon:0 (322) 338 64 25 Faks:0 (322) 338 60 70
e-Posta:cufef@cu.edu.tr Web:www.cu.edu.tr
Kep Adresi:cukurovauniversitesi@hs01.kep.tr

Bilgi için: Hatice SARICA
Unvanı: Bilgisayar İşletmeni
Tel No: 0(322) 338 64 25

Bu belge,güvenli elektronik imza ile imzalanmıştır.

MEMBERS OF THE ORGANIZING COMMITTEE

Prof. Dr. Mykola VASKIV
Borys Grinchenko Kyiv University

Prof. Dr. Miguel Gonçalves
Polytechnic University of Coimbra Portugal

Prof. Dr. Mohammad Mehdi Rashidi
University of Electronic Science and Technology of China

Prof. Dr. Fatih GÜRBÜZ
Bayburt University

Prof. Dr. Vecihi AKSAKAL
Bayburt University

Assoc. Prof. Dr. Mevhibe ŞAHBAZ
Çukurova University

Assoc. Prof. Dr. Bülent BAYRAKTAR
Bayburt University

Assoc. Prof. Dr. Betul APAYDIN YILDIRIM
Ataturk University

Assoc. Prof. Dr. Nermin Kişi
Zonguldak Bülent Ecevit University

Assoc. Prof. Dr. Murat GENÇ
Atatürk University

Assoc. Prof. Dr. Cavit POLAT
Kahramanmaras Sutcu Imam University

Dr. Ethem İlhan ŞAHİN
Adana Alparslan Türkeş Science and Technology University

Dr. Serkan GÜN
Siirt University

Dr. Elvan CAFAROV
Azerbaijan State Pedagogy University

Dr. Burcu TEMEL
Adıyaman University

Dr. Bashir Ali SALEH
Al-Jabal Al-Gharbi University, Libya

Dr. Zila Özlem KIRBAŞ
Bayburt University

Dr. Filiz AYGÜN ERTÜRK
Bayburt University

Dr. Seda KIZIL
Bayburt University

SCIENTIFIC AND ADVISORY BOARD

Prof. Dr. Miguel Gonçalves
Polytechnic University of Coimbra Portugal

Prof. Dr. Hacer HUSEYONA
Azerbaijan Pedagogy University

Prof. Dr. Ahmet Niyazi ÖZKER
Bandırma Onyedi Eylul University

Prof. Dr. Salih ÖZTÜRK
Tekirdağ Namık Kemal University

Prof. Dr. Necati DEMİR
Gazi University

Prof. Dr. Fatih GÜRBÜZ
Bayburt University

Prof. Dr. Vecihi AKSAKAL
Bayburt University

Assoc. Prof. Dr. Güray ALPAR
IKSAD Institute

Assoc. Prof. Dr. Özlem ÜLGER
Batman University

Assoc. Dr. Nazife ASLAN
Ankara Hacı Bayram Veli University

Assoc. Prof. Dr. Bülent BAYRAKTAR
Bayburt University

Assoc. Prof. Dr. Hatice Burçin ŞOLT
Zonguldak Bülent Ecevit University

Assoc. Dr. Froilan MOBO
Philippine Merchant Marine Academy

Assoc. Prof. Dr. Fatih YILDIRIM
Atatürk University

Assoc. Prof. Dr. Mevhibe ŞAHBAZ
Çukurova University

Assoc. Prof. Dr. Mehmet Emin KALGI
Ardahan University

Assoc. Prof. Dr. Ahmet TOPAL
Atatürk University

Assoc. Prof. Ayşegül TÜRK
Ankara Haci Bayram Veli University

Assoc. Prof. Fatime Gül KOÇSOY
Fırat University

Assoc. Prof. Dr. Nermin Kişi
Zonguldak Bülent Ecevit University

Assist. Prof. Dr. Murat GENÇ
Atatürk University

Asst. Prof. Dr. Fatma HASTAOGLU
Sivas Cumhuriyet University

Assoc. Prof. Dr. Cavit POLAT
Kahramanmaras Sutcu Imam University

Dr. Damezhan SADYKOVA
Kazakh Girls State Pedagogical University

Dr. Mariam S. OLSSON
Labanise University

Dr. Burcu TEMEL
Adiyaman University

Dr. Muntazir MEHDI
National University of Modern Languages

Dr. WU Yicheng
Minzu University

Dr. Ethem İlhan ŞAHİN
Adana Alparslan Turkes Science and Technology University

Dr. Serkan GÜN
Siirt University

Dr. Mohammed Shoaib KHAN
Pak Turk Maarif School

Dr. Zila Özlem KIRBAŞ
Bayburt University

Dr. Filiz AYGÜN ERTÜRK
Bayburt University

Dr. Seda KIZIL
Bayburt University

PHOTO GALLERY

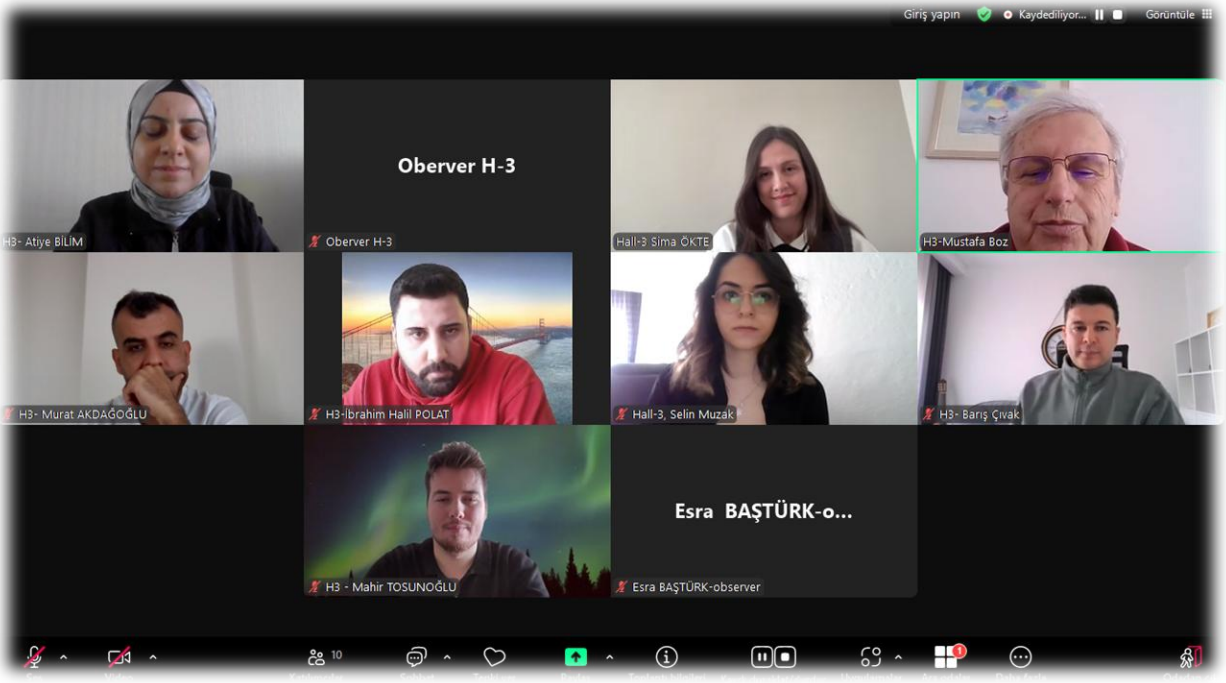


PHOTO GALLERY

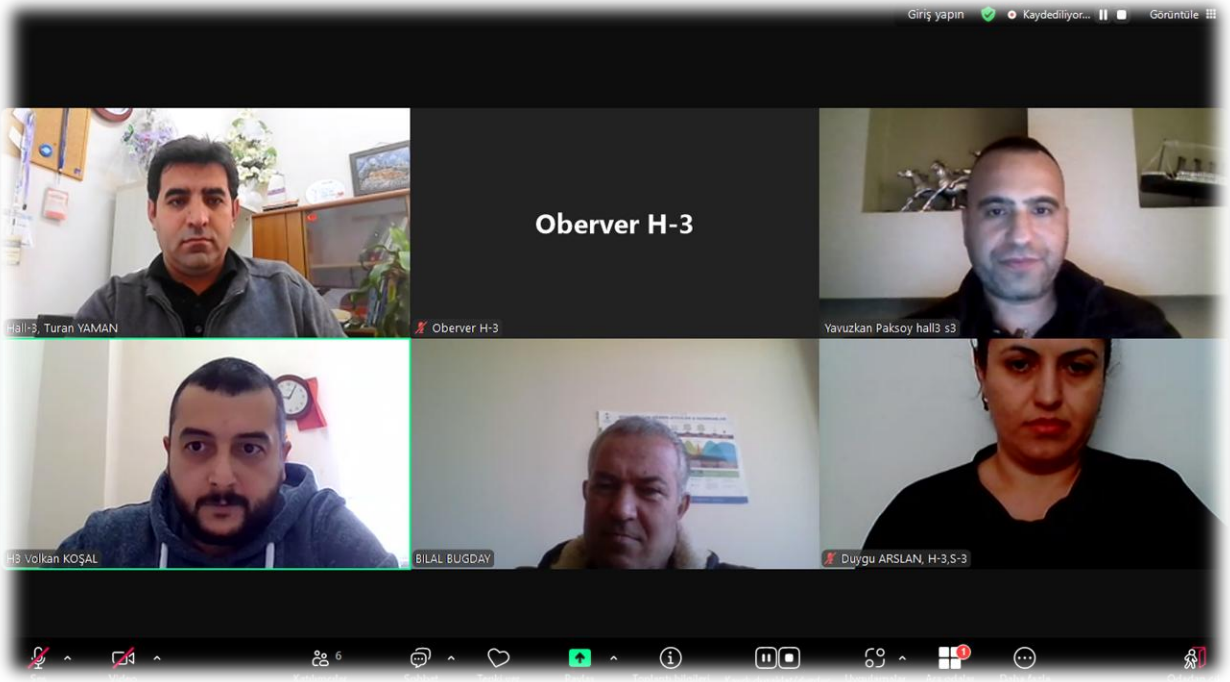


PHOTO GALLERY

PHOTO GALLERY

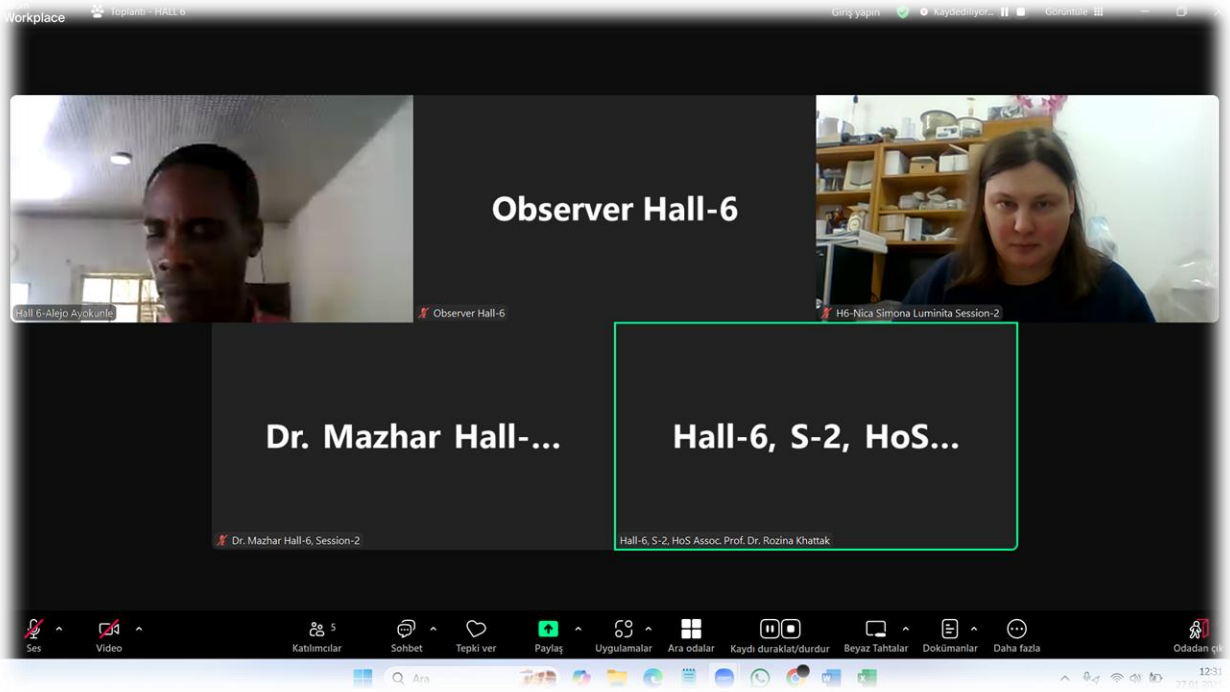
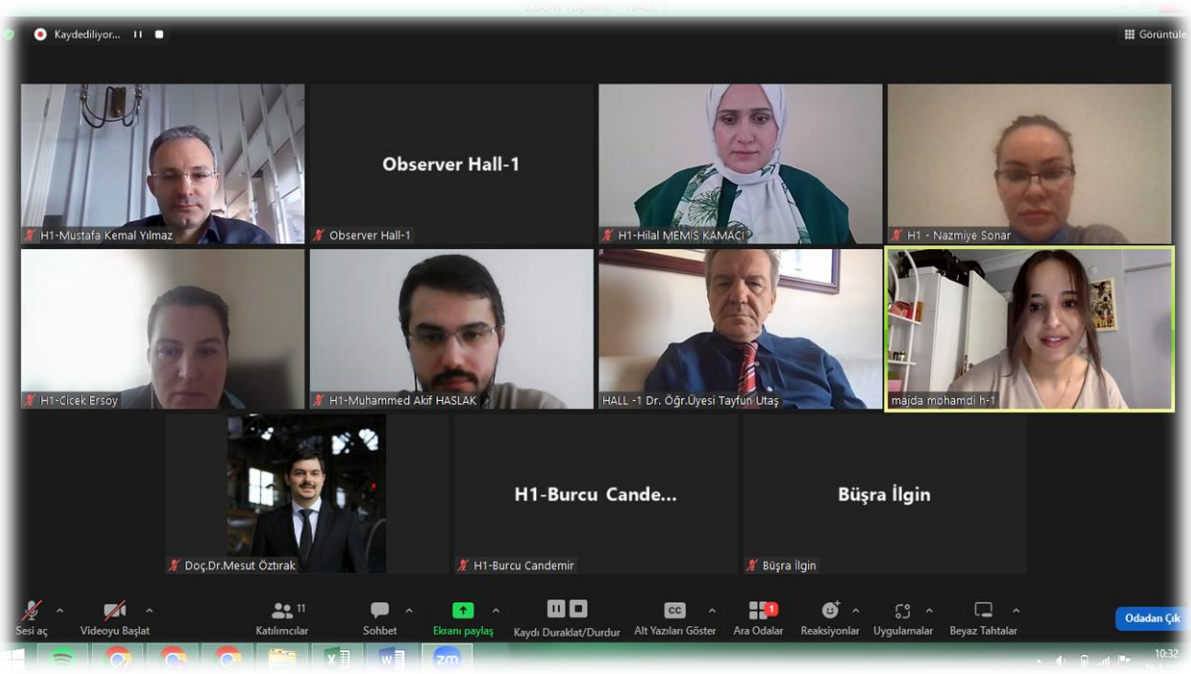


PHOTO GALLERY



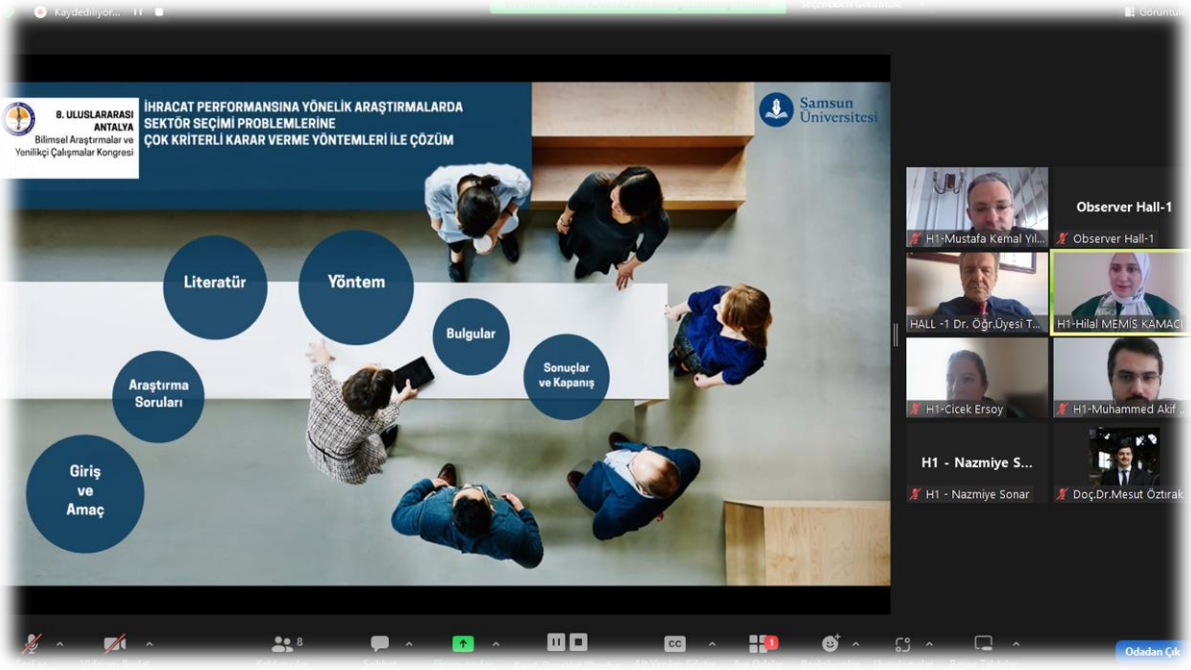
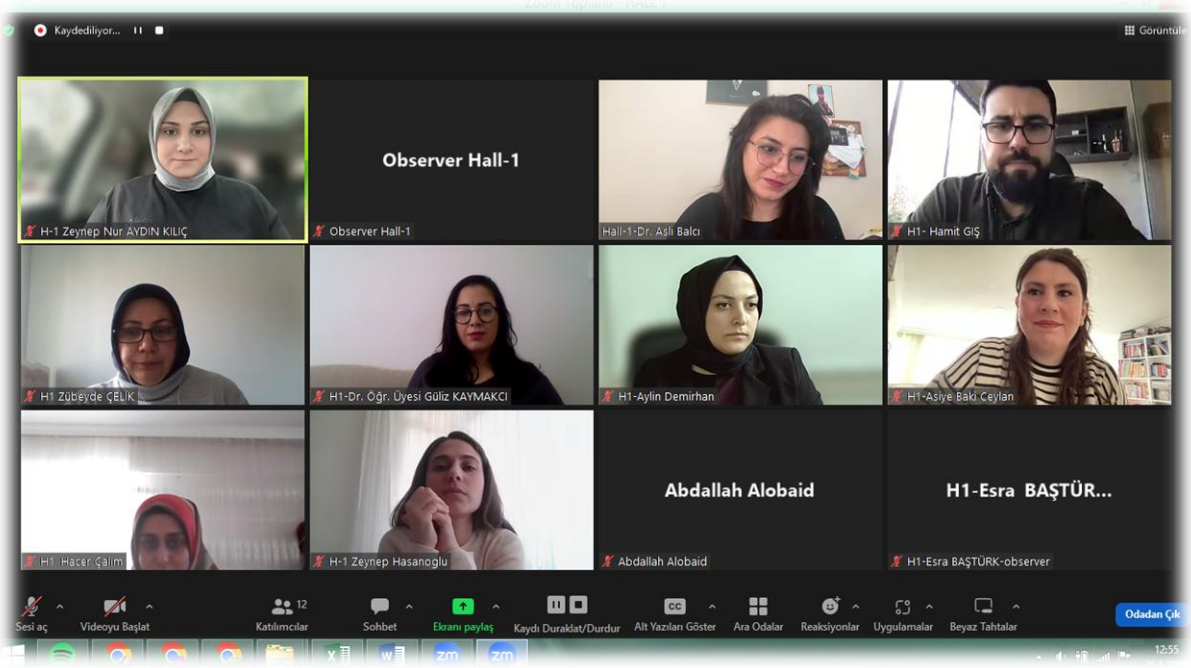


PHOTO GALLERY



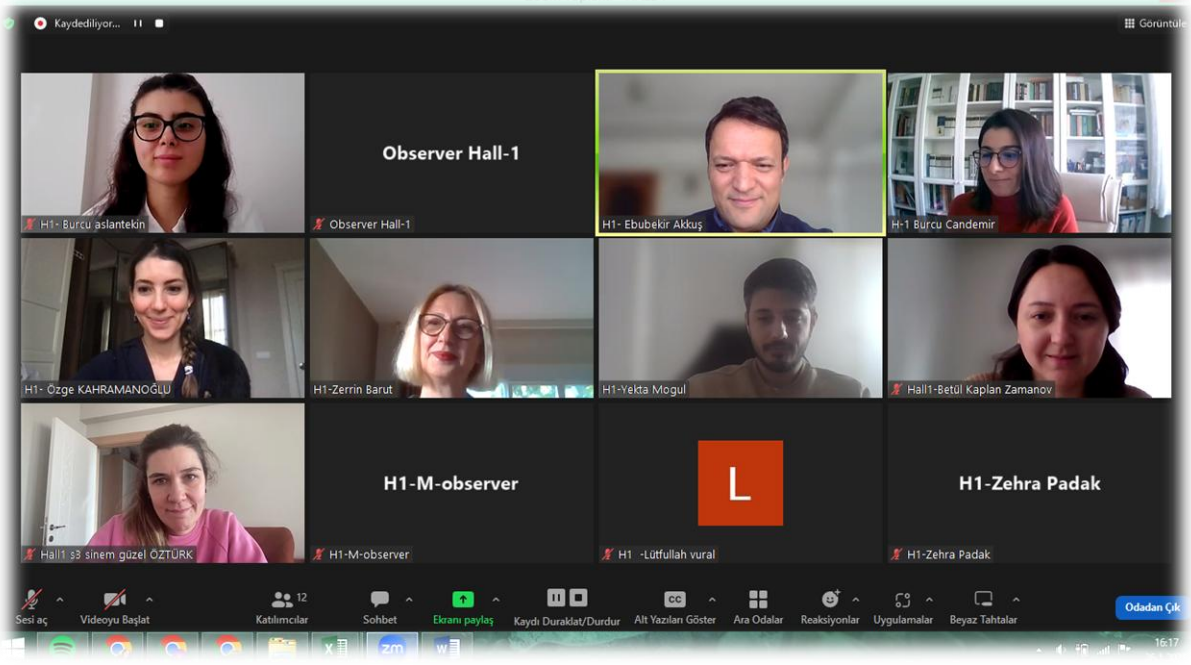
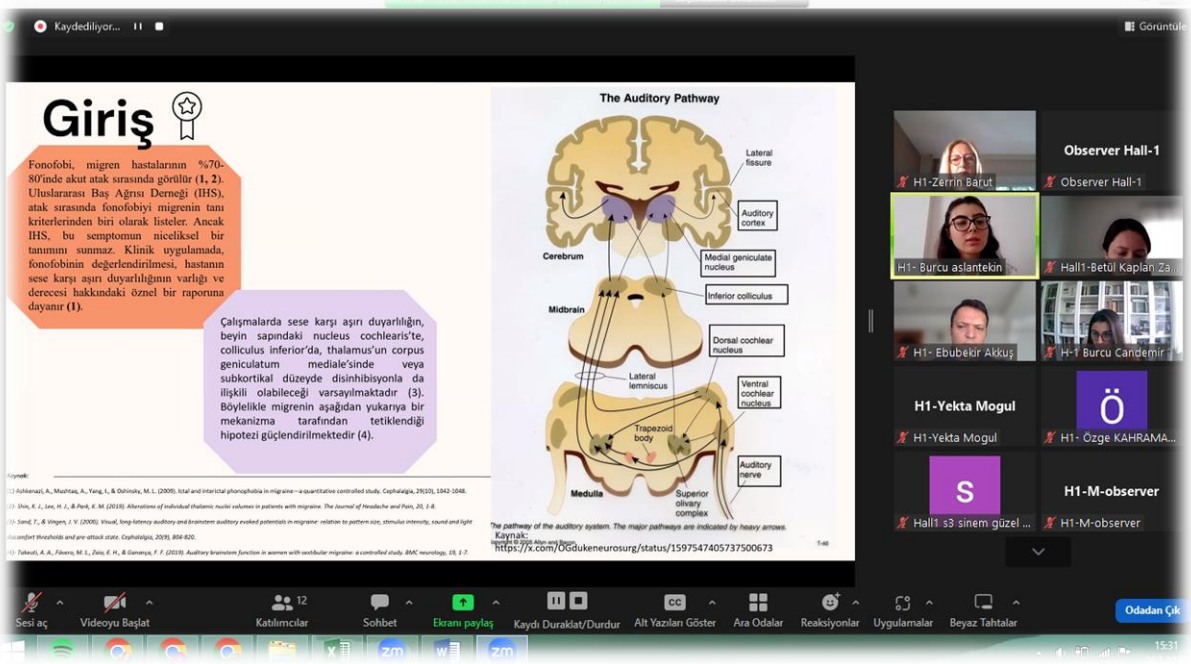


PHOTO GALLERY



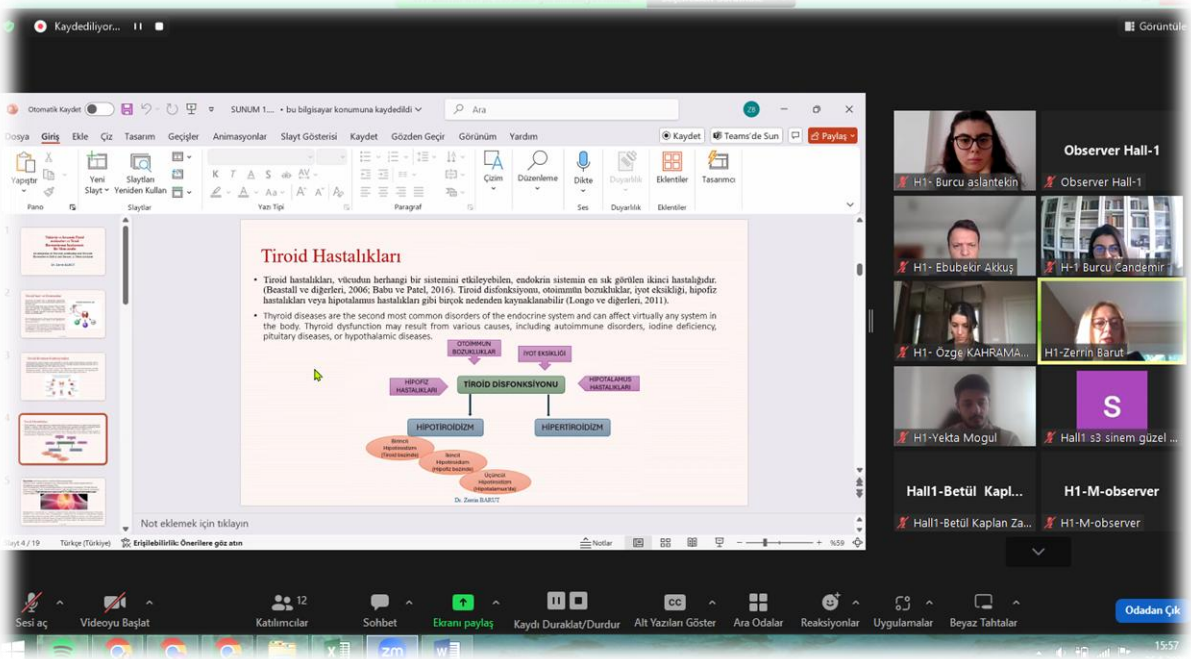


PHOTO GALLERY

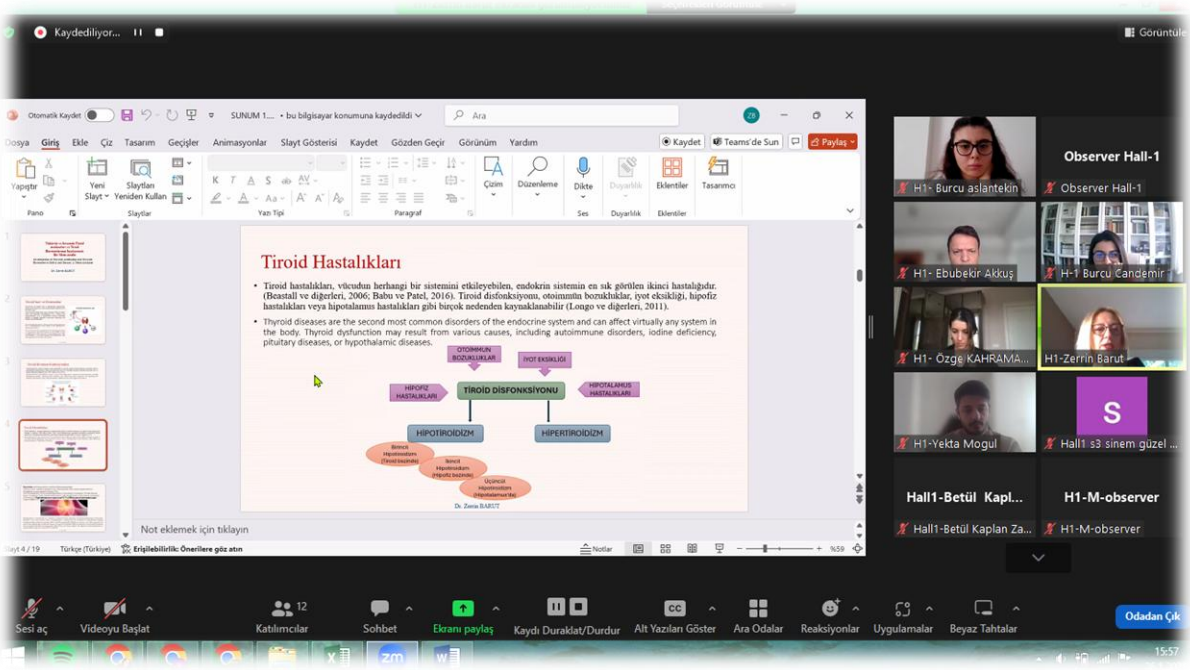
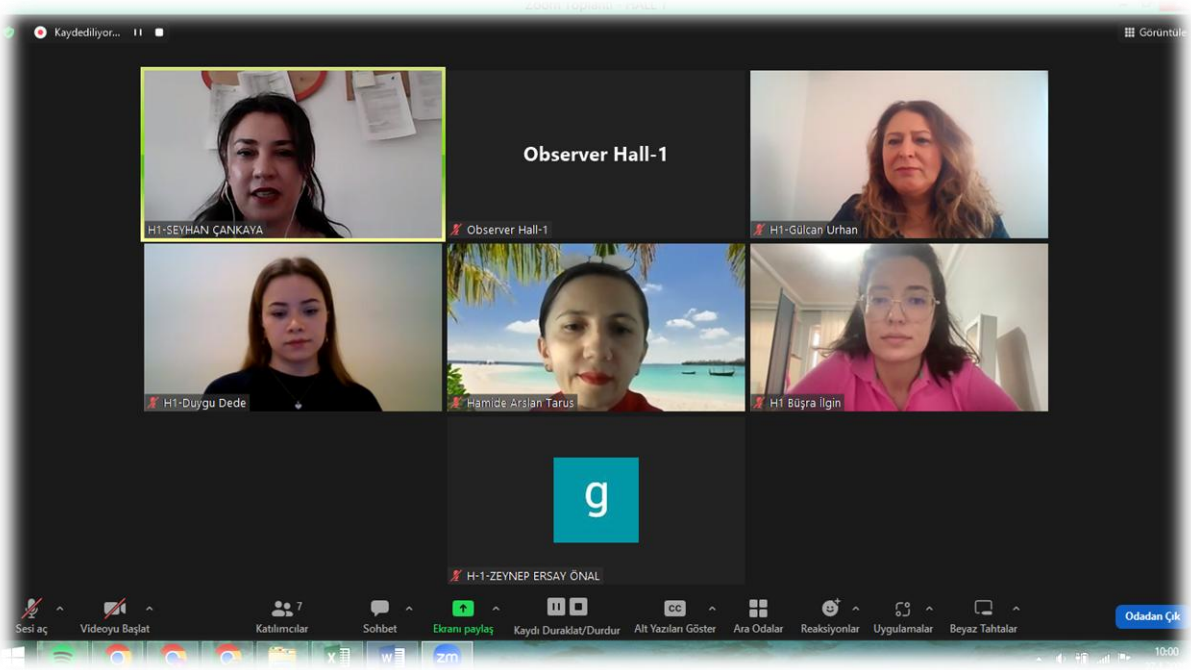


PHOTO GALLERY



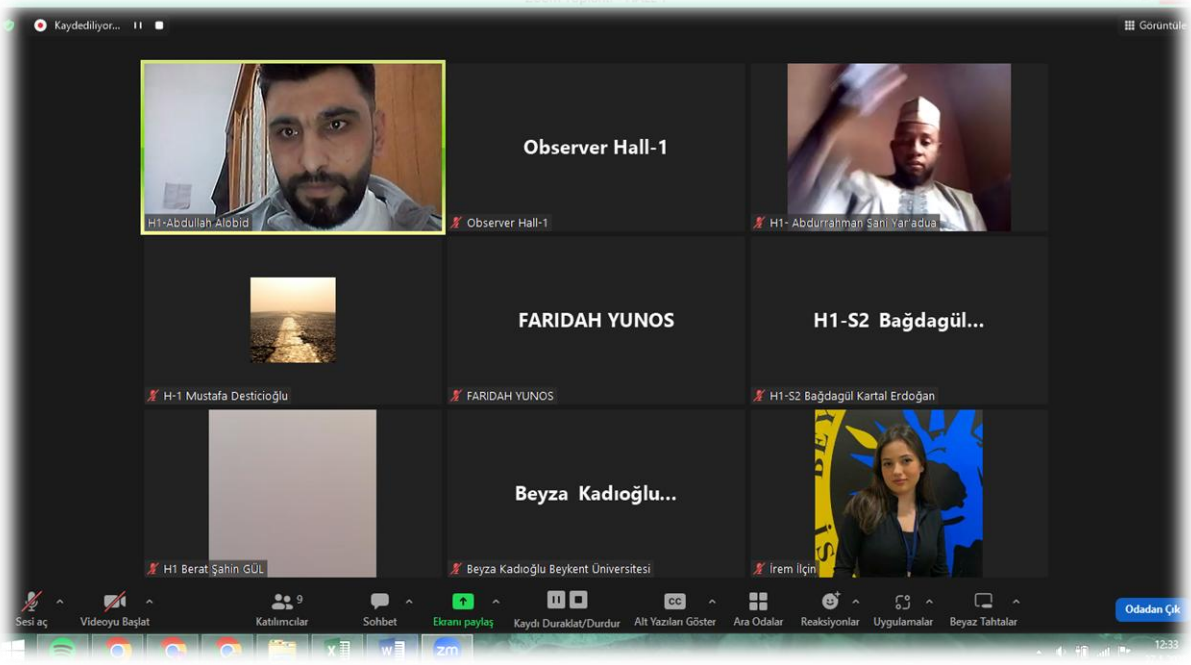


PHOTO GALLERY

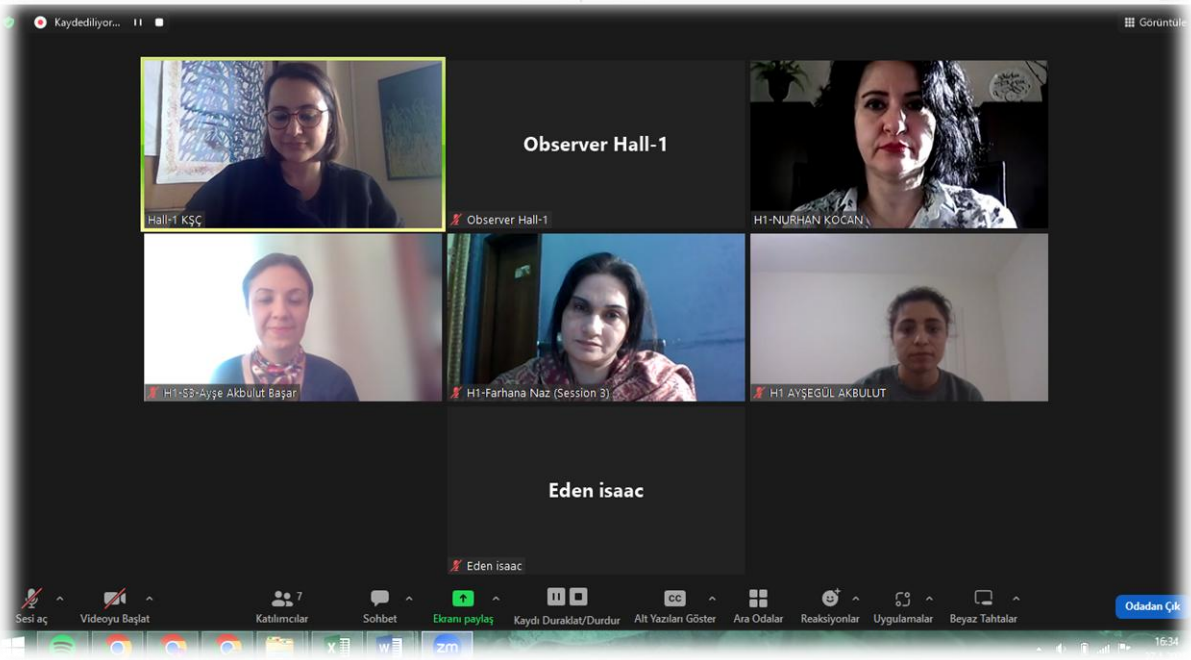
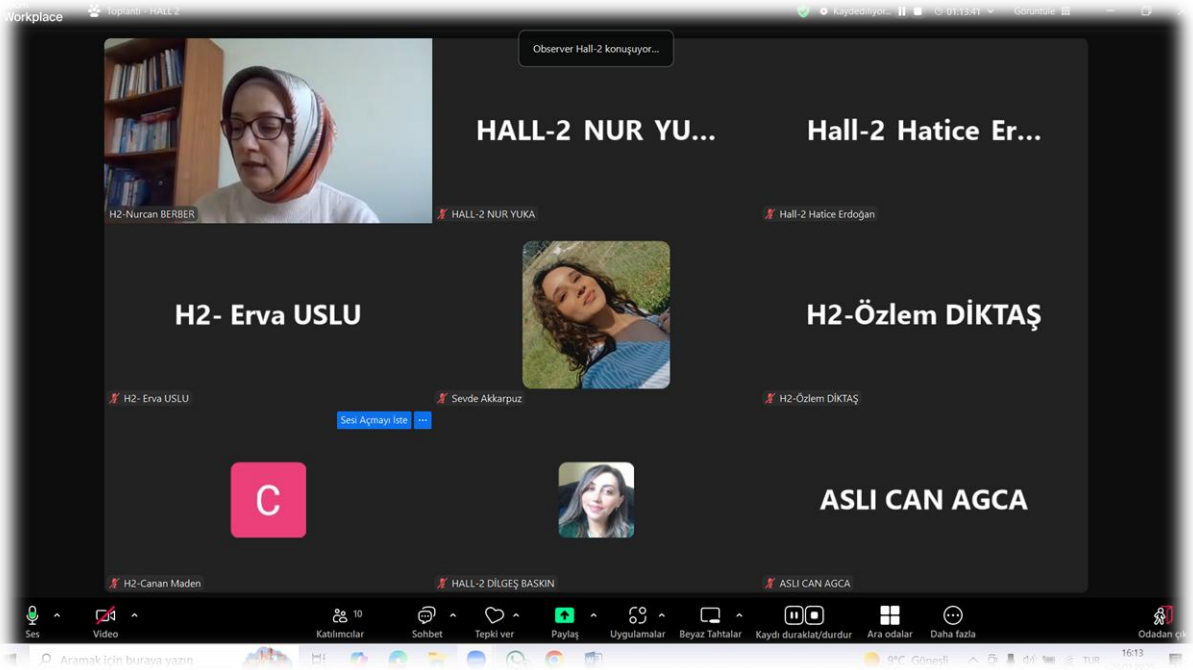


PHOTO GALLERY

PHOTO GALLERY



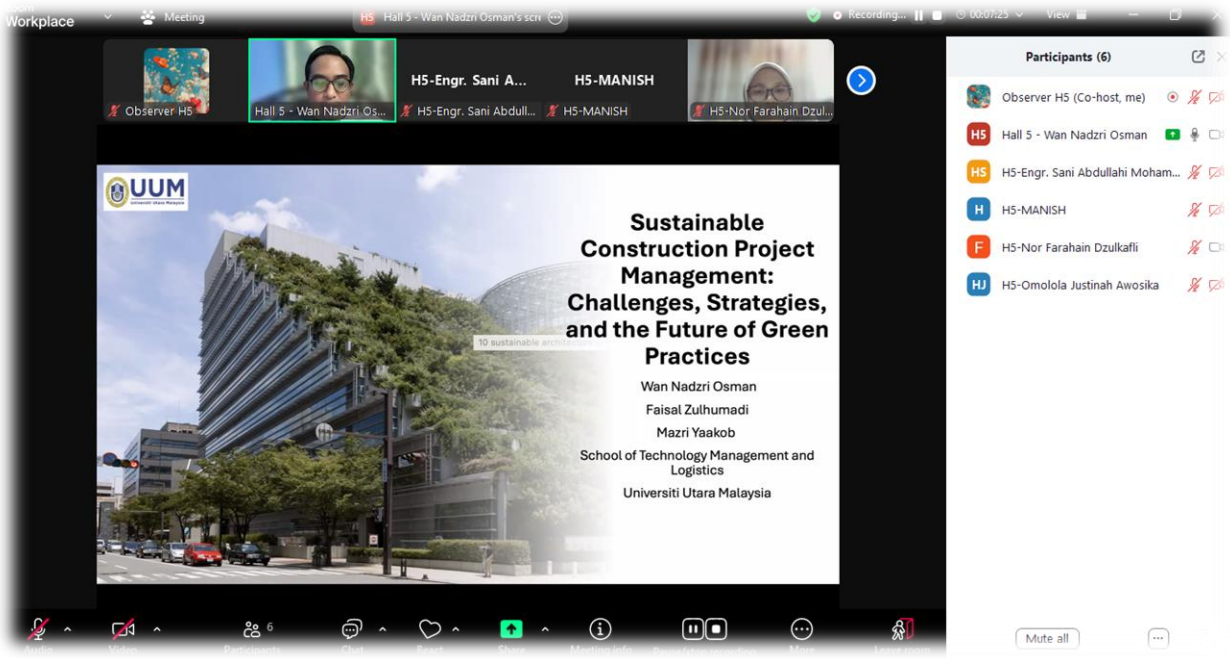
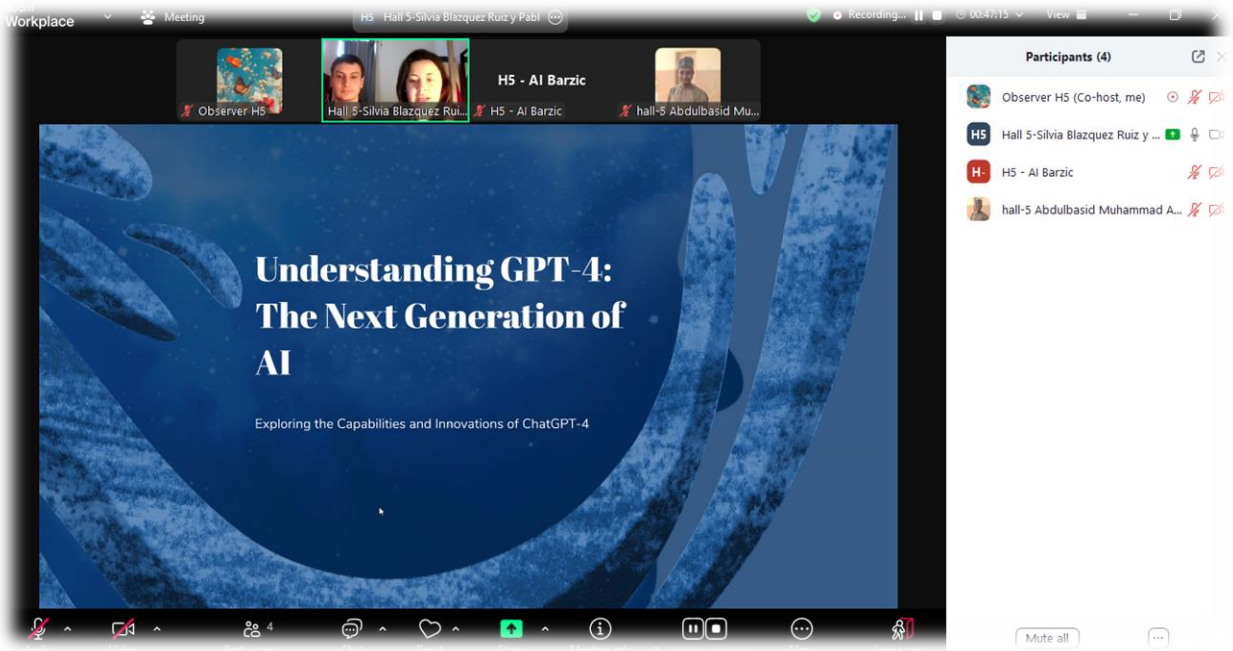


PHOTO GALLERY



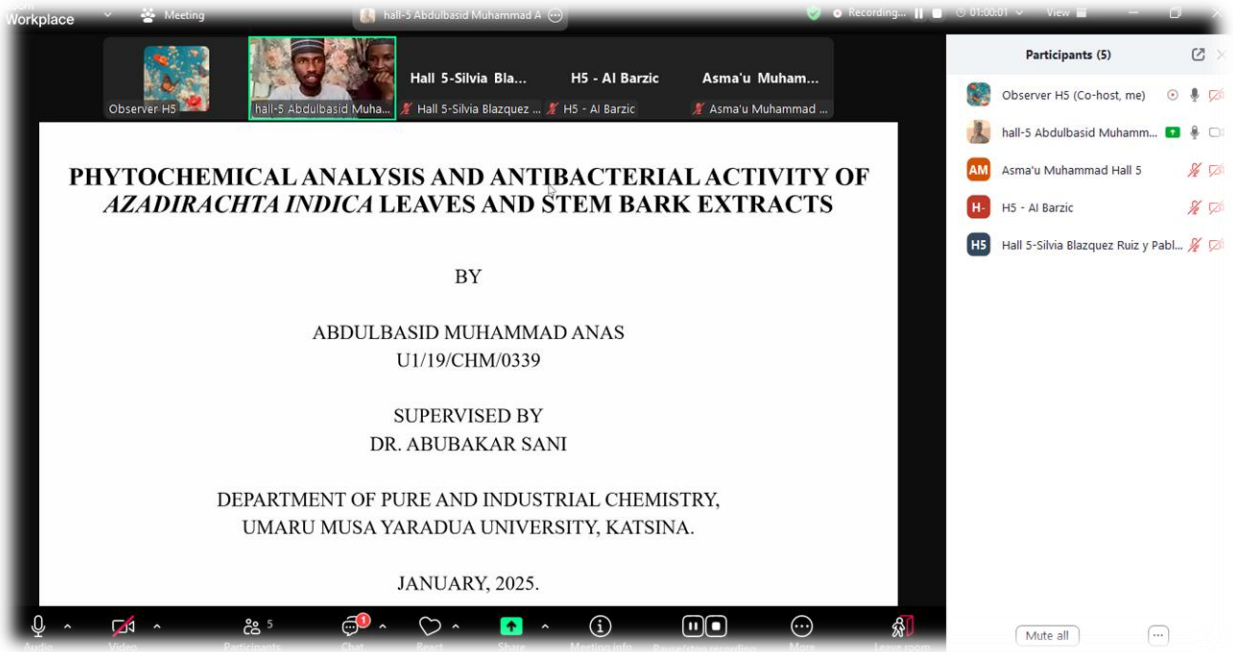
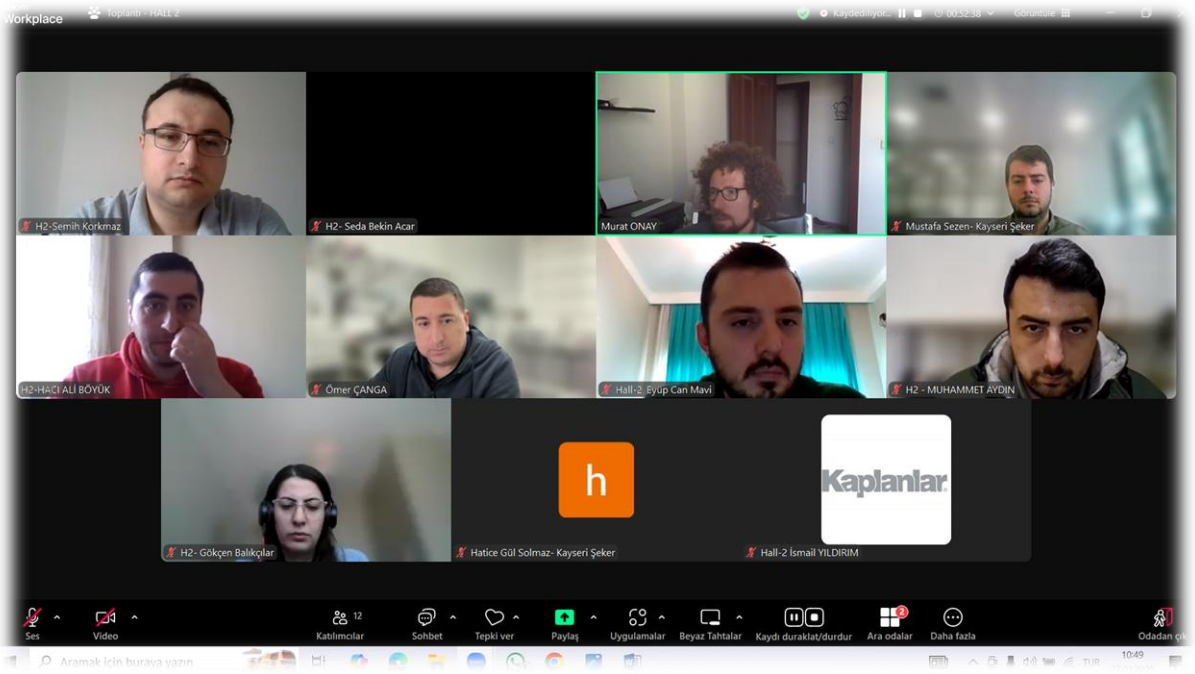


PHOTO GALLERY



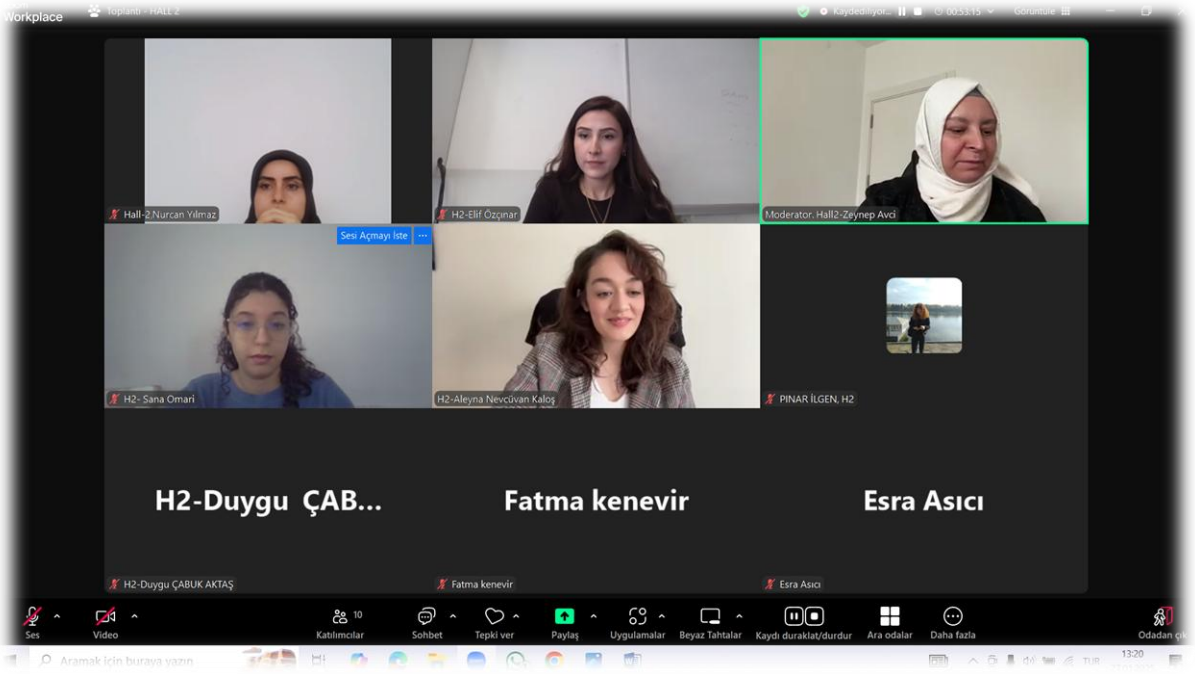


PHOTO GALLERY

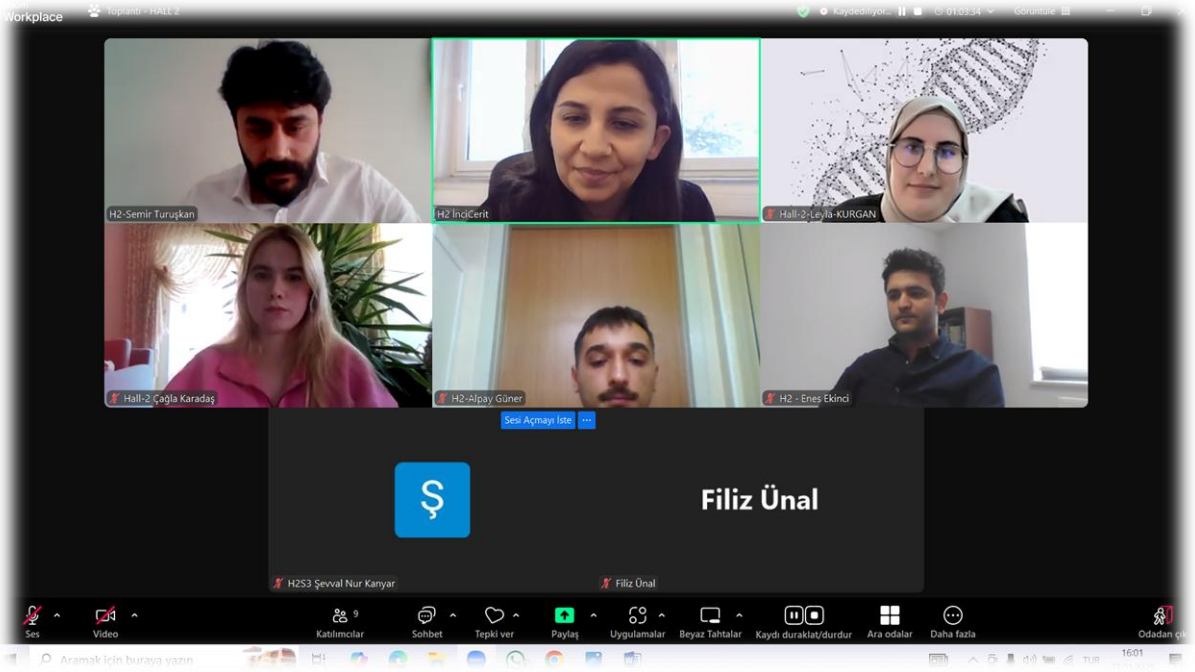


PHOTO GALLERY

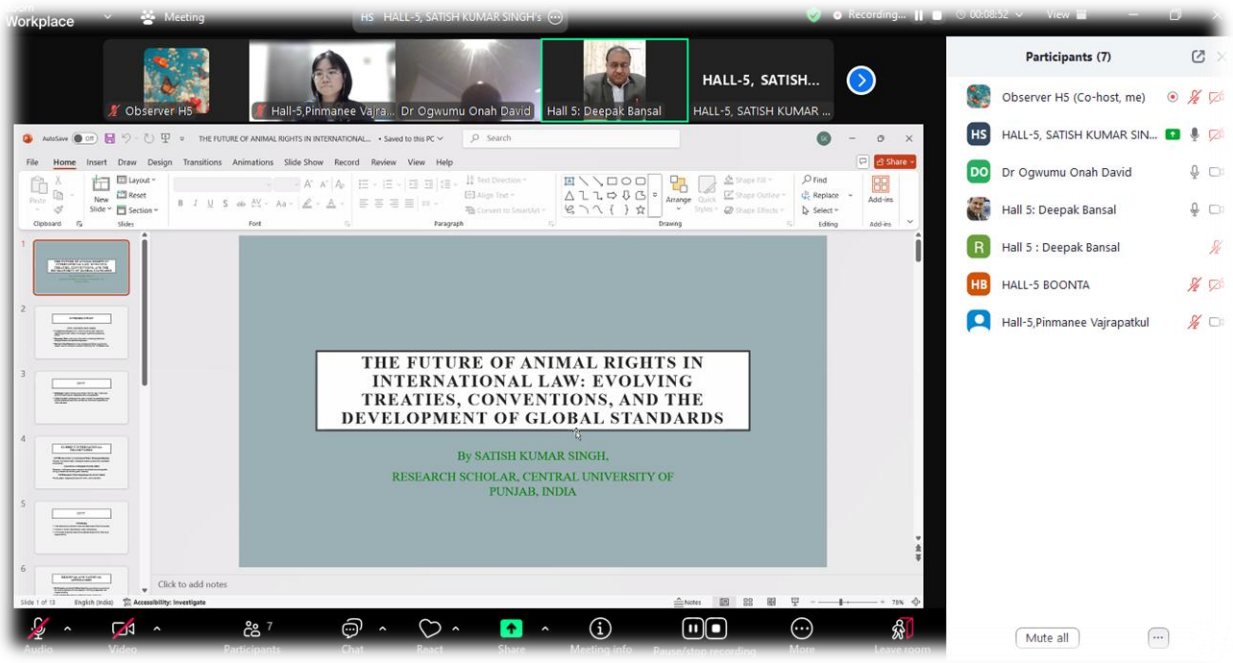
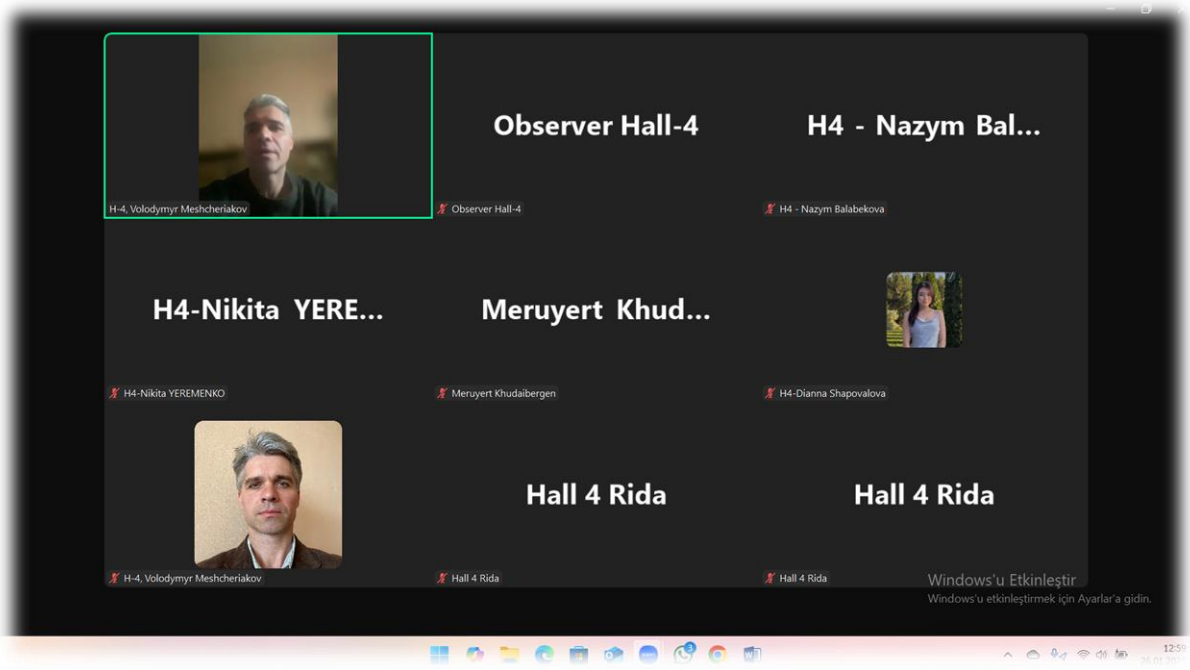
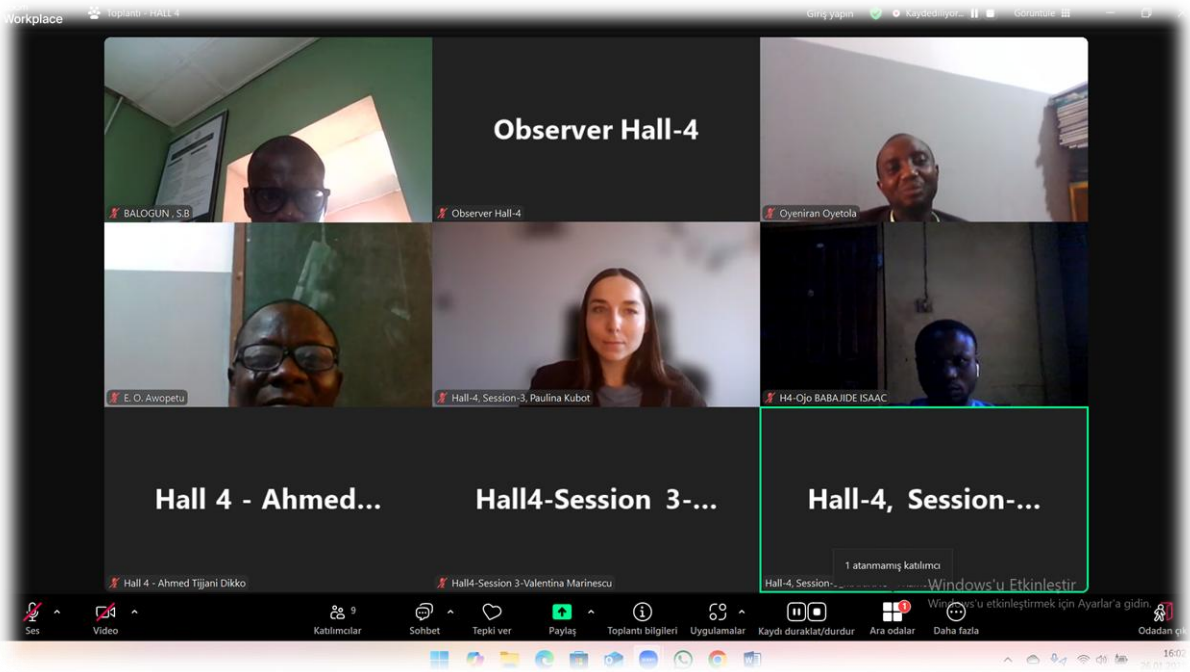


PHOTO GALLERY





VIII-International Antalya

Scientific Research and Innovative Studies Congress

January 25-27, 2025- Antalya

CONGRESS PROGRAM

Online (with ZOOM Conference)

IMPORTANT

- To be able to make a meeting online, login via **https://zoom.us/join** site, enter ID instead of "Meeting ID or Personal link Name'' and solidify the session.
- The presentation will have **15 minutes** (including questions and answers).
- The Zoom application is free and no need to create an account.
- The Zoom application can be used without registration.
- The application works on tablets, phones and PCs.
- Speakers must be connected to the session **15 minutes before** the presentation time.
- All congress participants can connect live and listen to all sessions.
- During the session, your camera should be turned on at least %70 of session period
- Moderator is responsible for the presentation and scientific discussion (question-answer) section of the session.

TECHNICAL INFORMATION

- Make sure your computer has a microphone and is working.
- You should be able to use screen sharing feature in Zoom.
- Attendance certificates will be sent to you as pdf at the end of the congress.
- Moderator is responsible for the presentation and scientific discussion (question-answer) section of the session.

Before you login to Zoom, indicate hall number and your surname (Hall-1, Merve KIDIRYUZ)

PARTICIPATING COUNTRIES: (27 Countries)

TÜRKİYE, LIBYA, NIGERIA, ROMANIA, TURKISH REPUBLIC OF NORTHERN CYPRUS, MOROCCO, NORTH MACEDONIA, SERBIA, ALGERIA, IRAN, IRAQ, PAKISTAN, INDIA, TUNUSIA, HUNGARY, UKRAINE, INDONESIA, KAZAKHSTAN, MALAYSIA, SPAIN, POLAND, BANGLADESH, VIETNAM, SCOTLAND, USA, FRANCE, THAILAND

https://us02web.zoom.us/j/85811170419?pwd=7yjkQmicrxfzet6OumOmJIQUtwWGI1.1

ONLINE PRESENTATIONS

Zoom Meeting ID: 858 1117 0419

Zoom Passcode: 080808

ONLINE PRESENTATIONS

26.01.2025 / Hall-1, Session-1

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419	
10 ^{00} : 12 ^{00}		ZOOM PASSCODE: 080808	

HEAD OF SESSION: Assoc. Prof. Dr. Tayfun UTAŞ

AUTHORS	AFFILIATION	TOPIC TITLE
Res. Assist. Hilal MEMİŞ KAMACI Prof. Dr. Mustafa Kemal YILMAZ	Samsun University TÜRKİYE	RESOLVING SECTOR SELECTION CHALLENGES IN EXPORT PERFORMANCE RESEARCH THROUGH MULTI-CRITERIA DECISION-MAKING METHODS
Assist. Prof. Dr. Vildan BAYRAM Assoc. Prof. Dr. Mesut ÖZTIRAK	İstanbul Aydın University TÜRKİYE İstanbul Medipol University TÜRKİYE	GREEN CAPABILITIES AND DIGITAL TRANSFORMATION: ACHIEVING COMPETITIVE ADVANTAGE WITH SUSTAINABLE TECHNOLOGIES
Majda MOHAMDI	İstanbul Nişantaşı University TÜRKİYE	THE EFFECT OF CHATBOTS USABILITY ON CUSTOMER LOYALTY
Muhammed Akif HAŞLAK Ömür AKDEMİR	Ankara Yıldırım Beyazıt University TÜRKİYE	AI-BASED HEALTH APPLICATION USED IN TÜRKİYE: USABILITY ANALYSIS
Dr. Nazmiye SONAR	İstanbul Nişantaşı University TÜRKİYE	RELATIONSHIP BETWEEN BUYING POWER AND BRANDING IN MARKETING
Assoc. Prof. Dr. Tayfun UTAŞ Prof. Dr. Tarık OCAK Ferda ZAMAN KAYA	Istinye University TÜRKİYE Health Sciences University TÜRKİYE	HEALTCARE EMERGENCY DEPARTMENT SUCCESS FACTORS EVALUATION WITH DEMATEL METHOD
Assoc. Prof. Dr. Tayfun UTAŞ Ferda Zaman KAYA	İstinye University TÜRKİYE Health Sciences University TÜRKİYE	RELIABILITY CENTERED MAINTENANCE (RCM) IN HEALTCARE
Dr. Çiçek ERSOY	Istanbul Technical University TÜRKİYE	REAL TIME BIDDING IN DIGITAL MARKETING AND DATA PROTECTION

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

26.01.2025 / Hall-2, Session-1

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
10 ^{00} : 12 ^{00}		ZOOM PASSCODE: 080808

HEAD OF SESSION: Assoc. Prof. Dr. Ayhan AKSAKALLI

AUTHORS	AFFILIATION	TOPIC TITLE
Yasemin DUMANLI GÜRLER	Marmara University TÜRKİYE	EVALUATION OF THE RELATIONSHIP BETWEEN THE HIGHER EDUCATION SYSTEM AND THE LABOR MARKET IN THE CONTEXT OF SKILLS SHORTAGE IN TURKEY
Assoc. Prof. Dr. Ayhan AKSAKALLI	Bayburt University TÜRKİYE	IN THE GRIP OF RATIONALITY: THE INVISIBLE STRUCTURAL CORRUPTION OF SOCIAL JUSTICE
Prof. Dr. Yusuf GENÇ Fatma Sude UZUN	Sakarya University TÜRKİYE	PROBLEMS FACED BY WOMEN IN WORKING LIFE AND SOLUTION-ORIENTED SOCIAL POLICIES
Assist. Prof. Dr. Mehmet AKARÇAY	Kırşehir Ahi Evran University TÜRKİYE	FACTORS AFFECTING THE NON-PERFORMING LOAN RATE: THE EXAMPLE OF THE TURKISH BANKING SECTOR
Amina NAIMOVA Assoc. Prof. Dr. Figen HARAVON	Nişantaşı University TÜRKİYE	SUSTAINABLE REAL ESTATE DEVELOPMENT: A COMPARATIVE ANALYSIS OF GREEN BUILDING PRACTICES IN TÜRKİYE
Dr. Nuray YÜZBAŞIOĞLU	Aydın Adnan Menderes University TÜRKİYE	FINTECH'IN EVRIMI: BIBLIYOMETRIK BIR ANALIZ
Dr. Nuray YÜZBAŞIOĞLU	Aydın Adnan Menderes University TÜRKİYE	CRYPTOCURRENCY AND STOCK MARKETS: RELATIONSHIPS IN TIME AND FREQUENCY DOMAINS
Bilal BELEN Dr. Osman KARTAL	Düzce University TÜRKİYE	THE RELATIONSHIP BETWEEN FINANCIAL LITERACY AND DIGITAL LITERACY: THE CASE OF DÜZCE

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

26.01.2025 / Hall-3, Session-1

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
10 ^{00} : 12 ^{00}		ZOOM PASSCODE: 080808

HEAD OF SESSION: Assoc. Prof. Dr. Ali Can YILMAZ

AUTHORS	AFFILIATION	TOPIC TITLE
Assoc. Prof. Dr. Ali Can YILMAZ Lect. Dr. Özlem ERDEM	Çukurova University TÜRKİYE	IMPACT OF SUGARCANE BAGASSE ASH INCORPORATION IN BRAKE PAD MATRIX ON THE COEFFICIENT OF FRICTION
Assoc. Prof. Dr. Ali Can YILMAZ Lect. Dr. Özlem ERDEM	Çukurova University TÜRKİYE	THE EFFECT OF DIFFERENT FUELS ON HEAT TRANSFER FROM THE COMBUSTION CHAMBER OF A SPARK-IGNITION ENGINE
Mehmet Akif DÜNDAR Osman ÖZENÇ	Yozgat Bozok University TÜRKİYE	PREDICTING THE THREE-POINT BENDING BEHAVIOR OF 3D-PRINTED ACRYLONITRILE STYRENE ACRYLATE AMORPHOUS THERMOPLASTIC: A NUMERICAL STUDY
Assoc. Prof. Dr. Sezer ÇOBAN	İskenderun Technical University TÜRKİYE	OPTIMIZATION OF LONGITUDINAL CONTROL SYSTEM FOR FIXED-WING UAVS USING PID CONTROLLER AND SPSA METHOD
Oğuz SÜLÜKÇÜLER Assoc. Prof. Dr. Murat AKDAĞ Dr. A. Emre ÇETİN	Dokuz Eylül University TÜRKİYE Olgun Automation Leader Manisa TÜRKİYE	DESIGN AND MANUFACTURING OF COMPOSITE LEAF SPRING RATE MEASUREMENT MACHINE
Assist. Prof. Dr. Tolga ALTAN	Niğde Ömer Halisdemir University TÜRKİYE	EFFECT OF GLASS-CERAMIC SEALANT THICKNESS ON SHEAR STRENGTH IN SOLID OXIDE FUEL CELLS
Hüseyin ALPTEKİN Arif ÜÇER Mustafa ÇETİN Hatice KARAYILAN	EFG Electric Energy Inc. Diyarbakır TÜRKİYE	INVESTIGATION OF THE EFFECT OF NANOPARTICLES ON MATERIAL STRENGTH IN COMPOSITE MATERIALS
Assist. Prof. Dr. Çağın BOLAT Assist. Prof. Dr. Sinan MARAŞ	Samsun University TÜRKİYE Ondokuz MayısUniversity TÜRKİYE	A NUMERICAL INVESTIGATION ON THE EFFECTS OF BEAM THICKNESS AND FILLING RATE ON BUCKLING BEHAVIOR OF 3D-PRINTED NYLON-6 POLYMERS
Batuhan GÖÇEN Berke GÜLER Mücahit BARUĞ Ümit ÜNVER	Korkmaz Mutfak Eşyaları San ve Tic A.Ş, R&D Department İstanbul TÜRKİYE Yalova University TÜRKİYE	BREWING AND CONSUMPTION ANALYSIS OF BLACK TEA
Büşra EROL Osman Vahid MERCAN Batuhan GÖÇEN Ümit ÜNVER	Yalova University TÜRKİYE Korkmaz Mutfak Eşyaları San ve Tic A.Ş, R&D Department İstanbul TÜRKİYE Yalova University TÜRKİYE	THE ROLE OF WINDOW/WALL RATIO IN BUILDING ENERGY EFFICIENCY

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

26.01.2025 / Hall-4, Session-1

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
10 ^{00} : 12 ^{00}		ZOOM PASSCODE: 080808

HEAD OF SESSION: Dr. Hayatem Hamal

AUTHORS	AFFILIATION	TOPIC TITLE
Dr. Hayatem Hamal	Tripoli University LIBYA	ESTIMATES OF A NEW MODIFICATION KANTOROVICH TYPE BERNSTEIN OPERATOR VIA CALCULUS
Alaekwe, I.O.	Federal University NIGERIA	DRUG-ABILITY AND PHARMACOKINETIC PROPERTIES OF CATECHIN AND BETA SITOSTEROL ISOLATED FROM BAUHINIA SEMIBIFIDA LEAF
Samia BABA HAMED Amel BERREBBAH ALIOUA	LATES University MOROCCO	ANALYSIS AND PURIFICATION OF LAMINARIN EXTRACTED FROM LAMINARIA: METHODS AND APPLICATIONS
Samia BABA HAMED BENBAYER Wided	LATES University MOROCCO	MORPHOLOGY AND MOLECULAR IDENTIFICATION OF MICROALGAE DUNALIELLA SALINA STRAIN SEQ DUNA5.8S ISOLATED FROM AN ALGERIAN SALT LAKE
Prof. Dr. Marina Todor STOJANOVA Acad. Prof. Dr. Dragutin A. DJUKIC Dr. Monika STOJANOVA	Ss. Cyril and Methodius University NORTH MACEDONIA Kragujevac University SERBIA Association for Scientific-research, Educational and Cultural Activities "Open Science" NORTH MACEDONIA	INFLUENCE OF FOLIAR CALCIUM AMPLIFIERS ON THE YIELD AND CHEMICAL COMPOSITION OF TOMATO LEAVES
Sabrina ROGUAI Abdelghani LAKEL	Université Abbes Laghrour ALGERIA	COPPER-DOPED ZINC OXIDE THIN FILMS FOR ENHANCED PHOTOVOTAIC PERFORMANC
BRAHMI Zahia GHERISSI Djallel Eddine	University of Souk-Ahras, Souk Ahras ALGERIA	ADVANCING FEMALE CAMEL REPRODUCTIVE HEALTH
Taleb MOUNIA	Echahid Cheikh Larbi Tebessi University ALGERIA	CONTRIBUTION TO CONDITIONAL PREVENTIVE MAINTENANCE OF ROTATING MACHINES

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

26.01.2025 / Hall-5, Session-1

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
10 ^{00} : 12 ^{00}		ZOOM PASSCODE: 080808

HEAD OF SESSION: Dr. Rashidat Abdulsalam-Nuhu

AUTHORS	AFFILIATION	TOPIC TITLE
Musa, A.A. Ibrahim, H. Bashir, A.B. Hussaini, H.A. Garba, A. Mohammed, BG.Manga	Federal Polytechnic NIGERIA Bayero University NIGERIA	ASSESSMENT OF THE IMPACT OF RADIO BROADCASTING ON RURAL DEVELOPMENT IN FAGGE LOCAL GOVERNMET KANO STATE
Musa, A.A. Ibrahim, H. Bashir, A.B. Hussaini, H.A. Garba, A. Mohammed, BG.Manga	Federal Polytechnic NIGERIA Bayero University NIGERIA	INFLUENCE OF SOCIAL MEDIA ON VOTING BEHAVIOR IN FAGGE LOCAL GOVERNMENT AREA, KANO STATE
Saloni Sharma Suhani Sharma	Deemed University INDIA	REVOLUTIONIZING EDUCATION: INNOVATIONS IN TEACHING FOR THE 21ST CENTURY
Dr. Rashidat Abdulsalam-Nuhu Rasaq Sulyman (Ph. D)	University of Abuja NIGERIA Kwara State University NIGERIA	EXPLORATORY STUDY OF PLAYWAY METHOD IN PRIMARY SCHOOLS IN GWAGWALADA AREA COUNCIL OF THE FCT, NIGERIA
Azizian SAEED Kabiri Fatemeh Babaei Mohaddisa	University of Science and Culture IRAN	THE IMPACT OF URBAN REGENERATION ON THE CUSTOMS AND CULTURE OF THE RESIDENTS OF THE REGION
Sana Zainab Dr. Khawar Naheed	Bahauddin Zakariya University PAKISTAN	ENTREPRENEURIAL JOURNEY FROM COMPETENCIES TO INTENTIONS: DOES PASSION HAS ANYTHING TO SAY?
Abubakar SANI Saifullahi RILWANU	Umaru Musa Yar'adua University NIGERIA	SCREENING OF LEAVES AND STEM BARK OF GUIERA SENEGLENSIS FOR ANTIBACTERIAL ACTIVITY
Prof. Dr. Bouzekraoui Hicham Phd Student. Mouaddine Atika	Sultan May Slimane University MOROCCO	GEOROUTE AS NEW TOOL FOR GEOTOURISM VALORISATION IN BENI MELLAL ATLAS, (MOROCCO)

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

26.01.2025 / Hall-6, Session-1

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
10 ^{00} : 12 ^{00}		ZOOM PASSCODE: 080808

HEAD OF SESSION: Fadimatu Dauda Muhammad

AUTHORS	AFFILIATION	TOPIC TITLE
Dhanya S.R Rajani.V	K.S.M.D.B College INDIA All Saints' College INDIA	DISTRIBUTION OF INVASIVE ALIEN PLANT SPECIES ALONG THE BANKS OF THE SASTHAMCOTTA LAKE (RAMSAR SITE) IN KOLLAM, KERALA
Rihab Hedhiri Ibtissem Haboubi Emna Grami Neila Saidi	Carthage University TUNUSIA	IRRIGATION OF SOIL PLOTS BY WATER POLLUTED BY WASTEWATER AND ITS IMPACT ON ITS QUALITY
Aloui MOURAD Fahsi KARIM Menana ELHALAOUI	Sidi Mohamed Ben Abdellah University MOROCCO Mohammed V University MOROCCO Sidi Mohamed Ben Abdellah University MOROCCO	DESIGN AND EVALUATION OF SELECTIVE SURVIVIN INHIBITORS: A STUDY BASED ON MX-106
Annah Siminle Amos Dr. Simon Olonkwoh Salihu Dr. Idris Suleiman	Federal University of Technology NIGERIA	SPECIATION OF ARSENIC FROM FISH POND SEDIMENTS FROM TALBA FARM, MINNA METROPOLIS
Fadimatu Dauda Muhammad	Usman Dan Fodio University Sokoto NIGERIA	FOODBORNE PATHOGENS IN MEAT AND DAIRY PRODUCTS
Fadimatu Dauda Muhammad	Usman Dan Fodio University Sokoto NIGERIA	REPRODUCTIVE PERFORMANCE OF DAIRY CATTLE
Anas Hamdani Said Bouda Atman Adiba Jamal Charafi	National Institute of Agricultural Research MOROCCO University of Sultan Moulay Slimane MOROCCO National Institute of Agricultural Research MOROCCO	CHILL AND HEAT REQUIREMENTS OF FOUR PLUM VARIETIES GROWING AT TWO CONTRASTING CLIMATE ENVRONMENTS IN MOROCCO
Aliyu HASSAN	Air Force Institute of Technology NIGERIA	EVALUATION OF URBAN FLOODING AND UNCONTROLLED WASTE DISPOSAL: OCCURRENCE AND IMPACTS

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

26.01.2025 / Hall-1, Session-2

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419	
$12^{30} : 14^{30}$		ZOOM PASSCODE: 080808	

HEAD OF SESSION: Assoc. Prof. Dr. Cansu TUTKUN & Assist. Prof. Dr. Aslı BALCI

AUTHORS	AFFILIATION	TOPIC TITLE
Zübeyde ÇELİK Prof. Dr. Süleyman GÖKSOY	Düzce University TÜRKİYE	RELATIONSHIP BETWEEN TRANSFORMATIONAL LEADERSHIP ROLES OF SCHOOL PRINCIPALS AND ORGANIZATIONAL HAPPINESS OF TEACHERS (A theoretical evaluation)
Hamit GIŞ Assoc. Prof. Dr. Arzu DEVECİ TOPAL	Kocaeli University TÜRKİYE	INSTRUCTIONAL TECHNOLOGIES USED IN VISUAL ARTS EDUCATION
Asiye BAKİ CEYLAN Assoc. Prof. Dr. Arzu DEVECİ TOPAL	Kocaeli University TÜRKİYE	TRENDS IN LEARNING ANALYSES RESEARCHES
Assoc. Prof. Dr. Cansu TUTKUN Dr. Zeynep Nur AYDIN KILIÇ	Bayburt University TÜRKİYE Gazi University TÜRKİYE	VR. IN PRESCHOOL EDUCATION: PRESERVICE TEACHERS' EXPECTATIONS AND PERCEPTIONS
Assoc. Prof. Dr. Cansu TUTKUN Assist. Prof. Dr. Aslı BALCI	Bayburt University TÜRKİYE Atatürk University TÜRKİYE	THE EFFECT OF VIRTUAL REALITY EXPERIENCE ON PRESERVICE PRESCHOOL TEACHERS' OPINIONS ON THE USE OF VR IN EDUCATION
Zeynep HASANOĞLU Prof. Dr. Mutlu ŞAHİN	Yıldız Technical University TÜRKİYE	THE EFFECT OF USING ALGODOO IN SCIENCE EDUCATION ON THE LEARNING OF STUDENTS WITH SPECIFIC LEARNING DISABILITIES
Aylin DEMİRHAN Prof. Dr. Tolga GÜYER	Gazi University TÜRKİYE	THE EFFECT OF USING ROBOTICS AND SIMULATION IN EDUCATION ON CREATIVE PROBLEM SOLVING AND COMPUTATIONAL THINKING SKILLS OF GIFTED STUDENTS
Hacer ÇALIM Assist. Prof. Dr. Güliz KAYMAKCI	Tokat Gaziosmanpaşa University TÜRKİYE	EXAMINATION OF SPACE KNOWLEDGE OF GIFTED SECOND GRADE STUDENTS

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

26.01.2025 / Hall-2, Session-2

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
12 30 : 14 30		ZOOM PASSCODE: 080808

HEAD OF SESSION: Assist. Prof. Dr. Rahime Evra KARAKAYA

AUTHORS	AFFILIATION	TOPIC TITLE
Merve YAVAŞ KİREZ Prof. Dr. Mehmet Lütfi YOLA	Hasan Kalyoncu University TÜRKİYE	A NOVEL FAMOXADONE FUNGICIDE DETECTION IN MILK SAMPLES BY SURFACE PLASMON RESONANCE BASED ON MOLECULARLY IMPRINTING POLYMER
Cansu İpek BOZKURT Prof. Dr. Yasemin BEYHAN	Hasan Kalyoncu University TÜRKİYE	THE RELATIONSHIP BETWEEN ADVANCED GLICATION END PRODUCTS (AGE) AND HEALTH
Assist. Prof. Dr. Rahime Evra KARAKAYA	Ankara Yıldırım Beyazıt University TÜRKİYE	CURRENT APPROACHES TO NUTRITIONAL MANAGEMENT OF FIBROMYALGIA
Cemre Yaren ERKAL Assoc. Prof. Dr. Salim YILMAZ Assist. Prof. Dr. Ahmet Murat GÜNAL	İstanbul Okan University TÜRKİYE Acıbadem Mehmet Ali Aydınlar University TÜRKİYE Haliç University TÜRKİYE	CLUSTERING ANALYSIS BASED ON COUNTRIES' FRUIT AND VEGETABLE CONSUMPTION, LIFE EXPECTANCY, HEALTH EXPENDITURES, AND CARDIOVASCULAR AND OBESITY PREVALENCE
Özgür Devrim ABLAY	DIMES Food Ind. & Inc., İzmir TÜRKİYE	NEW TREND IN THE BEVERAGE INDUSTRY: FUNCTIONAL DRINKS
Dilber ÇAĞLAR	DIMES Food Ind. & Inc., İzmir TÜRKİYE	THE POTENTIAL OF ALTERNATIVE PROTEINS FOR SUSTAINABLE FOOD SYSTEMS
Nazan ÇAĞLAR Assist. Prof. Dr. Şakir Selçuk SEÇİLMİŞ Mehmet ÇAĞLAR	GaziantepUniversity TÜRKİYE Şölen Chocolate Food Industry and Trade Inc. Gaziantep TÜRKİYE	DEVELOPMENT OF SOFT CANDY FORMULATIONS ENRICHED WITH FUNCTIONAL INGREDIENTS AND COMPARISON WITH MARKET PRODUCTS
Bahar KURT	DIMES Food Ind. & Inc., İzmir TÜRKİYE	PACKAGING TECHNOLOGIES FOR EXTENDING SHELF LIFE AND CURRENT APPLICATIONS IN THE FOOD INDUSTRY
Zeliha nur BOZKURT Ayşe ELKOCA Duygu AYAR	Gaziantep Islamic Science and Technology University TÜRKİYE	ATTENTION DEFICIT AND HYPERACTIVITY DISORDER IN SCHOOL AGE CHILDREN

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

26.01.2025 / Hall-3, Session-2

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
12 30 : 14 30		ZOOM PASSCODE: 080808

HEAD OF SESSION: Prof. Dr. Mustafa BOZ

AUTHORS	AFFILIATION	TOPIC TITLE
Sima ÖKTE Prof. Dr. Kadir ARSLANBOĞA Assist. Prof. Dr. İlker KARAÖNDER	Çanakkale Onsekiz Mart University TÜRKİYE	EXORBITANT FRAUD IN THE OTTOMAN EMPIRE: LEGAL AND SOCIAL IMPACTS (THE CASE OF ISTANBUL)
Atiye BİLİM	Konya Technical University TÜRKİYE	GENERAL OVERVIEW OF CONSTRUCTION ACCIDENTS IN TÜRKİYE AND ANALYSIS BY PROVINCE
Mahir TOSUNOĞLU Assoc. Prof. Dr. İbrahim Halil POLAT	Ege University TÜRKİYE Hakkari University TÜRKİYE	THE ROLE OF GLOBALIZATION AND AGRICULTURE IN ENVIRONMENTAL KUZNETS CURVE (EKC) HYPOTHESIS FOR ASEAN COUNTRIES
Assoc. Prof. Dr. İbrahim Halil POLAT Mahir TOSUNOĞLU	Hakkari University TÜRKİYE Ege University TÜRKİYE	CORRUPTION, RULE OF LAW, AND ACCOUNTABILITY THEIR ROLES IN GOVERNMENT EFFICIENCY IN TÜRKİYE
Prof. Dr. Mustafa BOZ Gökhan TURAK	Çanakkale Onsekiz Mart University TÜRKİYE	INNOVATIVE METHODS IN ENTREPRENEURSHIP EDUCATION: ENTREACTION ERASMUS+ PROJECT CASE
Assist. Prof. Dr. Barış ÇIVAK	Anadolu University TÜRKİYE	WHAT WILL HAPPEN IN THE FUTURE? THE EFFECT OF AI AND ROBOTS ON THE TOURISM WORKFORCE
Selin MUZAK Prof. Dr. Şule TURHAN	Bursa Uludağ University TÜRKİYE	EVALUATION OF SUSTAINABLE AGRICULTURE IN TÜRKİYE
Selin MUZAK Prof. Dr. Şule TURHAN	Bursa Uludağ University TÜRKİYE	THE ROLE OF WOMEN'S COOPERATIVES IN AGRICULTURE
Dr. Murat AKDAĞOĞLU Prof. Dr. İsmet BAŞER	Tekirdağ Namık Kemal University TÜRKİYE	EFFECTS OF DIFFERENT SOWING DENSITY AND NITROGEN DOSE APPLICATIONS ON SOME QUALITY CHARACTERISTICS OF SWITCHED WHEAT (Triticum turgidum var. Mirabile)
Dr. Murat AKDAĞOĞLU Prof. Dr. İsmet BAŞER	Tekirdağ Namık Kemal University TÜRKİYE	EFFECTS OF DIFFERENT SOWING RATE AND NITROGEN DOSE APPLICATIONS ON SOME ABIOTIC STRESS FACTORS AND SEEDLING SCORE IN EINHOOD WHEAT (Triticum Monococcum L.)

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

26.01.2025 / Hall-4, Session-2

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
12 30 : 14 30		ZOOM PASSCODE: 080808

HEAD OF SESSION: Rida ZULFIQAR

AUTHORS	AFFILIATION	TOPIC TITLE
Rida ZULFIQAR	Szeged University HUNGARY	JUDICIAL APPOINTMENTS AND RULE OF LAW: PERSPECTIVES FROM COMMON LAW AND CIVIL LAW JURISDICTIONS
Nilanjana Bhunia Sushovan Khatua	IBCS, SOA University INDIA Maulana Abul Kalam Azad University INDIA	OPTIMIZATION OF LAST-MILE DELIVERY IN E-COMMERCE
Volodymyr MESHCHERIAKOV Maria KALINICHENKO	State Biotechnological University UKRANIE	GLOBAL LOGISTICS FACILITIES OF WORLD MARKETS
Ningsih Diliyanti Benu	Christian University INDONESIA	CHRISTIAN GOLDEN AGERS COMMUNITY: MANAGE A COMMUNITY OF GOLDEN AGERS TO FACE LATE-LIFE CRISIS
Khudaibergen Meruyert	University of International Business named after Kenzhegali Sagadiev Almaty KAZAKHSTAN	LABOUR MARKET MANAGEMENT IN KAZAKHSTAN IN THE CONDITIONS OF CRISIS
Yeremenko Nikita	EP Marketing University KAZAKHSTAN	THEORETICAL FOUNDATIONS FOR ENHANCING BRAND AWARENESS OF A COMPANY
Shapovalova Diana	University of International Business named after Kenzhegali Sagadiev Almaty KAZAKHSTAN	FROM CLICKS TO CLASSROOMS: LEVERAGING DIGITAL TOOLS FOR PROMOTING EDUCATIONAL SERVICES
Balabekova Nazym Asetovna	University of International Business named after Kenzhegali Sagadiev Almaty KAZAKHSTAN	BRIDGING THE GAP BETWEEN EDUCATION AND THE LABOR MARKET: INSIGHTS FROM ALMATY UNIVERSITIES

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

26.01.2025 / Hall-5, Session-2

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
$12^{30} : 14^{30}$		ZOOM PASSCODE: 080808

HEAD OF SESSION: Nimota Jibola Kadir Abdullahi (PhD)

AUTHORS	AFFILIATION	TOPIC TITLE
Nimota Jibola Kadir Abdullahi (PhD)	University of Ilorin NIGERIA	REINVENTING LEADERSHIP FOR HIGHER EDUCATION SUSTAINABLE DEVELOPMENT IN NIGERIA
Wan Nadzri Osman Faisal Zulhumadi Mazri Yaakob	School of Technology Management and Logistics Universiti MALAYSIA	SUSTAINABLE CONSTRUCTION PROJECT MANAGEMENT: CHALLENGES, STRATEGIES, AND THE FUTURE OF GREEN PRACTICES
Nor Farahain binti Dzulkafli Faizan Maisarah binti Abu Bakar	Sultanah Bahiyah Polytechnic MALAYSIA	GENERATIVE AI IN EDUCATION: PERCEPTIONS AND CONCERNS AMONG POLYTECHNIC MALAYSIA STUDENTS
G. Manish Kumar M. Suresh Dr. Tawseef Ahmad Ch. Sunil Kumar	Bharat Institute of Engineering and Technology INDIA	FAKE PROFILE IDENTIFICATION ON SOCIAL MEDIA BY USING MACHINE LEARNING
Assoc. Prof., PhD., Nataliya TODOROVA Anatolii MYSHKO	Uzhhorod National University UKRANIE	DEVELOPING CIVIC EDUCATION IN WARTIME (Ukraine, 2014–2024)
Kerimu Ikazuwagbe Joel Omolola Justinah Awosika	University of Ilorin NIGERIA Wesley University NIGERIA	SPORTS BETTING PROBLEMS AMONG UNIVERSITY STUDENTS ATHLETE
O. D. Alawode P. S. Yaduma H. Bello A. A. Deba	Federal University NIGERIA Abubakar Tafawa Balewa University NIGERIA	EFFECTS OF METACOGNITIVE STRATEGY ON ACHIEVEMENT, RETENTION AND GENDER IN BUILDING ENVIRONMENT AND MAN AMONG INDUSTRIAL AND TECHNOLOGY EDUCATION STUDENTS
Ogwumu, Onah David Yavalah Deborah W.	Federal University NIGERIA	AN ECONOMICAL MODELLING ANALYSIS OF THE IMPACT OF SLEEP DISORDER ON NIGERIAN'S WORKFORCE AND PRODUCTIVITY

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

26.01.2025 / Hall-6, Session-2

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
$12^{30} : 14^{30}$		ZOOM PASSCODE: 080808

HEAD OF SESSION: FILALI, Saloua

AUTHORS	AFFILIATION	TOPIC TITLE
FILALI, Saloua NASSER, Abdelkader KERKOUR-EL MIAD Abdelhamid AMAR, Najib	Mohammed Premier University MOROCCO	ANALYZING THE INFLUENCE OF BRICK POWDER ON THE MECHANICAL PROPERTIES OF SUSTAINABLE CONCRETE
Divya Dwivedi M. Thenmozhi	Technology and Advanced Studies (VISTAS), Pallavaram INDIA	GREEN SYNTHESIS OF COPPER NANOPARTICLES USING AZADIRACHTA INDICA AND ITS ANTIMICROBIAL AND ANTIOXIDANTS ACTIVITY
V S Angulakshmi N Anusuya M Priyadharshini S Kalaiselvan	Krishnammal College for Women INDIA Rathinam Technical Campus Coimbatore INDIA	SUSTAINABLE APPROACH TO MANGANESE OXIDE NANOPARTICLES: SYNTHESIS, CHARACTERIZATION AND APPLICATIONS WITH CORN HUSK
O. A. Odebiyi J. K. Oladejo	Ladoke Akintola University of Technology NIGERIA	MATHEMATICAL MODELLING AND SENSITIVITY ANALYSIS OF HIV/AIDS TRANSMISSION AMONG HIGH-RISK PRISONERS
Mekki Amel Hammou Mohamed Boukoussa Bouhadar Marisol Grande-Casas Enrique Sastre Carlos Marquez-Alvarez Manuel Sanchez-Sanchez Joaquín P´erez- Pariente	Higher School of Biological Sciences of Oran (ESSBO) ALGERIA University of Science and Technology ALGERIA Mohamed Boudiaf University ALGERIA Instituto de Catalisis y Petroleoquimica (ICP) SPAIN	THE USE OF OMEGA HIERARCHICAL ZEOLITE IN THE CONVERSION OF M-XYLENE
Saira Malik Syed Mohsan Raza Shah Uniza Fatima bukhari Tasawar Fatima bukhari Iqra	Education University PAKISTAN	LEAF STRUCTURAL AND FUNCTIONAL MODIFICATION OF IPOMOEA CARNEA JACQ. AN INVASIVE PLANT SPECIES, UNDER IDVERSE SALINTIY GRADIENT
Kirana Dara Dinanti Adiputra Novemia Fatmarischa Andi Nurmasytha AS	Mulawarman University INDONESIA	INTACT PLASMA MEMBRANE AND SPERMATOZOA MOTILITY IN CRYOPRESERVED SEMEN OF BALI BULLS

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

26.01.2025 / Hall-1, Session-3

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419	
15 ^{00} : 17 ^{00}		ZOOM PASSCODE: 080808	

HEAD OF SESSION: Dr. Zerrin BARUT

AUTHORS	AFFILIATION	TOPIC TITLE
Dr. Burcu CANDEMİR	Etlik City Hospital Ankara, TÜRKİYE	DOES INSULIN PUMP THERAPY IMPROVE NON-ALCOHOLIC FATTY LIVER DISEASE IN PATIENTS WITH TYPE 1 DIABETES MELLITUS?
Dr. Özge KAHRAMANOĞLU	Sancaktepe Prof. Dr. İlhan Varank Training and Research Hospital İstanbul TÜRKİYE	FETAL RENAL ARTERY DOPPLER IN PREGNANCIES COMPLICATED BY GESTATIONAL DIABETES MELLITUS
Dr. Yekta MOGUL Prof. Dr. Yasemin ZER Ayşe BÜYÜKTAŞ MANAY Zehra PADAK Lütfullah VURAL	Gaziantep University TÜRKİYE	MONITORING CHANGES IN PATHOGENS AND ANTIBIOTIC RESISTANCE RATES IN PEDIATRIC URINARY TRACT INFECTIONS
Lect. Esma GÜL Burcu ASLANTEKİN Ramazan ÇETİN Assoc. Prof. Dr. Emrah ÖZCAN Assoc. Prof. Dr. Nermin TEPE	Balıkesir University TÜRKİYE	MEDIAL GENICULATE BODY VOLUME AND ASYMMETRY IN PATIENTS WITH MIGRAINE DIAGNOSIS
Dr. Betül KAPLAN ZAMANOV	İstanbul Medeniyet University TÜRKİYE	HIDDEN DEADLY DANGER IN THE SWIMMING POOL
Dr. Sinem GÜZEL ÖZTÜRK	Yenişehir State Hospital Bursa TÜRKİYE	CAN THE USE OF BRAIN CT BE REDUCED IN PEDIATRIC HEAD TRAUMAS?
Dr. Zerrin BARUT	Antalya Bilim University TÜRKİYE	CORRELATION OF THYROID ANTIBODIES AND THYROID HORMONES IN SERUM AND SALIVA: A META ANALYSIS
Ufuk BAL Ebubekir AKKUŞ Kürşad KOCAİSPİR	Osmaniye Korkut Ata University TÜRKİYE Aydın Adnan Menderes University TÜRKİYE Osmaniye Korkut Ata University TÜRKİYE	EVALUATING THE EFFECT OF FOCAL LOSS FUNCTION ON THE CLASSIFICATION METRICS FOR DIABETIC RETINOPATHY CLASSIFICATION MODELS

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

26.01.2025 / Hall-2, Session-3

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
15 ^{00} : 17 ^{00}		ZOOM PASSCODE: 080808

HEAD OF SESSION: Assoc. Prof. Dr. Nurcan BERBER

AUTHORS	AFFILIATION	TOPIC TITLE
Adem SOYCAN Assist. Prof. Dr. Doğanhan Kadir ER Prof. Dr. Devrim DÜNDAR	Kocaeli University TÜRKİYE	BACTERIAL PATHOGENS IN VARIOUS RAW FOOD PRODUCTS IN KOCAELI PROVIENCE
Canan MADEN Büşra MUTLU Şeyma DUMAN Fatma DEMİRCİ	Bursa Technical University TÜRKİYE	PRODUCTION AND CHARACTERIZATION OF CHITOSAN-BASED COMPOSITE FIBERS
Özlem DİKTAŞ Prof. Dr. Hasan KILIÇ Assoc. Prof. Dr. Davut UZUN	Marmara University TÜRKİYE	INVESTIGATION OF THE SPECIFIC CAPACITANCE OF ZNO ELECTRODE PRODUCED BY HYDROTHERMAL METHOD
Hafize Sevde AKKARPUZ Derya ALTAY Assist. Prof. Dr. Başar KARACA Prof. Dr. Murat KOÇ Assist. Prof. Dr. Aslı CAN AĞCA	Ankara Yıldırım Beyazıt University TÜRKİYE	DETERMINATION OF TOTAL PHENOLIC AND FLAVONOID CONTENT AND ANTIOXIDANT, ANTIMICROBIAL AND ANTIBIOFILM ACTIVITIES OF STACHYS CRETICA SUBSP. CRETICA
Erva USLU Assoc. Prof. Dr. Feyza KOLCU	Çanakkale Onsekiz Mart University TÜRKİYE	SYNTHESIS AND CHARACTERIZATION OF SCHIFF BASES AND POLY(AZOMETHINE)s CONTAINING ANTHRACENE AND AMINOBENZOTHIAZOLE UNITS
Assoc. Prof. Dr. Nurcan BERBER	Çanakkale Onsekiz Mart University TÜRKİYE	SYNTHESIS OF THIOUREA AND THIAZOLE STRUCTURED COMPOUNDS CONTAINING SULFAMETHAZINE
Hatice ERDOĞAN Seher ÇELİK Perihan AKBAŞ	Ondokuz Mayıs University TÜRKİYE	ANTIMICROBIAL ACTIVITY AND GC-MS/MS ANALYSIS OF Datura stramonium EXTRACTS PREPARED USING CLASSIC AND DEEP EUTECTIC SOLVENTS
Dr. Dılgeş BASKIN Nur YUKA	Van Yüzüncü Yıl University TÜRKİYE	SYNTHESIS OF A FUNCTIONAL MAGNETITE-BASED ADSORBENT FOR THE PRECONCENTRATION OF NICKEL (II)

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

26.01.2025 / Hall-3, Session-3

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
15 ^{00} : 17 ^{00}		ZOOM PASSCODE: 080808

HEAD OF SESSION: Assist. Prof. Dr. Yavuzkan PAKSOY

AUTHORS	AFFILIATION	TOPIC TITLE
Volkan KOŞAL Turan YAMAN	Van Yüzüncü Yıl University TÜRKİYE	EFFECT OF BAKUCHIOL ON TESTICULAR HISTOPATHOLOGY AND SOME SPERMATOLOGIC PARAMETERS
Turan YAMAN Volkan KOŞAL	Van Yüzüncü Yıl University TÜRKİYE	EFFECTS OF HIGH FAT DIET ON RAT TESTICULAR TISSUE
Assist. Prof. Dr. Yavuzkan PAKSOY	Necmettin Erbakan University TÜRKİYE	COW BREEDING VALUE ESTIMATION
Assist. Prof. Dr. Yavuzkan PAKSOY	Necmettin Erbakan University TÜRKİYE	THE BENEFICIAL EFFECTS OF MASSAGE TECHNIQUES ON DOG BREEDING
Bilal BUĞDAY Assoc. Prof. Dr. Mehmet Settar ÜNAL	Şırnak University TÜRKİYE	CULTIVATION OF GILABORU, A GRAPE FRUIT, IN TURKEY
Bilal BUĞDAY Assoc. Prof. Dr. Mehmet Settar ÜNAL	Şırnak University TÜRKİYE	AN INTERPRETATION ON THE FACTORS AFFECTING THE COMPOSITION OF THE GRAPE IN VINE

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

26.01.2025 / Hall-4, Session-3

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
15 ^{00} : 17 ^{00}		ZOOM PASSCODE: 080808

HEAD OF SESSION: Assist. Prof. Dr. Ramona MARINACHE

AUTHORS	AFFILIATION	TOPIC TITLE
ADEMOLA, Olaitan Idowu, PhD IORLIAM, Emmanuel Vambe, PhD SANGOLEYE, Solomon Adebayo, PhD	Alvan-Ikoku Federal University NIGERIA University of Abuja NIGERIA Alvan-Ikoku Federal Universit NIGERIA	TEACHERS' PERCEPTION OF CIVIC EDUCATION CURRICULUM AS TOOL FOR CITIZENSHIP DEVELOPMENT OF SENIOR SECONDARY SCHOOL STUDENTS IN NORTH CENTRAL NIGERIA
Assist. Prof. Dr. Ramona MARINACHE Prof. Dr. Valentina MARINESCU	Bucharest University ROMANIA	DISCOURSES ABOUT MEDICAL SPACES AND WELL-BEING OF ROMANIAN PATIENTS
Ahmed Tijjani Dikko Abdulmalik Sabitu Sukola Ibrahim Tambaya	Yusuf Bala Usman College of Education and Legal NIGERIA Federal University NIGERIA	TEACHING CELLULAR RESPIRATION: IMPACT OF GROUP-INVESTIGATIVIE AND HEURISTIC-DISCOVERY STRATEGIES ON STUDENT'S RETENTION IN KATSINA STATE, NIGERIA
MSc Paulina Maria Kubot Associate Professor Monika Łopuszanska-Dawid MSc Sara Kaźmierska-Urban	Józef Piłsudski University POLAND	ENHANCING PSYCHOLOGICAL WELLBEING IN THE ELDERLY THROUGH PHYSICAL ACTIVITY IN GREEN SPACES
Dr. Awopetu Emmanuel Olajide	Obafemi Awolowo University NIGERIA	EFFECTS OF PODCAST, VIDEOCAST AND MULTIMEDIA INSTRUCTIONAL PACKAGES ON STUDENTS' PROFICIENY SKILLS IN ENGLSH LANGUAGE
Dr. Oyetola Oyeniran Mr. Babajide Issac Ojo	Obafemi Awolowo University NIGERIA	ASSESSMENT OF LECTURERS' INTERNET SKILLS AS CORRELATE OF ACCEPTANCE OF E-LEARNING IN COLLEGES OF EDUCATION IN OSUN STATE, NIGERIA
Fatogun, Olukunle Ibukun Balogun, Sherif Babajide	The Federal Polytechnic Ilaro NIGERIA	INTERNAL CONTROL SYSTEMS AND FINANCIAL PERFORMANCE IN NIGERIAN LISTED PHARMACEUTICAL COMPANIES
Kerimu Ikazuwagbe Joel Prof. Olufunmilola Leah Dominic Dr. Theresa Nfam Odeigah Omolola Justinah Awosika Oluwatosin Adejare Sangodeyi	University of Ilorin NIGERIA	PRAYING FOR VICTORY AND FAVOUR: THE NARRATIVE OF YOUNG ATHLETES IN NIGERIA

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

26.01.2025 / Hall-5, Session-3

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
15 ^{00} : 17 ^{00}		ZOOM PASSCODE: 080808

HEAD OF SESSION: Prof. Dr. Ivan PAVLOVIC

AUTHORS	AFFILIATION	TOPIC TITLE
Yacine Djeghader Reda Rouaibia Atef Benhaouas	University of Mohamed-Cherif Messaadia ALGERIA	HARMONIC ANALYSIS IN RENEWABLE ENERGY SYSTEMS CONNECTED TO ELECTRICAL GRIDS
Andreea Irina BARZİC Iuliana STOICA Raluca Marinica ALBU Simona Luminita NİCA Marius SOROCEANU	Institute of Macromolecular Chemistry ROMANIA	OPTICAL AND MORPHOLOGICAL BEHAVIOR OF FILMS MADE BY MIXING POLYVINYL ALCOHOL WITH A TRIPHENYLMETHANE DERIVATIVE
Andreea Irina BARZİC Iuliana STOICA Raluca Marinica ALBU Ph.D., Lavinia Petronela CURECHERIU Maria Teresa BUSCAGLIA	Institute of Macromolecular Chemistry ROMANIA	OPTICAL AND MORPHOLOGICAL BEHAVIOR OF CHITOSAN-DERIVED DIELECTRICS FOR ENERGY HARVESTING USES
Farrah Deeba Muhammad Huzaifah Khalid Anas Sarwar Qureshi Muhammad Adil	Agriculture University PAKISTAN Riphah International University PAKISTAN Agriculture University PAKISTAN	THERAPEUTIC EVALUATION OF CENTRATHERUM ANTHELMINTICUMN FOR XXTHE CONTROL OF SUBCLINICAL MASTITIS IN DAIRY BUFFALO
Sani Abdullahi Mohammed Hamza Abdullahi Sani Sale Yakubu Umar Alhassan Umar Aminu Baffa Ibrahim	Electronics Engineering, School of Technology NIGERIA	PERFORMANCE EVALUATION OF A BASIC THREE-PHASE INDUCTION MOTOR STARTING METHODS
Silvia BLAZQUEZ RUIZ Pablo HERRERO MARTÍN Eva Reka KERESZTES	Budapest Business University HUNGARY	UNDERSTANDING GPT-4: THE NEW GENERATION OF AI
Andi Nurmasytha AS Amalina Nur Wahyuningtyas Kirana Dara Dinanti Adiputra	Mulawarman University INDONESIA	IDENTIFICATION OF SANITATION AND HYGIENE FACTORS IN CHICKEN MEAT SALES AT TRADITIONAL MARKETS
Abubakar Sani Abdulbasid Muhammad Anas	Umaru Musa Yar'adua University NIGERIA	PHYTOCHEMICAL ANALYSIS AND ANTIBACTERIAL ACTIVITY OF AZADIRACHTA INDICA LEAVES AND STEM BARK EXTRACTS
Prof. Dr. Ivan PAVLOVIC	Scientific Institute for Veterinary Medicine SERBIA	BIOSECURITY MEASURES IN THE RAISING OF PHEASANTS UNTIL THE RELEASE IN THE HUNTING GROUND

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

26.01.2025 / Hall-6, Session-3

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
15 ^{00} : 17 ^{00}		ZOOM PASSCODE: 080808

HEAD OF SESSION: Irina-Ana DROBOT

AUTHORS	AFFILIATION	TOPIC TITLE
Irina-Ana DROBOT	Technical University ROMANIA	I CHING IN THE NOVEL THE MAN IN THE HIGH CASTLE BY PHILIP K. DICK
Dr. Wasiu Abiodun Makinde Abiola Oluwaseun Rufai	The Federal Polytechnic NIGERIA	CHANGE MANAGEMENT PRACTICES AND ADMINISTRATIVE EFFECTIVENESS IN FEDERAL INLAND REVENUE SERVICES, ABEOKUTA, OGUN STATE
AIGBODUWA, Stephen Ayemwenre DR. MAXWELL, O. Arimonu OGBEBOR, Samuel Osamede	Federal College of Education (Technical) Ekiadolor NIGERIA Ambrose Alli University Ekpoma NIGERIA	GENDER EFFECT ON STUDENTS' PERFORMANCE IN BLOCK-LAYING AND CONCRETE WORKS IN GOVERNMENT SCIENCE AND TECHNICAL COLLEGES IN EDO STATE
Kaushiki Singh Mukesh Shukla	University of Lucknow INDIA	GENDER INCLUSIVE INDIA : THE ROLE OF TRANSPORTATION IN ENSURING EQUITY AND SAFETY
Olalekan Eyitayo AJIBADE Oluwaseun Adewale SALAKO	The Federal Polytechnic NIGERIA	MOTIVATION AND EMPLOYEE'S PERFORMANCE IN PUBLIC ESTABLISHMENTS IN NIGERIA: FREDERICK HERZBERG'S THEORY TWO FACTOR OF MOTIVATION PERSPECTIVE
Dr. Qader Vazifeh Damirchi Dr. Nasrin Khodabakhshi	Ministry of Education IRAN Islamic Azad University IRAN	PREDICTION OF SCHOOL PARTICIPANT EMPOWERMENT VIA CULTURAL INTELLIGENCE
Mohd Abdul MATEEN Dr. Tawseef Ahmad Ch. Sunil Kumar M. Suresh	Bharat Institute of Engineering and Technology INDIA	TEXT – IMAGE LANGUAGE TRANSLATOR
Moses Adeolu AGOI Oluwakemi Racheal OSHINOWO Benjamin Johnson OLASIJU Oluwanifemi Opeyemi AGOI	Lagos State University of Education NIGERIA Obafemi Awolowo University NIGERIA	ICT AND ITS SIGNIFICANCE TO TEACHER EDUCATION: A REVIEW ON MODERN TRENDS IN EDUCATIONAL TECHNOLOGIES

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

27.01.2025 / Hall-1, Session-1

	ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
	10 ^{00} : 12 ^{00}		ZOOM PASSCODE: 080808

HEAD OF SESSION: Assoc. Prof. Dr. Seyhan ÇANKAYA

AUTHORS	AFFILIATION	TOPIC TITLE
Duygu DEDE Res. Assist. Hamide ARSLAN TARUS	Anadolu Medical Center İstanbul TÜRKİYE Marmara University TÜRKİYE	BIBLIOMETRIC ANALYSIS OF THESES ON GESTATIONAL DIABETES IN NURSING
MSc. Hamide ARSLAN TARUS MSc. Ceyda Su GÜNDÜZ Prof. Dr. Nurdan DEMİRCİ	Marmara University TÜRKİYE Muğla Sıtkı Koçman University TÜRKİYE Marmara University TÜRKİYE	USE OF GENERATIVE AI FOR IMPROVING HEALTH LITERACY IN HUMAN PAPILLOMAVIRUS INFECTION: CASE STUDY
Zeynep ERSAY ÖNAL Assoc. Prof. Dr. Ayşe ÇİÇEK KORKMAZ	Bandırma Onyedi Eylül University TÜRKİYE	SYSTEMATIC REVIEW OF POSTGRADUATE THESES ON GENERATIONAL DIFFERENCES IN NURSING
Zeynep ERSAY ÖNAL Assoc. Prof. Dr. Ayşe ÇİÇEK KORKMAZ	Bandırma Onyedi Eylül University TÜRKİYE	IS TOXIC LEADERSHIP INEVITABLE? A STUDY ON THE EFFECT OF TOXIC LEADERSHIP BEHAVIORS FOR HEALTH CARE ORGANIZATIONS AND NURSES
Assoc. Prof. Dr. Seyhan ÇANKAYA Assoc. Prof. Dr. Hacer ALAN DIKMEN Dr. Res. Assist. Ayşenur ATAŞ	Selçuk University TÜRKİYE	THE EFFECT OF PEANUT BALL USE ON LABOR MEMORY, LABOR SATISFACTION, DELIVERY LENGTH, AND NEONATAL APGAR SCORE: A RANDOMIZED CONTROLLED TRIAL
Res. Assist. Dürdane ÇETİN Assoc. Prof. Dr. Gülcan URHAN	İstanbul University-Cerrahpasa TÜRKİYE	SOLUTION SUGGESTIONS PRODUCED BY WOMEN WORKING IN ELDERLY CARE SERVICES FOR THE PROBLEMS THEY EXPERIENCE
Büşra İLGİN	KTO Karatay University TÜRKİYE	NORTH COUNTRY FILM: MANIFESTATION OF SEXUAL VIOLENCE AS A SPECIAL TYPE OF VIOLENCE IN THE OCCUPATIONAL FIELD
Dr. Ishwar Mittal Dr. Aarti Dr. Rosy Dhall Mikul	Maharshi Dayanand University INDIA Gandhinagar University INDIA Maharshi Dayanand University INDIA	UNDERSTANDING WORKPLACE BULLYING AMONG NURSING STUDENTS IN INDIA

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

27.01.2025 / Hall-2, Session-1

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
10 ^{00} : 12 ^{00}		ZOOM PASSCODE: 080808

HEAD OF SESSION: Assist. Prof. Dr. Murat ONAY

AUTHORS	AFFILIATION	TOPIC TITLE
Assist. Prof. Dr. Seda BEKIN ACAR	Yalova University TÜRKİYE	INVESTIGATION OF THERMAL PROPERTIES OF CELLULOSE BASED THERMOSET COMPOSITES
Gökçen BALIKÇILAR USTA Ali Yurdun ORBAK	Bursa Uludağ University TÜRKİYE	SUPPLIER SELECTION MULTI-CRITERIA DECISION MAKING BY USING AHP AND COPRAS METHODS: AN AUTOMOTIVE SECTOR APPLICATION
Muhammet AYDIN Halil İbrahim DEMİR	Sakarya University TÜRKİYE	MINIMIZING TOTAL SETUP TIME USING THE TABU SEARCH ALGORITHM IN BOTTLENECK MACHINES
Assist. Prof. Dr. Murat ONAY Ömer ÇANGA Mehmet KAPLAN Hatice Gül SOLMAZ Mustafa SEZEN	Erciyes University TÜRKİYE Kayseri Sugar Factory TÜRKİYE	ARTIFICIAL INTELLIGENCE APPLICATION FOR CERCOSPORA DETECTION
Assist. Prof. Dr. Murat ONAY Hacı Ali BÖYÜK Mehmet KAPLAN Hatice Gül SOLMAZ Mustafa SEZEN	Erciyes University TÜRKİYE Kayseri Sugar Factory TÜRKİYE	UNMANNED AIR VEHICLE (UAV) BASED PLANT COUNTING USING ARTIFICIAL INTELLIGENCE
Eyüp Can MAVİ Assoc. Prof. Dr. Erdem AKBOY	Yıldız Technical University TÜRKİYE	ANALYSIS AND APPLICATION OF SOFT SWITCHING FULL BRIDGE DC-DC CONVERTER FOR MILITARY AVIATION APPLICATION
Assist. Prof. Dr. Semih KORKMAZ	Bandırma Onyedi Eylül University TÜRKİYE	ANALYSIS OF TUNABLE BAND-STOP FILTERS USING SILVER-AIR-SILVER WAVEGUIDE AND TRIANGLE-RECTANGLE RESONATOR COUPLE
İsmail YILDIRIM	Kaplanlar Cooling Inc. R&D Center Bursa TÜRKİYE	THE EFFECT OF COLOUR TEMPERATURES OF LEDS USED IN REFRIGERATED DISPLAY CABINETS ON PRODUCT STORAGE TEMPERATURES

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

27.01.2025 / Hall-3, Session-1

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
10 ^{00} : 12 ^{00}		ZOOM PASSCODE: 080808

HEAD OF SESSION: Observer

AUTHORS	AFFILIATION	TOPIC TITLE
Büşra YILDIZ Alpay DUMAN Soner TAŞAR Özgür DOĞAN	Afyonkarahisar Health Sciences University TÜRKİYE	DETECTION OF FOREIGN BODY IN THE NASAL CAVITY DURING DENTAL EXAMINATION IN A PEDIATRIC PATIENT
Res. Assist. Tulca BÜYÜKPATIR TÜRK	Ankara Yıldırım Beyazıt University TÜRKİYE	USE OF ORTHODONTIC RECORDS WITH ARTIFICIAL INTELLIGENCE SUPPORT
Pelinsu AYDIN Şemsi ALP	Near East University TURKISH REPUBLIC OF NORTHERN CYPRUS	ESTHETIC REHABILITATION OF TEETH WITH WHITE SPOT LESIONS BY OFFICE-TYPE BLEACHING AND RESIN INFILTRATION: A CASE REPORT
Res. Assist. Esma ATIŞ Assist. Prof. Dr. Özgür DOĞAN	Afyonkarahisar Health Sciences University TÜRKİYE	TREATMENT OF A DENTIGEROUS CYST IN A PEDIATRIC PATIENT AND THREE-YEAR FOLLOW-UP: A CASE REPORT

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

27.01.2025 / Hall-4, Session-1

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
$10^{00} : 12^{00}$		ZOOM PASSCODE: 080808

HEAD OF SESSION: Md. Mizanur RAHMAN

AUTHORS	AFFILIATION	TOPIC TITLE
G. Mohith Kumar Dr. Tawseef Ahmad Ch. Sunil Kumar M. Suresh	Bharat Institute of Engineering and Technology INDIA	MENTAL HEALTH THERAPIST CHATBOT
R. Keerthan M. Suresh Dr. Tawseef Ahmad Ch. Sunil Kumar	Bharat Institute of Engineering and Technology INDIA	VISUALIZING STOCK MARKET TRENDS: AN INTERACTIVE APPOROACH
Kolla Dhanush Baba M.Suresh Dr. Tawseef Ahmad Ch. Sunil Kumar	Bharat Institute of Engineering and Technology INDIA	VOLUME CONTROL USING HAND GESTURES
Abdulmalik SABITU Umar USMAN Shehu Safiyya ABDULRAHAMAN Rafindadi	Federal University Dutsin-Ma NIGERIA	ASSESSMENT OF LIFE SKILLS ON FEMALE STUDENT'S PARTICIPATION AND ACADEMIC ACHIEVEMENT IN SCIENCE IN KATSINA STATE, NIGERIA
Md. Mizanur RAHMAN	Bangabandhu Sheikh Mujibur Rahman Science and Technology University BANGLADESH	IRAN-U.S. RELATIONS IN 2025: ANALYZING ESCALATION AND PROSPECTS FOR DIPLOMACY
Mythri Kosika Dr. M. Suresh Dr. Tawseef Ahmad Ch. Sunil Kumar	Bharat Institute of Engineering and Technology INDIA	HAND GESTURE-CONTROLLED SNAKE GAME USING CNN
Sakineh Sojoodi Elmira Azizi Norouzabadi	University of Tabriz IRAN	EXAMINING THE ROLE OF GOVERNMENT IN INTERNATIONAL COMPETITIVENESS WITH A FOCUS ON PORTER'S DIAMOND MODEL
Folashade Folake Alfa Dr. A. A. Yaki Dr R. M. Bello	Federal College of Freshwater Fisheries Technology NIGERIA School of Science and Technology Education NIGERIA Federal College of Freshwater Fisheries Technology NIGERIA	AWARENESS, ACCESSIBILITY AND UTILISATION OF MODERN TECHNOLOGIES FOR AQUACULTURE INSTRUCTION IN TERTIARY INSTITUTIONS IN NIGER STATE, NIGERIA

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

27.01.2025 / Hall-5, Session-1

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
$10^{00} : 12^{00}$		ZOOM PASSCODE: 080808

HEAD OF SESSION: Subhashish DEY

AUTHORS	AFFILIATION	TOPIC TITLE
Subhashish DEY	Gudlavalleru Engineering College INDIA	STABILIZATION OF SOIL BY USING GEOGRIDS
Rahul Kumar Mishra Dheeraj Rathore	Central University of Gujarat INDIA	DECODING THE STRUCTURAL IMPORTANCE OF L-ASCORBIC ACID IN MITIGATING PLANT STRESS
Renuka GAUTAM Dr. Dheeraj RATHORE	Central University of Gujarat INDIA	LIFE CYCLE ASSESSMENT OF BIODEGRADABLE-PLASTIC AND COMPOSTABLE PLASTIC: INSIGHTS FOR THE FUTURE OF PLASTIC MATERIALS
Pooja Gangwar Dheeraj Rathore	Central University of Gujarat INDIA	BIO-MONITORING POTENTIAL OF ROADSIDE PLANTS FOR HEAVY METALS POLLUTION USING PLANTS FUNCTIONAL GROUPS
Sa'ad R. Yousif Watheq F. Shneen	Kufa University IRAQ	ASSESSMENT OF THE MARSHES IN SOUTHERN IRAQ USING REMOTE SENSING TECHNIQUES
Ajesh Chauhan	Hindu College of Pharmacy INDIA	CUBOSOMES AS A NOVEL APPROACH FOR CANCER THERAPY
Adirala Baby Deyol Dr. Tawseef Ahmad Ch. Sunil Kumar M.Suresh	Bharat Institute of Engineering and Technology INDIA	Mr. TOUR APP
Jatto, A. O. Jimoh, O. R. Yusuf, S. I.	Federal University of Technology NIGERIA	MODELING HEAT TRANSFER TO MAGNETOHYDRODYNAMIC DUSTY FLUID FLOW PAST BETWEEN TWO RIGA PLATES EMBEDED IN A POROUS MEDIUM

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

27.01.2025 / Hall-6, Session-1

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
10 ^{00} : 12 ^{00}		ZOOM PASSCODE: 080808

HEAD OF SESSION: Ana-Lucia Blendea

AUTHORS	AFFILIATION	TOPIC TITLE
Ana-Lucia Blendea Alin Ciobica Ioan Gotca Lacramioara Atudorei	University of Medicine and Pharmacy ROMANIA Habil. PhD Principal Investigator Alexandru Ioan Cuza University ROMANIA Socola Psychiatry Institute ROMANIA University of Medicine and Pharmacy VIETNAM	THE INFLUENCE OF MICRONUTRIENTS ON NEUROTRANSMITTERS, OXIDATIVE STRESS, AND NEURONAL PLASTICITY
Mr. Ram Prataap Yadav Prof. Sunil Kumar Srivastav Prof. Ajai Kumar Srivastav	DDU Gorakhpur University INDIA	AMELIORATIVE EFFECT OF JAMUN (SYZYGIUM CUMINI) SEED AND ORANGE (CITRUS SINENSIS) PEEL EXTRACTS AGAINST CADMIUM INDUCED ALTERATION IN LIVER BIOMARKERS OF RATS
VATIKI VIJAY KUMAR M.Suresh Ch. Sunil Kumar Dr. Tawseef Ahmad	Bharat Institute of Engineering and Technology INDIA	PREDICTION OF USED CARS PRICES USING MACHINE LEARNING
Eda Tabaku Rinela Kapciu Robert Kosova Ejona Duci	University "Aleksandër Moisiu" Durrës ALBANIA	COMPARISON OF SEARCHING ALGORITHMS IN AI AGAINST HUMAN AGENT IN SNAKE GAME
Igonoh Achenyo Okolo PhD Emmanuel Musa Samdi	University of Jos NIGERIA	STRUCTURAL EQUATION MODELLING OF AUTONOMY SUPPORT AND STUDENT'S PERFORMANCE IN EDUCATIONAL STATISTICS IN FACULTY OF EDUCATION AT UNIVERSITY OF JOS, PLATEAU STATE, NIGERIA
ChayarajuBalaSai Nadagouda Kalyani K. Tharani	G. pulla reddy Engineering INDIA	ANALYSIS OF ADMIXTURES FOR CONCRETE
Ramireddy Sushmitha	G. Pulla Reddy Engineering College INDIA	APPLICATION OF AUTOMATED ROAD INVENTORY DATA IN ROAD ASSET MANAGEMENT
Ramireddy Sushmitha	G. Pulla Reddy Engineering College INDIA	CORRELATION BETWEEN IN-SITU RESILIENT MODULUS AND LABORATORY RESILIENT MODULUS

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

27.01.2025 / Hall-1, Session-2

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419	
$12^{30} : 14^{30}$		ZOOM PASSCODE: 080808	

HEAD OF SESSION: OBSERVER

AUTHORS	AFFILIATION	TOPIC TITLE
Prof. Dr. Hasan Hüseyin UĞURLU	Gazi University TÜRKİYE	POLAR U – AND Z – CURVES IN THE LORENTZ – MINKOWSKI PLANE21 R- II
Assoc. Prof. Dr. Bağdagül KARTAL ERDOĞAN Abdullah ALOBID	Erciyes University TÜRKİYE	GENERALIZED ABSOLUTE RIESZ SUMMABILITY OF INFINITE SERIES
Assoc. Prof. Dr. Kenan ORÇANLI Beyza KADIOĞLU İrem İLÇİN Sude AKSOY Beyza BASKIN	Beykent University TÜRKİYE	AIR POLLUTION PREDICTION AND PERFORMANCE EVALUATION WITH ARTIFICIAL NEURAL NETWORK ALGORITHM
Berat ŞAHİN GÜL Assist. Prof. Dr. Nurbiye TURAN ZABUN	Gaziantep University TÜRKİYE	CO-COBALANSING NUMBERS AND DIOPHANTINE EQUATIONS
Res. Assist. Emine ÖÇAL Assoc. Prof. Dr. Ayfer Ezgi YILMAZ ÇAKIROĞLU	Dokuz Eylül University TÜRKİYE Hacettepe University TÜRKİYE	LOG-LINEAR MODELS FOR HANDLING MISSING OBSERVATIONS IN TWO-DIMENSIONAL CONTINGENCY TABLES: A CASE STUDY
Assist. Prof. Dr. Ali İhsan KILIÇ Mustafa DESTİCİOĞLU	Eskişehir Osmangazi University TÜRKİYE Research Institute for Fundamental Sciences. Tübitak Bilgem, Gebze/Kocaeli TÜRKİYE Eskişehir Osmangazi University TÜRKİYE	THE DIRECT REACTION INVESTIGATION OF27 Al (d, p)28 Al TRANSFER REACTION
Faridah Yunos Nik Rasiqa Nik Roslan Amir Hamzah	Universiti Putra Malaysia MALAYSIA	SELF-INVERTIBLE KEYS BASED ON ORTHOGONAL VECTORS FOR DOUBLE TRANSFORMATION OF HILL CIPHER
Abdurrahman Sani Yar'adua	Federal University Dutsin-Ma NIGERIA	EFFECT OF THINK PAIR SHARE STRATEGY ON MALE AND FEMALE STUDENTS' ACADEMIC PERFORMANCE AND RETENTION IN ALGEBRAIC PROCESS AMONG SECONDARY SCHOOL IN KATSINA STATE

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

27.01.2025 / Hall-2, Session-2

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
12 30 : 14 30		ZOOM PASSCODE: 080808

HEAD OF SESSION: Assoc. Prof. Dr. Zeynep Yurtseven AVCI

AUTHORS	AFFILIATION	TOPIC TITLE
Duygu ÇABUK AKTAŞ	Ministry of National Education, İzmir TÜRKİYE	INVESTIGATION OF THE RELATIONSHIP OF COGNITIVE EMOTION REGULATION STRATEGIES AND PERCEIVED STRESS LEVELS WITH PSYCHOLOGICAL COUNSELORS' PROFESSIONAL QUALITY OF LIFE
Res. Assist. Elif ÖZÇINAR	İzmir Demokrasi University TÜRKİYE	THESES ON BASIC PSYCHOLOGICAL NEEDS IN TÜRKİYE: A DOCUMENT ANALYSIS
Pınar İLGEN Assoc. Prof. Dr. Ahmet BUĞA	Gaziantep University TÜRKİYE	AN INVESTIGATION OF SELF COMPASSION AND COGNITIVE DEFUSION AS PREDICTORS OF INTERPERSONAL RELATIONSHIP STYLES
Aleyna Nevcüvan KALOŞ Assist. Prof. Dr. Pınar ALGEDİK	Haliç University TÜRKİYE	AN EXAMINATION OF SUICIDE ATTEMPT AS A NERVOUS EXPERIENCE IN THE CONTEXT OF DEATH DRIVE AND PROCRASTINATION CONCEPT IN PSYCHOANALYSIS
Sana OMARI Reyhane TAHERI Dr. Gloria MANYERUKE	Near East University TURKISH REPUBLIC OF NORTHERN CYPRUS	THE SNOWBALL EFFECT OF POSITIVE LIVING: FOCUS ON EXERCISE, HEALTHY EATING, PROSOCIAL BEHAVIOR AND RESOURCES OF GRIT
Assoc. Prof. Dr. Zeynep Yurtseven AVCI	Eskişehir Osmangazi University TÜRKİYE	WHAT GENERATIVE ARTIFICIAL INTELLIGENCE APPLICATIONS PROMISE IN EDUCATION: PRE-SERVICE TEACHER OPINIONS
Nurcan YILMAZ	Pendik Hala Sultan Imam Hatip Secondary School İstanbul TÜRKİYE	EXAMINING THE CONTRIBUTION OF LITERATURE USE IN CLASSROOM APPLICATIONS TO STUDENTS' EFFECTIVE LEARNING WITH SWOT ANALYSIS
Dr. Fatma KENEVİR	Ankara University TÜRKİYE	THE CONNECTION BETWEEN ART AND THE SACRED: EXPLORING RELIGIOUS EMOTIONS

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

27.01.2025 / Hall-3, Session-2

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
12 30 : 14 30		ZOOM PASSCODE: 080808

HEAD OF SESSION: Prof. Dr. Süleyman GÖKSOY

AUTHORS	AFFILIATION	TOPIC TITLE
Doğan DEMİRER Prof. Dr. Süleyman GÖKSOY	Düzce University TÜRKİYE	THE RELATIONSHIP BETWEEN TEACHERS' PERSONALITY TRAITS AND EMOTIONAL LABOR BEHAVIORS
Muhammet Burak OKKALI Ali ÇEKEN	Bursa TechnicalUniversity TÜRKİYE Sakarya University TÜRKİYE	THE RELATIONSHIP BETWEEN HISTORICAL SITES AND CAPITALISM: COMPARISON OF RİZE MUSEUM AND YELDEĞİRMENİ NEIGHBORHOOD
Esra BAŞTÜRK Prof. Dr. Süleyman GÖKSOY	Düzce University TÜRKİYE	EXAMINING THE RELATIONSHIP BETWEEN ORGANIZATIONAL POWER RESOURCES USED BY SCHOOL PRINCIPALS AND TEACHERS' PERCEPTIONS OF ORGANIZATIONAL CITIZENSHIP
Res. Assist. Orhan YILDIRIM Assist. Prof. Dr. Ahmet USANMAZ	Belek University TÜRKİYE Ağrı İbrahim Çeçen University TÜRKİYE	A SOCIOLOGICAL EVALUATION ON İZMİR GÜNDOĞDU SQUARE
Dr. Namık SAÇLI	Independent Researcher Mersin TÜRKİYE	DISASTER DIPLOMACY BETWEEN THE OTTOMAN EMPIRE, RUSSIA, AND THE UNITED STATES: THE SINKING OF THE CHIKHACHEV IN JAFFA (1891)
Assist. Prof. Dr. Dilber ZEYTİNKAYA	Marmara University TÜRKİYE	AI-POWERED SONG DUBBING AND ISOTOPY IN ARTIFICIAL SONG TRANSLATION: ETHICAL ISSUES OF VOICE CLONING
Serhat Sina KARAASLAN	Ankara Yıldırım Beyazıt University TÜRKİYE	STRATEGIC COMMUNICATION IN SOCIAL MEDIA 2.0: A MULTI-THEORY PERSPECTIVE
Ayşe ÖZTÜRK	Kırşehir Ahi Evran University TÜRKİYE	THE IMPACT OF PUBLIC SCHOOLS AND PUBLIC CHAMBERS ON TRADITION IN THE REPUBLIC PERIOD

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

27.01.2025 / Hall-4, Session-2

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
$12^{30} : 14^{30}$		ZOOM PASSCODE: 080808

HEAD OF SESSION: Dr. Abdelfattah EL MAHBOUBY

AUTHORS	AFFILIATION	TOPIC TITLE
Gupta Swati Sanjaykumar Anuj Darji	Sigma University INDIA	RECENT ADVANCES IN FIBER BASED TISSUE REGENERATION
Kazi Md Salim Newaz	University of Malaya MALAYSIA	ANALYSIS OF DRAG REDUCTION AND HEAT TRANSFER PROPERTIES USING NATURAL FIBERS AND POLYMERIC SUBSTANCES
Sanjana Kulkarni M.Suresh Dr. Tawseef Ahmad Ch. Sunil Kumar	Bharat Institute of Engineering and Technology INDIA	GUAVA DISEASE DETECTION USING CONVOLUTIONAL NEURAL NETWORKS
Mohanapriya. P Chamundeeswari. M	St. Joseph's College of Engineering INDIA	ECOTOXIC EFFECT OF ACTIVE COMPOUNDS FROM BIODEGRADATION OF PLASTIC FILMS WITH SOIL MICROORGANISM
Sagaya Auralia P Renish P Varghese	Christ University INDIA	EARLY DETECTION OF PARKINSON'S DISEASE: A COMPREHENSIVE REVIEW OF MACHINE LEARNING, DEEP LEARNING, AND MULTIMODAL APPROACHES
Dr. Abdelfattah EL MAHBOUBY Prof. Dr. Sanaa MAJID	Hassan II University of Casablanca MOROCCO	ENHANCED ADSORPTION OF ANIONIC DYES USING MODIFIED MOROCCAN GHASSOUL CLAY: A SUSTAINABLE APPROACH FOR WATER TREATMENT
Samreen Gul Saqib Shahid Rahim Fahad Masood	Abasyn University Peshawar PAKISTAN	NEURAL NETWORKS-BASED CYLINDRICAL MATERIAL CLASSIFICATION USING ELECTROMAGNETIC SCATTERED FIELD
Rehana Riaz Saima Bibi Muhammad Zubair	Government College University Faisalabad PAKISTAN	SYNTHESIS, IN SILICO MOLECULAR MODELING AND IN VITRO PHARMACOLOGICAL EVALUATIONS OF BIPHENYL4CARBOXAMIDE DERIVATIVES

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

27.01.2025 / Hall-5, Session-2

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
$12^{30} : 14^{30}$		ZOOM PASSCODE: 080808

HEAD OF SESSION: Sabrina ROGUAI

AUTHORS	AFFILIATION	TOPIC TITLE
Zeba Ali Mumtaj Abdul Rahman Khan Saimah Khan	Integral University INDIA	NUTRIENT REMOVAL FROM SYNTHETIC WASTEWATER CONTAINING CIPROFLOXACIN AND AMOXICILLIN USING HORIZONTAL FLOW CONSTRUCTED WETLAND
Monisha SHARMA	Independent Scholar INDIA	MAPPING THE WAY TO CODE: AN AUTOETHNOGRAPHIC EXPLORATION OF VISUAL TOOLS IN K-12 ONLINE CODING EDUCATION
Muhammad Abdullah Dr.Mah-ru-nisa Atif Dr.Beenish Osama Dr.Nadia Bilal Dr. Rimsha yousaf	Hajvery University PAKISTAN	ANALYSIS OF ADVERSE DRUG REACTIONS REPORTING IN DISTRICT LAHORE
Muhammad Safdar Syed Mohsan Raza Shah	Education University PAKISTAN	UNVEILING ADAPTIVE COMPONENTS FOR ENVIRONMENTAL HETEROGENEITY IN IPOMOEA CARNEA JACQ
Zineb Benbouzid Mohammed Ridha Benzidane Noureddine Hassini Abdelhadi Namoune Faten Belarbi	Abdelhamid Ibn Badis University ALGERIA Relizane University ALGERIA Mostaganem University ALGERIA	STUDY OF THE IMPACT OF CADMIUM SULFIDE BUFFER LAYER THICKNESS ON THE PERFORMANCE OF CIGS SOLAR CELLS
Jebasingh Jeremiah Rajesh Jesudoss Hynes	Opole University of Technology POLAND	HYDROTHERAPY-INSPIRED ALARM CLOCKS: A NOVEL APPROACH TO WAKING UP NATURALLY
ARSHA G KARIBASAPPA CS MEENA N	Palar Agricultural College INDIA	THE ROLE OF RHIZOSPHERE MICROBIOMES IN DISEASE SUPPRESSION

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

27.01.2025 / Hall-6, Session-2

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
12 30 : 14 30		ZOOM PASSCODE: 080808

HEAD OF SESSION: Assoc. Prof. Dr. Rozina KHATTAK

AUTHORS	AFFILIATION	TOPIC TITLE
Muhammad Mazhar Iqbal Tehmena Rashid Hafiz Qaiser Yasin Shafiq-ur-Rehmn Muhammad Abdullah	Water Management Training Institute PAKISTAN Agriculture Mechanization Research Institute (AMRI) PAKISTAN Directorate General of Agriculture Punjab PAKISTAN Water Management Training Institute PAKISTAN Directorate General of Agriculture Punjab PAKISTAN	ADVANCEMENT IN AGRICULTURAL RESILIENCE THROUGH SOLAR-POWERED IRRIGATION IN A DEVELOPING COUNTRY: PAKISTAN
Ilhame Fitah Miloud Chakit Mohamed El Kadiri Aboubaker El Hessni Abdelhalem Mesfioui	Ibn Tofail University MOROCCO	ASSESSMENT OF THE SOCIAL FUNCTIONING OF SCHIZOPHRENIA PATIENTS FOLLOWED UP IN THE HEALTH CENTER MY EL HASSAN OF KENITRA, MOROCCO
Assoc. Prof. Dr. Rozina KHATTAK	Shaheed Benazir Bhutto Women University PAKISTAN	KINETICS AND MECHANISM OF THE REDOX REACTION BETWEEN DICYANOBİS(2,2'-DIPYRIDYL) IRON(III) AND IODIDE IN AQUEOUS MEDIUM
Assoc. Prof. Dr. Rozina KHATTAK	Shaheed Benazir Bhutto Women University PAKISTAN	POTENTIAL USE OF DICYANOBIS(1,10-PHENANTHROLINE)IRON(III) AS A SENSITIZER TO OXIDIZE IODIDE IN WATER: A KINETIC STUDY
Khanh Giang Le	University of Transport and Communications VIETNAM	A BIM-GIS FRAMEWORK FOR 3D MODELING OF INFRASTRUCTURE ASSETS
A.O Alejo B. O. Akinyele A.C. Odiyi L. S. Fayeun	Federal University of Technology NIGERIA	MORPHOLOGICAL CHARACTERIZATION OF SOME CYNODON ECOPHENES IN SOUTH WESTERN NIGERIA
Kavyn Vasyl	Ivano-Frankivsk National Medical University UKRAINE	USING THE ELECTRONIC PLATFORM ''FORMS'' TO MONITOR THE ACQUIRED KNOWLEDGE OF THE DISCIPLINE ''CLINICAL ANATOMY AND OPERATIVE SURGERY'' AMONG STUDENTS OF THE FIFTH YEAR OF THE ''MEDICINE'' SPECIALTY
Dr. Simona Luminita NICA Dr. Constantin GAINA	"Petru Poni" Institute of Macromolecular Chemistry ROMANIA	MECHANICAL AND ABSORPTION PROPERTIES OF COMPOSITES BASED ON MODIFIED POLYSULFONE REINFORCED WITH CARBON NANOTUBES

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

27.01.2025 / Hall-1, Session-3

	ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
	15 ^{00} : 17 ^{00}		ZOOM PASSCODE: 080808

HEAD OF SESSION: Assoc. Prof. Dr. Kübra ŞAHİN ÇEKEN

AUTHORS	AFFILIATION	TOPIC TITLE
Prof. Dr. Nurhan KOÇAN Dr. Esra ÇETİNKAYA ÖZKAN Assist. Prof. Dr. Şeyma ŞENGÜR Dr. Muhibe Aslı ALP Assoc. Prof. Dr. Ömer Lütfü ÇORBACI	Bartın University TÜRKİYE Fırat University TÜRKİYE Ordu University TÜRKİYE Recep Tayyip Erdoğan University TÜRKİYE	LANDSCAPE DESIGN SUGGESTIONS FOR SALTUKOVA (ZONGULDAK) RECREATION AREA
Assist. Prof. Dr. Ayşe AKBULUT BAŞAR	Niğde Ömer Halisdemir University TÜRKİYE	THREE-DIMENSIONAL (3D) VISUALIZATION IN URBAN PLANNING: HISTORY, DEVELOPMENTS, AND IMPORTANCE
Res. Assist. Ayşegül AKBULUT	İstanbul Arel University TÜRKİYE	TRANSFORMATION OF ART AS A FINANCIAL TOOL
Assoc. Prof. Dr. Kübra ŞAHİN ÇEKEN	İstanbul Arel University TÜRKİYE	SAVANT PAINTERS AND SUPERIOR PAINTING TALENTS
Laphissou Eden Isaac NGUESSAN Assoc. Prof. Dr. Kübra ŞAHİN ÇEKEN	İstanbul Arel University TÜRKİYE	THE EFFECT OF VISUAL IDENTITY ON BRAND STRATEGY
Farhana NAZ	Lahore college for Women University PAKISTAN	SUSTAINABLE ARCHITECTURE IN SOUTH ASIA: CHALLENGES AND OPPORTUNITIES IN ENERGY EFFICIENCY

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

27.01.2025 / Hall-2, Session-3

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
15 ^{00} : 17 ^{00}		ZOOM PASSCODE: 080808

HEAD OF SESSION: Assist. Prof. Dr. İnci CERİT

AUTHORS	AFFILIATION	TOPIC TITLE
Assist. Prof. Dr. İnci CERİT	Sakarya University TÜRKİYE	ENCAPSULATION OF BLACK CHOKOBERRY PHENOLIC EXTRACT (Aronia melanocarpa) WITH VARIOUS WALL MATERIALS
Leyla KURGAN Assoc. Prof. Dr. Barış EREN Assist. Prof. Dr. Adnan AYDIN	Iğdır University TÜRKİYE	EPIGENETIC RESPONSE TO HIGH AND LOW TEMPERATURE STRESSES IN PLANTS
Şevval Nur KANYAR Assist. Prof. Dr. Adnan AYDIN	Iğdır University TÜRKİYE	DETERMINATION OF THE EXPRESSION LEVELS OF GENES IN THE MELATONIN PATHWAY IN SALT SENSITIVE AND TOLERANT WHEAT CULTIVARS
Semir TURUŞKAN Assoc. Prof. Dr. Filiz ÜNAL	Eskişehir Osmangazi University TÜRKİYE	IDENTIFICATION OF FUSARIUM SPECIES IN MAIZE PRODUCTION AREAS OF ESKIŞEHIR PROVINCE AND DETERMINATION OF THE EFFECTS OF SOME SOIL HERBICIDES ON FUSARIUM UNDER IN VITRO CONDITIONS
Assist. Prof. Dr. Enes EKİNCİ	İnönü University TÜRKİYE	INVESTIGATION OF VARIABLES AFFECTING EARLY AGE PERFORMANCE OF GEOPOLYMER MORTAR SAMPLES
Çağla KARADAŞ	Private Clinic Ankara TÜRKİYE	THE EFFECT OF PHYSICAL THERAPY APPLICATIONS ON EPISODIC AND CHRONIC TENSION-TYPE HEADACHE
Çağla KARADAŞ	Private Clinic Ankara TÜRKİYE	EFFECTIVENESS OF STRETCHING EXERCISES IN CERVICOGENIC HEADACHE
Alpay GÜNER Yunus Emre YILMAZ Hamza SARIOĞLAN Şaban KALPAKLI Assoc. Prof. Dr. Murat TOMRUK	Burdur Mehmet Akif Ersoy University TÜRKİYE	INTERGRADE COMPARISON OF POSTURAL DISORDERS OF PHYSIOTHERAPY STUDENTS

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

27.01.2025 / Hall-3, Session-3

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
15 ^{00} : 17 ^{00}		ZOOM PASSCODE: 080808

HEAD OF SESSION: Assoc. Prof. Dr. Naseem Akhter

AUTHORS	AFFILIATION	TOPIC TITLE
Farida Haddou Rahou Youssef Aboussaleh Samiha İmrani	Ibn Tofail University MOROCCO	PUBLIC POLICIES AND GLOBAL INITIATIVES FOR ENHANCED ROAD SAFETY CASE STUDY OF MOROCCO
Assoc. Prof. Dr. Naseem Akhter	Shaheed Benazir Bhutto Women University PAKISTAN	A STUDY ON THE SPIRITUAL, SOCIAL, AND POLITICAL CHANGE THROUGH SUFISM: THE VIEWPOINT OF SEERAT-UN-NABI
Assoc. Prof. Dr. Naseem Akhter	Shaheed Benazir Bhutto Women University PAKISTAN	THE ROLE OF CIVIL SOCIETY AND EDUCATION IN DEVELOPING TOLERANCE AND RESPECT FOR COEXISTENCE
Assoc. Prof. Dr. Naseem Akhter	Shaheed Benazir Bhutto Women University PAKISTAN	PROPHET MUHAMMAD'S LEADERSHIP, PRINCIPLES OF ECONOMIC JUSTICE, RATIONAL USE OF RESOURCES, AND COMBATING CORRUPTION: A REVIEW
Dr. Megha Dhillon Jaya Shekhar	Delhi University INDIA The University of Edinburgh SCOTLAND	TRANSFORMATIVE GROWTH: EXPLORING CHİLDHOOD EXPERIENCES AND CAREER MOTIVATION IN MENTAL HEALTH PRACTITIONERS
Abdul JALIL Najam ul HAQ Ms. Taqwa SYED Saba SHAUKAT Bilal BAHADAR	Peshawar University PAKISTAN	EMPOWERING YOUNG WOMEN FOR SUSTAINABLE DEVELOPMENT: OVERCOMING EDUCATIONAL AND ECONOMIC BARRIERS IN RURAL PAKISTAN
Hema Saini	Punjabi University INDIA	DYNAMIC CONDITIONAL CO-MOVEMENT OF SECTORAL STOCK RETURNS: EVIDENCE FROM BOMBAY STOCK EXCHANGE
ELESIN, Ganiy Olanrewaju ELESIN, Islamiat Folashade	Federal Polytechnic NIGERIA	GENTRIFICATION EFFECTS ON THE HISTORIC CITY CORE OF ABEOKUTA, NIGERIA

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

27.01.2025 / Hall-4, Session-3

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
15 ^{00} : 17 ^{00}		ZOOM PASSCODE: 080808

HEAD OF SESSION: Dr. Iram Liaqat

AUTHORS	AFFILIATION	TOPIC TITLE
Imen Laadouze Noussaiha Salhi Ibtissem Khouja Emna Grami Ribab Hedhiri Kathleen Sullivan Sealey Neila Saidi	Water Research and Technology Center TUNUSIA Carthage University TUNUSIA Water Research and Technology Center TUNUSIA Miami University USA Water Research and Technology Center TUNUSIA	SOUTHERN MEDITERRANEAN SEA MICROBIAL POLLUTION AND EFFECT ON GROWTH AND BIOFILM ENDOGENS STREPTOCOCCUS AGALACTIAE
Mohamed Mastir Ali Dahbi Khalil El-Hami	Mohammed V University MOROCCO	AI-DRIVEN EARLY WARNING SYSTEMS FOR NATURAL DISASTERS
Saira Malik Syed Mohsan Raza Shah Uniza Fatima bukhari Tasawar Fatima bukhari Iqra	Education University PAKISTAN	LEAF STRUCTURAL AND FUNCTIONAL MODIFICATION OF IPOMOEA CARNEA JACQ. AN INVASIVE PLANT SPECIES, UNDER DIVERSE SALINITY GRADIENT
Hakima Lagrini Fouad Bentiss Charafeddine Jama Mohamed Bensitel Abdelaziz Sahibed-Dine	Chouaib Doukkali University MOROCCO Lille University FRANCE	DEVELOPMENT OF HIERARCHICALLY POROUS TITANIUM OXIDE USING SODIUM ALGINATE AS A SACRIFICIAL TEMPLATE BY THE SOL-GEL METHOD
Dr. Iram Liaqat	Government College University PAKISTAN	HONEY EFFICACY AS ANTIBIOFILM, ANTIQUORUM SENSING AND DISPERSAL AGENT AGAINST MULTISPECIES BACTERIAL BIOFILM
Hamza BENAALI Hmad FATIHI Abdellah TAHIRI Mohamed NAJI	Sidi Mohamed Ben Abdellah University MOROCCO Sultan Moulay Slimane University MOROCCO	FIRST-PRINCIPLES SCREENING OF STRUCTURAL, ELECTRONIC AND ELASTIC PROPERTIES OF SR-BASED HYDRIDES-PEROVSKITES SrXH3 (X=Ti, Mn and Fe) FOR HYDROGEN STORAGE APPLICATIONS
Adirek Vajrapatkul Boonta Wayupab Pinmanee Vajrapatkul	Sukhothai Thammathirat Open University THAILAND Central Food Retail Company Limited THAILAND Srinakharinwirot University THAILAND	ESTIMATING THAILAND GROSS PROVINCIAL PRODUCT: A K-NEAREST NEIGHBORS REGRESSION APPROACH
Adirek Vajrapatkul Boonta Wayupab Pinmanee Vajrapatkul	Sukhothai Thammathirat Open University THAILAND Central Food Retail Company Limited THAILAND Srinakharinwirot University THAILAND	FACTOR AFFECTING THAILAND ENERGY DEPLETION: A BAYESIAN LINEAR REGRESSION APPROACH

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

27.01.2025 / Hall-5, Session-3

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
15 ^{00} : 17 ^{00}		ZOOM PASSCODE: 080808

HEAD OF SESSION: Deepak Bansal

AUTHORS	AFFILIATION	TOPIC TITLE
Alabi, Folaranmi Oluwole Odu Adejare Samuel	Federal Polytechnic NIGERIA	MEDIA LITERACY, POPULAR CULTURE AND NATIONAL DEVELOPMENT: AN EXPLORATION OF INTERSECTION
Umar MAMMAN	Federal University NIGERIA	INFLUENCE OF TEST ANXIETY AND SCHOOL-BASED STRESS ON ACADEMIC PERFORMANCE OF SENIOR SECONDARY SCHOOL STUDENTS IN KATSINA STATE, NIGERIA
Oladunni, O.A. Oni, O.O. Adekeye, M.D Iyiola, O.A. Owolabi M.T.	Agricultural and Rural Management Training Institute (ARMTI) NIGERIA	IMPACT OF AGRICULTURAL TRAINING ON FARMERS INCOME AND SOCIOECONOMIC OUTCOMES IN NIGERIA: A Case Study Analysis
Mr. Satish Kumar Singh Ms. Pallavi Lakhera	Central University INDIA Allahabad University INDIA	THE FUTURE OF ANIMAL RIGHTS IN INTERNATIONAL LAW: EVOLVING TREATIES, CONVENTIONS, AND THE DEVELOPMENT OF GLOBAL STANDARDS
Aliyu Hassan	Air Force Institute of Technology NIGERIA	ASSESSMENT OF URBAN FLOODING AND UNREGULATED WASTE DISPOSAL: INCIDENCE, EFFECTS, AND CASE STUDY ANALYSIS
Adirek Vajrapatkul Boonta Wayupab Pinmanee Vajrapatkul	Sukhothai Thammathirat Open University THAILAND Central Food Retail Company Limited THAILAND Srinakharinwirot University THAILAND	THE DETERMINANTS OF PROPERTY OFFENCES IN THAILAND: A SUPPORT VECTOR MACHINE REGRESSION APPROACH
Mr. Satish Kumar Singh Mr. Sachin Singh Parihar Mr. Sadanand Patel Ms. Kumkum Sharma	Central University INDIA	INTERNATIONAL COOPERATION AND LEGAL FRAMEWORKS IN COMBATING CYBER CRIMES TARGETING WOMEN: A COMPARATIVE ANALYSIS OF GLOBAL APPROACHES
Ogwumu, Onah David Yavalah Deborah W. Ogwumu Isaiah Ogofotha, Marvellous O.	Federal University NIGERIA	A FINANCIAL MODELLING ANALYSIS OF THE IMPACT OF DEBT CRISIS ON NIGERIAN'S ECONOMY
Deepak Bansal	Indian Institute of Finance INDIA	DESIGN AND DEVELOPMENT OF NOVEL APPORACH FOR FILE SHARING FOR SECURITY USING BLOCKCHAIN TECHNOLOGY

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

ONLINE PRESENTATIONS

27.01.2025 / Hall-6, Session-3

ANKARA LOCAL TIME		ZOOM ID: 858 1117 0419
15 ^{00} : 17 ^{00}		ZOOM PASSCODE: 080808

HEAD OF SESSION: Major Gheorghe GIURGIU

AUTHORS	AFFILIATION	TOPIC TITLE
Rihab Hedhiri Emna Grami Neila Saidi	Centre for Water Research and Technology (CERTE) TUNUSIA Carthage University TUNUSIA	SOIL PLOTS IRRIGATION BY WASTEWATER AND ITS IMPACT ON ITS QUALITY
VIGNESH K Dr. K. SELVAM ARSHA G	Palar Agricultural College INDIA	INVITRO EFFICACY OF Serratia marcens ON Sarocladium oryzae CAUSES SHEATH ROT OF RICE (Oryzae sativa L.)
Zineb MOUJOUD Abdeslam El BOUARI Omar TANANE	Hassan II University MOROCCO	POTENTIALITY OF USING NATURAL FIBERS IN ECO-FRIENDLY GEOPOLYMER COMPOSITES
Melik Sami Khelil Sara Tallal Abdel Karim Bouzir	Mohamed Khider Biskra University ALGERIA Blida University ALGERIA	PUBLIC SQUARES AND CULTURAL IDENTITY: ARCHITECTURAL REFLECTIONS THROUGH TIME
Melik Sami Khelil Sara Tallal Abdel Karim Bouzir	Mohamed Khider Biskra University ALGERIA Blida University ALGERIA	TIMELESS ELEGANCE IN DESIGN: BALANCING TRADITION AND MODERNITY IN LUXURY ESTATES
Dr.M.K.GANESHAN	MIET Engineering College INDIA	IMPACT OF DIGITAL TRANSFORMATION ON WORKFORCE MANAGEMENT AND PRODUCTIVITY
Major Gheorghe GIURGIU Prof. Dr. Med. Manole COJOCARU	Deniplant-Aide Sante Medical Center ROMANIA Titu Maiorescu University ROMANIA	NATURAL MODULATION OF THE GUT MICROBIOTA IN PATIENTS WITH FOOD ALLERGIES. IMPACT OF ALERGIPLANT
Basim A. Almayahi Baneen Abdulkadhim Kamel	University of Kufa IRAQ	ADVANCING CANCER TREATMENT WITH NUCLEAR NANOMEDICINE AND NANOPARTICLES
Hejran Qais Faris Prof. Dr. Radhiyah M. Aljarrah	University of Kufa IRAQ	INVESTIGATION THE IMPACT OF Zn/Ni CONTENT ON THE PHOTOCATALYTIC EFFICIENCY OF HYDROTHERMALLY SYNTHESIZED ZnO-NiO NANOCOMPOSITES

All participants must join the conference 10 minutes before the session time.
Every presentation should last not longer than 10-12 minutes.
Kindly keep your cameras on till the end of the session.

CONTENTS

AUTHOR	TITLE	No
V S Angulakshmi N Anusuya M Priyadharshini S Kalaiselvan	SUSTAINABLE APPROACH TO MANGANESE OXIDE NANOPARTICLES: SYNTHESIS, CHARACTERIZATION AND APPLICATIONS WITH CORN HUSK	1
Hilal MEMİŞ KAMACI Mustafa Kemal YILMAZ	RESOLVING SECTOR SELECTION CHALLENGES IN EXPORT PERFORMANCE RESEARCH THROUGH MULTI-CRITERIA DECISION-MAKING METHODS	2
Mehmet Akif DÜNDAR Osman ÖZENÇ	PREDICTING THE THREE-POINT BENDING BEHAVIOR OF 3D-PRINTED ACRYLONITRILE STYRENE ACRYLATE AMORPHOUS THERMOPLASTIC: A NUMERICAL STUDY	3
Ayşe AKBULUT BAŞAR	THREE-DIMENSIONAL (3D) VISUALIZATION IN URBAN PLANNING: HISTORY, DEVELOPMENTS, AND IMPORTANCE	4
Musa, A.A. Ibrahim, H. Bashir, A.B. Hussaini, H.A. Garba, A. Mohammed, BG.Manga	ASSESSMENT OF THE IMPACT OF RADIO BROADCASTING ON RURAL DEVELOPMENT IN FAGGE LOCAL GOVERNMET KANO STATE	5
Musa, A.A. Ibrahim, H. Bashir, A.B. Hussaini, H.A. Garba, A. Mohammed, BG.Manga	INFLUENCE OF SOCIAL MEDIA ON VOTING BEHAVIOR IN FAGGE LOCAL GOVERNMENT AREA, KANO STATE	6
Rehana Riaz Saima Bibi Muhammad Zubair	SYNTHESIS, IN SILICO MOLECULAR MODELING AND IN VITRO PHARMACOLOGICAL EVALUATIONS OF BIPHENYL-4-CARBOXAMIDE DERIVATIVES	7
Rahul Kumar Mishra Dheeraj Rathore	DECODING THE STRUCTURAL IMPORTANCE OF L-ASCORBIC ACID IN MITIGATING PLANT STRESS	9
Abdelfattah EL MAHBOUBY Sanaa MAJID	ENHANCED ADSORPTION OF ANIONIC DYES USING MODIFIED MOROCCAN GHASSOUL CLAY: A SUSTAINABLE APPROACH FOR WATER TREATMENT	10
Murat AKDAĞOĞLU İsmet BAŞER	EFFECTS OF DIFFERENT SOWING DENSITY AND NITROGEN DOSE APPLICATIONS ON SOME QUALITY CHARACTERISTICS OF SWITCHED WHEAT (Triticum turgidum var. Mirabile)	11
Murat AKDAĞOĞLU İsmet BAŞER	EFFECTS OF DIFFERENT SOWING RATE AND NITROGEN DOSE APPLICATIONS ON SOME ABIOTIC STRESS FACTORS AND SEEDLING SCORE IN EINHOOD WHEAT (Triticum Monococcum L.)	12
Nataliya TODOROVA Anatolii MYSHKO	DEVELOPING CIVIC EDUCATION IN WARTIME (Ukraine, 2014–2024)	13

Enes EKİNCİ	INVESTIGATION OF VARIABLES AFFECTING EARLY AGE PERFORMANCE OF GEOPOLYMER MORTAR SAMPLES	15
Rida Zulfiqar	JUDICIAL APPOINTMENTS AND RULE OF LAW: PERSPECTIVES FROM COMMON LAW AND CIVIL LAW JURISDICTIONS	16
G. Mohith Kumar Tawseef Ahmad Sunil Kumar M.Suresh	MENTAL HEALTH THERAPIST CHATBOT	17
ADIRALA BABY DEYOL Tawseef Ahmad Sunil Kumar M.Suresh	Mr.TOUR APP	18
MOHD ABDUL MATEEN Tawseef Ahmad Sunil Kumar M.Suresh	TEXT – IMAGE LANGUAGE TRANSLATOR	19
G.Manish Kumar M.Suresh Tawseef Ahmad Sunil Kumar	FAKE PROFILE IDENTIFICATION ON SOCIAL MEDIA BY USING MACHINE LEARNING	20
Mythri Kosika M.Suresh Tawseef Ahmad Sunil Kumar	HAND GESTURE-CONTROLLED SNAKE GAME USING CNN	21
Ningsih Diliyanti Benu	CHRISTIAN GOLDEN AGERS COMMUNITY: MANAGE A COMMUNITY OF GOLDEN AGERS TO FACE LATE-LIFE CRISIS	22
Sagaya Auralia P Renish P Varghese	EARLY DETECTION OF PARKINSON'S DISEASE: A COMPREHENSIVE REVIEW OF MACHINE LEARNING, DEEP LEARNING, AND MULTIMODAL APPROACHES	23
Dürdane ÇETİN Gülcan URHAN	SOLUTION SUGGESTIONS PRODUCED BY WOMEN WORKING IN ELDERLY CARE SERVICES FOR THE PROBLEMS THEY EXPERIENCE	24
Ilhame Fitah Miloud Chakit Mohamed El Kadiri Aboubaker El Hessni Abdelhalem Mesfioui	ASSESSMENT OF THE SOCIAL FUNCTIONING OF SCHIZOPHRENIA PATIENTS FOLLOWED UP IN THE HEALTH CENTER MY EL HASSAN OF KENITRA, MOROCCO	25
Hayatem Hamal	ESTIMATES OF A NEW MODIFICATION KANTOROVICH TYPE BERNSTEIN OPERATOR VIA CALCULUS	27
BİLAL BELEN Osman KARTAL	THE RELATIONSHIP BETWEEN FINANCIAL LITERACY AND DIGITAL LITERACY: THE CASE OF DÜZCE	29
Mahir TOSUNOĞLU İbrahim Halil POLAT	THE ROLE OF GLOBALIZATION AND AGRICULTURE IN ENVIRONMENTAL KUZNETS CURVE (EKC) HYPOTHESIS FOR ASEAN COUNTRIES	30
İbrahim Halil POLAT Mahir TOSUNOĞLU	CORRUPTION, RULE OF LAW, AND ACCOUNTABILITY THEIR ROLES IN GOVERNMENT EFFICIENCY IN TURKIYE	31
Duygu DEDE Hamide ARSLAN TARUS	BIBLIOMETRIC ANALYSIS OF THESES ON GESTATIONAL DIABETES IN NURSING	32

Ishwar Mittal Aarti Rosy Dhall Mikul	UNDERSTANDING WORKPLACE BULLYING AMONG NURSING STUDENTS IN INDIA	33
Atiye BİLİM	GENERAL OVERVIEW OF CONSTRUCTION ACCIDENTS IN TÜRKİYE AND ANALYSIS BY PROVINCE	34
Zeba Ali Mumtaj Abdul Rahman Khan Saimah Khan	NUTRIENT REMOVAL FROM SYNTHETIC WASTEWATER CONTAINING CIPROFLOXACIN AND AMOXICILLIN USING HORIZONTAL FLOW CONSTRUCTED WETLAND	35
Mustafa BOZ Gökhan TURAK	INNOVATIVE METHODS IN ENTREPRENEURSHIP EDUCATION: ENTREACTION ERASMUS+ PROJECT CASE	36
Samreen Gul Saqib Shahid Rahim Fahad Masood	NEURAL NETWORKS-BASED CYLINDRICAL MATERIAL CLASSIFICATION USING ELECTROMAGNETIC SCATTERED FIELD	37
Barış ÇIVAK	WHAT WILL HAPPEN IN THE FUTURE? THE EFFECT OF AI AND ROBOTS ON THE TOURISM WORKFORCE	38
Qader Vazifeh Damirchi Nasrin Khodabakhshi	PREDICTION OF SCHOOL PARTICIPANT EMPOWERMENT VIA CULTURAL INTELLIGENCE	39
Wasiu Abiodun Makinde Abiola Oluwaseun Rufai	CHANGE MANAGEMENT PRACTICES AND ADMINISTRATIVE EFFECTIVENESS IN FEDERAL INLAND REVENUE SERVICES, ABEOKUTA, OGUN STATE	40
Farrah Deeba Muhammad Huzaifah Khalid Anas Sarwar Qureshi Muhammad Adil	THERAPEUTIC EVALUATION OF CENTRATHERUM ANTHELMINTICUMN FOR THE CONTROL OF SUBCLINICAL MASTITIS IN DAIRY BUFFALO	41
Wan Nadzri Osman Faisal Zulhumadi Mazri Yaakob	SUSTAINABLE CONSTRUCTION PROJECT MANAGEMENT: CHALLENGES, STRATEGIES, AND THE FUTURE OF GREEN PRACTICES	42
Rashidat Abdulsalam-Nuhu Rasaq Sulyman	EXPLORATORY STUDY OF PLAYWAY METHOD IN PRIMARY SCHOOLS IN GWAGWALADA AREA COUNCIL OF THE FCT, NIGERIA	43
Taleb Mounia	CONTRIBUTION TO CONDITIONAL PREVENTIVE MAINTENANCE OF ROTATING MACHINES	44
Majda Mohamdi	THE EFFECT OF CHATBOTS USABILITY ON CUSTOMER LOYALTY	45
Amina NAIMOVA Figen Haravon	SUSTAINABLE REAL ESTATE DEVELOPMENT: A COMPARATIVE ANALYSIS OF GREEN BUILDING PRACTICES IN TURKIYE	46
Oğuz SÜLÜKÇÜLER Murat AKDAĞ A. Emre ÇETİN	DESIGN AND MANUFACTURING OF COMPOSITE LEAF SPRING RATE MEASUREMENT MACHINE	47
Gökçen BALIKÇILAR USTA Âli Yurdun ORBAK	SUPPLIER SELECTION MULTI-CRITERIA DECISION MAKING BY USING AHP AND COPRAS METHODS: AN AUTOMOTIVE SECTOR APPLICATION	48
Cansu TUTKUN Zeynep Nur AYDIN KILIÇ	VR. IN PRESCHOOL EDUCATION: PRESERVICE TEACHERS' EXPECTATIONS AND PERCEPTIONS	49
Cansu TUTKUN Aslı BALCI	THE EFFECT OF VIRTUAL REALITY EXPERIENCE ON PRESERVICE PRESCHOOL TEACHERS' OPINIONS ON THE USE OF VR IN EDUCATION	50

Hamide ARSLAN TARUS Ceyda Su GÜNDÜZ Nurdan DEMİRCİ	USE OF GENERATIVE AI FOR IMPROVING HEALTH LITERACY IN HUMAN PAPILLOMAVIRUS INFECTION: CASE STUDY	51
Bağdagül KARTAL ERDOĞAN Abdullah ALOBID	GENERALIZED ABSOLUTE RIESZ SUMMABILITY OF INFINITE SERIES	52
Hamza BENAALI Hmad FATIHI Abdellah TAHIRI Mohamed NAJI	FIRST-PRINCIPLES SCREENING OF STRUCTURAL, ELECTRONIC AND ELASTIC PROPERTIES OF SR-BASED HYDRIDES-PEROVSKITES $SRXH_3$ (X = TI, MN AND FE) FOR HYDROGEN STORAGE APPLICATIONS	53
Fadimatu Dauda Muhammad	REPRODUCTIVE PERFORMANCE OF DAIRY CATTLE	54
Murat ONAY Ömer ÇANGA Mehmet KAPLAN Hatice Gül SOLMAZ Mustafa SEZEN	ARTIFICIAL INTELLIGENCE APPLICATION FOR CERCOSPORA DETECTION	55
Rozina Khattak	KINETICS AND MECHANISM OF THE REDOX REACTION BETWEEN DICYANOBIS(2,2'-DIPYRIDYL)IRON(III) AND IODIDE IN AQUEOUS MEDIUM	56
Gupta Swati Sanjaykumar Anuj Darji	RECENT ADVANCES IN FIBER BASED TISSUE REGENERATION	57
Hejran Qais Faris Radhiyah M. Aljarrah	INVESTIGATION THE IMPACT OF Zn/Ni CONTENT ON THE PHOTOCATALYTIC EFFICIENCY OF HYDROTHERMALLY SYNTHESIZED ZnO-NiO NANOCOMPOSITES	58
Murat ONAY Hacı Ali BÖYÜK Mehmet KAPLAN Hatice Gül SOLMAZ Mustafa SEZEN	UNMANNED AIR VEHICLE (UAV) BASED PLANT COUNTING USING ARTIFICIAL INTELLIGENCE	59
Rozina Khattak	POTENTIAL USE OF DICYANOBIS(1,10-PHENANTHROLINE)IRON(III) AS A SENSITIZER TO OXIDIZE IODIDE IN WATER: A KINETIC STUDY	60
Fadimatu Dauda Muhammad	FOODBORNE PATHOGENS IN MEAT AND DAIRY PRODUCTS	61
Nurhan KOÇAN Esra ÇETİNKAYA ÖZKAN Şeyma ŞENGÜR Muhibe Aslı ALP Ömer Lütfü ÇORBACI	LANDSCAPE DESIGN SUGGESTIONS FOR SALTUKOVA (ZONGULDAK) RECREATION AREA	62
Naseem Akhter	A STUDY ON THE SPIRITUAL, SOCIAL, AND POLITICAL CHANGE THROUGH SUFISM: THE VIEWPOINT OF SEERAT-UN-NABI	64
Naseem Akhter	THE ROLE OF CIVIL SOCIETY AND EDUCATION IN DEVELOPING TOLERANCE AND RESPECT FOR COEXISTENCE	65
Rahime Evra KARAKAYA	CURRENT APPROACHES TO NUTRITIONAL MANAGEMENT OF FIBROMYALGIA	66
Naseem Akhter	PROPHET MUHAMMAD'S LEADERSHIP, PRINCIPLES OF ECONOMIC JUSTICE, RATIONAL USE OF RESOURCES, AND COMBATING CORRUPTION: A REVIEW	67

Abdul JALIL Najam ul HAQ Taqwa SYED Saba SHAUKAT Bilal BAHADAR	EMPOWERING YOUNG WOMEN FOR SUSTAINABLE DEVELOPMENT: OVERCOMING EDUCATIONAL AND ECONOMIC BARRIERS IN RURAL PAKISTAN	68
VIGNESH K K. SELVAM ARSHA G	INVITRO EFFICACY OF Serratia marcens ON Sarocladium oryzae CAUSES SHEATH ROT OF RICE (Oryzae sativa L.)	69
Saloni Sharma Suhani Sharma	"REVOLUTIONIZING EDUCATION: INNOVATIONS IN TEACHING FOR THE 21ST CENTURY"	70
Ayşegül AKBULUT	TRANSFORMATION OF ART AS A FINANCIAL TOOL	71
R.Keerthan M.Suresh Tawseef Ahmad Sunil Kumar	VISUALIZING STOCK MARKET TRENDS: AN INTERACTIVE APPOROACH	72
Andreea Irina BARZIC İuliana STOICA Raluca Marinica ALBU Simona Luminita NICA Marius SOROCEANU	OPTICAL AND MORPHOLOGICAL BEHAVIOR OF FILMS MADE BY MIXING POLYVINYL ALCOHOL WITH A TRIPHENYLMETHANE DERIVATIVE	73
Andreea Irina BARZIC İuliana STOICA Raluca Marinica ALBU Lavinia Petronela CURECHERIU Maria Teresa BUSCAGLIA	OPTICAL AND MORPHOLOGICAL BEHAVIOR OF CHITOSAN-DERIVED DIELECTRICS FOR ENERGY HARVESTING USES	74
Irina-Ana DROBOT	I CHING IN THE NOVEL THE MAN IN THE HIGH CASTLE BY PHILIP K. DICK	76
Jatto, A. O. Jimoh, O. R. Yusuf, S. I.	MODELING HEAT TRANSFER TO MAGNETOHYDRODYNAMIC DUSTY FLUID FLOW PAST BETWEEN TWO RIGA PLATES EMBEDED IN A POROUS MEDIUM	77
Pooja Gangwar Dheeraj Rathore	BIO-MONITORING POTENTIAL OF ROADSIDE PLANTS FOR HEAVY METALS POLLUTION USING PLANTS FUNCTIONAL GROUPS	78
A.O Alejo B. O. Akinyele A.C. Odiyi L. S. Fayeun	MORPHOLOGICAL CHARACTERIZATION OF SOME CYNODON ECOPHENES IN SOUTH WESTERN NIGERIA	79
Alaekwe, I.O	DRUG-ABILITY AND PHARMACOKINETIC PROPERTIES OF CATECHIN AND BETA SITOSTEROL ISOLATED FROM BAUHINIA SEMIBIFIDA LEAF	80
Anas Hamdani Said Bouda Atman Adiba Jamal Charafi	CHILL AND HEAT REQUIREMENTS OF FOUR PLUM VARIETIES GROWING AT TWO CONTRASTING CLIMATE ENVIRONMENTS IN MOROCCO	81
Rihab Hedhiri Ibtissem Haboubi Emna Grami Neila Saidi	IRRIGATION OF SOIL PLOTS BY WATER POLLUTED BY WASTEWATER AND ITS IMPACT ON ITS QUALITY	82
Rihab Hedhiri Emna Grami Neila Saidi	SOIL PLOTS IRRIGATION BY WASTEWATER AND ITS IMPACT ON ITS QUALITY	83

FILALI, Saloua NASSER, Abdelkader KERKOUR-EL MIAD Abdelhamid AMAR, Najib	ANALYZING THE INFLUENCE OF BRICK POWDER ON THE MECHANICAL PROPERTIES OF SUSTAINABLE CONCRETE	84
Fatogun, Olukunle Ibukun Balogun, Sherif Babajide	INTERNAL CONTROL SYSTEMS AND FINANCIAL PERFORMANCE IN NIGERIAN LISTED PHARMACEUTICAL COMPANIES	85
Aleyna Nevcüvan KALOŞ Pınar ALGEDİK	AN EXAMINATION OF SUICIDE ATTEMPT AS A NERVOUS EXPERIENCE IN THE CONTEXT OF DEATH DRIVE AND PROCRASTINATION CONCEPT IN PSYCHOANALYSIS	86
Aliyu Hassan	ASSESSMENT OF URBAN FLOODING AND UNREGULATED WASTE DISPOSAL: INCIDENCE, EFFECTS, AND CASE STUDY ANALYSIS	87
Aliyu Hassan	EVALUATION OF URBAN FLOODING AND UNCONTROLLED WASTE DISPOSAL: OCCURRENCE AND IMPACTS	88
Igonoh Achenyo Okolo Emmanuel Musa Samdi	STRUCTURAL EQUATION MODELLING OF AUTONOMY SUPPORT AND STUDENTS' PERFORMANCE IN EDUCATIONAL STATISTICS IN FACULTY OF EDUCATION AT UNIVERSITY OF JOS, PLATEAU STATE, NIGERIA	89
VATIKI VIJAY KUMAR M.Suresh Sunil Kumar Tawseef Ahmad	PREDICTION OF USED CARS PRICES USING MACHINE LEARNING	90
Serhat Sina Karaaslan	STRATEGIC COMMUNICATION IN SOCIAL MEDIA 2.0: A MULTI-THEORY PERSPECTIVE	91
Folashade Folake Alfa A. A. Yaki R. M. Bello	AWARENESS, ACCESSIBILITY AND UTILISATION OF MODERN TECHNOLOGIES FOR AQUACULTURE INSTRUCTION IN TERTIARY INSTITUTIONS IN NIGER STATE, NIGERIA	92
Bilal BUĞDAY Mehmet Settar ÜNAL	AN INTERPRETATION ON THE FACTORS AFFECTING THE COMPOSITION OF THE GRAPE IN VINE	93
UMAR MAMMAN Asma'u Sadiq Imam	INFLUENCE OF TEST ANXIETY AND SCHOOL-BASED STRESS ON ACADEMIC PERFORMANCE OF SENIOR SECONDARY SCHOOL STUDENTS IN KATSINA STATE, NIGERIA	94
Silvia BLAZQUEZ RUIZ Pablo HERRERO MARTÍN Eva Reka KERESZTES	UNDERSTANDING GPT-4: THE NEW GENERATION OF AI	95
BRAHMI Zahia GHERISSI Djallel Eddine	ADVANCING FEMALE CAMEL REPRODUCTIVE HEALTH	96
Dilber ZEYTİNKAYA	AI-POWERED SONG DUBBING AND ISOTOPY IN ARTIFICIAL SONG TRANSLATION: ETHICAL ISSUES OF VOICE CLONING	97
Bilal BUĞDAY Mehmet Settar ÜNAL	CULTIVATION OF GILABORU, A GRAPE FRUIT, IN TURKEY	98
Oladunni, O.A. Oni, O.O. Adekeye, M.D Iyiola, O.A. Owolabi M.T.	IMPACT OF AGRICULTURAL TRAINING ON FARMERS INCOME AND SOCIOECONOMIC OUTCOMES IN NIGERIA: A CASE STUDY ANALYSIS	99

Hema Saini	DYNAMIC CONDITIONAL CO-MOVEMENT OF SECTORAL STOCK RETURNS: EVIDENCE FROM BOMBAY STOCK EXCHANGE	100
Kübra ŞAHİN ÇEKEN	SAVANT PAINTERS AND SUPERIOR PAINTING TALENTS	101
Zineb Benbouzid Mohammed Ridha Benzidane Noureddine Hassini Abdelhadi Namoune Faten Belarbi	STUDY OF THE IMPACT OF CADMIUM SULFIDE BUFFER LAYER THICKNESS ON THE PERFORMANCE OF CIGS SOLAR CELLS	102
Mizanur Rahman	"IRAN-U.S. RELATIONS IN 2025: ANALYZING ESCALATION AND PROSPECTS FOR DIPLOMACY"	103
VOLUME CONTROL USING HAND GESTURES	VOLUME CONTROL USING HAND GESTURES	104
Dılgeş BASKIN Nur YUKA	SYNTHESIS OF A FUNCTIONAL MAGNETITE-BASED ADSORBENT FOR THE PRECONCENTRATION OF NICKEL (II)	105
Eyüp Can MAVİ Erdem AKBOY	ANALYSIS AND APPLICATION OF SOFT SWITCHING FULL BRIDGE DC-DC CONVERTER FOR MILITARY AVIATION APPLICATION	106
Nor Farahain binti Dzulkafli Faizan Maisarah binti Abu Bakar	GENERATIVE AI IN EDUCATION: PERCEPTIONS AND CONCERNS AMONG POLYTECHNIC MALAYSIA STUDENTS	107
İnci CERİT	ENCAPSULATION OF BLACK CHOKOBERRY PHENOLIC EXTRACT (Aronia melanocarpa) WITH VARIOUS WALL MATERIALS	108
Iram Liaqat	HONEY EFFICACY AS ANTIBIOFILM, ANTIQUORUM SENSING AND DISPERSAL AGENT AGAINST MULTISPECIES BACTERIAL BIOFILM	109
Khanh Giang Le	A BIM-GIS FRAMEWORK FOR 3D MODELING OF INFRASTRUCTURE ASSETS	110
Paulina Maria Kubot Monika Łopuszanska-Dawid Sara Kaźmierska-Urban	ENHANCING PSYCHOLOGICAL WELLBEING IN THE ELDERLY THROUGH PHYSICAL ACTIVITY IN GREEN SPACES	111
Cemre Yaren ERKAL Salim YILMAZ Ahmet Murat GÜNAL	CLUSTERING ANALYSIS BASED ON COUNTRIES' FRUIT AND VEGETABLE CONSUMPTION, LIFE EXPECTANCY, HEALTH EXPENDITURES, AND CARDIOVASCULAR AND OBESITY PREVALENCE	112
Ramona MARINACHE Valentina MARINESCU	DISCOURSES ABOUT MEDICAL SPACES AND WELL-BEING OF ROMANIAN PATIENTS	113
Sezer ÇOBAN	OPTIMIZATION OF LONGITUDINAL CONTROL SYSTEM FOR FIXED-WING UAVS USING PID CONTROLLER AND SPSA METHOD	114
Turan YAMAN Volkan KOŞAL	EFFECTS OF HIGH FAT DIET ON RAT TESTICULAR TISSUE	115
Muhammad Safdar Syed Mohsan Raza Shah	UNVEILING ADAPTIVE COMPONENTS FOR ENVIRONMENTAL HETEROGENEITY IN IPOMOEA CARNEA JACQ	116
Turan YAMAN Volkan KOŞAL	EFFECT OF BAKUCHIOL ON TESTICULAR HISTOPATHOLOGY AND SOME SPERMATOLOGIC PARAMETERS	117

Seyhan ÇANKAYA Hacer Alan Dikmen Ayşenur Ataş	THE EFFECT OF PEANUT BALL USE ON LABOR MEMORY, LABOR SATISFACTION, DELIVERY LENGTH, AND NEONATAL APGAR SCORE: A RANDOMIZED CONTROLLED TRIAL	118
Bahar Kurt	PACKAGING TECHNOLOGIES FOR EXTENDING SHELF LIFE AND CURRENT APPLICATIONS IN THE FOOD INDUSTRY	119
İpek BOZKURT Yasemin BEYHAN	THE RELATIONSHIP BETWEEN ADVANCED GLICATION END PRODUCTS (AGE) AND HEALTH	120
Canan MADEN Büşra MUTLU Şeyma DUMAN Fatma DEMİRCİ	PRODUCTION AND CHARACTERIZATION OF CHITOSAN-BASED COMPOSITE FIBERS	121
Erva USLU Feyza KOLCU	SYNTHESIS AND CHARACTERIZATION OF SCHIFF BASES AND POLY(AZOMETHINE)s CONTAINING ANTHRACENE AND AMINOBENZOTHIAZOLE UNITS	123
Deepak Bansal	DESIGN AND DEVELOPMENT OF NOVEL APPORACH FOR FILE SHARING FOR SECURITY USING BLOCKCHAIN TECHNOLOGY	124
Moses Adeolu AGOI Oluwakemi Racheal OSHINOWO Benjamin Johnson OLASIJU Oluwanifemi Opeyemi AGOI	ICT AND ITS SIGNIFICANCE TO TEACHER EDUCATION: A REVIEW ON MODERN TRENDS IN EDUCATIONAL TECHNOLOGIES	125
Megha Dhillon Jaya Shekhar	TRANSFORMATIVE GROWTH: EXPLORING CHILDHOOD EXPERIENCES AND CAREER MOTIVATION IN MENTAL HEALTH PRACTITIONERS	126
Merve YAVAŞ KİREZ Mehmet Lütfi YOLA	A NOVEL FAMOXADONE FUNGICIDE DETECTION IN MILK SAMPLES BY SURFACE PLASMON RESONANCE BASED ON MOLECULARLY IMPRINTING POLYMER	127
Zerrin BARUT	CORRELATION OF THYROID ANTIBODIES AND THYROID HORMONES IN SERUM AND SALIVA: A META ANALYSIS	128
Laphissou Eden Isaac NGUESSAN Kübra ŞAHİN ÇEKEN	THE EFFECT OF VISUAL IDENTITY ON BRAND STRATEGY	129
Adirek Vajrapatkul Boonta Wayupab Pinmanee Vajrapatkul	ESTIMATING THAILAND GROSS PROVINCIAL PRODUCT: A K-NEAREST NEIGHBORS REGRESSION APPROACH	130
Adirek Vajrapatkul Boonta Wayupab Pinmanee Vajrapatkul	THE DETERMINANTS OF PROPERTY OFFENCES IN THAILAND: A SUPPORT VECTOR MACHINE REGRESSION APPROACH	131
Adirek Vajrapatkul Boonta Wayupab Pinmanee Vajrapatkul	FACTOR AFFECTING THAILAND ENERGY DEPLETION: A BAYESIAN LINEAR REGRESSION APPROACH	132
ADEMOLA, Olaitan Idowu IORLIAM, Emmanuel Vambe SANGOLEYE, Solomon Adebayo	TEACHERS' PERCEPTION OF CIVIC EDUCATION CURRICULUM AS TOOL FOR CITIZENSHIP DEVELOPMENT OF SENIOR SECONDARY SCHOOL STUDENTS IN NORTH CENTRAL NIGERIA	133
Mohamed Mastir Ali Dahbi Khalil El-Hami	AI-DRIVEN EARLY WARNING SYSTEMS FOR NATURAL DISASTERS	134

Alpay GÜNER Yunus Emre YILMAZ Hamza SARIOĞLAN Şaban KALPAKLI Murat TOMRUK	INTERGRADE COMPARISON OF POSTURAL DISORDERS OF PHYSIOTHERAPY STUDENTS	135
Zeynep Y. AVCI	WHAT GENERATIVE ARTIFICIAL INTELLIGENCE APPLICATIONS PROMISE IN EDUCATION: PRE-SERVICE TEACHER OPINIONS	137
Balabekova Nazym Asetovna	BRIDGING THE GAP BETWEEN EDUCATION AND THE LABOR MARKET: INSIGHTS FROM ALMATY UNIVERSITIES	138
Kazi Md Salim Newaz	ANALYSIS OF DRAG REDUCTION AND HEAT TRANSFER PROPERTIES USING NATURAL FIBERS AND POLYMERIC SUBSTANCES	139
Muhammad Abdullah Mah-ru-nisa Atif Beenish Osama Nadia Bilal Rimsha yousaf	ANALYSIS OF ADVERSE DRUG REACTIONS REPORTING IN DISTRICT LAHORE	140
Zeliha nur BOZKURT Ayşe ELKOCA Duygu AYAR	ATTENTION DEFICIT AND HYPERACTIVITY DISORDER IN SCHOOL AGE CHILDREN	141
Elif ÖZÇINAR	THESES ON BASIC PSYCHOLOGICAL NEEDS IN TÜRKİYE: A DOCUMENT ANALYSIS	142
Yeremenko Nikita	THEORETICAL FOUNDATIONS FOR ENHANCING BRAND AWARENESS OF A COMPANY	143
Abdulmalik SABITU Umar USMAN Shehu Safiyya ABDULRAHAMAN Rafindadi	ASSESSMENT OF LIFE SKILLS ON FEMALE STUDENTS' PARTICIPATION AND ACADEMIC ACHIEVEMENT IN SCIENCE IN KATSINA STATE, NIGERIA	144
Sa'ad R. Yousif Watheq F. Shneen	ASSESSMENT OF THE MARSHES IN SOUTHERN IRAQ USING REMOTE SENSING TECHNIQUES	145
Aylin DEMİRHAN Tolga GÜYER	THE EFFECT OF USING ROBOTICS AND SIMULATION IN EDUCATION ON CREATIVE PROBLEM SOLVING AND COMPUTATIONAL THINKING SKILLS OF GIFTED STUDENTS	146
Muhammet Burak OKKALI Ali ÇEKEN	THE RELATIONSHIP BETWEEN HISTORICAL SITES AND CAPITALISM: COMPARISON OF RİZE MUSEUM AND YELDEĞİRMENİ NEIGHBORHOOD	147
Duygu ÇABUK AKTAŞ	INVESTIGATION OF THE RELATIONSHIP OF COGNITIVE EMOTION REGULATION STRATEGIES AND PERCEIVED STRESS LEVELS WITH PSYCHOLOGICAL COUNSELORS' PROFESSIONAL QUALITY OF LIFE	148
Ufuk BAL Ebubekir AKKUŞ Kürşad KOCAİSPİR	EVALUATING THE EFFECT OF FOCAL LOSS FUNCTION ON THE CLASSIFICATION METRICS FOR DIABETIC RETINOPATHY CLASSIFICATION MODELS	149
Emine ÖÇAL Ayfer Ezgi YILMAZ ÇAKIROĞLU	LOG-LINEAR MODELS FOR HANDLING MISSING OBSERVATIONS IN TWO-DIMENSIONAL CONTINGENCY TABLES: A CASE STUDY	150
Renuka gautam Dheeraj Rathore	LIFE CYCLE ASSESSMENT OF BIODEGRADABLE-PLASTIC AND COMPOSTABLE PLASTIC: INSIGHTS FOR THE FUTURE OF PLASTIC MATERIALS	151

IVAN PAVLOVIC	BIOSECURITY MEASURES IN THE RAISING OF PHEASANTS UNTIL THE RELEASE IN THE HUNTING GROUND	152
Bouzekraoui Hicham Mouaddine Atika	GEOROUTE AS NEW TOOL FOR GEOTOURISM VALORISATION IN BENI MELLAL ATLAS, (MOROCCO)	153
Esma GÜL Burcu ASLANTEKİN Ramazan ÇETİN Emrah ÖZCAN Nermin TEPE	EDIAL GENICULATE BODY VOLUME AND ASYMMETRY IN PATIENTS WITH MIGRAINE DIAGNOSIS	154
Büşra İLGİN	NORTH COUNTRY FILM: MANIFESTATION OF SEXUAL VIOLENCE AS A SPECIAL TYPE OF VIOLENCE IN THE OCCUPATIONAL FIELD	156
Ram Prataap Yadav Sunil Kumar Srivastav Ajai Kumar Srivastav	AMELIORATIVE EFFECT OF JAMUN (SYZYGIUM CUMINI) SEED AND ORANGE (CITRUS SINENSIS) PEEL EXTRACTS AGAINST CADMIUM INDUCED ALTERATION IN LIVER BIOMARKERS OF RATS	157
Eda Tabaku Rinela Kapciu Robert Kosova Ejona Duci	COMPARISON OF SEARCHING ALGORITHMS IN AI AGAINST HUMAN AGENT IN SNAKE GAME	158
O. D. Alawode P. S. Yaduma H. Bello A. A. Deba	EFFECTS OF METACOGNITIVE STRATEGY ON ACHIEVEMENT, RETENTION AND GENDER IN BUILDING ENVIRONMENT AND MAN AMONG INDUSTRIAL AND TECHNOLOGY EDUCATION STUDENTS	160
Ramireddy Sushmitha	CORRELATION BETWEEN IN-SITU RESILIENT MODULUS AND LABORATORY RESILIENT MODULUS	161
Ramireddy Sushmitha	APPLICATION OF AUTOMATED ROAD INVENTORY DATA IN ROAD ASSET MANAGEMENT	162
Muhammad Mazhar Iqbal Tehmena Rashid Hafiz Qaiser Yasin Shafiq-ur-Rehmn Muhammad Abdullah	ADVANCEMENT IN AGRICULTURAL RESILIENCE THROUGH SOLAR-POWERED IRRIGATION IN A DEVELOPING COUNTRY: PAKISTAN	163
Ajesh Chauhan	CUBOSOMES AS A NOVEL APPROACH FOR CANCER THERAPY	165
Ayşe Öztürk	THE IMPACT OF PUBLIC SCHOOLS AND PUBLIC CHAMBERS ON TRADITION IN THE REPUBLIC PERIOD	166
BüşraYILDIZ Alpay DUMAN Soner TAŞAR Özgür DOĞAN	DETECTION OF FOREIGN BODY IN THE NASAL CAVITY DURING DENTAL EXAMINATION IN A PEDIATRIC PATIENT	167
Hatice ERDOĞAN Seher ÇELİK Perihan AKBAŞ	ANTIMICROBIAL ACTIVITY AND GC-MS/MS ANALYSIS OF Datura stramonium EXTRACTS PREPARED USING CLASSIC AND DEEP EUTECTIC SOLVENTS	168
Ogwumu, Onah David Yavalah Deborah W. Ogwumu Isaiah Ogofotha, Marvellous O.	A FINANCIAL MODELLING ANALYSIS OF THE IMPACT OF DEBT CRISIS ON NIGERIAN'S ECONOMY	170

Esma ATIŞ Özgür DOĞAN	TREATMENT OF A DENTIGEROUS CYST IN A PEDIATRIC PATIENT AND THREE-YEAR FOLLOW-UP: A CASE REPORT	171
Shapovalova Diana	FROM CLICKS TO CLASSROOMS: LEVERAGING DIGITAL TOOLS FOR PROMOTING EDUCATIONAL SERVICES	172
Dilber ÇAĞLAR	THE POTENTIAL OF ALTERNATIVE PROTEINS FOR SUSTAINABLE FOOD SYSTEMS	173
Yacine Djeghader Reda Rouaibia Atef Benhaouas	HARMONIC ANALYSIS IN RENEWABLE ENERGY SYSTEMS CONNECTED TO ELECTRICAL GRIDS	174
Pelinsu AYDIN Şemsi ALP	ESTHETIC REHABILITATION OF TEETH WITH WHITE SPOT LESIONS BY OFFICE-TYPE BLEACHING AND RESIN INFILTRATION: A CASE REPORT	175
Samia BABA HAMED BENBAYER Wided	MORPHOLOGY AND MOLECULAR IDENTIFICATION OF MICROALGAE DUNALIELLA SALINA STRAIN SEQ DUNA5.8S ISOLATED FROM AN ALGERIAN SALT LAKE	176
Abdurrahman Sani Yar'adua	EFFECT OF THINK PAIR SHARE STRATEGY ON MALE AND FEMALE STUDENTS' ACADEMIC PERFORMANCE AND RETENTION IN ALGEBRAIC PROCESS AMONG SECONDARY SCHOOL IN KATSINA STATE	177
Çağla KARADAŞ	EFFECTIVENESS OF STRETCHING EXERCISES IN CERVICOGENIC HEADACHE	178
Esra BAŞTÜRK Süleyman GÖKSOY	EXAMINING THE RELATIONSHIP BETWEEN ORGANIZATIONAL POWER RESOURCES USED BY SCHOOL PRINCIPALS AND TEACHERS' PERCEPTIONS OF ORGANIZATIONAL CITIZENSHIP	179
Faridah Yunos Nik Rasiqa Nik Roslan Amir Hamzah	SELF-INVERTIBLE KEYS BASED ON ORTHOGONAL VECTORS FOR DOUBLE TRANSFORMATION OF HILL CIPHER	180
Fatma KENEVİR	THE CONNECTION BETWEEN ART AND THE SACRED: EXPLORING RELIGIOUS EMOTIONS	181
Özge KAHRAMANOĞLU	FETAL RENAL ARTERY DOPPLER IN PREGNANCIES COMPLICATED BY GESTATIONAL DIABETES MELLITUS	182
Nuray YÜZBAŞIOĞLU	THE EVOLUTION OF FINTECH: A BIBLIOMETRIC ANALYSIS	184
Olalekan Eyitayo AJIBADE Oluwaseun Adewale SALAKO	MOTIVATION AND EMPLOYEE'S PERFORMANCE IN PUBLIC ESTABLISHMENTS IN NIGERIA: FREDERICK HERZBERG'S THEORY TWO FACTOR OF MOTIVATION PERSPECTIVE	185
Marina Todor STOJANOVA Dragutin A. DJUKIC Monika STOJANOVA	INFLUENCE OF FOLIAR CALCIUM AMPLIFIERS ON THE YIELD AND CHEMICAL COMPOSITION OF TOMATO LEAVES	186
AIGBODUWA, Stephen Ayemwenre MAXWELL, O. Arimonu OGBEBOR, Samuel Osamede	GENDER EFFECT ON STUDENTS' PERFORMANCE IN BLOCK-LAYING AND CONCRETE WORKS IN GOVERNMENT SCIENCE AND TECHNICAL COLLEGES IN EDO STATE	187
Kaushiki Singh Mukesh Shukla	GENDER INCLUSIVE INDIA : THE ROLE OF TRANSPORTATION IN ENSURING EQUITY AND SAFETY	188
Çiçek ERSOY	REAL-TIME AUCTIONS AND PERSONAL DATA PROTECTION IN DIGITAL MARKETING	189

Major Gheorghe GIURGIU Manole COJOCARU	NATURAL MODULATION OF THE GUT MICROBIOTA IN PATIENTS WITH FOOD ALLERGIES. IMPACT OF ALERGIPLANT	190
Divya Dwivedi M. Thenmozhi	GREEN SYNTHESIS OF COPPER NANOPARTICLES USING AZADIRACHTA INDICA AND ITS ANTIMICROBIAL AND ANTIOXIDANTS ACTIVITY	191
Sanjana Kulkarni M.Suresh Tawseef Ahmad Sunil Kumar	GUAVA DISEASE DETECTION USING CONVOLUTIONAL NEURAL NETWORKS	192
Hacer ÇALIM Güliz KAYMAKCI	EXAMINATION OF SPACE KNOWLEDGE OF GIFTED SECOND GRADE STUDENTS	193
Andi Nurmasytha AS Amalina Nur Wahyuningtyas Kirana Dara Dinanti Adiputra	IDENTIFICATION OF SANITATION AND HYGIENE FACTORS IN CHICKEN MEAT SALES AT TRADITIONAL MARKETS	194
Imen Laadouze Noussaiha Salhi Ibtissem Khouja Emna Grami Ribab Hedhiri Kathleen Sullivan Sealey Neila Saidi	SOUTHERN MEDITERRANEAN SEA MICROBIAL POLLUTION AND EFFECT ON GROWTH AND BIOFILM ENDOGENS STREPTOCOCCUS AGALACTIAE	195
M.K.GANESHAN	IMPACT OF DIGITAL TRANSFORMATION ON WORKFORCE MANAGEMENT AND PRODUCTIVITY	197
Yavuzkan PAKSOY	COW BREEDING VALUE ESTIMATION	198
Kirana Dara Dinanti Adiputra Novemia Fatmarischa Andi Nurmasytha AS	INTACT PLASMA MEMBRANE AND SPERMATOZOA MOTILITY IN CRYOPRESERVED SEMEN OF BALI BULLS	199
ELESIN, Ganiy Olanrewaju ELESIN, Islamiat Folashade	GENTRIFICATION EFFECTS ON THE HISTORIC CITY CORE OF ABEOKUTA, NIGERIA	200
Dhanya S.R Rajani.V	DISTRIBUTION OF INVASIVE ALIEN PLANT SPECIES ALONG THE BANKS OF THE SASTHAMCOTTA LAKE (RAMSAR SITE) IN KOLLAM, KERALA	201
Hakima Lagrini Fouad Bentiss Charafeddine Jama Mohamed Bensitel Abdelaziz Sahibed-Dine	DEVELOPMENT OF HIERARCHICALLY POROUS TITANIUM OXIDE USING SODIUM ALGINATE AS A SACRIFICIAL TEMPLATE BY THE SOL-GEL METHOD	202
Saira Malik Syed Mohsan Raza Shah Uniza Fatima bukhari Tasawar Fatima bukhari Iqra	LEAF STRUCTURAL AND FUNCTIONAL MODIFICATION OF IPOMOEA CARNEA JACQ. AN INVASIVE PLANT SPECIES, UNDER DIVERSE SALINITY GRADIENT	203
ÇAĞIN BOLAT SİNAN MARAŞ	A NUMERICAL INVESTIGATION ON THE EFFECTS OF BEAM THICKNESS AND FILLING RATE ON BUCKLING BEHAVIOR OF 3D-PRINTED NYLON-6 POLYMERS	204
Vildan BAYRAM Mesut ÖZTIRAK	GREEN CAPABILITIES AND DIGITAL TRANSFORMATION: ACHIEVING COMPETITIVE ADVANTAGE WITH SUSTAINABLE TECHNOLOGIES	205
Farhana Naz	SUSTAINABLE ARCHITECTURE IN SOUTH ASIA: CHALLENGES AND OPPORTUNITIES IN ENERGY EFFICIENCY	206
Yusuf GENÇ Fatma Sude UZUN	PROBLEMS FACED BY WOMEN IN WORKING LIFE AND SOLUTION-ORIENTED SOCIAL POLICIES	208

Kavyn Vasyl	USING THE ELECTRONIC PLATFORM "FORMS" TO MONITOR THE ACQUIRED KNOWLEDGE OF THE DISCIPLINE "CLINICAL ANATOMY AND OPERATIVE SURGERY" AMONG STUDENTS OF THE FIFTH YEAR OF THE "MEDICINE" SPECIALTY	209
Khudaibergen Meruyert	LABOUR MARKET MANAGEMENT IN KAZAKHSTAN IN THE CONDITIONS OF CRISIS	210
Adem SOYCAN Doğanhan Kadir ER Devrim DÜNDAR	BACTERIAL PATHOGENS IN VARIOUS RAW FOOD PRODUCTS IN KOCAELI PROVIENCE	211
Hüseyin ALPTEKİN Arif ÜÇER Mustafa ÇETİN Hatice KARAYILAN	INVESTIGATION OF THE EFFECT OF NANOPARTICLES ON MATERIAL STRENGTH IN COMPOSITE MATERIALS	212
Hasan Hüseyin UĞURLU	POLAR U – AND Z – CURVES IN THE LORENTZ-MINKOWSKI PLANE R_1^2 - II	213
Zübeyde ÇELİK Süleyman GÖKSOY	RELATIONSHIP BETWEEN TRANSFORMATIONAL LEADERSHIP ROLES OF SCHOOL PRINCIPALS AND ORGANIZATIONAL HAPPINESS OF TEACHERS (A theoretical evaluation)	214
Burcu CANDEMİR	DOES INSULIN PUMP THERAPY IMPROVE NON-ALCOHOLIC FATTY LIVER DISEASE IN PATIENTS WITH TYPE 1 DIABETES MELLITUS?	215
Kenan ORÇANLI Beyza KADIOĞLU İrem İLÇİN Sude AKSOY Beyza BASKIN	AIR POLLUTION PREDICTION AND PERFORMANCE EVALUATION WITH ARTIFICIAL NEURAL NETWORK ALGORITHM	218
Doğan DEMİRER Süleyman GÖKSOY	THE RELATIONSHIP BETWEEN TEACHERS' PERSONALITY TRAITS AND EMOTIONAL LABOR BEHAVIORS	220
Tayfun Utaş Tarik Ocak Ferda Zaman Kaya	HEALTCARE EMERGENCY DEPARTMENT SUCCESS FACTORS EVALUATION WITH DEMATEL METHOD	221
Tayfun Utaş Ferda Zaman Kaya	RELIABILITY CENTERED MAINTENANCE (RCM) IN HEALTCARE	222
Ayhan AKSAKALLI	IN THE GRIP OF RATIONALITY: THE INVISIBLE STRUCTURAL CORRUPTION OF SOCIAL JUSTICE	223
Yavuzkan PAKSOY	THE BENEFICIAL EFFECTS OF MASSAGE TECHNIQUES ON DOG BREEDING	224
Zeynep ERSAY ÖNAL Ayşe ÇİÇEK KORKMAZ	SYSTEMATIC REVIEW OF POSTGRADUATE THESES ON GENERATIONAL DIFFERENCES IN NURSING	225
Samia BABA HAMED Amel BERREBBAH ALIOUA	ANALYSIS AND PURIFICATION OF LAMINARIN EXTRACTED FROM LAMINARIA: METHODS AND APPLICATIONS	226
Asiye BAKİ CEYLAN Arzu DEVECİ TOPAL	TRENDS IN LEARNING ANALYSES RESEARCHES	227
Leyla KURGAN Barış EREN Adnan AYDIN	EPIGENETIC RESPONSE TO HIGH AND LOW TEMPERATURE STRESSES IN PLANTS	228
O. A. Odebiyi J. K. Oladejo	MATHEMATICAL MODELLING AND SENSITIVITY ANALYSIS OF HIV/AIDS TRANSMISSION AMONG HIGH-RISK PRISONERS	229

Alabi, Folaranmi Oluwole Odu Adejare Samuel	MEDIA LITERACY, POPULAR CULTURE AND NATIONAL DEVELOPMENT: AN EXPLORATION OF INTERSECTION	230
Volodymyr MESHCHERIAKOV Maria KALINICHENKO	GLOBAL LOGISTICS FACILITIES OF WORLD MARKETS	231
Mohanapriya. P Chamundeeswari. M	ECOTOXIC EFFECT OF ACTIVE COMPOUNDS FROM BIODEGRADATION OF PLASTIC FILMS WITH SOIL MICROORGANISM	232
Aloui Mourad Fahsi Karim Menana Elhalaoui	DESIGN AND EVALUATION OF SELECTIVE SURVIVIN INHIBITORS: A STUDY BASED ON MX-106	233
Muhammed Akif HAŞLAK Ömür AKDEMİR	AI-BASED HEALTH APPLICATION USED IN TÜRKİYE: USABILITY ANALYSIS	234
Muhammet AYDIN Halil İbrahim Demir	MINIMIZING TOTAL SETUP TIME USING THE TABU SEARCH ALGORITHM IN BOTTLENECK MACHINES	235
Ali İhsan KILIÇ Mustafa DESTİCİOĞLU	THE DIRECT REACTION INVESTIGATION OF $^{27}Al(d, p)^{28}Al$ TRANSFER REACTION	236
Basim A. Almayahi Baneen Abdulkadhim Kamel	ADVANCING CANCER TREATMENT WITH NUCLEAR NANOMEDICINE AND NANOPARTICLES	237
Simona Luminita NICA Constantin GAINA	MECHANICAL AND ABSORPTION PROPERTIES OF COMPOSITES BASED ON MODIFIED POLYSULFONE REINFORCED WITH CARBON NANOTUBES	238
Nurcan BERBER	SYNTHESIS OF THIOUREA AND THIAZOLE STRUCTURED COMPOUNDS CONTAINING SULFAMETHAZINE	239
Ahmed Tijjani Dikko Abdulmalik Sabitu Sukola Ibrahim Tambaya	TEACHING CELLULAR RESPIRATION: IMPACT OF GROUP-INVESTIGATIVE AND HEURISTIC-DISCOVERY STRATEGIES ON STUDENTS' RETENTION IN KATSINA STATE, NIGERIA	240
NilanjanaBhunia SushovanKhatua	OPTIMIZATION OF LAST-MILE DELIVERY IN E-COMMERCE	241
Orhan YILDIRIM Ahmet USANMAZ	A SOCIOLOGICAL EVALUATION ON İZMİR GÜNDOĞDU SQUARE	242
Berat ŞAHİN GÜL Nurbige TURAN ZABUN	CO-COBALANSING NUMBERS AND DIOPHANTINE EQUATIONS	243
Ali Can YILMAZ Özlem ERDEM	IMPACT OF SUGARCANE BAGASSE ASH INCORPORATION IN BRAKE PAD MATRIX ON THE COEFFICIENT OF FRICTION	244
Ali Can YILMAZ Özlem ERDEM	THE EFFECT OF DIFFERENT FUELS ON HEAT TRANSFER FROM THE COMBUSTION CHAMBER OF A SPARK-IGNITION ENGINE	245
Selin Muzak Şule Turhan	EVALUATION OF SUSTAINABLE AGRICULTURE in TÜRKİYE	246
Selin Muzak Şule Turhan	THE ROLE of WOMEN'S COOPERATIVES in AGRICULTURE	247
Nazan ÇAĞLAR Şakir Selçuk SEÇİLMİŞ Mehmet ÇAĞLAR	DEVELOPMENT OF SOFT CANDY FORMULATIONS ENRICHED WITH FUNCTIONAL INGREDIENTS AND COMPARISON WITH MARKET PRODUCTS	248
Özgür Devrim ABLAY	NEW TREND IN THE BEVERAGE INDUSTRY: FUNCTIONAL DRINKS	249
Özlem DİKTAŞ Hasan KILIÇ Davut UZUN	INVESTIGATION OF THE SPECIFIC CAPACITANCE OF ZNO ELECTRODE PRODUCED BY HYDROTHERMAL METHOD	250

ChayarajuBalaSai Nadagouda Kalyani K.Tharani	ANALYSIS OF ADMIXTURES FOR CONCRETE	251
Yekta MOGUL Yasemin ZER Ayşe BÜYÜKTAŞ MANAY Zehra PADAK Lütfullah VURAL	MONITORING CHANGES IN PATHOGENS AND ANTIBIOTIC RESISTANCE RATES IN PEDIATRIC URINARY TRACT INFECTIONS	252
Büşra EROL Osman Vahid MERCAN Batuhan GÖÇEN Ümit ÜNVER	THE ROLE OF WINDOW/WALL RATIO IN BUILDING ENERGY EFFICIENCY	254
Pınar İLGEN Ahmet BUĞA	AN INVESTIGATION OF SELF COMPASSION AND COGNITIVE DEFUSION AS PREDICTORS OF INTERPERSONAL RELATIONSHIP STYLES	255
Zineb MOUJOUD Abdeslam El BOUARI Omar TANANE	POTENTIALITY OF USING NATURAL FIBERS IN ECO-FRIENDLY GEOPOLYMER COMPOSITES	256
Kerimu Ikazuwagbe Joel Olufunmilola Leah Dominic Theresa Nfam Odeigah Omolola Justinah Awosika Oluwatosin Adejare Sangodeyi	PRAYING FOR VICTORY AND FAVOUR: THE NARRATIVE OF YOUNG ATHLETES IN NIGERIA	257
Abubakar Sani Abdulbasid Muhammad Anas	PHYTOCHEMICAL ANALYSIS AND ANTIBACTERIAL ACTIVITY OF AZADIRACHTA INDICA LEAVES AND STEM BARK EXTRACTS	258
Farida Haddou rahou Youssef aboussaleh Samiha imrani	PUBLIC POLICIES AND GLOBAL INITIATIVES FOR ENHANCED ROAD SAFETY CASE STUDY OF MOROCCO	259
Melik Sami Khelil Sara Tallal Abdel Karim Bouzir	PUBLIC SQUARES AND CULTURAL IDENTITY: ARCHITECTURAL REFLECTIONS THROUGH TIME	260
Nimota Jibola Kadir Abdullahi	REINVENTING LEADERSHIP FOR HIGHER EDUCATION SUSTAINABLE DEVELOPMENT IN NIGERIA	261
Sana Omari Reyhane Taheri Gloria Manyeruke	THE SNOWBALL EFFECT OF POSITIVE LIVING: FOCUS ON EXERCISE, HEALTHY EATING, PROSOCIAL BEHAVIOR AND RESOURCES OF GRIT	262
Semir TURUŞKAN Filiz ÜNAL	IDENTIFICATION OF FUSARIUM SPECIES IN MAIZE PRODUCTION AREAS OF ESKIŞEHIR PROVINCE AND DETERMINATION OF THE EFFECTS OF SOME SOIL HERBICIDES ON FUSARIUM UNDER IN VITRO CONDITIONS	263
Hafize Sevde AKKARPUZ Derya ALTAY Başar KARACA Murat KOÇ Aslı CAN AĞCA	DETERMINATION OF TOTAL PHENOLIC AND FLAVONOID CONTENT AND ANTIOXIDANT, ANTIMICROBIAL AND ANTIBIOFILM ACTIVITIES OF STACHYS CRETICA SUBSP. CRETICA	264
Sabrina ROGUAI Abdelghani Lakel Abdelkader DJELLOUL	COPPER-DOPED ZINC OXIDE THIN FILMS FOR ENHANCED PHOTOVOTAIC PERFORMANC	266
Sana Zainab Khawar Naheed	ENTREPRENEURIAL JOURNEY FROM COMPETENCIES TO INTENTIONS: DOES PASSION HAS ANYTHING TO SAY?	267

Sani Abdullahi Mohammed Hamza Abdullahi Sani Sale Yakubu Umar Alhassan Umar Aminu Baffa Ibrahim	PERFORMANCE EVALUATION OF A BASIC THREE-PHASE INDUCTION MOTOR STARTING METHODS	268
Nazmiye SONAR	RELATIONSHIP BETWEEN BUYING POWER AND BRANDING IN MARKETING	269
Abubakar Sani Saifullahi Rilwanu	SCREENING OF LEAVES AND STEM BARK OF GUIERA SENEGLENSIS FOR ANTIBACTERIAL ACTIVITY	270
Seda BEKIN ACAR	INVESTIGATION OF THERMAL PROPERTIES OF CELLULOSE BASED THERMOSET COMPOSITES	271
Mekki Amel Hammou Mohamed Boukoussa Bouhadar Marisol Grande-Casas Enrique Sastre Carlos Marquez-Alvarez Manuel Sanchez-Sanchez Joaquín P´erez-Pariente	THE USE OF OMEGA HIERARCHICAL ZEOLITE IN THE CONVERSION OF M-XYLENE	272
Semih KORKMAZ	ANALYSIS OF TUNABLE BAND-STOP FILTERS USING SILVER-AIR-SILVER WAVEGUIDE AND TRIANGLE-RECTANGLE RESONATOR COUPLE	274
Şevval Nur KANYAR Adnan AYDIN	DETERMINATION OF THE EXPRESSION LEVELS OF GENES IN THE MELATONIN PATHWAY IN SALT SENSITIVE AND TOLERANT WHEAT CULTIVARS	275
Monisha Sharma	MAPPING THE WAY TO CODE: AN AUTOETHNOGRAPHIC EXPLORATION OF VISUAL TOOLS IN K-12 ONLINE CODING EDUCATION	276
Sima ÖKTE Kadir Arslanboğa İlker Karaönder	EXORBITANT FRAUD IN THE OTTOMAN EMPIRE: LEGAL AND SOCIAL IMPACTS (THE CASE OF ISTANBUL)	277
Nurcan Yılmaz	EXAMINING THE CONTRIBUTION OF LITERATURE USE IN CLASSROOM APPLICATIONS TO STUDENTS' EFFECTIVE LEARNING WITH SWOT ANALYSIS	278
Batuhan GÖÇEN Berke GÜLER Mücahit BARUĞ Ümit ÜNVER	BREWING AND CONSUMPTION ANALYSIS OF BLACK TEA	278
Ogwumu, Onah David Yavalah Deborah W.	AN ECONOMICAL MODELLING ANALYSIS OF THE IMPACT OF SLEEP DISORDER ON NIGERIAN'S WORKFORCE AND PRODUCTIVITY	281
İsmail Yıldırım	THE EFFECT OF COLOUR TEMPERATURES OF LEDS USED IN REFRIGERATED DISPLAY CABINETS ON PRODUCT STORAGE TEMPERATURES	282
Sakineh Sojoodi Elmira Azizi Norouzabadi	EXAMINING THE ROLE OF GOVERNMENT IN INTERNATIONAL COMPETITIVENESS WITH A FOCUS ON PORTER'S DIAMOND MODEL	283
Annah Siminle Amos Simon Olonkwoh Salihu Idris Suleiman	SPECIATION OF ARSENIC FROM FISH POND SEDIMENTS FROM TALBA FARM, MINNA METROPOLIS	284

Kerimu Ikazuwagbe Joel Omolola Justinah Awosika	SPORTS BETTING PROBLEMS AMONG UNIVERSITY STUDENTS ATHLETE	285
Subhashish Dey	STABILIZATION OF SOIL BY USING GEOGRIDS	286
Mehmet AKARÇAY	FACTORS AFFECTING THE NON-PERFORMING LOAN RATE: THE EXAMPLE OF THE TURKISH BANKING SECTOR	287
Namık Saçlı	DISASTER DIPLOMACY BETWEEN THE OTTOMAN EMPIRE, RUSSIA, AND THE UNITED STATES: THE SINKING OF THE CHIKHACHEV IN JAFFA (1891)	288
Çağla KARADAŞ	THE EFFECT OF PHYSICAL THERAPY APPLICATIONS ON EPISODIC AND CHRONIC TENSION-TYPE HEADACHE	289
Satish Kumar Singh Pallavi Lakhera	THE FUTURE OF ANIMAL RIGHTS IN INTERNATIONAL LAW: EVOLVING TREATIES, CONVENTIONS, AND THE DEVELOPMENT OF GLOBAL STANDARDS	290
Ana-Lucia Blendea Alin Ciobica Ioan Gotca Lacramioara Atudorei	THE INFLUENCE OF MICRONUTRIENTS ON NEUROTRANSMITTERS, OXIDATIVE STRESS, AND NEURONAL PLASTICITY	291
ARSHA G KARIBASAPPA CS MEENA N	THE ROLE OF RHIZOSPHERE MICROBIOMES IN DISEASE SUPPRESSION	292
Melik Sami Khelil Sara Tallal Abdel Karim Bouzir	TIMELESS ELEGANCE IN DESIGN: BALANCING TRADITION AND MODERNITY IN LUXURY ESTATES	293
Satish Kumar Singh Sachin Singh Parihar Sadanand Patel Kumkum Sharma	INTERNATIONAL COOPERATION AND LEGAL FRAMEWORKS IN COMBATING CYBER CRIMES TARGETING WOMEN: A COMPARATIVE ANALYSIS OF GLOBAL APPROACHES	294
Zeynep ERSAY ÖNAL Ayşe ÇİÇEK KORKMAZ	IS TOXIC LEADERSHIP INEVITABLE? A STUDY ON THE EFFECT OF TOXIC LEADERSHIP BEHAVIORS FOR HEALTH CARE ORGANIZATIONS AND NURSES	295
Tolga ALTAN	EFFECT OF GLASS-CERAMIC SEALANT THICKNESS ON SHEAR STRENGTH IN SOLID OXIDE FUEL CELLS	296
Tulca BÜYÜKPATIR TÜRK	USE OF ORTHODONTIC RECORDS WITH ARTIFICIAL INTELLIGENCE SUPPORT	297
Awopetu Emmanuel Olajide	EFFECTS OF PODCAST, VIDEOCAST AND MULTIMEDIA INSTRUCTIONAL PACKAGES ON STUDENTS' PROFICIENY SKILLS IN ENGLSH LANGUAGE	298
Oyetola Oyeniran Babajide Issac OJo	ASSESSMENT OF LECTURERS' INTERNET SKILLS AS CORRELATE OF ACCEPTANCE OF E-LEARNING IN COLLEGES OF EDUCATION IN OSUN STATE, NIGERIA	299
Azizian.saeed	THE IMPACT OF URBAN REGENERATION ON THE CUSTOMS AND CULTURE OF THE RESIDENTS OF THE REGION	300
Betül KAPLAN ZAMANOV	HIDDEN DEADLY DANGER IN THE SWIMMING POOL	301
Sinem GUZEL OZTURK	CAN THE USE OF BRAIN CT BE REDUCED IN PEDIATRIC HEAD TRAUMAS?	303
Hamit GIŞ Arzu DEVECİ TOPAL	INSTRUCTIONAL TECHNOLOGIES USED in VISUAL ARTS EDUCATION	304

Jebasingh Jeremiah Rajesh Jesudoss Hynes	HYDROTHERAPY-INSPIRED ALARM CLOCKS: A NOVEL APPROACH TO WAKING UP NATURALLY	305
Yasemin DUMANLI GÜRLER	EVALUATION OF THE RELATIONSHIP BETWEEN THE HIGHER EDUCATION SYSTEM AND THE LABOR MARKET IN THE CONTEXT OF SKILLS SHORTAGE IN TURKEY	306
Zeynep HASANOĞLU Mutlu ŞAHİN	THE EFFECT OF USING ALGODOO IN SCIENCE EDUCATION ON THE	308
Nuray YÜZBAŞIOĞLU	CRYPTOCURRENCY AND STOCK MARKETS: RELATIONSHIPS IN TIME AND FREQUENCY DOMAINS	309

SUSTAINABLE APPROACH TO MANGANESE OXIDE NANOPARTICLES: SYNTHESIS, CHARACTERIZATION AND APPLICATIONS WITH CORN HUSK

V S Angulakshmi

Department of Chemistry, P.S.G.R. Krishnammal College for Women, Peelamedu, Coimbatore – 641004, Tamil Nadu, India.

N Anusuya

Department of Chemistry, P.S.G.R. Krishnammal College for Women, Peelamedu, Coimbatore – 641004, Tamil Nadu, India.

M Priyadharshini

Department of Chemistry, P.S.G.R. Krishnammal College for Women, Peelamedu, Coimbatore – 641004, Tamil Nadu, India.

S Kalaiselvan

Associate Professor, Department of Chemistry, Rathinam Technical Campus, Coimbatore, India

ABSTRACT

The present study focuses on the eco-friendly synthesis of manganese oxide (MnO) nanoparticles utilizing corn husk as a renewable and sustainable bio-resource. Manganese chloride served as the metal precursor, and its reduction in the presence of corn husk extract led to the formation of well - defined MnO nanoparticles. The synthesized nanoparticles were characterized for their optical and morphological properties using UV-visible spectroscopy, Fourier transform infrared (FTIR) spectroscopy and Scanning electron microscopy (SEM). X-ray diffraction (XRD) analysis confirmed the crystalline structure of the nanoparticles, with particle sizes ranging from 40 nm to 80 nm. The antibacterial potential of the MnO nanoparticles was evaluated using the well-diffusion method against both Gram-positive Staphylococcus aureus and Gram-negative Escherichia coli bacterial strains.

Keywords: MnO nanoparticles, corn husk, antibacterial activity

RESOLVING SECTOR SELECTION CHALLENGES IN EXPORT PERFORMANCE RESEARCH THROUGH MULTI-CRITERIA DECISION-MAKING METHODS

Hilal MEMİŞ KAMACI
Samsun University, Faculty of Political Sciences, Department of International Trade and Business, Samsun, Turkey
ORCID ID: https://orcid.org/0000-0003-0567-1404

Mustafa Kemal YILMAZ
Samsun University, Faculty of Political Sciences, Department of International Trade and Business, Samsun, Turkey
ORCID ID: https://orcid.org/0000-0002-6906-5414

ABSTRACT

Introduction and Purpose: The primary objective of this study is to provide a systematic approach to select sectors for academic research that investigate the factors influencing export performance. Since the determinants of export performance can differ across sectors, choosing the appropriate sector is essential for the success of this research. Consequently, this study utilizes Multi-Criteria Decision-Making (MCDM) methods to ensure that the sector selection process is both objective and systematic, ultimately leading to accurate sampling.

Materials and Methods: The data utilized in this study were collected through two-stage semi-structured interviews with academicians and professionals specialized in international trade. In the first stage, the criteria essential for the sector selection process were identified. These criteria facilitated a systematic analysis of the factors critical to export performance research. To ascertain the relative importance of each criterion, the Analytical Hierarchy Process (AHP) was employed, and the weights for each criterion were calculated using this method. In the second stage, sectors were ranked based on their proximity to the ideal solution using the Technique for Order Preference by Similarity to Ideal Solution (TOPSIS). This approach enabled the evaluation and ranking of alternative sectors according to various criteria.

Results: The analysis revealed that the textile, dried fruit, and machinery sectors have the highest potential for export performance research, based on evaluations across eight criteria. Conversely, sectors such as leather, fisheries, and ornamental plants were ranked as having lower significance. These findings were derived from a combination of expert opinions and mathematical models.

Discussion and Conclusion: This study, which evaluated 19 different sectors with input from six experts, offers valuable insights that enhance the sector selection process in export performance research. The findings indicate that the top ten ranked sectors represent over 73% of Turkey's total exports. This serves as a significant reference point for future empirical studies, especially for researchers seeking to investigate multiple sectors using stratified sampling strategies.

Key Words: Export Performance; Export Sector Selection; MCDM; AHP; TOPSIS

PREDICTING THE THREE-POINT BENDING BEHAVIOR OF 3D-PRINTED ACRYLONITRILE STYRENE ACRYLATE AMORPHOUS THERMOPLASTIC: A NUMERICAL STUDY

Mehmet Akif DÜNDAR

Yozgat Bozok University, Faculty of Engineering and Architecture, Department of Mechanical Engineering, Yozgat, Turkey

ORCID ID: https://orcid.org/0000-0001-5463-6774

Osman ÖZENÇ

Yozgat Bozok University, Faculty of Engineering and Architecture, Department of Mechanical Engineering, Yozgat, Turkey

ORCID ID: https://orcid.org/0000-0003-3455-9411

ABSTRACT

Introduction and Purpose: Accurately predicting the response of industrially relevant amorphous polymers, such as Acrylonitrile-Styrene-Acrylate (ASA), under multiaxial loading conditions, such as three-point bending, presents significant challenges due to their distinct yielding behaviors under tension and compression. For satisfactory predictions, the material model employed in finite element analysis must adequately capture these varied behaviors. However, most existing models are complex and necessitate the identification of numerous parameters. Consequently, the objective of this study was to accurately estimate the three-point bending response of ASA with a relatively simple linear Drucker-Prager material model and to propose a clear and systematic approach for determining the model's parameters.

Materials and Methods: Tension, compression and three-point bending tests were conducted on ASA specimens fabricated via 3D printing. The plastic stress-strain data obtained from tension and compression tests at the same strain rate were utilized to determine the parameters of the linear Drucker-Prager material model, including the friction angle, dilation angle, and the yield stress ratio. Subsequently, three-point bending simulations were performed in the Abaqus finite element engineering software, incorporating these determined parameters along with plastic stress-strain data from the tensile tests to characterize the material's hardening behavior. For comparative analysis, the three-point bending simulations were also performed based on the von-Mises criterion, which disregards the distinct yielding behaviors of ASA under tension and compression.

Results: The simulation results underscored the necessity for material models employed in finite element analysis to account for the distinct material behaviors under compression and tension to accurately predict the three-point bending response of ASA. **Discussion and Conclusion:** This study revealed that the linear Drucker-Prager model accurately predicts ASA's three-point bending response with minor peak load overestimation, while the von Mises criterion significantly underestimates it, highlighting its limitations.

Key Words: Amorphous; Acrylonitrile-Styrene-Acrylate (ASA); Three-Point Bending; Linear Drucker-Prager; Finite Element Analysis.

THREE-DIMENSIONAL (3D) VISUALIZATION IN URBAN PLANNING: HISTORY, DEVELOPMENTS, AND IMPORTANCE

Ayşe AKBULUT BAŞAR

Niğde Ömer Halisdemir University, Architecture Faculty, City and Regional Planning Department, Niğde, Turkey

ORCID ID: https://orcid.org/0000-0002-6101-310X

ABSTRACT

Introduction and Purpose: Three-dimensional (3D) visualization simplifies interpreting complex spatial data and creating realistic representations of urban spaces, benefiting both experts and students. This study explores the historical development, evolution, and significance of 3D visualization in urban planning within a historical context.

Materials and Methods: The initial applications of 3D visualization emerged during the 1980s and 1990s, driven by advancements in Computer-Aided Design (CAD) technologies. Early studies integrated spatial analysis and urban modeling. The early 2000s marked the digital mapping and modeling period, characterized by the widespread adoption of Geographic Information Systems (GIS) and 3D modeling software in professional and educational planning contexts. This period highlighted the role of 3D visualization in decision-making and participatory processes. In the 2010s, participatory and interactive approaches gained prominence, with simulations and digital twins easing public engagement. Post-2020, artificial intelligence (AI), augmented reality (AR), and virtual reality (VR) enhanced 3D visualization, making it more interactive and accessible.

Results: The contributions of 3D visualization to urban planning include improved spatial perception, participatory learning, and real-time testing of scenarios. Challenges span technical infrastructure deficiencies, limited educator expertise, varying student technological competencies, financial constraints, and cultural barriers.

Discussion and Conclusion: The future of urban planning depends on effectively integrating digital technologies. This process involves using technological tools and adapting them to planning processes. In Turkey, investments by public institutions, universities, and organizations highlight promising advancements in 3D visualization and modeling technologies. However, increased public-private sector collaboration, capacity-building programs for educators, and financial support mechanisms remain critical to meeting international standards and maintaining competitiveness.

Key Words: Urban Planning; 3D Visualization; Innovation.

ASSESSMENT OF THE IMPACT OF RADIO BROADCASTING ON RURAL DEVELOPMENT IN FAGGE LOCAL GOVERNMET KANO STATE

Musa, A.A.

Department of Mass Communication, Federal Polytechnic Damaturu, Yobe State.

Ibrahim, H.

Department of Mass Communication, Bayero University, Kano.

Bashir, A.B.

Department of Mass Communication, Federal Polytechnic Damaturu, Yobe State.

Hussaini, H.A.

Department of Mass Communication, Federal Polytechnic Damaturu, Yobe State.

Garba, A.

Department of Mass Communication, Federal Polytechnic Damaturu, Yobe State.

Mohammed, BG.Manga

Department of Mass Communication, Federal Polytechnic Damaturu, Yobe State.

Abstract

This study assesses the impact of radio broadcasting on rural development in Fagge Local Government Area, Kano State, focusing on its role in disseminating information, enhancing community awareness, and driving socio-economic progress. Using a mixed-methods approach, data were collected from 250 respondents, including farmers, traders, and local leaders, through structured questionnaires and interviews. The findings reveal that 74% of respondents rely on radio as their primary source of information for agricultural practices, health awareness, and educational programs. Radio programs significantly contributed to improved farming techniques, with 62% of respondents reporting higher productivity due to the adoption of broadcasted recommendations. Additionally, health campaigns on maternal care and hygiene reached 81% of households, leading to increased health awareness. However, challenges such as limited access to electricity and language barriers were identified, restricting the full potential of radio broadcasting in certain areas. The study concludes that radio broadcasting plays a pivotal role in fostering rural development in Fagge LGA by bridging information gaps and promoting socio-economic activities.

Keywords: Radio Broadcasting, Rural Development, Community Awareness, Socio-Economic Progress, Fagge LGA

INFLUENCE OF SOCIAL MEDIA ON VOTING BEHAVIOR IN FAGGE LOCAL GOVERNMENT AREA, KANO STATE

Musa, A.A.

Department of Mass Communication, Federal Polytechnic Damaturu, Yobe State.

Ibrahim, H.

Department of Mass Communication, Bayero University, Kano.

Bashir, A.B.

Department of Mass Communication, Federal Polytechnic Damaturu, Yobe State.

Hussaini, H.A.

Department of Mass Communication, Federal Polytechnic Damaturu, Yobe State.

Garba, A.

Department of Mass Communication, Federal Polytechnic Damaturu, Yobe State.

Mohammed, BG.Manga

Department of Mass Communication, Federal Polytechnic Damaturu, Yobe State.

Abstract

This study examines the influence of social media on voting behavior in Fagge Local Government Area (LGA), Kano State, exploring its role in shaping electoral choices and political engagement. A mixed-methods approach was employed, gathering data from 300 respondents through structured surveys and focus group discussions. The findings reveal that social media platforms, especially Facebook, WhatsApp, and Twitter, are crucial in disseminating political information, shaping public opinion, and influencing voting patterns. Results show that 68% of respondents rely on social media for political news, with 60% reporting that online political campaigns significantly impacted their voting preferences. However, the proliferation of misinformation emerged as a notable issue, with 47% of respondents struggling to verify the authenticity of online political content. The study concludes that while social media plays a significant role in influencing voting behavior in Fagge LGA, its impact varies based on demographic factors such as age, education, and access to credible sources of information.

Keywords: Social Media, Voting Behavior, Electoral Influence, Misinformation, Fagge LGA

SYNTHESIS, IN SILICO MOLECULAR MODELING AND IN VITRO PHARMACOLOGICAL EVALUATIONS OF BIPHENYL-4-CARBOXAMIDE DERIVATIVES

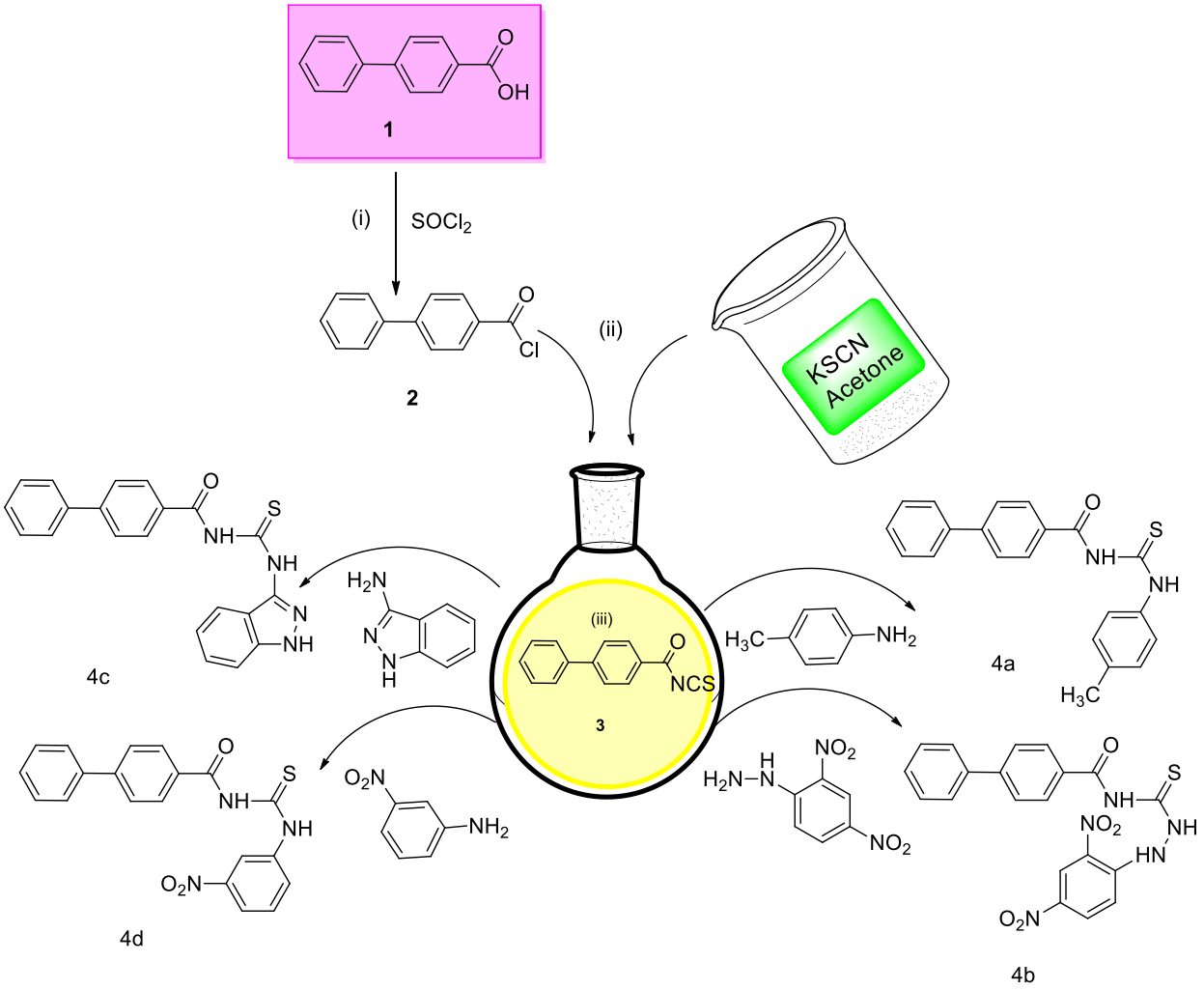
Rehana Riaz

Saima Bibi

Muhammad Zubair

Department of Chemistry, Government College University Faisalabad, Faisalabad 38000, Pakistan

We have synthesized library of biphenyl-4-carboxamide derivatives via one-pot strategy. The synthesized molecules were pharmacologically tested for their anticancer, antimicrobial activities and inhibition potential against acetylcholinesterase (AChE), butyrylcholinesterase (BChE) and urease enzymes. Molecular docking studies were performed against AChE, BChE and urease to further investigate the inhibition mechanism of the synthesized compounds. Compound 4a (at conc. 100 μg/mL) was found to be most active against human liver cancer cell lines (Hep2) (cell viability = 29.33%). Compound 4b demonstrated potent inhibitory activity against AChE (% inhibition 84.36) at 0.5 mM concentration and urease (% inhibition 31.42) enzymes at 0.25 mM concentration while 4c showed good activity against BChE (% inhibition 52.19) at 0.5 mM concentration. Synthesized molecules showed potent antibacterial and antifungal activities. To rationalize the observed pharmacological activities, we performed docking studies against AChE, BChE and enzymes. Compounds 4d, 4c and 4a showed high binding affinity with AChE, BChE and urease, respectively, with lowest bonding energies values (− 12.4, − 11.5 and − 8.9), respectively, so molecular docking study showed that all the synthesized compounds have good binding capability targeted to AChE, BChE and urease enzymes. Pharmaceutical activities and molecular docking studies suggest that synthesized compounds may play a great role as pharmaceutical agents.


1
(i) SOCl2
2
(ii)
KSCN
Acetone
(iii)
3
4c
4a
4d
4b

DECODING THE STRUCTURAL IMPORTANCE OF L-ASCORBIC ACID IN MITIGATING PLANT STRESS

Rahul Kumar Mishra

Dheeraj Rathore

School of Environment and Sustainable Development, Central University of Gujarat, Gandhinagar-382030, (Gujarat), India

ABSTRACT

Ascorbic acid (AsA) plays a key role in plant functioning, especially in mitigating plant stress (both biotic and abiotic). Because of the structural flexibility and stereochemistry of AsA, it exists in four isomers: L-AsA, D-AsA, L-isoAsA and D-isoAsA. Among these, L-AsA is the most biologically active and abundant form. A comprehensive study regarding dominance of L-AsA across other isomers of AsA is lacking. The study explored possibilities behind the superiority of L-AsA over other isomers and also discussed how the lactone ring acts under high heat stress. In L-AsA, the enediol groups at positions C2 and C3 has two hydroxyl groups next to a double bond. This arrangement is perfect for donating electrons and ensures high compatibility with plant enzymes. The enzyme L-galactono-1,4-lactone dehydrogenases which plays a crucial role in the Smirnoff-Wheeler pathway is highly stereospecific and favours the production of L-AsA. The other isomers cannot participate efficiently in enzymatic reactions due to their incompatible stereo-configuration. Monodehydroascorbate and Dehydroascorbic acid (oxidized form of L-AsA) serve as an antioxidant reserve as they can be enzymatically reduced back to L-AsA. Other isomers cannot interconvert with monodehydroascorbate and dehydroascorbic acid. Hence, other isomers are generated in very little amounts and have minimal biological activity. The conjugated double bonds of the cyclic lactone ring distribute the thermal stress and reduce strain. The intermolecular H-bonding among the hydroxyl group absorbs the heat and keeps the molecule stable and protects the cyclic ring from breaking down under moderate stress. Therefore, through stereospecificity and structural compatibility, L-AsA surpasses other isomers in mitigating plant stress.

Keywords: ascorbic acid, isomers, structure, plant stress

ENHANCED ADSORPTION OF ANIONIC DYES USING MODIFIED MOROCCAN GHASSOUL CLAY: A SUSTAINABLE APPROACH FOR WATER TREATMENT

Dr. Abdelfattah EL MAHBOUBY

Faculty of Sciences Aïn Chock, Hassan II University of Casablanca, Morocco

ORCID ID: https://orcid.org/0000-0002-4223-4257

Prof. Dr. Sanaa MAJID

Faculty of Sciences Aïn Chock, Hassan II University of Casablanca, Morocco

Abstract

Water pollution caused by anionic dyes in liquid effluents is a major issue due to their low biodegradability, posing significant risks to the environment and human health. While adsorption is an effective and economical technique for addressing these pollutants, the high cost and difficulty of regenerating activated carbon have prompted the exploration of natural alternatives. Among these, organophilic clays stand out for their ability to adsorb organic compounds, offering a promising solution for treating textile effluents.

Moroccan Ghassoul clay, already recognized for its effectiveness in adsorbing cationic dyes and heavy metals, has not yet been studied for anionic dyes due to repulsive forces. This study aims to overcome this limitation by modifying Ghassoul with the cationic surfactant N-methyl-N,N,N-trioctylammonium to enhance the adsorption of anionic dyes RB19 and RB69. It includes a detailed characterization of the composite, an analysis of adsorption parameters (pH, adsorbent dosage, initial dye concentration, contact time, and temperature), as well as studies on adsorption isotherms, kinetics, thermodynamics, and methods for regeneration and reuse.

Keywords: Water Pollution, Anionic Dyes,Adsorption, Organophilic Clays, Ghassoul Clay .

EFFECTS OF DIFFERENT SOWING DENSITY AND NITROGEN DOSE APPLICATIONS ON SOME QUALITY CHARACTERISTICS OF SWITCHED WHEAT (Triticum turgidum var. Mirabile)

Murat AKDAĞOĞLU

Tekirdağ Büyükşehir Belediyesi, Tarımsal Hizmetler Başkanlığı Süleymanpaşa

ORCID ID: 0000-0001-6437-5029

İsmet BAŞER

Prof. Dr., Tekirdağ Namık Kemal Üniversitesi, Ziraat Fakültesi, Tarla Bitkileri Bölümü,

ORCID ID: 0000-0002-5770-0118

ABSTRACT

Introduction and Purpose: In recent years, due to the increasing impact of global climate change and increasing awareness among consumers, the demand for local wheat has increased. However, studies on the planting rate and nitrogen dose to be applied for local wheats such as switchgrass are quite few. The aim of the study is to determine the most appropriate planting rate and nitrogen dose for some quality traits of switchgrass at different planting rates and nitrogen doses.

Meterial and Method: The study was carried out in Tekirdağ ecological conditions in 2023 and 2024 with 4 different planting densities (400, 450, 500 and 550 seed m2) and 10, 15, 20 kg/da pure nitrogen application according to the split plots experimental design with 3 replications. 25 kg/da 20.20.0 fertilizer was applied to all plots together with planting.

Results: The highest wet gluten value was 42.24% in the amount of 500 seeds/m², while when the effect of different nitrogen doses on wet gluten content was examined, the highest wet gluten was obtained with 39.87% in the amount of 10 kg/da pure nitrogen dose. The highest gluten index value was 78.55% in the amount of 550 seeds/m², while when the effect of different nitrogen doses on gluten index content was examined, the highest gluten index was obtained with 70.79% in the amount of 10 kg/da pure nitrogen dose. The highest protein value was 14.91% in the application of 450 seeds/m², and when the effect of different nitrogen doses on protein value was examined, the highest protein value was 14.98% in the dose of 20 kg/da pure nitrogen. It has been determined that the highest wet gluten content was obtained with high planting frequency and the lowest nitrogen application, that high planting frequency increased the competition between plants and this situation positively affected the gluten content. It has been determined that high planting density has a positive effect on gluten index, while low planting density has a negative effect on gluten quality by reducing competition between plants. It has been determined that nitrogen increases gluten quality up to a certain level, but excessive nitrogen application causes imbalances in plant metabolism and negatively affects gluten index. Protein content is affected by agricultural practices as well as genetic factors. It has been determined that agricultural practices such as nitrogen fertilization and planting density directly affect the protein content of wheat.

Keywords: Triticum turgidum var. Mirabile, Sowing Rate, Nitrogen Dose, Local Wheat, Protein, Gluten

EFFECTS OF DIFFERENT SOWING RATE AND NITROGEN DOSE APPLICATIONS ON SOME ABIOTIC STRESS FACTORS AND SEEDLING SCORE IN EINHOOD WHEAT (Triticum Monococcum L.)

Murat AKDAĞOĞLU

Tekirdağ Büyükşehir Belediyesi, Tarımsal Hizmetler Başkanlığı Süleymanpaşa

ORCID ID: 0000-0001-6437-5029

İsmet BAŞER

Prof. Dr., Tekirdağ Namık Kemal Üniversitesi, Ziraat Fakültesi, Tarla Bitkileri Bölümü,

ORCID ID: 0000-0002-5770-0118

ABSTRACT

Introduction and Purpose: Objective: In recent years, due to the increasing impact of global climate change and increasing awareness among consumers, the demand for local wheat has increased. However, studies on the planting rate and nitrogen dose to be applied for local wheats such as einkorn are quite few. The aim of the study is to determine the most appropriate planting rate and nitrogen dose in terms of chlorophyll content, vegetation temperature and seedling score characteristics of einkorn wheat at different planting rates and nitrogen doses.

Meterial and Method: The study was carried out using einkorn wheat supplied by the Field Crops Central Research Institute in 2023 and 2024. It was carried out in Tekirdağ ecological conditions with 4 different planting densities (400, 450, 500 and 550 seed m2) and 10, 15, 20 kg/da pure nitrogen application according to the split plots trial design with 3 replications. 25 kg/da 20.20.0 fertilizer was applied to all plots together with planting.

Result: The highest chlorophyll content was obtained with a SPAD value of 42.40 at the amount of 450 seeds/m², when the effect of different nitrogen doses on chlorophyll content was examined, the highest chlorophyll content was obtained with a SPAD value of 41.26 and 40.78 at 20 and 15 kg/da pure nitrogen doses. The highest vegetation temperature was obtained with a value of 23.83 Cº at the amount of 450 seeds/m², when the effect of different nitrogen doses on vegetation temperature was examined, the highest vegetation temperature was obtained with a value of 23.54 at the dose of 15 kg/da pure nitrogen. The highest seedling score was obtained with a value of 3.66 at the amount of 500 seeds/m², when the effect of different nitrogen doses on seedling score was examined, the highest seedling score was obtained with a value of 3.50 at the dose of 15 kg/da pure nitrogen. It was determined that the long structure of the einkorn wheat genotype caused a significant decrease in chlorophyll content, especially with the increase in the number of seeds per square meter. The lowest vegetation temperature was determined as 23.01 °C at the highest seed amount per square meter, 550 seeds/m² planting frequency. The lowest seedling score value was obtained with the 400 seeds/m² planting frequency and the lowest nitrogen dose, 10 kg/da nitrogen application. This finding reveals that low planting frequency and insufficient nitrogen application negatively affect seedling development.

Keywords: Triticum monococcum L., Sowing Rate, Nitrogen Dose, Local Wheat

DEVELOPING CIVIC EDUCATION IN WARTIME

(Ukraine, 2014–2024)

Assoc. Prof., PhD., Nataliya TODOROVA

Department of Multicultural Education and Translation, Faculty of History and International Relations, Uzhhorod National University, Ukraine ORCID ID: https://orcid.org/0000- 0003-2282-6447

Anatolii MYSHKO, senior lecturer

Department of Multicultural Education and Translation, Faculty of History and International Relations, Uzhhorod National University, Ukraine ORCID ID: https://orcid.org/0000-0003-2925-1092

ABSTRACT

Introduction and Purpose: Civic education plays a pivotal role in shaping democratic societies by fostering active citizenship, critical thinking, and a sense of shared responsibility among individuals. In Ukraine, the importance of civic education has gained increased recognition amidst the challenges posed by war, socio-political transformations, and the need to strengthen national identity and democratic values. The Action Plan for Implementing the Concept for the Development of Civic Education in Ukraine until 2030 serves as a strategic blueprint to address these challenges and advance civic education as a cornerstone of societal development. The purpose of this research is to critically examine the Action Plan for Implementing the Concept for the Development of Civic Education in Ukraine until 2030 to estimate its effectiveness in achieving its stated goals by analyzing the key components and strategic priorities outlined in the Action Plan, identifying strengths that enhance the plan's potential for fostering civic engagement and democratic development and highlighting challenges and implementation risks. Through this analysis, the paper seeks to contribute to the broader discourse on civic education in Ukraine and provide actionable insights for policymakers, educators, and stakeholders involved in advancing civic education initiatives.

Methodology: This research employs a qualitative methodology and is guided by a combination of document analysis, stakeholder review, and comparative evaluation to provide a comprehensive understanding of the plan’s content, strengths, and challenges. The core method involves a detailed examination of the Action Plan, including its objectives, strategic priorities, timelines, and implementation mechanisms, complementary policy documents, related legal or regulatory frameworks. Emphasis is placed on identifying practical insights regarding the implementation of the plan and the challenges faced by these stakeholders. The research is limited to publicly available documents and secondary sources, which may not fully capture all stakeholder perspectives or internal decision-making processes. Additionally, the analysis is focused on the plan’s design rather than direct empirical outcomes, as its implementation is ongoing.

Results: The “Action Plan for the Development of Civic Education in Ukraine until 2030” (https://osvita.ua/doc/files/news/914/91405/65c60ece409a3499331898.pdf) represents a comprehensive roadmap aimed at fostering democratic values, critical thinking, and active

citizenship in Ukrainian society. The document outlines key objectives, practical measures, and timelines, reflecting Ukraine's strategic response to the challenges of nation-building, particularly in the context of war and its implications for societal cohesion. Its key strengths include: a) a holistic approach that integrates civic education across formal, non-formal, and informal sectors, ensuring outreach to diverse demographic groups; b) emphasis on democratic values; c) incorporation of critical thinking with a focus on media literacy and combating misinformation, propaganda, and disinformation campaigns; d) partnerships and stakeholder involvement; e) flexibility and monitoring that allows for adaptive management, enabling the program to respond to emerging challenges effectively.

Discussion and Conclusion: However, the Action Plan can be hindered by significant dependency on financial and human resources, which may be constrained due to the ongoing war and economic instability. Another challenge is uneven implementation across regions, particularly in areas affected by the conflict. While the plan emphasizes school-based civic education, initiatives targeting adult learners and working professionals are less detailed. Besides, there exists a risk of over-politicization as civic education must navigate the fine line between fostering patriotism and avoiding ideological indoctrination. The action plan is a promising framework for cultivating a resilient, informed, and democratic society, but its success hinges on consistent implementation, equitable resource allocation, and ongoing stakeholder engagement.

Keywords: national identity, democratic values, holistic approach, critical thinking, media literacy

INVESTIGATION OF VARIABLES AFFECTING EARLY AGE PERFORMANCE OF GEOPOLYMER MORTAR SAMPLES

Enes EKİNCİ

Inonu University, Faculty of Engineering, Department of Civil Engineering, Malatya, Turkey

ORCID ID: https://orcid.org/0000-0001-7669-887X

ABSTRACT

In recent years, finding a greener alternative to cement has been a topic of great interest in the scientific community. The term geopolymer, which is an important alternative to traditional Portland Cement-based concretes, was introduced by Davidovits in the late 1970s. Geopolymer composites, obtained as a result of the activation of aluminosilicate-based raw materials with Na and K-based alkaline solutions, have become the center of attention due to their high early strength, superior durability properties and environmentally friendly structure. In this study, the effects of two different aggregate types (stream aggregate and construction demolition waste aggregates) and two different alkali/binder ratios (0,5 and 0,6) and two distinct NaOH concentrations (5 M and 10 M) on the mechanical and physical properties of geopolymer samples at early-ages were investigated. The binder part of geopolymer mortar samples was produced by substituting 5% silica fume (SF) into ground blast furnace slag (GBFS). The ratio of the binder part produced in this way to aggregate was kept constant as 1:2. Compressive strength tests were carried out on geopolymer mortar samples for 3 and 7 days. Thus, the effects of different variables on early strength values were determined. In addition, water absorption values of geopolymer mortar samples on 3 and 7 days were also obtained. Experimental findings showed that achieving high mechanical properties at early ages is only possible by obtaining optimum production parameters.

Key Words: Compressive Strength; Water Absorption; Geopolymer, Construction and Demolition Waste

JUDICIAL APPOINTMENTS AND RULE OF LAW: PERSPECTIVES FROM COMMON LAW AND CIVIL LAW JURISDICTIONS

By Rida Zulfiqar

University of Szeged, Hungary

Abstract:

Judicial appointments play a critical role in safeguarding the rule of law by ensuring an independent and impartial judiciary. This paper compares and contrasts judicial appointment processes in common law jurisdictions (including the United States and United Kingdom) and in Civil Law jurisdictions (France and Germany). The structural frameworks, legal principles and institutional practices which underpin these processes are examined and their implications for judicial integrity and the rule of law are highlighted.

This research uses a qualitative methodology and a comprehensive literature review with thematic analysis of scholarly articles, legal statutes, institutional reports, and case studies. This thesis explores the use of appointment mechanisms, political and executive pressures, and constitutional safeguards to keep the judiciary independent. Particular attention is paid to the nexus of judicial appointees and public trust in legal institutions, and to the implications of the broader picture for democratic governance.

Results show that methods and principles to judicial appointments differ greatly in common law and Civil Law jurisdictions. Merit based selections and judicial discretion generally given and check and balances usually limiting interference by executive are given importance in common law systems. However, while structured, these processes are centralized and codified, which inevitably gives the judiciary more exposure to political influences than Common Law jurisdictions. The study also identifies shared challenges, such as the lack of transparency in appointment processes and evolving demands for judicial accountability in an era of globalization.

This paper aims at advancing the literature on judicial independence by providing practical recommendations on how to improve judicial selection systems. It promotes greater openness, the use of merit-based selection procedures, and the development of institutional mechanisms that would prevent the judiciary from being influenced by various legal systems. Through analyzing the issues of judicial appointments and their effects on the rule of law, this research offers a strong basis for policy makers and legal scholars to build democracy in the growing sphere of the international legal system.

Keywords: Judicial Appointments, Rule of Law, Judicial Independence, Common Law and Civil Law Jurisdictions, Democratic Governance

MENTAL HEALTH THERAPIST CHATBOT

G. Mohith Kumar

Dr.Tawseef Ahmad

Ch.Sunil Kumar

M.Suresh

Department of CSE(Artificial Intelligence and Machine Learning), Bharat Institute of Engineering and Technology,Mangalpally(v),Ibrahimpatanam,Hyderabad,501510

Abstract

Mental health challenges impact millions worldwide, yet accessing timely and affordable care remains a persistent issue. The "Mental Health Therapist Chatbot" project is designed to bridge this gap by providing an AI-driven virtual assistant to support mental well-being. Using advanced natural language processing (NLP) and machine learning (ML), the chatbot facilitates empathetic conversations, offers coping strategies, and connects users with appropriate resources. Prioritizing user privacy and accessibility, the chatbot aims to serve as a low-cost, easily available option for managing stress, anxiety, depression, and related concerns.

Equipped with sentiment analysis and contextual understanding capabilities, the chatbot delivers personalized responses based on user interactions. It can identify emotional distress and recommend tailored interventions, such as relaxation techniques, mindfulness exercises, or journaling prompts. Furthermore, it includes a feature to direct users to professional mental health services when necessary. Built on ethical and unbiased data, the chatbot ensures a supportive and inclusive experience for users while employing security measures to protect their information.

This project combines artificial intelligence, psychology, and user-focused design to develop a comprehensive mental health solution. Accessible on various platforms, including mobile and web, the chatbot is designed to be user-friendly and inclusive. By offering a private and non-judgmental space for mental health support, the chatbot aims to reduce stigma, empower individuals to seek help, and make mental health resources more accessible to a diverse audience

Keywords: Artificial Intelligence, Mental Health, Natural Language Processing, Deep Learning, Chatbot

Mr.TOUR APP

ADIRALA BABY DEYOL

Dr.Tawseef Ahmad

Ch.Sunil Kumar

M.Suresh

Department of CSE(Artificial Intelligence and Machine Learning), Bharat Institute of Engineering and Technology,Mangalpally(v),Ibrahimpatanam,Hyderabad,501510

Abstract

The Travel e app is an innovative mobile platform designed to streamline and enhance the travel experience for tourists. By offering personalized tour planning, real-time navigation, and local recommendations, the app serves as a comprehensive companion for travelers. Users can browse curated itineraries, book guided tours, and access local attractions with ease, all while enjoying tailored suggestions based on their interests and preferences. With an intuitive interface, offline maps, and integration with public transportation systems, TravelEase ensures a seamless, stress-free travel experience. Additionally, the app supports social features, allowing users to share their journeys and discover hidden gems through community-driven content. TravelEase aims to make exploring new destinations more accessible, enjoyable, and memorable for travelers of all types.

The android tourist guide provides the tourist with a city map depending on its current location entered by the android phone user. This information helps the tourists to find the desired locations to visit. Well it consists of entire details of those locations or how to reach the location as well as other emergency amenities like hospitals, institutes, bus stops etc but it provides the basic information to decide the places to visit. This project is mainly beneficial for the tourist's having no idea about the places they want to visit. By providing a geographic based information system the tourists and people shifting to new cities can get a better guidance of the places they want to visit .

This proposed application does not require any internet access and thus eliminates the disadvantage of single point failure. By making the application GIS based, it includes many advantages as the user can view the required location on a map and accordingly estimate the time that will be required to reach the final destination .

Keywords: ChatGPT,Tourism,vacation,etc.

TEXT – IMAGE LANGUAGE TRANSLATOR

MOHD ABDUL MATEEN

Dr.Tawseef Ahmad

Ch.Sunil Kumar

M.Suresh

Department of CSE(Artificial Intelligence and Machine Learning), Bharat Institute of Engineering and Technology,Mangalpally(v),Ibrahimpatanam,Hyderabad,501510

Abstract

This project presents a novel approach to converting text from images into a structured, translatable format using Optical Character Recognition (OCR) technology. The objective is to develop a robust Text-to-Image Language Translator that leverages OCR to extract text from various image sources, such as photographs, scanned documents, and screenshots. Once extracted, the text is processed through advanced natural language processing (NLP) techniques to facilitate accurate translation into multiple languages.

The system integrates machine learning algorithms to enhance OCR accuracy, particularly in recognizing varied fonts and layouts, while also addressing challenges posed by noise and distortion in images. The translated text is then rendered back into image format, preserving the original visual context. This project aims to streamline communication across language barriers, making it an invaluable tool for travellers, educators, and professionals working in multilingual environments. Evaluation metrics will include translation accuracy, processing speed, and user satisfaction, demonstrating the effectiveness and potential applications of this integrated OCR and translation system. .

Keywords: natural language proccesing, tanslator, Education, Conflict

FAKE PROFILE IDENTIFICATION ON SOCIAL MEDIA BY USING MACHINE LEARNING

G.Manish Kumar (22E15A6606)

M.Suresh

Dr.Tawseef Ahmad

Ch.Sunil Kumar

Department of CSE(Artificial Intelligence and Machine Learning), Bharat Institute of Engineering and Technology,Mangalpally(v),Ibrahimpatanam,Hyderabad,501510.

Abstract

Online social networks have permeated our social lives in the current generation. These sites have allowed us to see our social lives differently than they did in the past. Nowadays we can connect with new friends and maintain relationships with them via social and personal activities become quite easy. Online Social Networks (OSN) are contributed in all areas such as Research in all domains, Job-related areas, Technology oriented areas, Health care, and business-oriented areas, Information gathering and data collection, and so on. One of the biggest problems on these social media platforms is fake profiles. Impersonating to be someone else and causing harm and defamation to the real person or advertising or popularizing removed propaganda on someone's name to get more benefit is the motto of such profile creators. There have been many studies regarding these fake accounts and how can they be mitigated. Manyapproaches such as graph-level activities or feature analysis have been taken into consideration to identify fake profiles. These methods are outdated when compared to arising issues of these days. In this paper, we proposed a technique using machine learning for fake profile detection which is efficient. . The benchmark data set is collected and mixed with manual data first furthermore; a data cleaning technique is used to present the data more feasibly. Then the preprocessed data is used for model building with sufficient information such as profile name, profile ID name, number of followers, and so on. We added Cross validation process where many training algorithms are implemented on the given data and are then tested on the same data. Based on the experiments the RF classifier performed better than the other classification methods. The Random Forest classifier is used to forecast the profile whether is fake or genuine in an efficient way.

Keywords : Anomaly Detection, Fake Profile Detection Algorithms like Random Forest, SVM, and CNN.

HAND GESTURE-CONTROLLED SNAKE GAME USING CNN

Mythri Kosika

Dr.M.Suresh

Dr.Tawseef Ahmad

Ch.Sunil Kumar

Department of CSE(Artificial Intelligence and Machine Learning), Bharat Institute of Engineering and Technology,Mangalpally(v),Ibrahimpatanam,Hyderabad,501510

Abstract

This study explores an innovative approach to controlling the classic snake game using real-time hand gestures, powered by Convolutional Neural Networks (CNN). The proposed system leverages a CNN model trained on a hand gesture dataset to recognize and classify gestures accurately. Real-time gesture input is captured via a webcam and processed using Python's OpenCV library to map gestures to specific game actions, including navigating the snake left, right, up, and down. The project shifts from traditional keyboard controls to an interactive and engaging gameplay experience.

The system captures motion gestures and translates them into seamless game control, enhancing user interaction. The snake navigates the grid to consume food while avoiding collisions with walls or its body. This gesture-based interface demonstrates the potential for innovative control systems in gaming and broader interactive applications.

This approach introduces a novel, immersive gaming experience and underscores the potential for gesture-based control systems in other interactive domains, including virtual reality and assistive technologies.

Keywords: Hand Gesture Recognition, OpenCV Integration, Interactive Gameplay, Gesture Mapping, Gaming Application.

CHRISTIAN GOLDEN AGERS COMMUNITY: MANAGE A COMMUNITY OF GOLDEN AGERS TO FACE LATE-LIFE CRISIS

Ningsih Diliyanti Benu

Christian University Of Indonesia

Abstract

"Growing old is a natural process experienced by all of God's creations, including humans. Sometimes, in this process, people face crises due to declining abilities to work and engage in activities. The church, as a fellowship of all believers from every generation and age, must be able to help the elderly navigate the crises they face in their later years. The purpose of this study is to equip the church to create a community of faith for elderly members to help them face late-life crises while remaining steadfast in their faith in God. This research uses a qualitative method with a literature review approach. The findings of this study show that the church can manage a golden agers community for elderly members that includes activities designed to help them face their crises with joy and maintain their faith in Jesus Christ. Through meaningful activities within the community, elderly members no longer view their crises as something frightening but rather as a blessing from God that should be cherished with gratitude."

Keywords: Late-life Crises, elderly members, golden agers community

EARLY DETECTION OF PARKINSON'S DISEASE: A COMPREHENSIVE REVIEW OF MACHINE LEARNING, DEEP LEARNING, AND MULTIMODAL APPROACHES

Sagaya Auralia P

Renish P Varghese

Abstract

Parkinson's Disease (PD) is a progressive neurodegenerative disorder with significant diagnostic challenges in its early stages. Recent advancements in predictive modelling have shown promise for improving early detection by integrating clinical, genetic, and imaging data. Machine learning methods, such as Support Vector Machines (SVM), Random Forests (RF), and K-Nearest Neighbours (KNN), have demonstrated reliable classification capabilities using patient records and voice features. Deep learning techniques, particularly Convolutional Neural Networks (CNNs) like VGG16 and ResNet50, excel in analysing medical imaging data such as MRI scans, achieving detection accuracies above 90%. Furthermore, ensemble methods and radionics-based hybrid SVM models enhance performance by combining multiple approaches, while real-time object detection algorithms like YOLOv5 offer speed and versatility in medical imaging analysis.

Despite their effectiveness, these methods face challenges such as limited dataset availability, high computational demands, and a lack of interpretability. CNNs and ensemble techniques require large, high-quality labelled datasets, while hybrid models and radionics improve feature extraction but often struggle with generalizability across populations. This review emphasizes the importance of multimodal data integration and hybrid modelling strategies to improve diagnostic precision, scalability, and real-world applicability for early PD detection. Future research must focus on developing robust, interpretable solutions with diverse, large-scale datasets to address these limitations and advance clinical diagnostic tools.

Keywords: Parkinson's Disease, Machine Learning Algorithms, Deep Learning Techniques, Convolutional Neural Networks, Multimodal Data Integration

SOLUTION SUGGESTIONS PRODUCED BY WOMEN WORKING IN ELDERLY CARE SERVICES FOR THE PROBLEMS THEY EXPERIENCE

Dürdane ÇETİN

Istanbul University-Cerrahpasa, Faculty of Health Science, Department of Social Work, Istanbul, Turkey

ORCID ID: https://orcid.org/0000-0001-9214-1924

Gülcan URHAN

Istanbul University-Cerrahpasa, Faculty of Health Science, Department of Social Work, Istanbul, Turkey

ORCID ID: https://orcid.org/0000-0002-2259-137X

ABSTRACT

Introduction and Purpose: In Turkey, institutional care services for the elderly are predominantly built on a model reliant on women's labor. However, the substantial caregiving burden assumed by women in social care leads to various challenges in both their professional and personal lives. This study aims to identify the issues faced by women working in elderly care services and to explore their proposed solutions to these problems.

Materials and Methods: A phenomenological research design, one of the qualitative research methodologies, was employed in the study. The analysis focused on how women interpret and make sense of the challenges they encounter in institutional care services, as well as the solutions they propose to address these challenges, using a phenomenological approach. Face-to-face interviews were conducted with 15 female employees working in a private care center, including 5 social workers, 5 healthcare professionals, and 5 caregivers, using a socio-demographic information form and a semi-structured interview form. The data obtained from the transcription of the interviews were analyzed using the Maxqda software, categorized into two main themes with subcategories and codes, and examined in a thematic-relational framework.

Results: The findings revealed that participants primarily focused on physical challenges such as "orthopedic problems and aggressive behaviors of the elderly," psychological challenges including "anxiety disorders and burnout," social challenges like "intolerance in social relationships," and emotional challenges such as "excessive emotionality and moral burden." Regarding their proposed solutions, professional recommendations emphasized "the organization of in-service training," institutional suggestions focused on "assigning a social worker as the responsible manager," and policy recommendations highlighted improvements in "salary and leave entitlements, early retirement, the employment of security personnel and doctors." Consequently, these findings underscore the importance of supporting professional, institutional, and policy-related proposals to protect and enhance the well-being of women working in elderly care services.

Keywords: Aging, institutional care services, women's labor, social work

ASSESSMENT OF THE SOCIAL FUNCTIONING OF SCHIZOPHRENIA PATIENTS FOLLOWED UP IN THE HEALTH CENTER MY EL HASSAN OF KENITRA, MOROCCO

Ilhame Fitah

Biology and Health Laboratory, Department of Biology, Faculty of Sciences, Ibn Tofail University, Kenitra, Morocco

Miloud Chakit

Biology and Health Laboratory, Department of Biology, Faculty of Sciences, Ibn Tofail University, Kenitra, Morocco

Mohamed El Kadiri

Moulay El Hassan Health Center, Psychiatry Unit, Kenitra, Morocco.

Aboubaker El Hessni

Biology and Health Laboratory, Department of Biology, Faculty of Sciences, Ibn Tofail University, Kenitra, Morocco

Abdelhalem Mesfioui

Biology and Health Laboratory, Department of Biology, Faculty of Sciences, Ibn Tofail University, Kenitra, Morocco

Abstract

Background Difficulties in interacting in and adapting to the social world are the central complaint faced by patients with schizophrenia. These people are often socially isolated, unemployed and may find it difficult to live independently.

Aim this study aims to evaluate the social functioning of schizophrenic patients and to highlight the various factors associated with the alteration of the social functioning of schizophrenic patients.

Methods We conducted a prospective descriptive and analytical study of a population of 72 patients with schizophrenia. These are patients between 19 and 59 years old, clinically stabilized, diagnosed, and followed at the My EL Hassan health center in Kenitra (Morocco). Symptom assessment is measured using a standardized Positive and Negative Syndrome Scale (PANSS), and social functioning is assessed using a Social Functioning Questionnaire (SFQ).

Results Statistical analysis shows that of 72 schizophrenic patients, 33.3% had good social functioning, 59.7% had moderate social functioning, while 6.9% of patients had altered social functioning (the average score of all SFQ items less than 2.4). 6.9% with altered social

functioning, are patients aged 19 to 49, were male ($p<0.35$), come from urban areas ($p<0.17$), without professional activity ($p<0.00$), and have a progressive onset of the disease ($p<0.31$).

5.5% (n=4) of them were single ($p<0.12$), caught this disease at an age greater than or equal to 20 years, and have the mixed type of symptoms (positive/negative) ($p<0.15$). The altered social functioning of our patients is correlated to five factors: professional activity ($p<0.00$), family situation ($p<0.03$), family care ($p<0.02$), family awareness ($p<0.01$), and the negative subtype of psychotic symptomatology ($p<0.02$).

Conclusion this study underlines the interest in psychosocial treatment as specific care, which would complement symptomatic treatment and improve the social functioning of patients with schizophrenia.

Keywords: Schizophrenia, Social functioning, Quality of life, Social interactions, SFQ

ESTIMATES OF A NEW MODIFICATION KANTOROVICH TYPE BERNSTEIN OPERATOR VIA CALCULUS

Hayatem Hamal

Department of Mathematics, Tripoli University, Tripoli 22131, Libya

ORCID ID: https://orcid.org/ 0000-0002-4281-3371

ABSTRACT

Introduction and Purpose:

Materials and Methods: In this paper, we present the main results of the recent generalization of the Kantorovich-type Bernstein operator based on (p,q)- calculus for $0<q<p<1$, which is defined by Hamal as the following:

$$\tilde{\Omega}_{n,l,\alpha}^{p,q}(f,x)=\sum_{k=0}^{n+l} b_{n,l,k}^{p,q}(x)\int_0^1 f\left(\frac{p^{n+l-k}\left([k]_{p,q}+q^k t^{\alpha}\right)}{[n+l+1]_{p,q}}\right)d_{p,q}t,\ \ x\in[0,1], \qquad \textbf{(1)}$$

where $f\in C[0,l+1]$, $l\in\mathbb{N}_0$, $n\in\mathbb{N}$ and $b_{n,l,k}^{p,q}(x)$ represents the basic function, is given by

$$b_{n,l,k}^{p,q}(x)=\begin{bmatrix} n+l \\ k \end{bmatrix}_{p,q} p^{k(k-1)/2-(n+l)(n+l-1)/2}\left(r_{n,l}^{p,q}\right)^k\left(1-r_{n,l}^{p,q}\right)_{p,q}^{n+l-k},\ \text{where}$$

$$r_{n,l}^{p,q}(x)=\frac{[n]_{p,q}}{[n+l]_{p,q}}x\ ,0\le r_{n,l}^{p,q}(x)\le 1.$$

Results: we discuss the main results with their estimation of a new modification Kantorovich type Bernstein operator via (p,q)- calculus for $\alpha>0$ $n\in\mathbb{N}$, $x\in[0,1]$ and $0<q<p\le 1$, we need these results to determine the rate convergence of operators. Our subsequent study focuses on their qualitative aspects, including uniform convergence. Now, let us present the estimations of the second and fourth-order central moments of the operators $\tilde{\Omega}_{n,l,\alpha}^{p,q}(f,x)$

$$\tilde{\Omega}_{n,l,\alpha}^{p,q}(t-x,x)\le\frac{p^{n+l}}{[\alpha+1]_{p,q}[n]_{p,q}}+\left\{(1-q)\left(1-\frac{1}{[\alpha+1]_{p,q}}\right)-\frac{p^{n+l}}{[n]_{p,q}}\right\}r_{n,l}^{p,q}(x), \qquad \textbf{(2)}$$

$$\tilde{\Omega}_{n,l,\alpha}^{p,q}\left((t-x)^2,x\right)\le\frac{A}{[n]_{p,q}}\left\{\phi_{p,q}(\alpha)+\gamma_{n,l}^{p}(x)\right\},$$

(3)

$$\tilde{\Omega}_{n,l,\alpha}^{p,q}\left(\left(t-x\right)^4,x\right)\leq\frac{A_2}{\left[n\right]_{p,q}^2}\eta_{p,q}^{\alpha}\left(x\right),$$

(4)

where $\eta_{p,q}^{\alpha}\left(x\right)=\left\{\frac{1}{\left[4\alpha+1\right]_{p,q}^4}+\left[k\right]_{p,q}^2+\varphi_{p,q}\left(x\right)\right\}.$

Key Words: $\left(p,q\right)$- calculus; Kantorovich theorem; $\left(p,q\right)$- Balázs-Szabados operators.

THE RELATIONSHIP BETWEEN FINANCIAL LITERACY AND DIGITAL LITERACY: THE CASE OF DÜZCE

BİLAL BELEN

Duzce University, Faculty of Business Administration, Business Administration, Duzce, Türkiye

ORCID ID: https://orcid.org/0009-0003-7340-5607

Osman KARTAL

Duzce University, Faculty of Business Administration, Business Administration, Duzce, Türkiye

ORCID ID: https://orcid.org/0000-0001-9505-3161

ABSTRACT

With the rapid advancements in technology today, the use of digital tools has become increasingly widespread, both in daily life and in financial transactions. The ability to utilize digital tools in financial transactions often requires a certain level of digital literacy. In this context, the study examines the relationship between the mentioned levels of literacy.

This study examines the relationship between financial literacy and digital literacy levels among university students. In this framework, the research population is defined as students enrolled in the Faculty of Business Administration at Düzce University. The convenience sampling method was chosen as the sampling technique for the study. Accordingly, the sample group consists of first-, second-, third-, and fourth-year students from the Faculty of Business Administration.

The survey method was chosen for data collection, utilizing the financial literacy scale and the digital literacy scale. To gather the necessary data, an online survey was administered to students enrolled in the Faculty of Business Administration at Düzce University. The collected data were analyzed using the Statistical Package for the Social Sciences (SPSS). Significant differences between the demographic information of the sample and the results of the digital literacy and financial literacy scales were analyzed using the t-test. The analysis results revealed significant differences in university students' digital literacy and financial literacy levels based on certain demographic factors. The hypothesis of the study was tested using Pearson correlation analysis. However, the study concluded that there was no statistically significant relationship between financial literacy and digital literacy.

Keywords: Financial Literacy; Digital Literacy; Digitalization

THE ROLE OF GLOBALIZATION AND AGRICULTURE IN ENVİRONMENTAL KUZNETS CURVE (EKC) HYPOTHESIS FOR ASEAN COUNTRIES

Mahir TOSUNOĞLU

Ege University, Institute of Social Sciences, Department of Economics, Izmir, Turkiye

ORCID ID: https://orcid.org/0000-0002-9941-0151

İbrahim Halil POLAT

Hakkari University, Institute of Social Sciences, Department of Economics, Hakkari, Turkiye

ORCID ID: https://orcid.org/0000-0001-9785-160X

ABSTRACT

Introduction and Purpose: Environmental degradation has profoundly affected both society and ecosystems. The environmental Kuznets curve (EKC) illuminates the complex relationship between economic growth and environmental degradation. However, the EKC hypothesis may yield different results depending on the region examined. It is also important to examine environmental degradation in ASEAN countries, which include both economic cooperation and rapidly globalizing countries. This research aims to investigate the complex ways in which agriculture, globalization, economic growth and environmental degradation affect the link in ASEAN countries.

Materials and Methods: Examines the effects of agriculture, globalization and economic growth on CO2 emissions in ASEAN countries for the period 1984-2021 using Prais Winten (PW) panel data analysis method.

Results: According to the findings, the EKC hypothesis is valid in ASEAN countries. In addition, agriculture and globalization positively affect environmental degradation. Discussion and Conclusion: Factors such as agriculture and globalization increase environmental negativities. This situation shows that environmental protection and sustainability policies should not be limited to economic growth, but should also cover the environmental effects of agricultural practices and globalization. It is recommended that green agricultural practices be encouraged for sustainable environmental management in ASEAN countries, international cooperation should be increased to reduce the environmental effects of globalization, and economic growth policies should be aligned with environmental sustainability goals.

Key Words: Environmental sustainability, agriculture, globalization, Prais-Winsten

CORRUPTION, RULE OF LAW, AND ACCOUNTABILITY THEIR ROLES IN GOVERNMENT EFFICIENCY IN TURKIYE

İbrahim Halil POLAT

Hakkari University, Institute of Social Sciences, Department of Economics, Hakkari, Turkiye

ORCID ID: https://orcid.org/0000-0001-9785-160X

Mahir TOSUNOĞLU

Ege University, Institute of Social Sciences, Department of Economics, Izmir, Turkiye

ORCID ID: https://orcid.org/0000-0002-9941-0151

ABSTRACT

Introduction and Purpose: Corruption, rule of law, accountability, and control of government expenditures are generally assumed to positively influence government effectiveness. However, recent studies highlight the complex interplay among these variables. In this context, the aim is to assess the extent to which these factors impact government effectiveness in the case of Turkiye.

Materials and Methods: This study examines the effects of corruption, rule of law, accountability, and control of government expenditures on government effectiveness in Turkiye for the 2002–2023 period using the Autoregressive Distributed Lag Bound Test (ARDL) method.

Results: According to the analysis findings, a cointegration relationship has been identified among the variables. While control of corruption and rule of law positively influence government effectiveness, accountability and control of government expenditures have a negative impact on government effectiveness. **Discussion and Conclusion:** These findings indicate that accountability and control of government expenditures require reforms in current practices, as issues in these areas negatively impact government effectiveness. It is recommended that public policies be shaped to focus on the control of corruption and the rule of law.

Key Words: Government effectiveness, control of corruption, rule of law, ARDL

BIBLIOMETRIC ANALYSIS OF THESES ON GESTATIONAL DIABETES IN NURSING

Duygu DEDE

Anadolu Medical Center, Internal Medicine Unit, Istanbul, Turkey.

ORCID ID: https://orcid.org/0009-0001-6956-3245

Hamide ARSLAN TARUS

Faculty of Health Sciences, Department of Nursing, Division of Obstetrics and Gynecological Nursing, Istanbul, Turkey

ORCID ID: https://orcid.org/0000-0001-5857-980X

ABSTRACT

Introduction and Purpose: Gestational diabetes mellitus (GDM) is a form of carbohydrate intolerance that emerges in the second or third trimester of pregnancy in women without pre-existing Type I or Type II diabetes and resolves after childbirth. The management of carbohydrate intolerance during pregnancy requires a personalized approach, emphasizing the need for multidisciplinary care. Nurses play a pivotal role in this context, as they collect comprehensive patient data, educate patients and their families, and closely monitor their condition. This study aims to examine postgraduate theses on GDM conducted in the field of nursing in Turkey.

Materials and Methods: This descriptive study reviewed nursing theses accessed online, focusing on those published between 2010 and 2024. A total of 28 theses on GDM were identified. The data were analyzed descriptively under seven main categories using statistical methods.

Results: In Turkey, 89.3% of postgraduate theses on GDM were conducted within the Department of Obstetrics and Gynecology Nursing. Among these, 78.6% were at the master's level, and 67.9% were designed as descriptive studies. Notably, 100% of the doctoral-level theses employed experimental or quasi-experimental designs. Findings revealed that GDM is frequently observed among pregnant women, who tend to experience lower levels of psychosocial adaptation, sleep quality, and quality of life, alongside higher levels of breastfeeding difficulties, depression, and anxiety. Furthermore, educational and counseling interventions conducted by nurses were shown to positively impact lifestyle behaviors, improve quality of life, reduce depressive symptoms, and enhance adaptation to both pregnancy and GDM. **Discussion and Conclusion:** The study demonstrated that GDM is a prevalent condition that negatively affects pregnant women both physically and psychologically. It also highlighted the significant role of nursing interventions in improving the quality of life and supporting the psychosocial adaptation of pregnant women. In this context, it is recommended that more experimental studies be conducted by nurses on the management of GDM.

Key Words: Gestational Diabetes; Nursing; Postgraduate Theses.

UNDERSTANDING WORKPLACE BULLYING AMONG NURSING STUDENTS IN INDIA

Dr. Ishwar Mittal (Co-Author)

Assistant Professor, IMSAR, Maharshi Dayanand University, Rohtak

Dr. Aarti (Co-Author)

Assistant Professor, IMSAR, Maharshi Dayanand University, Rohtak

Dr. Rosy Dhall (Co-Author)

Assistant Professor, Gandhinagar University, Gujarat

Mikul (Co-Author)

Assistant Professor, M.M. Institute of Management, Maharishi Markandeshwar University, Mullana

Understanding Workplace Bullying Among Nursing Students in India

Abstract

Workplace bullying poses a serious challenge in India's healthcare sector, especially for nursing students entering the profession. This study examines factors influencing their awareness of bullying, such as prior exposure during clinical practice and the perceived intensity of such incidents. A survey of 240 nursing students emphasizes the necessity of well-designed educational initiatives to enhance understanding and mitigate workplace bullying. Indian nursing educators and healthcare institutions must tackle this issue by introducing supportive policies, mentorship frameworks, and grievance redress systems. This research underscores the value of targeted education and active measures to create safer and more supportive clinical environments for nursing students.

GENERAL OVERVIEW OF CONSTRUCTION ACCIDENTS IN TÜRKİYE AND ANALYSIS BY PROVINCE

Atiye BİLİM

Konya Technical University, Vocational School of Technical Sciences, Department of Occupational Health and Safety, Konya, Türkiye

ORCID ID: https://orcid.org/0000-0002-8265-6091

ABSTRACT

Introduction and Purpose: The construction sector is strategically important in economic development and sustainable growth. It forms the basic building block of modern societies with its basic functions, such as developing physical infrastructure, meeting the need for housing, and supporting urbanization dynamics. In addition, it plays a critical role in the economic value chain as it offers vast employment opportunities and has a strong interaction with subsectors. In addition to increasing countries' global competitiveness through strategic projects, it supports long-term sustainable development by improving the quality of life. Therefore, the construction sector is an economic activity and an indicator of a country's development and development potential. However, this sector also stands out as an area with high-risk and hazardous working conditions. Workers face serious occupational safety hazards such as falls from height, heavy load carrying, machinery accidents, and environmental factors.

Materials and Methods: Factors such as the specific conditions, labor profile, infrastructure status, and environmental factors of the areas where the construction sector operates may affect the type and frequency of accidents. Therefore, regional analysis of occupational accidents in the construction sector is important in determining local conditions and risk factors. This study aims to contribute to sectoral improvement and risk management studies by revealing this sector's safety dilemmas and regional differences. For this purpose, occupational accidents in the construction sector in Turkey between 2018 and 2022 have been analyzed. The employment status of the construction sector by provinces was investigated, and the incidence rates of fatal and injury occupational accidents in the sector were determined for each province.

Results: Based on the data obtained, the sectoral risk situations of the provinces were determined, and this situation was visualized using maps. This analysis enables the identification of risks in specific regions, raising regional awareness and developing more targeted security measures.

Discussion and Conclusion: It provides important contributions to strengthening occupational health and safety training at the local level, conducting inspections more effectively, and allocating resources correctly. In addition, by enabling more efficient and sustainable solutions to prevent occupational accidents in the sector, accidents in the sector can be reduced, and occupational safety can be increased.

Key Words: Occupational health and safety; Occupational accidents; Construction; Construction safety; Accident analysis

NUTRIENT REMOVAL FROM SYNTHETIC WASTEWATER CONTAINING CIPROFLOXACIN AND AMOXICILLIN USING HORIZONTAL FLOW CONSTRUCTED WETLAND

Zeba Ali Mumtaj

Abdul Rahman Khan

Saimah Khan

Department of Chemistry, Integral University, India

Abstract:

The removal efficiency of ciprofloxacin and amoxicillin in wastewater treatment can be significantly influenced by monthly variations (January-February & March-April) and the presence of vegetation. CWs are one such alternative that can efficiently remove variety of pollutants from wastewater. Constructed Wetland (CWs) is viewed as a low-cost treatment technology with proven treatment efficiency. CWs can treat a variety of contaminants using low energy and natural systems by altering various design parameters. In this study two horizontal flow constructed wetlands (HFCW) are used and the concentration of antibiotics namely ciprofloxacin and amoxicillin, in each synthetic wastewater is 50ppm. The parameters were studied for influent and effluent wastewater. This study reports comparative pollutants removal from synthetic wastewater using HFCW. The water samples were collected as grab samples after 24 hours of duration. Results showed that CWs with reeds shows higher removal efficiency than without reed CWs considering nitrate and phosphate. From the results, it was also concluded that the removal efficiency of nitrate (49-89%) and removal efficiency (%RE) of phosphate ranges between (39-96%) in planted and non-planted CW.

Keywords: Constructed wetland, synthetic wastewater, Nitrate and Phosphate.

INNOVATIVE METHODS IN ENTREPRENEURSHIP EDUCATION: ENTREACTION ERASMUS+ PROJECT CASE

Mustafa BOZ

Çanakkale Onsekiz Mart University, Faculty of Tourism, Department of Tourism Management, Çanakkale, Turkey

ORCID ID: https://orcid.org/ 0009-0001-3560-7561

Gökhan TURAK

Çanakkale Onsekiz Mart University, Faculty of Tourism, Postgraduate Education Institute, Çanakkale, Turkey

ORCID ID: https://orcid.org/0000-0002-1346-9663

ABSTRACT

Introduction and Purpose: The goal of entrepreneurship education is to provide people with the self-assurance, strategic thinking, and entrepreneurial skills necessary to identify, assess, and execute business possibilities. Teaching strategies are crucial in entrepreneurship education, just as in other forms of education. Active, student-centered, collaborative, creative teaching approaches are being developed in entrepreneurship education in response to global technological, social, commercial and political advancements and challenges. Enhancement of teachers' professional and pedagogical expertise, also helps students to develop communication and collaboration abilities through innovative teaching techniques . The aim of this study is to examine innovative approaches to entrepreneurship education and reveal their importance.

Materials and Methods: In this research, a case study which is one of the qualitative research methods was applied. The study focuses on the European Union Erasmus+ project titled as "EntreAction: An Innovative Case-to-videostory Approach in Entrepreneurial Education." The project has been developed by the collaboration of six universities from six countries and a related organization, aiming to determine and carry out innovative educational methods in entrepreneursip education. Its primary aim is to foster communication, interaction, and synergy among entrepreneurs, entrepreneurship trainers, and students by producing digital case-storytelling videos from the real world.

Results: Within the framework of firstly trainers' and after students' training, the project has been consist two phases. At first, experts have trained trainers in scenario building, business concept development, and video production. The project's trainers have produced a total of fourteen short videos about entrepreneurial businesses as course material. In the second phase, a summer school was organized by participation of of project members and students from partner countries. In the summer, school teachers, entrepreneurship trainers, students and entrepreneurs, shared entrepreneurial stories, experiences, and interactive innovative teaching methods. Students groups developed business ideas, implemented business plans, and prepared short videos under the supervision of their mentors. All documents and videos related to innovative entrepreneurship education are shared for the teachers and students from all around the world in the library of the project.

Key Words: Entrepreneurship Education; Innovative Teaching Techniques; EntreAction Erasmus+ Project

NEURAL NETWORKS-BASED CYLINDRICAL MATERIAL CLASSIFICATION USING ELECTROMAGNETIC SCATTERED FIELD

Samreen Gul

Saqib Shahid Rahim

Fahad Masood

Department of Computing, Abasyn University Peshawar, 25000, Pakistan

Abstract:
Material classification is vital in remote sensing applications for target detection and localization. The electromagnetic scattered field has become particularly important for identifying and classifying different materials. Permittivity, permeability, and conductivity are the material's physical properties that interact with electromagnetic waves to analyze the material’s properties. Material classification is a challenging task in remote sensing applications using electromagnetic scattered fields due to their complex analytical solution and computational resources. Machine learning provides low-cost and simple techniques for material classification using scattered fields. This research aims to develop a neural network-based material classification framework for cylindrical objects. Materials including dielectric, perfect electric conductors, and perfect magnetic conductors have been considered and the results reveal that the proposed framework shows better results in terms of accuracy.

Keywords: Material classification, Neural- Networks, Machine Learning

WHAT WILL HAPPEN IN THE FUTURE? THE EFFECT OF AI AND ROBOTS ON THE TOURISM WORKFORCE

Barış ÇIVAK

Anadolu University, Faculty of Toursim, Department of Tourism Management,

Eskişehir, Turkey

ORCID ID: 0000-0001-9334-3683

ABSTRACT

Introduction and Purpose: The questions about how the transformation in the use of advanced technologies such as artificial intelligence and robotic services in the tourism and service sector will take place and which areas it will affect are on the agenda of the tourism academy. However, the effects of these technologies on the tourism labor market in the future are ignored. The purpose of this study is to reveal in which areas artificial intelligence and robots will affect the workforce in the tourism sector by using studies in the literature.

Materials and Methods: In the study, steps were created for the purpose and scope of the subject for the narrative scan. The concepts of “artificial intelligence”, “robots”, “hospitality” and “tourism” were used in the search parameters. The studies falling within the scope of the subject were scanned and the situation was determined.

Results: It is obvious that there will be a paradigm shift with developing technology. It is possible to predict that technological transformations in service processes bring about creative destruction. In the future, when we move to a phase where the costs of artificial intelligence-supported chatbots, humanoids and others are lower than humans, it is estimated that jobs in the field such as reservations, travel planning, hotel check-in/check-out transactions, payment transactions, and switchboards will be included in the automation process by leaving human labor.

Discussion and Conclusion: Self-service areas will become widespread in many areas in the future. There are three basic factors as a prerequisite for service robots to replace humans in the sector. For this, first of all, service robots need to provide cost advantage, increase the robots' work capabilities and ensure customer acceptance. When the three pillars of the trivet are completed, it seems inevitable that a technological transformation will occur in many business areas.

Key Words: Precarious work, precarization, social class, neoliberalism, tourism ındustry

PREDICTION OF SCHOOL PARTICIPANT EMPOWERMENT VIA CULTURAL INTELLIGENCE

Dr. Qader Vazifeh Damirchi

Department of Middle School, Ministry of Education, ParsAbad, Iran

Dr. Nasrin Khodabakhshi

Department of Public Administration, Khalkhal Branch, Islamic Azad University Khalkhal, Iran

Abstract

Objective: Considering that educational managers in the field of education are often appointed with minimal criteria and qualifications, and that many lack essential skills for effective school management, this study seeks to predict the school participant empowerment by examining the role of cultural intelligence in Iranian middle schools.

Methods: This research is an applied type and is descriptive-correlational in nature. The statistical population of this study is 280 middle school managers in Paresh Abad city. The sample size in this study included 162 people, which was determined using the Cochran formula. The use of virtual sampling was combined with an online questionnaire (School Participant Empowerment Scale by Short and Rinehart, 1992 and Cultural Intelligence questionnaire by Early and Ang's, 2003). To determine the validity of the questionnaires, face validity was used and Cronbach's alpha was used to examine the reliability. To test the research hypotheses, after examining the normality of the data (Kolmogorov-Smirnov test), a simple linear regression analysis test was used.

Results: The study's findings reveal that the metacognitive aspect of cultural intelligence accounts for 66% of the variations in school participant empowerment, while the cognitive aspect accounts for 49%. Additionally, the motivational dimension predicts 62% of the changes, and the behavioral dimension accounts for 50%. Furthermore, the results indicate that cultural intelligence contributes to 23% of the overall changes in school participant empowerment.

Conclusions: An individual's capacity to adjust to values, traditions, and customs that differ from their own, as well as to thrive in diverse cultural settings, is a key indicator of cultural intelligence. With the growing importance of interpersonal and social relationships, it is crucial to enhance cultural intelligence within the Iranian education community, particularly among teachers.

Keywords: School Participant Empowerment, schools, cultural intelligence, empowerment

CHANGE MANAGEMENT PRACTICES AND ADMINISTRATIVE EFFECTIVENESS IN FEDERAL INLAND REVENUE SERVICES, ABEOKUTA, OGUN STATE

Dr. Wasiu Abiodun Makinde

Abiola Oluwaseun Rufai

Department of Public Administration, the Federal Polytechnic, Ilaro, Ogun State, Nigeria.

ABSTRACT

The study examined the change management practices on administrative effectiveness in the Nigerian Government agencies using the Federal Inland Revenue Services (FIRS), Abeokuta Office, Ogun State, Nigeria. Specifically, the study determined the effect of change management practices on administrative effectiveness; relationship between change management practices on administrative effectiveness; challenges associated with change management practices on administrative effectiveness in Federal Inland Revenue Abeokuta Ogun State. Descriptive survey design was adopted, questionnaire was the data instrument used to collect data. Taro Yamane formula was used to capture 194 staff of Federal Inland Revenue Abeokuta Ogun State. The findings revealed that change management practices have led to a reduction in administrative errors and delays, involvement of staff in the planning and implementation of changes has enhanced the effectiveness of administrative tasks. The researcher also discovered that resistance to change among employees is a major challenge affecting administrative effectiveness in Federal Inland Revenue Abeokuta Ogun State. It was concluded that change management practices have significant effect on administrative effectiveness in Federal Inland Revenue Abeokuta Ogun State. The study therefore recommended that Federal Inland Revenue Abeokuta Ogun State is ever turbulent and sensitive to change, therefore employee should be ready to accept change which would eventually lead to change in plan in order to achieve optimum performance.

Keywords: Administrative, Effectiveness, Efficiency, Management, Change Management, Government Agency

THERAPEUTIC EVALUATION OF CENTRATHERUM ANTHELMINTICUMN FOR THE CONTROL OF SUBCLINICAL MASTITIS IN DAIRY BUFFALO

Farrah Deeba

Muhammad Huzaifah Khalid

Anas Sarwar Qureshi

Muhammad Adil

Department of Clinical Medicine and Surgery, Faculty of Veterinary Science, University of Agriculture Faisalabad, Pakistan.
Department of Basic Bioscience, Riphah College of Veterinary Sciences, Riphah International University Lahore, Pakistan.

Abstract

Sub-Clinical Mastitis is an inflammatory disorder. affecting parenchymal. cells of mammary. gland, and is a major challenge in dairy business.This study examined the efficacy of Centratherum. Anthelminticum in subclinical. mastitis, and its potential to improve the quality of milk in buffalo. For this purpose, thirty animals were tested for subclinical. mastitis with California Mastitis Test (CMT), and nine were found CMT positive. These nine animals were divided into three groups; G1 group treated with Tylosin, G2 treated with Combination Tylosin+Centratherum Anthelminticum, while G3 treated with Centratherum. Anthelminticum alone for 7 days. All animals in GI and G2 became CMT negative after treatment, while one animal in G3 remained positive. Standard Plate Count (SPC) is used to measure udder inflammation. Milk Solids Not Fat (SNF), lactose, milk fat, and milk protein levels were also measured. The results indicate that SNF, lactose, milk fat, and milk protein levels found non-significant in the milk of sub-clinical mastitic treated buffalo, but milk fat content increased in G2 to some extent. The White Blood Cell (WBC) count decreased significantly in both G2 and GI, while Red Blood Cell (RBC) count increased significantly in G2. In conclusion, the combination of Tylo sin and Centratherum anthelminticum (G2) appeared to be most effective in treating subclinical mastitis in buffaloes but remained non-significant to improve milk quality. Further detailed studies are suggested to investigate the potential of Centratherum. Anthelminticum in improvement of milk quality and milk production in dairy animals.

Keywords: Subclinical mastitis, Centratherum Anthelminticum, lactose, fat, RBC, WBC

SUSTAINABLE CONSTRUCTION PROJECT MANAGEMENT: CHALLENGES, STRATEGIES, AND THE FUTURE OF GREEN PRACTICES

Wan Nadzri Osman

Faisal Zulhumadi

Mazri Yaakob

School of Technology Management and Logistics Universiti Utara Malaysia

Abstract

Sustainable construction practices are increasingly vital in addressing the growing environmental, social, and economic challenges within the built environment. This paper explores the role of project management in driving sustainability in construction, examining both the challenges faced by the industry and the strategies employed to integrate green practices throughout the project lifecycle. By reviewing current literature and case studies, this paper identifies key barriers to implementing sustainable construction, such as cost concerns, lack of stakeholder engagement, and regulatory complexities. It also highlights successful strategies, including the adoption of green building certifications, sustainable materials, energy-efficient technologies, and integrated project delivery (IPD) approaches. Moreover, the paper explores emerging trends, such as digital tools (e.g., Building Information Modeling, or BIM), which enable better collaboration, waste reduction, and performance monitoring. Looking forward, the paper proposes a framework for future research and practice in sustainable construction project management, emphasizing the need for enhanced collaboration, policy development, and education to overcome existing barriers and promote widespread adoption of green practices. Ultimately, this paper contributes to the evolving discourse on sustainability in the construction industry, providing insights for practitioners, policymakers, and researchers working to create a more sustainable built environment.

Keywords: Sustainable Construction**,** Project Management**,** Green Practices, Challenges, Strategies.

EXPLORATORY STUDY OF PLAYWAY METHOD IN PRIMARY SCHOOLS IN GWAGWALADA AREA COUNCIL OF THE FCT, NIGERIA

Dr. Rashidat Abdulsalam-Nuhu

Department of Educational foundations Faculty of Education University of Abuja, Abuja Nigeria

https://orcid.org/0000-0001-8724-7484

Rasaq Sulyman (Ph. D)

Arts and Science Education, Faculty of Education Kwara State University, Malete, Ilorin.

https://orcid.org/0009-0003-5950-9389

Abstract

Play helps in all areas of child development socially, emotionally, physically and cognitively. Play is an essential component of learning among children this is because they learn best through play. Without using play, learning in children will be impaired and apparently performance is affected. The study investigated the use and effect of play way method in teaching social studies in primary schools in Gwagwalada. The objectives of the study were to use play way method and investigate the effect of play way method on pupils' achievement. Two public primary schools were purposively selected to constitute experimental and control groups respectively. The experimental group was taught using play way method while the control group was taught with the conventional method. The design for this study was quasi-experimental research design where non-equivalent pretest posttest control group design was used. The scores obtained from the two groups were compared to see the effect of the play way teaching method in primary four pupils' performance in social studies. The finding revealed that play way method does not affect the performance of primary 4 school pupils' in Gwagwalada Area Council. It was also indicated that gender does not have any significant difference on the male and female performance of primary 4 school pupils' in Gwagwalada Area Council, Abuja when using play method of teaching.

Key: play way, Teaching, social studies, quasi-experimental design

CONTRIBUTION TO CONDITIONAL PREVENTIVE MAINTENANCE OF ROTATING MACHINES

Taleb Mounia
Environmental Laboratory, Mining Institute, Echahid Cheikh Larbi Tebessi University, Tebessa 12000,Algeria

Abstract: Rotating machines play a vital role in production lines. They are composed of fragile components (bearings and gears) subject to significant mechanical stress and harsh industrial environments and are subject to different types of failure such as: bearing spalling, unbalance, gear tooth breakage, misalignment of one of the axes, etc. These defects can have serious consequences. To avoid unplanned production stoppages and the resulting economic losses, this equipment must be constantly monitored and all warning signs of defects must be tracked before it is too late.

The implementation of a conditional maintenance policy for rotating machines by vibration analysis, radiographic analysis and thermography is now widely used in factories around the world.

Our work aims to show the importance and application of conditional preventive maintenance to detect defects at an early stage. The study is carried out on a rotating machine at the level of the cement production line of Tebessa.

Keywords: Diagnosis, conditional maintenance, rotating machines, Analysis, failure

THE EFFECT OF CHATBOTS USABILITY ON CUSTOMER LOYALTY

Majda Mohamdi

İstanbul Nişantaşı University, Department of Business Administration, Istanbul / Türkiye

ORCID ID: 0009-0004-1297-5283

ABSTRACT

In today's world, with the development of technology businesses are increasingly adopting to artificial intelligence (AI) technologies to enhance customer services and improve customer experience. Within the framework of these technological changes chatbot, a software application designed to simulate human conversation through text or voice interactions, have emerged as a prominent tool for engaging with customers in a different sectors. However, chatbot applications used by organizations that want to maximize customer satisfaction by improving customer experience can cause customer dissatisfaction by causing disappointment and dissatisfaction depending on the usability performance of the chatbots. When evaluated the chatbot usability in the context of creating loyalty, which is important for institutions in today's competitive environment, this study researched the effects of chatbot usability which includes perceived accessibility to chatbot functions, perceived quality of chatbot functions, perceived quality of conversation and information, and perceived privacy and security dimensions on brand loyalty. In the study, the data was collected through a survey on 440 people who were reached through convenience sampling, and correlation and regression analyses were used to reveal the effect of chatbot usability on brand loyalty. This research offers valuable insights for businesses aiming to improve customer interactions through effective chatbot implementation.

Keywords: Chatbot Usability, Customer Loyalty, Digital Customer Service, User Experience, Customer Satisfaction.

SUSTAINABLE REAL ESTATE DEVELOPMENT: A COMPARATIVE ANALYSIS OF GREEN BUILDING PRACTICES IN TURKIYE

Amina NAIMOVA

Faculty of Economics, Administrative and Social Sciences, Department of Business Administration, Istanbul, Turkey

ORCID ID: https://orcid.org/0009-0003-2793-5535

Figen Haravon

Digital marketing, Experience Economy and Marketing, International Marketing, Management and Innovation, Istanbul, Turkey.

ORCID ID: https://orcid.org/0000-0002-8695-0853

ABSTRACT

The real estate business is shifting toward sustainability as consumers become more sensitive to the environment. This research examines the rocks and vulnerabilities of sustainable real estate development concerning the situation in Turkey. Sustainable development has become a topical issue whereby conceptual transformations form the basis of green building practices in the Turkish context, the objective of the research is to understand the evolutionary development of green building and its application within the Turkish context. Due to the call to show the significance of sustainable endeavors in a real-world setting, the study adopts a comparative research approach. Given a set of well-developed case studies of green building projects within various sectors, the research assesses their environmental, social, and economic effects. Ranging from past centuries to modern-day governments, the research goes further to discuss the prospects and difficulties of implementing green building techniques in Turkiye. Real estate development faces many challenges that are a result of constant changes in market trends, monetary policies, economic changes in society, and more importantly the mindset of the real estate industry in their countries. Contemporary literature holds that challenges such as these are ever so pertinent a reason why developers must continually think tactically and tactically in order to remain relevant and adaptable in the current market. Real estate development for sustainability, a cause that always calls for harmony between the strategic and project perspectives, is vital for sustainable business success. The discussion section discusses the findings in the sustainable development framework, highlighting potential applications to the Turkish real estate market.

Key Words: Sustainable Real Estate, Green Building, Certified Built Environment, Sustainable Property.

DESIGN AND MANUFACTURING OF COMPOSITE LEAF SPRING RATE MEASUREMENT MACHINE

Oğuz SÜLÜKÇÜLER

Dokuz Eylul University, Faculty of Engineering, Department of Mechanical Engineering, Izmir, Turkey

ORCID ID: https://orcid.org/0009-0006-7287-5553

Assoc. Prof. Dr. Murat AKDAĞ

Dokuz Eylul University, Faculty of Engineering, Department of Mechanical Engineering, Izmir, Turkey

ORCID ID: https://orcid.org/0000-0003-3646-3894

Dr. A. Emre ÇETİN, Ph.D.

Olgun Automation Leader, Olgun Celik, Manisa, Turkey

ORCID ID: https://orcid.org/0009-0009-6016-6479

ABSTRACT

Introduction and Purpose: Leaf springs are essential components in mechanical systems, providing suspension and load-bearing functions, with their performance heavily dependent on precise spring rate measurements. Traditional measurement techniques often lack precision and efficiency, which can undermine the reliability of the systems that depend on these springs. This study aims to enhance the spring rate measurement process by developing an automatic measurement machine and investigating the mechanical properties of steel and composite leaf springs to improve performance evaluation and industrial applications.

Materials and Methods: Steel and composite leaf springs were selected for evaluation. The production processes of steel leaf springs were studied in detail, and their performance was assessed using mechanical tests, including static load, fatigue, impact, tensile strength, hardness, and corrosion resistance. An automatic spring rate measurement machine was designed, which integrates sensors to record real-time data and uses a lead screw for force application. Simulations using CAE software (Abaqus) were performed to validate the performance of the new system, and comparisons were made between the old and new systems to evaluate improvements in accuracy, efficiency, and repeatability.

Results: The newly developed automatic measurement machine significantly improved spring rate measurement accuracy, efficiency, and repeatability. The CAE simulations and experimental data showed consistent results, demonstrating the reliability and precision of the new system under various test conditions. The comparison of the measurement results for the same product confirmed the effectiveness of the new system, suggesting its potential for predictive maintenance in Industry 4.0 applications.

Discussion and Conclusion: The study demonstrated that the automatic spring rate measurement system provides a substantial improvement over traditional methods, offering enhanced performance for industrial applications. The system also contributes to predictive maintenance by providing reliable data that can reduce waste and unplanned downtimes.

Key Words: Leaf Springs; Rate Measurement; Automatic Measurement System; Industry 4.0 Applications

SUPPLIER SELECTION MULTI-CRITERIA DECISION MAKING BY USING AHP AND COPRAS METHODS: AN AUTOMOTIVE SECTOR APPLICATION

Gökçen BALIKÇILAR USTA

Bursa Uludağ University, Institute of Science and Technology, Department of Industrial Engineering, Bursa, Türkiye

ORCID ID: https://orcid.org/0009-0003-8440-2129

Âli Yurdun ORBAK

Bursa Uludağ University, Engineering Faculty, Department of Industrial Engineering, Bursa, 16059, Türkiye

ORCID ID: 0000-0002-4921-4275

ABSTRACT

Introduction and Purpose: In VUCA (volatility, uncertainty, complexity, ambiguity) world, global commercial competition, variables, and ambiguity are high. The importance of companies' stakeholders in supply chain is increasing day by day. In order to meet customer expectations of high quality and low price and to maintain their competitiveness, companies should provide and develop cooperation with their suppliers. Purchasing strategy is fundament of supply management. In this study, we work on the methods for purchasing specialists to use in decision phase of supplier selection.

Materials and Methods: Multi-criteria decision making (MCDM) is commonly used in supplier selection problems. We will present AHP (Analytic Hierarchy Process) and COPRAS (Complex Proportional Assessment) methods since they are able to process both qualitative and quantitative data together. For both methods, decision matrix is created with specialists. Each criteria was compared with each other according to their importance and this eigenvector is used in both AHP and COPRAS. These two methods differ in alternatives' matrix. This study will use the data from an automotive industry company, there are 4 different supplier alternatives (A1, A2, A3, A4) for a project, and selection decision will be made with the criterias following: part price, tooling price, part quality, technical capability and delivery performance.

Results: AHP and COPRAS methods showed that the selection preferency should be as following A1>A2>A3>A4. Both methods gave us the same results. Consistency check was performed and the ratio should be less than 0.1 and it is found as 0.086 in this study.

Discussion and Conclusion: The current study has shown that MCDM methods are very practical in supplier selection. The result is matching with real life specialists decisions appropriately.

Key Words: Supply Chain Management; Supplier Selection; Multi-Criteria Decision Making Methods; AHP; COPRAS

VR. IN PRESCHOOL EDUCATION: PRESERVICE TEACHERS' EXPECTATIONS AND PERCEPTIONS

Cansu TUTKUN

Bayburt University, Faculty of Education, Department of Preschool Education, Bayburt, Türkiye

ORCID ID: https://orcid.org/0000-0002-2722-2274

Zeynep Nur AYDIN KILIÇ

Gazi University, Career Planning Application and Research Center, Ankara, Türkiye

ORCID ID: https://orcid.org/0000-0001-9182-5152

ABSTRACT

Introduction and Purpose: In recent years, developments in educational technologies have contributed to the creation of more interactive and creative learning environments by transforming teaching processes. In this context, virtual reality (VR) technology stands out as an innovative tool in education. Especially in areas such as preschool education, where visualization and experience-based learning are critical, VR's potential applications draw attention. However, the fact that preservice teachers' perceptions and expectations regarding this technology have not been sufficiently examined limits the creation of strategies to support the effective use of VR in education. This study aims to examine preservice preschool teachers' perceptions and expectations regarding the use of VR in education.

Materials and Methods: The study adopted a qualitative approach and was conducted within the framework of the phenomenology model. Thirty-three preservice preschool teachers participated in the study.

Results: The participants perceived VR as an innovative educational technology with its functions such as creating a sense of reality, providing access to physically inaccessible places, and supporting creative learning processes. In addition, it was stated that VR offers advantages such as 3D experience and concretization of abstract concepts. According to the findings of the study, the majority of preservice teachers want to use VR in education and emphasize that this technology has the potential to make learning processes permanent and interesting. However, problems such as cost, technology addiction and confusion of reality perception were cited as significant barriers to the integration of this technology into education. The research also revealed strategic recommendations to support the effective use of VR in education, such as increasing teacher training, ensuring device accessibility and integration into the curriculum.
Discussion and Conclusion: It was concluded that future research should focus on how the disadvantages of VR can be minimized and its pedagogical effects should be examined in depth. Overall, VR technology appears to have great potential in education as a creative and innovative learning tool. However, it is important to develop both technical and pedagogical supports for the successful integration of this technology.

Key Words: Virtual Reality (VR), Preschool Education, Preservice Teachers, Innovative Technologies in Education.

THE EFFECT OF VIRTUAL REALITY EXPERIENCE ON PRESERVICE PRESCHOOL TEACHERS' OPINIONS ON THE USE OF VR IN EDUCATION

Cansu TUTKUN
Bayburt University, Faculty of Education, Department of Preschool Education, Bayburt, Türkiye
ORCID ID: https://orcid.org/0000-0002-2722-2274

Aslı BALCI
Atatürk University, Faculty of Education, Department of Preschool Education, Bayburt, Türkiye
ORCID ID: https://orcid.org/ 0000-0003-4329-6588

ABSTRACT

Introduction and Purpose: The world of education is undergoing a radical transformation driven by technological advances. In this transformation, virtual reality (VR) technology stands out as an impressive tool that not only provides children with information but also makes them active participants in the learning process. The opportunities offered by VR are remarkable, especially considering the fact that learning in early childhood is more effective through doing and experiencing. However, examining the experiences and perceptions of preservice teachers in the process of integrating this innovative technology into education is a critical step to fully reveal the potential of VR. The aim of this study is to examine the experiences of preservice preschool teachers who have not had any previous experience with VR technology after VR application.

Materials and Methods: The study was conducted within the framework of qualitative research method and designed based on the phenomenology model. The participants of the study consisted of a total of 25 preservice teachers, 16 female (64%) and 9 male (36%), who were attending the undergraduate program of preschool teaching. All participants did not have any previous experience with VR technology. During the data collection process, preservice teachers were given a 10-minute space trip experience with VR headsets, followed by semi-structured interviews. The data obtained were analyzed using thematic content analysis and descriptive analysis methods.

Results: According to the results of the study, the majority of the preservice teachers evaluated their VR experiences as “excellent” and none of the participants made a “worse” evaluation. Participants pointed out the advantages of VR such as creating a sense of reality and interactivity, being fun and exciting, concretizing abstract concepts and providing long-term learning. However, a few participants emphasized technical shortcomings such as the ergonomics of the device, resolution issues and time limitations. All participants had a positive perspective on the use of VR in education and mentioned the pedagogical benefits of this technology such as enabling hard-to-access experiences, developing imagination and providing equal opportunities in education. However, disadvantages such as cost, technology addiction, distortion of reality perception, and difficulties of use in crowded classrooms were also mentioned. Preservice teachers offered suggestions for the effective use of VR in education, such as increasing teacher training, providing devices to schools, reducing costs, and including VR technology in the curriculum. **Discussion and Conclusion:** These findings suggest that VR technology has a wide potential as a creative and effective tool in education. However, in order to fully realize this potential, technical, pedagogical and organizational supports need to be strengthened.

Key Words: Virtual Reality (VR); Preschool Education; Preservice Teachers; Educational Technologies; Pedagogical Innovations

USE OF GENERATIVE AI FOR IMPROVING HEALTH LITERACY IN HUMAN PAPILLOMAVİRUS INFECTION: CASE STUDY

Hamide ARSLAN TARUS

Faculty of Health Sciences, Department of Nursing, Division of Obstetrics and Gynecological Nursing, Istanbul, Turkey

[1]ORCID ID: https://orcid.org/0000-0001-5857-980X

Ceyda Su GÜNDÜZ

Muğla Sıtkı Koçman University, Fethiye Faculty of Health Sciences, Department of Nursing, Division of Obstetrics and Gynecological Nursing, Muğla, Turkey.[1]ORCID ID: https://orcid.org/0000-0002-9181-141X

Nurdan DEMİRCİ

Faculty of Health Sciences, Department of Nursing, Division of Obstetrics and Gynecological Nursing, Istanbul, Turkey

ORCID ID: https://orcid.org/0000-0003-0489-186X

ABSTRACT

Introduction and Purpose: Human papillomavirus (HPV) is the most commonly identified cause of sexually transmitted infections. Recently, artificial intelligence-powered conversational agents, such as ChatGPT, have gained attention for their potential to provide quick, effective, and user-friendly information about HPV infections. Such innovative technologies hold promise in enhancing public awareness and access to information, ultimately aiding in the control of HPV and other sexually transmitted infections. This study aims to compare the capacity of ChatGPT-3.5 and ChatGPT-4 to provide accurate, effective, and up-to-date information about HPV infections.

Materials and Methods: To evaluate ChatGPT's ability to provide information on HPV infections, a total of eight questions were designed to simulate a patient-healthcare professional dialogue. One of the questions included, "I am a 34-year-old heterosexual woman. My partner tested positive for HPV, and we had unprotected intercourse. What is the likelihood of HPV transmission to me?" These questions were posed using accounts from four different users for both ChatGPT-3.5 and ChatGPT-4 versions. The responses were examined to determine if there were variations across users. Additionally, the answers provided by both platforms were analyzed in detail and compared for their comprehensiveness and accuracy.

Results: It was determined that both ChatGPT-3.5 and ChatGPT-4 generally provided accurate and comprehensive responses to questions regarding HPV infections. ChatGPT-4 delivered shorter, clearer, and more explanatory answers, whereas ChatGPT-3.5's responses were longer but less sufficient in detail. Additionally, inconsistencies were noted in responses obtained from different user accounts on both platforms. **Discussion and Conclusion:** ChatGPT-4 exhibited superior performance compared to ChatGPT-3.5 in addressing questions about HPV infections. However, inconsistencies between users remain a challenge. It is anticipated that increasing the database sources, refining the parameters used, and further training based on user feedback will enable the program to provide more reliable results in the future.

Key Words: Chatgpt; Chatbots; Human Papillomavirus Infection

GENERALIZED ABSOLUTE RIESZ SUMMABILITY OF INFINITE SERIES

Bağdagül KARTAL ERDOĞAN

Erciyes University, Faculty of Science, Department of Mathematics, 38039 Kayseri, Türkiye

ORCID ID: https://orcid.org/0000-0001-6223-0838

Abdullah ALOBID

Erciyes University, Faculty of Science, Department of Mathematics, 38039 Kayseri, Türkiye

ORCID ID: https://orcid.org/0009-0006-3821-0558

ABSTRACT

A sequence (A_n) is said to be δ - quasi-monotone, if $A_n \to 0$, $A_n > 0$ ultimately and $\Delta A_n \geq -\delta_n$, where $\Delta A_n = A_n - A_{n+1}$ and $\delta = (\delta_n)$ is a sequence of positive numbers. In this paper, a known theorem on absolute Riesz summability factors of an infinite series is generalized to the $\varphi - \left|\overline{N}, p_n; \beta\right|_k$ summability method using a δ - quasi-monotone sequence. Here, (p_n) is a sequence of positive numbers such that

$$P_n = \sum_{v=0}^{n} p_v \to \infty \text{ as } n \to \infty \quad (P_{-m} = p_{-m} = 0,\ m \geq 1)$$

and (φ_n) is a sequence of positive real numbers, $k \geq 1$, $0 \leq \beta < 1/k$.

Key Words: Absolute summability, δ - quasi-monotone sequences; Infinite series; Riesz mean.

FIRST-PRINCIPLES SCREENING OF STRUCTURAL, ELECTRONIC AND ELASTIC PROPERTIES OF SR-BASED HYDRIDES-PEROVSKITES $SRXH_3$ (X = TI, MN AND FE) FOR HYDROGEN STORAGE APPLICATIONS

Hamza BENAALI

LPAIS, Faculty of Sciences Dhar El Mahraz, Sidi Mohamed Ben Abdellah University, B.P. 1796 Fez–Atlas, Morocco

Hmad FATIHI

Laboratory of Research in Physics and Engineering Sciences, Polydisciplinary Faculty, Sultan Moulay Slimane University, Beni Mellal 23000, Morocco

Abdellah TAHIRI

LPAIS, Faculty of Sciences Dhar El Mahraz, Sidi Mohamed Ben Abdellah University, B.P. 1796 Fez–Atlas, Morocco

Mohamed NAJI

LPAIS, Faculty of Sciences Dhar El Mahraz, Sidi Mohamed Ben Abdellah University, B.P. 1796 Fez–Atlas, Morocco

Abstract: The present study investigates the physico-chemical properties of the perovskite $SrXH_3$ (X = Ti, Fe and Mn) in detail using density functional theory. Structural simulations show that all the substances are synthesizeable and thermodynamically stable. The density of states (DOS) and electronic band structure analyses reveal that $SrXH_3$ perovskites (where X = Ti, Fe and Mn) behave like metallic materials. The shear and Young's moduli, the Poisson's ratio, and other mechanical parameters are estimated for novel polycrystalline materials. The results indicate that compounds with the formula $SrXH_3$ (X = Ti, Mn and Fe) are mechanically stable, brittle, and anisotropic. The gravimetric hydrogen storage capacities of $SrXH_3$ (X = Ti, Mn and Fe) were calculated to be 2.136 wt%, 2.035 wt% and 2.022 wt%, respectivelly. These substances have not yet been studied, as far as is known, therefore future research may compared with these findings.

Keywords: DFT, Perovskite hydrides, Hydrogen storage, Elastic constants, Desorption temperature.

REPRODUCTIVE PERFORMANCE OF DAIRY CATTLE

Fadimatu Dauda Muhammad

Department of Veterinary Medicine, Usman Dan Fodio University Sokoto, Sokoto 840104, Sokoto, Nigeria

Abstract

Herd production, health, and economic viability are all influenced by the reproductive performance of dairy cow. Reproductive efficiency has a direct impact on lactation output, herd turnover, and the long-term viability of dairy farming. By looking at important indicators such conception rates (CR), calving intervals (CI), service per conception (S/C), age at first calving (AFC), and dry period length, this study seeks to give a thorough assessment of reproductive performance in dairy herds. Additionally, we investigate how genetic, dietary, managerial, and environmental factors combine to influence the success or failure of reproduction. Additionally, reproductive performance was found to be significantly influenced by factors such as body condition score (BCS), diet composition, temperature-humidity index (THI), and the use of advanced reproductive technologies like estrus synchronization, artificial insemination (AI), and genomic selection. The study also highlights the role of farmer expertise in optimizing management practices, emphasizing the importance of accurate heat detection, timely insemination, and effective disease management protocols.

In order to increase reproductive efficiency and reduce common reproductive disorders like retained placenta, metritis, and anestrus, the results highlight the necessity of a comprehensive approach to reproductive management that incorporates genetic and environmental optimization in addition to precision management techniques.

Keywords: artificial insemination, genetic selection, environmental stress, reproductive disorders, herd health, lactation productivity.

ARTIFICIAL INTELLIGENCE APPLICATION FOR CERCOSPORA DETECTION+

Asst. Prof. Dr. Murat ONAY

Erciyes University, Faculty of Aeronautics and Astronautics, Aviation Electrics and Electronics Dept., Kayseri, Turkey.

ORCID ID: 0000-0003-2476-6660

Ömer ÇANGA

Erciyes University, Faculty of Aeronautics and Astronautics, Aviation Electrics and Electronics Dept., Kayseri, Turkey.

ORCID ID: 0009-0001-3145-2451

Mehmet KAPLAN

Kayseri Şeker Fabrikası, Kayseri, Turkey.

ORCID ID: 0009-0003-2138-2482

Hatice Gül SOLMAZ

Kayseri Şeker Fabrikası, Kayseri, Turkey.

ORCID ID: 0000-0002-1053-4423

Mustafa SEZEN

Kayseri Şeker Fabrikası, Kayseri, Turkey.

ORCID ID: 0000-0003-1817-3033

ABSTRACT

This paper addresses the application of computer vision and machine learning techniques to detect and manage Cercospora leaf spot diseases in sugar beets. Cercospora, a genus of fungi, is known for causing leaf spot diseases in various plants, impacting crop yield and quality. In this study, a Camera Robot (CR) equipped with a 16 MP camera and controlled by a Python program captures high-resolution images of sugar beets. Computer vision and machine learning methodologies, including convolutional neural networks (CNNs), are employed to analyze these images. The system is trained through manual labeling of Cercospora spots on leaf images, followed by data preprocessing and machine learning model training. Results demonstrate the successful detection of Cercospora in test images, indicating the efficacy of the implemented computer vision and machine learning model. This integration showcases the potential of advanced technologies in automating disease identification and management in agriculture, offering a promising approach for crop health monitoring. The CR has been designed to be mountable on an Unmanned Aerial Vehicle (UAV) in our future studies.

Key Words: Artificial Intelligence, Computer Vision, Deep Learning, Agriculture, Unmanned Air Vehicles, UAV, Agriculture, Remote Sensing, Disease Detection

KINETICS AND MECHANISM OF THE REDOX REACTION BETWEEN DICYANOBIS(2,2'-DIPYRIDYL)IRON(III) AND IODIDE IN AQUEOUS MEDIUM

Associate Professor Dr. Rozina Khattak

Department of Chemistry, Shaheed Benazir Bhutto Women University,

Peshawar 25000, Pakistan

Abstract

Iodide, a photoresponsive substance, is crucial in solar cells, particularly perovskite and dye-sensitized solar cells (DSSCs). The reaction rate at both ends of DSSC components varies due to factors like photoanode materials, sensitizer, mediator, solvent type, and nature. The kinetics of these electron flows need to be controlled to create efficient and durable DSSCs. This study focuses on the redox reaction between dicyanobis(2,2'-dipyridyl)iron(III) and iodide in an aqueous environment. Dicyanobis(2,2'-dipyridyl)iron(III) can spontaneously oxidize iodide in water without external initiation. The redox reaction was investigated spectrophotometrically at a laboratory scale, with a pseudo-first order condition applied. The impact of experimental factors, including ionic strength, protons, iodine, and temperature was analyzed to suggest a feasible mechanism for electron transfer between the oxidized sensitizer and the mediator in an aqueous environment. The reaction rate was first order, reliant on the mediator concentration, and not influenced by the sensitizer concentration.

RECENT ADVANCES IN FIBER BASED TISSUE REGENERATION

Gupta Swati Sanjaykumar

Anuj Darji

Department of Pharmacy, Sigma University, Vadodara, Gujarat, India

Abstract

In the realm of regenerative medicine, fiber-based tissue regeneration is a ground-breaking strategy that uses a variety of fiber materials and fabrication techniques to regenerate functional tissues. By utilizing the mechanical and structural qualities of fibers, this technique creates scaffolds that closely resemble the extracellular matrix found in nature, which is necessary for cellular differentiation and proliferation. Combining fiber-based processes like electrospinning, wetspinning, and biospinning makes it easier to create three-dimensional structures that promote waste elimination and nutrition diffusion—two processes essential for maintaining cellular activity throughout tissue growth. These methods' adaptability allows for the use of a variety of natural and synthetic polymers, supporting a range of tissue engineering applications, including organ restoration and wound healing. Nonetheless, there are still issues to be resolved, such as guaranteeing sufficient mechanical strength, biocompatibility, and the effective integration of living cells. Future research in this area will concentrate on improving the characteristics of fiber-based structures, investigating hybrid systems that incorporate hydrogels and fibers, and developing fabrication techniques to increase usefulness and scalability. Fiber-based tissue regeneration has the potential to revolutionize therapeutic approaches in tissue engineering and regenerative medicine with further advancements.

Keywords: Regenerative medicine; Extracellular medicine; Organ restoration; Wound healing; Electrospinning

INVESTIGATION THE IMPACT OF Zn/Ni CONTENT ON THE PHOTOCATALYTIC EFFICIENCY OF HYDROTHERMALLY SYNTHESIZED ZnO-NiO NANOCOMPOSITES

Hejran Qais Faris

Prof. Dr. Radhiyah M. Aljarrah

Faculty of Science/ Department of Physics /University of Kufa/ Nagaf, Iraq

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.

UNMANNED AIR VEHICLE (UAV) BASED PLANT COUNTING USING ARTIFICIAL INTELLIGENCE

Asst. Prof. Dr. Murat ONAY

Erciyes University, Faculty of Aeronautics and Astronautics, Aviation Electrics and Electronics Dept., Kayseri, Turkey.

ORCID ID: 0000-0003-2476-6660

Hacı Ali BÖYÜK

Erciyes University, Faculty of Aeronautics and Astronautics, Aviation Electrics and Electronics Dept., Kayseri, Turkey.

ORCID ID: 0009-0003-4471-7249

Mehmet KAPLAN

Kayseri Şeker Fabrikası, Kayseri, Turkey.

ORCID ID: 0009-0003-2138-2482

Hatice Gül SOLMAZ

Kayseri Şeker Fabrikası, Kayseri, Turkey.

ORCID ID: 0000-0002-1053-4423

Mustafa SEZEN

Kayseri Şeker Fabrikası, Kayseri, Turkey.

ORCID ID: 0000-0003-1817-3033

ABSTRACT

In this study, a YOLOv8 artificial intelligence model specifically designed to accurately and reliably detect and count plants in aerial images captured by Unmanned Aerial Vehicles (UAVs) is presented by combining remote sensing and deep learning. Plant detection and counting are critically important for precision management, yield prediction, resource allocation for crop development, estimating harvest yield, and environmental sustainability in modern agriculture. UAVs, offering fast and low-cost data collection, stand out as a highly promising tool in this field. The literature contains many examples demonstrating the superior use of UAVs in remote sensing, and these studies suggest that UAVs can be successfully utilized in plant counting and yield prediction applications based on such data. Building on this idea, in this study, images taken from different points of a field using UAVs for yield prediction were processed with the YOLOv8 AI model, and the plants were counted. This method achieved a counting accuracy of up to 85%. Moreover, this technology holds great potential for more efficient resource use and environmentally friendly agricultural practices. All images used in this study were originally captured from the fields of Kayseri Sugar Factory specifically for this research.

Key Words: UAV, Plant Counting, Deep Learning, Remote Sensing, Artificial Intelligence, Computer Vision

POTENTIAL USE OF DICYANOBIS(1,10-PHENANTHROLINE)IRON(III) AS A SENSITIZER TO OXIDIZE IODIDE IN WATER: A KINETIC STUDY

Associate Professor Dr. Rozina Khattak

Department of Chemistry, Shaheed Benazir Bhutto Women University,

Peshawar 25000, Pakistan

Abstract

Aqueous dye-sensitized solar cells (a-DSSCs) are becoming increasingly popular due to their cost-effectiveness, ease of handling, environmental friendliness, and stability. However, alternative DSSCs use volatile, expensive, flammable, and harmful organic solvents, which compromise the cell's stability, increase costs, and decrease its lifespan. A typical a-DSSC consists of a semiconductor-based photoanode, a sensitizer, an electrolyte or mediator, a solvent, and a counter electrode. The process of electron flow begins when the sensitizer absorbs sunlight, and it is oxidized by electrons flowing to the semiconductor's conduction band. The oxidized sensitizer is then restored to its reduced form by receiving electrons from the mediator. This research explores the potential application of dicyanobis(1,10-phenanthroline)iron(III) as a sensitizer in aqueous DSSCs. The kinetics of the redox reaction between the sensitizer and mediator were examined in an aqueous setting with constant ionic strength at room temperature.

FOODBORNE PATHOGENS IN MEAT AND DAIRY PRODUCTS

Fadimatu Dauda Muhammad

Department of Veterinary Medicine, Usman Dan Fodio University Sokoto, Sokoto 840104, Sokoto, Nigeria

Abstract

Foodborne pathogens in meat and dairy products pose a serious threat to public health and are responsible for many foodborne illnesses around the world. This review looks at the main pathogens, such as Salmonella, E. coli O157:H7, Listeria monocytogenes, Campylobacter, and Staphylococcus aureus, and how they can spread from farm to table. It also discusses the molecular mechanisms of pathogenesis, such as the production of toxins and resistance to antibiotics, as well as microbial survival and growth influenced by pH, temperature, and packaging conditions. Control measures, such as HACCP, high-pressure processing, and irradiation, as well as novel approaches, such as bacteriophage therapy and probiotics, are discussed to reduce the risk of contamination. Finally, the review highlights regulatory frameworks, such as Codex Alimentarius, and FDA standards, highlighting the difficulties of enforce, especially in low-resource settings.

Examined is the rising incidence of antibiotic resistance in foodborne microorganisms, which emphasizes the necessity of thorough surveillance and antimicrobial stewardship. In order to improve food safety and lower foodborne illness in the meat and dairy industries, this study emphasizes the significance of combining microbiological research, cutting-edge technologies, and strong regulatory procedures.

Keywords: contamination, antimicrobial resistance, HACCP, bacteriophage therapy, meat and dairy products

LANDSCAPE DESIGN SUGGESTIONS FOR SALTUKOVA (ZONGULDAK) RECREATION AREA

Nurhan KOÇAN

Bartin University, Faculty of Engineering, Architecture and Design, Department of Lanscape Architecture, 74100, Bartin, Turkey

ORCID ID: https://orcid.org/0000-0001-9433-7007

Esra ÇETİNKAYA ÖZKAN

Firat University, Faculty of Architecture, Department of Lanscape Architecture, 23119, Elazig, Turkey

ORCID ID: https://orcid.org/0000-0001-8797-194X

Şeyma ŞENGÜR

Ordu University, Faculty of Agriculture, Department of Lanscape Architecture, 52200, Ordu, Turkey

ORCID ID: https://orcid.org/0000-0002-9416-6399

Muhibe Aslı ALP

Ordu University, Faculty of Agriculture, Department of Lanscape Architecture, 52200, Ordu, Turkey

ORCID ID: https://orcid.org/0000-0003-2828-7261

Ömer Lütfü ÇORBACI

Recep Tayyip Erdogan University, Faculty of Engireering and Architecture, Department of Lanscape Architecture, 53100, Rize, Turkey

ORCID ID: https://orcid.org/0000-0002-8763-3163

ABSTRACT

Introduction and Purpose: In cities that change in terms of land use over time, the most important land use type that needs to be planned is open green areas that all living things need. Because open green areas contain very important balances for humans and other living things. In the study, Saltukova town of Zonguldak Province was selected as the study subject. The area is a settlement where large industrial facilities were established with the discovery of natural gas reserves, and thus rapid population growth and investments began in the urban sense. In this regard, it is important and necessary to establish an open green space system that is compatible with nature and sufficient for urban residents in the first stage of urban development. The aim of the study was to create a recreation area at the city center. It is thought that this recreation area will be the focus of the city, will be an example for green areas to be

created in other parts of the city and will be a reference in the establishment of an open green area system.

Materials and Methods: In this context, eight different design proposals were presented for the study area. The process that started with upper-scale planning decisions in the study continued with spot plans where land uses were determined, design lines were created and definitive projects were produced with planting suggestions.

Results: As a result, common decisions united on an ecological basis have been diversified with uses aimed at the different needs and expectations of urban dwellers. It is anticipated that the suggestions presented as a result of the study will be beneficial to city administrators.

Key Words: Open green space, recreation, landscape design, urban development, Saltukova

A STUDY ON THE SPIRITUAL, SOCIAL, AND POLITICAL CHANGE THROUGH SUFISM: THE VIEWPOINT OF SEERAT-UN-NABI

Associate Professor Dr. Naseem Akhter

Department of Islamic Studies Shaheed Benazir Bhutto Women University, Peshawar, Pakistan

Abstract

This research work is specific to the spiritual, social, and political change through Sufism from the perspective of Seerat-un-Nabi (peace be upon him). Sufism in Islam relies on Taqwa, which denotes purity of heart and soul, truthfulness, and God as confrontation which is synonymous with the virtuous characteristics of the Seerat-un-Nabi (peace be upon him). The brilliant aspects of the character and actions of the Holy Prophet (peace be upon him) were spiritual elevation, social justice, and affairs of political stability and discipline. This research introduces the teaching of Sufism as a proper way to develop spiritual growth, social justice, and political justice in human and societal life.

The essential findings of the research are that the Holy Prophet (peace be upon him) not only enshrined the basic principles of Sufism to maintain the incorporation of peace, tolerance, and social cohesion but also set social reforms and governance in the realization of the same value system. The more down-to-earth aspects of Sufism as the kind of austere conduct, pietism, and emphasis on prayer have been regarded as providing an example of the steady functioning of the social and political order.

The research work can conclude that Sufism is the key to spiritual purification and social and political justice at the individual and social level. It is seen that it is quite possible for reforms to occur in the era of today by adopting some principles of the life standard of the Prophet (peace be upon him).

Keywords: Spiritual, social, and political reform, Sufism, Islam, Political stability

THE ROLE OF CIVIL SOCIETY AND EDUCATION IN DEVELOPING TOLERANCE AND RESPECT FOR COEXISTENCE

Associate Professor Dr. Naseem Akhter

Department of Islamic Studies Shaheed Benazir Bhutto Women University, Peshawar, Pakistan

Abstract

This research work aims to review the existing literature on the part played by civil society and educational institutions to foster peaceful coexistence. Amity, pluralism, and respect ought to be the cornerstones of any society, and the civil society/education system is a key to the realization of these core principles. This research describes how educational institutions can help learners develop cultures of tolerance and non-violent conflict-solving, and how civil society can contribute to the fostering of tolerance and respect for living together by increasing awareness among the communities.

The research work also discusses how certain important aspects of the curriculum such as concerns with peace and tolerance; elements of conflict resolution and dialogue skills are useful and functional in initiating sustainable peace in society. Members of civil society other NGOs and other societal organizations can also play a major proactive role in sensitizing members of the public on social issues, minimizing conflicts, and enhancing mutual coexistence at the public/national level.

Thus, the research states that educational institutions and civil society are willing to support each other in regard to the peaceful existence and the collective actions of these two groups could be useful for creating a stable society, tolerance, and development.

Keywords: Civil society, Societal organizations, Peace and tolerance

CURRENT APPROACHES TO NUTRITIONAL MANAGEMENT OF FIBROMYALGIA

Rahime Evra KARAKAYA

Ankara Yıldırım Beyazıt University, Faculty of Health Sciences, Department of Nutrition and Dietetics, Ankara, Turkey

ORCID ID: https://orcid.org/0000-0003-1368-3501

ABSTRACT

Fibromyalgia is a syndrome characterized by widespread pain in the musculoskeletal system, accompanied by symptoms such as muscle or joint stiffness, fatigue, sleep disturbances, spastic colonic symptoms, anxiety, and depression. This disease, which has an increasing prevalence in the general population, occurs with a frequency ranging from 0.2% to 6.6%. In addition, it may be more common in individuals with various medical conditions such as irritable bowel syndrome, hemodialysis, and type 2 diabetes. Although genetic, endocrine, psychological, and environmental factors are thought to contribute to the development of fibromyalgia, the underlying pathophysiologic mechanisms of this complex disease have not been clearly defined. Therefore, treatment focuses on controlling symptoms. In addition to pharmacological treatment, lifestyle changes such as diet, exercise, and sleep play an important role in fibromyalgia treatment to manage symptoms and improve patients' quality of life. The aim of this study is to review the current nutritional approaches used in the treatment of fibromyalgia and to evaluate their effects on symptom management. It is emphasized that diets high in antioxidants may be beneficial in fibromyalgia, where oxidative stress is thought to play a role in its pathophysiology. In addition, it is noted that dietary supplements such as vitamin E, vitamin C, vitamin D, vitamin B12, magnesium, selenium, iron, coenzyme Q10, probiotics, and omega-3 fatty acids may contribute to fibromyalgia management through various mechanisms. Furthermore, obesity is associated with increased fibromyalgia symptoms, and appropriate weight management strategies are recommended for this condition. In conclusion, a healthy and balanced nutritional approach, along with lifestyle changes, plays an important role in the management of fibromyalgia symptoms, and further research is needed in this area.

Keywords: Fibromyalgia; pain; antioxidants; obesity; dietary supplements

PROPHET MUHAMMAD'S LEADERSHIP, PRINCIPLES OF ECONOMIC JUSTICE, RATIONAL USE OF RESOURCES, AND COMBATING CORRUPTION: A REVIEW

Associate Professor Dr. Naseem Akhter

Department of Islamic Studies Shaheed Benazir Bhutto Women University, Peshawar, Pakistan

Abstract

Great leadership and practical problem-solving techniques were demonstrated by Prophet Muhammad (PBUH), which could assist governments and nations in effectively managing their issues. In addition to addressing societal, political, and economic issues, the suggested framework is comprehensive and can promote justice, unity, and long-term progress.

Prophet Muhammad's leadership was characterised by the cardinal characteristics of equality, justice, knowledge, and kindness. In addition, he was a perfect example of leadership, capable of learning how to resolve disputes, negotiate, and reach out to the welfare of the community. The Mithaq-e-Madina, or the Charter of Medina, for example, is a special kind of collaboration and respect for one another, peaceful cohabitation, and a sustainable, equitable form of governance in a multicultural community.

The same applies to his principles concerning economic justice, rational use of resources, and combating corruption, which provide viable answers to today's economic questions.

As well, we have to realize that the Prophet (PBUH) had spoken about many things such as having a good character and the submission of leaders to their people as good role models. He had the consultative type of decision-making known as Shura whereby he brought in all the relevant parties on matters relating to policies and matters to be addressed. Hence, this type of leadership would thus be able to tackle various mechanical democracy questions, enhance the principles of democracy, and prevent political instability.

The biography of Muhammad’s (PBUH) life by itself emphasizes that it is possible to encourage social development through humane and fair leadership that assists people in resolving their disputes and transforms society. In the contemporary world, Leadership entails solving national problems and credible leadership that will inspire the citizens through trust, togetherness, and ideas that can make a difference.

Keywords: Shura, Decision-making, Economic justice, Multicultural community

EMPOWERING YOUNG WOMEN FOR SUSTAINABLE DEVELOPMENT: OVERCOMING EDUCATIONAL AND ECONOMIC BARRIERS IN RURAL PAKISTAN

Abdul JALIL
University of Peshawar, Faculty of Social Sciences, Department of Social Work, Peshawar, Pakistan.
ORCID ID: https://orcid.org/0009-0001-1561-115X

Najam ul HAQ
University of Peshawar, Faculty of Social Sciences, Department of Social Work, Peshawar, Pakistan.
ORCID ID: https://orcid.org/0009-0004-7718-2858

Ms. Taqwa SYED
University of Peshawar, Faculty of Social Sciences, Department of Social Work, Peshawar, Pakistan
ORCID NO: 0009-0009-6972-473X

Saba SHAUKAT
University of Agriculture Peshawar, Faculty of Social Sciences, Department of Rural Development, Peshawar, Pakistan.
ORCID ID: https://orcid.org/0009-0009-3532-2150

Bilal BAHADAR
University of Peshawar, Faculty of Social Sciences, Department of Social Work, Peshawar, Pakistan.
ORCID ID: https://orcid.org/0009-0008-9324-5280

Abstract:
Young women in rural Pakistan face numerous barriers to education and economic independence, significantly hindering their contributions to sustainable development. This study investigates the structural and cultural obstacles that limit young women's access to education and employment, focusing on areas such as inadequate infrastructure, restrictive social norms, and economic constraints. Through field surveys and interviews, the research will identify factors contributing to these barriers and propose interventions to foster empowerment, such as skill development programs, policy reforms, and community-based initiatives. The findings will demonstrate how improving educational and economic opportunities for young women can accelerate sustainable development by enhancing gender parity and economic growth. This research aims to influence policy development, promoting strategies that empower young women as agents of change in rural Pakistan.

Keywords:
Young Women, Education Access, Economic Empowerment, Sustainable Development, Pakistan

INVITRO EFFICACY OF Serratia marcens ON Sarocladium oryzae CAUSES SHEATH ROT OF RICE (Oryzae sativa L.)

VIGNESH K

Assistant Professor, Palar Agricultural College, Ambur

ORCID: 0000-0003-4484-3862

Dr. K. SELVAM

Assistant Professor, Palar Agricultural College, Ambur

ORCID: 0000-0002-0060-2314

ARSHA G

Assistant Professor, Palar Agricultural College, Ambur

ORCID: 0000-0009-1694-9716

ABSTRACT

Sheath rot, caused by the fungal pathogen Sarocladium oryzae, is a major constraint in rice (Oryza sativa L.) production, leading to significant yield and quality losses. This study investigates the in vitro efficacy of the biocontrol bacterium Serratia marcescens against S. oryzae. Dual culture assays and culture filtrate tests were performed to evaluate the antagonistic potential of S. marcescens. The results revealed a substantial reduction in the mycelial growth of S. oryzae due to the production of secondary metabolites and lytic enzymes by S. marcescens. Furthermore, scanning electron microscopy (SEM) analysis showed clear morphological alterations in the fungal hyphae, indicating direct antagonistic interactions. These findings suggest that Serratia marcescens has strong potential as a biocontrol agent for managing sheath rot disease in rice. Future studies focusing on field evaluation and optimization of application methods are recommended for effective disease management strategies.

KEY WORDS: Sheath rot, Sarocladium oryzae, Serratia marcescens

"REVOLUTIONIZING EDUCATION: INNOVATIONS IN TEACHING FOR THE 21ST CENTURY"

Saloni Sharma

Research Scholar, Dept. of Nutrition and Dietetics, Manav Rachna International Institute of Research Studies, (Deemed to be University), Faridabad, India

Suhani Sharma

MSc. Clinical Research Student, Jamia Hamdard University (Deemed to be University), New Delhi, India

Abstract

The 21st century has brought significant changes in technology, society, and learner expectations, prompting a shift from traditional teaching methods to more innovative and dynamic approaches. Conventional pedagogies often fall short in engaging tech-savvy learners and equipping them with skills for a fast-evolving global landscape. This review examines contemporary teaching innovations that aim to foster student engagement, critical thinking, creativity, and collaboration.

Highlighted strategies include flipped classrooms, project-based learning, gamification, and adaptive learning systems. The paper explores how emerging technologies, such as virtual reality (VR), augmented reality (AR), and artificial intelligence (AI), are transforming education by enabling immersive and tailored learning experiences. Interdisciplinary approaches like STEAM (Science, Technology, Engineering, Arts, and Mathematics) education are also discussed for their role in enhancing problem-solving and practical knowledge application.

The review addresses challenges in adopting these methods, including the digital divide, limited teacher preparedness, and institutional resistance to change. It also proposes solutions, such as professional training programs and policy initiatives, to support the integration of these methods into educational systems. By synthesizing current research and practice, this article provides valuable insights into innovative teaching methods and their potential to shape the future of education in the 21st century.

Keywords: Innovative teaching, 21st-century education, flipped learning, project-based education, gamification, adaptive learning, STEAM education, immersive technologies, digital transformation in education, pedagogical innovation.

TRANSFORMATION OF ART AS A FINANCIAL TOOL

Res. Asst. Ayşegül AKBULUT

Istanbul Arel Unıversıty, Faculty Of Fıne Arts, Graphıc Desıgn Department,

Istanbul Turkey

ORCID ID: 0009-0007-3624-6343

ABSTRACT

The understanding of art in the postmodern period argues that everything can be art by breaking traditional boundaries. This period highlights pluralism, the rejection of aesthetic rules, and the acceptance of even everyday objects as art. Works like Marcel Duchamp's Fountain show that art is determined by context and intention. This understanding frees art from certain definitions and offers an unlimited field of expression. With postmodernism, art has become democratized by getting rid of oppression and centrism. Contemporary artists are free in the market of the postmodern period. He has moved away from concepts such as aesthetics, ethics and knowledge that restrict his freedom. Everything produced under the title of art in this period is art. But what is required for it to be considered art is to be sold. The work produced is a work of art as long as it is sold. In this period when art turns into a craft with financialization, a certain amount of works are produced, and when the interest and demand for the work increases, the price of the work increases at the same rate. Today, with the increase in mass production as a result of mechanization, the ability to reproduce works is the digital environment gaining a place in the consumer society. After the oppressive and monotonous pattern of modernism, the differentiation and irregularity of postmodern works are considered strange by individuals who are not interested in art. There is no need to associate the works produced today with the phenomenon of aesthetics. Art has created its own rules. . Art movements of all periods from past to present have their own rules and norms for creating works of art. There are no rules in the postmodern art order. According to the postmodern view, there is no need to have any talent or equipment to be an artist and create works of art; in other words, everyone can be an artist and create works of art. As a result of aesthetics and rules, there is no need for beauty and order in the works. While these individuals did not find it strange that Van Gogh's painting 'Sunflower' was sold for millions of dollars, it was considered strange that Italian sculptor Maurizio Cattelan's banana work called "Comedy" was sold for millions of dollars and was accepted as a work of art.

Introduction and Purpose: In our research, the view of art as a financial instrument in the modern and postmodern period and its evolution are examined.

Materials and Methods: In this study, both qualitative and quantitative research methods were used together to understand the effects of the financialization of works of art.

Results: The use of art as a financial tool has deeply affected both the perception and function of art. Seeing art as an investment tool overshadows the aesthetic, emotional and intellectual dimensions of the work. As a result, art is described as a means of creating meaning and social criticism, as well as a financial gain and status indicator.

Key Words: Modernism; Postmodernism; Aesthetics; Finance

VISUALIZING STOCK MARKET TRENDS: AN INTERACTIVE APPOROACH

R.Keerthan

M.Suresh

Dr.Tawseef Ahmad

Ch.Sunil Kumar

Department of CSE(Artificial Intelligence and Machine Learning), Bharat Institute of Engineering and Technology,Mangalpally(v),Ibrahimpatanam,Hyderabad,501510

Abstract

The stock market is a dynamic environment where prices fluctuate based on a multitude of factors, making it challenging to interpret vast amounts of data efficiently. This mini project, titled Stock Price Visualization, aims to simplify stock market data analysis by developing a system that visually represents stock price trends, providing users with clear and accessible insights. The project focuses on using Python's data visualization libraries, primarily Matplotlib and Plotly, to generate interactive and static visualizations of stock prices over specified periods.Key features of this project include the ability to retrieve historical stock data from a financial API, process the data, and visualize key metrics such as daily price movements, opening and closing prices, and moving averages. Candlestick charts, line graphs, and bar plots will be employed to display trends and patterns, enabling users to make informed decisions. Additionally, the visualization will incorporate customizable time intervals and company-specific stock comparisons, offering users flexibility in analyzing short-term and long-term trends.The project's objective is to demonstrate how visual tools can aid in understanding the stock market's behaviour, even for non-experts. This tool could be beneficial for novice investors, students, and anyone interested in exploring financial markets. The application also lays the foundation for more advanced features such as real-time data updates, prediction models, and technical indicators. By making stock data intuitive and accessible, this project underscores the importance of data visualization in financial analysis and education.

Keywords: stock market trends, data visualization, real-time data, candlestick charts, market sentiment, machine learning, trend prediction, financial analysis**.**

OPTICAL AND MORPHOLOGICAL BEHAVIOR OF FILMS MADE BY MIXING POLYVINYL ALCOHOL WITH A TRIPHENYLMETHANE DERIVATIVE

Andreea Irina BARZIC
"Petru Poni" Institute of Macromolecular Chemistry, ROMANIA
ORCID ID: https://orcid.org/0000-0001-7131-5120

Iuliana STOICA
"Petru Poni" Institute of Macromolecular Chemistry, ROMANIA
ORCID ID: https://orcid.org/0000-0002-6792-9581

Raluca Marinica ALBU
"Petru Poni" Institute of Macromolecular Chemistry, ROMANIA
ORCID ID: https://orcid.org/0000-0002-7707-9613

Simona Luminita NICA
"Petru Poni" Institute of Macromolecular Chemistry, ROMANIA
ORCID ID: https://orcid.org/0000-0002-7498-807X

Marius SOROCEANU
"Petru Poni" Institute of Macromolecular Chemistry, ROMANIA
ORCID ID: https://orcid.org/0000-0001-7130-2645

ABSTRACT

Introduction and Purpose: Association of transparent polymers with colorants leads to novel materials that might exhibit advanced optical properties. These characteristics can be further tuned via different factors, such as solvent, pH, temperature and so on. Therefore, the scope of the present investigation was to examine the effect induced by the solvent type on the optical and morphological features of some dyed polymer films and to assess the effectiveness of the samples for optical filter uses.

Materials and Methods: The studied foils were prepared by blending solutions of polyvinyl alcohol (in H_20, DMSO, H_2O_2) with variable quantities of a triphenylmethane derivative solution. The attained systems were homogenized by mechanichal stirring under mild temperature. The blends were casted on glass supports and introduced in an oven for drying. After the removal of the samples from the slides, optical and morphological tests were done.

Results: The colorimetric properties reveal that the solvent nature has the potential to modify the sample's aspect. The light refraction is affected by the quantity of inserted dye in the polymer. Furthermore, the light absorption in the speciemns is augmented in polar solvents which lack oxidative character. In such solvation media spectral data evidence the occurrence of multiple absorption edges owing to the formation of new exciton-like states, which are leading to band gap diminishment. The morphology analysis indicates that the dye presence impacts the surface roughness.

Discussion and Conclusion: The current work has proved that both amount of dye (triphenylmethane derivative) and solvent type are paramount factors that contribute to the control of the color, refractive index, light absorption and morphology anisotropy, hence improving the basic features of optical filters.

Key Words: Polymer; Dye; Refraction; Optical applications

OPTICAL AND MORPHOLOGICAL BEHAVIOR OF CHITOSAN-DERIVED DIELECTRICS FOR ENERGY HARVESTING USES

Andreea Irina BARZIC

"Petru Poni" Institute of Macromolecular Chemistry, ROMANIA

ORCID ID: https://orcid.org/0000-0001-7131-5120

Iuliana STOICA

"Petru Poni" Institute of Macromolecular Chemistry, ROMANIA

ORCID ID: https://orcid.org/0000-0002-6792-9581

Raluca Marinica ALBU

"Petru Poni" Institute of Macromolecular Chemistry, ROMANIA

ORCID ID: https://orcid.org/0000-0002-7707-9613

Lavinia Petronela CURECHERIU

"Petru Poni" Institute of Macromolecular Chemistry, ROMANIA

ORCID ID: https://orcid.org/0000-0002-1788-1348

Maria Teresa BUSCAGLIA

Institute of Condensed Matter Chemistry and Energy Technologies, Genoa, Italy

ORCID ID: https://orcid.org/0000-0003-1694-2441

ABSTRACT

Introduction and Purpose: The actual scientific advancements in the area of the materials for energy harvesting have proved that for attaining a proper balance among the dielectric parameters, it is better to attain insulating layers by combining polymers with ceramic powders. In this context, the scope of the present work is to prepare and characterize new dielectric media by filling a biodegradable polymer with specific amounts of highly polarizable inorganic particles.

Materials and Methods: The composite films were prepared from chitosan and barium titanate. The filler particles were achieved by solid state reaction. The dispersions were deposited on clean supports and then they were dried in an oven. The obtained free-standing foils were tested from optical and morphological point of view.

Results: The images recorded by Scanning Electron Microscopy prove a good dispersion of the ceramic phase within the chitosan matrix. Atomic Force Microscopy (AFM) analyses were further carried out and evidenced important changes of the surface texture parameters upon modification of the sample composition. The force-distance spectroscopy DFL(Height) done by AFM proved that the adhesion force was enhanced by the gradual insertion of the inorganic phase in chitosan. Refractivity of the samples was also augmented by polymer reinforcement, leading to higher values of the dielectric constant in optical range.

Discussion and Conclusion: The current study has shown that the preparation method used for producing chitosan/barium titanate composites leads to composites with good dispersion of filler. This is further reflected in the increase of the refractive index and optical dielectric constant, as needed for energy harvesting applications.

Key Words: Polymer; Ceramic particles; Refractivity; Surface morphology; Energy applications

Acknowledgement: This work was supported by a grant of the bilateral scientific cooperation between the Romanian Academy and Consiglio Nazionale delle Ricerche CNR-Italy, project number P2-AR-CNR-2023-2025.

I CHING IN THE NOVEL THE MAN IN THE HIGH CASTLE BY PHILIP K. DICK

Irina-Ana DROBOT

Technical University of Civil Engineering Bucharest, Faculty of Engineering in Foreign Languages, Department of Foreign Languages and Communication, Bucharest, Romania

ORCID ID: https://orcid.org/0000-0002-2556-6233

ABSTRACT

Introduction and Purpose: This paper aims to consider how the I Ching, or Book of Changes, can be understood as literary device in the novel The Man in the High Castle by Philip K Dick. The I Ching is a book that can be consulted in order to predict the future course of our actions. We ask a question about the future outcome of a certain action or decision, then we get two hexagrams, which we interpret. In the first hexagram there is one or there can be more changing lines which lead to the transformation of the first hexagram into the second one.

Materials and Methods: In Philip K. Dick's novel, we can find characters who go to the I Ching oracle in order to search for a guidance for various decisions. Ethical dilemmas and psychological crises search for solutions by resorting to I Ching consultation. Psychological and philosophical reflections are intertwined with consulting the oracle. The way the plot of the novel goes reflects the way in which reallife events can go based on predictions. The novel deals with alternative realities, in a way reminding of alternatives given by consulting the oracle, together with destiny and the idea of free will.

Results: The I Ching is a parallel to the characters' introspection, related to their inner struggles.
Discussion and Conclusion: The paper can bring insight into I Ching based on analogies with how characters relate to it in this novel, based on literary and cultural studies.

Key Words: Cultural Studies; Literary Studies; Predictions; Hypothesis; Crisis

MODELING HEAT TRANSFER TO MAGNETOHYDRODYNAMIC DUSTY FLUID FLOW PAST BETWEEN TWO RIGA PLATES EMBEDED IN A POROUS MEDIUM

Jatto, A. O.

Jimoh, O. R.

Yusuf, S. I.

Department of Mathematics, Federal University of Technology, Minna, Nigeria

ABSTRACT

This paper presents an unsteady laminar heat transmittable dusty fluid flow past between two parallel stationary Riga plates. The coupled non-linear partial differential equations governing dusty fluid flow past between two parallel Riga plates embedded in a porous medium were nondimensionalized with the aid of some dimensionless variables and solved analytically using harmonic solution technique. The effects of the various physical parameters on the velocity and temperature of both the fluid and dusty flow were shown graphically and discussed. It is observed that Modified Hartman number increases the velocity of fluid and dusty particles, whereas Grashof number and dimensionless stress coefficient per unit volume decreases the velocity of fluid.

Keywords: MHD fluid, Dusty particle, Riga plate, Porous medium, Magnetic field, Harmonic solution.

BIO-MONITORING POTENTIAL OF ROADSIDE PLANTS FOR HEAVY METALS POLLUTION USING PLANTS FUNCTIONAL GROUPS

Pooja Gangwar

Dheeraj Rathore

School of Environment and Sustainable Development, Central University of Gujarat, Gandhinagar-382030, (Gujarat), India

ABSTRACT

Heavy metals (HMs) are toxic, non-biodegradable metals and metalloids with atomic numbers and densities greater than 20 and 5 gm/cm^3 respectively. Fossil fuel combustion, industrial activities, municipal wastes, pesticide application, and smelting operations are the main sources of heavy metals. Employing roadside plants to combat HM pollution is an effective and eco-friendly strategy, as they can absorb and accumulate harmful metals from the contaminated environment. Plant leaves are the primary organ for photosynthesis and gaseous exchange and play an important role in heavy metal uptake and detoxification. The study aims to evaluate the bio-monitoring potential of roadside plants for heavy metal pollution using plant functional groups. Five plants species were selected for the study and for the identification of HMs and functional group present in plant leaves, FTIR (Fourier Transform Infrared Spectroscopy) and ICP-OES (Inductively Coupled Plasma Optical Emission Spectroscopy) were used. The results suggest that roadside plants significantly vary with functional groups in response to heavy metals. Aromatic compounds found in banyan tree highly correlates the presence of copper, iron and vanadium. Isocyanate found in Peepal, Golden Shower, Ashoka, designated availability of (As, Cu, Li, Zn) while the nitro-compounds present in these plants shows the presence of Be, Se. Nitro-compounds found in Indian siris marks the presence of (As, Cu, Sb, Zn). Overall, the data indicates that roadside plants can serve as an effective bio-monitors for heavy metal pollution.

Keywords: bio-monitoring, heavy metals, functional groups

MORPHOLOGICAL CHARACTERIZATION OF SOME CYNODON ECOPHENES IN SOUTH WESTERN NIGERIA

A.O Alejo

Durable Crops Research Department, Nigerian stored products Research Institute, Onireke, Ibadan, Oyo-State, Nigeria.

Department of Crop, Soil and Pest Management, Federal University of Technology, Akure, Ondo State, Nigeria.

B. O. Akinyele

Department of Crop, Soil and Pest Management, Federal University of Technology, Akure, Ondo State, Nigeria.

A.C. Odiyi

Department of Crop, Soil and Pest Management, Federal University of Technology, Akure, Ondo State, Nigeria.

L. S. Fayeun

Department of Crop, Soil and Pest Management, Federal University of Technology, Akure, Ondo State, Nigeria.

Abstract

Cynodon dactylon are perennial and prostrate grass found in Nigeria. Thirty nine ecophenes of the specie were collected from different locations, spread across the south western region of Nigeria and characterized based on a set of twenty three characters. These plants were then established on two different fields in a randomized complete block design in different ecological zones. The analysis of data obtained after twelve months of field establishment led to the formation of five distinct clusters. A follow up procedure revealed stolon length to be the major character responsible for this grouping. Significant differences were also observed in other characters like leaf length, leaf width, leafiness, culm thickness, raceme length, spikelet colour and days to 50% flowering across the clusters. However, rhizome number, stolon number, spikelet length, seed set, adaxial and abaxial leaf hairiness showed no significant difference among the clusters. The observed differences between these clusters suggests alterations in their genetic constituents, thus necessitating the need for authentication at molecular level.

Keywords: *Cynodon*, ecophenes, clusters, characters

DRUG-ABILITY AND PHARMACOKINETIC PROPERTIES OF CATECHIN AND BETA SITOSTEROL ISOLATED FROM BAUHINIA SEMIBIFIDA LEAF

Alaekwe, I.O

Department of Chemistry, Federal University Gusau, Zamfara State. Nigeria

Abstract

A substantial number of effective drugs have been isolated from natural sources especially plants many of which are well established in their use in traditional medicine. The discovery of antibiotics and their development for the treatment of infectious diseases is the biggest success story in the history of chemotherapy but the efficiency of many antibiotics are being threatened by the emergence of microbes that resists some of the existing therapeutic agents. This has led to the search for natural antimicrobial compounds from plant sources. Catechin and Beta Sitosterol were the pure compounds isolated from the leaf of Bauhinia semibifida plant. Molecular docking analysis showed Beta Sitosterol and Catechin as drug-able compounds having passed the test of the Lipinski rule and exhibited stronger interaction with the GyrA with a binding affinity of -8.2 kcal/mol and -7.8 kcal/mol respectively and comparable to that of the standard drug Ciprofloxacin used for the treatment of typhoid at – 7.9 kcal/mol.

CHILL AND HEAT REQUIREMENTS OF FOUR PLUM VARIETIES GROWING AT TWO CONTRASTING CLIMATE ENVIRONMENTS IN MOROCCO

Anas Hamdani
Research Unit of Plant Breeding and Plant Genetic Resources Conservation, National Institute of Agricultural Research, Regional Agricultural Research Center of Meknes, BP 578, Meknes, Morocco,

Said Bouda
Laboratory of Agro-Industrial and Medical Biotechnologies, Faculty of Sciences and Techniques, University of Sultan Moulay Slimane, BP 523, Beni Mellal, Morocco,

Atman Adiba
Research Unit of Plant Breeding and Plant Genetic Resources Conservation, National Institute of Agricultural Research, Regional Agricultural Research Center of Meknes, BP 578, Meknes, Morocco,

Jamal Charafi
Research Unit of Plant Breeding and Plant Genetic Resources Conservation, National Institute of Agricultural Research, Regional Agricultural Research Center of Meknes, BP 578, Meknes, Morocco,

Abstract
This study is aimed at identifying the dates at which dormancy is released and flowering begins, and to measure the agroclimatic requirements (chill and heat) of four plum cultivars grown in two contrasting climatic zones, namely “Annoceur” (cold winter) and “Ain Taoujdate” (mild winter). These agroclimatic requirements were determined using three models for determining chilling requirements, namely the refrigeration hours model (CH), the Utah model (CU) and the dynamic model (CP), and the accumulated heat requirements were calculated using the GDH model. The forcing test was conducted on the flower buds of the four plum varieties in ordered conditions to monitor bud weight in the field and controlled environment to determine the date at which dormancy was released. Major differences have been found in agroclimatic requirements among the different sites and plum varieties. Chill requirements vary between 314 and 676 (CH), 679 and 998 (CU), 41.91 and 59.62 (CP), and 6576 and 9776 (GDH) according to the models used. The dormancy release date was earlier, and the chill requirements were met earlier at “Annoceur” than at “Ain Taoujdate.” The results also revealed considerable differences among varieties depending on their level of agroclimatic requirements, ranging from varieties with low agroclimatic requirements, such as “Methley,” to very demanding varieties, such as “Stanley” and “Fortune,” which translate into various dates for the release of dormancy and flowering. Understanding the agroclimatic requirements of varieties grown in contrasting sites is of paramount importance to enable farmers to foresee the productivity of future orchards for better planning and design new areas that take on board the reduction in winter cold due to global warming in many regions.
Keywords: Prunus domestica L., Prunus salicina L., Agroclimatic requirements, Contrasting climate

IRRIGATION OF SOIL PLOTS BY WATER POLLUTED BY WASTEWATER AND ITS IMPACT ON ITS QUALITY

Rihab Hedhiri

Centre for Water Research and Technology (CERTE), Laboratory for Water, Membranes and Biotechnology of the Environment (LR19CERTE04), Technopark Borj Cedria, Tunisia

.Faculty of Sciences of Bizerte, University of Carthage,7021 Jarzouna, Tunisia

Ibtissem Haboubi

Ben Arous Regional Commissioner for Agricultural Development

Emna Grami

Centre for Water Research and Technology (CERTE), Laboratory for Water, Membranes and Biotechnology of the Environment (LR19CERTE04), Technopark Borj Cedria, Tunisia

Neila Saidi

Centre for Water Research and Technology (CERTE), Laboratory for Water, Membranes and Biotechnology of the Environment (LR19CERTE04), Technopark Borj Cedria, Tunisia

Abstract

In Tunisia, irrigation is the most water-intensive activity, accounting for 75.5% of available water resources. The reuse of these treated waters for irrigation raises major issues in terms of public health, environmental preservation and efficiency of agricultural practices. The microbiological and chemical risks associated with this reuse require thorough and regular assessment to ensure crop, soil and population safety. In this context, our study aimed to analyze the quality of the sewage produced by the Mornag treatment plant and discharged into the water, which is then used by direct pumping to irrigate for the first time a plot of 2.5 ha of pears.

Analysis of samples E1, E2, E3 (water mixed with treated wastewater) E4 (water taken from the water table), showed electrical conductivity (EC) below the limit recommended by the national standard file for FSNR releases (7,000.0 µS/cm) for all waters. Site E1 showed the highest values expressed in mg/l, especially in terms of BOD5 (82.2 mg/L). Similarly, for COD (241mg/L); E2 was the least polluted site in terms of MES, BOD5 and COD concentrations reported below the standards required by the DPM and DPH. The site E1 closest to the point of sewage discharge showed the highest values expressed in mg/l of nitrogen Kjeldahl Nkj (74 mg/L), NO3 (18.6 mg/L), NO2 (2.4 mg/L), K (47 mg/L).

Total organic carbon TOC for sites E2, E3 and E4 indicated a concentration greater than 2 mg/L, the recorded anion and cation concentrations are above the limits recommended by the NSRF. Results suggested a pollution concentration at E2 level that may be due to overexploitation of the groundwater, and too high salinity for all sampled points. Low metal content was found in samples, except for Iron at all sites.

Keywords: Waste water, soil, REUT, irrigation, physicochemical analysis, microbiological analysis.

SOIL PLOTS IRRIGATION BY WASTEWATER AND ITS IMPACT ON ITS QUALITY

Rihab Hedhiri

Centre for Water Research and Technology (CERTE), Laboratory for Water, Membranes and Biotechnology of the Environment (LR19CERTE04), Technopark Borj Cedria, Tunisia

.Faculty of Sciences of Bizerte, University of Carthage,7021 Jarzouna, Tunisia

Emna Grami

Centre for Water Research and Technology (CERTE), Laboratory for Water, Membranes and Biotechnology of the Environment (LR19CERTE04), Technopark Borj Cedria, Tunisia

Neila Saidi

Centre for Water Research and Technology (CERTE), Laboratory for Water, Membranes and Biotechnology of the Environment (LR19CERTE04), Technopark Borj Cedria, Tunisia

Abstract

In Tunisia, irrigation is the most water-demanding activity, consuming 75.5% of the available water resources. Farmers are grappling with limited natural resources and increasingly severe weather conditions, highlighting the urgent need for innovative and sustainable solutions to secure water availability for irrigation. Reusing treated wastewater in agriculture challenges public health, environmental safety, and farming efficiency, requiring continuous evaluation to protect crops, soil, and communities.

In this context, our study aimed to analyze the quality of the sewage produced by a treatment plant and discharged into the water, which is then used by direct pumping to irrigate for the first time a plot of 2.5 ha of pears. Analysis of samples E1, E2, E3 (water mixed with treated wastewater) E4 (water taken from the water table), showed electrical conductivity (EC) below the limit. Site E1, the nearest to the confluence point between oued el H'ma and oued Méliane showed the highest values expressed in mg/l, especially in terms of BOD5 (82.2 mg/L) and COD (241mg/L) and the same for nitrogen Kjeldahl Nkj (74 mg/L), NO3 (18.6 mg/L), NO2 (2.4 mg/L), K (47 mg/L). however, E2 was the least polluted site in terms of MES, BOD5 and COD concentrations reported below the standards required by the DPM and DPH.

The recorded anion and cation concentrations are above the limits recommended by the NSRF. Results suggested a pollution concentration at E4 level that may be due to the infiltration and accumulation of surface water. For microbiological pollution, staphylococcus genus present in all samples except sample E4. For soil samples, S1 is the most polluted then S2. Risk of increased salinity in the long-term and the Pollution moves from surface water to groundwater throw the soil.

Keywords: Waste water, soil, REUT, irrigation, physicochemical analysis, microbiological analysis.

ANALYZING THE INFLUENCE OF BRICK POWDER ON THE MECHANICAL PROPERTIES OF SUSTAINABLE CONCRETE

FILALI, Saloua

Department of Physics; Laboratory of Materials Waves, Energy, and Environment, Team of Materials, Energy, Civil Engineering and Environment; Faculty of Sciences; Mohammed Premier University; Oujda, Morocco.

NASSER, Abdelkader

Department of Applied Engineering; Laboratory of Materials, Waves, Energy, and Environment, Team of Materials, Energy, Civil Engineering and Environment; Higher School of Technology; Mohammed Premier University; Oujda, Morocco.

KERKOUR-EL MIAD Abdelhamid

Department of Applied Engineering; Laboratory of Materials, Waves, Energy, and Environment, Team of Materials, Energy, Civil Engineering and Environment; Higher School of Technology; Mohammed Premier University; Oujda, Morocco.

AMAR, Najib

LABNORVIDA Director and Founder; Oujda, Morocco.

ABSTRACT

The increasing demand for concrete, driven by rapid urbanization and infrastructure development, significantly strains natural resources and threatens the environment. Incorporating recycled materials into concrete offers a sustainable solution to address this demand while maintaining performance standards. This study explores the mechanical properties of eco-friendly concrete incorporating brick powder (BP) as a partial replacement for sand in fine aggregates. Concrete mixtures were prepared with sand replaced by brick powder at rates ranging from 5% to 25%, and their workability, compressive strength, and split tensile strength were assessed using both destructive and non-destructive testing methods. The findings reveal that substituting 10% of sand with brick powder enhances compressive strength by 29.94%, reduces workability by 42.66%, and increases split tensile strength by 8.74%. Regression analysis confirmed a strong correlation between compressive strength, ultrasonic pulse velocity (UPV), and rebound number. The results demonstrate that incorporating 10% brick powder improves the mechanical performance of concrete, supporting sustainable construction practices.

Keywords: Brick powder; workability; strength, Schmidt hammer; ultrasonic velocity.

INTERNAL CONTROL SYSTEMS AND FINANCIAL PERFORMANCE IN NIGERIAN LISTED PHARMACEUTICAL COMPANIES

Fatogun, Olukunle Ibukun

Balogun, Sherif Babajide

Department of Accountancy, The Federal Polytechnic Ilaro, Ogun State Nigeria.

Abstract

This study examines how internal control systems affect financial performance. The study examined Nigeria's listed pharmaceutical enterprises' internal control systems and financial performance. The impact of audit committee, board, and audit size on chosen firms' return on assets was examined. The research's conceptual framework—agency, stewardship, dependability, and positive accounting—showed the link between internal control system and financial performance as independent and dependent variables. Study design used descriptive statistics. The hausman test and descriptive statistics like mean, median, and standard deviation assessed the data. The survey sampled five listed Nigerian pharmaceutical companies. Secondary data was used to complement non-respondent data. The research found that 5% of audit size and audit committee affect the listed pharmaceutical business. This was because the unit's audit committee and audit size increased, while the board size decreased the listed pharmaceutical industry's financial performance by 2.388198. The report also recommends that the listed pharmaceutical business lower its audit committee and size to boost financial performance.

Keywords: Audit committee; Audit size; Board size; Financial performance; Internal control.

AN EXAMINATION OF SUICIDE ATTEMPT AS A NERVOUS EXPERIENCE IN THE CONTEXT OF DEATH DRIVE AND PROCRASTINATION CONCEPT IN PSYCHOANALYSIS

Aleyna Nevcüvan KALOŞ

Haliç University, Institute of Graduate Studies Department of Psychology, Istanbul, Turkey

ORCID ID: https://orcid.org/0009-0009-6807-7884

Pınar ALGEDİK

Haliç University, Medicine, Department of Mental Health and Diseases, Istanbul, Turkey

ORCID ID: https://orcid.org/0000-0002-9617-6224

ABSTRACT

This study aims to examine the experiences of individuals who attempt suicide in the context of the concepts of death drive and procrastination in psychoanalysis. Qualitative research method was used in the study and data were collected through psychoanalytically oriented in-depth interviews. The study group consisted of 6 participants. The data obtained from the interviews were analyzed by thematic discourse analysis method. The research findings were shaped around eight main themes. Under the theme of origins and triggers of suicidal ideation, childhood traumas, miscommunication within the family, feelings of loneliness and alienation, feelings of worthlessness and loss of control were identified as prominent factors. In the theme of the relationship with the death drive, it was observed that the participants experienced fluctuations between fear of death and curiosity, saw death as a salvation and experienced the meaninglessness of life. In the theme of psychodynamics of suicide attempt, anger and revenge impulses, tendency to punish oneself, effort to gain control and desire to send a message to the environment were identified as the main motivations. In the theme of psychic dimensions of procrastination behavior, perfectionism, fear of failure, anxiety and adrenaline seeking caused by leaving it to the last moment were found to be prominent patterns. In the theme of post-suicide transformation, changes in family relationships, differentiation in self-perception and development of new coping mechanisms were observed. In the theme of object relations and attachment patterns, conflictual relationships with parents, insecure attachment styles and fear of abandonment were identified as the main patterns. In the theme of psychic pain and emotion regulation, inability to cope with emotional intensity, difficulty in expressing emotions and dissociative experiences were the prominent themes. In the existential themes, questioning the meaning of life, searching for identity and a sense of existential emptiness were central to the participants' experiences. The results of the study showed that especially early traumas, object relations patterns and emotion regulation difficulties play an important role in suicide attempts. In line with the findings of the study, recommendations for clinical practitioners were presented and it was suggested for future research to examine the relationship between procrastination behavior and suicide risk with larger samples.

Key Words: Death Drive, Procrastination, Suicide.

ASSESSMENT OF URBAN FLOODING AND UNREGULATED WASTE DISPOSAL: INCIDENCE, EFFECTS, AND CASE STUDY ANALYSIS

Aliyu Hassan

Department of Civil and Environmental Engineering, Air Force Institute of Technology, Nigerian Air Force, Kaduna

ABSTRACT

Urban flooding and unregulated waste disposal are interconnected environmental challenges that significantly impact urban areas, particularly in developing nations. Rapid population growth, inadequate urban planning, political inaction, and changing climatic conditions, such as high precipitation and rising sea levels, exacerbate flooding risks. This study investigates the link between improper waste management, specifically the careless disposal of solid waste like plastics and the rising occurrence of urban flooding. Improper waste disposal clogs drainage systems, intensifying flood risks during heavy rainfall. The research examines the frequency, socio-economic, and environmental impacts of these floods, highlighting the role of inadequate infrastructure and waste management practices. Drawing on case studies and a comprehensive review, the study identifies strategies to mitigate these issues, such as improving waste management systems, enhancing urban planning, and promoting public awareness. The findings underscore the urgent need for integrated approaches to address urban flooding and waste disposal, fostering sustainable and resilient urban environments.

Keywords: Urban flooding, Unregulated waste disposal, Improper waste management, Drainage system clogging, Environmental impacts, Socio-economic effects, Urban planning, Waste management systems

EVALUATION OF URBAN FLOODING AND UNCONTROLLED WASTE DISPOSAL: OCCURRENCE AND IMPACTS

Aliyu Hassan

Department of Civil and Environmental Engineering,Air Force Institute of Technology,

Nigerian Air Force,Kaduna

Abstract

Urban flooding and unregulated waste disposal are interconnected environmental challenges that significantly impact urban areas, particularly in developing nations. Rapid population growth, inadequate urban planning, political inaction, and changing climatic conditions, such as high precipitation and rising sea levels, exacerbate flooding risks. This study investigates the link between improper waste management, specifically the careless disposal of solid waste like plastics and the rising occurrence of urban flooding. Improper waste disposal clogs drainage systems, intensifying flood risks during heavy rainfall. The research examines the frequency, socio-economic, and environmental impacts of these floods, highlighting the role of inadequate infrastructure and waste management practices. Drawing on case studies and a comprehensive review, the study identifies strategies to mitigate these issues, such as improving waste management systems, enhancing urban planning, and promoting public awareness. The findings underscore the urgent need for integrated approaches to address urban flooding and waste disposal, fostering sustainable and resilient urban environments.

Keywords: Urban flooding, Unregulated waste disposal, Improper waste management, Drainage system clogging, Environmental impacts, Socio-economic effects, Urban planning, Waste management systems

STRUCTURAL EQUATION MODELLING OF AUTONOMY SUPPORT AND STUDENTS' PERFORMANCE IN EDUCATIONAL STATISTICS IN FACULTY OF EDUCATION AT UNIVERSITY OF JOS, PLATEAU STATE, NIGERIA

Igonoh Achenyo Okolo PhD

Department of Educational Foundations, Faculty of Education, University of Jos

Emmanuel Musa Samdi

Department of Marketing, Faculty of Management Science, University of Jos

Abstract

This study explores the relationship between autonomy support and students' performance in educational statistics at the University of Jos, Nigeria. Autonomy support, a concept deeply rooted in self-determination theory, fosters students' sense of volition and intrinsic motivation, which are crucial for academic success. A question was raised and one hypothesis was tested. The research, employed a cross-sectional descriptive and explanatory design. The population for the study was 2012 with a sample size of 261. Primary data were collected through a structured questionnaire and analysed using Structural Equation Modeling (SEM).The finding of the study revealed a significant positive relationship between autonomy support and students' performance, with a standardised path coefficient of 0.78. These results underscore the importance of autonomy-supportive teaching strategies in enhancing student engagement and performance in challenging subjects. The recommendation was that, future research should explore the long-term effects of autonomy support on students' performance and examine other factors that may mediate or moderate this relationship.

Keywords: Autonomy support, students' performance, educational statistics, structural equation modelling, motivation.

PREDICTION OF USED CARS PRICES USING MACHINE LEARNING

VATIKI VIJAY KUMAR

M.Suresh

Ch.Sunil Kumar

Dr.Tawseef Ahmad

Department of CSE(Artificial Intelligence and Machine Learning), Bharat Institute of Engineering and Technology,Mangalpally(v),Ibrahimpatanam,Hyderabad,501510

Abstract

The prediction of used car prices is a critical task in the automotive industry, enabling buyers, sellers, and dealers to make informed decisions. With the rapid growth of online marketplaces and the increasing volume of available data, traditional methods of pricing estimation are becoming less efficient. This paper explores the use of machine learning (ML) techniques for predicting the prices of used cars based on various factors such as make, model, year, mileage, condition, and location.

We employ multiple regression and classification algorithms, including linear regression, decision trees, random forests, and gradient boosting, to build predictive models. The dataset used consists of real-world data collected from multiple online platforms, with feature engineering techniques applied to enhance model performance. The results indicate that tree-based methods, particularly random forests and gradient boosting, provide superior accuracy compared to traditional linear models.

The findings highlight the potential of machine learning models to generate more reliable and dynamic pricing predictions, offering a valuable tool for both consumers and dealers. Furthermore, the study discusses the challenges in data preprocessing, feature selection, and model evaluation, providing insights into the best practices for applied machine learning in this domain.

Keywords: Used car prices, Machine learning, Predictive modeling, MERN Stack, random forests, Quick results

STRATEGIC COMMUNICATION IN SOCIAL MEDIA 2.0: A MULTI-THEORY PERSPECTIVE

Serhat Sina Karaaslan

International Security Studies, Institute for International Research and Strategic Research, Ankara Yıldırım Beyazıt University, Ankara, Türkiye

In an era marked by social media 2.0, scholars emphasize the value of adopting a multi-theory framework that incorporates both participatory dynamics (Jenkins, 2006) and the broad digital networks influencing collective behavior (Castells, 2009). In parallel, post-truth contexts necessitate deconstructing themes that interrogate the fluid boundaries between fact, opinion, and narrative. By integrating symbolic interactionism (Blumer, 1969) and the spiral of silence model (Noelle-Neumann, 1974), communicators can better understand how individual meaning-making processes intersect with group norms, thereby revealing why certain perspectives flourish online while others remain overlooked. This synthesis of theories illustrates how user-generated platforms offer unparalleled opportunities for content creation, yet also nurture environments in which controversial or minority viewpoints may be sidelined due to social pressure.

Furthermore, this theoretical union clarifies communication phenomena and strengthens strategic outreach for various audiences by addressing essential components such as self-presentation, community development, and the fear of isolation. Additionally, deconstructing themes in post-truth communication eco system encourages deeper awareness of how narratives gain traction and shape discourse on these platforms. In addition, recognizing these interacting forces enables communicators to refine messaging in a manner that respects cultural differences, individual values, and the interactive features of modern platforms. Moreover, grounding strategic communication in this multi-theory approach equips practitioners to navigate settings shaped by network effects, user-driven discourse, and ever-evolving public sentiments.

Thus, this line of inquiry not only enriches academic perspectives on online communication but also enhances applied strategies by merging established and innovative theories, thereby offering a more comprehensive view for both research and real-world engagement.

Keywords: Social media 2.0, symbolic interactionism, spiral of silence, strategic communication, post-truth

AWARENESS, ACCESSIBILITY AND UTILISATION OF MODERN TECHNOLOGIES FOR AQUACULTURE INSTRUCTION IN TERTIARY INSTITUTIONS IN NIGER STATE, NIGERIA

Folashade Folake Alfa

Dr. A. A. Yaki

Dr R. M. Bello

Basic Sciences Department, Federal College of Freshwater Fisheries Technology, New Bussa, Niger State, Nigeria

Department of Science Education, School of Science and Technology Education, Federal University of Technology, Minna, Niger State, Nigeria.

Abstract

The study investigated the awareness, accessibility, and utilisation of modern technologies for aquaculture instruction in tertiary institutions in Niger State, Nigeria. The research addresses critical gaps in integrating advanced educational technologies into aquaculture curricula, which are essential for bridging theoretical knowledge with practical applications and aligning education with industry needs. Despite the increasing global emphasis on technology-driven pedagogy, tertiary institutions in Niger State face significant challenges in adopting modern tools, which this study aimed to explore. The study adopted a descriptive survey research design involving 72 lecturers and instructors purposively sampled from five tertiary institutions. Data were collected using a structured questionnaire (google form) and analyzed using descriptive and inferential statistics. Key areas examined included the level of awareness, accessibility, and utilisation of modern technologies, gender differences in technology engagement, and constraints to effective utilisation. The findings reveal a high level of awareness of foundational technologies, such as institutional repositories (mean score = 3.73) and e-learning platforms (mean score = 3.52), among lecturers. However, advanced tools like augmented reality (AR), virtual reality (VR), and big data analytics demonstrated limited awareness and utilisation. Accessibility was similarly skewed, with high access to online courseware (mean score = 3.04) but low access to IoT devices and simulation software (mean scores < 2.50). Gender disparities were evident in the utilisation of advanced tools, with male lecturers exhibiting higher engagement. Constraints identified include inadequate funding, limited technical expertise, and lack of infrastructural support. The study underscores the need for targeted training programs, gender-inclusive policies, and enhanced investments in advanced educational technologies to bridge existing gaps. Recommendations include fostering public-private partnerships to improve access, integrating advanced tools into curricula, and implementing mentorship programs to enhance female lecturers' participation. These strategies are essential for equipping educators and students with the skills required to meet the dynamic demands of the aquaculture industry, thereby fostering innovation and sustainability in the sector.

Keywords: Awareness, Utilisation, Modern Technologies, Aquaculture.

AN INTERPRETATION ON THE FACTORS AFFECTING THE COMPOSITION OF THE GRAPE IN VINE

Bilal BUĞDAY

Şırnak University, Faculty of Agriculture, Department of Horticulture, Şırnak, urkey

ORCID ID: https://orcid.org/0009-0003-9405-2820

Mehmet Settar ÜNAL

Şırnak University, Faculty of Agriculture, Department of Horticulture, Şırnak, Turkey

ORCID ID: https://orcid.org/0000-0001-5903-0157

ABSTRACT

Because berry composition changes over time as part of the vine's development program during berry development and ripening, it is under genetic control. Homogeneous berry composition is desired for must, table and dried grape production. While color, astringency, acidity and taste-related characters are the main characteristics of wine grapes, table grape quality depends more on the sugar/acid ratio, hardness as an indicator of freshness, crispness, juiciness and visuality including color. Seedlessness is a desired characteristic in some table grape trades and especially for dried grapes. In addition, high sugar content is much more important in dried grapes than in table grapes, as the consumer wants sweeter raisins and the higher sugar dose at harvest shortens the drying period. In addition, berry composition can change with environmental factors such as phenology and yield and their interaction with the vine. Again, sugar density is higher and malate concentration is lower in berries with fewer seeds. However, the variation in berry weight and berry composition among clusters on a vine can be greater than the variation among vines in the same vineyard. This situation can even be the case for all berries on the same vine in a vineyard. However, there is some synchrony during berry development and maturation. Therefore, the variation in berry composition generally decreases as the berry matures and approaches more sugar and less acid values. Any factor that affects vine growth and metabolism directly or indirectly affects berry composition and can lead to wide variation in fruit quality between growing stages. Most of the fluctuations in berry composition are due to climate change. Such climate change takes precedence over differences in soil moisture in both irrigated and dry vineyards. Even if berries are harvested in different years or at exactly the same dry matter concentrations in different places, they may have different amounts of anthocyanins and aroma-active compounds. For a given clone of a cultivar, the variation in berry composition occurs within a cluster, within a vine, between vines, between vineyards and between vintages. The purpose of this research is to provide brief information about the factors that affect the content values of grape berries.

Keywords: Vineyard, Grape, Grape, Grape composition

INFLUENCE OF TEST ANXIETY AND SCHOOL-BASED STRESS ON ACADEMIC PERFORMANCE OF SENIOR SECONDARY SCHOOL STUDENTS IN KATSINA STATE, NIGERIA

UMAR MAMMAN

Asma'u Sadiq Imam

Department Of Educational Psychology And Counselling Faculty Of Education

Federal University Dutsin-Ma, Katsina State, Nigeria

ABSTRACT

The study aimed to investigate the correlation between test anxiety and school-based stress on the academic performance of senior secondary school students in English in Dutsin-ma Zonal Educational Quality Assurance, Katsina State. A sample of 365 students was drawn from the population of 5,461 students. three instruments were used for data collection, with reliability coefficients of STAQ= 0.82, SBSQ= 0.72, and ELAT= 0.78 respectively. The hypotheses were tested at 0.05 alpha level of significance, and Multiple Regression Analysis and Pearson Product Moment Correlation were employed using SPSS version 23. The results showed a relative importance of test anxiety and school-based stress to the correlation of academic performance in English Language, with a good level of prediction. There was a significant positive correlation between test anxiety and academic performance, and a significant relationship between school-based stress and academic performance. Additionally, there was a significant gender difference in academic performance in English Language. The study concluded that there is a significant correlation among test anxiety, school-based stress, and academic performance in senior secondary school students in Katsina State. It was recommended that regular counselling services be introduced to help students cope with test anxiety and school-based stress, and school authorities should develop guidelines and programs to help students cope with test anxiety.

Key words; Test anxiety, school-based stress, academic performance

UNDERSTANDING GPT-4: THE NEW GENERATION OF AI

Silvia BLAZQUEZ RUIZ

Student at Budapest Business University, Budapest, Hungary

Pablo HERRERO MARTÍN

Student at Budapest Business University, Budapest, Hungary

Eva Reka KERESZTES

Associate professor at Budapest Business University, Faculty of International Management and Business, Department of Methodology for Social Studies, Budapest, Hungary

ORCID ID: https://orcid.org/0000-0001-8532-5063

ABSTRACT

Introduction and Purpose: ChatGPT-4, released by OpenAI in March 2023, represents a major advancement in artificial intelligence, particularly as a large multimodal model capable of processing both text and images. This release marked a significant improvement over its predecessor, GPT-3, which was limited to text-based tasks. The purpose of GPT-4's development was to enhance AI capabilities across diverse applications, such as academic testing, programming assistance, and legal document analysis, while addressing limitations of previous models, including safety and user experience.

Materials and Methods: Key features of GPT-4 include its enhanced steerability, allowing users to guide the model's tone and style, and an expanded context window, capable of handling inputs up to 25,000 words — a notable increase from GPT-3. These advancements were achieved through extensive training to improve accuracy, reduce harmful outputs, and avoid disallowed content. The model underwent further optimization with the introduction of GPT-4 Turbo in the fall of 2023, which improved response time, increased the context window, and reduced costs for developers. In May 2024, OpenAI launched GPT-4 Omni (GPT-4o), which added real-time multimodal capabilities, including image, text, and audio recognition, and made these functionalities available to users free of charge.

Results: ChatGPT-4 demonstrated substantial improvements over GPT-3 in multiple domains, including academic testing, programming, and legal analysis. Its enhanced steerability and larger context window have significantly improved user experience and expanded its application range. The optimized GPT-4 Turbo further enhanced performance and accessibility, while GPT-4 Omni introduced cutting-edge multimodal interaction capabilities. Despite these advancements, the model still exhibits occasional hallucinations and biases. However, GPT-4 remains a groundbreaking tool that continues to redefine the possibilities of AI.

Key Words: ChatGPT-4; Multimodal AI; Steerability; Expanded Context Window; GPT-4 Omni

ADVANCING FEMALE CAMEL REPRODUCTIVE HEALTH

BRAHMI Zahia

Department of Veterinary Medicine, Institute of Agronomic and Veterinary Sciences, University of Souk-Ahras, Souk Ahras, Algeria, Laboratory of Animal Production, Biotechnology and Health (PABIOS), Souk Ahras, Algeria, Specialty: Zootechnie, Option: Biotechnology and Animal Production.

ORCID ID**:** https://orcid.org/ 0009-0003-0812-3558

GHERISSI Djallel Eddine

Department of Veterinary Medicine, Institute of Agronomic and Veterinary Sciences, University of Souk-Ahras, Souk Ahras, Algeria, Laboratory of Animal Production, Biotechnology and Health (PABIOS), Souk Ahras, Algeria, Specialty: Zootechnie, Option: Biotechnology and Animal Production.

ORCID ID*:* https://orcid.org/0000-0003-1615-1658

Abstract

Female camels play a pivotal role in supporting agricultural systems, especially in arid and semi-arid regions of the world. With an estimated global camel population of over 30 million, primarily concentrated in the Middle East and North Africa, camels are integral to the economies of these regions. Reproductive challenges, including infertility, low conception rates, and reproductive tract infections, significantly impact camel productivity and breeding success. This intervention aims to advance female camel reproductive health through a combination of innovative approaches in veterinary care, nutrition, and breeding techniques. Studies indicate that infertility affects up to 30% of female camels in certain regions, while low conception rates and reproductive tract infections are widespread. Poor reproductive performance is a key factor contributing to low herd productivity and economic losses. In addition, the reproductive cycle of camels, which includes a prolonged estrous period and delayed puberty, complicates breeding management. Recent advancements in reproductive technologies, such as artificial insemination (AI), embryo transfer, and hormonal regulation, offer promising solutions to enhance breeding efficiency and overcome reproductive barriers. Additionally, improving management practices, such as optimal feeding strategies and environmental conditions, can positively affect reproductive outcomes. Addressing common health issues like infections, hormonal imbalances, and genetic factors is essential for maintaining healthy and productive herds.

Key Word: Female camels, reproductive health, infertility, conception rates, hormonal regulation, estrous cycle.

AI-POWERED SONG DUBBING AND ISOTOPY IN ARTIFICIAL SONG TRANSLATION: ETHICAL ISSUES OF VOICE CLONING

Dilber ZEYTİNKAYA

Marmara University, Faculty of Humanities and Social Sciences,

Department of Translation and Interpreting, French Translation and Interpreting, Istanbul, Turkey

ORCID ID: https://orcid.org/0000-0001-5163-655X

ABSTRACT

Artificial intelligence, which shapes contemporary conditions, is also making its presence felt in the field of music. This study examines whether artificial intelligence can accurately capture the meaning in song translations, using Barış Manço's song Kazma, which contains numerous idioms and proverbs, as the subject of the research. The song, translated into French using the AI tool "Rask AI", is evaluated in the context of Peter Low's pentathlon principle. Within this framework, sense and naturalness are considered semantic properties, while rhyme, rhythm, and singability are evaluated as prosodic properties. The artificial song translation has been analysed in the context of singability, consisting of three layers: prosodic match, poetic match, and semantic match. In the context of musical semiotics, which explores the process of making sense of musical works, the issue of how the artificial intelligence interprets meaning was discussed, and analyses were conducted in this context. The study seeks to answer the following questions: Can an AI-assisted song translation stay faithful to the original song? Can both meaning transfer and prosodic harmony be achieved simultaneously in song translations? Can AI-assisted song translation be considered an adaptation or a recreation? The aim of textual linguistics, which examines the connections related to the entire text and contributes to the reception and interpretation of texts, is to define the criteria for being a text. One of these criteria is coherence, and the most important concept within coherence is isotopy. The concept of isotopy, adapted by Algirdas Julien Greimas to linguistics, is related to the meaning and sound structure of the text. In the context of the relationship of order within the text, isotopy, which depends on the continuity of the meaning units and constitutes the meaning, has been associated with song lyrics. Isotopy, which completes coherence, is effective in forming a meaningful whole from words. Therefore, in artificial song translations, the system of different signifiers has been classified through isotopy. The concept of isotopy, which represents contextual continuity, helped interpret the consistency of the lyrics. In this way, the isotopy and non-isotopy of the French artificial lyrics were analysed. Additionally, the legal and ethical issues of voice cloning have been discussed. Since voice cloning with artificial intelligence is a new and dynamic field, the boundaries of legal regulations in this area have not yet been clearly defined. The protection of content created with artificial intelligence in terms of copyright and personal rights will become increasingly important with new regulations to be implemented in the coming years. It is expected that this study will contribute to AI-assisted descriptive song translation analyses and offer new insights.

Key Words: Textlinguistics, Musical Semiotics, Pentathlon Principe, Song Translation, Artificial Intelligence, Isotopy.

CULTIVATION OF GILABORU, A GRAPE FRUIT, IN TURKEY

Bilal BUĞDAY

Şırnak University, Faculty of Agriculture, Department of Horticulture, Şırnak, Turkey

ORCID ID: https://orcid.org/0009-0003-9405-2820

Mehmet Settar ÜNAL

Şırnak University, Faculty of Agriculture, Department of Horticulture, Şırnak, Turkey

ORCID ID: https://orcid.org/0000-0001-5903-0157

ABSTRACT

Gilaboru, whose Family is Caprifoliaceae, Genus Viburnum and Species V. opulus, has both edible and inedible poisonous species. The plant has a woody structure and shrub form. The fruits are grape-like and are considered as “true grapes”. The one seed inside the fruit is flat, heart-shaped, quite hard and cannot germinate easily. There are species whose berries turn red, black or purple when ripe and these berries are used in ink making and fabric industry. In a study, it was determined as the most resistant species to air pollution, which increased the chance of using this species in areas where air pollution is intense. The fruit has value both as a cultivated plant and as a medicinal plant due to the high amount of antioxidant substances it contains. Viburnine, which gives a bitter taste to the bark, leaves and fruits, is not harmful to humans. It has a calming, relaxing and relaxing property when drunk as a tea. Gilaboru is also a food for many wild animals. Gilaboru is also used as an ornamental plant. Since it usually gives abundant bottom shoots, cultivation in the form of a hearth should be preferred. The flowers, which are erect, can be in different shades of white as well as in different shapes. Although it is self-fertile, planting at least two different varieties in the garden facility is important for satisfactory fruit intake. Gilaboru can be propagated by seed, cuttings, root shoots and grafting. Fruit harvesting should be done when the fruits are fully red in color. Although it can be harvested after leaf fall, it should not be delayed too long due to frost. Fruits should be cut with a knife or scissors in clusters and tied into bunches. It can also be marketed in this state for fresh consumption. The most common way of consumption of gilaboru, which is also consumed by making jam and marmalade from its fruits, is fruit juice production.

Key Words: Grape fruit, Gilaboru, Propagation, Evaluation

IMPACT OF AGRICULTURAL TRAINING ON FARMERS INCOME AND SOCIOECONOMIC OUTCOMES IN NIGERIA: A CASE STUDY ANALYSIS

Oladunni, O.A.

Agricultural and Rural Management Training Institute (ARMTI), Ilorin, Kwara State, Nigeria

Oni, O.O.

Department of Agricultural Development and Management (ADEM), Agricultural and Rural Management Training Institute (ARMTI), Ilorin, Kwara State, Nigeria

Adekeye, M.D

Department of Agricultural Development and Management (ADEM), Agricultural and Rural Management Training Institute (ARMTI), Ilorin, Kwara State, Nigeria

Iyiola, O.A.

Department of Rural Development and Gender Issues (RUDEG), Agricultural and Rural Management Training Institute (ARMTI), Ilorin, Kwara State, Nigeria

Owolabi M.T.

Department of Agricultural Development and Management (ADEM), Agricultural and Rural Management Training Institute (ARMTI), Ilorin, Kwara State, Nigeria

Abstract

Human capital serves as the cornerstone of agricultural innovation and productivity enhancement. Globally, training emerges as a major ingredient in driving this agricultural productivity. However, the efficacy of such programs in driving tangible outcomes, particularly in terms of participant income growth and overall value creation, remains a subject of considerable interest and inquiry. This paper presents a comprehensive assessment of the impact of human capital development on income growth of farmers in Nigeria. The specific objectives of the study were to identify the benefits of the training; to compare the income before and after the training; and to determine the effect of the training on income of the participants. Data were collected through questionnaire and interview schedule and analysed using frequency counts, percentages, t-test and regression analysis. Findings show that the training provides various benefits to the farmers which significantly increased participant income. Socioeconomic factors like age, education, and farm size were identified as determinant of income. The study recommends replicating the program nationwide to boost productivity and living standards, particularly targeting young adults with sizable farms in rural areas.

Key Words: ARMTI, Agricultural Training, Income, Case Study, Nigeria.

DYNAMIC CONDITIONAL CO-MOVEMENT OF SECTORAL STOCK RETURNS: EVIDENCE FROM BOMBAY STOCK EXCHANGE

Hema Saini

(School Of Management Studies Punjabi University, Patiala)

Abstract

The aim of the present study is to examine the level of cointegration among the sectoral market indices of Bombay stock exchange. These sectors include **BSE Auto, BSE Bank, BSE Energy, BSE FMCG, BSE IT.** using the dynamic conditional correlation generalized autoregressive conditional heteroscedasticity (DCC-GARCH) model. The analysis of the DCC-GARCH model captures the evolving correlations and heteroskedasticity in market data. The results from DCC-GARCH analysis reveal significant uni-directional and bi-directional volatility spillover across sectoral indices. The analysis determines barely any evidence of co-integrated relationships between sector indices. Findings provide insights into market interconnectedness, offering valuable implications for investors and policymakers in assessing cross-border risk transmission mechanisms in a globalized financial environment.

Keywords: Sectoral stock return, Market Interconnectedness, Volatility Spillover

SAVANT PAINTERS AND SUPERIOR PAINTING TALENTS

Kübra ŞAHİN ÇEKEN
Istanbul Arel University, Faculty of Fine Arts, Department of Graphic Design
Istanbul, Turkey
ORCID ID: https://orcid.org/0000-0003-1602-3920

ABSTRACT

Introduction and Purpose: Savant syndrome is a rare condition in which individuals exhibit extraordinary abilities in certain areas. Savant painters are individuals who often have mental or neurological differences but have extraordinary painting abilities. In this study, the characteristics of savant painters' talents, the neurological and psychological factors underlying this condition, their impact on the art world, and the inspiring stories of these individuals are discussed.

Savant syndrome causes individuals to demonstrate extraordinary talent in certain areas (such as music, mathematics, or painting), while limitations are observed in other cognitive skills. In the field of painting, this has led to the emergence of many different styles, from hyperrealism to abstract art. The aim of this research is to define the superior painting talents of savant painters, to examine scientific explanations about the formation of these talents, and to evaluate the place of these individuals in the art world.

Materials and Methods: Araştırma, savant ressamlarla ilgili bilimsel makaleler, biyografiler ve sanat eleştirilerinden elde edilen veriler ışığında hazırlanmıştır. Stephen Wiltshire ve Richard Wawro gibi tanınmış savant ressamların eserleri incelenerek, yeteneklerinin nörolojik ve sanatsal yönleri analiz edilmiştir. Bu analizler, savant sendromunun nörobilimsel temellerini ve bireylerin resim yeteneklerinin gelişim süreçlerini anlamaya yöneliktir.

Results: While the talents of savant painters shed light on the mysterious functioning of the human brain, they have also become a source of inspiration in the art world. These individuals often have exceptional memory, perception of detail, and visual design skills. The combination of neurological differences and creativity creates a unique depth in their works. The place of savant painters in the art world offers a window into understanding not only aesthetic but also human potential.

Key Words: Savant Painters, Art Therapy, Stephen Wiltshire, Richard Wawro

STUDY OF THE IMPACT OF CADMIUM SULFIDE BUFFER LAYER THICKNESS ON THE PERFORMANCE OF CIGS SOLAR CELLS

Zineb Benbouzid

Elaboration and Characterization Physico-Mechanical and Metallurgical of Materials Laboratory (ECP3M), Abdelhamid Ibn Badis University-Mostaganem. Route Nationale N°11, Kharrouba, 27000, Mostaganem, Algeria.

Mohammed Ridha Benzidane

Elaboration and Characterization Physico-Mechanical and Metallurgical of Materials Laboratory (ECP3M), Abdelhamid Ibn Badis University-Mostaganem. Route Nationale N°11, Kharrouba, 27000, Mostaganem, Algeria.

Noureddine Hassini

Elaboration and Characterization Physico-Mechanical and Metallurgical of Materials Laboratory (ECP3M), Abdelhamid Ibn Badis University-Mostaganem. Route Nationale N°11, Kharrouba, 27000, Mostaganem, Algeria.

Abdelhadi Namoune

Department of Electrotechnical & Automatic Engineering, Relizane University, Laboratoire Génie Industriel et Développement Durable GIDD.Algeria

Faten Belarbi

Faculty of Exact Sciences and Informatics, University of Mostaganem, Alegria

CIGS solar cells have become a central research topic due to their outstanding optoelectronic properties and efficiency in converting solar energy. One of the key elements influencing their performance is the CdS buffer layer, which provides an effective interface between the absorber material and the ZnO window layer. In this study, we examined the impact of CdS layer thickness on the performance of CIGS solar cells using the software. SCAPS-1D SOFTWARE. CdS layer thickness was investigated in a range from 50 nm to 140 nm, and we assessed the effect of this variation on photovoltaic parameters such as open-circuit voltage (V_{OC}), short-circuit current (J_{SC}), form factor (FF) and efficiency (η). To better understand the impact of thickness on these performances, we interpreted our results as a function of charge carrier recombination rate and cell quantum efficiency. Our results show that the thickness of the CdS layer has a direct impact not only on overall performance, but also on the recombination rate and quantum yield, highlighting the importance of fine optimization of this layer to maximize the efficiency of CIGS cells.

Keywords: CdS layer, solar cell, thickness, efficiency, SCAPS-1D

"IRAN-U.S. RELATIONS IN 2025: ANALYZING ESCALATION AND PROSPECTS FOR DIPLOMACY"

Md.Mizanur Rahman

Department of Political Science Affiliation: Bangabandhu Sheikh Mujibur Rahman Science and Technology University Gopalganj, Bangladesh.

Abstract:

The Iran-U.S. relationship in 2025 remains pivotal in shaping global geopolitics, defined by entrenched mistrust and heightened tensions. This study employs both quantitative and qualitative methods to analyze the drivers of escalation and the prospects for diplomatic resolution. Quantitative analysis includes evaluating data on economic impacts of sanctions, military expenditures, and nuclear enrichment levels, while qualitative methods focus on examining policy statements, expert interviews, and historical trends. Key issues, such as the U.S.'s re-imposition of sanctions following its withdrawal from the Joint Comprehensive Plan of Action (JCPOA), Iran's advancements in uranium enrichment, and increasing military confrontations in the Persian Gulf, are critically assessed. Statistical trends reveal the economic toll of sanctions on Iran, alongside a rise in regional instability. Concurrently, qualitative insights highlight diverging narratives and political motives driving both nations' foreign policies. The study further examines the role of third-party mediators, including the European Union and Qatar, in fostering dialogue. By triangulating quantitative findings with qualitative data, this research identifies patterns of conflict escalation and potential diplomatic breakthroughs. Scenarios such as phased sanctions relief, regional security pacts, and energy cooperation are evaluated for their feasibility and potential impact. The findings underscore a dual reality: while quantitative data reveal a trajectory of escalating conflict, qualitative insights suggest untapped opportunities for negotiation. Confidence-building measures, combined with multilateral frameworks, emerge as plausible strategies to stabilize relations. However, the success of such measures depends on both nations' willingness to align strategic interests and prioritize regional stability over unilateral gains. This research concludes that while the path to normalization remains fraught with challenges, an integrated approach leveraging quantitative and qualitative insights offers a pragmatic framework for de-escalation and renewed diplomacy.

VOLUME CONTROL USING HAND GESTURES

Kolla Dhanush Baba

M.Suresh

Dr.Tawseef Ahmad

Ch.Sunil Kumar

Department of CSE(Artificial Intelligence and Machine Learning), Bharat Institute of Engineering and Technology,Mangalpally(v),Ibrahimpatanam,Hyderabad,501510

Abstract

We are developing a volume controller in which we are using hand gestures as the input to control the system,Opencv module is basically used in this implementation to control the gestures.This system basically uses the web camera to record or capture the images /videos and accordingly on the basis of the input, the volume of the system is controlled by this application. The main function is to increase and decrease the volume of the system. The project is implemented using Python, OpenCV. We can use our hand gestures to control the basic operation of a computer like increasing and decreasing volume. Therefore ,people will have a convenient way to control the volume is there is any problem in the system without learning machinelike skills which are a burden most of the time.This type of hand gesture systems provides a natural and innovative modern way of non verbal communication. These systems has a wide area of application in human computer interaction. The purpose of this project is to discuss a volume control using hand gesture recognition system based on detection of hand gestures. In this the system is consist of a high resolution camera to recognise the gesture taken as input by the user. The main goal of hand gesture recognition is to create a system which can identify the human hand gestures and use same input as the information for controlling the device and by using real time gesture recognition specific user can control a computer by using hand gesture in front of a system video camera linked to a computer. In this project we are developing a hand gesture volume controller system with the help of OpenCV ,Python. This system can be controlled by hand gesture without making use of the keyboard and mouse

Keywords: Gesture recognition,computer vision,volume control

SYNTHESIS OF A FUNCTIONAL MAGNETITE-BASED ADSORBENT FOR THE PRECONCENTRATION OF NICKEL (II)

Dr. Dılgeş BASKIN

Van Yüzüncü Yıl University, Muradiye Vocational School, Department of Chemistry and Chemical Processing Technologies, Van, Turkey

ORCID ID: https://orcid.org/0009-0004-7393-1620

Nur YUKA

Van Yüzüncü Yıl University, Faculty of Science, Department of Chemistry, Van, Turkey[2]

ORCID ID: https://orcid.org/0000-0001-7099-3763

ABSTRACT

Introduction and Purpose: Environmental pollution caused by industrial waste and agricultural activities leads to the accumulation of heavy metals in water, soil, and living organisms, posing serious health and ecological risks. Detecting and monitoring heavy metals is crucial for environmental protection and public health. However, trace-level detection requires preconcentration techniques to improve sensitivity. Therefore, this study aimed to investigate the preconcentration efficiency of functional magnetite adsorbents for the removal of Ni^{2+} ions from environmental samples using the magnetic solid-phase extraction (MSPE) method coupled with flame atomic absorption spectrometry (FAAS).

Materials and Methods: Two different adsorbents, Fe_3O_4@APTES and Fe_3O_4@APTES@COOH nanoparticles, were synthesized and characterized using SEM, SEM-EDX, XRD, FT-IR, and FAAS. The Fe_3O_4@APTES nanoparticles were initially synthesized and then modified with citric acid to introduce carboxylic acid groups on their surface. Adsorption experiments were conducted to optimize nanoparticle performance by varying pH conditions to assess the influence of different functional groups on Ni^{2+} ion adsorption behavior. The linear calibration range was established by calculating the slope of the calibration curve and the standard deviation of the lowest concentration tested, measured in seven replicates. Environmental samples were collected from the shores of Van Lake for real-world validation of the method.

Results: The method achieved a limit of detection (LOD) of 1.56 µg/L and a limit of quantification (LOQ) of 5.2 µg/L for Ni^{2+} ions, indicating a 43-fold improvement in sensitivity (R^2 = 0.9995). Recovery rates for Van Lake samples ranged between 94% and 108%, confirming the method's reliability in complex matrices. The study demonstrates the potential of functionalized magnetic nanoparticles for efficient preconcentration and environmental monitoring applications.

Key Words: Magnetite Nanoparticles; Solid Phase Extraction; Flame Atomic Absorption Spectrometry; Environmental Monitoring; Preconcentration Techniques

ANALYSIS AND APPLICATION OF SOFT SWITCHING FULL BRIDGE DC-DC CONVERTER FOR MILITARY AVIATION APPLICATION

Eyüp Can MAVİ

Yildiz Technical University, Faculty of Electrical & Electronic, Department of Electrical Engineering

Istanbul, Turkey

ORCID ID: https://orcid.org/0009-0008-2064-6534

Assoc. Prof. Erdem AKBOY

Yildiz Technical University, Faculty of Electrical & Electronic, Department of Electrical Engineering

Istanbul, Turkey

ORCID ID: https://orcid.org/0000-0002-1030-9816

ABSTRACT

Introduction and Purpose: As a result of the development of technology day by day and the developments in power electronics, high power density and high efficiency have become a sought-after feature in power converters. In this way, the device dimensions are reduced considerably, and the dimensional efficiency is greatly increased. Due to the fact that avionics used in manned or unmanned aerial vehicle systems that ensure the effective use of the aircraft settlement area and allow increasing the payload capability, their volume and weight are becoming very important.

The classical Pulse Width Modulation (PWM) technique is often used in high-power insulated DC-DC converters. This method, which is preferred quite often, has important disadvantages such as high EMI, large volume, low switching frequency, high switching losses, in addition to being easy and widespread to apply.

The reduction or elimination of the disadvantages that occur in DC-DC converters using classical pulse width modulation is made possible by soft switching techniques.

Full bridge DC-DC converters with phase shift are widely used in designs that require high power, isolation and low loss due to soft switching. Thanks to the phase shift method, all of the switches used in the full bridge are turning on by ZVS depending on the load condition.

In this study, the MIL-STD-704F military aviation standard, some calculations of the phase-shifted full-bridge DC-DC converter power stage, closed-loop simulation will be examined.

Key Words: Phase Shifted Full Bridge Converter, Military Aviation, Soft Switching, Switching Loss

GENERATIVE AI IN EDUCATION: PERCEPTIONS AND CONCERNS AMONG POLYTECHNIC MALAYSIA STUDENTS

Nor Farahain binti Dzulkafli

Commerce Department, Tuanku Sultanah Bahiyah Polytechnic, Kulim Hi-Tech Park, 09000 Kulim, Kedah, Malaysia

Faizan Maisarah binti Abu Bakar

Commerce Department, Tuanku Sultanah Bahiyah Polytechnic, Kulim Hi-Tech Park, 09000 Kulim, Kedah, Malaysia

Abstract

This research is to examine the perspective of the polytechnic students on Generative Artificial Intelligence (GenAI) and students' concern regarding AI uses for educational purposes. These days, generative AI has been developing rapidly and influencing everyone's daily life. The ability of GenAI tools to produce text, images, and code opens up new avenues for productivity and creativity. However, there are significant issues with its rapid acceptance, including plagiarism, ethical quandaries, and potential reliance on AI-generated products. This study involved 210 students of polytechnic Malaysia. The research employs a quantitative survey method, aimed at collecting data on how students view the integration of AI tools, such as ChatGPT, into their educational experiences. Google Forms was used to create a structured questionnaire that was randomly distributed to polytechnic students around the country. Data analysis will provide valuable insights into the extent of GenAI adoption in polytechnic education, highlighting both its students viewpoints and concerns. Based on the study, most of the students believe GenAI helps them to reduce time in the learning process and completing tasks. The findings highlight that most of the students have a positive perception of GenAI adaptation. The analysis reveals that even though students adapt Gen AI in their study process, there are still concerns about using GenAI, such as ChatGPT. Reliance on GenAI could also result in misunderstandings or insufficient understanding of complex topics. Additionally, over-reliance on AI technologies can lead to passive learning and reduce human interaction and engagement during the learning process. Besides that, the students believe the value of polytechnic education may be compromised by the use of GenAI. This paper examines the dual impact of GenAI, highlighting its potential to boost productivity while emphasizing the need for guidelines to ensure responsible use. Understanding these dynamics is crucial to maximizing GenAI's benefits and minimizing its drawbacks, especially in education.

Keywords: Artificial Intelligence, polytechnic, concerns, perspective, GenAI

ENCAPSULATION OF BLACK CHOKOBERRY PHENOLIC EXTRACT (Aronia melanocarpa) WITH VARIOUS WALL MATERIALS

İnci CERİT

Sakarya University, Faculty of Engineering, Department of Food Engineering, Sakarya, Turkey

ORCID ID: https://orcid.org/0000-0002-3106-8951

ABSTRACT

Introduction and Purpose: Black chokeberries (Aronia melanocarpa) are rich in phenolic compounds such as anthocyanins, proanthocyanidins, flavonols, and phenolic acids, offering potential benefits for preventing chronic diseases like diabetes and cardiovascular disorders. However, these bioactives are highly unstable under light, oxygen, and moisture exposure. Therefore, advanced encapsulation techniques are required to protect them from these environmental factors. The aim of this study was to utilize maltodextrin, inulin and yeast cells to encapsulate of black chokeberry phenolic extract.

Materials and Methods: Maltodextrin (MD), a mixture of maltodextrin and inulin (MD+IN) (1:1 ratio) and yeast cells were used as coating materials in the encapsulation process. The extract and each of the three wall materials were mixed separately in weight ratios (w/w) of 1:5, 1:15, and 1:25 (extract:wall material). The samples were encapsulated using a freeze dryer. After the encapsulation process, color, total phenolic contents and encapsulation efficiency of samples were determined.

Results: Extraction efficiencies changed from 64.35 to 96.84% in microcapsules. The highest efficiency was detected when inulin was mixed with maltodextrin. In addition, the phenolic content of this sample was specified as 401.46 mg GAE/kg powder. The L* values increased as the wall material's concentration was elevated. a* values were significantly higher in maltodextrin and inulin capsules than in yeast ones. **Discussion and Conclusion:** This study successfully encapsulated polyphenol-rich chokeberry extract using the freeze-drying method with high efficiency across all coating materials. While yeast cells offer potential as sustainable carriers and nutritional benefits, the maltodextrin-inulin mixture demonstrates advantages such as prebiotic properties, a low glycemic index, and cost-effectiveness.

Key Words: Black chokeberry; Encapsulation; Maltodextrin; Inulin; Yeast

HONEY EFFICACY AS ANTIBIOFILM, ANTIQUORUM SENSING AND DISPERSAL AGENT AGAINST MULTISPECIES BACTERIAL BIOFILM

Dr. Iram Liaqat

Tenured Associate Professor, Department of Zoology, Government College University, Lahore

Abstract

Bacterial biofilms are a major worldwide healthcare problem (urinary tract infections) and are associated with decreasing quality of life and significant patient morbidity. This study is first to test Pakistani honey bess, Apis dorsata and A. cerana honey samples as anti biofilm, anti quorum sensing (QS) and biofilm dispersal agents honey against multispecies biofilm of bacteria (obtained from obese patients). Briefly, five previously identified isolates Pseudomonas aeruginosa, Escherichia coli, Staphylococcus aureus, Morganella morganii and Klebsiella pneumoniae (MT448672-MT448676) were selected. Antibiogram study of all five isolates was tested against three antibiotics viz., erythromycin (20 µg/mL), lincomycin (100 µg/mL) and rifampicin (100 µg/mL). In order to form multispecies biofilm, identified bacteria were grown in batch culture by mixing equal volumes (OD_{590nm}= 0.1) of 2, 3 and 5 bacterial isolates. In total 11 groups (g1-g11) were made. Crystal violet (CV) staining method was used to evaluate the antibiofilm potential and biofilm dispersal potential of both honey samples. QS inhibition in P. aeruginosa was measured following culture supernatant method. Antibiogram study showed significant ($p < 0.05$) resistance by P. aeruginosa against tested antibiotics. E. coli, M. morganii and K. pneumoniae were significantly susceptible to erythromycin and S. aureus to lincomycin. Minimum inhibitory concentrations (MIC) values of both honey samples showed 2 and 5% concentrations as having significant ($p < 0.05$) inhibition potential of multispecies biofilm by all test groups (g1-g11). Though A. dorsata honey significantly inhibited biofilm formation at 2 and 5% against all groups but 2% concentration was highly significant against g2-g4 groups. Regarding A. cerana honey, 2% concentration was significantly effective against g1, g4-g7 and g9-g11 groups. Both honey samples significantly inhibited QS at 2 and 5%. The 5% concentration of A. dorsata honey significantly dispersed biofilm by all groups compared to 2% which showed dispersal potential only by g2 and g3 groups. Collectively, honey samples showed significant antibiofilm, anti-QS and biofilm dispersal potentials thus can be considered as good alternative to antibiotics.

Keywords: Honey potential as antibiofilm, quorum sensing, antibiotic resistance, resistant isolates

A BIM-GIS FRAMEWORK FOR 3D MODELING OF INFRASTRUCTURE ASSETS

Khanh Giang Le

Faculty of Civil Engineering, University of Transport and Communications, Hanoi, Vietnam

ORCID: 0000-0002-6295-8578

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.

ENHANCING PSYCHOLOGICAL WELLBEING IN THE ELDERLY THROUGH PHYSICAL ACTIVITY IN GREEN SPACES

MSc Paulina Maria Kubot
Józef Piłsudski University of Physical Education in Warsaw,
Faculty of Physical Education, Department of Human Biology, Warsaw, Poland
ORCID ID: 0000-0002-5690-563X

Associate Professor Monika Łopuszanska-Dawid
Józef Piłsudski University of Physical Education in Warsaw,
Faculty of Physical Education, Department of Human Biology, Warsaw, Poland
ORCID ID: 0000-0002-3533-5754

MSc Sara Kaźmierska-Urban
Józef Piłsudski University of Physical Education in Warsaw,
Faculty of Physical Education, Department of Human Biology, Warsaw, Poland
ORCID ID: 0000-0001-5367-0065

Abstract

Introduction. As global populations age, maintaining the psychological wellbeing of elderly individuals becomes increasingly important. Recent research indicates unprecedented levels of stress, sadness, and anxiety globally, with approximately 14% of individuals aged 60 and above experiencing mental disorders. At the same time, studies highlights the significant role of physical activity, particularly in natural environments like green spaces, has emerged as a key factor in promoting mental health among the elderly. **Objective.** This study aims to review current literature on the benefits of engaging in physical activities in green spaces for the psychological wellbeing of older adults. **Material and methods.** A literature review of the current literature was conducted using the Ebsco, Scopus, Google Scholar and PubMed databases with search phrases including: green exercise and psychological wellbeing, green environment and exercises/physical activity and mental wellbeing/health/psychological condition, and elderly/older adults/ older people. The review encompassed publications released from January 2014 to December 2024. **Results.** Engaging in physical activities in green spaces significantly enhances psychological health in older adults. Benefits include improved cognitive function, reduced psychological stress, and mitigation of depression and anxiety symptoms. Activities such as walking, gardening, Nordic walking, running, and outdoor strength exercises positively impacted emotional wellbeing, mood, sleep quality, and cortisol levels. The natural environment provides a relaxing and calming effect, amplifying the mental health benefits of exercise. Moreover, the integration of green spaces into daily routines offers an opportunity for social interaction, fostering a sense of community and reducing feelings of loneliness among elderly individuals. Additionally, regular exposure to greenery and natural sunlight has been associated with improved vitamin D levels, which may further support overall health and cognitive function in older adults. **Conclusions.** In summary, promoting physical activity in green area offers an non-pharmacological intervention to support the psychological wellbeing of older people. Urban planning and public health policies should prioritize creating accessible green spaces to support mental health in aging populations.

Keywords: outdoor exercise, aging population, natural environments, psychological condition, review.

CLUSTERING ANALYSIS BASED ON COUNTRIES' FRUIT AND VEGETABLE CONSUMPTION, LIFE EXPECTANCY, HEALTH EXPENDITURES, AND CARDIOVASCULAR AND OBESITY PREVALENCE

Cemre Yaren ERKAL

Istanbul Okan University, Postgraduate Education Institute, Department of Nutrition and Dietetics, Istanbul, Türkiye

ORCID ID: https://orcid.org/0009-0003-2784-7789

Salim YILMAZ

Acıbadem Mehmet Ali Aydınlar University, Faculty of Health Sciences, Department of Health Management, Istanbul, Türkiye

ORCID ID: https://orcid.org/0000-0003-2405-5084

Ahmet Murat GÜNAL

Haliç University, Faculty of Health Sciences, Department of Nutrition and Dietetics, Istanbul, Türkiye

ORCID ID: https://orcid.org/0000-0001-9109-1080

ABSTRACT

Introduction and Purpose: This study analyzes countries' health and nutrition profiles based on fruit and vegetable consumption, life expectancy, health expenditures, obesity, and cardiovascular disease prevalence. By clustering countries using these variables, it provides insights into the effectiveness of health policies and global health disparities, emphasizing the importance of sustainable health policies by considering variable dynamics over time.

Materials and Methods: Secondary data from reliable international sources were analyzed. Variables were temporally weighted to reflect cumulative impacts, normalized using Z-scores, and clustered via K-means with Euclidean distances. Countries were categorized as good, moderate, or poor for each variable pair. Jaccard similarity coefficients compared clusters across variables. The analysis included 146 countries, with statistical analysis and visualization in R software.

Results: Fruit and vegetable consumption showed high similarity (50.0%) with life expectancy and health expenditures, highlighting a strong link between healthy eating and improved health outcomes. In contrast, its similarity with obesity/cardiovascular prevalence was only 12.3%, reflecting disparities in dietary patterns and nutrition access. Clustering revealed that countries with high health expenditures and life expectancy still face moderate obesity and cardiovascular risks, underscoring the complexity of health challenges.

Discussion and Conclusion: Healthy eating significantly enhances life expectancy and reduces health expenditures. However, disparities in nutrition access and excessive caloric intake's impact on chronic diseases call for targeted health policies. Promoting balanced nutrition, reducing processed food consumption, and enhancing healthcare access are critical strategies to address these challenges and foster healthier societies globally.

Key Words: Health Policy; Nutrition; Life Expectancy; Cardiovascular Diseases; Obesity; Clustering Analysis

DISCOURSES ABOUT MEDICAL SPACES AND WELL-BEING OF ROMANIAN PATIENTS

Assist. Prof. Dr. Ramona MARINACHE

Bucharest University, Faculty of Letters, Department of Cultural Studies, Bucharest – Romania

https://orcid.org/0000-0002-4072-8253

Prof. Dr. Valentina MARINESCU

Bucharest University, Faculty of Sociology and Social Work, Department of Sociology, Bucharest – Romania

https://orcid.org/0000-0002-9882-5902

ABSTRACT

The presentation aimed to identify the ways in which Romanian patients assess the last visit to the clinic or hospital as a physical “space” and as an environment of social encounters. The methodology used is a qualitative one – the auto-ethnography, an evocative and analytical form of writing which is itself an art, connects personal and cultural worlds by ”writing in” these ordinary everyday experiences. The sample was made of sixteen auto-ethnographies of the Romanian patients from Bucharest. The study showed that the spaces of the hospitals’ and clinics’ in Romania were perceived as unfriendly and hostile by the patients. On the other hand, the quality of social encounters within the medical spaces is very low. The discourses about spaces and encounters related to the medical act and illness were, as such, extremely negative as tone and the use of catastrophic metaphors was wide-spread. We can conclude that more researches are needed in order to change the way in which Romanian hospital and clinics were built and maintained in order to increase the patients’ satisfaction and trust.

Keywords: interpersonal communication, social encounters, discourse,

OPTIMIZATION OF LONGITUDINAL CONTROL SYSTEM FOR FIXED-WING UAVS USING PID CONTROLLER AND SPSA METHOD

Sezer ÇOBAN

Iskenderun Technical University, Aircraft Maintenance and Repair Department, İskenderun, Hatay, Turkey

ORCID ID: https://orcid.org/ 0000-0001-6750-5001

ABSTRACT

Introduction and Purpose: The design and optimization of control systems for unmanned aerial vehicles (UAVs) play a critical role in ensuring flight stability and performance. This study focuses on the development of a longitudinal control system for a fixed-wing UAV. A state-space model was created using aerodynamic parameters, with system matrices (A and B) derived from the UAV's physical and aerodynamic properties. The aim was to optimize a PID controller to improve the UAV's pitch angle control.

Materials and Methods: A Proportional-Integral-Derivative (PID) controller was implemented to regulate the pitch angle of the UAV. The controller parameters were optimized using the Simultaneous Perturbation Stochastic Approximation (SPSA) method. This method minimizes pitch error under realistic flight conditions and demonstrates robustness in high-dimensional and noisy environments. Simulations were conducted to assess the controller's performance in achieving the desired pitch angle with stability and precision.

Results: The results showed that the SPSA-optimized PID controller significantly improved pitch angle control. The UAV exhibited enhanced stability, achieving desired performance metrics even under challenging conditions.

Discussion and Conclusion: This study demonstrates the effectiveness of SPSA in optimizing PID controller parameters for UAV longitudinal control. The improved pitch angle regulation highlights the potential for integrating such methodologies in UAV control systems to enhance autonomous flight performance.

Key Words: UAV, PID Control, SPSA Optimization, Longitudinal Stability, State-Space Model

EFFECTS OF HIGH FAT DIET ON RAT TESTICULAR TISSUE

Turan YAMAN

Van Yüzüncü Yıl University, Faculty of Veterinary Medicine, Department of Pathology, 65040, Van, Türkiye

ORCID ID: https://orcid.org/0000-0001-8811-9775

Volkan KOŞAL

Van Yüzüncü Yıl University, Faculty of Veterinary Medicine, Department of Artificial Insemination, Van, Türkiye

ORCID ID: https://orcid.org/0000-0001-5268-5046

ABSTRACT

Introduction and Purpose: Obesity and overweight are currently one of the most important health problems in the world and are characterized by excessive storage of adipose tissue in the body. Recently, there is evidence that obesity affects fertility by reducing the amount of spermatozoa. Changes in metabolic profile in animal models of obesity have been reported to be similar to those reported in humans. The aim of the presented study was to evaluate the changes in the testicular tissues of rats fed with high-fat diet (HFD) for different periods of time by histopathological and spermatological examination.

Material and Methods: For this purpose, 18 rats were divided into three groups as control (n:6), group-1 (n:6) fed with HFD (60%) for 6 weeks and group-2 (n:6) fed with HFD (60%) for 12 weeks. At the end of the experimental period, testicular tissues were examined histopathologically. Sperm motility rate, density analysis and abnormal sperm rates were evaluated from sperm samples obtained by epididydymal puncture.

Results: Exposure to 6 weeks of HFD did not cause significant histopathologic and spermatologic differences in testicular tissues of the group-1 compared to the control group. However, histopathologic findings revealed the presence of germ cell loss in the tubular lumen, decreased number of spermatozoa and impaired tubular structures in the group-2 fed with HFD for 12 weeks compared to the control. In spermatologic analyses, it was statistically determined that motility and density decreased and abnormal sperm rates increased in the group-2.

Discussion and Conclusion: Our study shows that HFD exposure may cause changes in testicular histology and sperm parameters. It is also seen that longer dietary regimen worsens the observed changes.

Keywords: High fat diet; Rat; Testis; Histopathology

UNVEILING ADAPTIVE COMPONENTS FOR ENVIRONMENTAL HETEROGENEITY IN IPOMOEA CARNEA JACQ

Muhammad Safdar

Syed Mohsan Raza Shah

Department of Botany, Division of Science and Technology, University of Education, Lahore, Pakistan

ABSTRACT

Environmental heterogeneity is an important factor that affects species richness and provides conditions for adaptation of existing species. Factors affecting the diversity gradient are climatic variation, biotic interactions, territory, ambient vigor, productivity, available water resources and some other factors that direct the historical process by the evaluation of climatic history and phylogeny of niche conversation. Naturally adapted populations of Ipomoea carnea Jacq. were collected from various ecological regions of Punjab province to investigate their adaptive components that have been developed under heterogeneous environmental conditions. Multivariate redundancy analysis (RDA) and correlation analysis were done to evaluate the association of soil physiochemical features with different morpho-anatomical and physiological characteristics. I. carnea is an invasive species that can rapidly grow, spread and adapt from xerophytic to aquatic habitats. This species showed better growth and biomass production near water bodies. Additionally, it also exhibited some specific anatomical modifications such as aerenchyma formation, sclerification, xylem ray thickness, leaf thickness and large metaxylem area that enable it to survive under harsh environmental conditions. Populations from highly saline habitats showed higher value of osmolytes and ionic contents (K^+ and Ca^{2+}).Furthermore, the populations from highly saline areas also exhibited the maximum uptake of Na^+ content and the lowest uptake of K^+ and Ca^{2+} content. In conclusion, I. carnea showed very specific modifications in morpho-anatomical and physiological traits that reveal its ecological success from aquatic to xerophytic habitats.

EFFECT OF BAKUCHIOL ON TESTICULAR HISTOPATHOLOGY AND SOME SPERMATOLOGIC PARAMETERS

Turan YAMAN

Van Yüzüncü Yıl University, Faculty of Veterinary Medicine, Department of Pathology, 65040, Van, Türkiye

ORCID ID: https://orcid.org/0000-0001-8811-9775

Volkan KOŞAL

Van Yüzüncü Yıl University, Faculty of Veterinary Medicine, Department of Artificial Insemination, Van, Türkiye

ORCID ID: https://orcid.org/0000-0001-5268-5046

ABSTRACT

Introduction and Purpose: Bakuchiol (BAK) is a prenylated phenolic monoterpene with the chemical formula [(1E,3S)-3-ethenyl-3,7-dimethyl-1,6-octadien-1-yl] phenol obtained from the fruit of Psoralea corylifolia L. belonging to the family Leguminosae. It is frequently preferred in Traditional Chinese Medicine to eliminate male reproductive disorders. It has been the subject of research due to its antioxidant, anti-inflammatory, anti-aging, antibacterial properties. BAK reproductive disorders; It is preferred in the treatment of many diseases such as increasing spermatogenesis, erectile dysfunction, prostate cancer, benign prostatic hyperplasia. The aim of this study was to investigate the effects of long-term (12 weeks) BAK administration on reproductive parameters and testicular histopathology in male rats.

Material and Methods: 18 rats were randomly divided into 3 different groups. The groups were as follows; control, BAK-I (10 mg/kg), BAK-II (50 mg/kg). BAK administration was performed by oral gavage for 12 weeks. At the end of 12 weeks, rats were sacrificed by exsanguination method under anesthesia. After sacrification, semen was collected from the right testis by epididymis puncture. Motility, density and abnormal spermatozoon analysis were performed. The left testis was placed in 10% buffered formaldehyde for histopathologic examination.

Results: 12-week BAK administration decreased sperm motility rate and increased abnormal spermatozoon rate in a statistically dose-independent manner. It was observed that the head of the normally sickle-shaped rat spermatozoon was flattened in BAK-treated groups. There was a statistically significant increase in semen density in BAK-II group. Histopathologic examination revealed degeneration and structural deterioration in seminiferous tubules and enlargement in the intertubular area.

Discussion and Conclusion: Studies on the effects of BAK administration on male reproductive system are limited. As a result of our study, deleterious effects of BAK administration for 12 weeks on sperm parameters and testicular histopathology in male rats were revealed regardless of the dose.

Keywords: Bakhuciol; Histopathology; Sperm; Testis.

THE EFFECT OF PEANUT BALL USE ON LABOR MEMORY, LABOR SATISFACTION, DELIVERY LENGTH, AND NEONATAL APGAR SCORE: A RANDOMIZED CONTROLLED TRIAL

Assoc. Prof. Seyhan ÇANKAYA

Faculty of Health Science, Midwifery Department, Selcuk University, Aladdin Keykubat Campus Selcuklu, Konya, Turkey

ORCID ID: https://orcid.org/0000-0003-0433-2515,

Assoc. Prof. Hacer Alan Dikmen

Faculty of Health Science, Midwifery Department, Selcuk University, Aladdin Keykubat Campus Selcuklu, Konya, Turkey

ORCID ID: https://orcid.org/0000-0001-9617-4897,

Dr. Research Assist. Ayşenur Ataş

Faculty of Health Science, Midwifery Department, Selcuk University, Aladdin Keykubat Campus Selcuklu, Konya, Turkey

ORCID ID: https://orcid.org/0000-0003-3096-3599,

ABSTRACT

Objective: The purpose of this study was to evaluate the effect of using peanut balls during labor on labor memory, labor satisfaction, labor length, and neonatal APGAR scores.

Methods: This randomized, controlled, single-blind trial was conducted in 156 primiparous pregnant women (peanut ball group n=78, control group n=78) who delivered between Jan 2024 and October 2024. Pregnant women in the peanut ball group were instructed to perform movements with the peanut ball after cervical dilation reached 5 cm. Data were collected by personal information form, labor and postpartum follow-up form (APGAR score, etc.), Birth Memory and Recall Scale 4 hours after delivery, and Birth Satisfaction Scales. The control group received only standard intrapartum midwifery care.

Results: It was determined that the birth memory and recall memories of the pregnant women in the peanut ball group were more positive and their birth satisfaction was higher than the pregnant women in the control group ($p<0.001$). The 1st minute APGAR scores (8.3±0.6) and 5th minute APGAR scores (9.2±0.7) of the newborns of the peanut ball group were higher than the 1st minute APGAR scores (7.8±0.7) and 5th minute APGAR scores (8.5±0.7) of the newborns of the control group ($p<0.001$). The duration of the first stage (209.3±38.6) and second stage (27.4±13.7) of labor in the peanut ball group was shorter than the duration of the first stage (250.3±54.6) and second stage (32.3±11.3) of labor in the control group ($p<0.05$).

Conclusion: In this study found that peanut ball application positively affected women's labor memory and recall, and increased labor satisfaction. In addition, we found that peanut ball application increased neonatal APGAR scores and shortened the duration of the first and second stages of labor.

Key Words: Birth memory and recall, birth satisfaction, labor length, APGAR score, peanut ball

PACKAGING TECHNOLOGIES FOR EXTENDING SHELF LIFE AND CURRENT APPLICATIONS IN THE FOOD INDUSTRY

Bahar Kurt

DIMES Food Ind. & Inc., İzmir, Turkey

ORCID ID: https://orcid.org/0000-0001-8811-822X

ABSTRACT

In recent years, the food industry has focused on innovative packaging technologies to extend the shelf life of products. These technologies aim to reduce food waste, preserve freshness and increase consumer satisfaction. Active and smart packaging methods in particular are attracting the attention of the sector. While active packaging slows down the deterioration of foods by providing antimicrobial or antioxidant properties, smart packaging provides a safe experience for the consumer by providing information about the status of the product.

Active Packaging Technologies: Studies have shown that antimicrobial films and coatings are effective in extending shelf life. For example, edible biopolymers have been found to inhibit microbial growth when enriched with essential oils. In addition, oxygen scavengers and ethylene absorbers play an important role in preventing deterioration, especially in fruit and vegetable products. Smart Packaging Technologies: Solutions such as freshness indicators and RFID labels are used in food logistics. Some studies have shown that sensors that detect deterioration through color change increase consumer confidence. Smart packaging is widely used in food safety and traceability, especially in the e-commerce sector. Sustainability-based applications are also at the forefront in the industry. The use of biodegradable materials both reduces environmental impacts and appeals to consumers' environmental awareness. In addition, the restructuring of high-barrier plastics stands out as an important development in protecting products from oxygen and moisture.

These innovations in food packaging technologies have great potential to both reduce food waste and optimize the supply chain. The integration of these developments into the industry provides economic and environmental benefits in the long term. This study compiles current packaging technologies for use in the food industry. It is aimed to contribute to both literature and industry.

Key Words: Smart Packaging, Active Packaging, Sustainability

THE RELATIONSHIP BETWEEN ADVANCED GLICATION END PRODUCTS (AGE) AND HEALTH

Diyetisyen Cansu İpek BOZKURT

Hasan Kalyoncu Üniversitesi, Sağlık Bilimleri Fakültesi, Beslenme ve Diyetetik

0009-0005-7185-7049

Prof. Dr. Yasemin BEYHAN

Hasan Kalyoncu Üniversitesi, Sağlık Bilimleri Fakültesi, Beslenme ve Diyetetik

0000 - 0002 - 4001 - 1965

ABSTRACT

Advanced glycation end products (AGE) were defined by Louis Camille Maillard in 1912. When it was first defined, it was used in food chemistry. With the discovery of HbA1C in diabetic patients in 1968, it became a frequently discussed and emphasized topic in the field of health. AGE formation, which is a part of a normal metabolism, can become pathological when found in excessive amounts in tissues and circulation. AGEs bind to surface receptors in cells with cross-links. As a result of this binding, their structures and functions change. Therefore, oxidative stress and inflammation are caused. AGEs are known as glycotoxins. They are of pathological importance for many chronic diseases, especially diabetes. In recent years, the consumption of processed foods has increased. At the same time, the amount of sugar and fat taken into the body has also increased. These changes have brought about exposure to AGEs. It has been shown that AGEs have negative effects on health.. The formation of AGEs can be endogenous or exogenous in many different ways. Diet-induced AGE formation can be prevented by carefully selecting foods and paying attention to the cooking methods of these foods. It is possible to protect against diseases such as diabetes, kidney diseases, cardiovascular diseases, and polycystic ovaries by reducing dietary AGEs. Low-heat cooking methods should be applied instead of high cooking temperatures to reduce dietary AGE intake. Steaming and boiling methods should be preferred instead of frying and roasting. Care should be taken against Maillard reactions. Green tea and plants containing phenolic antioxidants should be added to the diet. Fresh foods should be preferred at every meal.

Keywords: Advanced Glycation End Products (AGE), Oxidative Stress, Diet and AGE.

PRODUCTION AND CHARACTERIZATION OF CHITOSAN-BASED COMPOSITE FIBERS

Canan MADEN

Bursa Technical University, Faculty of Engineering and Natural Sciences, Department of Polymer Materials Engineering, Bursa, TÜRKİYE

ORCID ID: https://orcid.org/0009-0002-4256-9580

Büşra MUTLU

Bursa Technical University, Faculty of Engineering and Natural Sciences, Department of Metallurgical and Materials Engineering, Bursa, TÜRKİYE

Bursa Technical University, Central Research Laboratory, Bursa, TÜRKİYE

ORCID ID: https://orcid.org/0000-0002-9946-6729

Şeyma DUMAN

Bursa Technical University, Faculty of Engineering and Natural Sciences, Department of Metallurgical and Materials Engineering, Bursa, TÜRKİYE

ORCID ID:https://orcid.org/0000-0002-6685-656

Fatma DEMİRCİ

Bursa Technical University, Faculty of Engineering and Natural Sciences, Department of Polymer Materials Engineering, Bursa, TÜRKİYE

ORCID ID: https://orcid.org/0000-0002-0617-8606

ABSTRACT

Introduction and Purpose: Polymeric biomaterials have found widespread use in recent years in terms of developing natural and functional materials in the biomedical and textile fields. Composite structures, where the unique properties of different structures are combined, allow the production of fibers with different properties such as biocompatible, antibacterial, moisture-retaining and mechanically durable. In this study, Collagen (COL) and Aloe Vera (AV) added Chitosan (CS) fibers were successfully produced by dry jet wet spinning method and the biological properties of chitosan were improved by mechanical properties of the additives. The produced filaments were characterized by FTIR, uniaxial tensile testing, microscope images and in vitro swelling assessments.

Materials and Methods: CS polymer solutions (4% w/v) were prepared by dissolving CS in an aqueous acetic acid solution. Then, COL additive at the rate of %75 by weight of CS was added to the solution. Lastly, various amount of AV at 10%, 20%, and 30% by weight of CS were added to the solution. The CS/COL/AV solution was transferred into a syringe and then pumped into the coagulation bath (a mixture of 10% NaOH and ethanol (1:1 ratio)) using a

syringe pump at a constant flow rate, passed through a washing bath.and dried overnight at room temperature in a stretched position.

Results and Discussion: Smooth and straight fibers were obtained. Mechanical properties of the fibers were decrease with increase AV addition. The functional groups of the chitosan/aloe vera/collagen composite were identified using FTIR analysis. The swelling behavior of the fibers were enhanced with increase the AV addition.

Conclusion: The fibers produced in this study have shown potential as an alternative material suitable for applications in the field of sutures.

Key Words: Chitosan; Collogen; Aloe vera; fiber production, dry jet-wet spinning

SYNTHESIS AND CHARACTERIZATION OF SCHIFF BASES AND POLY(AZOMETHINE)s CONTAINING ANTHRACENE AND AMINOBENZOTHIAZOLE UNITS

Erva USLU

Çanakkale Onsekiz Mart University, Faculty of Science, Department of Chemistry, Polymer Synthesis and Analysis Lab. Çanakkale 17020 Türkiye

ORCID ID: https://orcid.org/0009-0003-9669-6734

Feyza KOLCU

Çanakkale Onsekiz Mart University, Faculty of Science, Department of Chemistry, Polymer Synthesis and Analysis Lab. Çanakkale 17020 Türkiye

Çanakkale Onsekiz Mart University, Lapseki Vocational School, Department of Chemistry and Chemical Technologies, Lapseki, Çanakkale, 17800 Türkiye

ORCID ID: https://orcid.org/0000-0002-2004-8859

ABSTRACT

Introduction and Purpose: Schiff bases are compounds containing imine (C=N) groups, which are formed as a result of a condensation reaction of aldehydes and ketones with aliphatic or aromatic amines. These compounds have the ability to form complexes with metal ions and exhibit high chemical reactivity. Poly(azomethine)s, which are formed by polymerization of Schiff bases, contain repeating imine (C=N) groups in their structures. These compounds have high thermal and optical properties. The anthracene unit, a fundamental element in organic synthesis, exhibits high fluorescence and plays a pivotal role in the production of dyes and pigments. Similarly, 2-aminobenzothiazole, characterized by its high chemical reactivity, is crucial in the synthesis of pharmaceuticals.

Materials and Methods: The Schiff base compounds DHBAA and DHBABT were obtained by condensation reaction of 2-aminoanthracene (AA) and 2-amino-6-methylbenzothiazole (ABT) with 2,4-hydroxybenzaldehyde (DHB) in a 1:1 ratio. The synthesis of poly(azomethine)s, P-DHBAA and P-DHBABT, was accomplished through the reaction of 2-aminoanthracene and 2-amino-6-methylbenzothiazole in a 1:1 ratio with previously polymerized DHB. The structural elucidation of the synthesized compounds was facilitated by the implementation of FT-IR, UV-Vis, ^{1}H NMR and ^{13}C NMR measurements. Fluorescence, TGA, SEM and CV measurements were recorded for the characterization of these compounds. The molecular weights of the polymers were calculated using a GPC instrument.

Results: Depending on the instrumental results, it can be concluded that Schiff bases and poly(azomethine)s were successfully synthesized. The fluorescence properties of DHBAA, P-DHBAA and DHBABT compounds were determined. The optical and electrochemical band gaps of poly(azomethine)s having C-O-C etheric bonds were lower than those of Schiff bases.

Key Words: Schiff Base; Poly(azomethine); Fluorescence; TGA, Band Gaps

DESIGN AND DEVELOPMENT OF NOVEL APPORACH FOR FILE SHARING FOR SECURITY USING BLOCKCHAIN TECHNOLOGY

Deepak Bansal

Indian Institute of Finance, Greater Noida, India

ORCID number: 0009-0001-0777-3300

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

ICT AND ITS SIGNIFICANCE TO TEACHER EDUCATION: A REVIEW ON MODERN TRENDS IN EDUCATIONAL TECHNOLOGIES

Moses Adeolu AGOI

Lagos State University of Education, Lagos Nigeria

ORCID iD: 0000-0002-8910-2876

Oluwakemi Racheal OSHINOWO

Lagos State University of Education, Lagos Nigeria.

ORCID ID: 0000-0003-0568-6446

Benjamin Johnson OLASIJU

Lagos State University of Education, Lagos Nigeria.

Oluwanifemi Opeyemi AGOI

Obafemi Awolowo University, Osun Nigeria.

Abstract

Emerging technologies are rapidly revolutionizing teacher education and teaching practices in modern day education. The introduction of information and communication technology (ICT) into the education curriculum is increasing having profound implications on holistic teaching and learning process. The study of Kamil, et al. (2000) reveals that teachers teach better and students learn more when using modern day technologies. This paper essentially discussed the meaning and concept f ICT, scope of ICT in Education, Impact of ICT on Teacher Education, benefits of using ICT and challenges associated with the use of ICT. In order to collect vital information considered useful for the discussion on this paper, questions were carefully formulated and administered to respondents using online Google form questionnaire instrument. The gathered responses were subjected to reliability analysis. In conclusion, the paper affirms that the use of ICT will enhance the teaching experiences of teachers thereby allowing them to think independently, communicate creatively and achieve successful teaching, in an increasingly technological world. Finally, recommendations were made.

Keywords: ICT, Teacher Education, Educational Technologies.

TRANSFORMATIVE GROWTH: EXPLORING CHILDHOOD EXPERIENCES AND CAREER MOTIVATION IN MENTAL HEALTH PRACTITIONERS

Dr Megha Dhillon (presenter)

Assistant Professor, Department of Psychology, Lady Shri Ram College for Women, University of Delhi.

Jaya Shekhar (presenter)

Student, MSc Developmental Science, The University of Edinburgh.

Abstract

This study examines how childhood experiences influence therapists' motivations to pursue careers in mental health. These early experiences significantly shape personal development, fostering empathy, resilience, and a commitment to supporting others. The research provides valuable insights into psychotherapy by investigating the interplay between formative experiences, cultural contexts, and professional growth within a positive psychology framework.

Using a phenomenological and narrative approach, semi-structured interviews were conducted with practising therapists to explore how their childhood experiences shaped their career motivations, emotional resilience, and personal growth.

Thematic analysis revealed that, while often challenging, these early experiences contributed to the development of empathy and a strong desire to assist others. Participants recounted difficulties during their formative years, as well as professional challenges such as compassion fatigue. Despite these struggles, many highlighted how these experiences were integral to their personal and professional growth.

The findings highlight the critical role of resilience and post-traumatic growth in fostering careers in mental health. This research offers meaningful insights for enhancing training and support systems for mental health professionals, underscoring the importance of self-awareness and ongoing personal development.

Keywords: childhood experiences, resilience, culture, career motivation, transformative growth, positive psychology, empathy, counselling, psychotherapy.

A NOVEL FAMOXADONE FUNGICIDE DETECTION IN MILK SAMPLES BY SURFACE PLASMON RESONANCE BASED ON MOLECULARLY IMPRINTING POLYMER

Merve YAVAŞ KİREZ

Hasan Kalyoncu University, Faculty of Health Sciences, Department of Nutrition and Dietetics, Gaziantep, Turkey

ORCID ID: https://orcid.org/0009-0001-9606-9576

Mehmet Lütfi YOLA

Hasan Kalyoncu University, Faculty of Health Sciences, Department of Nutrition and Dietetics, Gaziantep, Turkey

ORCID ID: https://orcid.org/0000-0001-7424-3425

ABSTRACT

In this report, a new molecular imprinted surface plasmon resonance (SPR) sensor was prepared for Famoxadone (FAM) as a fungicide.

Biosensors provide an automated technology for food analysis, offering super-fast, non-destructive and cost-effective detection. SPR (Surface Plasmon Resonance) biosensor is an optical biosensor known for its versatility and has wider applications in food testing and analysis.

The aim of the study is to use this sensor for the quantitative analysis of Famoxadone (FAM) fungicide in milk samples with high recovery. The developed molecularly imprinted SPR sensor is expected to provide a new perspective for fungicide detection and also be a good tool for healthy living by contributing to food safety.

Firstly, the modification of gold surface of SPR chip was performed by self-assembling monolayer formation of allylmercaptane to introduce polymerizable double bonds on the chip surface. Then, FAM imprinted poly(2-hydroxyethylmethacrylate–methacryloylamidoglutamicacid) [p(HEMA– MAGA)] film was generated on the gold surface. The developed sensor surfaces were characterized by using scanning electron microscope (SEM), fourier transform infrared spectroscopy (FTIR), and atomic force microscopy (AFM). The analytical results have revealed that 1.0×10-9 – 1.0×10-8 M with a detection limit of 3.3×10-10 M in milk samples was found as linearity range. Furthermore, FAM imprinted SPR sensor was examined in terms of stability, repeatability.

As a result, the high selectivity, repeatability, reproducibility and stability of the prepared SPR sensor will help ensure safe food consumption worldwide.

Key Words: Famoxadone; Molecularly imprinting polymer; SPR; Sensor

CORRELATION OF THYROID ANTIBODIES AND THYROID HORMONES IN SERUM AND SALIVA: A META ANALYSIS

Zerrin BARUT

Antalya Bilim University, Faculty of Dentistry, Department of Basic Medical Sciences, Antalya, Turkiye

ORCID ID: https://orcid.org/0000-0002-6289-5562

ABSTRACT

Introduction and Purpose: Thyroid hormones are essential for regulating growth and metabolism. Thyroid dysfunction is common, with autoimmune diseases being leading causes. Diagnosis is typically achieved by measuring serum levels of free thyroxine (fT4), free triiodothyronine (fT3), and thyroid-stimulating hormone (TSH). However, autoimmune thyroid diseases are often involve thyroid autoantibodies such as anti-thyroid peroxidase (TPOAb) and anti-thyroglobulin (TgAb). Saliva is a promising, non-invasive medium for systemic disorders. Nevertheless, findings on the correlation between serum and salivary levels of thyroid hormones and autoantibodies remain inconsistent. This meta-analysis evaluates whether salivary biomarkers reliably diagnose and monitor thyroid diseases.

Materials and Methods: Following the PRISMA 2020 guidelines, a search conducted in the Web of Science (WOS) and PubMed databases from inception to January 2025 identified a total of 2,208 publications. Nine case-control studies provided data for quantitative meta-analysis. The inclusion criteria required studies to report simultaneous serum and salivary levels of TSH, fT3, fT4, TPOAb, and TgAb. For statistical analysis, a random-effects model using the inverse variance method was employed to compare the standardized mean difference (SMD) between salivary and serum samples.

Results: The general impact test results indicate statistical significance at the level of $p<0.05$ for T4, TgAb, and TPAb, borderline significance for T3, and non-significance for TSH. In the effect size and heterogeneity analysis, significant heterogeneity was identified across all parameters ($p<0.01$), suggesting inconsistent effects in terms of magnitude and/or direction. The I^2 value indicates that 98% of the variability across studies is attributable to heterogeneity.

Discussion and Conclusion: The findings suggest that the concentrations of thyroid autoantibodies in saliva may not reliably reflect their serum counterparts. However, salivary hormone levels demonstrate a potential to at least partially mirror their serum equivalents. The use of salivary thyroid hormones as biomarkers holds promising potential for contributing to clinical diagnostic processes. Nevertheless, further research is warranted to better evaluate their diagnostic value and broader applicability.

Key words: TPOAb; TgAb; TSH; T3; T4; Saliva; Thyroid

THE EFFECT OF VISUAL IDENTITY ON BRAND STRATEGY

Laphissou Eden Isaac NGUESSAN

Istanbul Arel University, Faculty of Fine Arts, Graphic Design Master's Program

Istanbul, Turkey

ORCID ID: https://orcid.org/0009-0001-1837-4460

Kübra ŞAHİN ÇEKEN

Istanbul Arel University, Faculty of Fine Arts, Department of Graphic Design

Istanbul, Turkey

ORCID ID: https://orcid.org/0000-0003-1602-3920

ABSTRACT

Visual identity is one of the most important elements that shape a brand. Logos, color palettes, typography and other visual designs are used as powerful tools to convey the brand's message to its target audience. In this article, the effect of visual personality on brand strategy is summarized, how it is shaped is explained and the results are evaluated. Introduction and Purpose

Brands must develop an effective strategy to survive in a competitive market. Visual identity is a key component that increases the brand's recognition and enables it to connect with its target audience. The purpose of this study is to evaluate the role of visual identity in the strategic success of a brand and to examine how this effect directs marketing strategies. Material and Method

In this article, literature review and case studies were used as the main methods. The visual identity elements of global brands such as Coca-Cola and Apple were analyzed and the impact of these elements on brand awareness and customer loyalty was discussed. The role of visual identity elements (logo, colors, typography) in perception management is detailed. Conclusion

Visual identity is the cornerstone of brand strategy and, when used correctly, creates an effective connection with the target audience. Elements such as the psychological effects of colors, the simplicity of the logo and the readability of typography positively affect brand perception. As a result, visual identity is not only an aesthetic element but also a strategic communication tool. When creating a visual identity, companies need to take into account the expectations of their target audience and marketing strategies.

Key Words: Visual Identity, Emblem, Logo, Typography

ESTIMATING THAILAND GROSS PROVINCIAL PRODUCT: A K-NEAREST NEIGHBORS REGRESSION APPROACH

Adirek Vajrapatkul
Sukhothai Thammathirat Open University, School of Economics, Thailand,

Boonta Wayupab
Central Food Retail Company Limited, Replenishment and Demand Forecasting Department, Thailand

Pinmanee Vajrapatkul
Computer Engineering Department, Srinakharinwirot University, Thailand

Abstract
The purpose of this research is to explore the relationship between economic and social factors and Gross Provincial Product in Thailand. This study employs a dataset consisting of 76 provinces in Thailand for the year 2020. The variables considered include the number of internet users, factories, doctors, and hospitals in each province. The KNN regression approach is applied to model the relationship between these indicators and GPP. The findings reveal that the number of doctors has the highest correlation with GPP, followed by internet usage, hospital availability, and the number of factories. The practical implications of this research are significant for regional economic planning in Thailand. The findings suggest that investments in healthcare infrastructure and technology can drive economic growth at the provincial level.
Keywords: Gross Provincial Product, number of doctors, internet usage, number of hospitals, K-Nearest Neighbors regression, Thailand

THE DETERMINANTS OF PROPERTY OFFENCES IN THAILAND: A SUPPORT VECTOR MACHINE REGRESSION APPROACH

Adirek Vajrapatkul
Sukhothai Thammathirat Open University, School of Economics, Thailand,

Boonta Wayupab
Central Food Retail Company Limited, Replenishment and Demand Forecasting Department, Thailand

Pinmanee Vajrapatkul
Computer Engineering Department, Srinakharinwirot University, Thailand

Abstract
This study explores the relationship between socio-economic factors and property offenses in Thailand, aiming to understand the impact of economic variables on criminal activities. This research utilizes a Support Vector Machine Regression (SVMR) with the data from available 77 provinces for the year 2021, sourced from the National Statistical Office. The model incorporates variables including the number of property offenses, remaining loan amounts, the number of temples as a cultural factor, agricultural land ownership, and drug-related offenses, to predict property crime in Thailand. The findings reveal significant correlations between property crime rates and several socio-economic indicators. Higher loan amounts and drug-related offenses show a strong predictive relation to increased property crime rates. Conversely, greater temple density and agricultural land ownership correlate with lower crime rates. Thus, policies that focus on economic aid, drug rehabilitation programs, and cultural integration initiatives could be effective in reducing property crime rates.
Keywords: Property offenses, Socio-economic factor, Support Vector Machine Regression, Thailand.

FACTOR AFFECTING THAILAND ENERGY DEPLETION: A BAYESIAN LINEAR REGRESSION APPROACH

Adirek Vajrapatkul
Sukhothai Thammathirat Open University, School of Economics, Thailand,

Boonta Wayupab
Central Food Retail Company Limited, Replenishment and Demand Forecasting Department, Thailand

Pinmanee Vajrapatkul
Computer Engineering Department, Srinakharinwirot University, Thailand

ABSTRACT

The objective of this research is to investigate the macroeconomic and demographic determinants of energy depletion in Thailand from 1972 to 2020, focusing on factors including population density, adjusted net national income, urbanization, GDP per capita, and natural resource rents. The study employs Bayesian linear regression to analyze annual data sourced from the World Bank. The results indicate that population density and natural resource rents are significant contributors to energy depletion. Urban population, however, exhibits a slight negative effect. Adjusted net national income and GDP per capita have minimal impact on energy depletion. Thus, policymakers should focus on improving energy efficiency, investing in infrastructure that reduces energy consumption, and diversifying energy sources to alleviate the issue of energy depletion and contribute to environmental sustainability efforts.

Keywords: Energy depletion, Net National Income, Population Density, Urban Population, GDP per capita, Natural Resource Rents

TEACHERS' PERCEPTION OF CIVIC EDUCATION CURRICULUM AS TOOL FOR CITIZENSHIP DEVELOPMENT OF SENIOR SECONDARY SCHOOL STUDENTS IN NORTH CENTRAL NIGERIA

ADEMOLA, Olaitan Idowu, PhD

Department of Curriculum & Instructions Alvan-Ikoku Federal University of Education Owerri

IORLIAM, Emmanuel Vambe, PhD

Department of Educational Foundational,Faculty of Education,University of Abuja.

SANGOLEYE, Solomon Adebayo, PhD

Department of Curriculum & Instructions Alvan-Ikoku Federal University of Education Owerri

Abstract

This study explored teachers' perceptions of the civic education curriculum as a tool for fostering citizenship development among senior secondary school students in the North Central zone of Nigeria. Using a descriptive survey design, the study sampled 400 teachers out of a total population of 6,956 in the region, guided by five research questions and hypotheses. The "Teachers' Perception of Civic Education Curriculum (TPCEC)" questionnaire was validated for clarity, relevance, and alignment with the study's objectives, achieving a reliability coefficient of 0.813 through Cronbach's Alpha. Data analysis, conducted using SPSS, involved mean scores and standard deviations to address research questions, while t-tests and regression analyses tested hypotheses at a 0.05 significance level. Findings revealed generally positive perceptions of the curriculum's effectiveness, despite challenges with relevance, instructional methods, and resources, and demographic factors showed no significant influence. Recommendations include periodic curriculum review, modern instructional resource integration, teacher capacity building, enhanced evaluation mechanisms, equitable resource distribution, and community engagement for improved civic education outcomes.

Keywords: Civic Education, Curriculum, Citizenship Development, and Teachers Perception

AI-DRIVEN EARLY WARNING SYSTEMS FOR NATURAL DISASTERS

Mohamed Mastir

Ali Dahbi

Khalil El-Hami

Mohammed V University in Rabat, Scientific Institute, Av. Ibn Batouta, B.P. 703, Agdal, Rabat, Morocco.

Abstract:

Natural disasters have been a big danger to humans and buildings and this has made it necessary to have strong early warning systems to reduce their effects. New technologies based on artificial intelligence (AI) present new ideas to improve these systems. This paper aims at designing and developing AI-based early warning systems for natural disasters such as earthquakes, floods and hurricanes. These systems are designed to use machine learning techniques and real time data from different sensors in order to give early and accurate warnings with the goal of reducing the impact of the disaster on the affected people. This study also discusses another important issue – the problem of integrating different data sources (satellite imagery, weather data and social media feeds) in order to improve the predictive performance of the warning system. The use of domain adaptation and ensemble learning techniques has also been investigated in the on study flood in prediction order reveals to that improve these the methods reliability result and in generalization significant of improvement the in system. the A precision comprehensive and case the study time to alert for disaster. The present study identifies how to increase the dependability and effectiveness of AI-based early warning systems. In the end, it is hoped that this research will help improve preparedness and response measures for natural disasters and may even help save lives and reduce costs. The use of AI in early warning systems is a novel application in disaster management, and the society will be more prepared to mitigate the effects of natural disasters.

Keywords: Early warning systems, machine learning, real-time data, disaster mitigation, domain adaptation, ensemble learning.

INTERGRADE COMPARISON OF POSTURAL DISORDERS OF PHYSIOTHERAPY STUDENTS

Alpay GÜNER, PT candidate

Burdur Mehmet Akif Ersoy University, Faculty of Health Sciences, Department of Physiotherapy and Rehabilitation, Burdur, Türkiye

ORCID ID: https://orcid.org/0009-0002-8250-8950

Yunus Emre YILMAZ, PT candidate

Burdur Mehmet Akif Ersoy University, Faculty of Health Sciences, Department of Physiotherapy and Rehabilitation, Burdur, Türkiye

ORCID ID: https://orcid.org/0009-0005-4608-2982

Hamza SARIOĞLAN, PT candidate

Burdur Mehmet Akif Ersoy University, Faculty of Health Sciences, Department of Physiotherapy and Rehabilitation, Burdur, Türkiye

ORCID ID: https://orcid.org/0009-0008-4772-8847

Şaban KALPAKLI, PT candidate

Burdur Mehmet Akif Ersoy University, Faculty of Health Sciences, Department of Physiotherapy and Rehabilitation, Burdur, Türkiye

ORCID ID: https://orcid.org/0009-0003-4493-0154

Assoc. Prof. Murat TOMRUK, PT, PhD

Burdur Mehmet Akif Ersoy University, Faculty of Health Sciences, Department of Physiotherapy and Rehabilitation, Burdur, Türkiye

ORCID ID: https://orcid.org/0000-0002-3941-816X

INTRODUCTION: Throughout their education process, physiotherapy students make movements that may negatively affect body mechanics, such as bending, lifting and reaching, and this may lead to postural disorders. In addition, the fact that students do not have sufficient knowledge about posture and ergonomics in the early stages of their education also makes these disorders and injuries become even more inevitable. It is still unknown whether postural disorders vary among the grades in physiotherapy students. The aim of this study was to compare the postural disorders of physiotherapy students between grades.

MATERIALS AND METHODS: A total of 190 (148 female, 43 male) physiotherapy students with a mean age of 20.88±1.62 years were included in the study. The students were divided into 4 groups according to their grades: 1st Grade (n=53), 2nd Grade (n=46), 3rd Grade (n=56), 4th Grade (n=36). Postural disorders of the students were assessed using the "New York Posture

Rating Chart (NYPRC)". Chi-square analysis was performed to compare distributions between classes. Kruskal-Wallis test was used to analyze the differences between groups ($p<0.05$).

RESULTS: The chi-square analysis showed that there was no difference between the grades in terms of gender, upper extremity dominance, lower extremity dominance and regular exercise habits ($p>0.05$). Kruskal-Wallis analysis revealed that there was no significant difference between the groups in terms of postural disorder ($p>0.05$).

DISCUSSION AND CONCLUSION: The results of our study showed that the postural disorders of physiotherapy students did not differ between grades. The reason for this could be the fact that students' practice which may negatively affect body mechanics, such as bending, lifting and reaching increase towards the last grade, however, their level of knowledge about posture and ergonomics may also increase. Further studies may investigate the effects of posture and ergonomics training given to students on postural disorders.

KEYWORDS: posture, postural disorders, physiotherapy, student, grade.

WHAT GENERATIVE ARTIFICIAL INTELLIGENCE APPLICATIONS PROMISE IN EDUCATION: PRE-SERVICE TEACHER OPINIONS

Zeynep Y. AVCI

Eskisehir Osmangazi University, Faculty of Education, Department of Instructional Technology, Eskisehir, Turkey

ORCID ID: 0000-0001-7740-743X

ABSTRACT

Introduction and Purpose: As in many fields, the use of generative artificial intelligence (AI) applications in the field of education arouses curiosity in academic circles. While issues such as how reliable the content produced with AI is and how these applications bring with them some ethical problems are discussed, on the other hand, discussions about the use of various generative AI applications in educational environments are expanding. In this study, the awareness of teacher candidates from different fields about AI and generative AI tools, their experiences with generative AI tools, and their expectations for the future of these applications in the field of education were examined.

Materials and Methods: Bu çalışma farklı alanlardan 15 öğretmen adayı ile gerçekleştirilmiştir. Çevrimiçi anket yoluyla öğretmen adaylarına yapay zekâ ve üretken yapay zekâ araçları hakkında farkındalıkları, çeşitli üretken yapay zekâ uygulamaları hakkında tecrübeleri ve bu uygulamalarla ilgili genel anlamda eğitim alanında ve kendi öğretmenlik alanlarında geleceğe yönelik beklentileri sorulmuştur. Veriler içerik analizi yöntemi ile incelenerek açık kodlama yapılmıştır.

Results: Participants have stated that productive artificial intelligence applications can find a place in educational environments in a wide range of contexts, from increasing students' interest in class to offering alternatives for students with special needs.

Discussion and Conclusion: It is anticipated that the results of this study will be significantly important, as there have not yet been sufficient studies on this increasingly widespread research topic in our country. It is also foreseen that results will shed a light on possible future applications of generative artificial intelligence applications into in different teaching fields.

Key Words: Generative AI, Artificial intelligence; Pre-service teachers; AI expectations; AI Awareness

BRIDGING THE GAP BETWEEN EDUCATION AND THE LABOR MARKET: INSIGHTS FROM ALMATY UNIVERSITIES

Balabekova Nazym Asetovna

University of International Business named after Kenzhegali Sagadiev Almaty, Kazakhstan
Scientific Supervisor PhD Mussabalina D.S.

Abstract

The purpose of this study is to analyze empirical research on the professional competencies of students attending universities in Almaty. The research explores how university curricula impact students' readiness for the labor market, particularly in their ability to develop essential professional competencies. By examining trends and key components in professional competency formation, this study seeks to identify challenges and opportunities within the current educational framework and make recommendations to improve competency-based learning outcomes. Using a comprehensive literature review of recent studies on professional competency and applying empirical data collection through surveys and statistical analysis, the research highlights critical gaps in practical training and competency-based assessment methods. Results indicate the need for enhanced practical experience and competency-focused educational reforms to align university education with labor market demands. The findings underscore the role of competency-oriented education in promoting students' professional growth and their adaptability to the evolving labor market.

Keywords: professional competence, university students, Almaty, education, curriculum development, labor market, competency-based education.

ANALYSIS OF DRAG REDUCTION AND HEAT TRANSFER PROPERTIES USING NATURAL FIBERS AND POLYMERIC SUBSTANCES

Kazi Md Salim Newaz

Professor, Department of Mechanical Engineering, Faculty of Engineering, University of Malaya, 50603 Kuala Lumpur, Malaysia.

In industries such as papermaking, natural fibers are often transported as suspensions to processing machines. Studying frictional losses and heat transfer in fiber suspensions offers insights into the relationship between the properties of suspended fibers and the characteristics of the final paper products. This approach also presents opportunities for advanced particle characterization in suspension form.

The drag reduction capabilities of polymers and various fibers play a critical role in slurry transportation and utility applications. Research on polymeric suspensions has demonstrated drag reduction rates of up to 70%, with thermal resistance increasing by 5–6 times. Notably, the reduction in heat transfer for polymer suspensions is significantly greater than the drag reduction. By combining polymeric additives, friction loss and heat transfer behavior can be tailored to meet specific operational requirements.

Simultaneous investigations into heat transfer and friction loss in fiber suspensions have been carried out by several researchers. Kazi et al. explored fiber suspensions at low concentrations and observed that increasing fiber concentration and flexibility resulted in enhanced drag reduction and reduced heat transfer. They further correlated fiber and paper properties with heat transfer and friction loss data, proposing this methodology as a tool for real-time monitoring of paper quality.

The inclusion of polymers such as Guar gum and Gum Arabic in water was found to reduce drag and alter heat transfer characteristics. In this study, varying concentrations of polymeric materials were tested, revealing significant effects on drag reduction and heat transfer retardation. Guar gum achieved a maximum drag reduction of 28% at 300 ppm, while mixtures of Gum Arabic and Polyethylene Oxide (PEO) in water exhibited approximately 5% drag reduction at similar concentrations. However, Gum Arabic and PEO demonstrated superior heat transfer performance compared to Guar gum. Optimally formulated polymer mixtures can provide customized solutions for specific drag reduction and heat transfer needs.

Keywords: Heat transfer, Drag reduction, Fiber suspensions, Wood pulp fiber, Non-wood pulp fiber, Particle characterization, Fiber properties, Paper properties, Polymers, Correlations

ANALYSIS OF ADVERSE DRUG REACTIONS REPORTING IN DISTRICT LAHORE

Muhammad Abdullah

Muhammad Abdullah

Dr.Mah-ru-nisa Atif

Dr.Beenish Osama

Dr.Nadia Bilal

Dr.Rimsha yousaf

research scholar Hajvery University,Lahore,Pakistan

Abstract

This study highlights the importance and significance of adverse drug reactions (ADRs) in patient safety and healthcare outcomes. With a focus on the emerging trends of technological devices (smart phones, laptops, tablets, etc) usage for ADRs reporting, the study explores healthcare professionals' preferences and challenges in reporting practices. The research study outlines the types of ADRs, diagnostic processes, and management strategies. Results of the study highlight gaps in reporting participation, suggesting the need for educational campaigns and user-friendly reporting applications. The study aims to provide insights for optimizing ADRs reporting systems and enhancing pharmacovigilance practices. This cross-sectional study was conducted in Punjab, Pakistan, over a period of three months, engaged 400 health professionals across various healthcare settings. Utilizing a questionnaire, the research explored ADRs reporting and their management , focusing on hospitals, healthcare centers, and pharmacies. Participants, including physicians, pharmacists, nurses, volunteered, while those refusing consent were excluded. Despite a promising 79.5% awareness rate, targeted education is needed for the remaining 20.5%. Healthcare professional’s preferences for tangible reporting methods and positive views on mobile reporting underscore the dynamic nature of ADRs reporting. Notable findings include the importance of user-friendly mobile applications, addressing reporting gaps, and continuous improvements for effective pharmacovigilance. The study emphasizes the significance of comprehensive education, trust-building, and technological integration to enhance ADRs reporting and, consequently, patient safety.

Key words: ADR reporting, healthcare professionals, pharmacovigilance, mobile applications, patient safety, educational campaigns

ATTENTION DEFICIT AND HYPERACTIVITY DISORDER IN SCHOOL AGE CHILDREN

Zeliha nur BOZKURT

Gaziantep Islamic Science and Technology University, Public Health Nursing, Gaziantep, Turkey

ORCID ID: https://orcid.org/0009-0003-2207-0720

Ayşe ELKOCA

Gaziantep Islamic Science and Technology University, Midwifery, Gaziantep, Turkey

ORCID ID: https://orcid.org/0000-0002-3936-4122

Duygu AYAR

Gaziantep Islamic Science and Technology University, Nursing, Gaziantep, Turkey

ORCID ID: https://orcid.org/0000-0002-3936-4122

ABSTRACT

ADHD (Attention Deficit and Hyperactivity Disorder) is a problem characterized by attention deficit, hyperactivity and impulsivity that begins in childhood and can continue into adulthood. It is the most common psychiatric disorder in childhood and affects children in every aspect of life socially, psychologically, emotionally and academically. There is limited information about the etiology of ADHD. Diagnosis is made after behavioral assessments by families and teachers, and examinations by psychologists and psychiatrists. Children diagnosed with ADHD are frequently scolded by their teachers and ostracized by their friends due to their excessive mobility and careless behavior in the school environment where they spend most of their time. This causes children's self-perception to decrease and their self-confidence to be damaged. For this reason, students, teachers and families need information and support in recognizing ADHD and managing this process. Today, ADHD is not only an individual problem, but also a condition that affects the health and policies of countries. School health nurses are needed to protect the health of children, monitor and prevent risky behaviors, support these children and families in areas where they have difficulty in their daily lives, and teach coping methods.

Keywords: Attention deficit, impulsivity, hyperactivity, school health clinic.

THESES ON BASIC PSYCHOLOGICAL NEEDS IN TÜRKİYE: A DOCUMENT ANALYSIS

Arş. Gör. Elif ÖZÇINAR

İzmir Demokrasi Üniversitesi, Eğitim Fakültesi, Rehberlik ve Psikolojik Danışmanlık Anabilim Dalı, İzmir, Türkiye

ORCID ID: https://orcid.org/0009-0004-6151-1901

ABSTRACT

Introduction and Purpose: Basic psychological needs, which are critical for an individual's well-being and welfare in life, are among the core concepts of the Self-Determination Theory developed by Deci and Ryan. This study aims to examine postgraduate theses written on basic psychological needs in Türkiye and analyze them according to predetermined criteria.

Materials and Methods: For this purpose, 143 theses with access permission were examined out of 145 theses accessed through the National Thesis Center database using the keyword "basic psychological needs." The theses were categorized based on type, year, sample group, sample size, research fields, research methods, and investigated variables. Document analysis, one of the qualitative research methods, was used in this study.

Findings: The analysis revealed an increase in studies addressing basic psychological needs in recent years. Master's theses were found to be more prevalent compared to doctoral dissertations. Quantitative research methods were employed more frequently than qualitative and mixed-method approaches. The majority of samples consisted of adult participants, with study groups typically ranging between 200-299 individuals. These studies were primarily conducted in the field of psychology, focusing predominantly on variables such as well-being, life satisfaction, problematic internet use, parental attitudes, and anxiety.

Discussion and Conclusion: The findings of the study indicate that thesis studies on basic psychological needs are limited in terms of sample groups and research methods employed. However, it is anticipated that the increasing number of studies on this topic in recent years, utilizing more diverse methods and involving different sample groups, will contribute significantly to the literature. It is further suggested that the findings of this study may guide future researchers in diversifying sample types, research methods, and examined variables, thereby enhancing the scope and depth of future investigations.

Key Words: Basic psychological needs, theses, document analysis.

THEORETICAL FOUNDATIONS FOR ENHANCING BRAND AWARENESS OF A COMPANY

Yeremenko Nikita

2nd year Master's degree student, EP Marketing University of International Business

Scientific Supervisor PhD Mussabalina D.S.

Abstract

Brand awareness is an essential element of the successful functioning of companies in the modern market. This article examines the main theoretical aspects related to consumers' perception of the brand, the definition of awareness levels, strategies for increasing awareness, and evaluating their effectiveness. Modern research and examples of the successful application of various methods are presented.

Keywords: Brand awareness, top-of-mind, brand recognition, marketing, identity.

ASSESSMENT OF LIFE SKILLS ON FEMALE STUDENTS' PARTICIPATION AND ACADEMIC ACHIEVEMENT IN SCIENCE IN KATSINA STATE, NIGERIA

Abdulmalik SABITU

Umar USMAN Shehu

Safiyya ABDULRAHAMAN Rafindadi

Department of Science Education, Federal University Dutsin-Ma

Abstract

Life skills such as problem-solving, critical thinking, and self-confidence are believed to positively influence female secondary school students' participation in science activities and their academic performance. Despite the recognized importance of these skills, there is limited research on their impact on science learning outcomes, particularly among female students in Katsina State, Nigeria. This study aimed to assess the relationship between life skills and female students' participation and performance in science. The researchers sampled 600 female students from selected secondary schools in Katsina State using a stratified sampling technigues. A descriptive survey design was adopted. The data was collected using three validated instruments: a Life Skills Assessment Questionnaire (LSAQ), a Science Participation Scale (SPS), and a Science Performance Test (SPT). The instruments were pilot tested and have reliability coefficients of 0.87, 0.84, and 0.91 for LSAQ, SPS, and SPT, respectively. Mean, standard deviation, and Pearson’s correlation, were employed for data analysis. The findings revealed significant positive connection between life skills and both participation in science activities ($r = 0.72$) and academic performance ($r = 0.75$). The study recommends integrating life skills training into the science curriculum to enhance female students' participation and achievement in science.

Keywords: Life Skills, Participation, Performance, Science, Gender

ASSESSMENT OF THE MARSHES IN SOUTHERN IRAQ USING REMOTE SENSING TECHNIQUES

Sa'ad R. Yousif

Watheq F. Shneen

Department of Geology, Faculty of Science, University of Kufa, Iraq

Abstract

Iraq is one of the dry regions, especially in the southern regions, where rains do not compensate the quantities of water lost due to evaporation, as the water in those regions that form the marshes, which originate from the Tigris and Euphrates Rivers, and to some extent Karkheh and Karun Rivers must receive special attention in terms of regulating the quantities of water coming to them from the aforementioned sources besides rain, as well as regulating the outgoing water from them through the Shatt Al-Arab, which drains it to the Arabian Gulf. Here, there must be specialized studies that take upon themselves the feasibility of benefiting from the water concentrated in the marshes. These studies are dealt with irrigation and drainage methods, and studies dealing with the area in terms of the feasibility of agriculture from hydrological concepts. Measuring the ability of the marshes to meet the water needs of farmers, given that the water of the marshes is one of the hydrological features that make that water suitable for agriculture to some extent, if the marshes are considered strategic reservoirs. The importance of the studied area comes from the marshes were chosen within the list of UNESCO World Heritage.

The study concerns the urgent need to protect the national wealth from losses through monitoring the active borders of the marshes utilizing remote sensing techniques to determine the landuse and landcover change (LULCC) for successive years.

THE EFFECT OF USING ROBOTICS AND SIMULATION IN EDUCATION ON CREATIVE PROBLEM SOLVING AND COMPUTATIONAL THINKING SKILLS OF GIFTED STUDENTS

Aylin DEMİRHAN

Yüksek Lisans Öğrencisi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, BÖTE Anabilim Dalı

ORCID ID: 0000-0002-9174-0578

Prof.Dr. Tolga GÜYER

Dr., Gazi Üniversitesi, Gazi Eğitim Fakültesi, BÖTE Anabilim Dalı

Dr., Gazi University, Faculty of Education Department of CEIT

ORCID ID: 0000-0001-9175-5043

ABSTRACT

This study aims to examine the impact of robot- and simulation-based education on the creative problem-solving and computational thinking skills of gifted students. The research was conducted using a mixed-methods design that combines quantitative and qualitative approaches. The pre-test and post-test scores of the experimental and control groups were evaluated, and document analysis was employed to analyze qualitative data derived from student feedback.

Quantitative findings revealed an increase in computational thinking and creative problem-solving skills in both the robotics and simulation education groups. However, these increases were not statistically significant ($p > .05$). Qualitative analyses, on the other hand, indicated that students held positive perceptions of robot- and simulation-based education and reported heightened motivation during these processes. Students particularly noted that robots enhanced their algorithm development and logical reasoning skills. Simulation environments were described as engaging and motivating learning platforms that reinforced problem-solving processes.

The findings suggest that robot- and simulation-based education can contribute to the development of creative problem-solving and computational thinking skills in gifted students. While robotics education particularly supports advancements in algorithmic and coding skills, the simulation group highlighted the benefits of structured guidance and prompts for more effective learning. It was emphasized that students required additional support for complex tasks and that extending the duration of training programs is crucial for skill development.

This study underscores the potential of integrating robotics and simulation tools into the education of gifted students, while emphasizing the need for long-term investigations. The results provide guidance for the development of educational materials and programs. It is recommended that such educational approaches be further integrated into curricula, and future research should focus on the role of teachers in these processes.

Keywords: Robotics education, simulation-based robotics education, creative problem-solving, computational thinking, gifted students

THE RELATIONSHIP BETWEEN HISTORICAL SITES AND CAPITALISM: COMPARİSON OF RİZE MUSEUM AND YELDEĞİRMENİ NEİGHBORHOOD

-Muhammet Burak OKKALI

Bursa Technical University, Graduate Institute, Department of Sociology, Bursa, Turkey

ORCID ID:https://orcid.org/0009-0001-8782-8024

Ali ÇEKEN

Sakarya University, Institute of Social Sciences, Communication Sciences, Sakarya, Turkey

ORCID ID:https://orcid.org/0000-0001-5398-8735

ABSTRACT:

Historical sites are the most important areas that shape the identity of cities with their physical, cultural and economic values, as well as reflecting the culture of a society. However, with the effect of globalization and capitalization, these places are in danger of turning into tourism and consumption-oriented areas. This study examines these transformation processes of historical places and the effects of capitalist spatial organization. In this context, the study examines how a balance can be established between sustainability and protection while evaluating the advantages and disadvantages of using historical sites as a business with the Decapitation of capitalism. According to Henri Lefebvre's theory of space, space is a product of social relations. The capitalist system, on the other hand, turns spaces into objects of consumption for the purpose of economic profitability. Thus, the historical city is turning into a tourism and visual consumption-oriented structure and losing its social and cultural values. In particular, the use of space as a business; restoration, that is, the preservation of the physical structure of the space and economic development, as well as the loss of the main identity over time, the exclusion of local people and distance from the values specific to the space leads to problems such as. The study discusses the role that sustainable conservation strategies can play in this transformation process. An approach should be adopted to support economic development by preserving the original identities of historical sites. In this direction, ensuring the active participation of local people, supporting local production and traditional values, protecting the physical and social structure of the place are offered as priority options. As a result of the qualitative analyses used in the research, it has been assessed that the use of historical sites as businesses under the influence of capitalism offers economic opportunities but carries serious risks. In order for these places to be used as a business without losing their original values, production and culture-oriented approaches should be adopted, not consumption-oriented. Sustainability and conservation strategies should be implemented in a balanced manner. Spatial and social harmony should be observed with the participation of all stakeholders. In this context, the use of historical sites as a business should be evaluated not only as an economic tool, but also as an opportunity for the preservation of cultural heritage.

Keywords: Capitalism, Transformation, Sustainability and Protection**.**

INVESTIGATION OF THE RELATIONSHIP OF COGNITIVE EMOTION REGULATION STRATEGIES AND PERCEIVED STRESS LEVELS WITH PSYCHOLOGICAL COUNSELORS' PROFESSIONAL QUALITY OF LIFE

Duygu ÇABUK AKTAŞ

Ministry of National Education, Izmir, Turkey

ORCID ID: https://orcid.org/0000-0001-8627-3592

ABSTRACT

Introduction and Purpose: The aim of this study is to examine the relationship between psychological counselors' professional quality of life, cognitive emotion regulation skills and perceived stress levels. This research is a quantitative study in relational screening model.

Materials and Methods: The participants of the research are 460 psychological counselors who are working in private or public institutions. Demographic data of the participants were obtained through the "personal information form". Data on the measurement of the participants' professional quality of life were collected using "Professional Quality of Life Scale", data on the measurement of cognitive emotion regulation skills were collected using "Cognitive Emotion Regulation Questionnaire" and data on the measurement of perceived stress levels were collected using "Perceived Stress Scale". In the data analysis process, descriptive analyzes; Pearson correlation coefficient; independent samples t-test; Welch t-test; one way analysis of variance (one way ANOVA) and multiple linear regression analysis were performed.

Results: According to result of multiple regression analysis, the cognitive emotion regulation strategies and perceived stress levels of the psychological counselors accounted for approximately 26% of the total variance in the compassion satisfaction sub-dimension, approximately 29% of the total variance in the burnout sub-dimension, and approximately 17% of the total variance in the compassion fatigue sub-dimension of counselors' professsional quality of life. Along with these findings, the findings regarding the relationships between the sub-dimensions of all variables were discussed and interpreted in the light of the literature.

Key Words: Professional Quality of Life, Compassion Satisfaction, Compassion Fatigue, Burnout, Cognitive Emotion Regulation Skills, Perceived Stress.

EVALUATING THE EFFECT OF FOCAL LOSS FUNCTION ON THE CLASSIFICATION METRICS FOR DIABETIC RETINOPATHY CLASSIFICATION MODELS

Ufuk BAL
Osmaniye Korkut Ata University, Electrical and Electronics Engineering Department, Osmaniye, Türkiye
ORCID ID: https://orcid.org/0000-0003-0345-6989

Ebubekir AKKUŞ
Aydın Adnan Menderes University, Germencik Yamantürk Vocational School, Electronics and Automation Department, Aydın, Türkiye
ORCID ID: https://orcid.org/0000-0003-1232-948X

Kürşad KOCAİSPİR
Osmaniye Korkut Ata University, Electrical and Electronics Engineering Department, Osmaniye, Türkiye
ORCID ID: https://orcid.org/0009-0008-7640-3291

ABSTRACT

Introduction and Purpose: Diabetic retinopathy (DR) is a significant complication of diabetes with the potential to result in blindness in advanced stages. Therefore, early detection and classification of DR is of vital importance. The number of studies on DR detection and classification is increasing with developments in artificial intelligence. In the studies conducted for this purpose, convolutional neural network (CNN) models with deep learning architecture stand out. The objective of the present study is to ascertain the impact of the Focal Loss function on the classification performance metrics of CNN models.

Materials and Methods: In this study, publicly available APTOS2019 dataset, consisting of 3662 color fundus images, was used to train and test CNN models. The dataset was divided into three groups: training, validation and test data. Three different pre-trained CNN models, namely AlexNet, DenseNet201 and Vgg16, were trained using standard loss function. Then, each CNN model was trained using the Focal Loss function. All trained models were tested on the test dataset, and the classification performance of each model was evaluated based on Accuracy, Precision, Sensitivity, and F1 Score.

Results: In the study, it was observed that three different CNN models trained using the Focal Loss function showed higher classification performance in terms of evaluation metrics compared to CNN models trained standard loss function. The highest performance for five-class classification performed on the test dataset was achieved with the VGG16 model, with values of 82.34%, 61.66%, 70.81% and 64.46% based on Accuracy, Precision, Sensitivity and F1 Score metrics, respectively.

Discussion and Conclusion: The study showed that using the Focal Loss function in model training improves the performance of CNN models in DR classification. This approach improves not only the accuracy but also other important performance metrics such as Precision, Recall, F1 Score, thus increasing the overall validity of the model. These results also highlight the potential of using the Focal Loss function in developing models with high general validity using imbalanced datasets such as those encountered in medical imaging.

Key Words: Diabetic Retinopathy; Classification; Focal Loss Function; Convolutional Neural Network.

LOG-LINEAR MODELS FOR HANDLING MISSING OBSERVATIONS IN TWO-DIMENSIONAL CONTINGENCY TABLES: A CASE STUDY

Arş. Gör. Emine ÖÇAL

Dokuz Eylül Üniversitesi, Fen Fakültesi, İstatistik Bölümü

https://orcid.org/0009-0004-5657-8458

Doç. Dr. Ayfer Ezgi YILMAZ ÇAKIROĞLU

Hacettepe Üniversitesi, Fen Fakültesi, İstatistik Bölümü

https://orcid.org/0000-0002-6214-8014

ABSTRACT

In scientific research, categorical variables are analyzed using contingency tables during data analysis. Log-linear models are frequently utilized for this purpose. However, the presence of missing values in the dataset can lead to inaccurate results if these models are applied directly. Therefore, it is crucial to address the issue of missing values with suitable methods before proceeding with the analysis to ensure reliable inferences from the data. This study investigates log-linear models and closed-form estimations for scenarios involving missing values in one or both variables of two-dimensional contingency tables. Additionally, an application of these methods is demonstrated using the "dresses attribute sales" dataset.

Keywords: Categorical data, two-dimensional contingency tables, missing data, log-linear models

LIFE CYCLE ASSESSMENT OF BIODEGRADABLE-PLASTIC AND COMPOSTABLE PLASTIC: INSIGHTS FOR THE FUTURE OF PLASTIC MATERIALS

Renuka gautam

Dr. Dheeraj Rathore

School of Environment and Sustainable Development,

Central University of Gujarat, Gandhinagar-382030, (Gujarat), India

Globally, the production of petrochemical based plastic market around 99% of total plastic production and it's rising exponentially due to its wide range of application and economic advantages. However only 9% of it is recycled while, remaining is ended into landfill, oceans or incinerated which ultimately entered into human body through various routes. Bioplastic has the potential to be future plastic due to fast degradability and lower ecological footprint. Bioplastic is the term include bio-based and biodegradable or both plastic. Biodegradable-plastic and compostable plastic are therefore the promising solution for biodegradability issue while, ecological and socio-economic scale is still complex. A comparative analysis of PHB (bio-degradable) and PLA (compostable), both are biological in origin (microalgae), through LCA (life cycle assessment) is crucial for understanding the sustainability of product. Cultivation, harvesting, blending, additives, production, transportation, and product disposal are the steps that make up LCA. The input-output data comprised all emissions from energy (fuels, electricity), and resource utilization (water, chemicals, and materials). The analysis considered global warming potential, fossil energy consumption, acidification, eutrophication, and human health hazards. It was demonstrated that PHB is better than compostable plastic for extended use and lower contamination risk, whereas compostable plastic is better for a single usage. However there are challenges in the production of these bioplastic involves optimizing the process on industrial scale . Since the technology is still in its early stages, more studies are required to fully understand the LCA of biodegradable and compostable plastic from an environmental and socioeconomic perspective.

Keywords:- Bioplastic, Polyhydroxy-butyrate, Polylactic acid

BIOSECURITY MEASURES IN THE RAISING OF PHEASANTS UNTIL THE RELEASE IN THE HUNTING GROUND

Academician Prof. Dr. IVAN PAVLOVIC

Scientific Institute for Veterinary Medicine of Serbia, Belgrade, Serbia

ABSTRACT

In order for artificially reared pheasants to adapt more easily to natural conditions after being released into the hunting grounds, the application of technical-technological and biosecurity measures is necessary. The phase of adaptation of pheasant chicks to the environment in aviaries for feralization is defined as a special phase of the technological production process. When the pheasants reach the age of twenty days, the wire between the aviary and the outlet is raised. In the aviaries, the pheasants remain until the fifth or sixth week of age when they are transported to shelters in hunting grounds as their future habitats or until they are transferred to the winter aviary if they are used for a breeding flock. Aviaries are closed units where mother flocks and hatched pheasants are kept until they are released into the hunting grounds. Each part on the side and above is fenced with a braided wire 2 m high. In the interior of the aviary there are feeders, waterers and canopies. In most pheasants, the floor of the aviary is made of earth, which is planted with clover, sunflower or sorghum. After the birds leave the aviary, they must rest for at least 6 months before settling in a new flock. This is achieved by having a large number of aviaries within the pheasantry and keeping the breeding flock in only one of them, while the others are kept for the reception of pheasants. Biosecurity hygiene measures are necessary here. The wire parts of the aviaries, the movable and immovable equipment in them and the land are prepared for settlement, as well as in the aviaries for the reception of the breeding flock. During this phase, the immune status of the individuals is checked for the carried out vaccination. Within this phase, feces are sampled once every three weeks for bacteriological examination.

Keywords: pheasants, farm breeding, biosecurity measure,

GEOROUTE AS NEW TOOL FOR GEOTOURISM VALORISATION IN BENI MELLAL ATLAS, (MOROCCO)

Prof. Dr. Bouzekraoui Hicham

Research Group of Landscapes Dynamic, Risks and Patrimony, Faculty of Letters and Human Sciences, Sultan May Slimane University, Beni Mellal, Morocco
https://orcid.org/0000-0002-3980-4378View this author's ORCID profile

Phd Student. Mouaddine Atika

Georessources and Environment Laboratory, Faculty of Sciences and Techniques, Sultan My Slimane University, Beni Mellal, Morocco

Abstract:

Georoutes are essential touristic tools for disseminating and valorising geoheritage because they work as outdoor field classrooms where visitors learn about geological and geomorphological sites and phenomena. The aim of this work is the inventory, localisation and classification of geosites in Atlas of Beni Mellal and so identifying their geotourism potential. Moreover, the mapping of these geosites to produce a geotourism map, showing three georoute linking the selected geosites as new tool to geotourism valorisation in this Mountain area. Geographically, they city of Beni Mellal is located at the foot of the Middle Atlas-Central High Atlas Mountains junction largely known as Atlas of Beni Mellal Mountain belt. It contains a wide number of geosites with high geological and geomorphological values, uniqueness, integrity and beauty. They are essential for understanding the geological and geomorphological history of this part of the Atlas Mountains, and therefore deserved to be valorized. However, this geological and geomorphological richness is generally unknown to the general public and overshadowed by local actors. Moreover, due to their outstanding landscape integrity and beauty, these geosites have excellent potential for geotourism development. The geotouristic map is produces by using a simplified geological layer as the background of this map geological map to provide an overview of the geology of these municipalities. Furthermore, the inventoried geosites represents the basic elements used to elaborate a géoroute with three geotourism itineraries. Moreover, cultural sites and tourist information are also added are represented to increase the attractiveness of this area and facilitate the visit of these geosites. The inventory that was made reveals the presence of geosites that are both numerous and diversified in this territory. In total, 35 geosites resulted from geological processes such as magmatic, sedimentary and structural phenomena as well as geomorphological processes mainly fluvial and karstic. For this geosites, an approach of an overall inventory and mapping is needed both in regional and national levels. This will put these geological and geomorphological potentialities as a lever for sustainable geotourism development in Moroccan's Mountains.

Keywords: georoute, geotourism, google maps, geosites, Beni Mellal Atlas, Morocco.

EDIAL GENICULATE BODY VOLUME AND ASYMMETRY IN PATIENTS WITH MIGRAINE DIAGNOSIS

Esma GÜL

Balikesir University, İvrindi Vocational School of Health Services, Department of Medical Documentation and Secretarial, Balikesir, Turkey

ORCID ID: https://orcid.org/0000-0001-6234-937X

Burcu ASLANTEKİN

Balikesir University, Faculty of Medicine, Department of Anatomy, Balikesir, Turkey

ORCID ID: https://orcid.org/0000-0002-2212-8748

Ramazan ÇETİN

Balikesir University, Faculty of Medicine, Department of Anatomy, Balikesir, Turkey

ORCID ID: https://orcid.org/0000-0001-5282-0308

Emrah ÖZCAN

Balikesir University, Faculty of Medicine, Department of Anatomy, Balikesir, Turkey

ORCID ID: https://orcid.org/0000-0002-6373-4744

Nermin TEPE

Balikesir University, Faculty of Medicine, Department of Neurology, Balikesir, Turkey

ORCID ID: https://orcid.org/0000-0003-4148-2539

ABSTRACT

Introduction and Purpose: Thalamus, which is claimed to be the highest mechanism of the brain and receives information from the cortex and subcortex, plays an important role in the pathogenesis of migraine, which affects 10% to 20% of the world's population and is characterized by headache. Phonophobia, which is defined as excessive sensitivity to sounds that are not normally shown in migraine, is seen in 70-80% of migraine attacks. It is known that the medial geniculate body, one of the thalamus nuclei, is responsible for transmitting incoming auditory stimuli to the primary auditory center via the brachium of inferior colliculus, and is also reported to be responsible for auditory perception. Therefore, it is thought that the medial geniculate body may be associated with phonophobia in patients diagnosed with migraine. This study aims to evaluate the volume and asymmetry of the medial geniculate body in patients diagnosed with migraine and compare it with healthy individuals.

Materials and Methods: The study included 40 female patients aged 20-49 who were diagnosed with migraine at Balikesir University Health Practice and Research Hospital between

2023-2024, and 30 healthy women aged 22-47. Cranial MRI images of the participants were taken via the hospital's PACS system and transferred to VolBrain software. The asymmetry between the right, left and total volumes of the medial geniculate body and the right and left volumes were evaluated and the data were analyzed with IBM SPSS version 22 program. The means of the obtained data were compared with the Independent Group T-Test and the Pearson Correlation Test was used for correlation with age.

Results: According to the results obtained, no significant difference was found between the right, left and total volume and asymmetry of the medial geniculate body between migraine patients and healthy individuals ($p>0.05$). However, no significant correlation was found between age and medial geniculate body volume and asymmetry ($p>0.05$).

Discussion and Conclusion: In this study, it was determined that migraine has no effect on the volume and asymmetry of the medial geniculate body, and that there is no significant change in the volume and asymmetry of this nucleus with aging. Although acoustic stimuli from the inner ear in migraine patients do not cause a change in the volume of the medial geniculate body, it is thought that auditory pathways should be evaluated as a whole in migraine, since there are stimuli from the medial geniculate body to both the amygdala and the auditory cortex. Therefore, the relationship between the medial geniculate body and phonophobia in migraine patients should be reconsidered.

Key Words: Migraine; Medial Geniculate Body; Asymmetry; Morphometry

NORTH COUNTRY FILM: MANIFESTATION OF SEXUAL VIOLENCE AS A SPECIAL TYPE OF VIOLENCE IN THE OCCUPATIONAL FIELD

Büşra İLGİN

KTO Karatay University, Institute of Graduate Studies, Department of Sociology,

Konya, Turkey

ORCID ID: https://orcid.org/0009-0004-3577-2171

ABSTRACT

Introduction and Purpose: In professional life, women experience inequality with men in many areas in the workplace. Natural rights are mandatory rights that every person should benefit from regardless of gender. However, these rights are not always granted everywhere, they are restricted despite being natural rights, and women are restricted especially by gender discrimination. Women experience serious problems, especially in sexual violence. The purpose of this article is to reveal the problems women experience in places where they work and the reasons for these problems through the film North Country. It is to investigate the struggle of women against sexual violence, oppression and oppression experienced by women in their working lives. Among the problems experienced by women, the dimension of sexual violence in the professional field is especially mentioned in this article.

Materials and Methods: The study was handled with content analysis from qualitative methods. The study was examined and addressed in detail with this method.

Results: As a result of the research and analysis, it is seen that the women's struggle has achieved a successful result and the balance of inequality has changed. In addition to the dimension of sexual violence, the film shows that women experience oppression and oppression in every area together with the norms of the patriarchal structure.

Key Words: Women, sexual violence, harassment, women's rights, gender

AMELIORATIVE EFFECT OF JAMUN (SYZYGIUM CUMINI) SEED AND ORANGE (CITRUS SINENSIS) PEEL EXTRACTS AGAINST CADMIUM INDUCED ALTERATION IN LIVER BIOMARKERS OF RATS

Mr. Ram Prataap Yadav

Prof. Sunil Kumar Srivastav

Prof. Ajai Kumar Srivastav

Department of Zoology, DDU Gorakhpur University, Gorakhpur- 273009 (UP), India.

Abstract:

The protective effects of jamun seed extract (JSE) and orange peel extract (OPE) on cadmium induced alteration in liver biochemical parameters were investigated. One hundred twenty Wistar rats were divided into six groups (A-F). Group A (control): No treatment was given, Group B: cadmium chloride (10 mg/kg b wt.) was given, Groups C: rats were given 10 mg/kg b wt. cadmium chloride and 200 mg/kg b wt. Jamun seed extract, Group D rats were given 10 mg/kg b wt. cadmium chloride and 200 mg/kg b wt. orange peel extract, Groups E: 200 mg/kg b wt. orange peel extract, and Group F rats were given a dose of 200 mg/kg b wt. jamun seed extract. The treatments were conducted for 14 days. On 7th and 14th day, blood samples were collected from each group and liver biochemical parameters were analyzed. In cadmium chloride treated rats liver biomarkers levels (serum alkaline phosphatase, serum SGOT, serum SGPT, serum bilirubin and serum lactate dehydrogenase) were increased at 7 day and 14 day whereas serum albumin levels decreased on 7 day to 14 day as compared to control. JSE and OPE exerts hepatoprotective effects against cadmium induced alternation in liver biomarkers as the changes in serum alkaline phosphatase, serum SGOT, serum SGPT, serum albumin, serum bilirubin and serum lactate dehydrogenase were recovered to near control values.

Keywords: Cadmium, Liver biomarkers, Jamun seed extract, Orange peel extract, Protective

COMPARISON OF SEARCHING ALGORITHMS IN AI AGAINST HUMAN AGENT IN SNAKE GAME

Eda Tabaku

University “Aleksandër Moisiu” Durrës, Faculty of Information Technology, Department of Computer Science, Durrës, Albania

ORCID ID: https://orcid.org/0009-0000-4876-6927

Rinela Kapciu

University “Aleksandër Moisiu” Durrës, Faculty of Information Technology, Department of Computer Science, Durrës, Albania

ORCID ID: https://orcid.org/0000-0001-6020-744X

Robert Kosova

University “Aleksandër Moisiu” Durrës, Faculty of Information Technology, Department of Mathematics, Durrës, Albania

ORCID ID: https://orcid.org/0000-0001-7407-5441

Ejona Duci

University “Aleksandër Moisiu” Durrës, Faculty of Bussines, Department of Finance and Accounting, Durrës, Albania

ORCID ID: https://orcid.org/0000-0001-6020-744X

ABSTRACT

Introduction and Purpose

Artificial Intelligence (AI) plays a pivotal role in computer science, and its applications are growing at a rapid pace. One of the key areas where AI is heavily used is in gaming, particularly for the creation of non-player characters (NPCs). Among the various methods for implementing AI in games, search algorithms are the most commonly employed. This thesis aims to compare different search algorithms used in AI and evaluate their performance in comparison to human agents, using the Snake game as a testing ground.

Materials and Methods

A thorough literature review was conducted to investigate the various search algorithms that are commonly utilized in AI, with a specific focus on their use in gaming contexts. Drawing from the insights gained in the review, several algorithms were then implemented in the Snake game to assess their performance. The algorithms tested include A* Search, Breadth-First Search, Depth-First Search, Best First Search, and Hamiltonian Search.

Results

The experimental results revealed that the A* Search algorithm outperformed the other search algorithms, including Breadth-First Search, Depth-First Search, Best First Search, and Hamiltonian Search, in terms of both efficiency and accuracy within the context of the Snake game.

Discussion and Conclusion

The comparison of search algorithms highlighted that A* Search is the most effective method for implementing AI in gaming, offering superior decision-making capabilities. This study underscores the effectiveness of A* Search over other algorithms in gaming environments. Future research could explore the application of these search algorithms to more complex gaming scenarios and further AI-driven applications.

Keywords
Artificial Intelligence, Search Algorithms, Snake Game, A* Search, Gaming AI

EFFECTS OF METACOGNITIVE STRATEGY ON ACHIEVEMENT, RETENTION AND GENDER IN BUILDING ENVIRONMENT AND MAN AMONG INDUSTRIAL AND TECHNOLOGY EDUCATION STUDENTS

O. D. Alawode
Departments of Industrial and Technology Education School of Science and Technology EducationFederal University of Technology, Minna

P. S. Yaduma
Department of Vocational and Technology Education Faculty of Technology Education Abubakar Tafawa Balewa University, Bauchi

H. Bello
Department of Vocational and Technology Education Faculty of Technology Education Abubakar Tafawa Balewa University, Bauch

A. A. Deba
Department of Vocational and Technology Education Faculty of Technology Education Abubakar Tafawa Balewa University, Bauchi

This study examined the effect of metacognitive strategy on achievement, retention and gender in building environment and man among 300 level of industrial and technology education students in federal university of technology, Minna, Nigeria. The study adopted a Pre-test, Post-test, post-post-test quasi-experimental design. The study used 35 (28 males and 7 females) students from the department of industrial and technology education, federal university of technology, Minna, Nigeria. The experimental group consisted of 18 (14 males and 4 females) students, while the control group consisted of 17 (14 males and 3 females) students. The instruments used were developed and validated. These include: Building Environment and Man Pre-Test (BEMPT), Building Environment and Man Achievement Test (BEMAT), a six-item theory questions with reliability coefficient of 0.88 and Metacognitive Teaching Strategy (MTS). The experimental period lasted for the whole semester during which the control group was taught using traditional method while the experimental group was taught using Metacognitive Teaching Strategy. The research questions were answered using descriptive statistics of mean and standard deviation. Hypotheses one and three were tested using an independent sample t-test, hypothesis two, was tested using Analysis of Covariance **(**ANCOVA), while hypothesis three, was tested using Multivariate Analysis of Variance (MANOVA) at $p \leq 0.05$, level of significance. There was no significant difference between the entry performance mean scores of the experimental and control groups. There were significant differences between the post-test mean scores and retention ability of the experimental and control groups in favour of the experimental group. There were significant differences in achievement and retention among students based on their gender when taught using metacognitive strategy: male students had a slightly higher achievement and retention mean score than female students. Hence, the strategy was effective across genders in terms of enhancing their achievement and ability to retain the information learned towards the building environment and man. It is recommended that technology lecturers should use metacognitive strategy in teaching technology courses and develop ways to foster it within all students.

Keywords: Metacognitive Strategy, Achievement, Retention Gender and Building Environment and Man

CORRELATION BETWEEN IN-SITU RESILIENT MODULUS AND LABORATORY RESILIENT MODULUS

Ramireddy Sushmitha

Assistant Professor, G. Pulla Reddy Engineering College (Autonomous), Kurnool, Andhra Pradesh-518007, India.

Abstract

The characteristics and behavior of subgrade, base and subbase soils have a major impact on the performance of flexible pavement systems. Pavement design based on field performance requires using realistic material properties that can simulate the in-situ behavior of unbound layers. There are many empirical methods proposed in the literature which could not successfully characterize the in-situ behavior of unbound layers under traffic loading. The most common test used for the estimation of the unbound layers performance in most of the design specifications is the California Bearing Ratio (CBR) Test. There are, however, certain problems in using the CBR test in the design process of flexible pavements. First, CBR is a quasi-static test that cannot effectively model the types of stresses experienced by the unbound pavement layers. Second, neither the test conditions nor the specimens prepared do not represent the actual field conditions of the materials. In order to reflect the dynamic response of pavement layers to vehicular traffic loads, highway engineers developed new techniques to perform dynamic tests. Resilient modulus test is one of the most common and reliable experiment for the estimation of the unbound layers response to dynamic traffic loads. The pavement loads on the unbound layers are simulated by the application of a confining pressure and a repeated axial haversine loading which represents the dynamic wheel loads. Resilient modulus is accepted to be an appropriate measure of stiffness for unbound materials in a pavement structure. Although resilient modulus test is sufficient but time consuming. Since conducting resilient modulus and CBR tests during the construction process is time consuming, light falling weight deflectometer (LFWD) are also used for in-situ measurement of resilient modulus. So, the correlations between the field strength parameters with in-situ results will give the result in less test and saving a lot of laboratory costs. Thus, models correlating laboratory and field resilient modulus values are determined in order to achieve reliable estimates for in-situ performance prediction of unbound layers.

APPLICATION OF AUTOMATED ROAD INVENTORY DATA IN ROAD ASSET MANAGEMENT

Ramireddy Sushmitha

Assistant Professor, Civil Engineering Department, G. Pulla Reddy Engineering College (Autonomous), Kurnool, Andhra Pradesh-518007, India.

Abstract

In the case of the road networks, the available resources for maintenance of defective pavement sections are too limited. So, there is a need for developing an appropriate methodology to prioritize the road network for maintenance based on the existing surface condition. Pavements are one of the major assets of country infrastructure. Maintenance and rehabilitation of these pavements up to the desired level of serviceability is one of the critical problems faced by pavement engineers and administrators in the pavement engineering sector. The evaluation of the pavement performance using pavement condition indicators is a basic component of any Pavement Management System (PMS). Various indicators like Characteristic deflection, Roughness of the pavement are commonly used in pavements to assign maintenance strategies with respect to traffic, age of the pavement and initial conditions of the pavement. Traffic studies were carried out in order to predict the future traffic and the number of axles coming on to the pavement. Surveys like Benkelman Beam Deflection survey and Roughness surveys were carried out for condition assessment and to suggest maintenance strategies. Regression equations were developed with Deflection and Roughness as dependent variables and age, initial conditions and traffic as independent variables. And the future pavement condition is predicted not to reach beyond the threshold values and to make the funds available with time. With this, the proper maintenance strategy within appropriate time saves the time and money.

ADVANCEMENT IN AGRICULTURAL RESILIENCE THROUGH SOLAR-POWERED IRRIGATION IN A DEVELOPING COUNTRY: PAKISTAN

Muhammad Mazhar Iqbal

Water Management Training Institute, Department of Agriculture (On Farm Water Management), Government of Punjab, Lahore 54000

Tehmena Rashid

Agriculture Mechanization Research Institute (AMRI), Agriculture Department, Government of Punjab, Multan, Pakistan

Hafiz Qaiser Yasin

Directorate General of Agriculture Punjab, Department of Agriculture (On Farm Water Management), Government of the Punjab, Lahore 54000, Pakistan

Shafiq-ur-Rehmn

Water Management Training Institute, Department of Agriculture (On Farm Water Management), Government of Punjab, Lahore 54000

Muhammad Abdullah

Directorate General of Agriculture Punjab, Department of Agriculture (On Farm Water Management), Government of the Punjab, Lahore 54000, Pakistan

Abstract

This study investigates the potential of solar-powered irrigation systems (SPIS) as a sustainable solution to address critical agricultural challenges in Punjab, Pakistan. The research focuses on two case studies: the reclamation of waterlogged lands in T.T. Singh and the promotion of gram cultivation in the arid Thal region. Solar irrigation technologies, including drip, sprinkler, and flood systems, were evaluated for their efficiency in optimizing water use, improving crop productivity, and reducing dependence on conventional energy sources. Drip systems, with water use efficiency of up to 90%, emerged as the most effective, followed by sprinkler systems at 70-80%.

The implementation of SPIS yielded significant outcomes, including the reclamation of waterlogged soils, groundwater level reduction, and a 20-25% increase in crop yields across various sites. Replacing diesel/electric tubewells with solar-powered systems led to substantial energy savings, reducing diesel consumption by 11.2 million liters annually and cutting carbon emissions by 93,800 tons per year. Additionally, these systems enhanced irrigation affordability for farmers by eliminating energy costs and fostering greater water use efficiency.

Despite its numerous benefits, the adoption of SPIS faces challenges, such as high initial investment costs, technical capacity gaps, and equipment maintenance requirements. The study highlights the need for targeted financial incentives, farmer training programs, and public-private partnerships to overcome these barriers. Addressing these challenges will ensure scalability and the long-term viability of SPIS, enabling their wider adoption in water-scarce and energy-deficient regions.

This research underscores the transformative potential of solar irrigation systems in achieving climate-smart agriculture. By integrating renewable energy into agricultural water management, SPIS not only enhance water use efficiency and crop productivity but also contribute to environmental sustainability and rural economic resilience. The findings provide a pathway for policymakers, researchers, and development practitioners to promote solar irrigation as a cornerstone for sustainable agriculture in developing countries.

Keywords: SPIS; Agricultural Sustainability; Water Use Efficiency; Climate Resilience; Renewable Energy In Agriculture; Soil Reclamation; Carbon Emissions Reduction

CUBOSOMES AS A NOVEL APPROACH FOR CANCER THERAPY

Ajesh Chauhan

Assistant Professor, Hindu College of Pharmacy, Sonipat, Haryana, India

Cubosomes are a class of lipid-based nanoparticles with a unique, highly ordered internal structure. Their ability to encapsulate various therapeutic agents, including chemotherapeutics, immunotherapies, and imaging probes, makes them promising candidates for cancer treatment. Advantages of cubosomes in cancer therapy include: Cubosomes can improve drug solubility, stability, and targeted delivery to tumor sites, potentially increasing therapeutic efficacy while minimizing side effects. The unique structure of cubosomes allows for controlled release of encapsulated drugs, optimizing their therapeutic effect and reducing systemic toxicity. Cubosomes can be engineered to carry multiple therapeutic agents or combine therapeutic and diagnostic functions, enabling personalized and targeted cancer treatment. Cubosomes represent a novel and promising approach for cancer therapy. Their unique properties and versatility offer significant potential for improving the treatment of various cancers. Continued research and development in this area are crucial to translate the promise of cubosomes into effective clinical applications.

THE IMPACT OF PUBLIC SCHOOLS AND PUBLIC CHAMBERS ON TRADITION IN THE REPUBLIC PERIOD

Ayşe Öztürk

Kırşehir Ahi Evran Üniversitesi Türk Halk Edebiyatı Bölümü/Kırşehir

Orcıd no: 0009-0000-2208-053X

Abstract

With the declaration of the Republic in 1923, the state entered a new era. As such, the state used public schools and public chambers as tools to spread its own ideology and ideas. Due to the low literacy rate in this period, the public schools and village chambers operating in Anatolia began to explain the ideology, laws and new customs of the state. Public schools provided the basic education of people living in rural areas in particular, and developed the intellectual world of individuals by reducing their attachment to traditional life. Thanks to the public schools, villagers who learned to read and write and read the books sent to the public chambers began to apply what they learned to their daily lives. Public chambers, on the other hand, became the center of cultural and social activities and encouraged the participation of the people in art, literature and politics. For this reason, serious changes occurred in the daily life of Turkish society in the Republican period, namely in the traditional structure and transition periods. Cultural identities emerged in various artistic activities in the Republican period. Theatre is one of the branches of art in which cultural identity comes to the fore. Based on this in this study the effect of public schools and public chambers on tradition and how the new state ideology was received by the people are examined by quoting from the text through the play Gelin Alayı published by Saim Yay in 1948 by Ulus Printing House during The Republican period. The interaction it establishes with the folklore elements taken from the text is explained according to the folklore functionality theory.

Key Words: Republic period, People's houses, People's rooms, Tradition, Identity, Theatre.

DETECTION OF FOREIGN BODY IN THE NASAL CAVITY DURING DENTAL EXAMINATION IN A PEDIATRIC PATIENT

BüşraYILDIZ
Afyonkarahisar Health Sciences University Faculty of Dentistry, Department of Pediatric Dentistry, Afyonkarahisar, Turkey
ORCID ID: https://orcid.org/0000-0001-5438-3834

Alpay DUMAN
Private Fuar Hospital, Otorhinolaryngology Polyclinic, Afyonkarahisar, Turkey
ORCID ID: https://orcid.org/0009-0007-9973-7692

Soner TAŞAR
Şuhut State Hospital Otorhinolaryngology Polyclinic, Afyonkarahisar, Turkey
ORCID ID: https://orcid.org/0000-0002-0818-8584,

Özgür DOĞAN
Afyonkarahisar Health Sciences University Faculty of Dentistry, Department of Pediatric Dentistry, Afyonkarahisar, Turkey
ORCID ID: https://orcid.org/0000-0002-5793-175X

ABSTRACT

Case Description: Foreign body aspiration is an important and common health problem requiring urgent intervention in children and adults. Early diagnosis and treatment is of vital importance in these patients as it may result in various pulmonary complications. Diagnosis is based on clinical and radiologic examination. While foreign bodies can sometimes be recognized in the acute situation, sometimes they may remain unnoticed for many years. In these cases, they can be recognized during routine dental examinations. In orthopantomographic films, foreign body images may occur incidentally in the nasal cavity and maxillary sinus, which are in the scanning area. An 11-year-old male patient was admitted to our clinic for routine dental examination. According to the anamnesis obtained from the parents of the patient, it was learned that he breathed through his mouth, snored at night and had difficulty breathing. Mouth breathing was confirmed in the clinical examination and multiple dental caries were observed in the intraoral examination. Orthopantomographic film showed a well-demarcated, prominent radiopacity in the left nasal cavity. There was no tenderness on palpation in the left nasal cavity. The patient was consulted to the ear-nose-throat outpatient clinic and the presence of a foreign body in the nasal cavity was confirmed. In the planned operation, the foreign body was removed from the nasal cavity and was found to be a pebble. The patient was followed up at regular intervals and it was observed that the respiratory problems were solved in time and the patient switched to nasal breathing.

Conclusion: The presence of a foreign body in the respiratory tract should be considered in patients with a history of respiratory distress and nasal breathing on clinical examination.

Keywords: Pediatric patient, foreign body, nasal cavity

ANTIMICROBIAL ACTIVITY AND GC-MS/MS ANALYSIS OF Datura stramonium EXTRACTS PREPARED USING CLASSIC AND DEEP EUTECTIC SOLVENTS

Hatice ERDOĞAN

Ondokuz Mayıs University, Graduate Education Institute, Forensic Sciences Master's Program Samsun, Turkey

ORCİD ID: https://orcid.org/0009-0003-8732-9203

Seher ÇELİK

Ondokuz Mayıs University, Graduate Education Institute, Forensic Sciences Master's Program Samsun, Turkey

ORCİD ID: https://orcid.org/0009-0005-4155-0847

Perihan AKBAŞ

Ondokuz Mayıs University, Karadeniz Advanced Technology Research and Application Center, Samsun, Turkey

ORCİD ID: https://orcid.org/0000-0001-5977-7621

ABSTRACT

Datura stramonium (pipe flower) is a widely available annual flowering plant belonging to the Solanaceae family. It grows spontaneously in nature and is rich in tropane alkaloids. *Datura stramonium* is popularly used as an herbal medicine for asthma, bronchitis, eczema and hemorrhoids. It also has potential as a narcotic due to hallucinogenic and euphoric effects.

Deep eutectic solvents (DES) are mixtures of hydrogen bond acceptor and donor components with low melting points. The most common formulation is a mixture of choline chloride as hydrogen bond donor and different compounds as hydrogen bond acceptor. These solvents are preferred in extraction processes due to their advantages such as low toxicity, biodegradability and easy preparation.

The aim of this study was to investigate the antimicrobial activities and aromatic components (GC-MS/MS analysis) of the extracts obtained from the seeds and leaves of *Datura stramonium* plant using conventional solvents methanol and DES.

Methanol and ***deep eutectic solvent (choline chloride+glycerol)*** extracts were prepared from the seed and leaf parts of *Datura stramonium* plant by ultrasonically assisted extraction method. The chemical content was investigated by GC-MS/MS analysis. In addition, the antimicrobial effect of extracts prepared from *Datura stramonium* seeds and leaves were investigated by agar well diffusion technique using *Escherichia coli, Pseudomonas aeruginosa, Yersinia enterocolitica, Klebsiella pneumoniae, Staphylococcus aureus, Enterococcus faecalis, Bacillus cereus, Bacillus subtilis, Acinetobacter baumannii* bacteria and *Candida albicans* yeast.The leaf extract obtained with DES formed a zone diameter on *Yersinia enterocolitica* (15.1 mm), *Bacillus cereus* (7.2 mm) and *Acinetobacter baumannii* (8.9 mm) bacteria. The seed extract obtained with DES was effective against *Yersinia enterocolitica* (9.4 mm) and *Acinetobacter*

baumannii (7.1 mm). The methanol extract had no antimicrobial activity against the test microorganisms.

When GC-MS/MS analyses were evaluated; 2,3-Propanetriol and Silane triethylmethoxy had the highest concentrations in the seed extract prepared with DES. The highest concentration of N,N-Dimethyl-2-aminoethanol was detected in the leaf extracts.

These findings indicate that the extracts obtained from the leaves and seeds of *Datura stramonium* plant by ultrasonically assisted extraction technique from deep eutectic solvents have high aromatic content and antimicrobial activity against certain pathogens.

Keyword: *Datura stramonium*, Deep Eutectic Solvents (DES), Antimicrobial activity, GC-MS/MS analysis

A FINANCIAL MODELLING ANALYSIS OF THE IMPACT OF DEBT CRISIS ON NIGERIAN'S ECONOMY

Ogwumu, Onah David

Yavalah Deborah W.

Ogwumu Isaiah

Ogofotha, Marvellous O.

Department of Mathematics and Statistics, Faculty of Pure and Applied Sciences,

Federal University Wukari, Taraba State, Nigeria.

In this study, a dynamical modelling of the impact of National Debt burden on Nigeria's Gross Domestic Product (GDP) and the economy at large was examined. The study was necessitated by the alarming growing rate of Nigeria's foreign and Local debt, and how its burden is daily on the rise due to the debt interest accruement. The study utilised the concept of epidemiology to subdivide the model's variables into a 4- compartmental modelling subdivisions with 2- Tangible Financial compartments and 2- Intangible Financial or vector/drivers compartments that are driving the debt crisis of the nation. Thus. the dynamics of the interaction between the financial forces that make or mar an economy of a nation was successfully examined and the stage at which the economy's GDP will be stabilised (or decline) and when the national debt will grow unsustainably was deduced. Likewise, how exchange rate and the top leader of a nation's Intelligence Quotient will influence the overall dynamics of the financial standing of the nation was computed. But the study found out that the national debt will grow unsustainably when the debt ratio $\frac{\text{Debt}}{\text{GDP}} \to \infty$. This implies that the nation's debt is growing faster than the GDP, and the economy cannot generate sufficient income to service it. Similarly, the study showed that a higher value of b (Debt impact on GDP) and a lower combined effect of ($\delta+\mu+c$) (where: δ= Debt repayment rate, μ= Economic barrenness factor and c= Additional debt decay) leads to the stage when national debt will grow unsustainably.

Keywords:impact on GDP, Financial Modelling, Leadership contribution, Exchange rate, National debt, Economic barrenness factor, Total national income

TREATMENT OF A DENTIGEROUS CYST IN A PEDIATRIC PATIENT AND THREE-YEAR FOLLOW-UP: A CASE REPORT

Esma ATIŞ

Afyonkarahisar Health Sciences University, Faculty of Dentistry, Department of Pediatric Dentistry, Afyonkarahisar, Turkey

ORCID ID: https://orcid.org/0000-0002-0362-4324

Özgür DOĞAN

Afyonkarahisar Health Sciences University, Faculty of Dentistry, Department of Pediatric Dentistry, Afyonkarahisar, Turkey

ORCID ID: https://orcid.org/0000-0002-5793-175X

ABSTRACT

Aim: The aim of this case presentation is to demonstrate the treatment of a dentigerous cyst observed during the mixed dentition period and the recovery process following treatment.

Case Report: Dentigerous cysts are developmental odontogenic cysts that surround the crown of an unerupted tooth and are attached to the cervical region. Although their exact etiology is unknown, they are also referred to as follicular cysts. These lesions are typically asymptomatic and are often detected during radiographic examination. Dentigerous cysts can occur in all age groups; however, they are relatively rare during the first decade of life. While developmental in nature, dentigerous cysts may sometimes form due to an inflammatory primary tooth, and their treatment requires careful consideration to avoid damage to the developing permanent tooth. In this study, an 8-year-old male patient with no systemic disease presented to our clinic with tooth pain. Intraoral examination revealed caries and mobility in the lower left teeth. Radiographic examination showed a cyst with a radiopaque border surrounding the germ of the permanent premolar tooth. The patient was referred for surgery, and a preliminary diagnosis of a dentigerous cyst was made. To protect the tooth germ, marsupialization was preferred over enucleation of the cyst. A drain was placed distal to the tooth without damaging the permanent tooth germ, and the first primary molar tooth was extracted. Post-operative recommendations were provided, and the patient was scheduled for follow-up. One month later, an impression was taken to fabricate a space maintainer to preserve the position of the teeth. The patient was monitored for three years, during which the permanent premolar teeth erupted in a healthy position, and radiographs confirmed continued root development.

Conclusion: Although dentigerous cysts are the second most common cysts observed in the jaws after radicular cysts, they are rare during the mixed dentition period and are generally detected incidentally. It is suggested that periapical lesions observed during the primary dentition period may lead to cystic lesions. Therefore, it is important to monitor primary teeth with periapical lesions through regular clinical and radiographic examinations.

Key Words: Dentigerous Cyst, Marsupialization

FROM CLICKS TO CLASSROOMS: LEVERAGING DIGITAL TOOLS FOR PROMOTING EDUCATIONAL SERVICES

Shapovalova Diana

University of International Business named after Kenzhegali Sagadiev Almaty, Kazakhstan

Scientific Supervisor PhD Mussabalina D.S.

Abstract

The rapid advancement of digital technologies has necessitated the adaptation of marketing strategies for promoting educational services in the online environment. This study investigates the role of internet marketing in enhancing the competitiveness of educational institutions, with a focus on the University of International Business (UIB) named after Kenzhegali Sagadiev. The research analyzes current internet marketing tools such as SEO, social media platforms, content marketing, and targeted advertising, evaluating their effectiveness in attracting and retaining students. By examining successful strategies and offering recommendations, this study aims to optimize the digital marketing approach of UIB to meet evolving consumer needs. The findings underscore the significance of personalized content, innovative communication methods, and strategic use of digital channels for the sustainable growth of educational institutions.

Keywords: internet marketing, educational services, digital transformation, SEO, social media marketing, targeted advertising, University of International Business.

THE POTENTIAL OF ALTERNATIVE PROTEINS FOR SUSTAINABLE FOOD SYSTEMS

Dilber ÇAĞLAR

DIMES Food Ind. & Inc., Izmir, Turkey

ORCID ID: https://orcid.org/ 0000-0001-9712-5069

ABSTRACT

The global food system faces significant challenges, including population growth, climate change, and the depletion of natural resources. In this context, alternative protein sources are gaining attention by offering environmentally and nutritionally sustainable alternatives to traditional animal-based proteins.

Plant-based proteins, particularly legumes and grains, stand out due to their high protein content and scalability. Additionally, mycoproteins derived from filamentous fungi such as Fusarium venenatum provide a valuable alternative for the food industry with their high-quality protein content and functional properties such as dietary fiber. Single-cell proteins (microalgae, yeasts, and fungi) are notable for their rapid production processes and low environmental impact. Proteins obtained from microalgae (Spirulina, Chlorella) not only offer high bioavailability but also contain health-beneficial components like omega-3 fatty acids and antioxidants. Insect proteins are emerging as a rich source of protein, essential amino acids, vitamins (e.g., B12), and minerals (e.g., iron and zinc). Species like Acheta domesticus (house cricket), Tenebrio molitor (mealworm), and Hermetia illucens (black soldier fly larvae) are used in both human nutrition and animal feed production. The farming of insects enhances environmental sustainability with minimal water and land requirements. Moreover, protein powders and flour derived from insects are widely utilized in functional food products. Cultured meat is produced by proliferating animal cells in bioreactors and resembles conventional meat in sensory characteristics. This method significantly reduces water consumption and greenhouse gas emissions while also offering advantages in terms of animal welfare.

Reducing the production costs of cultured meat and improving energy efficiency are critical for the widespread application of this technology. These innovative protein sources play a crucial role in the transition to sustainable food systems. However, overcoming challenges such as consumer acceptance, regulatory frameworks, and cost will require multidisciplinary collaborations. This study aims to highlight the sustainability of alternative protein sources that can be used on an industrial scale and to create data specific to this subject for the food sector.

Keywords: food, alternative, protein, sustainable

HARMONIC ANALYSIS IN RENEWABLE ENERGY SYSTEMS CONNECTED TO ELECTRICAL GRIDS

Yacine Djeghader

Reda Rouaibia

Atef Benhaouas

Department of Electrical Engineering, University of Mohamed-Cherif Messaadia ,Souk Ahras, ALGERIA ; BP 1553 Annaba Road 41000 Souk Ahra, Algeria.

LEER Laboratory University of Mohamed-Cherif Messaadia ,Souk Ahras, ALGERIA

Abstract

Photovoltaic (PV) energy is among the most widely utilized renewable energy sources due to its numerous advantages and rapid advancements. With the increasing adoption of PV systems, their integration into electrical networks has become a critical area of focus. This integration typically relies on power electronic devices, which, while essential, can degrade power quality by introducing harmonics.This paper examines the integration of a PV system into a low-voltage electrical grid under two scenarios: (1) without a polluting load (three-phase rectifier) and (2) with the presence of such a non-linear load. The study utilizes a Maximum Power Point Tracking (MPPT) controller to regulate the boost converter and Pulse-Width Modulation (PWM) control for the three-phase inverter, ensuring efficient connection and energy transfer.Simulation results for the first scenario, without the non-linear load, reveal that the current waveforms in both the PV system and the power grid are nearly sinusoidal, with Total Harmonic Distortion (THD) values compliant with established standards. However, when the non-linear load is introduced, a significant distortion in current waveforms is observed, resulting in elevated THD levels exceeding acceptable limits.This study highlights the impact of non-linear loads on harmonic distortion in grid-connected PV systems, emphasizing the importance of advanced mitigation strategies to maintain power quality standards.

Keywords- Electrical Grid , Harmonic, , Power system , Power Quality, MPPT, Renewable Energy Systems

ESTHETIC REHABILITATION OF TEETH WITH WHITE SPOT LESIONS BY OFFICE-TYPE BLEACHING AND RESIN INFILTRATION: A CASE REPORT

Pelinsu AYDIN

Near East University, Faculty of Dentistry, Department of Restorative Dentistry, Nicosia

ORCID ID: https://orcid.org/0009-0006-5004-058X

Şemsi ALP

Near East University, Faculty of Dentistry, Department of Restorative Dentistry, Nicosia
ORCID ID: https://orcid.org/0000-0002-6217-5426

ABSTRACT

Introduction and Purpose: The pre-cavitation stage of dental caries, known as a white spot lesion, is marked by areas of demineralization beneath the enamel surface. Reduced mineral content alters enamel transparency, creating an opaque white appearance. Bleaching and resin infiltration treatments are commonly combined to address these lesions.

Case description: A 44-year-old female presented at Near East University Faculty of Dentistry with concerns about the opaque appearance and discoloration of her central incisors. Clinical and radiographic examinations revealed overhanging restorations and white spot lesions on her anterior teeth. A treatment plan involving bleaching and resin infiltration using a gel with 35% hydrogen peroxide was developed.Initial examination confirmed tooth vitality, absence of periapical pathology, and no sensitivity. The patient's tooth color was recorded as A3 on the VITA Classic A1-D4 scale. In the first session, superficial discolorations were polished, and gingiva near the treatment area was protected with a light-cured resin barrier (Top Dam Gingival Barrier, FGM, Brazil). A 35% hydrogen peroxide gel (Whitness HP AutoMixx, FGM, Brazil) was applied per manufacturer instructions for 50 minutes. The second session, held one week later, involved repeating the bleaching process. In the third session, white lesions became prominent and were treated with resin infiltration (Icon infiltrant; DMG, Germany). Overhanging restorations were removed and replaced with OA2 (dentin) and A2 (enamel) composite resins (Estelite Sigma Quick, Tokuyama, Japan). Polishing was completed using the Super-Snap Rainbow Kit (Shofu, Japan).

Results: The combined bleaching and resin infiltration approach effectively addressed aesthetic concerns, restoring psychosocial confidence while preserving dental tissues through minimal intervention.

Discussion and Conclusion: This conservative treatment method achieved the desired aesthetic outcome, demonstrating the efficacy of combined bleaching and resin infiltration in addressing white spot lesions.

Key Words: Whitening, resin infiltration, white spot lesion

MORPHOLOGY AND MOLECULAR IDENTIFICATION OF MICROALGAE DUNALIELLA SALINA STRAIN SEQ DUNA5.8S ISOLATED FROM AN ALGERIAN SALT LAKE

Samia BABA HAMED

Ecole Supérieure en Sciences Biologiques d'Oran (ESSBO)

ORCID BABA HAMED samia : 0000-0002-6742-6001

BENBAYER Wided

laboratoire de toxicologie environnement et santé LATES Université des sciences et de la technologie d'Oran Mohamed Boudiaf USTO-MB

ABSTRACT

Algeria has high algal biodiversity, of great interest and is rarely exploited. Isolation of Dunaliella salina strain Seq Duna5.8S, from Oran Lake in Algeria, was carried out for this purpose. Algae of the genus Dunaliella salina are usually used for feed, for nutritional reinforcement as a vitamin A precursor and for pharmaceuticals and fine chemicals. The aim of this research was to identify the isolated strain by morphological and molecular taxonomy using, ARNr 5.8s, for further development in this field. In this study, we associate morphological and molecular analysis to characterize a strain Seq Duna5.8S isolated from Oran Lake. Samples of natural populations show the appearance of several green and red cells, mobile or not with different shapes in diverse stages of development, corresponding to the presence Dunaliella salina. Plus ARNr 5.8s analysis was to corroborate the identification and phylogenetic analyses, for clarification of the taxonomy of these microalgae.

Keywords : Dunaliella salina, Algeria, morphology, ARNr 5.8s, taxonomy.

EFFECT OF THINK PAIR SHARE STRATEGY ON MALE AND FEMALE STUDENTS' ACADEMIC PERFORMANCE AND RETENTION IN ALGEBRAIC PROCESS AMONG SECONDARY SCHOOL IN KATSINA STATE

Abdurrahman Sani Yar'adua

Department of Science Education Federal University Dutsin-Ma, Katsina State, Nigeria

Abstract

This study examined the effects of the Think-Pair-Share (TPS) strategy on the academic performance and retention of male and female students in Algebraic Processes among secondary school students in the Katsina Zonal Education Quality Assurance area of Katsina State, Nigeria. The research was guided by two objectives and corresponding research questions, along with two hypotheses tested at a 0.05 level of significance. The study population consisted of 17,664 students from all public senior secondary schools within the Katsina Zonal Education Quality Assurance area. Using purposive sampling, two senior secondary schools were selected. From each school, 35 students (comprising 35 males and 35 females) were chosen through simple random sampling, resulting in a total of 70 participants. A quasi-experimental design incorporating pre-test, post-test, post-post-test, and a non-equivalent control group was adopted. The Algebraic Process Performance Test (APPT), a validated instrument with a reliability coefficient of 0.703 (determined using Pearson Product-Moment Correlation), was utilized for data collection. Descriptive statistics, including mean and standard deviation, were employed to address the research questions, while inferential statistics (independent samples t-test) were used to test the hypotheses at a significance level of $\alpha = 0.05$. The findings indicated no significant difference between male and female students in terms of performance and retention ability. Based on these results, it was recommended that government authorities organize workshops, seminars, and conferences to train teachers on implementing innovative teaching strategies, such as the Think-Pair-Share strategy, to improve mathematics instruction in schools.

Key words: Think Pair Share Strategy; Algebraic Process; Gender; Performance; Retention.

EFFECTIVENESS OF STRETCHING EXERCISES IN CERVICOGENIC HEADACHE

Çağla KARADAŞ

Private Clinic, Department of Physical Therapy and Rehabilitation, Ankara, Turkey

ORCID ID: https://orcid.org/0009-0002-5147-0961

ABSTRACT

Objective: Cervicogenic headache (CGH) is a type of headache originating from the cervical spine, which can negatively affect individuals' quality of life. This study aims to evaluate the effectiveness of stretching exercises in reducing the frequency and intensity of CGH.

Materials and Methods: A total of 12 patients (8 females, 4 males) participated in the study. Inclusion criteria were being aged between 18–65 years, having a diagnosis of CGH, and experiencing symptoms for at least 3 months. Exclusion criteria included a history of neck surgery, inflammatory diseases, active cancer, or neurological disorders. Patients were randomly assigned to two groups: the stretching exercise group (n=6) and the control group (n=6). Stretching Exercise Group: Performed a stretching protocol for 20 minutes, 3 days a week, over 8 weeks. Control Group: Received no intervention.

Pain levels were assessed using the Visual Analog Scale (VAS), and functional status was evaluated with the Neck Disability Index (NDI) before and after the intervention.

Results: The stretching exercise group showed significant improvements in both VAS and NDI scores post-treatment (VAS: p=0.002; NDI: p=0.001). In contrast, the control group exhibited no significant changes (VAS: p=0.456; NDI: p=0.512).

VAS: Stretching exercise group: Baseline: 7.8 ± 1.2, Post-treatment: 3.4 ± 1.1 (p=0.002).Control group: Baseline: 7.6 ± 1.3, Post-treatment: 7.4 ± 1.2 (p=0.456).

NDI: Stretching exercise group: Baseline: 45.3 ± 5.6, Post-treatment: 28.5 ± 4.8 (p=0.001). Control group: Baseline: 44.2 ± 6.1, Post-treatment: 43.8 ± 5.9 (p=0.512).

Conclusion: The results indicate that stretching exercises are effective in reducing pain and improving functional status in the treatment of CGH. Further randomized controlled trials with larger patient populations are needed to support these findings.

Keywords: Cervicogenic headache, stretching exercises, pain, functional status

EXAMINING THE RELATIONSHIP BETWEEN ORGANIZATIONAL POWER RESOURCES USED BY SCHOOL PRINCIPALS AND TEACHERS' PERCEPTIONS OF ORGANIZATIONAL CITIZENSHIP

Esra BAŞTÜRK

Düzce University, Faculty of Education, Educatıon Management and Experıence, Düzce, Turkey

ORCID ID: https://orcid.org/0009-0008-1573-0117

Süleyman GÖKSOY

Düzce University, Faculty of Education, Educatıon Management and Experıence, Düzce, Turkey

ORCID ID: https://orcid.org/0000-0002-7151-0863

ABSTRACT

Introduction and Purpose: The purpose of this study is to determine the relationship between the organizational power resources used by school principals and teachers' perceptions of organizational citizenship.

Materials and Methods: Relational survey model was used in the study and 389 teachers in the center of Düzce were selected as the sample. “Organizational Power in Schools Scale” and ‘Organizational Citizenship Scale’ were used to collect data. The data were analyzed with SPSS 18.0 program.

Results: Teachers' perceptions of organizational power are generally high in the dimensions of reward, expertise and charisma power and low in the dimension of coercive power. In terms of organizational citizenship behaviors, significant differences were observed in marital status and professional seniority variables. The organizational citizenship behaviors of married and senior teachers were found to be higher. In addition, it was determined that there was a negative relationship between the perception of coercive power and organizational citizenship behaviors, and a positive relationship with the perception of expertise power.

Discussion and Conclusion: Training programs should be organized to improve the leadership and communication skills of school administrators. Projects that will increase cooperation should be implemented to support teachers' organizational citizenship behaviors. By adopting a more horizontal organizational structure instead of a hierarchical structure, the perception of power distance should be reduced and participation in management should be encouraged. In addition, mentoring programs to reduce seniority differences and policies to ensure gender equality should be implemented. The study makes important contributions to the literature on the relationship between organizational power sources and organizational citizenship behaviors. The negative effects of coercive power perception and the positive effects of expert power stand out as critical findings that need to be considered in terms of leadership practices.

Key Words: Organizational Power, Organizational Citizenship, Teacher.

SELF-INVERTIBLE KEYS BASED ON ORTHOGONAL VECTORS FOR DOUBLE TRANSFORMATION OF HILL CIPHER

Faridah Yunos

Nik Rasiqa Nik Roslan

Amir Hamzah

Department of Mathematics and Statistics, Faculty of Science, Universiti Putra Malaysia, 43400 UPM, Serdang, Selangor, Malaysia.

ORCID ID: https://orcid.org/0000-0002-1197-0972

Abstract

The Hill Cipher system and its variants are still often used to transmit image-based secret messages. Finding the encryption key's inverse is a significant obstacle when decrypting ciphertext to plaintext. According to earlier studies, this procedure can be made simpler by using a self-invertible matrix based on an integer-entry matrix with all integer eigenvalues. The technique for creating a self-invertible key using two orthogonal vectors is presented in this paper. The technique for creating a self-invertible key using two orthogonal vectors is presented in this paper. This includes its implementation in transforming the Hill cipher twice.

Keywords: Hill Cipher, orthogonal vectors, self-invertible key,encryption, decryption

THE CONNECTION BETWEEN ART AND THE SACRED: EXPLORING RELIGIOUS EMOTIONS

Fatma KENEVİR

Ankara University, Faculty of Divinity, Department of Sociology of Religion, Ankara, Turkey

ORCID ID: https://orcid.org/0000-0002-1224-1173

ABSTRACT

Introduction and Purpose: Art sociology deals with the relationship between art and society and focuses on how art reflects society. The emergence of art as a necessity dates back to ancient times, and there is a huge body of literature based on debates about what art is and what it is not. Depending on the specific conditions of different cultures and different historical periods, the relationship between art and the sacred has manifested itself in different ways. The elements that lead to art as a necessity, the relationship between art and the sacred, and the interaction between religious emotions and art are deeply interconnected and complex issues. In this sense, Mircea Eliade has made important contributions to the fields of art and aesthetics by addressing mythology, symbolism, and the interaction with the sacred. Eliade's work emphasizes the importance of symbolism in understanding the sacred dimensions of art (Garcia, 2007).

Methods: This study will use qualitative methodology. First, we will conduct a thematic review by analyzing relevant literature, followed by an analysis of videos. It is planned to conduct visual analysis (setting, symbols, movements) as well as the analysis of speech, behavior or visual elements in the videos.

Results: This study will explore the connection between art and the sacred within Shamanic culture, which emphasizes a nature-centered worldview and involves various rituals.

Discussion and Conclusion: In shamanic rituals, music and dance play a crucial role in helping the shaman enter a trance state. These rituals are not only focused on healing and communication with the sacred but also involve distinctive elements such as shamanic costumes, masks, musical instruments, and dances. They provide a fascinating framework for examining how the sacred interacts with aesthetics and art.

Key Words: Sociology of Art, Religious Experience, Sanctity, Shamanism.

FETAL RENAL ARTERY DOPPLER IN PREGNANCIES COMPLICATED BY GESTATIONAL DIABETES MELLITUS

Özge KAHRAMANOĞLU

SBÜ, Sancaktepe Prof. Dr. İlhan Varank Eğitim ve Araştırma Hastanesi, Perinatoloji Kliniği,İstanbul/Türkiye

ORCID: 0000-0003-2397-3924

Objective:
This study aimed to evaluate fetal renal and umbilical artery Doppler parameters in pregnancies complicated by gestational diabetes mellitus (GDM) and their potential implications on fetal hemodynamics and neonatal outcomes.

Material and Methods:

This retrospective study was conducted over a one-year period at a tertiary care center. Forty-five singleton pregnancies diagnosed with GDM and 45 normoglycemic pregnancies served as the study and control groups, respectively. Doppler ultrasound assessments of the fetal renal and umbilical arteries were performed between 28 and 38 weeks of gestation. Renal artery and umbilical artery Doppler parameters, including pulsatility index (PI), resistance index (RI), and systolic/diastolic (S/D) ratios, were measured at the renal hilum. Exclusion criteria included preeclampsia, fetal growth restriction, multiple pregnancies, congenital anomalies, and incomplete medical records. All Doppler measurements were obtained by a single experienced operator using standardized techniques to minimize interobserver variability. Maternal and neonatal data, including birth weight, gestational age at delivery, Apgar scores, and mode of delivery, were collected. Statistical analysis was performed, with p-values < 0.05 considered significant.

Results:
No significant differences were observed in renal artery Doppler parameters (PI, RI, and S/D) between the GDM and control groups ($p > 0.05$). In contrast, umbilical artery Doppler indices, including PI and RI, were significantly elevated in the GDM group ($p < 0.05$). Pregnancies complicated by GDM had lower average birth weights and higher cesarean section rates compared to the control group ($p < 0.05$). Apgar scores and gestational age at delivery were comparable between groups.

Conclusion:
While renal artery Doppler parameters did not exhibit significant alterations, umbilical artery Doppler indices were elevated in pregnancies complicated by GDM, reflecting potential changes in placental vascular resistance. These findings underscore the importance of umbilical artery Doppler assessments in monitoring pregnancies affected by GDM.

Keywords:
Gestational diabetes mellitus, renal artery Doppler, umbilical artery

Table I. Maternal, Fetal, and Obstetric Characteristics in GDM and Control Groups

Parameter	**GDM Group (Mean ± SD)**	**Control Group (Mean ± SD)**	**p-Value**
Maternal Age (years)	31.5 ± 5.2	29.8 ± 4.9	0.03
Gestational Age at Ultrasound (weeks)	32.5 ± 1.1	32.6 ± 1.0	0.18
Gestational Age at Delivery (weeks)	38.1 ± 0.8	38.4 ± 0.7	0.05
Birth Weight (grams)	2950 ± 240	3100 ± 210	< 0.05
Apgar Score (5 min)	8.5 ± 0.3	8.7 ± 0.2	0.25
Cesarean Section Rate (%)	70	65	< 0.05

Table II. Doppler Findings in GDM and Control Groups

Parameter	**GDM Group (Mean ± SD)**	**Control Group (Mean ± SD)**	**p-Value**
Renal Artery Pulsatility Index (PI)	2.15 ± 0.10	1.80 ± 0.10	0.06
Renal Artery Resistance Index (RI)	0.82 ± 0.04	0.78 ± 0.03	0.07
Renal Artery Systolic/Diastolic Ratio (S/D)	6.5 ± 0.4	5.8 ± 0.3	0.08
Umbilical Artery Pulsatility Index (PI)	0.85 ± 0.15	0.80 ± 0.12	< 0.05
Umbilical Artery Resistance Index (RI)	0.57 ± 0.06	0.55 ± 0.05	< 0.05
Umbilical Artery Systolic/Diastolic Ratio (S/D)	2.35 ± 0.50	2.25 ± 0.40	< 0.05

FINTECH'IN EVRIMI: BIBLIYOMETRIK BIR ANALIZ

Nuray YÜZBAŞIOĞLU

Adnan Menderes University, Nazilli Vocational School, Aydın, Turkey

ORCID ID: https://orcid.org/0000-0001-7409-4263.

ABSTRACT

Introduction and Purpose: This article aims to examine the developmental trends in the field of financial technology (FinTech) during the 2014-2024 period. Using data from Web of Science, Scopus databases, and VOSviewer software, the study analyzes global trends, the most cited authors, the most contributing countries, and the global clustering structures within the FinTech domain. The study seeks to provide valuable insights into the dynamics of this rapidly growing field.

Materials and Methods: The study includes 1,827 articles selected from the Web of Science and Scopus databases. The articles were filtered based on parameters such as publication year, document type, publication stage, and language. The contributors to FinTech literature, including authors, countries, keywords, citations, and subject areas, were examined. A bibliometric analysis was conducted using VOSviewer.

Findings: The analysis reveals that financial technology has developed rapidly during this period. The country contributing the most was China, with 208 publications between 2020 and 2024. The primary subject area was identified as Economics, Econometrics, and Finance. The most cited author was Dariusz Wójcik from the University of Oxford. Co-occurrence analysis of keywords identified four main clusters: FinTech, blockchain, banking, and sustainable development. The study's findings suggest that FinTech will continue to evolve in the future, remaining a critical area of focus not only for researchers but also for regulators and practitioners.

Keywords: Financial Technology, Fintech, Blockchain, Banking, Sustainable Development, Scopus, Vosviewer, Bibliometric Analysis

MOTIVATION AND EMPLOYEE'S PERFORMANCE IN PUBLIC ESTABLISHMENTS IN NIGERIA: FREDERICK HERZBERG'S THEORY TWO FACTOR OF MOTIVATION PERSPECTIVE

Olalekan Eyitayo AJIBADE

Department of Public Administration The Federal Polytechnic, Ilaro

Oluwaseun Adewale SALAKO

Department of Public Administration The Federal Polytechnic, Ilaro

Abstract

Motivation plays a critical role in enhancing employee performance, particularly in public establishments where productivity and efficiency are often under scrutiny. This paper examines the relationship between motivation and employee performance in public sector organizations in Nigeria, using Frederick Herzberg's Two-Factor Theory of Motivation as a conceptual framework. Herzberg's theory categorizes motivation into two factors: motivators, which foster job satisfaction and performance, and hygiene factors, which prevent dissatisfaction.

The study explores how intrinsic motivators such as recognition, achievement, and growth opportunities influence employee engagement and output in the Nigerian public sector. Additionally, it analyzes the impact of extrinsic hygiene factors like salary, working conditions, and job security on reducing dissatisfaction. By addressing the unique challenges of the Nigerian public service environment, this paper highlights the interplay between these factors and their collective impact on employee morale and productivity.

The findings emphasize the need for a balanced approach to improving both motivators and hygiene factors to enhance performance. Practical recommendations are offered to policymakers and administrators for designing strategies that foster a motivated and high-performing workforce in public establishments. This research contributes to the understanding of motivation dynamics in developing economies and the potential for Herzberg's theory to guide organizational development in Nigeria.

Keywords: Motivation, Job satisfaction, employee, public organizations, productivity.

INFLUENCE OF FOLIAR CALCIUM AMPLIFIERS ON THE YIELD AND CHEMICAL COMPOSITION OF TOMATO LEAVES

Prof. Dr. Marina Todor STOJANOVA

University of Ss. Cyril and Methodius, Faculty of Agricultural Sciences and Food, Department of Agrochemistry, Skopje, North Macedonia

Acad. Prof. Dr. Dragutin A. DJUKIC

University of Kragujevac, Faculty of Agronomy, Cacak, Serbia

Dr. Monika STOJANOVA

Association for Scientific-research, Educational and Cultural Activities “Open Science”, North Macedonia

ABSTRACT

Tomato (Lycopersicon esculentum Mill.) is one of the most important solanaceous vegetable crops grown worldwide due to its wide adaptability, high yield potential, and suitability for various uses in both fresh and processed food industries. Macro and micronutrients are essential for plant growth, acting as catalysts that promote various organic reactions within the plant. To maintain sustainability in tomato production and its nutritional value, it is increasingly important to replenish the depleting reserves of macro and micronutrients in the soil or to apply them through foliar sprays to meet the crop's immediate needs.

This research aimed to determine the influence of soil and foliar fertilization on the chemical composition of tomato fruits. The material for the work was the tomato variety ‘Bele’.

In the Strumica region, North Macedonia, a field crop experiment was set in the protected spaces of 300 m^2. The variants in the experiment were: 1. Control (untreated); 2. Zeofit forte (SiO_2 15%, CaO 35%, MgO 7%, P_2O_5 0.04%, K_2O 0.63%, MnO 0.043%, Fe_2O_3 4.70%) – 3 g/L; 3. Zeofit forte (SiO_2 15%, CaO 35%, MgO 7%, P_2O_5 0.04%, K_2O 0.63%, MnO 0.043%, Fe_2O_3 4.70%) – 5 g/L; 4. Zeofit plus (SiO_2 25%, CaO 21%; MgO 13%; K_2O 1.1%; Fe_2O_3 2.0%) – 3 g/L; 5. Zeofit plus (SiO_2 25%, CaO 21%; MgO 13%; K 1.1%; Fe_2O_3 2.0%) – 3 g/L.

Each variant was treated with tasted foliar fertilizer in concentrations of 3 g/L and 5 g/L solution. Foliar fertilization had a positive influence on the yield and the chemical content of the examined parameters in tomato leaves. The highest ($p<0.05$) average yield of 92.40 t/ha was obtained in variant 2, and the lowest in the control variant of 76.80 t/ha.

In all variants, the analyzed parameters gave better ($p<0.05$) results compared to the untreated control variant. The highest ($p<0.05$) average content of N (3.46%), P_2O_5 (0.38%) and K_2O (2.81%) was determined in the tomato leaves in the variant 2. The highest ($p<0.05$) content of Ca 2.88%, Mg (0.35%), Fe (290 $mg \cdot kg^{-1}$) and the highest ($p<0.05$) content of Zn (0.034 $mg \cdot kg^{-1}$) was determined in the tomato leaves in the variant 4.

Keywords: Eco-agriculture, soil amplifiers, sustainable production, tomato leaves.

GENDER EFFECT ON STUDENTS' PERFORMANCE IN BLOCK-LAYING AND CONCRETE WORKS IN GOVERNMENT SCIENCE AND TECHNICAL COLLEGES IN EDO STATE

AIGBODUWA, Stephen Ayemwenre

Department of Building and Architectural Technology, school of Technical Education, Federal College of Education (Technical) Ekiadolor, Benin City.

Edo State, Nigeria.

DR. MAXWELL, O. Arimonu

Department of Automobile Technology, school of Technical Education, Federal College of Education (Technical) Ekiadolor, Benin City.

Edo State, Nigeria.,

OGBEBOR, Samuel Osamede

Department of Vocational And Technical Education, Faculty of Education, Ambrose Alli University Ekpoma, Edo State, Nigeria.

Abstract

The study examined the gender effect on students' performance in block-laying and concrete works in government science and technical colleges in Edo State. One research question was raised to guide the study and one hypothesis formulated and tested at 0.05 level of significance. No sampling technique used, due to the manageable size of the population. The research instrument was subjected to test-retest reliability test technique. The reliability coefficient was calculated using Cronbach-Alpha coefficient. The data collected were analyzed using Mean and Standard Deviation and t-test. Mean and standard deviation were used to analyze the research question and t-test was used to test the hypothesis at 0.05 level of significance. The results of the study showed that even though the male students had slightly better performance compared to the female students, it was not significant. Based on the findings of this study, recommendations were made. Parents are encouraged to provide the right education they can afford for their children irrespective of gender. Also, there should be a deliberate Federal Government policy to encourage absorbance of female students into further studies in block-laying and concrete works. Furthermore, it was recommended that stake holders in the education industry should make use of these findings and try to research into ways of making gender sensitive policies.

Keywords; Education, Gender, Students' Performance, and Technical Colleges.

GENDER INCLUSIVE INDIA : THE ROLE OF TRANSPORTATION IN ENSURING EQUITY AND SAFETY

Kaushiki Singh

Post graduate student Department of Applied Economics University of Lucknow

Mukesh Shukla

Research Scholar Department of Applied Economics University of Lucknow

ABSTRACT

Women labour force participation can impact India socially and economically, as women empowerment is a neccecity for a developing country like India, whose half population consist women. This paper is based on case studies and shows how by improving transport models one can ensure the safety and security of women, making them more mobile and increasing their accessibility towards education and work will automatically increase their economic participation. Labour Force participation of women will increase with safe and affordable means of transportation.

Keywords : Labour force participation rate , Transportation , Women safety , Economic participation , India .

DİJİTAL PAZARLAMADA GERÇEK ZAMANLI AÇIK ARTTIRMA VE KİŞİSEL VERİLERİN KORUNMASI

Çiçek ERSOY

İstanbul Teknik Üniversitesi İşletme Fakültesi Öğretim Üyesi, İstanbul, Türkiye

ORCID ID: https://orcid.org/0000-0002-4724-8252

ABSTRACT

Advertising technologies (AdTech) are defined as any digital tool that collects, manages and analyzes data for the purpose of running online advertising campaigns, and performs automatic data processing for advertising purposes. With new advertising technologies, companies can reach new customers more effectively. Secondly, they can run advertising campaigns more focused and faster on existing customers, thus making campaigns less costly and effective. Finally, the benefit of advertising technologies for companies is to be able to better analyze the results of campaigns and whether they have achieved their goals. In digital marketing, it is mandatory to comply with certain rules when using the personal data of the customers.

Real-time bidding is a system that enables the sale of advertising spaces through a real-time tender (auction) in order to display advertisements at the right place and at the right time according to the interests of the users. When using this system, customers whose data is processed must be informed in accordance with the Law No. 6098 on the Protection of Personal Data and in certain cases, data processing consent must be obtained from the data owner. However, due to the operation of the system, there are difficulties in meeting both conditions. Because the system, which works with an auction method like a real-time tender system on the basis of advertising spaces, actively follows the areas of interest with the help of cookies on the mobile device or computer and ensures that the advertisement of the brand that makes the highest bid in only 50 milliseconds is displayed. Within the scope of the paper, it will be discussed how the marketing activities to be carried out with the real-time bidding method will fulfill the requirements arising from the KVKK.

Key Words: Protection of personal data, Real-time bidding, Digital marketing

NATURAL MODULATION OF THE GUT MICROBIOTA IN PATIENTS WITH FOOD ALLERGIES. IMPACT OF ALERGIPLANT

Major Gheorghe GIURGIU

[1]Deniplant-Aide Sante Medical Center, Biomedicine, Bucharest, Romania

https://orcid.org/0000-0002-5449-2712

Prof dr med Manole COJOCARU

Academy of Romanian Scientists

[3]Titu Maiorescu University, Faculty of Medicine, Bucharest, Romania

Background Dysbiosis or microbial imbalance, can predispose individuals to allergies, while a balanced gut microbiome, fosters immune tolerance. The immune mechanisms involved in food allergies are complex and little is known about the possible role of the gut microbiota in the aetiopathogenesis of food allergies.

Objective Alergiplant could modulate the immune system through gut microbiota in food allergies. Advancing knowledge of the gut microbiome and its function in modulating the course of food allergies, might result in novel therapeutic strategies.

Materials and methods The evaluation of the patients was based on history and physical examination. We investigated the effect Alergiplant in patients with food allergies.

Results Environmental factors such as urbanisation, pollution, and dietary habits also significantly contribute to food allergies risk. It is not clear whether microbial change in food allergies is an outcome of barrier defect or the cause of barrier dysfunction and inflammation. Manipulation of the gut microbiota as a method for modifying atopy, may be attempted in many ways including avoidance of certain foods, supplementation with probiotics and prebiotics, optimising nutrient intake, minimising stress, antimicrobial therapy, correction and prevention of low stomach acid, and faecal microbiota transplantation.

Conclusion The resident microbiota is important in maintaining structural and functional integrity of the gut and in immune system regulation. There was an increase of the intestinal permeability reported in patients with food allergies and a reduction of the gut microbiome diversity. Modifying gut microbiome by applying Alergiplant during early years may be a preventive and therapeutic option in high risk groups.

Keywords: food allergies, host-microbiome interaction; immune regulation; Alergiplant

GREEN SYNTHESIS OF COPPER NANOPARTICLES USING AZADIRACHTA INDICA AND ITS ANTIMICROBIAL AND ANTIOXIDANTS ACTIVITY

Divya Dwivedi

M. Thenmozhi

Department of Biotechnology, School of Sciences, Vels Institute of Science, Technology and Advanced Studies (VISTAS), Pallavaram, Chennai, Tamil Nadu, India.

The use of copper nanoparticles is having a huge attention of researchers from different fields due to its catalytic, optical, photonic, electric and antimicrobial activities. The green synthesis of copper nanoparticles using plant extract is environment friendly, non-toxic and economical. This study explores an eco-friendly green synthesis method for producing copper nanoparticles (CuNPs) using extracts derived from the leaves, bark and veins of Azadirachta indica (Neem). This biosynthetic approach offers significant environment benefits over conventional methods by avoiding toxic chemicals, thus ensuring a sustainable and non-hazardous process. The CuNPs synthesized demonstrated remarkable antimicrobial activity, effectively inhibiting the growth of Escherichia coli and Pseudomonas fluorescens. Additionally, the nanoparticles exhibited strong antioxidant properties, highlighting their potential for diverse applications in biomedical, environmental and industrial fields. This work emphasizes the importance of plant-based synthesis in developing eco-friendly nano materials with multifunctional properties.

Key Words: Green synthesis, Copper Nanoparticles, Azadirachta indica, antimicrobial activity, antioxidants activity

GUAVA DISEASE DETECTION USING CONVOLUTIONAL NEURAL NETWORKS

Sanjana Kulkarni

M.Suresh

Dr.Tawseef Ahmad

Ch.Sunil Kumar

Department of CSE(Artificial Intelligence and Machine Learning), Bharat Institute of Engineering and Technology,Mangalpally(v),Ibrahimpatanam,Hyderabad,501510

Abstract

This project focuses on the early detection of diseases in guava plants by employing Convolutional Neural Networks (CNNs). By leveraging advanced image processing techniques and deep learning, the project aims to accurately identify and classify diseases affecting guava plants.

The agricultural sector plays a vital role in the global economy, with fruit cultivation being a significant part of it. Early and accurate detection of these diseases is crucial for effective management and control. Traditional methods of disease identification are often time-consuming, labor-intensive, and require expert knowledge. To address these challenges, this project proposes a novel approach for guava disease detection using Convolutional Neural Networks (CNNs), a class of deep learning models known for their effectiveness in image classification tasks.

The primary objective of this project is to develop an automated system that can accurately identify and classify common guava diseases from leaf images. The proposed system leverages the powerful feature extraction capabilities of CNNs to distinguish between healthy leaves and those affected by diseases such as anthracnose, powdery mildew, and leaf spot. A comprehensive dataset of guava leaf images, categorized by disease type, is used to train and validate the CNN model.

Keywords: Deep learning, Image classification, Convolutional Neural Network

EXAMINATION OF SPACE KNOWLEDGE OF GIFTED SECOND GRADE STUDENTS

Hacer ÇALIM

Tokat Gaziosmanpaşa University, Graduate Education Institute, Special Education Department, Tokat, Turkey

ORCID ID: https://orcid.org/ 0009-0007-5130-7941

Güliz KAYMAKCI

Tokat Gaziosmanpaşa University, Education Faculty, The Department of Gifted Education, Tokat, Turkey

ORCID ID: https://orcid.org/ 0000-0002-3428-5214

ABSTRACT

Introduction and Purpose: The fact that gifted students have innate curiosity, discovery and observation skills increases their interest in space and astronomy sciences. At the same time, students' curiosity and interest are relatively high in primary school periods when reading and writing are learnt. For this reason, this study aimed to determine the knowledge of gifted students studying in the second grade of primary school about space and to evaluate this knowledge according to gender.

Methods: In this study, the case study model, one of the qualitative research methods, was used. The sample of this study, which was determined using the convenience sampling method, consists of 36 gifted primary school second-grade students studying in Science and Art Centres in Tokat, Malatya and Adıyaman provinces in the 2024-2025 academic year. The data were collected with a semi-structured interview form created by the researchers was used as a data collection tool. The data obtained from the research were analysed through descriptive and content analysis.

Results: As a result of the study, girls defined the concept of space with celestial bodies such as planets and stars, while boys described it as a prominent, dark, unbreathable place. It was determined that gifted students knew how and why they went to space and what kind of studies were carried out there. However, it was determined that they had some misconceptions about the lunar and solar eclipse. **Discussion and Conclusion:** It is thought that 2nd-grade primary school students have difficulty understanding and defining concepts related to space because they are in the concrete thinking stage, and their abstract thinking skills are not yet fully developed. It is recommended to use different teaching methods to eliminate students' misconceptions about space and to ensure that they learn the correct information.

Key Words: Gifted Education, Science Education, Space

IDENTIFICATION OF SANITATION AND HYGIENE FACTORS IN CHICKEN MEAT SALES AT TRADITIONAL MARKETS

Andi Nurmasytha AS

(ORCID: 0009-0005-9345-2480)

Department of Animal Science, Agriculture Faculty, Mulawarman University, Samarinda, Indonesia

Amalina Nur Wahyuningtyas

(ORCID: 0000-0001-9604-8575)

Department of Animal Science, Agriculture Faculty, Mulawarman University, Samarinda, Indonesia

Kirana Dara Dinanti Adiputra

(ORCID: 0009-0004-3652-1286)

Department of Animal Science, Agriculture Faculty, Mulawarman University, Samarinda, Indonesia

ABSTRACT

Chicken meat has a high-protein food source widely favored by people. However, it is highly perishable due to improper handling. In traditional markets, chicken meat is often sold uncovered, placed on tables without temperature control, and with minimal attention to hygiene, which can compromise its quality. This study aims to identify factors affecting sanitation and hygiene at chicken meat stalls in traditional markets in Maros. The research methods included field surveys and interviews with chicken meat vendors in four traditional markets (Markets A, B, C, and D), complemented by direct observations of the environmental conditions.The findings revealed poor personal hygiene among vendors in all four markets. Most respondents did not use aprons, head coverings, masks, or gloves. The sanitation of chicken meat stalls was inadequate, as they were often mixed with other commodities such as vegetables and fish, leading to potential cross-contamination. In conclusion, the sanitation and hygiene levels for chicken meat stalls were rated as 22% good in Markets B, C, and D, and 25% good in Market A.

Keywords: Chicken Meat, Sanitation, Hygiene, Traditional Markets

SOUTHERN MEDITERRANEAN SEA MICROBIAL POLLUTION AND EFFECT ON GROWTH AND BIOFILM ENDOGENS STREPTOCOCCUS AGALACTIAE

Imen Laadouze
Water Research and Technology Center, Soliman Tourist Route, P.O. Box 273, 8020 Soliman, Tunisia
Faculty of Sciences of Bizerte, University of Carthage, 702a, Zarzouna, Tunisia,

Noussaiha Salhi
Water Research and Technology Center, Soliman Tourist Route, P.O. Box 273, 8020 Soliman, Tunisia
Faculty of Sciences of Bizerte, University of Carthage, 702a, Zarzouna, Tunisia,

Ibtissem Khouja
Water Research and Technology Center, Soliman Tourist Route, P.O. Box 273, 8020 Soliman, Tunisia
Faculty of Sciences of Bizerte, University of Carthage, 702a, Zarzouna, Tunisia,

Emna Grami
Water Research and Technology Center, Soliman Tourist Route, P.O. Box 273, 8020 Soliman, Tunisia
Faculty of Sciences of Bizerte, University of Carthage, 702a, Zarzouna, Tunisia,

Ribab Hedhiri
Water Research and Technology Center, Soliman Tourist Route, P.O. Box 273, 8020 Soliman, Tunisia
Faculty of Sciences of Bizerte, University of Carthage, 702a, Zarzouna, Tunisia,

Kathleen Sullivan Sealey
Coastal Ecology Laboratory, Department of Biology, University of Miami, Coral11 Gables, Florida, USA. https://orcid.org/0000-0003-4470-0909

Neila Saidi
Water Research and Technology Center, Soliman Tourist Route, P.O. Box 273, 8020 Soliman, Tunisia

Abstract

The pollution by pathogens in one country from the Mediterranean basin may affect all neighboring countries. B Streptococcus agalactiae (BHS) was isolated from the coastal waters of Hammamet Gulf in the southern Mediterranean (off Northeastern Tunisia). The isolated strain was tested for its ability to grow and to form biofilms. Initial bacteria cultures under starvation showed exponential growth for the first 6 days of incubation followed by a growth plateau. The bacterial culture formed a biofilm after two days of culture under starvation conditions. Cultures faced with continuous starvation beyond 6 days showed an inhibition of biofilm formation. Submitted to ferrous sulfate ($FeSO_4$), at below 20 mM both growth and biofilm formation were promoted in BHS strain. However, over than 20 mM the iron was toxic to bacteria cells and restricted biofilm formation. In contrast, increasing the concentration of Zinc sulfate ($ZnSO_4$) and copper sulfate ($CuSO_4$) from 10-, 20- and 50-mM reduced BHS strain to grow and to form biofilm. Also, BHS was relatively sensitive to germicidal ultraviolet light

(UV_{254}) and increasing UV_{254} doses (0, 30, 60, 120 et 240 mJ/cm^2) affected the growth of BHS strain. Tested for antibiotic susceptibilities (AS) BHS strain showed resistance to tetracycline (30 µg), clindamycin (2 µg), erythromycin (15 µg), and levofloxacin (5 µg) and was sensitive only to penicillin (10 U). This finding may serve to raise awareness among the authorities in order to develop strategies to limit this continuous pollution and to require Tunisian sanitation offices to properly treat their effluent before throwing it into the sea
Keywords: Beta-hemolytic Streptococcus agalactiae, growth, biofilm, starvation stress, heavy metals, UV_{254} and antibiotics

IMPACT OF DIGITAL TRANSFORMATION ON WORKFORCE MANAGEMENT AND PRODUCTIVITY

Dr.M.K.GANESHAN

Assistant Professor Department of Management Studies MIET Engineering College

Tiruchirappalli-620 007 Tamil Nadu, India

https://orcid.org/0000-0003-2407-1527

Abstract

Digital transformation is the process by which companies embed technologies across their businesses to drive fundamental change. Digital transformation has revolutionized workforce management and productivity, redefining traditional human resource practices and organizational workflow management. This research is elaborated on digital transformation, digital tools, employee productivity, remote work or hybrid models, and workforce analytics. This research explores how emerging technologies like artificial intelligence, cloud computing, and data analytics optimize workforce planning, enhance employee engagement, and streamline decision-making processes. It examines the challenges of technology adoption, including skill gaps, resistance to change, and cybersecurity risks. Statistical data collected from some industries impact things like increased productivity, employee engagement, operational efficiency, labour cost, and market growth. The research emphasizes the role of digital tools, enabling remote work, and driving organizational efficiency. Finally, the modern workplace positions digital transformation as a method for sustainable growth and competitive advantage.

Keywords: Digital transformation, workforce management, employee engagement, productivity, sustainable growth.

COW BREEDING VALUE ESTIMATION

Dr. Öğr. Üyesi Yavuzkan PAKSOY

Necmettin Erbakan Üniversitesi, Konya Ereğli Kemal Akman Meslek Yüksekokulu, Bitkisel ve Hayvansal Üretim Bölümü, Konya, Türkiye.

Orcid ID: 0000-0002-0935-7693

ABSTRACT

A crucial factor in determining a cow's genetic potential and output is breeding value. Based on variables including milk quality, the number of children, and health status, this value is estimated. Breeding value is estimated by genetic selection and genetic analysis techniques. High accuracy is provided by genomic selection. Breed characteristics, milk yield, and milk components are examples of phenotypic data that are gathered. Statistical Models: BLUP (Best Linear Unbiased Prediction) is one statistical model used to evaluate data. Research indicates that combining genetic and phenotypic data can improve the accuracy of breeding value estimation. In herd management, methods backed by genomic data offer substantial benefits. To boost milk output and guarantee economic efficiency, it is essential to estimate a cow's breeding value accurately. More advanced genetic analysis methods will be used in the future to increase prediction accuracy in this field. A crucial step in raising cattle breeding output is estimating a cow's breeding value. The investigation of genetic, productivity, health, and environmental factors forms the basis of this calculation. In conclusion, breeding value is estimated using; genetic information, performance metrics, health and resilience, environmental variables and statistical models.

Keywords: Cow, Breeding Value, Genetics, Statistics

INTACT PLASMA MEMBRANE AND SPERMATOZOA MOTILITY IN CRYOPRESERVED SEMEN OF BALI BULLS

Kirana Dara Dinanti Adiputra

(ORCID: 0009-0004-3652-1286)

Department of Animal Science, Agriculture Faculty, Mulawarman University, Samarinda, Indonesia

Novemia Fatmarischa

(ORCID: 0009-0009-1400-6378)

Department of Animal Science, Agriculture Faculty, Mulawarman University, Samarinda, Indonesia

Andi Nurmasytha AS

(ORCID: 0009-0005-9345-2480)

Department of Animal Science, Agriculture Faculty, Mulawarman University, Samarinda, Indonesia

ABSTRACT

Factors supporting the artificial insemination success in Bali cattle are assessed by the parameters of Plasma Membrane Intactness (PMI) and Motility in cryopreserved semen. Artificial Insemination is one of the reproductive technologies in livestock breeding. The plasma membrane of spermatozoa consists of lipids, phospholipids, glycolipids, cholesterol and proteins. This composition affects the function of spermatozoa and during the storage and refrigeration process, while the motility value strongly supports spermatozoa cells to reach to ovarium cell in the reproductive tract of cows. Intact plasma membrane parameters were tested using Hypo-osmotic Swelling (HOS) Test solution and motility using fluorescent Microscope (Adiputra et al., 2022). The purpose of this study was to determine the quality of cryopreserved semen of Bali bulls kept in Technical Implementation Unit PIBPS South Sulawesi. This study used cryopreserved semen from 5 Bali bulls at Technical Implementation Unit PIBPS South Sulawesi aged 6-7 years with 6 observations. Data were analyzed using ANOVA. Based on the results of the study it can be concluded that the MPU of Bali bull spermatozoa named Hercules is lower than other bull while the motility of Bali bull spermatozoa named Rowa is lower than other bull.

Keywords: Artificial Insemination, Intact Plasma Membrane, Motility, Cryopreserved Semen

GENTRIFICATION EFFECTS ON THE HISTORIC CITY CORE OF ABEOKUTA, NIGERIA

ELESIN, Ganiy Olanrewaju

Department of Urban & Regional Planning, The Federal Polytechnic, Ilaro, Ogun State.

ELESIN, Islamiat Folashade

Physical Planning Unit, The Federal Polytechnic, Ilaro, Ogun State.

Abstract

Gentrification is one of the societal issues which are faced by people when they are displaced from their neighborhood and the neighborhood is now transformed to high value. Attempt is being made in this study, to investigate the effects of gentrification on the historic city core of Abeokuta, Ogun State; with a view of identifying problems associated and proffer possible solutions in form of suggestions and recommendations. The paper focused on introduction/background of the study, which also include the statement of the research problems, scope of the study. However, the fundamental objectives of this study among others include:- to investigate initial profile of housing development before gentrification in the study area, to investigate level of gentrification in terms of housing development in the study area, to assess socio –economics characteristics of the inhabitants before and after the gentrification in the study area, to investigate probable factors responsible for gentrification in the study area and to identify problems associated with housing gentrification in the study area. Review of some scholarly literatures were done with explanation and discussion on theoretical/conceptual framework. Research methodology is focused on research design and instrument of data collection, method and sources of collected data, sample frame and size as well as method of data analysis with brief history of the study area. Data was collected through questionnaires administration to some selected respondents in the selected historic city core of the study area (Abeokuta). The research result is done based on discussion, with the summary of research findings, where presentation of collected data was done with the aid of frequency tables, charts, figures, and simple percentage for proper and easy analysis. Findings from the study confirmed that development is the major reason for the gentrification which also indicate significant changes in the neighborhoods different from their initial designated uses from residential to commercial with effect on the social and economic conditions of the study area. Sustained demand for space for other uses in addition to increasing population resulting in sudden increase in rent. The study recommends that, there should be good cooperation among local stakeholders for development and land use rehabilitation in the area, introduction of rent control measures while physical planning department must not only approve modification of plan but also monitor the development to ensure compliance and provisions of more infrastructural facilities to serve the increasing population in the study area.

Keywords: Gentrification, Effects, City-core, Historic.

DISTRIBUTION OF INVASIVE ALIEN PLANT SPECIES ALONG THE BANKS OF THE SASTHAMCOTTA LAKE (RAMSAR SITE) IN KOLLAM, KERALA

Dhanya S.R,

Assistant Professor, Department of Botany, K.S.M.D.B College, Sasthamcotta, Kollam.

Rajani.V

Assistant Professor, P.G Department of Environmental Sciences, All Saints' College, Thiruvananthapuram.

ABSTRACT

Invasive Alien species are the second biggest threat to biodiversity after habitat destruction and are a major cost to the economic wellbeing of the planet. They cause enormous and often irreversible harm to biodiversity around the world by displacing native and useful species and changing ecosystems. Overgrowth of these species cause extinction or decline of many species and continue to pose a huge threat to many more. The Sasthamcotta lake, categorized as a Ramsar wetland, is the largest fresh water lake in Kerala, India on the South of the West Coast. It meets the drinking water needs of half million people of the Kollam district. Rich plant diversity in the banks of lake gives aesthetic beauty to the lake along with richness of water.In the present study, invasive alien plant species occurring along the banks of lake were compiled based on the literature survey, field observation and discussion with local people. Invasive alien species were divided into three categories- naturalized, interfering and noxious. Self-replacing plant populations by recruitment through seeds and capable of independent growth were categorized as naturalized. Alien and native plants which impacted agriculture adversely especially on the disturbed sites were taken as noxious. The adverse impact of noxious species was in the form of competition for space with tillage or forage crops and harbouring of pests or disease vectors, harmful to crops and native species. The habit, nativity and the impact of invasive plant species on forest, grassland and agricultural communities were noticed to prepare a catalogue of this region.A total of 58 invasive alien plant species of the terrestrial vegetation of Sasthamcotta lake side have been documented. Habit wise analysis shows that 57% of species are herbs, 19% are shrubs and 21% are climbers. The four dominant families contributed 75% of the invasive alien flora of terrestrial vegetation of Sasthamcotta lake side. The present catalogue of invasive exotic species is likely to serve as basic information for future research towards conservation of native plant species of the region.

Keywords: Invasive plants, Alien flora, Exotic species, noxious species.

DEVELOPMENT OF HIERARCHICALLY POROUS TITANIUM OXIDE USING SODIUM ALGINATE AS A SACRIFICIAL TEMPLATE BY THE SOL-GEL METHOD

Hakima Lagrini
Laboratory of Catalysis and Corrosion of Materials, Faculty of Sciences, University Chouaib Doukkali, PO Box 20, 24000 El Jadida, Morocco.

Fouad Bentiss
Laboratory of Catalysis and Corrosion of Materials, Faculty of Sciences, University Chouaib Doukkali, PO Box 20, 24000 El Jadida, Morocco.
Materials and Transformations Unit, University of Lille, CNRS, INRAE, Centrale Lille, UMR 8207-UMET, F-59000 Lille, France.

Charafeddine Jama
Materials and Transformations Unit, University of Lille, CNRS, INRAE, Centrale Lille, UMR 8207-UMET, F-59000 Lille, France.

Mohamed Bensitel
Laboratory of Catalysis and Corrosion of Materials, Faculty of Sciences, University Chouaib Doukkali, PO Box 20, 24000 El Jadida, Morocco.

Abdelaziz Sahibed-Dine
Laboratory of Catalysis and Corrosion of Materials, Faculty of Sciences, University Chouaib Doukkali, PO Box 20, 24000 El Jadida, Morocco.

In this study, we propose the synthesis of hierarchical porous TiO_2 nanoparticles, obtained by the sol-gel method using a natural and abundant biopolymer extracted in the laboratory. Sodium alginate, used as a surfactant, helps generate porous structures and control the morphology of TiO2 nanoparticles under various synthesis conditions. The main objective of this study is to examine the effect of the presence or absence of the biopolymer in the synthesis of titanium oxide (TiO_2), comparing the samples obtained by the sol-gel method without the biopolymer (denoted $TiO_{2\text{-}C}$) and with the biopolymer (denoted $TiO_{2\text{-}BP}$), in order to create a material with hierarchical porosity. The synthesized materials ($TiO_{2\text{-}C}$ and $TiO_{2\text{-}BP}$) are then modified by the incorporation of transition metals such as silver. The obtained samples are characterized using various techniques, including nitrogen adsorption analysis, X-ray diffraction (XRD), scanning electron microscopy (SEM), Fourier-transform infrared spectroscopy (FTIR), energy-dispersive X-ray spectroscopy (EDS), zeta potential, as well as UV-Visible spectroscopy, inductively coupled plasma optical emission spectrometry (ICP-OES), and Raman spectroscopy. These samples are subsequently tested in the isopropanol decomposition reaction and evaluated for the adsorption of a cationic dye (BM).
KEYWORDS: Nanoparticles, surfactant, biopolymers, mesoporous materials, $TiO_{2\text{-}C}$, $TiO_{2\text{-}BP}$.

LEAF STRUCTURAL AND FUNCTIONAL MODIFICATION OF IPOMOEA CARNEA JACQ. AN INVASIVE PLANT SPECIES, UNDER DIVERSE SALINITY GRADIENT

Saira Malik

Syed Mohsan Raza Shah

Uniza Fatima bukhari

Tasawar Fatima bukhari

Iqra

Department of Botany, Division of Science and Technology, University of Education, Lahore, Pakistan

Abstract

The role of structural and functional plasticity of Ipomoea carnea for invasion in diverse saline environments was investigated. The populations were collected from 30 different habitats of Pakistan. The populations were divided into 3 groups based on the extent of salinity in their natural habitat. The non-saline habitats (ECe>4 dS m^{-1}) were Kohala, Islamabad, Pahari Nala, Pir Kot, Nerian Sharif, Daska, Dhir Kot, Namal, Lower Jhelum and Majuhan. Moderately saline habitats (ECe 4-8 dS m^{-1}) were Mong Depo, Pasrur, Layyah, Mana Wala, Phularwan Roadside, Kharian Wala, Phulrwan canal, Rasool, Puran and Shah Kot. Highly saline habitats (<8 dS m^{-1}) included Gunjal, Gutwala, Skindar Pura, Choa Sadien Shah, Phid, Buchal, Kallar Kahar, Cholistan Desert, Sangla Hills and Sahian Wala. The hyper-saline population accumulated more compatible solutes like total soluble sugars, phenolics and flavonoids linked to osmoprotection. Increased sclerifcation and phloem thickness in hyper-saline and moderately saline populations. Increased density of trichomes and salt excretory glands prevented water loss and excreted toxic ions through leaf surface. In conclusion, I. carnea populations adopted different strategies like water conservation via water storage in parenchymatous tissues, accumulation of compatible solutes (total soluble sugars) and allelochemicals (flavonoids and phenolics) for chemical defense. All these aspects were key factors for survival and invasive success in a variety of habitat types and environmental conditions.

Keywords: Environmental heterogeneity, Invasive species, Ipomoea carnea, Sclerifcation, Trichomes.

A NUMERICAL INVESTIGATION ON THE EFFECTS OF BEAM THICKNESS AND FILLING RATE ON BUCKLING BEHAVIOR OF 3D-PRINTED NYLON-6 POLYMERS

Dr. Öğr. Üyesi ÇAĞIN BOLAT

Samsun Üniversitesi, Mühendislik ve Doğa Bilimleri Fakültesi, Makine Mühendisliği

ORCID: 0000-0002-4356-4696

Dr. Öğr. Üyesi SİNAN MARAŞ

Ondokuzmayıs Üniversitesi, Mühendislik Fakültesi, Makine Mühendisliği Bölümü

ORCID: 0000-0002-8227-1124

ABSTRACT

3D printing is a highly versatile technology to produce the polymer components and its usage has increased day by day in different industries like medicine, automotive, education, aerospace, and building. In this work, 3D-printed Nylon 6 (PA6) samples were analyzed in point of buckling style deformation responses by using finite element methodology. Due to its good abrasion resistance, sufficient printability, and corrosion resistance, Nylon 6 was selected as a substrate material. As a manufacturing method, fused filament fabrication (FFF) was used. In the printing stage, infill rates were altered as 30%, 60%, and 100% while the other variables were kept constant. Besides, the thickness levels of the designed beams were changed to examine the geometrical variables. The results showed that the critical buckling load levels escalated with the rising infill rates. Additionally, climbing beam thickness levels led to higher the critical buckling load outcomes.

Keywords: Nylon 6, Buckling deformation, beam thickness, finite element, 3D printing.

GREEN CAPABILITIES AND DIGITAL TRANSFORMATION: ACHIEVING COMPETITIVE ADVANTAGE WITH SUSTAINABLE TECHNOLOGIES

Vildan BAYRAM

Istanbul Aydın University, Anadolu Bil, Business Management Department, Istanbul, Turkey

ORCID ID: https://orcid.org/0000--0001-7526-6485

Mesut ÖZTIRAK

Istanbul Medipol University, Business and Management Faculty, Aviation Management Department, Istanbul, Turkey

ORCID ID: https://orcid.org/0000--0003-4828-7293

ABSTRACT

Introduction and Purpose: Green capabilities and digital transformation are key factors in helping companies achieve their environmental sustainability goals while simultaneously gaining competitive advantage. This study explores the role of digital transformation in enhancing green capabilities. Digital technologies, such as artificial intelligence (AI), big data, the Internet of Things (IoT), and blockchain, are strategically utilized to help companies reach environmental targets like energy efficiency, waste management, and carbon emission reduction. The purpose of this study is to examine how these technologies can streamline sustainable business practices and contribute to the development of green capabilities, ultimately leading to improved environmental performance and competitive advantage for companies.

Materials and Methods: The study employs a comprehensive literature review to assess how digital transformation impacts the implementation of green strategies in businesses. Key areas of focus include the application of digital tools in optimizing resource use, reducing environmental footprints, and facilitating the creation of sustainable supply chains. Case studies and examples of companies that have integrated green technologies with digital solutions are analyzed to illustrate their success in leveraging these tools for sustainability goals. The review also explores various models of digital transformation and green technology adoption in the context of corporate strategy.

Results: The results of the study show that the integration of digital technologies with green strategies significantly improves environmental performance in companies. For instance, AI and big data analytics help optimize energy consumption, while IoT enables better waste tracking and carbon emission monitoring. Additionally, blockchain ensures transparency and accountability in supply chains, further supporting sustainability efforts. The findings suggest that businesses utilizing digital transformation tools not only enhance their environmental practices but also achieve operational efficiencies, cost savings, and stronger brand positioning in the market.

Discussion and Conclusion: This study concludes that the fusion of green capabilities and digital transformation provides businesses with a strategic advantage in the competitive marketplace. By incorporating digital tools into environmental strategies, companies can more

effectively address sustainability challenges and meet their long-term goals. The ability to integrate digital technologies with green practices enhances operational efficiency, reduces costs, and creates new opportunities for innovation, giving businesses a sustainable competitive edge. The paper offers new insights into how companies can successfully merge digital transformation and green strategies to achieve a sustainable future while maintaining competitive advantage.

Key Words: Green Capabilities, Digital Transformation, Sustainable Technologies, Competitive Advantage, Environmental Performance

SUSTAINABLE ARCHITECTURE IN SOUTH ASIA: CHALLENGES AND OPPORTUNITIES IN ENERGY EFFICIENCY

Farhana Naz

Lahore college for Women University, Faculty of Arts and Social Sciences, Interior Design Department, Lahore, Pakistan.

Abstract

This study examines the development and implementation of energy-efficient design practices in South Asia, with a focus on India, Bangladesh, and Pakistan. By analyzing policy frameworks, green building certification systems, and sustainable technologies, the research highlights strategies for reducing energy consumption and environmental impact. Comparative analysis reveals the effectiveness of renewable energy integration, water conservation measures, and green building certifications like LEED and GRIHA in driving sustainable architectural practices. Challenges such as financial constraints, policy gaps, and limited awareness are identified, alongside recommendations for fostering stakeholder engagement and regional collaboration. The findings aim to guide architects, policymakers, and construction professionals in advancing sustainable architecture across South Asia.

Keywords: Energy-efficient design, sustainable architecture, policy frameworks, green building, South Asia.

PROBLEMS FACED BY WOMEN IN WORKING LIFE AND SOLUTION-ORIENTED SOCIAL POLICIES

Yusuf GENÇ

Prof. Dr., Sakarya Üniversitesi İnsan ve Toplum Bilimleri Fakültesi Sosyal Hizmet Bölümü, https://orcid.org/0000-0001-6580-0883

Fatma Sude UZUN

Yüksek Lisans Öğrencisi, Sakarya Üniversitesi Sosyal Bilimler Enstitüsü Sosyal Hizmet Anabilim Dalı, https://orcid.org/0009-0001-0993-1800

ABSTRACT

Throughout history, wars and the steps of industrialization that began at different times in different geographies have caused the participation of only men in the paid workforce to be insufficient. With the destruction of the male population in wars, the beginning of migration movements from villages to cities with industrialization, and the insufficiency of the income provided by a single person in urban life to meet the expenses, the employment of women working in unpaid jobs within the home and family has started to come to the agenda.

In societies where it is customary for women to assume the roles of housewife and motherhood, women's participation in the paid labor force has not been fully supported. Women's participation in the labor force has been limited or they have been subjected to gender-based discrimination in these areas. Women have worked in jobs that are directly proportional to the roles expected of them in domestic life, and have been subjected to gender-based discrimination when the opposite occurs.

It has been observed that women who have been subjected to gender-based discrimination with their participation in employment have not had equal rights and equal pay with employed men despite doing the same job, have been subjected to psychological and sexual violence at the workplace, have been subjected to a complex mix of roles expected of them in the family and roles expected of them in work life, and have been characterized as cheap labor and have been subjected to unregistered employment.

National and global legal texts have been written and various practices have been implemented in line with these texts in order to solve gender-based discrimination and the accompanying problems faced by women in employment. This study focuses on the obstacles to women's employment, the problems they face in business life, and the texts and practices that have been written and implemented to provide solutions to these problems.

Keywords: Women, women's employment, working women's problems gender, gender-based discrimination

USING THE ELECTRONIC PLATFORM "FORMS" TO MONITOR THE ACQUIRED KNOWLEDGE OF THE DISCIPLINE "CLINICAL ANATOMY AND OPERATIVE SURGERY" AMONG STUDENTS OF THE FIFTH YEAR OF THE "MEDICINE" SPECIALTY

Kavyn Vasyl

(Ivano-Frankivsk National Medical University, Ukraine)

Introduction. The educational process requires constant improvement. Especially, higher medical education needs the use of the new methods and forms of student training, which is due to the appearance of new technologies in medicine. One of the important disciplines is clinical anatomy and operative surgery. In Ukraine, the relevance of discipline increased during the war. Regardless of the specialty, each doctor must be able to sew up a wound, stop bleeding, provide emergency care, operate or assist in various surgical interventions and in different conditions. Students acquire the practical skills while studying the discipline of clinical anatomy and operative surgery. Monitoring the practical skills and knowledge of the discipline among fifth year students who studied this discipline three years ago makes it possible to analyze the students' mastering of knowledge and practical skills.

Aim: to analyze the assimilation of knowledge by fifth year students in the discipline "Clinical Anatomy and Operative Surgery", which they studied in previous courses.

Material and methods: 79 fifth year students of the Faculty of Medicine were analyzed for the mastering of knowledge in the discipline "Clinical Anatomy and Operative Surgery", which the students studied three years ago. For this purpose, we used the electronic form "Forms", which was sent to fifth year students as a link. The results of the electronic survey were distributed as follows: if more than 61% of students answered the question, this indicated "good" mastering of knowledge in the discipline; if the question was answered by 31% to 60% of students - this indicated "average" mastering of knowledge; if up to 30% of the surveyed students answered the question, this indicated "weak" mastering of knowledge.

Results and discussion

The electronic survey of fifth year students was conducted at the end of the 2024 academic year. For this, a list of questions was compiled in the electronic form "Forms". Each student had to answer the questions and submit them. There were 20 questions on clinical anatomy, 20 questions on operative surgery

The monitoring results showed that 20% of students have good knowledge of clinical anatomy, 70% of students have average knowledge, and 10% of students have weak knowledge of clinical anatomy.

We note that 40% of students have good knowledge of operative surgery; average mastering of knowledge on operative surgery was also found in 40% of students; weak mastering of knowledge on operative surgery was found in 20% of students.

LABOUR MARKET MANAGEMENT IN KAZAKHSTAN IN THE CONDITIONS OF CRISIS

Khudaibergen Meruyert

University of International Business named after Kenzhegali Sagadiev Almaty, Kazakhstan

Scientific Supervisor PhD Mussabalina D.S.

Abstract

The labour market is a key element of the socio-economic structure of any country, determining its development and sustainability. In conditions of economic crises, the labour market becomes particularly vulnerable, which leads to increased unemployment, lower incomes of the population and deterioration of working conditions. In the context of Kazakhstan, facing the challenges of economic instability, the problem of labour market management becomes particularly relevant. This study aims to analyse the methods of labour market management in Kazakhstan under crisis conditions. The work includes an examination of the impact of the crisis phenomena on employment, the structure of labour relations and demand for skills, as well as an assessment of the effectiveness of implemented strategies such as employment support programmes, labour law reforms and retraining measures. The study is based on an interdisciplinary approach using economic, statistical and sociological methods of analysis. The scientific research is based on the identification of factors affecting the sustainability of the labour market, as well as on the development of practical recommendations for adapting its structure to the crisis conditions. The results of the study make it possible to develop more effective strategies for labour market management, minimizing the negative consequences of crises and contributing to sustainable socio-economic development of Kazakhstan.

Keywords: labour market, economic crisis, employment management, unemployment, socio-economic stability, labour relations, Kazakhstan, sustainable development, state policy, crisis management, employment support programmes.

BACTERIAL PATHOGENS IN VARIOUS RAW FOOD PRODUCTS IN KOCAELI PROVIENCE

Adem SOYCAN
Kocaeli University, Institute of Health Sciences, Medical Microbiology Department, Kocaeli, Türkiye
ORCID ID: https://orcid.org/0009-0009-0533-808X

Doğanhan Kadir ER
Kocaeli University, Gastroenterology and Hepatology Institute, Molecular Gastroenterology and Hepatology Department, Kocaeli, Türkiye
ORCID ID: https://orcid.org/0000-0001-5237-7983

Devrim DÜNDAR
Kocaeli University, Faculty of Medicine, Medical Microbiology Department, Kocaeli, Türkiye
ORCID ID: https://orcid.org/0000-0003-2073-7168

ABSTRACT

Introduction and Purpose: Foodborne diseases are a significant public health concern. Raw food products have a risk of contamination with pathogenic bacteria and can pose serious health risks. The aim of this study is to identify the prevalence of bacterial pathogens in raw food products in Kocaeli Province.

Materials and Methods: In this study, 220 raw food samples were analyzed, including 49 beef, 40 chicken, 42 fish, 44 leafy green vegetables (lettuce, parsley, spinach), and 45 milk. Microbiological analyses and cut-off values were conducted in accordance with ISO standards, targeting **Salmonella spp., Listeria monocytogenes, Escherichia coli, Shigella spp.,** and **Staphylococcus aureus** as pathogens of interest.

Results: E.coli was the most prevalent pathogen, at 59.54% (131/220). It was highest in raw milk (80%). S.aureus had a prevalence of 31.81% (70/220), with the highest rate also detected in raw milk (53.33%). Raw milk exhibited the highest contamination levels for both E. coli and S.aureus (**$p<0.05$**). When the acceptable limit values were considered, 16.32% of raw beef, 13.63% of green leafy vegetables and 4.76% of fish were contaminated with E. coli above the acceptable limit. Salmonella spp. was detected 10% (22/220), with the highest rate observed in raw chicken meat (17.50%). L.monocytogenes was found only in raw beef and raw chicken meat samples (2.04%). Shigella spp. was not detected.

Discussion and Conclusion: The results suggest that bacterial contamination in raw food products constitutes a significant public health concern. Despite the low prevalence of pathogens such as Salmonella spp. and L.monocytogenes, the high occurrence of E.coli and S.aureus poses considerable risks to the safe consumption of these products. The findings underscore the need for stricter regulatory inspections, improved hygiene and sanitation measures, and greater consumer awareness, especially regarding raw milk and poultry meat.

Key Words: Foodborne pathogens, raw food, microbiological quality

INVESTIGATION OF THE EFFECT OF NANOPARTICLES ON MATERIAL STRENGTH IN COMPOSITE MATERIALS

Hüseyin ALPTEKİN
EFG Elektrik Enerji A.Ş., Diyarbakır, Turkey
ORCID ID: https://orcid.org/0000-0002-6060-6915

Arif ÜÇER
EFG Elektrik Enerji A.Ş., Diyarbakır, Turkey
ORCID ID: https://orcid.org/0009-0001-9711-1692

Mustafa ÇETİN
EFG Elektrik Enerji A.Ş., Diyarbakır, Turkey
ORCID ID: https://orcid.org/0009-0000-4567-3370

Hatice KARAYILAN
EFG Elektrik Enerji A.Ş., Diyarbakır, Turkey
ORCID ID: https://orcid.org/0009-0003-0295-4166

ABSTRACT

Introduction and Purpose: In the past, metal and similar materials were used as the main structural elements in industry and production. Due to the complexity of the developing industrial and production systems, a new type of material that incorporates the properties of multiple materials has been sought. With the introduction of composite materials in industrial and production applications, a solution to this problem has been produced. Composite materials are a new type of material consisting of macroscopic combination of more than one material. The components of composite materials are called reinforcing element and matrix. The reinforcing element is the material placed in the matrix to increase the effect on binding and mechanical properties. The general purpose of these studies is to produce a more advanced material by combining the superior properties of materials generally used in engineering applications. Composite materials, which are formed by combining multiple materials, have made an important breakthrough in this regard.

Materials and Methods: In fibre reinforced composite materials, the mechanical properties of epoxy resins called matrix are lower in terms of fibre. Epoxy resin exhibits brittle properties and may cause fractures under load. Researchers have carried out various studies to improve these disadvantages of epoxy resins by adding nanoparticles into the resin in order to prevent these problems. In this study, the effect of nanoparticles on material strength in nano composites produced by the methods in the literature was investigated.

Results: When the existing studies in the literature are analyzed, it has been proved that nanoparticles placed in epoxy resin increase the strength values with scientific studies. Nanoparticles are materials with particle size less than 100 nm. The biggest advantage of nanoparticles is that they have high surface areas per unit volume and therefore increase the strength of these materials by establishing more mechanical bonds in the resin. Due to these advantages, they have a wide range of applications. In this study, the effects of nanoparticles added to composite materials as additives on mechanical strengths were investigated.

Keywords: Composite materials, nanoparticles, mechanical properties

POLAR U – AND Z – CURVES IN THE LORENTZ – MINKOWSKI PLANE R_1^2 - II

Hasan Hüseyin UĞURLU

Department of Secondary School Mathematics and Science Education, Gazi Education Faculty, Gazi University, Ankara, Turkey

ORCID ID: https://orcid.org/0000-0002-9900-6634

ABSTRACT

Introduction and Purpose: In Euclidean geometry; the polar equations of circle, lemniscate, eight, cardioid, limaçon, spiral (generally and specifically Archimedean, Fermat, hyperbolic, lituus, Galilean, Poinsot and atomic) and rose curves are expressed in simple form. These curves have widespread applications in the fields of Science and Engineering. The polar and Cartesian equations of the expressed curves in the Lorentz-Minkowski plane R_1^2 are defined in [1]. In this plane, the Lorentzian geometric location of the points whose sum (difference) of the distances to two different fixed points is constant is an ellipse (hyperbola). However, unlike the situation in the Euclidean plane, the Cartesian equation of an ellipse (hyperbola) in this plane is defined by the equation of a Euclidean hyperbola (ellipse). The Cartesian equation of the parabola is the same in both planes. The Cartesian equations of these special curves were defined in [2] and [3]. However, the polar equations of these conic sections are not defined. The aim is to define the polar equations of these special curves and to determine their properties.

Material and Method: Basic curves defined in [1] are generally given by two polar equations. This means that curves in space and time domains are defined by two different angles. Polar equations of conic sections given Cartesian equations in [2] and [3] are similarly defined by two polar equations.

Results: Polar equations of conic sections of the plane were defined with the help of central and hyperbolic angles and these curves were called ‘‘U - and Z - Conic Sections’’. In addition, conic sections were considered rölativistically and Lorentzian geometric interpretations were given from this point of view. Visuals created with defined conic sections were presented under the title ‘‘Polar U - and Z - Curve Gallery – II’’.

Discussion and Conclusion: Different properties of conic sections defined in the Lorentz-Minkowski plane from Euclidean conic properties were stated in the study and these special curves were visualized. The polar equations of conic sections defined in this study will also be a basic resource for researchers who will work on ‘‘orbit theory’’ in the space R_1^3, in addition to the fields mentioned above.

Key Words: Lorentz - Minkowski Plane, Central Angle, Hyperbolic Angle, Polar U - Curve, Polar Z - Curve

RELATIONSHIP BETWEEN TRANSFORMATIONAL LEADERSHIP ROLES OF SCHOOL PRINCIPALS AND ORGANIZATIONAL HAPPINESS OF TEACHERS

(A theoretical evaluation)

Zübeyde ÇELİK

Düzce University Graduate Education Institute Educational Administration and Supervision Düzce, Turkey Thesis Master's Degree Student

ORCID ID: 0000-0001-6712-5500

Prof. Dr. Süleyman GÖKSOY

Düzce University Faculty of Education, Düzce, Turkey

ORCID ID: 0000-0002-7151-0863

ABSTRACT

Transformational leadership is a leadership style that aims to support and encourage teachers by encouraging them. In this context, it can be thought that this leadership style will increase teachers' organizational happiness, job satisfaction and motivation. The happiness of teachers, who are the cornerstone of schools in educational organizations, is extremely important for the general happiness of the education system and therefore the society. Schools, whose input and output are people, take from the society and give back to the society, and the happiness of teachers who provide their education and prepare their futures so that students can receive a happy and peaceful education in their schools is important. Educational administrators have great responsibilities in this regard. Therefore, the aim of the study will be to examine the concepts of transformational leadership and organizational happiness from a theoretical perspective and to examine the relationship between these two concepts. In the study, the concepts of transformational leadership and organizational happiness and the concepts under the title of transformational leadership and organizational happiness in educational organizations were explained and then the "relationship between transformational leadership and organizational happiness" was evaluated with the support of scientific studies. As a result of the research, when the results of the research conducted so far are evaluated, it is seen that the transformational leadership roles of school principals have achieved positive results in factors such as teachers' organizational happiness, motivation, communication within the school, job satisfaction, job satisfaction, well-being, etc. School principals who are suitable for the needs of the age, have a vision and mission, and are open to innovation and transformation can support teachers' organizational happiness with transformational leadership roles in order for the school to reach its desired goals, and thus teachers can feel more valuable and important.

Keywords: Leadership, Transformational leadership, Organizational happiness.

DOES INSULIN PUMP THERAPY IMPROVE NON-ALCOHOLIC FATTY LIVER DISEASE IN PATIENTS WITH TYPE 1 DIABETES MELLITUS?

Burcu CANDEMİR

MD, Etlik City Hospital, Department of Endocrinology and Metabolism, Ankara, Turkey.

ORCID ID: 0000-0003-1800-6235

ABSTRACT

Introduction and Purpose: Type 1 Diabetes mellitus (T1DM) is an autoimmune disease characterized by pancreatic beta-cell destruction, insulin deficiency, and chronic hyperglycemia. Treatment of T1DM mainly involves exogenous insulin therapy and it is difficult to achieve optimal glycemic control in the long term. Poor glycemic control can lead to increased glycogen synthesis and fatty acid uptake. As a result, increased glycogen and fat storage affects liver functions and may cause non-alcoholic fatty liver disease (NAFLD). Increasing insulin pump treatment in T1DM has reduced significant complications such as severe hypoglycemia, hyperglycemia, and ketoacidosis and significantly improved quality of life. To our knowledge, there are no sufficient studies investigating the relationship between insulin pump therapy and NAFLD in type 1 DM. This study aimed to investigate the relationship between the presence of NAFLD and insulin pump therapy in T1DM.

Materials and Methods: Two hundred and thirty-four patients with T1DM who applied to the outpatient clinic in the last year were evaluated retrospectively. After applying exclusion criteria, 120 patients with type 1 DM were included. Sociodemographic data and biochemical measurements, such as glucose, HbA1c, creatinine, lipid levels, and NAFLD examinations with abdominal ultrasonography were obtained from anamnesis and medical records. Participants were divided into two groups: those using insulin pumps and those using multiple daily injections. SPSS-25.0 was used in the analysis of data.

Results: Thirty-six (30%) of the patients were using insulin pumps, while 84 (70%) were using multiple daily insulin injections (MDI). There was no significant difference between the two groups in terms of age, gender, body mass index, and disease duration. The two groups were similar in terms of hypertension, dyslipidemia, and celiac disease ($p>0.05$, for all parameters). Compared to the group with MDI, the group with insulin pump had significantly lower glycated hemoglobin (HbA1c) and triglyceride levels ($p=0.002$, $p=0.044$, respectively). The prevalence of NAFLD was 13.9% (n=5) in the insulin pump group and 45.2% (n=38) in the MDI group ($p=0.001$). While there was a negative correlation between the presence of NAFLD and insulin pump therapy, there was a positive correlation between HbA1c level and NAFLD ($p=0.001$, Rho=-0.300, $p<0.001$, Rho=0.399, respectively). We found that insulin pump therapy significantly reduced the risk of NAFLD in logistic regression analysis (Odds: 0.202 (0.054-0.749), $p=0.017$). In conclusion, this study has shown that insulin pump therapy may reduce the risk of NAFLD in patients with type 1 DM. Switching to insulin pump therapy in the early stages of T1DM may help reduce the risk of NAFLD development and NAFLD-related complications.

Keywords: Insulin pump, Non-alcoholic fatty liver disease, Type 1 Diabetes mellitus.

Table 1. Baseline clinical characteristics of the study population.			
	Insulin pump (n=36)	**MDI (n=84)**	**P**
Age, years	32.88±7.36	30.71±6.56	0.112
Gender, male, n (%)	11(30.6)	36(42.9)	0.206
Disease duration, years	13.75±4.4	12.29±4.06	0.083
Pump duration, years	10.22±3.88	-	-
BMI, (kg/m²)	23.12±2.55	23.71±2.73	0.170
SBP, (mmHg)	114.36±15.24	112.41±13.72	0.493
DBP, (mmHg)	68.63±9.59	67.53±9.83	0.572
Smoking, n (%)	3(8.3)	12(14.3)	0.366
NAFLD, n (%)	5(13.9)	38(45.2)	**0.001**
Hypertension, n (%)	4(11.1)	14(16.7)	0.435
Dyslipidemia, n (%)	4(11.1)	16(19)	0.285
ASCVD, n (%)	1(2.8)	3(3.6)	0.824
Hashimoto, n (%)	6(16.7)	18(21.4)	0.550
Celiac, n (%)	4(11.1)	7(8.3)	0.732
Neuropathy, n (%)	8(22.2)	35(41.7)	**0.042**
Retinopathy, n (%)	2(5.6)	8(9.5)	0.471
Nephropathy, n (%)	7(19.4)	21(25)	0.510
Glucose, (mg/dL)	134.44±42.55	148.69±48.24	0.128
HbA1c, (%)	7.82±1.29	8.64±1.34	**0.002**
GFR, (mL/dk / 1.73 m^2)	112(93.25-122.5)	117(105.25-125)	0.100
AST, U/L	15.44±3.29	18.09.±4.1	**0.001**
ALT, U/L	17.22±4.39	16.32±3.68	0.250
TSH, (mIU/L)	1.89±0.72	1.97±0.89	0.650
HDL, (mg/dL)	54.38±10.61	54.72±11.08	0.880
LDL, (mg/dL)	101.94±22.82	108.15±28.92	0.213
TG, (mg/dL)	100.83±31.58	113.48±30.98	**0.044**
Hemoglobin, (g/dL)	13.63±0.76	13.89±0.77	0.087
Platelet, × 10³ /mL	284.97±61.8	266.84±60.74	0.139
FIB-4	0.43(0.34-0.57)	0.54(0.38-0.67)	**0.041**
MDI, multiple daily injections; BMI, body mass index; SBP, systolic blood pressure; DBP, diastolic blood pressure; NAFLD, non-alcoholic fatty liver disease; ASCVD, atherosclerotic cardiovascular disease; HbA1c, glycated hemoglobin; GFR, glomerular filtration rate; AST, aspartate aminotransferase; ALT, alanine			

aminotransferase; TSH, thyroid stimulating hormone; HDL, high-density lipoprotein; LDL, low-density lipoprotein; TG, triglyceride; FIB-4, fibrosis score-4.

The results are shown as percentages (%), mean ± standard deviation, or median (interquartile range). Significant P values are in bold.

Table 2. Correlation analysis of the presence of NAFLD with various parameters in the study population (n=120).

		Age	Gender	Disease duration	Insulin pump	BMI	HbA1c	Neuropathy	TG
NAFLD	Rho	-0.114	0.041	-0.028	-0.300	0.119	0.399	0.203	0.229
	P	0.214	0.655	0.760	**0.001**	0.196	**<0.001**	**0.026**	**0.012**

NAFLD, non-alcoholic fatty liver disease; BMI, body mass index; HbA1c, glycated hemoglobin; TG, triglyceride.

Significant P values are in bold.

Table 3. Multivariate logistic regression analysis showing independent predictors of the presence of NAFLD.

Risk factor	**Odds Ratio**	**P**
BMI	1.170 (1.013-1.351)	**0.033**
HbA1c	1.969 (1.303-2.975)	**0.001**
Insulin pump	0.202 (0.054-0.749)	**0.017**

BMI, body mass index; HbA1c, glycated hemoglobin.

Only the significant results are shown.

AIR POLLUTION PREDICTION AND PERFORMANCE EVALUATION WITH ARTIFICIAL NEURAL NETWORK ALGORITHM

Kenan ORÇANLI

Beykent University, Faculty of Economics and Administrative Sciences, Department of Managemant Information System, Istanbul, Turkey

ORCID ID: https://orcid.org/0000-0001-5716-4004

Beyza KADIOĞLU

Beykent University, Faculty of Economics and Administrative Sciences, Department of Managemant Information System, Istanbul, Turkey

ORCID ID: https://orcid.org/0009-0005-6128-0397

İrem İLÇİN

Beykent University, Faculty of Economics and Administrative Sciences, Department of Managemant Information System, Istanbul, Turkey

ORCID ID: https://orcid.org/0009-0007-6081-6369

Sude AKSOY

Beykent University, Faculty of Economics and Administrative Sciences, Department of Managemant Information System, Istanbul, Turkey

ORCID ID: https://orcid.org/0009-0003-6319-2142

Beyza BASKIN

Beykent University, Faculty of Economics and Administrative Sciences, Department of Managemant Information System, Istanbul, Turkey

ORCID ID: https://orcid.org/0000-0001-5716-4004

Today, air pollution stands out as one of the most important environmental problems that seriously threaten human health among the many problems faced by humanity. Air pollution has become a global problem and is becoming more complex with the increase in population growth, urbanisation and industrial activities. The adverse effects of this problem have made accurate estimation of air pollution levels a critical need.

In recent years, artificial intelligence and machine learning methods have contributed to the development of more powerful and accurate models for air pollution forecasting. In particular, Artificial Neural Networks (ANN), thanks to its capacity to analyse complex and non-linear relationships, can provide superior results than traditional methods in multifactor systems such as air pollution. This study aims to examine the effectiveness of ANN-based regression models used in air pollution forecasting.

Artificial Neural Networks are an artificial intelligence technology that can learn complex relationships between data by modelling biological neural networks. These models process input data in layers, understand the relationships between output and input, and predict future air pollution levels using this information. In this study, single-layer and multi-layer ANN models are compared and the performance of both models are evaluated.

Single layer ANN models offer a fast training process thanks to their simpler structure and require low computational power. Multilayer ANN models can handle more complex data structures through multiple hidden layers and provide high accuracy. Within the scope of the research, the performance of both models was measured using common performance metrics such as MAE, MSE and R^2.

In conclusion, Artificial Neural Networks are a powerful tool for predicting complex problems such as air pollution. The research shows that multilayer ANN models provide high accuracy but require more computational power and training time. In the future, the integration of explainable artificial intelligence approaches can increase the reliability of these models and enable them to play a more effective role in solving environmental and societal problems.

Key Words: Air Pollution, Artificial Neural Networks (ANN), Data Processing, Regression Model, ANN Models

THE RELATIONSHIP BETWEEN TEACHERS' PERSONALITY TRAITS AND EMOTIONAL LABOR BEHAVIORS

Doğan DEMİRER

Düzce University, Institute of Education, Department of Educational Administration and Supervision, Düzce, Turkey

ORCID ID: https://orcid.org/0009-0001-7418-6798

Süleyman GÖKSOY

Düzce University, Institute of Education, Department of Educational Administration and Supervision, Düzce, Turkey

ORCID ID: https://orcid.org/0000-0002-7151-0863

ABSTRACT

Introduction and Purpose: This study examines the relationship between emotional labor behaviors and personality traits among teachers in Kapaklı, Tekirdağ. Specifically, it investigates the connections between personality trait subdimensions (extraversion, conscientiousness, openness to experience, agreeableness, and emotional stability) and emotional labor subdimensions (surface acting, deep acting, and genuine expression of emotions).

Materials and Methods: Using a correlational research design, the study sampled 215 middle school teachers from a population of 870, selected with a 95% confidence level and a 5% margin of error during the 2024-2025 academic year in Kapaklı, Tekirdağ. The participants completed the 44-item Big Five Personality Inventory and the 13-item Emotional Labor Scale. Pearson correlation analysis was employed to assess linear relationships between the variables.

Results: Surface Acting demonstrated a moderate negative correlation with Agreeableness ($r = -0.341$) and Conscientiousness ($r = -0.432$), indicating that teachers with higher agreeableness and conscientiousness exhibit lower levels of surface acting. Genuine Expression of Emotions exhibited a moderate positive correlation with Extraversion ($r = 0.321$) and weak positive correlations with Agreeableness ($r = 0.251$) and Conscientiousness ($r = 0.203$). These findings suggest that extraverted teachers tend to express their emotions more authentically, while agreeableness and conscientiousness also support genuine emotional expression.

Discussion and Conclusion: This study highlights the crucial role of teachers' personality traits in shaping emotional labor behaviors. The findings suggest that managing emotional labor processes based on teachers' individual personality traits can positively influence their professional performance. Educational administrators should develop policies that address teachers' emotional labor needs while considering their personality differences. While personality traits significantly influence emotional labor behaviors, contextual factors are also believed to play a shaping role.

Key Words: Big Five Personality Traits, Emotional Labor Behaviors, Teachers

HEALTCARE EMERGENCY DEPARTMENT SUCCESS FACTORS EVALUATION WITH DEMATEL METHOD

Assoc. Prof. Tayfun Utaş
İstinye University, Faculty of Economics, Administrative and Social Sciences. MIS
Istanbul, Turkey
ORCID ID: https://orcid.org/0000-0002-8696-3769

Prof Dr. Tarik Ocak
Prof Dr Tarik Ocak, Istinye University Medical Faculty, Department of Emergency Medicine, Istanbul, Turkiye
ORCID ID:https://orcid.org/0000-0003-4721-8616

PhD Ferda Zaman Kaya
Health Sciences University, Hamidiye Faculty of Medicine, Department of Histology and Embryology, Istanbul, Turkey
ORCID ID: https://orcid.org/0000-0002-2998-8669

ABSTRACT

Introduction and Purpose: Emergency services are critical components of healthcare systems, providing essential care to patients experiencing a range of urgent medical conditions at any time of the day or night. The efficiency of these services depends significantly on the management of the departments and the collaboration of various service providers. The objective of this study was to identify and analyze the critical success factors (CSFs) that influence the effectiveness of emergency services, using the DEMATEL (Decision-Making Trial and Evaluation Laboratory) method to assess the interrelationships between these factors.

Materials and Methods: This study was conducted in a private foundation hospital, where seven key factors were identified: K1 (Effective and Fast Patient Admission Process), K2 (Educated and Experienced Personnel), K3 (Communication and Coordination), K4 (Use of Equipment and Technology), K5 (Patient Safety and Satisfaction), K6 (Capacity Management), and K7 (Teamwork). A decision matrix was created based on expert opinions, and the DEMATEL method was employed to evaluate the impact of these factors on each other. The analysis helped determine the relative importance and interdependencies of the identified factors.

Results: The analysis revealed that K2 (Educated and Experienced Personnel) plays a crucial role in the overall performance of emergency services. Furthermore, K3 (Communication and Coordination) and K7 (Teamwork) were found to have strong effects on many of the other factors. K5 (Patient Safety and Satisfaction) was identified as being highly influenced by other factors, highlighting its sensitivity and complexity in the system.

Discussion and Conclusion: The results of this study demonstrate that the training and experience of personnel, effective communication, and teamwork are essential for the optimal functioning of emergency services. Additionally, patient safety is influenced by a variety of interconnected factors, making it one of the most sensitive and critical components in the system. The findings emphasize the importance of managing these factors effectively to enhance the performance and success of emergency services.

Key Words: Emergency Services, Critical Success Factors, DEMATEL Method, Healthcare Management, Patient Safety, Teamwork, Communication and Coordination

RELIABILITY CENTERED MAINTENANCE (RCM) IN HEALTCARE

Assoc. Prof. Tayfun Utaş

İstinye University, Faculty of Economics, Administrative and Social Sciences. MIS

Istanbul, Turkey

ORCID ID: https://orcid.org/0000-0002-8696-3769

PhD Ferda Zaman Kaya

Health Sciences University, Hamidiye Faculty of Medicine, Department of Histology and Embryology, Istanbul, Turkey

ORCID ID: https://orcid.org/0000-0002-2998-8669

ABSTRACT

Introduction and Purpose: Maintenance services are essential to ensure that equipment operates in accordance with manufacturer standards and maintains the desired level of quality. In hospitals, unexpected equipment failures and operational disruptions can be minimized with an appropriate maintenance system. However, inadequate maintenance strategies can increase patient safety risks and lead to higher costs. Research indicates that the healthcare sector predominantly relies on time-based preventive maintenance systems. Nonetheless, the increasing complexity of medical devices has revealed the insufficiency of periodic maintenance practices, necessitating the adoption of proactive measures. This study proposes the implementation of Reliability-Centered Maintenance (RCM) as a predictive approach in healthcare. RCM offers a systematic framework for improving medical asset management, optimizing operations, reducing costs, and ultimately enhancing the health outcomes of patients served by these devices.

Materials and Methods: The study reviews existing literature and practices in healthcare maintenance management, highlighting the limitations of time-based approaches. A systematic exploration of RCM's principles and applications was conducted to outline its potential benefits in the healthcare sector. The study also examines the applicability of RCM in addressing the challenges posed by the complexity of modern medical equipment.

Results: The findings suggest that RCM provides a robust framework for improving the reliability and efficiency of medical equipment. By prioritizing the most critical functions and identifying potential failure modes, RCM enables targeted interventions that enhance operational continuity and patient safety. Furthermore, RCM's emphasis on proactive maintenance strategies has the potential to significantly reduce overall costs while ensuring the optimal performance of healthcare equipment.

Discussion and Conclusion: This study underscores the importance of transitioning from traditional, time-based maintenance approaches to a reliability-centered framework in healthcare. By integrating RCM into medical asset management, healthcare institutions can achieve better operational efficiency, cost savings, and improved patient outcomes. Additionally, the lack of Turkish-language resources on RCM in healthcare highlights the novelty and importance of this study, which aims to fill a critical gap in the literature and raise awareness among researchers and healthcare managers.

Key Words: Maintenance, Medical Equipment, Reliability-Centered Maintenance, Healthcare Management, Proactive Strategies, Patient Safety

IN THE GRIP OF RATIONALITY: THE INVISIBLE STRUCTURAL CORRUPTION OF SOCIAL JUSTICE

Ayhan AKSAKALLI

Bayburt University, Vocational School of Health Services, Opticianry Program, Bayburt, Turkey

ORCID ID: https://orcid.org/0000-0001-6281-5828

ABSTRACT

Rational justice, while based on Enlightenment principles of impartiality and universality, often fails to address the complexity of social inequalities. While rational frameworks promise justice, they reinforce existing power dynamics and social hierarchies. In this article, I critically assess the limits of rational justice, arguing that it contributes to the marginalisation of disadvantaged communities. Judith Butler and Michel Foucault have shown how claims of rational neutrality serve dominant ideologies and deepen inequality. Kimberlé Crenshaw's theory of intersectionality emphasises that rational justice ignores the identities of marginalised individuals. When intersectional identities such as race, gender and class are not taken into account, social justice cannot be achieved. At the same time, Pierre Bourdieu and John Rawls point out that meritocratic ideals legitimise structural inequalities. Meritocracy conceals social power dynamics and presents inequalities as individual failures. Consequently, rethinking justice should build on social context, recognition and the transformation of oppressive systems rather than abstract principles. More inclusive and responsive approaches will enable social injustices to be addressed at the structural and individual level.

Key Words: Equality, Intersectionality, Justice, Rationality, Structural inequality

THE BENEFICIAL EFFECTS OF MASSAGE TECHNIQUES ON DOG BREEDING

Dr. Öğr. Üyesi Yavuzkan PAKSOY

Necmettin Erbakan Üniversitesi, Konya Ereğli Kemal Akman Meslek Yüksekokulu, Bitkisel ve Hayvansal Üretim Bölümü, Konya, Türkiye.

Orcid ID: 0000-0002-0935-7693

ABSTRACT

Applications of physiotherapy have long been a recognized alternative medicine approach among doctors worldwide. The purpose of these applications is to assist with standard care. In recent years, similar therapeutic techniques have also been taught to animal doctors and therapists, who have incorporated them into veterinary practice. Because no chemical medications are employed and quick results can be achieved, its popularity is growing daily. Different massage techniques and styles have led to the development of customized therapies for various issues. It is frequently utilized because of its ability to balance blood pressure, reduce movement restrictions, improve joint and tendon mobility, ease muscular spasms, and, through its calming effects, aid in the elimination of behavioral issues. The most popular, simplest, and least expensive type of physical treatment is manual massage. In both human and animal medicine, a standard manual massage protocol is recognized. Methods including hitting, rubbing, kneading, compression, friction, shaking, and rolling are recommended. For a massage, different oils are preferred. The most popular oils include argan oil, olive oil, baby oil, thyme oil, and clove oil. Painkillers and antispasmodic chemical creams can be used, depending on the condition and the doctor's preference. In certain situations, when carried out by skilled and knowledgeable individuals, it works better than chemical agents. Let's sum up by saying that massage improves animal wellbeing and lessens stress and pain.

Keywords: Physical Therapy, Dog, Massage, Herbal Oils

SYSTEMATIC REVIEW OF POSTGRADUATE THESES ON GENERATIONAL DIFFERENCES IN NURSING

Zeynep ERSAY ÖNAL
Bandirma Onyedi Eylül University, Faculty of Health Scıences, Department of Nursing, Bandırma, Turkey
ORCID ID: https://orcid.org/0000-0000-0000-0000

Ayşe ÇİÇEK KORKMAZ
Bandirma Onyedi Eylül University, Faculty of Health Scıences, Department of Nursing, Bandırma, Turkey
ORCID ID: https://orcid.org/0000-0003-1724-4709

Introduction and Purpose: Increasing generational diversity has had significant effects on elements such as communication, motivation, collaboration, and professional commitment in nursing teams. In today's world where generations X, Y, and Z work together, understanding generational differences is of critical importance in terms of strengthening team harmony and improving the quality of patient care. However, it is seen that studies on generational differences in the field of nursing in Turkey are limited. Therefore, this systematic review aims to examine postgraduate theses on generational differences in nursing in Turkey and to reveal the effects of these differences on the profession.
Method: Within the scope of the research, a search was conducted in the database of the National Thesis Center of the Council of Higher Education (YÖK) with the keywords "generation" "baby boomers", "generation X", "generation Y", "generation Z" in the nursing department. The "thesis evaluation form" prepared by the researchers was used in data collection. Descriptive statistics were used in the evaluation of the data. Theses were examined in terms of thesis type, publication year, purpose, sample group, method, and results.
Findings: 13 theses were identified as a result of the scan. %76,9 of the examined theses were master's theses and %23,1 were doctoral theses. When the distribution of the theses was examined, it was found that %23,2 were about the intention to leave the profession and job, 15.4% were about the examination of organizational and professional commitments and %15,4 were about motivation. In most of the theses, it was stated that the intention to leave the profession of Generation Y was higher than Generation X, that the sources of motivation changed from generation to generation and that the clear definition of tasks was an important factor in team harmony. The prominent findings in the theses showed that Generation Y nurses had lower job satisfaction, weaker organizational commitment compared to Generation X and higher intentions to leave the profession. In addition, it was determined that each generation had different sources of motivation; it was determined that there were significant differences between the task-oriented approach of Generation X nurses and the flexibility and freedom expectations of Generation Y nurses. While %46,1 of theses were about communication and motivation within the team, 38.5% focused on intergenerational collaboration and professional commitment. % 84,6 of theses were translated into publications, and the remaining % 16,4 have not yet been published.
Conclusion: As a result, it was determined that postgraduate theses on intergenerational differences in nursing in Turkey are predominantly descriptive in nature and are usually completed at the master's level. It is recommended that doctoral theses be increased in this field, that qualitative and quantitative methods be used in a balanced manner, and that the findings obtained be integrated into professional practices. In addition, advanced studies are required to address the effects of intergenerational differences on patient care in the nursing profession in more depth.
Key Words: Generation, nurses, gen Z, generation X and Y

ANALYSIS AND PURIFICATION OF LAMINARIN EXTRACTED FROM LAMINARIA: METHODS AND APPLICATIONS

Samia BABA HAMED

Ecole Supérieure en Sciences Biologiques d'Oran (ESSBO)

laboratoire de toxicologie environnement et santé LATES Université des sciences et de la technologie d'Oran Mohamed Boudiaf USTO-MB

ORCID: BABA HAMED Samia: 0000-0002-6742-6001

Amel BERREBBAH ALIOUA

Laboratoire de toxicologie environnement et santé LATES Université des sciences et de la technologie d'Oran Mohamed Boudiaf USTO-MB

ORCID**:** Amel BERREBBAH ALIOUA: 0000-0002-4916-8635

Abstract : Laminaria, a brown algae, is a rich source of polysaccharides such as laminarin, which has bioactive properties. The objective of this study is to extract and characterize laminarin from 5 g of Laminaria using advanced analytical techniques.Materials and Methods:Laminarin extraction was performed from 5 g of Laminaria using an aqueous method at moderate temperature. After extraction, the product was precipitated with ethanol and then freeze-dried. Laminarin characterization was carried out using FTIR (Fourier-transform infrared spectroscopy) to identify functional groups, and NMR (nuclear magnetic resonance) to analyze its chemical structure.Results and Discussion:FTIR results revealed the main functional groups characteristic of laminarin, including hydroxyl and methyl groups. NMR confirmed the polysaccharide structure of laminarin, with peaks corresponding to glucose units linked by β (1→3) bonds. The extraction yielded satisfactory results, and the analyses demonstrated adequate purity of the product. Conclusion:This study demonstrates the effectiveness of laminarin extraction and characterization from Laminaria. The results suggest that the extracted laminarin may have potential applications in the pharmaceutical and cosmetic industries, requiring further research to fully explore its potential.

Keywords : Laminarin, Laminaria, Characterization (FTIR, NMR)

TRENDS IN LEARNING ANALYSES RESEARCHES

Asiye BAKİ CEYLAN

Kocaeli University, Department of Educational Technologies, Master's student, Kocaeli, Türkiye

orcid.org/0009-0004-7217-5018

Arzu DEVECİ TOPAL

Kocaeli University, Faculty of Education, Department of Computer and Instructional Technologies Education, Türkiye

orcid.org/0000-0001-5090-8592

Abstract

Introduction and Objective: Learning analytics (LA) offers new opportunities to increase student achievement by adopting digitalisation and data-driven approaches in education. The aim of this study is to summarise the effects of these tools on educational processes such as academic achievement, student engagement and motivation by reviewing existing research in the field of learning analytics and to provide an evaluation by compiling general findings in this field.

Materials and Methods: In the study, a systematic literature review was used to synthesise the results of different studies. Since the effect of learning analytics on learning was to be analysed in the study, only experimental studies were focused on. In this context, 'Web of Science' database was searched with the keywords 'Learning Analytics', 'Data Analytics', 'Data Mining', 'Educational Data Mining' and 'Experimental' in journals within the scope of SCI and SSCI. As a result of the search, approximately 17 thousand articles were identified. In order to limit this number and to determine the recent trend, it was decided to examine only the years 2023 and 2024. As a result of this limitation, 221 articles were accessed. For this study, 20 articles were randomly selected from the 221 articles. The studies examine the use of machine learning algorithms to predict student achievement and the application of feedback and personalised homework to optimise student performance.

Findings: A significant relationship was found between learning analytics applications and academic achievement, especially the effectiveness of machine learning algorithms in predicting student achievement was emphasised. Feedback and personalised learning processes were found to positively affect achievement by increasing student motivation.

Discussion and Conclusion: The study revealed the importance of learning analytics applications in the process of monitoring student achievement and developing intervention strategies. In this context, it was concluded that learning analytics tools play an important role in increasing academic achievement and early intervention systems are effective in improving student achievement.

Keywords: Learning Analytics, Data Mining in Education, Student Achievement, Academic Achievement Intervention Strategies

EPIGENETIC RESPONSE TO HIGH AND LOW TEMPERATURE STRESSES IN PLANTS

Leyla KURGAN

Iğdır Üniversitesi, Ziraat Fakültesi, Tarımsal Biyoteknoloji Bölümü, Iğdır/Türkiye

ORCID ID: https://orcid.org/0000-0002-2052-6013

Barış EREN

Iğdır Üniversitesi, Ziraat Fakültesi, Tarımsal Biyoteknoloji Bölümü, Iğdır/Türkiye

ORCID ID: https://orcid.org/0000-0002-3852-6476

Adnan AYDIN

Iğdır Üniversitesi, Ziraat Fakültesi, Tarımsal Biyoteknoloji Bölümü, Iğdır/Türkiye

ORCID ID: https://orcid.org/0000-0002-8284-3751

ABSTRACT

Epigenetics refers to mechanisms that enable stable changes in gene expression without alterations in the DNA sequence. These mechanisms play a critical role in regulating genetic interactions with environmental stimuli in plants. These mechanisms include DNA methylation, histone modifications, and non-coding RNAs. DNA methylation contributes to gene silencing and genome stability, while histone modifications regulate gene expression by altering chromatin structure. Non-coding RNAs, particularly microRNAs and small interfering RNAs, mediate gene regulation. Environmental stress factors directly influence these epigenetic mechanisms, enhancing the adaptive capacity of plants. In response to temperature stress, DNA methylation and histone modifications optimize gene regulation during and after stress conditions. Histone H3K4 methylation acts as a key epigenetic marker in the formation of thermal stress memory, while histone acetylation increases the accessibility of gene promoters. Non-coding RNAs play a central role in regulating stress-responsive genes, and RNA-dependent DNA methylation contributes to gene silencing and transposon control. These mechanisms improve plants' ability to adapt to stressful conditions and enhance their resilience to future temperature fluctuations. Epigenetic mechanisms are critical tools for plants to adapt to both high and low temperatures. In this context, further research on epigenetic mechanisms is recommended for developing temperature-stress-tolerant plant varieties. Such an approach supports agricultural sustainability while enhancing agriculture's resilience to changing climatic conditions.

Keywords: Abiotic stress, Epigenetics, Plant

MATHEMATICAL MODELLING AND SENSITIVITY ANALYSIS OF HIV/AIDS TRANSMISSION AMONG HIGH-RISK PRISONERS

O. A. Odebiyi

J. K. Oladejo

Department of Pure and Applied Mathematics, Ladoke Akintola University of Technology, Ogbomoso, Nigeria.

Abstract: HIV/AIDS spread in prisons poses significant global health concerns, necessitating mathematical modelling to inform evidence-based interventions and policy decisions. This study explores HIV/AIDS transmission dynamics within prisons focusing on high-risk populations. A six-compartmental model which consists of Susceptible, Vaccinated-PrEP, Asymptomatic, Symptomatic, Treated and AIDS population is presented. The validity of the solution states affirms that the model is well-defined and holds epidemiological significance. The basic reproduction number (R_0) was also obtained using the next generation matrix. The disease-free and endemic equilibrium states were identified, and their stability is analyzed which shows that if $R_0 < 1$ the disease free equilibrium is locally asymptotically stable and unstable if otherwise. Sensitivity analysis was carried out using normalized forward sensitivity index. The most sensitive parameters are recruitment rate (π), transmission rate (β), and infectivity rate (η) . The outcomes from stability and sensitivity analysis suggest promising prospects for mitigating HIV/AIDS spread within prison populations.

Keywords: Mathematical modelling**,** Sensitivity, HIV/AIDS, Basic Reproduction Number

MEDIA LITERACY, POPULAR CULTURE AND NATIONAL DEVELOPMENT: AN EXPLORATION OF INTERSECTION

Alabi, Folaranmi Oluwole

Faculty of Communication and Media Studies Ajayi Crowther University Oyo, Oyo State, Nigeria

Odu Adejare Samuel

Poly International College The Federal Polytechnic Ilaro, Ogun State, Nigeria

ORCID iD: 0009-0002-3463-3992

It is a common place that culture is influenced and promoted by the media and technology as well as individual creations. Thus, this paper explores the concepts of culture, popular culture which is the culture that appeals or a culture that is easily accepted and digested by the general public. Also, the concept of media literacy was examined in view to establish the fact that it can be a good umpire in the face of rapid production and dissemination of popular culture while both concepts in the long run are building blocks for national development. Popular culture and media literacy are close and intertwined in relation to national development. Strictly speaking, popular culture and media literacy are integral parts of national development. While popular culture provides avenues for international relations, shapes individual and national identity, drives economic growth and fosters innovation; media literacy on the other hand empowers citizens to critically evaluate the media and their contents in a way to contribute to the socio-economic landscape of the nation.

Key Words: Popular culture, Media Literacy, National Development & Intersection

GLOBAL LOGISTICS FACILITIES OF WORLD MARKETS

Volodymyr MESHCHERIAKOV

PhD in Economics, Associate Professor., State Biotechnological University, Faculty of Economic Relations and Finance, Department of Global Economy, Kharkiv, Ukraine

(Responsible author)

ORCID ID: https://orcid.org/0000-0002-4709-5436

Maria KALINICHENKO

Bachelor's degree, State Biotechnological University, Faculty of Economic Relations and Finance, Department of Global Economy, Kharkiv, Ukraine

ABSTRACT

The globalization of economic processes and the integration of world markets have created new challenges for logistics systems. In this context, global logistics has become a key factor in economic development, affecting the competitiveness of national economies.

The work carries out a comprehensive study of global logistics objects as key elements of modern international economic processes. It is determined that global logistics ensures the effective movement of material, information and financial flows within the globalized space, playing an important role in ensuring the functioning of world markets. The classification of global logistics objects is substantiated, which includes material components (vehicles, warehouses, infrastructure nodes), intangible elements (logistics networks, information systems) and infrastructure objects (seaports, airports, railway terminals). The theoretical principles of the formation and functioning of global logistics objects are revealed, including the integration of local logistics systems into global networks and the standardization of processes in accordance with international standards; a detailed analysis of transport systems, which are fundamental objects of global logistics, in particular sea, air, rail and road transport, is carried out. The role of logistics hubs and warehouses as nodal points for managing goods flows is separately considered. The importance of environmental sustainability of global logistics facilities is emphasized, in particular, the implementation of energy-efficient solutions, reducing the carbon footprint; the main challenges facing global logistics facilities are identified; the prospects for the development of global logistics facilities are substantiated through the implementation of autonomous vehicles, automated warehouses, innovative transport solutions and digital platforms.

Recommendations are proposed for improving the efficiency of global logistics facilities. The results of the study are of theoretical and practical importance for specialists in the field of logistics, transport and international economics. The work can serve as a basis for further research in the field of global logistics and strategic management of logistics systems.

Keywords: Logistics, Globalization, Economic Processes, Hubs, Trends, Iinformation System.

ECOTOXIC EFFECT OF ACTIVE COMPOUNDS FROM BIODEGRADATION OF PLASTIC FILMS WITH SOIL MICROORGANISM

Mohanapriya. P

Research Scholar, Department of Biotechnology, St. Joseph's College of Engineering, Sholinganallur, Chennai- 600119, India.

Chamundeeswari. M

Associate Professor, Department of Biotechnology, St. Joseph's College of Engineering, Sholinganallur, Chennai- 600119, India.

ABSTRACT

In recent decades, the usage of plastic/ polymers is severe and thrown as wastes into the surroundings cause threaten to lives on earth through food chain. Plastics made from petroleum byproducts like polyethylene, polystyrene, poly vinyl chloride and propylene on its degradation produce toxic substances like Bisphenol A hazardous to nature. The biodegradation of polymers not be quite effective in case of certain high chemical deposition toxic to microorganism. Researches on nanomaterials towards the biodegradation activity of microbes get enhanced owing to its physiochemical characteristics. The nanoparticles get adsorbed by microbes in the form of trace micronutrients for its survival as well as to metabolize the various compounds through enzymatic machinery. In this research study, plastic films were biodegraded using soil microorganism from agriculture field with metallic nanoparticles prepared by co-precipitation method as degradation enhancers. The treated films were characterized using FTIR and SEM. GCMS spectral analysis carried out to determine for its active compounds. Further the toxic effects of metabolite were studied with Allium cepa plant model. We achieved 80 % efficiency of plastic film degradation in 60 days of treatment with isolated strain optimized cell concentration of 0.25µL/mL and pH 7. Experimental plant model found to be non toxic with cell division on supplied with metabolites. The study could be evident for beneficial impact of nanoparticles on microorganism to improve the plastic film degradation will be valuable.

Key words: Nanoparticles, Biodegradation, Soil microorganism, Metabolites, Allium cepa

DESIGN AND EVALUATION OF SELECTIVE SURVIVIN INHIBITORS: A STUDY BASED ON MX-106

Aloui Mourad

LIMAS Laboratory, Faculty of Sciences Dhar El Mahraz, Sidi Mohamed Ben Abdellah University, Fez, Morocco

Fahsi Karim

Heterocyclic Organic Chemistry Laboratory, Faculty of Sciences Rabat, Mohammed V University, Rabat, Morocco.

Menana Elhalaoui

LIMAS Laboratory, Faculty of Sciences Dhar El Mahraz, Sidi Mohamed Ben Abdellah University, Fez, Morocco

Abstract:

Survivin (BIRC5), a tightly regulated gene in tumor cells, is a validated cancer biomarker and a promising target for anticancer therapies. This study focuses on designing and evaluating novel selective survivin inhibitors inspired by the lead compound MX-106, which features a hydroxyquinoline framework.

Using in silico techniques, 31 hydroxyquinoline derivatives of MX-106 were analyzed, leading to the identification of nine promising compounds with enhanced predicted inhibitory potential. In vitro assays confirmed their effectiveness in inhibiting the proliferation of MDA-MB-435 breast cancer cells, while also demonstrating improved metabolic stability compared to the most active molecule in the test set.

The computational approach employed included 2D-QSAR methods (MLR, MNR, and ANN), molecular docking, molecular dynamics simulations, and ADMET predictions. Molecular docking highlighted the stability of compound C24, revealing multiple hydrogen bonds with key residues. A 100-nanosecond molecular dynamics simulation further validated its sustained stability.

Based on these molecular modeling insights, nine new compounds (Pred1-Pred9) were designed and predicted to exhibit strong survivin inhibitory activity according to MLR models. The study recommends a thorough evaluation of the ADMET properties of these novel compounds, which hold significant potential as innovative anticancer agents targeting survivin inhibition, similar to MX-106.

This work offers promising perspectives for the development of targeted therapies against survivin-dependent cancers.

Keywords: QSAR, Tumor Cells, Molecular Docking Simulations, Molecular Dynamics Simulations, ADMET Predictions, Selective Survivin (BIRC5) Inhibitors, Anticancer Agents, Hydroxyquinoline Derivatives, MX-106 Scaffold.

AI-BASED HEALTH APPLICATION USED IN TÜRKİYE: USABILITY ANALYSIS

Muhammed Akif HAŞLAK

Ankara Yıldırım Beyazıt University, Faculty of Business, Department of Management Information Systems, Ankara, Türkiye[1]

ORCID ID: https://orcid.org/0009-0005-0063-1421

Ömür AKDEMİR

Ankara Yıldırım Beyazıt University, Faculty of Business, Department of Management Information Systems, Ankara, Türkiye

ORCID ID: https://orcid.org/0000-0002-6631-1843

ABSTRACT

Introduction and Purpose: In today's world, influenced by the COVID-19 pandemic, significant advancements have been made in digitalization and the exploration of new technologies, with artificial intelligence (AI) playing a pivotal role. AI projects are typically high-cost and time-intensive to develop, making sustainability a critical factor. The sustainability of systems involving AI is closely tied to their user interface usability. If a system's interface lacks usability, it will gradually be abandoned by users. This study aims to investigate the usability of the AI based application "Neyim Var? (What is wrong with me?)" utilized by the Turkish Ministry of Health.

Materials and Methods: In this study, a mixed research method was used. The sample consisted of university students aged 18-25 studying in Ankara, with a total of 92 participants performing user-based tests. Participants were categorized into two groups based on task completion times as "fast" and "slow," and their attitudes towards artificial intelligence (AI) as "positive" and "negative." The study also determines whether a significant difference exists between these groups in terms of efficiency. Task completion rates were analyzed, and participant responses to the System Usability Scale were evaluated to assess satisfaction with the interface.

Results: The participants completed all the tasks, which shows that the application is at a sufficient level in terms of interface effectiveness. It was determined that the interface usability of the application was acceptable. However, users expressed a need for improved efficiency for switching duration from e-nabız (e-pulse) application to the "Neyim Var? (What is wrong with me?)" application.

Discussion and Conclusion: The study found that the usability of the AI-based health application used in Türkiye is acceptable. Except for one specific screen, there were no factors negatively affecting efficiency. Further research should concentrate on improving the efficiency of the application for screen switch duration.

Key Words: Artificial Intelligence; Human Computer Interaction, Usability

MINIMIZING TOTAL SETUP TIME USING THE TABU SEARCH ALGORITHM IN BOTTLENECK MACHINES

Muhammet AYDIN

Sakarya University, Faculty of Engineering Sciences, Department of Industrial Engineering, Industrial Engineering MSc Program, Sakarya, Turkey

ORCID ID: https://orcid.org/0000-0002-6534-1215

Halil İbrahim Demir

Sakarya University, Faculty of Engineering, Department of Industrial Engineering, Industrial Engineering, Sakarya, Turkey

ORCID ID: https://orcid.org/ 0000-0003-1949-9676

ABSTRACT

Enhancing productivity and reducing costs are paramount strategic objectives for manufacturing enterprises. Within this scope, the optimization of setup times in production processes represents a critical avenue for efficiency improvement. This study investigates the optimization of setup times in a bottleneck machine within a tire manufacturing facility. In the current operational setup, production sequences are determined chronologically, disregarding setup time considerations, which results in inefficiencies and increased costs.

To address this issue, this research employs the Tabu Search algorithm, a metaheuristic optimization technique recognized for its efficacy in solving complex and large-scale problems. The algorithm leverages a dynamic "tabu list" to prevent revisiting previously explored solutions, enabling comprehensive exploration of the solution space and incremental improvement of outcomes.

In this study, setup times for each product transition were calculated, and alternative production sequences were generated using the Tabu Search algorithm. The optimized sequence demonstrated a 10.71% reduction in total setup time compared to the existing production arrangement. This improvement translates into a significant enhancement in production efficiency and cost-effectiveness.

This research highlights the potential of integrating metaheuristic methods like the Tabu Search algorithm into production planning to achieve strategic efficiency goals. It also serves as an exemplary model for the application of advanced optimization techniques in manufacturing processes.

Key Words: Optimization, Tabu Search Algorithm, Metaheuristic Methods, Setup Time Optimization

THE DIRECT REACTION INVESTIGATION OF ^{27}Al(d, p)^{28}Al TRANSFER REACTION

Ali İhsan KILIÇ

The University of Eskişehir Osmangazi University, Faculty of Science, Department of Physics, Eskişehir, Türkiye

Research Institute for Fundamental Sciences. Tübitak Bilgem, Gebze/Kocaeli, Türkiye

ORCID ID: https://orcid.org/0000-0003-2762-3913

Mustafa DESTİCİOĞLU[1]

The University of Eskişehir Osmangazi University, Faculty of Science, Department of Physics, Eskişehir, Türkiye

ORCID ID: https://orcid.org/0009-0004-1689-7489

ABSTRACT

Introduction and Purpose: In this study, we have investigated the ^{27}Al(d, p)^{28}Al transfer reaction, which plays a crucial role in interpreting astronomical observations of gamma-ray lines associated with ^{27}Al(d, p)^{28}Al in astrophysical environments. Understanding this reaction is also essential for probing the nuclear processes occurring in stellar interiors, as it provides insight into one-neutron transfer dynamics.

Materials and Methods The ^{27}Al(d, p)^{28}Al reaction was analyzed using a deuteron beam energy of 25 MeV. The analysis employed the Distorted Wave Born Approximation (DWBA), a theoretical framework commonly used to describe nuclear transfer reactions. DWBA simplifies the complex many-body problem of nuclear reactions by treating the interaction between the nuclei in terms of distorted waves, which account for the influence of the nuclear potential on the incoming and outgoing particles. This approach enables the calculation of key reaction observables, such as angular distributions and spectroscopic factors. In order to achieve this, the FRESCO and DWUCK-5 reaction codes were utilized. Spectroscopic factors corresponding to the energy levels of ^{27}Al(d, p)^{28}Al were extracted and compared with theoretical predictions from shell model calculations. Moreover, wave functions associated with the energy levels of ^{27}Al(d, p)^{28}Al were computed, incorporating entrance and exit channel optical potentials.

Results: This work offers a comprehensive analysis of ^{27}Al(d, p)^{28}Al reaction, contributing to the broader understanding of neutron transfer reactions in astrophysical and nuclear environments. Therefore, from an astrophysical perspective, the findings contribute to a deeper understanding of nuclear processes that govern element formation in not only stars but also understanding of supernova explosion mechanism by elucidating the mechanisms of the ^{27}Al(d, p)^{28}Al reaction,

Key Words: Nuclear Reactions, Nuclear Physics, Astrophysics, Transfer Reactions.

ADVANCING CANCER TREATMENT WITH NUCLEAR NANOMEDICINE AND NANOPARTICLES

Basim A. Almayahi

Department of Physics, Faculty of Science, University of Kufa, Najaf, Iraq

Baneen Abdulkadhim Kamel

Department of Physics, Faculty of Science, Universiti Malaya, 50603 Kuala Lumpur, Malaysia

Faculty of Science, University of Kufa, Najaf, Iraq

Significant progress has been made in cancer treatment, yet the need for more precise and effective therapies persists. Nuclear nanomedicine and nanoparticles offer innovative solutions for enhancing cancer diagnosis and treatment. Due to their unique attributes, nanoparticles can target cancer cells selectively and deliver therapeutic agents directly to the tumor site. Integrating nuclear medicine with nanoparticles enables advanced approaches, such as using radioactive nanoparticles for localized radiation therapy or employing nanoparticles as carriers for imaging and therapeutic isotopes. While these methods show great promise, challenges like regulatory compliance and minimizing toxicity to healthy tissues must be addressed to ensure safe clinical application. This work explores the use of radioactive nanoparticles and functionalized nanocarriers for cancer therapy, focusing on their potential applications in drug delivery and theranostics. Ongoing research and development in this field could pave the way for highly targeted and effective cancer treatments, ultimately improving patient outcomes.

Keywords: Cancer treatment, nuclear nanomedicine, nanoparticles, radiation therapy, diagnostic imaging, drug delivery

MECHANICAL AND ABSORPTION PROPERTIES OF COMPOSITES BASED ON MODIFIED POLYSULFONE REINFORCED WITH CARBON NANOTUBES

Dr. Simona Luminita NICA

"Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania

ORCID ID: 0000-0002-7498-807X

Dr. Constantin GAINA

"Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania

ORCID ID: 0000-0002-4558-7461

Abstract

The development of innovative nanocomposite materials to be applied in different surface related domains knew a tremendous progress in the past decades. Considering the above premises, this study investigates the preparation and characterization of some composites containing a new modified polysulfone matrix reinforced with varying amount of modified carbon nanotubes (MWCNTs) from 0.5% to 5% by weight. The filler material was selected due to its exceptional mechanical and dielectric properties. A better dispersion of the MWCNTs into the polymer matrix imposes modification of their surface with hydroxyl functional groups (OH). The dispersion of the filler was studied by scanning electronic microscopy (SEM). The samples indicated a good homogeneity. Considering these aspects the surface features of the samples were also investigated. The wettability analyses were performed to understand the hydrophilic/hydrophobic nature of the materials and also their surface tension. The water sorption behaviors of the composites were also evaluated showing a type-IV shape for all studied materials according to IUPAC classification.

Next, the mechanical tests of the materials in terms of tensile properties such as tensile strength (σ_b), elongation at break (ε_b) and Young's modulus (E) were analyzed. The results showed an enhancement of the Young's modulus after reinforcing the polymer matrix with MWCNTs fillers.

Such materials are of great interest for water purification and/or blood-contacting materials.

Keywords: polymer composite, carbon-based filler, SEM analysis, surface analysis, mechanical analysis

SYNTHESIS OF THIOUREA AND THIAZOLE STRUCTURED COMPOUNDS CONTAINING SULFAMETHAZINE

Nurcan BERBER

Department of Pharmacy Services, Vocational School of Health Services, Çanakkale 18 Mart University, Çanakkale, Turkey

ORCID ID: https://orcid.org/0000-0002-1595-585X

ABSTRACT

Introduction and Purpose: The incidence of dangerous bacteria resistant to antibiotics has been increasing over the last few decades. This increase has caused antibiotic derivatives to become ineffective against diseases and has rendered many antibiotics ineffective in treatments. In this study, it was planned to synthesize, purify and elucidate the molecular structures of new sulfamethazine derivative active pharmaceutical ingredients.

Materials and Methods: A mixture of 1 mmol Sülfamethazine and thioisocyanate derivatives refluxed at 70°C for 24 hours in THF (7 mL). After completion of the reaction, the mixture was cooled to room temperature and then poured on cold water (50 mL). The product was filtered, washed with water, and dried. Then, thiazole structures were obtained by reacting the obtained thiourea structures with acetophenones in EtOH/DMF. After completion of the reaction, the mixture was cooled to room temperature and then poured on cold water. The product sulfamethazine derivative was filtered and dried.

Results: The structures of the compounds were deduced from their IR, ^{1}H NMR and ^{13}C NMR. In the IR spectra of compounds thiazole rings displayed characteristic absorption bands at around 3288, 2970, 1600, 1346 and 1217 cm^{-1} regions, confirming the presence of -NH, ═C–H, C═N, C═C, SO^{2}, respectively. The ^{1}H NMR spectra of all the compounds showed that the ═CH proton peaks on aromatic ring come between 8.40 and 6.58 ppm. In the ^{1}H NMR spectrum, the protons of methyl of the pyrimidine ring appeared at around 2.20 ppm. Also, the methyl protons from the thioisocyanate appeared at 2.31-2.28 ppm. In the ^{13}C NMR spectra, the -N=C- and -C=C- atom in the thiazole ring were seen at about 160 ppm and 102.50 ppm. Also, the methyl carbon atoms appeared at around 22.00 ppm. All spectra dates support the structure of the synthesized compounds. (This work was supported by Çanakkale Onsekiz Mart University The Scientific Research Coordination Unit, Project number: FHD-2021-3544)

Key Words: Sülfamethazine Derivatives; Thioisocyanete, Acetophenone, Thiazol Ring

TEACHING CELLULAR RESPIRATION: IMPACT OF GROUP-INVESTIGATIVE AND HEURISTIC-DISCOVERY STRATEGIES ON STUDENTS' RETENTION IN KATSINA STATE, NIGERIA

Ahmed Tijjani Dikko

Department of Education, Yusuf Bala Usman College of Education and Legal Studies, Daura, Katsina State, Nigeria.

Abdulmalik Sabitu

Department of Science Education, Federal University, Dutsin-Ma, Katsina State, Nigeria.

Sukola Ibrahim Tambaya

Department of Science Education, Federal University, Dutsin-Ma, Katsina State, Nigeria.

Abstract

Teaching methods significantly influence students' understanding and retention in science, particularly in complex topics like cellular respiration. However, the traditional lecture-based methods commonly used often fail to actively engage students or enhance their comprehension of such concepts. This study investigated the effects of Group-Investigative and Heuristic-Discovery Strategies (GIS and HDS, respectively) on secondary school students' retention in cellular respiration in Katsina State, Nigeria. Two specific objectives with corresponding research questions and hypotheses guided the study. The quasi experimental design was employed. A sample of 165 Senior Secondary II (SSII) students was selected from a population of 4525 students. The instrument used was Cellular Respiration Achievement Test (CRAT), which was validated by three experts with a reliability coefficient of r=0.816. The research questions were answered using mean and standard deviation while the hypotheses were tested using ANCOVA at a $P \leq 0.05$. The findings revealed that students taught using GIS performed better than HDS, while students taught with HDS achieved significantly higher scores in retention than those taught using the lecture method (LM). However, there were no significant differences in retention of male and female students in cellular respiration concepts when taught using the three strategies. The study concludes that GIS is the most effective strategy for improving students' retention in cellular respiration and therefore recommended for its adoption by biology teachers.

Keywords: Cellular Respiration; Group-Investigative Strategy; Heuristic-Discovery Strategy; Lecture Method; Retention.

OPTIMIZATION OF LAST-MILE DELIVERY IN E-COMMERCE

Ms. NilanjanaBhunia

IBCS,SOA UNIVERSITY, Bhubaneswar, India

Mr. SushovanKhatua

Maulana Abul Kalam Azad University of Technology, India

ABSTRACT

The rapid expansion of e-commerce has made last-mile delivery a critical focus area in supply chain management, given its significant impact on operational costs, delivery speed, and customer satisfaction. The final leg of delivery is fraught with challenges such as high costs, inefficiencies, urban congestion, and environmental concerns. This study investigates innovative strategies for optimizing last-mile delivery, leveraging emerging technologies and sustainable practices to address these challenges. Key approaches include adopting advanced technologies like artificial intelligence for predictive demand planning, route optimization algorithms, and using autonomous vehicles and drones to enhance delivery efficiency. Emerging models such as crowd sourced delivery networks, urban micro-fulfillment centers, and locker systems are explored as solutions to reduce costs and improve accessibility.

Sustainability is a central theme, emphasizing green transportation options, optimized delivery routes, and eco-friendly packaging to minimize environmental impact. The research integrates case studies, simulation models, and real-world data from leading e-commerce platforms to identify best practices and scalable solutions. Findings indicate that integrating technological innovations with sustainable operations can significantly reduce costs while maintaining high service levels. This study offers actionable insights for e-commerce companies aiming to build a resilient, customer-centric last-mile delivery ecosystem that meets the demands of the modern digital economy while addressing environmental and urbanization challenges. These insights contribute to the broader discourse on enhancing supply chain sustainability and efficiency in the e-commerce sector.

Keywords: Supply chain management, Sustainability, optimization.

A SOCIOLOGICAL EVALUATION ON İZMİR GÜNDOĞDU SQUARE

Orhan YILDIRIM

Arş. Gör., Antalya Belek Üniversitesi, İnsani Bilimler Fakültesi, Sosyoloji Bölümü, Antalya, Türkiye.

ORCID ID: 0000-0002-2401-1316

Ahmet USANMAZ

Dr. Öğr. Üyesi, Ağrı İbrahim Çeçen Üniversitesi, Sosyal Hizmetler Yüksekokulu, Sosyal Hizmet, Ağrı, Türkiye.

ORCID ID: 0000-0001-9498-1521

ABSTRACT

Today, people's sharing of pictures and videos on social media platforms, which emerged with the development of technology, has led to a blurring of the boundaries between private and public space. This is because debates on whether social media is private or public have emerged. In fact, the history of public sphere debates is quite old. Jurgen Habermas sees the public sphere as a place centered on communication and discourse where all differences express themselves freely. Hannah Arendt argues that in the Ancient Greek period, all citizens expressed themselves equally and freely in discussions in the agora, but with the modern period, the public sphere has been replaced by the social sphere where freedoms are restricted and people are afraid to express their opinions openly. Richard Sennett, on the other hand, stated that the public sphere emerged in the 18th century, where individuals socialized and were informed, but with the 19th century, the public sphere lost its function and assumed a different function. The aim of this study is to discuss the political identity and social position of Gündoğdu Square, a social space in Izmir, in the context of Habermas, Arendt and Sennet's views of public space. The study tries to answer the question of whether Gündoğdu Square is a public space as defined by Habermas, Arendt and Sennet. The square is seen both as a place where different parties hold rallies and demonstrations and as a place of consumption and entertainment thanks to the activities such as hotels, cafes, food restaurants, bars, entertainment venues, playgrounds for children, bicycle and jogging paths. The study reveals that Gündoğdu Square is a place of consumption and entertainment rather than a free and equal space where people express themselves, as philosophers have argued.

Keywords: Gundogdu Square, Public Space, Izmir

CO-COBALANSING NUMBERS AND DIOPHANTINE EQUATIONS

Berat ŞAHİN GÜL

Gaziantep Türkiye Odalar ve Borsalar Birliği Anadolu İmam Hatip Lisesi

ÖĞRETMEN

ORCID NO: 0009-0004-3685-8532

Dr: Öğr. Üyesi Nurbige TURAN ZABUN

ORCID NO: 0000-0002-6187-1614

ABSTRACT

Behera and Panda defined balancing numbers n as solutions of the Diophantine equation

$$1 + 2 + 3 + \cdots + (n - 1) = (n + 1) + (n + 2) + \cdots + (n + r),$$

calling r the balancer corresponding to n. In this study, recurrence relations, generating function and Binet formulas of balancing numbers were given. Also, a connection between balancing numbers and the Pythagorean triplets was also established. This work has inspired many mathematicians. Afterwards, some special numbers such as cobalancing, almost balancing and co-cobalancing numbers were also defined. And the connections of these numbers with balancing numbers were examined. In addition, it was seen that these numbers were solutions to some Pell and Diophantine equations.

Definition of co-cobalancing number were made by Pakapongpun and Chattae. They gave recurrence relations for co-cobalancing numbers and some results on co-cobalancing numbers by using Binet's formula. In this study, we will give information in the literature about co-cobalancing numbers. In this context, generator function and Binet formulas will be mentioned. Some interesting relations obtained by using Binet formulas of co-cobalancing numbers will be given. In addition, the relationship between co-cobalancing numbers and balancing numbers will be examined. An application of co-cobalancing numbers that can be written as a solution of a Diophantine equation will be given.

Key Words: Co-cobalancing numbers, co-cobalancing numbers, Diophantine equations.

IMPACT OF SUGARCANE BAGASSE ASH INCORPORATION IN BRAKE PAD MATRIX ON THE COEFFICIENT OF FRICTION

Assoc.Prof.Dr. Ali Can YILMAZ

Cukurova University, Dept. of Motor Vehicles and Transportation Technologies

Adana, Türkiye

ORCID NO: 0000-0001-9832-9880

Dr. Özlem ERDEM

Cukurova University, Dept. of Textile Technologies, Adana, Türkiye

ORCID NO: 0000-0002-0976-2162

ABSTRACT

The aim of this study is to investigate the effect of adding sugarcane pulp ash to the standard brake pad matrix on the friction coefficient between the pad and disc. Ash was added in different weight ratios of 10%, 15% and 20% by reducing the amount of phenolic resin. A pin-disc tribotester was used to measure the coefficient of friction (θ) and specific wear rate (η) values between the brake pad samples and the rotating cast iron disc. According to the findings, as the concentration of ash in the matrix increased, both density and hardness values of the samples also increased and it was determined that matrix with 15% ash was the most optimal sample among others in terms of density, hardness and tribology. It was observed that all three pad samples exhibited superior tribological performance compared to the original sample. Therefore, it was concluded that sugarcane pulp ash is suitable additive for brake pad components. These substances reduce production costs, extend product life and enable the utilization of waste pulp material. Promising results obtained from experimental studies show that this study has the potential to be a good guide for the production of highly efficient and low-cost brake pads by using agricultural and industrial wastes.

THE EFFECT OF DIFFERENT FUELS ON HEAT TRANSFER FROM THE COMBUSTION CHAMBER OF A SPARK-IGNITION ENGINE

Assoc.Prof.Dr. Ali Can YILMAZ

Cukurova University, Dept. of Motor Vehicles and Transportation Technologies

Adana, Türkiye

ORCID NO: 0000-0001-9832-9880

Dr. Özlem ERDEM

Cukurova University, Dept. of Textile Technologies, Adana, Türkiye

ORCID NO: 0000-0002-0976-2162

ABSTRACT

This study aims to examine the heat transfer behavior from the combustion chamber to the cooling water of a spark ignition engine using pure gasoline (E0) and 50 vol.% gasoline-bioethanol mixture (E50) and compare it for the two fuel types. Hohenberg correlation was used to evaluate the convective heat transfer coefficient. A data logger was used to obtain the necessary parameters (in-cylinder temperature and pressure) from the test engine. Heat transfer coefficient was calculated with the data obtained under certain engine operating conditions with two different fuel types and its change with crank angle was examined. The results showed that with the addition of bioethanol to gasoline, convective heat transfer increased in the early stages of combustion, and heat transfer decreased as the combustion phase approached its completion. It was concluded that, thanks to the high octane number of bioethanol compared to gasoline, heat transfer was increased by approximately 33% when using E50 compared to the E0 fuel mode and increased thermal efficiency in the early stages of the work cycle.

Keywords: Convective Heat Transfer, Hohenberg, Bioethanol

EVALUATION OF SUSTAINABLE AGRICULTURE in TÜRKİYE

Selin Muzak

Yüksek Lisans Öğrencisi, Bursa Uludağ Üniversitesi Ziraat Fakültesi Tarım Ekonomisi Bölümü,

Şule Turhan

Prof. Dr., Bursa Uludağ Üniversitesi Ziraat Fakültesi Tarım Ekonomisi Bölümü, sbudak@uludag.edu.tr

ABSTRACT

Sustainable agricultural practices in the world are a production method in which synthetic agricultural inputs are reduced and agricultural technologies are used in order to ensure food safety and quality. With the rise of sustaniable agrıculture, the concept of organic and ecological farming have also been introduced into our lives. The concept of sustainability was first included as a term in the 2nd article of the Stockholm Declaration, which was held with the participation of 113 countries in 1972. Intensive input production has begun in agriculture in order to meet the increasing food supply with the increase in the world's population. The use of intensive chemical inputs has led to various environmental problems over time. The long-term effects of environmental problems are global in nature, and this situation brings with it social and economic problems. Sustainable agriculture, which explains the existence of the relationship between agriculture, nature and humans, necessitates the management of natural resources in a way that will also benefit future generations. Turkey is a very important country in terms of the agricultural sector and faces some difficulties in terms of sustainable agriculture. However, various steps are being taken in this area and important studies are being carried out both in the state and private sectors. The studies contucted have supported sustaniable agrıculture and paved the way for these activites. The agrıcultural sector provides the raw materials for our fundamental human need: nutrition. However, production methods that heavily rely on agricultural inputs pose various global challenges to both our world and country. It is precisely at this point that the importance of sustainable agriculture becomes evident. In this study, the subject will be addressed from the perspective of Turkey and the developments awaiting the agricultural sector in the future will be examined.

Keywords: Sustainability, Sustainable agriculture, Conventional agriculture,

THE ROLE of WOMEN'S COOPERATIVES in AGRICULTURE

Selin Muzak

Yüksek Lisans Öğrencisi, Bursa Uludağ Üniversitesi Ziraat Fakültesi Tarım Ekonomisi Bölümü,

Şule Turhan

Prof. Dr., Bursa Uludağ Üniversitesi Ziraat Fakültesi Tarım Ekonomisi Bölümü,

ABSTRACT

There is no accepted definition of women's cooperatives in the literature. However, cooperatives established by women and in which the production, processing and marketing stages are carried out by women are defined as women's cooperatives. The contributions of women in the agricultural sector in Turkey and around the world play a major role in economic and social development. Women's cooperatives are an important tool for increasing women's potential in agriculture, providing them with economic independence and supporting gender equality. The number of women's cooperatives in Turkey has increased rapidly in recent years. Especially women living in rural areas participate in agricultural production and marketing activities through cooperatives and contribute to the family economy. Supporting women's cooperatives will contribute to the development of not only women but also all segments of society. It will also contribute to the establishment of a more just and egalitarian structure in agriculture. Ensuring employment for the local population through women’s cooperatives has played a significant role in preventing rual to urban migration,which is critical for the economic development of countries. Therefore, sufficient support from the sustainability of these cooperatives. In Turkey, women wake up nearly half of the population. Ensuring the employment of women who join the active workforce through cooperatives has strategic importance for our developing economy. Additionally, we can mention several significant impacts of these cooperatives, such as preserving agricultural biodiversity, revitalizing local gastronomy and boosting rural tourism. In this study, women's cooperatives engaged in agricultural production, their aims, grants and supports in women's cooperatives and the current situation in Turkey will be evaluated.

Keywords: Women's cooperatives, agriculture, Turkey

DEVELOPMENT OF SOFT CANDY FORMULATIONS ENRICHED WITH FUNCTIONAL INGREDIENTS AND COMPARISON WITH MARKET PRODUCTS

Nazan ÇAĞLAR

Gaziantep University, Faculty of Engineering, Department of Food Engineering, Gaziantep, Türkiye.

ORCID ID: https://orcid.org/0000-0001-8056-7565

Dr.Öğr.Üyesi Şakir Selçuk SEÇİLMİŞ

Gaziantep University, Vocational School of Naci Topcuoglu, Department of Food Processing, Gaziantep, Türkiye

ORCID ID: https://orcid.org/0000-0003-3415-7420

Mehmet ÇAĞLAR

Şölen Chocolate Food Industry and Trade Inc. Gaziantep,Türkiye

ABSTRACT

Confectionery is a very wide range of products consumed by different age groups. However, since excessive consumption of confectionery causes nutritional imbalance and some health problems, there is an increasing tendency to produce functional confectionery as an alternative. Therefore, this study aimed to develop a recipe for soft candy enriched with functional ingredients and compare it with commercial soft candy. The physico-chemical properties of soft candies prepared with pistachios, pectin and gelatin were analyzed by Fourier transform infrared (FT-IR) and analytical methods. Structural properties of the confectionery products were determined by texture profile analysis (TPA). FT-IR analysis showed that gelatin, pectin and commercial soft sugars contain O-H, aliphatic C-H, C=O, N-H and C-N groups. The presence of alcohols, esters, amide, hydroxyl and carboxyl groups indicate the presence of functional components. Brix and water activity values of pectin soft candy were found to be higher than gelatin and commercial products. According to the results of Texture Profile Analysis (TPA), hardness and stickiness parameters were statistically different. The hardness and stickiness values of soft candy with pectin were higher than those of gelatin and commercial products. The results obtained in the study show that the use of different gel agents in soft candy can be used to produce an alternative confectionery product with functional properties.

Keywords: Confectionery, Antep pistachio, gelatin, texture, pectin, functional food

NEW TREND IN THE BEVERAGE INDUSTRY: FUNCTIONAL DRINKS

Özgür Devrim ABLAY

DIMES Food Ind. & Inc., İzmir, Turkey

ORCID ID: 0000-0001-8411-4598

ABSTRACT

Nowadays, products called ‘functional beverages’, which have beneficial properties in terms of health, have become increasingly popular. Research and studies on this subject are continuing continuously. In this context, the beverage industry focuses on developing products with high antioxidant content or natural ingredients enriched with beneficial components.

Functional beverages go beyond basic nutritional needs and aim to improve consumers' physical health processes, reduce disease risks and support overall health. These beverages exhibit positive effects on health with bioactive ingredients such as probiotics, prebiotics, antioxidants, polyphenols, vitamins, minerals and plant extracts.

For example, probiotic beverages containing Lactobacillus and Bifidobacterium species have been proven in many scientific studies to support digestive health and strengthen immune functions by balancing the intestinal microbiota. Similarly, phenolic compounds such as green tea and grape seed extracts help to reduce oxidative stress by neutralising free radicals thanks to their powerful antioxidant properties.

Fruit juices are recommended as an ideal carrier medium for functional health ingredients because they naturally contain beneficial nutrients, have flavour profiles that appeal to all age groups and are perceived as a healthy and refreshing option.

One of the most critical issues in the development of functional beverages is to maintain the physicochemical stability and bioavailability of bioactive components. In this direction, microencapsulation, nanoemulsion and liposome technologies are widely used to improve the stability of these components both under storage conditions and in harsh environments such as the digestive tract. Furthermore, optimising the sensory properties of beverages is of great importance for consumer acceptance. In particular, masking undesirable flavours such as bitterness, ensuring parameters such as homogeneity and colour stability are important factors considered in the commercialisation process of the product.

In general, functional beverages are an innovative and rapidly developing field of study in the field of food engineering. The aim of this study is to summarise examples of functional beverages in the beverage industry.

Keywords: functional beverages, probiotics, prebiotics

INVESTIGATION OF THE SPECIFIC CAPACITANCE OF ZNO ELECTRODE PRODUCED BY HYDROTHERMAL METHOD

Özlem DİKTAŞ

Marmara University, Faculty of Science, Institute of Natural and Applied Sciences, Department of Physical Chemistry, Istanbul, Turkey

ORCID ID: https://orcid.org/0009-0006-1677-1696

Hasan KILIÇ

Marmara University, Faculty of Science, Institute of Natural and Applied Sciences, Department of Physical Chemistry, Istanbul, Turkey

ORCID ID: https://orcid.org/0000-0003-0933-7307

Davut UZUN

Marmara University, Faculty of Science, Institute of Natural and Applied Sciences, Department of Physical Chemistry, Istanbul, Turkey

ORCID ID: https://orcid.org/0000-0001-7844-0418

ABSTRACT

Introduction: We need energy to do many things in our daily lives. Energy has become an important complement in our daily lives. The increase in the world population indirectly increases the use of energy. At this point, it is important to be able to produce as much energy as we consume. At the same time, storing excess energy produced at different times of the year and under different conditions can eliminate possible fluctuations and mismatches between supply and demand for energy. In this part, energy storage systems gain importance. There are many types of energy storage methods and systems. Electrochemical energy storage methods include rechargeable batteries and supercapacitors. In addition to being used in many areas, capacitors can be used in the field of energy storage. The fact that it has advantages such as fast charging and discharging and having a long cycle life makes supercapacitors come to the fore. In this study, the performance of zinc oxide, which is actually seen as a very suitable anode material, as a cathode material in a supercapacitor has been a main research topic that arouses curiosity and motivation. The aim of the study is to ensure that the zinc oxide ZnO electrodes produced are ideal electrodes for capacitors. In this study, the electrochemical performance and capacity of zinc oxide produced by hydrothermal method for a supercapacitor were investigated and investigated.

Materials and Methods: In this study, ZnO was produced by hydrothermal method. Hydrothermal ZnO electrode was made from the zinc oxide produced and the electrochemical performance of the working electrode was investigated by CV and GCD methods by using platinum and Ag/AgCl electrodes in a three-electrode assembly.

Results: The capacity of the ZnO electrode was 34.375 F/g, the cumulative efficiency was 96.08%, the energy density was 0.4 Wh/kg and the power density was 3000W/kg according to GCD data. High power density and high coulombic efficiency values Hydrothermal ZnO electrode has proven to be a very suitable electrode material for supercapacitors.

Key words: Energy storage, capacitor, supercapacitor, hydrothermal

ANALYSIS OF ADMIXTURES FOR CONCRETE

ChayarajuBalaSai

Assistant Professor Department of Civil Engineering,G.pulla reddy Engineering college(Autonomous),Kurnool, AP, INDIA

(Orcid-0009-0003-4055-9773),

Nadagouda Kalyani

Assistant Professor Department of Civil Engineering,G.pulla reddy Engineering college(Autonomous),Kurnool, AP, INDIA

K.Tharani

Assistant Professor Department of Civil Engineering,G.pulla reddy Engineering college(Autonomous),Kurnool, AP, INDIA

Abstract:

Admixtures are liquids or powders that are added to concrete based on calculations for the mix design with the goal of improving the qualities of the concrete both in its fresh and hardened states. Concrete's workability, strength, and finish affect the product's quality, cost, and longevity. concrete Adoption of smart building practices is crucial given the escalating environmental pollution issues and the need for sustainable construction methods, as well as the cost-quality-time pyramid of construction projects. One solution to the aforementioned problems is the use of admixtures in the manufacturing of concrete.The mix water and chemical admixtures have an effect on the rheology of concrete. Chemical admixtures affect the characteristics of concrete in both its fresh and hardened states. The mega structures built in the recent period under constructor serve as a visible representation of the advantageous effects of using chemical admixtures in concrete mixes.Admixture chemistry is important in converting a typical concrete mix into a high-performance concrete mixture. The invention of chemical admixtures, transformations seen in head mixture chemistry, and the uses of the admixtures in certain significant concrete constructions are all attempted to be presented in this study.

Keywords: Concrete; Admixtures; High Performance Concrete

MONITORING CHANGES IN PATHOGENS AND ANTIBIOTIC RESISTANCE RATES IN PEDIATRIC URINARY TRACT INFECTIONS

Yekta MOGUL

Gaziantep University Faculty of Medicine, Department of Clinical Microbiology, Gaziantep, Turkey

ORCID ID: https://orcid.org/0009-0007-5380-5477

Yasemin ZER

Gaziantep University Faculty of Medicine, Department of Clinical Microbiology, Gaziantep, Turkey

ORCID ID: https://orcid.org/0000-0002-9078-9900

Ayşe BÜYÜKTAŞ MANAY

Gaziantep University Faculty of Medicine, Department of Clinical Microbiology, Gaziantep, Turkey

ORCID ID: https://orcid.org/0000-0001-5790-3006

Zehra PADAK

Gaziantep University Faculty of Medicine, Gaziantep, Turkey

ORCID ID: https://orcid.org/0009-0005-2311-6166

Lütfullah VURAL

Gaziantep University Faculty of Medicine, Gaziantep, Turkey

ORCID ID: https://orcid.org/0009-0000-9191-2803

ABSTRACT

Introduction and Purpose: Urinary tract infections (UTIs) are common in both community-acquired and hospitalized patients. Causative agents are typically endogenous bacteria that colonize the periurethral area and ascend into the urinary tract. UTIs are particularly significant in children due to nonspecific symptoms and their potential to cause chronic kidney diseases. This study aimed to monitor changes in pathogens and antibiotic resistance profiles in pediatric UTIs to guide empirical treatment practices.

Materials and Methods: This retrospective study analyzed urine culture samples from pediatric patients (<18 years) submitted to our laboratory between 2019 and June 2024. Data were obtained from the hospital automation system and laboratory records. A total of 21,843 samples from 10,275 patients were reviewed. Recurrent cultures with the same pathogen were excluded, and only the first significant positive culture per patient was analyzed.

Results: Among the 21,843 samples, growth was detected in 6,742 (30.9%), while 14,073 (64.4%) showed no growth, and 884 (4%) were classified as contamination. Contamination rates were significantly higher in females. Of the 3,750 patients with growth-positive samples, 1,984 (52.9%) were under 24 months, and UTIs were significantly more common in this age group. Escherichia coli was the most frequently isolated pathogen, with no significant yearly variations. Aminoglycosides, carbapenems, and colistin were the most effective antibiotics, while aminopenicillins showed high resistance. Resistance rates showed no significant changes over time, and ceftaroline exhibited unexpectedly high resistance.

Discussion and Conclusion: This study highlights the importance of monitoring pediatric UTI pathogens and antibiotic resistance to inform empirical treatment guidelines.

Key Words: Pediatric urinary tract infections(UTIs); Empirical treatment; Antibiotic resistance

THE ROLE OF WINDOW/WALL RATIO IN BUILDING ENERGY EFFICIENCY

Büşra EROL
Yalova Üniversitesi Mühendislik Fakültesi, Makine Mühendisliği Bölümü, Yalova, Türkiye
ORCID ID: https://orcid.org/0009-0009-9422-1990

Osman Vahid MERCAN
Yalova Üniversitesi Mühendislik Fakültesi, Makine Mühendisliği Bölümü, Yalova, Türkiye
ORCID ID: https://orcid.org/0009-0007-9499-0533

Batuhan GÖÇEN
Korkmaz Mutfak Eşyaları San ve Tic A.Ş, Ar-Ge Bölümü, İstanbul, Türkiye
ORCID ID: https://orcid.org/0000-0001-8141-3330

Ümit ÜNVER
Yalova Üniversitesi, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, Yalova, Türkiye
ORCID ID: https://orcid.org/0000-0002-6968-6181

ABSTRACT

Introduction and Purpose: This study aims to examine the impact of increasing glass surfaces, driven by evolving aesthetic trends and the widespread use of curtain wall applications in industrial buildings, on the energy performance of window-to-wall ratio in building designs. The study also seeks to provide design recommendations to enhance energy efficiency. By analyzing the effects of daylight and different types of windows on energy consumption, the study aims to contribute to academic literature and emphasize that meeting efficiency and sustainability criteria is more important than aesthetic concerns, while also guiding design processes.Materials and Methods: The research focuses on buildings located in Istanbul, within the Marmara Region, classified as a 2nd Degree Daylight Zone. The effects of window-to-wall ratios (10%, 30%, 50%, 70%, 90%) on heat loss for a 30 m² wall over a 12-month period were calculated in accordance with TS 825 standards. The types of windows analyzed were categorized as double-glazed (air and argon-filled), coated double-glazed, and triple-glazed. Heat loss and solar gain calculations were conducted using energy equations compliant with TS 825 standards.Results: Heat loss increased across all window types as the window-to-wall ratio rose. An increase in the ratio from 10% to 90% resulted in a 9.3% rise in energy loss. Coated double-glazed windows provided 22% greater energy savings compared to regular double-glazed windows. Argon-filled double-glazed windows exhibited lower heat loss compared to air-filled double-glazed windows. Triple-glazed windows demonstrated the highest energy efficiency among all types. South-facing window designs and windows with low U-values were recommended to minimize energy loss. The study underscores the necessity of optimizing window-to-wall ratios and selecting high-energy-efficiency window types. Implementing correctly optimized practices, without compromising the TS 825 standards for any building type, is crucial for achieving efficiency criteria, as well as for fostering sustainable building designs and energy management.

Key words: Window/wall ratio, Energy performance, Sustainable building design, TS 825, Heat loss

AN INVESTIGATION OF SELF COMPASSION AND COGNITIVE DEFUSION AS PREDICTORS OF INTERPERSONAL RELATIONSHIP STYLES

Pınar İLGEN

Gaziantep University, Faculty of Education, Department of Psychological Counseling and Guidance, Gaziantep, Turkey

ORCID ID: https://orcid.org/0009-0001-4342-8790

Assoc. Prof. Dr. Ahmet BUĞA

Gaziantep University, Faculty of Education, Department of Psychological Counseling and Guidance, Gaziantep, Turkey

ORCID ID: https//orcid.org/0000 0002 9598 2451

ABSTRACT

Introduction and Purpose: Interpersonal relationships are an important concept for young adulthood. Developing positive interpersonal relationships is one of the most significant goals of young adulthood. Building positive interpersonal relationships requires individuals to have a positive relationship with themselves. In this context, the aim of this resarche is to examine to correlationel relationships between self-compassion, cognitive defusion and interpersonal relationship styles.

Materials and Methods: The study was designed as a descriptive study and the sample of the study included 768 university students (490 female, 278 male) from different faculties of Gaziantep University. Data was collected using the demographic information form, Interpersonal Style Scale, Self-Compassion Scale and Drexel Defusion Scale. The research variables were investigated in variables of gender and age with independent samples T-test in the SPSS program. Correlation analyses were used to examine the relationship between variables. Since no meaningful relationship was found between cognitive defusion and poisoning relationship style, one of the factors of interpersonal relationship styles, the poisoning relationship style was not included in the regression model. Hierarchical multiple regression analysis was used to find out to what degree interpersonal relationships styles was predicted by self compassion and cognitive defusion.

Results: Except for cognitive defusion and poisoning relationship style, the relationships between all variables were found to be significant ($p<0.05$). Nourishing relationship style was predicted firstly by self-compassion and secondly by cognitive defusion variables. Self-compassion and cognitive defusion variables together explained 8% of the variance.

Discussion and Conclusion: The current study has demonstrated that high levels of self-compassion and cognitive defusion will increase the likelihood of using a nourishing style in interpersonal relationships. As a result, the higher the level of self-compassion and cognitive defusion, the more likely the person will develop a nourishing relationship style in their relationships.

Key Words: Interpersonal Relationship Styles; Nourishing Style and Poisoning Style, Cognitive Defusion, Self-Compassion

POTENTIALITY OF USING NATURAL FIBERS IN ECO-FRIENDLY GEOPOLYMER COMPOSITES

Zineb MOUJOUD

Abdeslam El BOUARI

Omar TANANE

Chemistry Department, Faculty of Sciences Ben M'Sick, Hassan II University of Casablanca, Morocco,

Abstract

The construction sector, one of the most energy-intensive industries, is responsible for 36% of global final energy consumption and is estimated to increase to 58% by 2040. This sector relies heavily on conventional materials, which not only consume energy but also release CO_2 during their life cycle. Nearly 40% of energy-related CO_2 emissions are estimated to be attributed to the building sector. To overcome this drawback, the global interest in developing durable building materials with low CO_2 emissions makes geopolymer materials a friendly alternative to conventional cementitious materials. However, geopolymers display a quasi-brittle behavior, meaning they tend to fracture suddenly under tensile stress, posing challenges and limitations for structural design. This weakness can be mitigated by using natural fibers as reinforcements in composites. The purpose of this study is to investigate the potential of developing novel geopolymer composite (GPC) materials utilizing brick waste (BW) as an aluminosilicate precursor for the geopolymer matrix and reinforcing it with abundant natural fibers. The treated fibers were added to the mixture at 0, 1, 2, and 3% by weight of the matrix. Pull-out test and compressive strength were conducted to investigate the influence of fibers on mechanical properties. The results show that the addition of fibers improved the strength characteristics of geopolymer composites. It is also found that the porosity and water absorption increase with the increase in fiber content, while the bulk density and thermal conductivity are reduced. Overall, to address the demand for eco-friendly and sustainable materials, it can be stated that natural fibers-reinforced geopolymers offer a promising solution with improved mechanical and thermal insulation properties for construction purposes.

Keywords: Natural fibers, Reinforcement, Waste management, Geopolymer composites;

PRAYING FOR VICTORY AND FAVOUR: THE NARRATIVE OF YOUNG ATHLETES IN NIGERIA

Kerimu Ikazuwagbe Joel
Department of Human Kinetics Education, University of Ilorin, Ilorin, Kwara State, Nigeria.
Orcid ID: 0000-0003-3523-4272

Prof. Olufunmilola Leah Dominic
Department of Human Kinetics Education, University of Ilorin, Ilorin, Kwara State, Nigeria.
Orcid ID: 0000-0001-7467-5156

Dr. Theresa Nfam Odeigah
Department of History, University of Ilorin, Ilorin, Kwara State, Nigeria.
Orcid ID: 0000-0002-8786-4949

Omolola Justinah Awosika
Department of Public Health, Wesley University, Ondo, Ondo State, Nigeria.
Orcid ID: 0009-0000-9061-2526

Oluwatosin Adejare Sangodeyi
Department of Human Kinetics Education, University of Ilorin, Ilorin, Kwara State, Nigeria.

Abstract
Religious practice such as prayer has become the norm among young athletes, especially in Nigeria. The purpose of this study is to examine pre-match prayers for victory and favour among young athletes in Nigeria. The study employed a descriptive survey design. Data were collected from 389 young athletes from different states in Nigeria at the National Youths Game 2021 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 of this study among others revealed that a total of 1098 (70.6%) favourable responses and 458 (29.4%) unfavourable responses to pre-match prayer for victory. While, pre-match prayers for favour results revealed that, a total of 1175 (75.5%) favourable responses and 381 (24.5%) unfavourable responses. Furthermore, the result also indicated that majority of the respondents 221 (56.8%) were males and 168 (43.2%) were females. It concludes among other considerations that Nigerian youth athletes believe pre-match prayers aided victory and favour during matches. The findings of this study could be used as a constructive strategy for coaches, managers and sports psychologists to manage young athletes who are religious.
Keywords: Sports, Young athletes, Prayer, Victory, Favour, Psychology, Nigeria

PHYTOCHEMICAL ANALYSIS AND ANTIBACTERIAL ACTIVITY OF AZADIRACHTA INDICA LEAVES AND STEM BARK EXTRACTS

Abubakar Sani

Abdulbasid Muhammad Anas

Department of Pure and Industrial Chemistry, Umaru Musa Yar'adua University, P.M.B. 2218, Katsina, Nigeria.

Abstract

The Study was aimed to determine the phytochemical constituents and in vitro Antibacterial activity of Ethanol and Chloroform crude extracts of Azadirachta indica Leaves and Stem Bark against Pseudomonas aeruginosa and Streptococus puemonia. The phytochemical screening of the plant materials for various phytochemical constituents was conducted using qualitative method. The sensitivity of each extracts against the isolates was determined using the disc diffusion method, these was employed for the determination of Minimum Inhibitory concentration (MIC) and Minimum Bactericidal concentration (MCB) of the extracts. The result of preliminary Phytochemical screening of the extracts revealed the results of Alkaloids, Flavonoids, Saponins, Steroids, Terpenoids, Glycosides, Tannis, and Anthraquinones. The Antibacterial activity of the extracts showed that the extracts were active against the isolates with Streptococus puemonia being the most susceptible isolate with the highest average zone of inhibition of 20.1 mg/ml and Pseudomonas aeruginosa the least susceptible with the highest average zone of inhibition of 18.9 mg/ml. Statistical analysis of the result showed that Chloroform extract is more effective than Ethanol extract, while the Leaves of the Plant showed higher efficacy than the Stem Bark. However, Finding of the study justify the Antibacterial efficacy of the Leaves and Stem Bark of Azadirachta indica.

Keywords: Phytochemical screening, Antibacterial activity, Azadirachta indica.

PUBLIC POLICIES AND GLOBAL INITIATIVES FOR ENHANCED ROAD SAFETY CASE STUDY OF MOROCCO

Farida Haddou rahou

Youssef aboussaleh

Samiha imrani

Laboratory of Sciences and Technologies, Faculty of Sciences Kenitra, University Ibn Tofail, Kenitra, Morocco.

Abstact

Road safety is a major challenge for public policies, particularly in developing countries where road traffic accidents are a leading cause of mortality and morbidity. every hour, one person is killed and several injured, and between 3,000 and 4,000 people lose their lives each year in road accidents. Around 3% of the population have been injured or have lost their lives in road accident. This research aims to analyze public policies and global initiatives implemented to improve road safety in Morocco. Using a combined approach that includes qualitative analysis of national legislative texts and action plane, as well as a quantitative study of data from national and international reports, particularly those of the World Health Organization (WHO) and the National Road Safety Agency (NARSA), In Morocco, the 2017-2026 national road safety strategy has set quantified targets in line with global guidelines the ultimate aim of which is to reduce road deaths by 50% by 2026, this research evaluates the effectiveness of the measures adopted. It also examines international recommendations and best practices that could be integrated into the Moroccan context. The ultimate goal is to propose improvements to public policies and strategies tailored to local specificities in order to enhance road safety and reduce the number of traffic-related casualties.

Key words : Road safty, Public policies, natinal road safty agency, mortality rate, injury rate, road accident, , Morocco.

PUBLIC SQUARES AND CULTURAL IDENTITY: ARCHITECTURAL REFLECTIONS THROUGH TIME

Melik Sami

Departement of architecture, Mohamed Khider Biskra University, Biskra, Algeria. /LACOMOFA Biskra laboratory

Khelil Sara

Departement of architecture, Mohamed Khider Biskra University, Biskra, Algeria. /LACOMOFA Biskra laboratory

Tallal Abdel Karim Bouzir

Institute of Architecture and Urban Planning, Blida University, Blida, Algeria.

Abstract:

History of the evolution of the urban space has been closely related to the public spaces and their functions to create and organize the spontaneity of urban community interactions. This study, titled "Public Squares and Cultural Identity: Architectural Reflections Through Time" examines how streets and squares have become the key nodes of civic participation, cultural expression and social cohesion. Finally, the article through analysis of historical case studies Roman forum, Piazza San Marco in Venice and Parco della Musica in Rome, examines how are architectural designing and urban planning responding to and mirroring the socio-cultural dynamics of their time. It illustrates the transition from political (and cultural) symbolic spaces to contemporary multifunctional spaces that valorize inclusion, accessibility and sustainability while also promoting housing for vastly disenfranchised groups. The study presents the importance of a balance between historical preservation and contemporary needs brought in public space design through the integration of historical insights with modern innovations. Its interdisciplinary approach provides valuable lessons for architects, urban planners, and policymakers as they seek to devise adaptable, invigorating public spaces that will support a diverse continuum of community identity in a dynamic urban environment.

Keywords: Public Spaces; Urban Design; Architecture of Gathering; Streets and Squares; Civic Engagement.

.

REINVENTING LEADERSHIP FOR HIGHER EDUCATION SUSTAINABLE DEVELOPMENT IN NIGERIA

Nimota Jibola Kadir Abdullahi (PhD)

Department of Educational Management Faculty of Education, University of Ilorin, Ilorin Nigeria.

Abstract

Leadership in Nigeria has traditionally been characterized by power imbalances, inefficient governance, and limited accountability, leading to challenges in key sectors like education. This study examines the role of purpose-driven, innovative, and resilient leadership in promoting sustainable development within higher education. By reimagining leadership practices, the study provides fresh insights into fostering institutional growth and long-term sustainability. A total of 400 participants were purposefully selected from universities in north-central Nigeria. SmartPLS statistical analysis, the findings reveal the significant impact of leadership reinvention on sustainable outcomes. Purpose-driven leadership was identified as a catalyst for accountability and visionary governance, enabling educational institutions to navigate complex challenges effectively. Innovative leadership played a critical role in driving adaptability and fostering creative problem-solving, while resilience proved essential in establishing supportive work environments capable of withstanding uncertainties. The study underscores the urgency for Nigerian leaders to shift away from conventional governance approaches and adopt forward-thinking strategies that encourage creativity, adaptability, and transformative change. Purpose-driven leadership inspires innovative thinking, while resilient leadership promotes institutional agility and sustainability. Higher education, positioned as a driver of national development, stands to benefit from leadership models that prioritize equity, innovation, and sustainability, laying the groundwork for transformative progress in Nigeria.

Keywords: Purpose-driven; Innovation; Resilience; higher education; sustainable development

THE SNOWBALL EFFECT OF POSITIVE LIVING: FOCUS ON EXERCISE, HEALTHY EATING, PROSOCIAL BEHAVIOR AND RESOURCES OF GRIT

Sana Omari

Master's Candidate in Guidance and Psychological Counseling, Near East University, https://orcid.org/0009-0008-7402-7800

Reyhane Taheri

PhD Candidate in General Psychology, Near East University

https://orcid.org/0009-0001-6802-483X

Dr. Gloria Manyeruke

Near East University, https://orcid.org/0000-0001-6226-3779

ABSTRACT

The current study aims to examine the relationship between exercise, healthy eating, prosocial behavior, and grit. The research uses a quantitative approach, analyzing data from 341 international university students in North Cyprus. Data were collected through four standardized scales: the Global Physical Activity Questionnaire (GPAQ) was used to assess physical activity, the Starting the Conversation (STC) Diet Tool for healthy eating habits, the Prosocialness Scale for Adults (PSA) for prosocial behavior, and the Grit Psychological Resources Scale (GPRS) for measuring grit. The sample was selected using convenience sampling. Results show a positive correlation between prosocial behavior and grit, as well as between physical activity and grit, highlighting the importance of altruism and resilience in strengthening perseverance. In addition, the results show that resources of grit had causal relationships with exercise, healthy eating, and prosocial behavior. Gender differences have also emerged. Male participants displayed more physical activity, while females engaged in more prosocial behavior. This study not only builds on the growing body of research exploring the interplay between physical health, psychological resilience, and social behaviors—particularly among young adults—but also highlights the interconnected pathways of healthy habits, providing important insights for designing a holistic action plan to enhance well-being.

Keywords: *Healthy living, healthy eating, exercise, prosocial behavior, Grit, well-being*

IDENTIFICATION OF FUSARIUM SPECIES IN MAIZE PRODUCTION AREAS OF ESKIŞEHIR PROVINCE AND DETERMINATION OF THE EFFECTS OF SOME SOIL HERBICIDES ON FUSARIUM UNDER IN VITRO CONDITIONS

Semir TURUŞKAN

Department of Plant Protection, Faculty of Agriculture, Osmangazi University, Eskisehir, Türkiye

ORCID ID: https://orcid.org/0009-0006-3039-3388

Filiz ÜNAL

Department of Plant Protection, Faculty of Agriculture, Osmangazi University, Eskisehir, Türkiye

ORCID ID: https://orcid.org/0000-0003-4620-5397

ABSTRACT

In order to determine the Fusarium species and their pathogenicity in maize production areas of Tepebaşı, Odunpazarı, Alpu, Seyitgazi districts of Eskişehir province, 180 samples were collected from 45 fields in survey studies conducted in 2023-2024. A total of 110 Fusarium isolates were obtained as a result of the isolations from the plants. It was determined that the isolated species belonged to F. verticillioides, F. culmorum, F. proliferatum, F. graminearum, F. sanbucinum, F. acuminatum, F. clamydosporum and F. equiseti. It was determined that the most common species was F. verticillioides and the most virulent species was F. graminearum with 96,67% disease severity. In the study investigating the effects of four different doses of three different soil herbicides against the most virulent species, F. graminearum, under in vitro conditions, lower doses, recommended doses, upper doses and double doses of herbicides with the active ingredients Isoxaflutole+Thiencarbazone methyl+Cyprosulfamide, Dimethenamid-P+Saflufenacil and S-Metolachlor+Terbuthylazine were evaluated. As a result of the study, it was observed that inhibition rates increased as the doses increased. When the inhibition rates of fungus colony development of the recommended doses are taken into consideration, it was observed that the herbicide with the active ingredient Isoxaflutole+Thiencarbazone methyl+Cyprosulfamide average inhibited by 9,76%, the herbicide with the active ingredient Dimethenamid-P+Saflufenacil inhibited by 19.68%, and the herbicide with the active ingredient Metolachlor+Terbuthylazine inhibited by 39,45%. As a result, it was determined that the herbicide with the highest inhibition rate was the herbicide with the active ingredient Metolachlor+Terbuthylazine. This study is a part of the master's thesis and is thought to be an important step towards a more detailed understanding of the relationship between soil herbicides and soil-borne pathogens and will shed light on future studies.

Key words: Herbicide, maize, Fusarium, stalk, ear, rot

DETERMINATION OF TOTAL PHENOLIC AND FLAVONOID CONTENT AND ANTIOXIDANT, ANTIMICROBIAL AND ANTIBIOFILM ACTIVITIES OF STACHYS CRETICA SUBSP. CRETICA

Hafize Sevde AKKARPUZ

Ankara Yıldırım Beyazıt University, Institute of Public Health, Ankara, Türkiye.

ORCID ID: https://orcid.org/0009-0009-0376-689X

Derya ALTAY

Ankara Yıldırım Beyazıt University, Vocational School of Health Services, Department of Medical Services and Techniques, Ankara, Türkiye

ORCID ID: https://orcid.org/0009-0003-1630-7162

Başar KARACA

Ankara University, Faculty of Science, Department of Biology, Ankara, Türkiye

ORCID ID: https://orcid.org/0000-0001-6943-8965

Murat KOÇ

Ankara Yıldırım Beyazıt University, Institute of Public Health, Ankara, Türkiye

ORCID ID: https://orcid.org/0000-0002-0829-4571

Aslı CAN AĞCA

Ankara Yıldırım Beyazıt University, Institute of Public Health, Ankara, Türkiye

ORCID ID: https://orcid.org/0000-0002-5710-3479

ABSTRACT

Introduction and Aim: Stachys species belonging to Lamiaceae are commonly used in traditional medicine, especially to treat respiratory disorders. [1] Stachys cretica subsp. cretica L. has been reported to be used for its antifungal and antibacterial properties. [2] This study aimed to determine the total phenol, total flavonoid, antimicrobial and antioxidant properties of methanol extracts obtained by 2 different methods of S. cretica subsp. cretica.

Material and Method: Methanol extracts were obtained from the plant's aerial parts using 2 different extraction methods: a) Soxhlet extraction (SE), b) ultrasound-assisted extraction (USE). The Folin Ciocalteu technique was used to determine the total phenolic content.[3] The total flavonoid amount was determined by using the Aluminium Chloride technique. [4] Antioxidant activity was determined by DPPH and FRAP techniques. [5,6] Agar well diffusion test and minimum inhibition concentration test (MIC) were used to evaluate the antimicrobial effect of the extracts. [7] Antibiofilm activity was examined on Pseudomonas aeruginosa and Staphylococcus aureus strains. [8]

Results: It was determined that the USE extract has the highest values with 58.49 mg GAE/g total phenolic content and 19.55 mg QE/g flavonoid content. Regarding antioxidant capacity, the USE extract demonstrated the highest values in the FRAP (125.03 mg TE/g) and DPPH (79.65% inhibition) assays. The highest antimicrobial activity was observed with methicillin-resistant Staphylococcus aureus ATCC 43300, Bacillus subtilis ATCC 6633, and Enterococcus faecalis ATCC 29212. Antibiofilm activity was observed with S. aureus ATCC 25923 at a concentration of 625 μg/mL, where the extract of SE proved to be more effective.

Discussion And Conclusion: The USE extract of S. cretica subsp. cretica obtained was found to be more effective in terms of phenolic content and antioxidant capacity. Further studies are necessary to support the medicinal potential of the plant.

Keywords: Stachys cretica subsp. cretica L.; Extraction, Total Phenol; Total Flavonoids; Antioxidant Activity; Antimicrobial Activity; Antibiofilm Effect

COPPER-DOPED ZINC OXIDE THIN FILMS FOR ENHANCED PHOTOVOTAIC PERFORMANC

Sabrina ROGUAI

LASPI2 A Laboratoire des Structures, Propriétés et Interactions Inter Atomiques, Université Abbes Laghrour, Khenchela 40000, Algeria

ORCID: 0000-0002-0767-0846

Abdelghani Lakel

LASPI2 A Laboratoire des Structures, Propriétés et Interactions Inter Atomiques, Université Abbes Laghrour, Khenchela 40000, Algeria

ORCID: 0000-0002-0767-0846

Abdelkader DJELLOUL

LASPI2 A Laboratoire des Structures, Propriétés et Interactions Inter Atomiques, Université Abbes Laghrour, Khenchela 40000, Algeria

ABSTRACT

Pure and copper-doped zinc oxide (ZnO) thin films were deposited on glass substrates via ultrasonic spray pyrolysis at 450°C for 30 minutes. This study investigates the impact of varying copper (Cu) doping levels, ranging from 0.02 to 0.20 atomic fraction, on the structural and optical properties of ZnO films. X-ray diffraction (XRD) analysis reveals that copper doping induces structural disorder and the formation of a secondary CuO phase, which becomes more pronounced with higher Cu concentrations. Optical transmittance measurements indicate a decline in transmittance as Cu content increases. Concurrently, the refractive index of the films increases with higher copper doping. The bandgap energy of the films decreases with increasing Cu concentration, suggesting enhanced electronic interactions within the ZnO matrix due to copper incorporation. These findings provide insights into how Cu doping influences the optical and structural characteristics of ZnO films, which could be valuable for applications in optoelectronic and photonic devices.

Keywords: Thin films; X–ray diffraction; Optical properties

ENTREPRENEURIAL JOURNEY FROM COMPETENCIES TO INTENTIONS: DOES PASSION HAS ANYTHING TO SAY?

Sana Zainab

MS Innovation and Entrepreneurship, Department of commerce, Bahauddin Zakariya university Multan Pakistan

Dr. Khawar Naheed (Corresponding author)

Associate Professor, Commerce Department, Bahauddin Zakariya University, Multan, Pakistan.

Abstract:

Entrepreneurship is a complex discipline that negates various competencies, intentions, and the pivotal role of passion. This study delves into the intricate relationships among entrepreneurial competencies, technical skills, and their influence on entrepreneurial intentions, with a particular focus on the moderating effect of entrepreneurial passion.

Using Partial Least Squares Structural Equation Modeling PLS-SEM, data was collected from a sample of successful entrepreneurs and analyzed. The findings illustrate that both interpersonal and technical skills significantly relate to entrepreneurial intentions. Entrepreneurs' passion significantly raises these impacts and acts as a moderating variable for all resilience, creativity and decision making. This is consistent with new studies that reveal the importance of passion in an entrepreneurial journey.

This study contributes to theories and practices by demonstrating that passion serves as an engine of entrepreneurship but not only that, but it also strengthens the relationship between entrepreneurial efficacy and intention.

The current study supports and follows the existing literature that highlights the vital role of entrepreneurial passion in forming intentions and behaviors. An article in the International Journal of Global Business and Competitiveness argues that entrepreneurial passion is a significant mediator of the relationship between creativity and the intention to become an entrepreneur, which underlines its importance in the entrepreneurial cycle. In a similar manner, the article in the International Journal for Educational and Vocational Guidance provided evidence that supports the claims of the current article showing that the entrepreneurial passion is indeed related with the student's vehicle of intention towards entrepreneurship.

In short, this article addresses the gap of entrepreneurial competencies and passion on how they provided a handshake in determining entrepreneurial intentions. By bringing together several theoretical approaches and conducting empirical analysis it provides useful recommendations on the ways to build up efficient educational curricula or policies regarding the rules that foster entrepreneurship. In this way, future studies could investigate additional elements that can affect this relationship, such as variation in cultural factors or aspects of an industry, to yield a greater clarification of the entrepreneurial journey.

Keywords: entrepreneurial competencies, entrepreneurial intentions, entrepreneurial passion, resilience, self-efficacy, innovation, entrepreneurship education, economic development

PERFORMANCE EVALUATION OF A BASIC THREE-PHASE INDUCTION MOTOR STARTING METHODS

Sani Abdullahi Mohammed

Department of Electrical & Electronics Engineering, School of Technology,

Kano State Polytechnic, Kano State, Nigeria

Orcid ID:0000-0003-0178-5623

Hamza Abdullahi

Department of Electrical & Electronics Engineering, School of Technology,

Kano State Polytechnic, Kano State, Nigeria

Sani Sale Yakubu

Department of Computer Engineering, School of Technology, Kano State Polytechnic,

Kano State, Nigeria

Umar Alhassan Umar

Department of Computer Science, Kano State Polytechnic, Kano State, Nigeria

Aminu Baffa Ibrahim

Department of Computer Science, Kano State Polytechnic, Kano State, Nigeria

ABSTRACT

Asynchronous machines are now considered the most extensively utilized electrical machines, mostly employed as electrical induction motors. The most critical step is to start the induction motor. The idea behind this project is that using Matlab's subsystem feature to represent the real motor with a set of equations and values, an idealistic motor can be created with comparable physical effects. Induction Motor draws a high starting current during starting period which effects on electromagnetic torque, speed and current. There are three basic ways to start the motor under various loads Direct On-Line Starter (DOL), Star-Delta Starter, and Soft Starter. Each approach is investigated and described using current, torque, speed, efficiency, and power factor curves simulations. To find out the theoretical and actual characteristics of Induction motors. These three basic starting methods which differ irrespective of wiring connection are the most applicable and widely used starting methods in the industrial area due to economic reasons.

Keywords: induction motor, starting methods, star-Delta, soft starter.

RELATIONSHIP BETWEEN BUYING POWER AND BRANDING IN MARKETING

Nazmiye SONAR

Dr., İstanbul Nişantaşı university, Department of Marketing, İstanbul/Türkiye,

Orcid: 0009-0005-7209-8101

Introduction and Purpose: Branding and consumers' purchasing power are important in terms of showing both economic and financial value of the brand in the field of marketing. This research aims to examine the relationship between purchasing power and branding in marketing.

Materials and Methods: In the research, patent applications, consumer price index and inflation data as brand indicators for Turkey between 2007-2021 from the World Bank Country Reports were used as the data set. The most up-to-date brand patent applications as the data set belong to 2021, and the oldest patent data belongs to 2007. Spearman's rho correlation analysis and Generalized Linear Model (Logit) analysis were performed for the relationship between the variables.

Results: While 109,486 domestic and 30,430 foreign patent applications were made in Turkey since 2007; the number of domestic patent applications was 395,159 and the number of foreign patent applications was 39,220 in 2021. When the purchasing power is taken as 100 in 2010, it reached 314.81 in 2021 from 78.49 in 2007. Inflation, on the other hand, was 8.76 in 2007 and 19.60% in 2021. There is a statistically significant and positive relationship between the number of domestic patent applications and the consumer price index ($r=0.960$; $p<0.01$) and inflation ($r=0.776$; $p<0.01$). There is a statistically significant and positive relationship between the number of foreign patent applications and purchasing power ($r=0.780$; $p<0.01$) and inflation ($r=0.596$; $p<0.01$). The number of domestic patents ($B=0.001$; $p<0.01$), the number of foreign patents ($B=-0.004$; $p<0.05$) and inflation ($B=5.984$; $p<0.01$) have a statistically significant effect on the consumer price index, which is an indicator of purchasing power.

Discussion and conclusion: As a result, while domestic patents increase the added value of production and the price band in the domestic market, foreign patents seem to increase purchasing power, but in the long run they may cause a decrease in added value and quality in the market or a decrease in purchasing power. Therefore, by establishing advanced research and models with wider variables, research results can be spread to a wider framework.

Keywords: Purchasing power, brand, patent, branding, marketing.

SCREENING OF LEAVES AND STEM BARK OF GUIERA SENEGLENSIS FOR ANTIBACTERIAL ACTIVITY

Abubakar Sani

Saifullahi Rilwanu

Department of Pure and Industrial Chemistry, Umaru Musa Yar'adua University, P.M.B. 2218, Katsina, Nigeria.

Abstract

Guiera seneglensis, a prominent shrub native to the savannah regions of waste Africa, has attracts attention for its widespread medicinal and ecological benefits. The phytochemical composition and the antibacterial activity of G. seneglensis against Pseudomonas aeureginosa and streptococcus pneumoniae was studied. Using a combination of ethanol, methanol, chloroform and aqueous solvent, results shows the key bioactive compounds such as alkaloids, flavonoids, tannins, and steroids, with a significant variation in concentration across extracts. Antibacterial tests was conducted using disc diffusion and minimum inhibitory concentration (MIC) techniques, which revealed notable inhibitory and bactericidal activity, particularly in methanol and ethanol extracts. The results provided scientific evidence for the use of the plant by traditional herbalist in the treatment of microbial infections.

Keywords: Phytochemical screening, Antibacterial activity, Guiera seneglensis.

INVESTIGATION OF THERMAL PROPERTIES OF CELLULOSE BASED THERMOSET COMPOSITES

Seda BEKIN ACAR

Polymer Materials Engineering Department, Yalova University, Turkey

ORCID ID: https://orcid.org/0000-0002-5448-3437

ABSTRACT

Introduction and Purpose: Microcellulose, a renewable biopolymer derived from natural resources, is preferred in different applications due to its high surface area and mechanical strength. Microcellulose-based composites provide significant improvements in terms of mechanical and thermal properties. In order to benefit from these superior properties, it is aimed to improve the thermal properties of thermoset composites obtained by using microcellulose as reinforcement in thermoset matrices.

Materials and Methods: In this study, the effect of microcellulose on the thermal properties of thermoset composites was investigated. A pure thermoset without microcellulose (MC) called as reference sample and thermoset composites containing different amounts of MC were prepared by thiol-epoxy click reaction. First, the determined amount of epoxy and thiol compounds were added to the test tube and mixed for a few minutes. Then, different amounts of microcrystalline cellulose (0, 2, 5 and 10 wt%) were added and dispersed in the monomers with the help of an ultrasonic bath and then with a homogenizer. Finally, an amine-based catalyst was added to the formulation and mixed, and the homogeneous solution was poured into a teflon mold in the form of strips. MC/thermoset composites were rapidly obtained by thiol-epoxy click reaction.

Results and Discussion: The dispersion of MC in the thermoset matrix was observed by scanning electron microscopy (SEM). Homogeneously distributed and occasionally agglomerated MC fillers were observed in SEM images. The structural properties of pure thermoset and MC/thermoset composites were investigated by Fourier transform infrared spectroscopy (FT-IR). The thermal properties of final composites were evaluated by thermogravimetric analysis (TGA). As a result of TGA thermograms, the highest char yield was determined in the thermoset composite containing 10% MC. Moreover, MC/thermoset composites provided improved thermal properties compared to pure thermoset.

Key Words: Cellulose; Click Chemistry; Composite; Thermal Properties; Thermosets

THE USE OF OMEGA HIERARCHICAL ZEOLITE IN THE CONVERSION OF M-XYLENE

Mekki Amel
Higher School of Biological Sciences of Oran (ESSBO), Emir Abdelkader Estate (EX-INESSMO), P.O. Box 1042, Saim Mohamed, Oran 31000, Algeria.

Hammou Mohamed
Department of Mining and Metallurgy, Faculty of Mechanical Engineering, University of Science and Technology, BP 1505, El-Mnaouer 31000, Oran, Algeria.

Boukoussa Bouhadar
Department of Materials Engineering, Faculty of Chemistry, Mohamed Boudiaf University of Science and Technology, El-Mnaouer, BP 1505, Oran, Algeria.

Marisol Grande-Casas
Instituto de Catalisis y Petroleoquimica (ICP), CSIC, Marie Curie 2, 28049 Madrid, Spain

Enrique Sastre
Instituto de Catalisis y Petroleoquimica (ICP), CSIC, Marie Curie 2, 28049 Madrid, Spain

Carlos Marquez-Alvarez
Instituto de Catalisis y Petroleoquimica (ICP), CSIC, Marie Curie 2, 28049 Madrid, Spain

Manuel Sanchez-Sanchez
Instituto de Catalisis y Petroleoquimica (ICP), CSIC, Marie Curie 2, 28049 Madrid, Spain

Joaquín P´erez-Pariente
Instituto de Catalisis y Petroleoquimica (ICP), CSIC, Marie Curie 2, 28049 Madrid, Spain

Abstract

In this study, the large-pore zeolite omega (Si/Al ratio of 3.1) was utilized and treated with solutions of the surfactant hexadecyltrimethylammonium (CTA) in aqueous ammonia to create intracrystalline mesoporosity. Initially, the as-synthesized sample was calcined, then converted to its acid form through ion exchange with an ammonium chloride solution, followed by another calcination step. The acid form was subsequently treated with steam at 620 °C to achieve partial dealumination of the framework. Characterization of the samples was conducted using X-ray diffraction (XRD), nitrogen adsorption, thermogravimetric analysis (TGA), scanning electron microscopy (SEM), magic-angle spinning nuclear magnetic resonance (MAS NMR) for both 29Si and 27Al, and pyridine adsorption for acidity assessment. The samples were also evaluated for their catalytic activity in the isomerization and disproportionation of m-xylene. It has been discovered that in order for CTA to produce intracrystalline mesopores with a narrow pore diameter of 4 nm, the framework (Si/Al ~ 7.3) must be partially decomposed, followed by mild acid leaching (HCl = 0.3 M) to remove only the extraframework aluminum species. When applied to the steamed sample prior to acid leaching or to the acid form (Si/Al ~ 5.7), the CTA treatment is unsuccessful. The CTA samples' average acid strength and strong site concentration

are lower than those of the steamed/acid leached sample, indicating the existence of weak acid sites at the mesopores.
By reducing diffusional constraints, the mesopores significantly increased the catalytic activity in the m-xylene conversion; however, the CTA treatment did not improve the selectivity to the bulky trimethylbenzenes, indicating that the remaining reaction occurs at the strong acid sites at the micropores.
Keywords : Zeolite Omega, Mesoporosity, Surfactant, m-xylene, acidity.

ANALYSIS OF TUNABLE BAND-STOP FILTERS USING SILVER-AIR-SILVER WAVEGUIDE AND TRIANGLE-RECTANGLE RESONATOR COUPLE

Asist. Prof. Dr. Semih KORKMAZ

Bandirma Onyedi Eylul University, Faculty of Engineering and Natural Sciences, Balıkesir, Turkey

ORCID ID: https://orcid.org/0000-0001-5576-7653

ABSTRACT

This study proposes and numerically analyzes band-stop filters, including a silver-air-silver waveguide coupled with a triangular-rectangular resonator pair. The triangular and rectangular resonators are located on either side of the straight waveguide. The finite-difference time-domain (FDTD) approach is implemented to obtain the transmission spectra and the magnetic field distributions of the designed band-stop filters. The different resonance wavelengths of the designed filters can be arranged by varying the geometrical parameters. The basic geometrical parameters are the lengths of the triangular and rectangular resonators. The analysis of the silver-air-silver waveguide coupled with the triangular-rectangular resonator is performed using the Johnson and Christy model for the optical constants of silver (Ag). In this system, air is assumed to have a refractive index of 1. A Gaussian source with transverse magnetic polarization is directed through the straight waveguide to investigate the light-structure interaction. The suggested band-stop filter has four resonance wavelengths. The first and fourth modes originate from the rectangular resonator, while the second and third modes are obtained from the triangular resonators. The examination of the magnetic field distributions for the designed structure is presented at the respective resonance wavelengths. These analyses verify the physical origin of the resonance wavelengths. For the examined structure, the best performance parameters, including transmission, full width at half maximum (FWHM), and quality factor, are 7%, 8 nm, and 73.5, respectively. This study provides important results for designing optical devices commonly used in daily life.

Keywords: Triangle-rectangle Resonators; MIM Waveguide; Band-stop Filter; Transmission

DETERMINATION OF THE EXPRESSION LEVELS OF GENES IN THE MELATONIN PATHWAY IN SALT SENSITIVE AND TOLERANT WHEAT CULTIVARS

Şevval Nur KANYAR

Igdir University, Faculty of Agriculture, Department of Agricultural Biotechnology, Iğdır/Türkiye

ORCID ID: https://orcid.org/0000-0002-7398-3242

Adnan AYDIN

Igdir University, Faculty of Agriculture, Department of Agricultural Biotechnology, Iğdır/Türkiye

ORCID ID: https://orcid.org/0000-0002-8284-3751

Salinity is an important abiotic stress factor for plants. The amount of salt in the soil occurs mostly in semi-arid and arid regions with low rainfall and high temperatures and negatively affects the quality and yield of the plant. Different sources of salinity such as unnecessary and excessive irrigation, high ground water, inadequate drainage, natural salt rocks mixing with irrigation water can create problems in agricultural areas.

One of the important features that distinguishes plants from all other living things is that they depend on their environment. Like other living things, they do not have the ability to move away from their environment when they encounter unfavorable conditions and need protection. For this reason, there are reasons that prevent the optimum living conditions of plants and suppress their growth and development for generations. The obstacles to which plants are exposed can be caused by both living organisms and the non-living environment. Plants have developed a variety of strategies to combat stressors and sustain their generations. Some of them have adapted by changing their gene expression, physiology and developmental activities, some have escaped the stressor by developing in different periods, and some have provided adaptation capability that is passed from generation to generation when they encounter stressors at different times and at different doses. It is impossible for plants that are considered susceptible to survive if optimum conditions are not provided. In order to develop tolerance to stress factors, plants are exposed to stress for certain periods of time and in certain amounts, changing their biochemical and molecular structures and gaining the ability to distinguish the next higher level stress factor. Here, the type of stress encountered by the plant and its past response to this stress and stress memory are revealed. In addition, there are studies in the literature that increase the tolerance level of plants by applying various pre-treatments to the plants, so that the plant is minimally affected by the stress and the development of the plant progresses and the stress memory is revitalized. In this thesis, it was tried to determine the expression levels of genes in the melatonin pathway in salt sensitive and tolerant wheat varieties.

Keywords: Seratonin, Abiotic Stress, Triticum aestivum, Tryptophan

MAPPING THE WAY TO CODE: AN AUTOETHNOGRAPHIC EXPLORATION OF VISUAL TOOLS IN K-12 ONLINE CODING EDUCATION

Monisha Sharma

Independent Scholar

ORCID number: 0009-0001-3039-4093

ABSTRACT

Introduction and Purpose: Online learning when paired with visual aids like mind maps, has the potential to transform complex subjects like coding and computing, making them more accessible by breaking down abstract concepts into clear, visual representations. This research explores the effectiveness of using mind maps in teaching coding to K-12 students online, specifically addressing how they can enhance understanding and engagement.

Methods and Materials: As a K-12 online coding educator, I faced the persistent challenge of making abstract programming concepts accessible to young learners. In search of a solution, I experimented with several interactive, visually-driven tools, as it is often known that visuals communicate more effectively than words. This led me to adopt mind mapping as a teaching tool. I meticulously documented my experiences in a teaching journal, noting both successes and challenges in integrating mind maps into my coding lessons. Two main questions guided my research: 1) How has the use of mind mapping influenced my teaching of coding to K-12 learners in online environments? and 2) How my experiences might inform other educators who are looking to implement visual tools in their teaching?

Results: Thematic analysis of my reflections while teaching revealed that adding mind maps to online K-12 sessions in coding can lead to immense benefits. Mind maps helped my students break down coding problems into manageable, visual structures, improving their ability to understand complex concepts. They also made it easier for young learners to grasp difficult topics and debug codes effectively. Challenges that I came across included technical issues with mind mapping tools and younger students (7-8 years old) struggling to create their own maps. This autoethnographic study highlights the transformative power of mind mapping and inspires educators to embrace visual tools for a more engaging and effective teaching and learning experience.

Keywords: mind mapping, K-12, visual tools, coding and computing education, online learning

EXORBITANT FRAUD IN THE OTTOMAN EMPIRE: LEGAL AND SOCIAL IMPACTS (THE CASE OF ISTANBUL)

Sima ÖKTE
Çanakkale Onsekiz Mart University, Faculty of Political Sciences, Economic Policy
Canakkale, Turkey
ORCID ID: 0000-0002-9545-7227

Prof. Dr. Kadir Arslanboğa
Çanakkale Onsekiz Mart University, Faculty of Political Sciences, Economy
Canakkale, Turkey
ORCID ID: 0000-0002-0264-4796

Dr. Öğretim Üyesi İlker Karaönder
Çanakkale Onsekiz Mart University, Yenice Vocational School, Law, Justice
Agricultural and Environmental Sciences, Social Sciences, Law
ORCID ID: 0000-0003-3625-7273
Canakkale, Turkey

Introduction and Objective:
In the Ottoman Empire, gabn-i fahiş (exorbitant fraud) emerged as a fundamental legal principle aimed at preventing unjust profit and ensuring economic justice. This study examines the definition, practices, and societal impacts of the gabn-i fahiş concept, highlighting the regulatory role of the Ottoman legal system in markets. Particularly, court records reflected in the Istanbul kadı registers reveal how Ottoman law intervened in markets to establish a fair pricing mechanism. The objective of this study is to emphasize the significance of this concept in maintaining social peace, ensuring economic efficiency, and achieving justice.
Materials and Methods:
This research analyzes court records related to gabn-i fahiş from the Istanbul kadı registers. The documents were simplified and categorized to analyze the legal processes implemented by the state to determine the market values of economic goods and establish their true economic worth. These court records serve as primary sources to understand the Ottoman legal system's role in remedying individual grievances and ensuring market order.
Findings:
The research reveals that the Ottoman legal system actively intervened in markets to determine the standard prices of goods, playing a significant role in achieving social justice. By balancing the interests of buyers and sellers, it fostered a sense of trust in commercial activities and contributed to preserving social peace. Furthermore, the application of gabn-i fahiş was instrumental in preventing the waste of scarce resources and enhancing economic efficiency. The impact of Ottoman legal interventions in market regulations provides a valuable example for modern legal and economic systems.
Keywords: Gabn-i fahiş, Ottoman law, Market regulation, Economic goods, Economic justice

EXAMINING THE CONTRIBUTION OF LITERATURE USE IN CLASSROOM APPLICATIONS TO STUDENTS' EFFECTIVE LEARNING WITH SWOT ANALYSIS

Nurcan Yılmaz

Guidance Counselor, Pendik Hala Sultan Imam Hatip Secondary School, İstanbul, Türkiye.

ORCID: 0009-0008-6477-1329

Abstract

Background and Purpose: This study aimed to analyze the strengths and weaknesses, opportunities and threats of the use of literary works as a teaching method in classroom applications in institutions affiliated to the Ministry of National Education in a semiotic way. **Material and Methods:** The research was designed on the descriptive scanning model and phenomenological research methods. University institute journals and scientific refereed journals were scanned for the research. According to the results obtained, the contribution of the use of literary works as a teaching method in classroom applications to the effective learning of students was examined.

Results: The main strengths of using literature in classroom applications are the positive contributions of students to their spiritual, mental and social areas. It is thought that these effects will contribute to academic skills and, accordingly, the learning process. The weaknesses of using literature in classroom applications can be seen as the spread of unqualified children's literature products and the negative effects of the values of popular culture, which prioritize pleasure and consumption, on the learning process. In the context of opportunities, the possibility of decreasing the risk of technology addiction and developing socialization skills comes to the fore. As for threats, the negative effects of popular culture on spiritual values can be shown through subjective disinformation and manipulation that may arise from various tendencies.

Discussion and Conclusion: As a result, although there are weaknesses and threats regarding the use of literature in classroom applications, it is seen that the strengths are more effective. In this context, it is thought that the use of literature in classroom applications can be preferred as a process worth trying in terms of its contribution to students' effective learning.

Keywords: Literature, learning, classroom applications, student activity.

BREWING AND CONSUMPTION ANALYSIS OF BLACK TEA

Batuhan GÖÇEN
Korkmaz Mutfak Eşyaları San ve Tic A.Ş, Ar-Ge Bölümü, İstanbul, Türkiye
ORCID ID: https://orcid.org/0000-0001-8141-3330

Berke GÜLER
Korkmaz Mutfak Eşyaları San ve Tic A.Ş, Ar-Ge Bölümü, İstanbul, Türkiye
ORCID ID: https://orcid.org/0009-0000-1438-3223

Mücahit BARUĞ
Korkmaz Mutfak Eşyaları San ve Tic A.Ş, Ar-Ge Bölümü, İstanbul, Türkiye
ORCID ID: https://orcid.org/0009-0006-2066-4287

Ümit ÜNVER
Yalova Üniversitesi, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, Yalova, Türkiye
ORCID ID: https://orcid.org/0000-0002-6968-6181

.

ABSTRACT

Introduction and Purpose: This article aims to provide an in-depth analysis of Turkish tea brewing culture by examining the biochemical properties of black tea, brewing processes, and brewing techniques across different cultures. Various parameters influencing the taste during the tea brewing process have been explored, and the differences between the Turkish tea brewing method and other cultural practices have been highlighted. Additionally, the study touches on tea consumption, water usage, and sustainability.

Materials and Methods: The article is compiled using information from existing literature. The chemical composition of tea, brewing techniques, and water characteristics in different cultures have been analyzed. The Turkish tea brewing method has been compared to methods from other cultures, focusing on factors such as equipment used, water quality, and brewing times. Tea production and consumption data were collected and analyzed from FAO and other sources. Water usage data from various countries were utilized to present an approach specific to Turkey.

Results: Black tea is produced through the fermentation process of green tea, which gives it its characteristic black color. Black tea accounts for 75% of global tea production. The use of a double teapot (çaydanlık) helps maintain the temperature during brewing. Oxidation and brewing time significantly influence the taste profile. Parameters such as water hardness, oxygen content, and boiling temperature are key factors affecting the taste of tea. The Turkish brewing method involves a prolonged brewing time and the use of a double teapot. The ideal brewing time for Turkish tea is 15-20 minutes.

With an annual per capita consumption of 4 kg of black tea, Turkey ranks first globally in tea consumption. **Discussion and Conclusion:** The tea brewing process varies significantly depending on the equipment and water characteristics used. Turkish tea brewing stands out from other cultures with its unique teapot structure and extended brewing time. Factors such as water quality, brewing time, and tea storage conditions must be optimized for a tasty tea. It is recommended that tea brewing methods be reconsidered in terms of sustainability.

Keywords: Black tea, Tea consumption, Brewing characteristics, Tea taste, Sustainable consumption

AN ECONOMICAL MODELLING ANALYSIS OF THE IMPACT OF SLEEP DISORDER ON NIGERIAN'S WORKFORCE AND PRODUCTIVITY

Ogwumu, Onah David

Yavalah Deborah W.

Department of Mathematics and Statistics, Faculty of Pure and Applied Sciences,

Federal University Wukari, Taraba State, Nigeria.

This study is concerned with the multidimensional dynamical modelling of the impact of sleep-disorder on Nigeria's workforce. The study utilised the concept of epidemiology to subdivide the model's variables into a 6- compartmental modelling subdivisions with 4-Human compartments and 2-vector compartments. The Human compartment is made up of the Nation's population (N), the Sleep Disordered population (S_d) , the Treated population as a result of the disorder, (T_r) and the Workforce population, (W_f). Whereas the vector compartment is made up of the poverty, (P) and the Work-Stress (S_w) compartment. However, with the aid of scenario analysis, the study showed that, the higher the growth and influence of Poverty (a_1) and work-stress(a_2), the higher the sleep-disordered population keep increasing. Similarly, the parameter sensitivity analysis of the model showed that the death due to Sleep-disorder (δ) is a major contributor to the shortage of Nigeria's Workforce which by implication will lead to a reduced productivity and GDP output. But on the other hand, some level of increase in the rate of response to Sleep-disorder's treatment (b_3) leads to the increase in the workforce population which therefore recommends that all hands must be on the desk to promote the attention on sleep-disorder's treatment improved governance in order to reduce the overall impact of sleep disorder on the Nigeria's workforce.

Keywords: Work-stress, Workforce, Poverty, Sleep-disorder, Epidemiology, Human Population, Vector/Drivers Population

THE EFFECT OF COLOUR TEMPERATURES OF LEDS USED IN REFRIGERATED DISPLAY CABINETS ON PRODUCT STORAGE TEMPERATURES

İsmail Yıldırım

Kaplanlar Soğutma A.Ş. R&D Center, Bursa

ORCID NO : 0000-0003-1739-7449

ABSTRACT

This study examines the impact of the colour temperatures of LED lighting used in refrigerated display cabinets on internal cabinet temperatures and product preservation conditions. LED lighting not only enhances energy efficiency and aesthetics but also influences temperature distribution within the cabinet, thereby altering the storage conditions of the products. In this context, the effects of LED lighting with colour temperatures of 3000K, 4000K, 5000K, and 6000K on packaged products inside the cabinet were systematically analysed.

The study was conducted in a dairy cabinet tested under constant temperature conditions over 24 hours. LED lighting was installed on the upper panel (canopy) and beneath the shelves to optimise internal light distribution. Temperature measurements were recorded using thermocouples placed at various shelf levels inside the cabinet. The effects of LEDs on energy consumption, average temperature, temperature differences between shelves, and product surface temperatures were examined in detail.

The findings reveal that the colour temperatures of LED lighting have a direct impact on the products within the cabinet. Specifically, colour temperatures of 4000K and 5000K were found to maintain a balanced internal temperature, thereby improving product preservation conditions. Furthermore, the 5000K colour temperature emerged as the optimal option, offering the best combination of energy efficiency and temperature stability. These findings highlight the importance of considering both energy efficiency and thermal effects when selecting LED lighting for refrigerated display cabinets.

Keywords: LED Lighting, Colour Temperature, Temperature Distribution, Energy Efficiency, Product Storage Conditions

EXAMINING THE ROLE OF GOVERNMENT IN INTERNATIONAL COMPETITIVENESS WITH A FOCUS ON PORTER'S DIAMOND MODEL

Sakineh Sojoodi

Associate Professor of Economics, University of Tabriz, Tabriz, Iran.

Elmira Azizi Norouzabadi

M.A. Student of Economics, University of Tabriz, Tabriz, Iran.

Abstract

Until the late 1980s, a comprehensive framework to understand and explain competitiveness at the national level was absent. Michael Porter, a renowned consultant in international government strategy, addressed this gap by introducing the Diamond Model in his seminal work, "The Competitive Advantage of Nations." This analytical framework evaluates and ranks the competitive advantages of nations based on four interrelated factors: factor conditions, domestic demand conditions, related and supporting industries, and strategy, structure, and rivalry of domestic firms. Porter posits that these factors operate in a dynamic interplay, where changes in one can significantly influence the others. In addition to these internal dynamics, Porter highlights two external elements—government and unpredictable shocks—as pivotal influences that shape the interaction of the four core factors. Among these, the role of government is particularly critical, as it directly impacts all dimensions of competitiveness, either by enabling growth through sound policies or by hindering progress through inefficiencies and mismanagement. This study aims to explore and compare the roles governments play in fostering and sustaining national competitiveness, with a specific focus on Iran. The findings underline the importance of targeted and effective governmental interventions to address Iran’s unique challenges in the domains of factor conditions, domestic demand, related industries, and business competitiveness. Key recommendations include implementing strategic reforms in governance to enhance policy coherence, investing in infrastructure to bridge critical gaps, increasing transparency to boost investor confidence, and fostering an innovation-driven economy. By adopting Porter’s Diamond Model as a strategic framework, policymakers can systematically identify and address priority areas, ensuring the alignment of economic, industrial, and social strategies to create a resilient and competitive economic environment. These measures are essential not only to elevate Iran’s standing in the global arena but also to secure long-term sustainable development**.**

Keywords: Competitiveness, Porter’s Diamond Model, Government

SPECIATION OF ARSENIC FROM FISH POND SEDIMENTS FROM TALBA FARM, MINNA METROPOLIS

Annah Siminle Amos

Dr. Simon Olonkwoh Salihu

Dr. Idris Suleiman

Department of Chemistry, Federal University of Technology, Minna, Niger State, Nigeria.

ABSTRACT:

This study investigate the speciation of arsenic (As) from fish pond sediments (FPS) obtained from Talba farm (TF), Minna metropolis, the BCR Sequential Extraction Method was employed to determine the species of Arsenic (As) associated with four different chemical fraction of the sediments, the concentration of As species from result obtained from analysis with MP-AES gave information on the solubility and mobility of As in the FPS from each fraction (1 to 4), across the sampling location. The concentration: 3.13>1.29>1.21>1.20 of fraction 1, implies the level to which As is more soluble and easily exchangeable with carbonates, hydroxides and other clay minerals with the order of location 4>2>3>1 with location 4 and 1 having the highest and lowest concentration respectively, The concentration:1.63>1.47>1,39>1.04 of fraction 2, implies the level to which As is more bound to Iron and Manganese with the order of location 3>1>4>2 with location 3 and 2 having the highest and lowest concentration respectively,The concentration: 1.55=1.55>1.47>1.01 of fraction 3, implies the level to which As targets metals bound to organic matter and sulfides, with the order of location 1=3>2>4 with location 1=3 and 4 as the highest and lowest concentration respectively. The concentration: 1.80>1.57>1.53>1.35 of fraction 4, implies the level to which As are bound more to silicates mineral and are therefore considered most stable and least available for biological uptake, with order of location 1 >2>4>3, the result shows that location 1 and 3 have the highest and lowest concentration respectively.

Key Words; BCR, MP-AES, FPS, metals, sediments, arsenic, chemical speciation, fish pond, Talba farm and solubility.

SPORTS BETTING PROBLEMS AMONG UNIVERSITY STUDENTS ATHLETE

Kerimu Ikazuwagbe Joel

Department of Human Kinetics Education, University of Ilorin, Ilorin, Kwara State, Nigeria.

Orcid ID: 0000-0003-3523-4272

Omolola Justinah Awosika

Department of Public Health, Wesley University, Ondo, Ondo State, Nigeria.

Orcid ID: 0009-0000-9061-2526

Abstract

Sports betting has become a major component of the gambling industry, with many students becoming addicted. Sports betting addiction can led to sports betting problems among students, which comes with adverse consequences, such as poor academic performance, absenteeism from school, school dropout, debt, mental issues, suicidal intention and suicide. The objective of this study was to examine sports betting problems among university student's athlete. Data were collected from 118 student athletes in the University of Nigeria, Nsukka, aged between 16 and 40 years old, 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 of this study among others revealed that 55 student's athlete (46.6%) are non-problem sports bettor, while, 15 student's athletes (12. 7%) are problem sports bettor. Also, 55.1% of the respondents were males, while 44.9% of them were females. Likewise, the results showed that more than one-third (42.4%) of the respondents were in 3rd and 4th year of study**.** Furthermore, it was revealed that more than two-third (69.5%) respondents were living off campus. Based on the findings of the study, it was recommended among others that the gambling regulatory bodies should regulate accurately sports betting practice and establish socially responsible betting policies and public health educators should embark on an informative campaign in universities to reduce the degree to which students overrate sports betting as an avenue to make money.

Keywords: Gambling, Sports betting, Problem sports betting, Students athlete, University

STABILIZATION OF SOIL BY USING GEOGRIDS

Subhashish Dey

Civil Engineering Department, Gudlavalleru Engineering College, Gudlavalleru, Andhra Pradesh, India

Abstract

Stabilization is the main aim, to reduce the bearing capacity of soil by using coated yarn geogrid. The supporting power of a soil or rock is referred to as its bearing capacity. Reinforced earth is a composite material, a combination of soil and reinforcement suitably placed in layers to resist tensile stresses. In case of soft soils geogrid is one which redistributes the stresses internally with locally available backfill materials. Ground improvement technique using geosynthetic material i.e. geogrid is done below foundation. Using this technique; we can improve stability of available soil, and increase the load bearing capacity. With this it also controls the earthquake vibrating forces. Reinforcement of soil to improve the ground (weak soil) using a polymeric geo synthetic material i.e. coated yarn geogrid is applied. . This can also be implemented to many such weak places as road, railway ballast, airways, slopes, tunnels, etc. in various ways. Stabilization is unavoidable for the purpose of highway and runway construction, stabilization denotes improvement in both strength and durability which are related to performance. Stabilization is a method of processing available materials for the production of low-cost road design and construction, the emphasis is definitely placed upon the effective utilization of Geo grids. In the present investigation we will evaluate the compaction and unconfined compressive strength of soil using Geo grids. Characterization of soil is carried out for grain distribution, index properties (free swell index, liquid limit, and plastic limit) and soil classification. A series of compaction tests will be carried out for the soil along with Geo grids of different strengths. For stabilization of soil, the unconfined compressive strength test will be carried out in accordance with the standard procedures for soil along with Geo grids. Geotechnical engineers often deals with the soil bearing capacity and compaction quality of soils and non-cohesive sub-bases, as well as for soil improvement applications. Built-in soil layers can easily be tested without load abutment, facilitating quick assessments of test lots even under limited space conditions. Strengthening is carried out and the results of this method is measured and tabulated. The test results indicate that the soil reinforced by geogrid is very much effective to increase the load bearing capacity of the soil.

Keywords: Granite powder, Compressive strength, Constructions, Concrete structures, Granite, Aggregates and Tensile strength

FACTORS AFFECTING THE NON-PERFORMING LOAN RATE: THE EXAMPLE OF THE TURKISH BANKING SECTOR

Mehmet AKARÇAY

Kırşehir Ahi Evran Üniversitesi, Mucur Meslek Yüksekokulu, Bankacılık ve Sigortacılık Bölümü, Kırşehir, Turkey

ORCID ID: https://orcid.org/0000-0003-1933-3510

ABSTRACT

Introduction and Purpose: The banking sector, whose main purpose is to collect deposits from savers and to provide loans to real and legal entities, is seen as a sub-sector of the financial services sector that contributes to the growth and development of the country's economy. While banks keep the assets of depositors safe, they provide money flow by providing loans to individual or corporate businesses. However, in some cases, banks may experience problems in terms of repayment of the loans provided. In general, non-performing loans are defined as loans prepared by banks or financial institutions according to a certain payment plan but not paid by the borrower within the planned period or not likely to be paid. This study aims to determine the factors affecting the non-performing loan rate in the Turkish banking sector. In addition, this research aims to determine the gaps in this field and to progress in a more productive research line in the future.

Materials and Methods: In the study where non-performing loans/total loans are used as dependent variables, long and short-term relationships were tested with the ARDL bounds test using quarterly data between 2016Q1-2024Q2.

Results: When the empirical findings of the study are examined, it is seen that economic growth has a decreasing effect on the rate of non-performing loans in the short term. In addition, it has been determined that the increase in interest rates causes a decrease in non-performing loans and this decrease is significant. No significant relationship was found between the dependent variable and the capital adequacy ratio and the CPI variables in the short term. When the long-term relationships between the interest rate and non-performing loans are examined, it is concluded that the increases in interest rates cause an increase in non-performing loans and this situation is statistically significant. It is seen that the growth rate and CPI variables do not have a significant effect on the dependent variable in the long term.

Key Words: Turkish Banking Sector, Non-Performing Loans, ARDL Bound Test

DISASTER DIPLOMACY BETWEEN THE OTTOMAN EMPIRE, RUSSIA, AND THE UNITED STATES: THE SINKING OF THE CHIKHACHEV IN JAFFA (1891)

Dr. Namık Saçlı

Yakınçağ Tarihi, Bağımsız Araştırmacı (Doktora: İstanbul Üniversitesi)

ORCID: 0000-0001-5680-0152

ABSTRACT

Solidarity between states following crises, natural disasters, or other calamities, both in history and today, has the potential to initiate positive diplomatic engagements. This study aims to shed light on the diplomatic consequences that emerged following such an event by analyzing a notable historical case. In 1891, the Chikhachev, a steam-powered mail and passenger ship owned by the Russian Steam Navigation and Trading Company (ROPiT), departed from Alexandria via Port Said en route to Odessa. However, the ship encountered severe weather and tragically sank off the coast of Yafa. Following the shipwreck, Yafa District Governor Mustafa Hikmet Bey, leading the local authorities, swiftly organized the rescue efforts for the ship's crew and passengers with dedication and efficiency. In addition to the official efforts, local boatmen actively participated in the rescue operations. The humanitarian response demonstrated by the Ottoman local authorities and the community was highly appreciated by Russia. This incident became an instance of disaster diplomacy between the Ottoman Empire and Russia. Those who contributed to the evacuation efforts were honored with medals by the Russian government as a token of recognition. The diplomatic implications of the event extended beyond Russia's gestures of appreciation. In parallel, the United States also joined the diplomatic gestures as its citizens were among those rescued. The boatmen who played a significant role in the rescue efforts were awarded orders, medals, and gifts as a gesture of appreciation. This shipwreck demonstrates how humanitarian efforts can yield diplomatic results. The process that unfolded between the Ottoman Empire, Russia, and the United States serves as a valuable case study in post-disaster diplomacy.

Keywords: Ottoman, Russia, United States, Disaster Diplomacy, Shipwreck, Jaffa

When the empirical findings of the study are examined, it is seen that economic growth has a decreasing effect on the rate of non-performing loans in the short term. In addition, it has been determined that the increase in interest rates causes a decrease in non-performing loans and this decrease is significant. No significant relationship was found between the dependent variable and the capital adequacy ratio and the CPI variables in the short term. When the long-term relationships between the interest rate and non-performing loans are examined, it is concluded that the increases in interest rates cause an increase in non-performing loans and this situation is statistically significant. It is seen that the growth rate and CPI variables do not have a significant effect on the dependent variable in the long term.

Key Words: Turkish Banking Sector, Non-Performing Loans, ARDL Bound Test

THE EFFECT OF PHYSICAL THERAPY APPLICATIONS ON EPISODIC AND CHRONIC TENSION-TYPE HEADACHE

Çağla KARADAŞ
Private Clinic, Department of Physical Therapy and Rehabilitation, Ankara, Turkey
ORCID ID: https://orcid.org/0009-0002-5147-0961

ABSTRACT

Objective: This study aims to evaluate the effects of physical therapy interventions on patients with episodic tension-type headache (ETTH) and chronic tension-type headache (CTTH), comparing their impacts on pain intensity, muscle tension, and quality of life.

Materials and Methods: A total of 15 patients were included, with 7 diagnosed with ETTH and 8 with CTTH. Participants were diagnosed according to the International Headache Society (IHS) criteria.

Inclusion Criteria:

•Age between 18 and 60 years.
•Diagnosis of ETTH or CTTH based on IHS criteria.
•Headache duration of at least 6 months

Exclusion Criteria:

•Presence of migraine, cluster headache, or other primary headache disorders.
•Acute trauma or surgical history involving the neck or shoulder region.
•Pregnancy or lactation.

Treatment Protocol: Patients underwent a 4-week physical therapy program consisting of 3 sessions per week. The therapy included:Manual therapy, exercise therapy, relaxation techniques

Assessment Methods:

1. Pain Intensity: Visual Analog Scale (VAS).
2.Quality of Life: SF-36 Quality of Life Scale.
3.Muscle Tension: Manual palpation.

Results: Pain Intensity; Post-treatment VAS scores showed a 60% reduction in the ETTH group and a 40% reduction in the CTTH group. Quality of Life; Significant improvements were observed in the physical function and general health subscales of the SF-36 in both groups ($p<0.01$ for the ETTH group, $p<0.05$ for the CTTH group). Muscle Tension; Muscle relaxation in the neck and shoulder regions was observed in both groups, although tension reduction persisted longer in the CTTH group.

Conclusion: Physical therapy interventions positively impacted pain intensity, muscle tension, and quality of life in patients with both episodic and chronic tension-type headaches. However, ETTH patients demonstrated a more rapid and pronounced response to treatment compared to CTTH patients.

Keywords: Episodic tension-type headache, Chronic tension-type headache, Physical therapy

THE FUTURE OF ANIMAL RIGHTS IN INTERNATIONAL LAW: EVOLVING TREATIES, CONVENTIONS, AND THE DEVELOPMENT OF GLOBAL STANDARDS

Mr. Satish Kumar Singh [LL.M.; Qualified UGC NET & JRF]

Research Scholar, Department of Law, Central University of Punjab, India.

Postal Address: Shaheed Bhagat Singh Boys Hostel, Central University of Punjab, Bathinda, Punjab, Pin code- 151401, India.

Ms. Pallavi Lakhera [LL.M.; Qualified UGC NET]

Research Scholar, Faculty of Law, University of Allahabad, India

Postal Address: Ward No. 11, Lakhera Ward, Bamhani Banjar, District- Mandla, Madhya Pradesh, Pin code- 481771, India.

ABSTRACT

The development of treaties, conventions, and international standards aimed at enhancing the protection and well-being of animals globally will influence the future of animal rights in international law. This study examines the history of international legal frameworks pertaining to animal rights, emphasising the system's growth, difficulties, and prospects for improvement. It looks at the function of important international agreements, like the Universal Declaration on Animal Welfare (UDAW) and the Convention on International Trade in Endangered Species (CITES), and evaluates how well they work to advance animal protection worldwide while pointing out areas where enforcement and compliance are lacking. The article highlights the functions of international organisations like the United Nations and the World Trade Organisation while delving deeper into the development of universal animal welfare standards and attempting to standardise legal protections for animals across various jurisdictions. It examines the legal, cultural, and political obstacles to upholding international animal rights standards, with a focus on the difficulty of striking a balance between national sovereignty and international collaboration. This study also examines the connections between human rights law, environmental protection, and animal rights; it examines how these domains work together to address intricate problems like sustainability, biodiversity conservation, and ethical consumerism. The study also examines new legal frameworks and agreements that attempt to address modern issues, including industrial farming, animal testing, and wildlife trafficking. In the end, the study shows that international laws need to keep changing in order to protect animals in a way that is moral, consistent, and effective. It also suggests that countries work together more to make and enforce strong animal welfare standards.

Keywords: International Animal Rights, Global Animal Welfare Standards, Treaties and Conventions, Environmental and Human Rights Law, Enforcement of Animal Protection Laws.

THE INFLUENCE OF MICRONUTRIENTS ON NEUROTRANSMITTERS, OXIDATIVE STRESS, AND NEURONAL PLASTICITY

Ana-Lucia Blendea

Student at Nutrition and Dietetics, UMF Iasi, University of Medicine and Pharmacy

Alin Ciobica

Ciobica Alin, Habil. PhD Principal Investigator Alexandru Ioan Cuza University, Faculty of Biology, Iasi, Romania, Romanian Academy of Science

Ioan Gotca

Doctor of Medicine, CSM Iasi, Socola Psychiatry Institute

Lacramioara Atudorei

Student at Nutrition and Dietetics, UMF Iasi, University of Medicine and Pharmacy

Abstract: This review explores the pivotal role of micronutrients in modulating neurotransmitter synthesis, oxidative stress, and neuronal plasticity. Neurotransmitters, the brain's chemical messengers, are critically influenced by micronutrient availability, which affects cognitive functions and emotional health. Additionally, oxidative stress—an imbalance between free radicals and antioxidants in the body—has been shown to contribute to neurodegenerative diseases and aging. Micronutrients, such as vitamins and minerals, play an essential role in defending against oxidative damage and supporting the brain's antioxidant systems. [1] Furthermore, neuronal plasticity, the brain's ability to adapt and reorganize itself, is significantly affected by micronutrient levels. This review synthesizes current research linking micronutrient status to these neural processes and discusses potential therapeutic implications for enhancing brain health and resilience. By understanding how micronutrients influence these critical aspects of neurobiology, we can better strategize nutritional interventions to optimize mental and neurological health. [2]

Keywords: micronutrients, neurotransmission, oxidative stress, neuronal plasticity, brain health

THE ROLE OF RHIZOSPHERE MICROBIOMES IN DISEASE SUPPRESSION

ARSHA G

Assistant Professor, Palar Agricultural College, Ambur

ORCID: 0000-0009-1694-9716

KARIBASAPPA CS

Subject matter specialist. Kiphire

ORCID: 0000-0002-4664-8502

MEENA N

Assistant Professor, Palar Agricultural College, Ambur

ORCID: 0009-0001-6228-2838

Abstract

The rhizosphere, the narrow region of soil surrounding plant roots, harbors a complex and dynamic community of microorganisms that significantly influence plant health and disease outcomes. Rhizosphere microbiomes play a pivotal role in suppressing plant diseases by competing with pathogens, producing antimicrobial compounds, and inducing systemic resistance in plants. Beneficial microbes, such as bacteria from the genera Pseudomonas and Bacillus or fungi like Trichoderma, are known to inhibit pathogen growth through mechanisms including nutrient competition, production of volatile organic compounds, and secretion of lytic enzymes.Advances in metagenomics and high-throughput sequencing have unveiled the diversity and functional potential of rhizosphere microbiomes, providing insights into how microbial communities can be manipulated for effective disease control. Additionally, microbiome engineering and probiotics for plants are emerging as promising strategies to enhance disease resistance sustainably. The role of abiotic factors, such as soil type, pH, and agricultural practices, in shaping rhizosphere microbiomes and their disease-suppressive capabilities is also gaining attention.

This paper explores the interactions between rhizosphere microbiomes and plant pathogens, emphasizing the mechanisms underlying disease suppression. It also discusses innovative approaches to harness microbiomes for sustainable agriculture and the challenges of translating research into field applications. Leveraging the potential of rhizosphere microbiomes offers a pathway to reduce chemical inputs, improve crop productivity, and promote ecological resilience in agricultural systems.

TIMELESS ELEGANCE IN DESIGN: BALANCING TRADITION AND MODERNITY IN LUXURY ESTATES

Melik Sami

Departement of architecture, Mohamed Khider Biskra University, Biskra, Algeria. /LACOMOFA Biskra laboratory

Khelil Sara

Departement of architecture, Mohamed Khider Biskra University, Biskra, Algeria. /LACOMOFA Biskra laboratory

Tallal Abdel Karim Bouzir

Departement of architecture, Mohamed Khider Biskra University, Biskra, Algeria. /LACOMOFA Biskra laboratory

Institute of Architecture and Urban Planning, Blida University, Blida, Algeria.

Abstract:

With this study analyzing the concept of timeless elegance, which lies midway between traditional craftsmanship and modern innovation in luxury estate design, this study tries to discover a formula of timeless elegance. The research raises the question of how historical architectural narratives can be maintained and celebrated while incorporating contemporary design principles that fuse functionality and aesthetics. Three case studies lead us into the transformative potential of unifying classical design principles with the latest technologies, and illustrate the array of methods for preserving cultural heritage, using materials and carrying out sustainable work. Findings weights contextual design as an essential element for creating spaces that reflect and address the modern lifestyle without compromising the message of the cultural identity. Drawing on the fusion of tradition and modernity, this article offers a rare view into the making of luxury estates that maintain an ethos beyond time and transcends trends through environments that evoke respect for history while being ahead of its time in innovation.

Keywords: Timeless Elegance; Luxury Estate Design; Tradition and Modernity; Architectural Balance; Historical Craftsmanship.

.

INTERNATIONAL COOPERATION AND LEGAL FRAMEWORKS IN COMBATING CYBER CRIMES TARGETING WOMEN: A COMPARATIVE ANALYSIS OF GLOBAL APPROACHES

Mr. Satish Kumar Singh [LL.M.; Qualified UGC NET & JRF]

Research Scholar, Department of Law, Central University of Punjab, India.

Mr. Sachin Singh Parihar [LL.M.; Qualified UGC NET & JRF]

Research Scholar, Department of Law, Central University of Punjab, India.

Mr. Sadanand Patel [LL.M.; Qualified UGC NET & JRF]

Research Scholar, Department of Law, Central University of Punjab, India.

Ms. Kumkum Sharma [LL.M.; Qualified]

Department of Law, Central University of Punjab, India.

ABSTRACT

Addressing the growing menace of cybercrimes affecting women, especially in an increasingly linked digital world, requires international cooperation and legislative frameworks. Cybercrimes such as cyberstalking, online harassment, and gender-based online violence disproportionately impact women, necessitating strong national and international legal responses. Different countries have quite different legal frameworks for cybercrimes; some have well-established legislation, while others don't provide complete protections, especially for women. This comparative study examines the usefulness of international legislative frameworks and cross-border collaboration in preventing cybercrimes against women. The study explores how regional agreements like the African Union Convention on Cyber Security and Personal Data Protection and the EU's Directive on Cybercrime, as well as international conventions like the Budapest Convention on Cybercrime, affect international cooperation in combating gender-based cybercrimes. It also discusses the issues of jurisdiction, extradition, and varying legal and cultural viewpoints that make cross-border collaboration more difficult. The study also assesses the contributions of global organisations like UN Women, INTERPOL, and other advocacy groups to the advancement of more robust safeguards for women online. By looking at case studies and legal practices from different parts of the world, the study aims to find the pros and cons of current international efforts to fight cybercrime against women and make suggestions for better legal protections and more productive international cooperation.

Keywords: Cybercrimes, International Cooperation, Gender-Based Violence, Legal Frameworks, Cross-Border Collaboration.

IS TOXIC LEADERSHIP INEVITABLE? A STUDY ON THE EFFECT OF TOXIC LEADERSHIP BEHAVIORS FOR HEALTH CARE ORGANIZATIONS AND NURSES

Zeynep ERSAY ÖNAL
Bandirma Onyedi Eylül University, Faculty of Health Scıences, Department of Nursing, Bandırma, Turkey
ORCID ID: https://orcid.org/0000-0000-0000-0000

Ayşe ÇİÇEK KORKMAZ
Bandirma Onyedi Eylül University, Faculty of Health Scıences, Department of Nursing, Bandırma, Turkey
ORCID ID: https://orcid.org/0000-0003-1724-4709

ABSTRACT

Introduction and Purpose: The effects of leadership behaviors on the well-being of employees, job satisfaction and patient care quality in healthcare organizations are quite important. In this context, toxic leadership, which has attracted attention in recent years, is defined as a leadership style that treats employees badly, disrupts the peace of the environment, reduces organizational efficiency and is prone to narcissistic personality traits. Leadership behaviors in the nursing profession directly affect the work environment, team dynamics and patient care quality. It is known that toxic leadership includes elements such as authoritarianism, manipulation and lack of understanding, weakens trust, cooperation and team harmony and reduces motivation. The purpose of this review is to examine the effectiveness of toxic leadership behaviors for healthcare organizations and the nursing profession. In particular, it is aimed to reveal the effects of this leadership style on the well-being of nurses, the functioning of healthcare teams and the quality of patient care. In addition, the importance of preventing toxic leadership in healthcare organizations and providing a healthier work environment will be emphasized.

Methods: This study was planned as a compilation and both national and international related studies were examined. National and international indexes were searched using the keywords "toxic", "toxic leadership", "nurse" and "healthcare workers". As a result of the search, seven national and 19 international studies were reached. The scope and characteristics of these studies were evaluated and the effects of toxic leadership behaviors on nurses and health organizations were analyzed.

Findings: Toxic leadership practices generally occur within the organization through behaviors such as dictatorship, manipulation, and threats. The studies examined show that toxic leadership weakens team cooperation, reduces organizational commitment, renders communication ineffective, and creates organizational cynicism. In the nursing profession, toxic leadership increases job dissatisfaction, burnout, and turnover rates, while causing decreases in the quality of patient care. Publications have concentrated particularly on the health and military fields, and it has been concluded that environments where health care workers face physical and mental challenges make the effects of toxic leadership even more apparent.

Conclusion: Toxic leadership weakens team collaboration in healthcare organizations, reduces organizational commitment and communication effectiveness; causes job dissatisfaction, burnout and turnover among nurses. This leads to a decrease in the quality of patient care and a decrease in the effectiveness of healthcare services. In order to reduce the effects of toxic leadership in healthcare organizations and create healthier work environments, leadership development programs should be focused on and more research should be conducted on this subject.

Keywords: Toxic, toxic leadership, nurse, health organizations

EFFECT OF GLASS-CERAMIC SEALANT THICKNESS ON SHEAR STRENGTH IN SOLID OXIDE FUEL CELLS

Tolga ALTAN

Nigde Omer Halisdemir University, Faculty of Engineering, Mechanical Engineering Department, Nigde, Türkiye

ORCID ID: https://orcid.org/0000-0001-7586-7758

ABSTRACT

Solid oxide fuel cell (SOFC) is a type of fuel cell that has the capacity to operate on a variety of fuels and demonstrates superior efficiency in comparison to conventional power generation systems. In SOFC systems, sealing elements are required to gas-tighten the ceramic cells and metal interconnectors at elevated operating temperatures. These sealing elements play a critical role in preventing the mixture of fuel and air, thereby maintaining optimal system performance and safety. Glass-ceramic materials are widely used for this purpose. Nevertheless, it is important to determine an ideal thickness of the sealing element to ensure optimal performance and cost-effectiveness. The sealing performance of glass-ceramic materials is determined by a variety of factors, one of which is the bonding strength. In this study, the effect of SOFC glass-ceramic sealant thickness on sealing performance is experimentally investigated by measuring the bonding strengths. The glass-ceramic sealants are fabricated using the tape casting method, which is simple and cost-effective for mass production, compared to other alternative methods. Glass-ceramic samples of various thicknesses are obtained by stacking different numbers of cast tapes (6, 12, 18, 24 and 30 pieces) and laminating them under mechanical pressing. In the preparation of the mechanical test specimens, the glass-ceramics are placed between Crofer® 22 APU metallic interconnects, which are produced specifically for mechanical testing, and then sintered in a programmable high-temperature furnace. The shear strength of 24 specimens prepared for each case is determined at room temperature using a tensile testing machine. The results show that the shear strength values increase with increasing glass-ceramic thickness. On the other hand, when the mechanical data and production cost are evaluated together, it is concluded that the optimum situation is glass-ceramic produced with 18 layers, resulting in a final thickness of ~0.75 mm after the forming process.

Keywords: Solid oxide fuel cell; Glass-ceramic; Bonding Performance; Shear strength

USE OF ORTHODONTIC RECORDS WITH ARTIFICIAL INTELLIGENCE SUPPORT

Tulca BÜYÜKPATIR TÜRK

Ankara Yıldırım Beyazıt University, Faculty of Dentistry, Department of Orthodontics, Ankara, Turkey

ORCID ID: https://orcid.org/0000-0002-4295-9258

ABSTRACT

Contemporary dentistry is at the center of a significant shift, driven by the fusion of artificial intelligence (AI) into diverse domains, including orthodontics. This innovative synthesis has birthed novel, unconventional workflows in orthodontic practice, positively disrupting traditional methods. AI's self-learning capability holds immense potential in reducing clinicians' workloads, thus enhancing their productivity and overall job satisfaction. Researchers are intensely investigating the efficacy and precision of AI applications, with a multitude of studies clearly showing the viability of AI-assisted execution of routine procedures. Notably, AI has revolutionized the field of radiographic imaging, particularly in orthodontic practice. For example, it has been used to analyze lateral cephalometric radiographs, which are essential in diagnosing orthodontic problems, with a high degree of accuracy. Similarly, AI has been employed to estimate bone and tooth age from cephalograms, a crucial aspect of orthodontic treatment planning. Furthermore, its ability to analyze posteroanterior radiographs has facilitated the identification of skeletal discrepancies and other anomalies. In addition, AI-driven photographic assessments have enabled orthodontists to make precise measurements and visualize treatment outcomes, ultimately leading to more effective and personalized treatment plans. The primary goal of this review is to provide an informative overview of AI's integration in orthodontic materials, conducting a thorough examination of existing research to clarify its vast potential and investigate its numerous applications in improving clinical decision-making.

Key Words: Artificial Intelligence; Orthodontics; Orthodontic Materials

EFFECTS OF PODCAST, VIDEOCAST AND MULTIMEDIA INSTRUCTIONAL PACKAGES ON STUDENTS' PROFICIENY SKILLS IN ENGLSH LANGUAGE

Dr. Awopetu Emmanuel Olajide

(ORCID: 0000-0001-8281-630X)

Obafemi Awolowo University, Faculty of Education, Department of Arts and Social Science Education, Ile-Ife, Nigeria

Abstract

The study developed Podcast, Videocast and Multimedia Instructional Packages for teaching Oral English in Osun State Senior Secondary Schools and also examined the effect of each of the instructional packages on Osun State SSS students' proficiency in Oral English.

The research design used in this study was pretest- posttest quasi experimental design. The population for this study consisted of all Osun State Senior Secondary Schools (SSSII) students. Multi-stage sampling technique was used for the selection of the sample for the study. One local government area was chosen from each of the three senatorial districts which are in the state using convenient sampling technique. From each of the three LGAs, two senior secondary schools (SSSs) were selected: one SSS was randomly selected while the second one was purposively selected based on population and availability of infrastructural facilities required. The students were used in their intact classes. Thus, a sample of six intact classes was used for the research. The intact classes were classified into three groups for both the experimental and the control. There were three experimental groups and three control groups. Oral English Proficiency Test (OEPT) was the instrument for data collection and it was administered as pre-test and post-test. There were three instructional packages developed for this research. The first instructional package was Podcast, the second was Videocast and the third was multimedia instructional packages respectively. Data collected were subjected to analysis using descriptive and inferential statistical tools of mean, standard deviation and analysis of covariance (ANCOVA) while Bonferroni was employed in the post-hoc analysis.

Findings depicted that there was significant effect in Oral English proficiency [$F_{3,259} = 9.982$, $p = 0.000$] among the groups. It was further discovered that there was significant effect in the Oral English proficiency between students exposed to Podcast and Multimedia instructional packages ($p = 0.003$). Also, it was shown that the instructional package that had the most effect was multimedia instructional package (mean = 28.61) compared to videocast instructional package (mean = 27.41) and podcast instructional package (mean = 25.81).

The study therefore concluded that all of PIP, VIP and MIP were effective in improving SSSII students' Oral English proficiency.

Keywords: Podcast, videocast, multimedia, Oral English.

ASSESSMENT OF LECTURERS' INTERNET SKILLS AS CORRELATE OF ACCEPTANCE OF E-LEARNING IN COLLEGES OF EDUCATION IN OSUN STATE, NIGERIA

Dr. Oyetola Oyeniran

(ORCID: 0000-0002-2044-8246)

Obafemi Awolowo University, Faculty of Education, Department of Educational Technology and Library Studies, Ile-Ife, Nigeria

Mr. Babajide Issac OJo

Obafemi Awolowo University, Faculty of Education, Department of Educational Technology and Library Studies, Ile-Ife, Nigeria

Abstract

The study identified the internet skills possessed by Lecturers in Colleges of Education in Osun State, Nigeria. It determined the lecturers' acceptance of e-learning in the study area. Finally, the study investigated the relationship between lecturers internet skills and their acceptance of e-learning.

The study adopted descriptive survey research design. Population of the study consisted 605 lecturers in colleges of education in Osun State, Nigeria. Three Colleges of Education (one federal, one state, and one private) were selected from the three senatorial districts using purposive sampling technique. Twenty lecturers were selected from each of the colleges of education using convenience sampling technique. Two research instruments were adapted for data gathering. These are; Lecturers' E-learning Acceptance Questionnaire (LEAQ), and Internet Skills Rating Scale (ISRS). LEAQ was used to gather information on lectures' acceptance of E-learning while ISRS was used to collect information on the internet skills possessed by lecturers in colleges of education in Osun State. Data collected were analyzed.

The findings of the study showed that the lecturers have the following skills; operational skills (85.10%), information navigation skills (78.65%), social skills (81.75%), mobile skills (78.50%) and creative skills (66.15%). The findings further showed that the lecturers acceptance of e-learning was excellent (77.37%). Lastly, the study showed that there was a significant relationship between the internet skills possessed by the lecturers and their acceptance of e-learning ($F_{(1,58)} = 5.10$; $p < 0.05$)

The study concluded that there was a positive correlation between the internet skills possessed by the lecturers of Colleges of Education in Osun State and their acceptance of e-learning.

Keywords: e-learning, Internet Skills, Lecturers, Acceptance, Colleges of Edu

TITLE: THE IMPACT OF URBAN REGENERATION ON THE CUSTOMS AND CULTURE OF THE RESIDENTS OF THE REGION

Azizian.saeed

University of Science and Culture.Tehran.Iran Kabiri.fatemeh & Babaei.mohaddisa & Ahlul Bayt International University.Tehran.Iran

Abstract:

The impact of urban regeneration on the customs and culture of the residents of the region

Paying attention to worn-out tissues and fixing their instability has become a serious and central issue, in such a way that it has led the relevant organizations to try to organize and recreate the said tissues.

The approaches of urban restoration and improvement have changed from reconstruction, revival and regeneration to urban regeneration and regeneration, but the most important part that should be considered is a serious attitude towards the category of native culture and customs of the people.

In this research, using descriptive and analytical methods, suitable solutions to improve and speed up this issue have been investigated.

Another issue that leads the statesmen towards urban regeneration and reconstruction is the lack of space and urban space for the production and expansion of housing.

So that in order to prevent the expansion of cities and the heavy financial burden of the required infrastructures, they think of recreating the worn-out tissues in the internal limits, the consequences of not doing it correctly can have harmful consequences for the residents of the.

We hope that in this article we have examined and provided solutions that we hope will be useful.

Keywords: regeneration, The impact of urban regeneration, worn-out tissues, The approaches of urban restoration

HIDDEN DEADLY DANGER IN THE SWIMMING POOL

Betül KAPLAN ZAMANOV

İstanbul Medeniyet University, Göztepe Prof. Dr. Süleyman Yalçın City Hospital, Department of Emergency Medicine, Istanbul, Turkey

ORCID ID: 0009-0005-2715-6026

ABSTRACT

Introduction and Purpose: Carbon monoxide (CO) is a colorless, odorless, and tasteless gas that is produced by the incomplete combustion of carbon-based compounds. In our country, the most common source of CO poisoning is heating systems, and most cases occur during the winter months. CO poisoning diagnosis is made by measuring COHb levels in arterial blood gas analysis. The aim of this case series is to emphasize the impact of CO poisoning associated with enclosed spaces on communities.

Case: In our case series, we present 17 patients who experienced CO poisoning due to a natural gas leak in a swimming pool at a recreational facility. The patients' ages ranged from 25 to 45, with an average age of 39.11 years. 82.3% (n = 14) of these patients were female, and the most common symptoms were headache and dizziness. COHb levels of the patients ranged from 7.1% to 28%, with an average value of 14.49%. One patient with a COHb level of 28% was referred to an external center for hyperbaric oxygen therapy. The remaining 16 patients received normobaric oxygen therapy in the emergency department. After treatment and monitoring in the emergency department, the patients were discharged with recommendations.

Discussion and Conclusion: 17 patients with nonspecific complaints and mild signs of poisoning, who presented to the same hospital during the same time period, were identified through detailed history-taking and were able to receive the correct diagnosis and treatment. Once again, the importance of epidemiology was highlighted in the emergency department. Following the reporting of the cases to the relevant authorities, an investigation was initiated, and after feedback, a natural gas leak was detected at the facility's swimming pool. Potential disasters were prevented, and further exposure was avoided. We recommend that clinicians consider CO poisoning in patients presenting with nonspecific complaints.

Keywords: CO, poisoning, community poisoning

Table 1: Descriptive statistics

	N	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
pH	17	7,34	7,43	7,38	0,02
pCO2(mmHg)	17	30,9	48,7	40,05	4,91
pO2(mmHg)	17	13,7	50,7	27,38	10,30
Lactate(mmol/L)	17	0,94	2,09	1,33	0,35
COHb(%)	17	7,1	28,0	14,49	5,38
control COHb(%)	17	0,1	4,2	1,87	1,43
Troponin(ng/L)	17	3,00	24,20	6,26	5,50

CAN THE USE OF BRAIN CT BE REDUCED IN PEDIATRIC HEAD TRAUMAS?

Sinem GUZEL OZTURK

Yenisehir State Hospital, Department of Emergency Medicine, Bursa, Turkey

[1]ORCID ID: https://orcid.org/0000-0001-7718-3384

ABSTRACT

Introduction and Purpose: Head traumas are common reasons for emergency services visits both in our country and worldwide. In particular, the highest rates are seen in the elderly and in the 0-4 age group. We see that the use of computerized tomography (CT) is preferred at different rates among doctors, especially in cases with minor head trauma. Studies show that this rate is lower in specialized pediatric hospitals and among physicians with pediatric trauma training compared to emergency department physicians. Our study aims to analyze pediatric head trauma cases admitted to our emergency department and underwent brain CT imaging.

Material and Methods: The study was designed retrospectively, and the data of head trauma patients under the age of 18 who applied to our emergency department between 01.06.2024 and 31.08.2024 were analyzed. The demographic characteristics of the patients, trauma mechanisms, CT findings, discharge, hospitalization, and referral data were examined.

Results: 310 patients were included in the study, the female/male ratio was 94/216 and the mean age was 7.19 years. Among the patients, 82 were in the 0-2 age group, 80 were in the 12-17 age group, and 148 were in the 3-11 age group. Falling from the same level were the most common cause in all age groups, accounting for 141 admissions in total. In terms of computed tomography findings, 29 patients had subcutaneous hematoma, 8 had fractures, and 1 had intracranial hemorrhage. Of the patients, 277 were discharged, 14 were referred to a higher-level center for follow-up and treatment.

Discussion and Conclusion: In our country, the majority of cases are present to emergency departments that are not specialized in this field and are generally staffed by general practitioners. It is believed that implementing an algorithm such as the PECARN-based head trauma decision tool in these emergency depatments could have a significant impact on reducing brain CT use in pediatric head trauma cases.

Keywords: PECARN; Pediatric head traumas; Brain CT

INSTRUCTIONAL TECHNOLOGIES USED in VISUAL ARTS EDUCATION

Hamit GIŞ
Kocaeli University, Department of Educational Technologies, Master's student, Kocaeli, Turkiye
orcid.org/0009-0006-8358-7987

Arzu DEVECİ TOPAL
Kocaeli University, Faculty of Education, Department of Computer and Instructional Technologies Education, Türkiye
orcid.org/0000-0001-5090-8592

ABSTRACT

Introduction and Objective: This study aims to evaluate the current situation in this field and shed light on future research by bringing together the findings of academic studies that address visual arts education and technology integration in different aspects. Thus, it will be possible to make inferences on how technology can be used effectively in visual arts courses and how this use can add value to education.

Materials and Methods: This systematic literature review study aims to understand the trends, gaps and suggestions in the field by analysing existing scientific studies in line with certain themes. The population of the study consisted of scientific publications on the use of technology in visual arts education. The sample of the study consists of a total of 18 research articles published between 2015 and 2024, within the scope of SSCI, SCI, ACHI, ESCI and accessed with the keywords ‘visual arts’, ‘education’, ‘e-learning’, ‘technology’, ‘web 2.0’, ‘digital technologies’, ‘digital material’, ‘educational technologies’, ‘distance learning’, ‘virtual reality’.

Findings: In the research, it was determined how innovative technologies such as augmented reality, virtual reality, hologram technology, digital curation tools and mobile devices are used in educational processes and how this use has positive effects on student achievement, motivation and creativity. In this process, teachers' technological competences are an important factor. The findings reveal that the integration of technology into visual arts education facilitates students' understanding of abstract concepts and improves their critical thinking and creativity skills. However, technical infrastructure deficiencies, differences in teachers' competence levels and pedagogical difficulties are among the factors that limit the effective use of technology.

Conclusion and Discussion: This study reveals that innovative approaches at the intersection of technology and arts have the potential to make educational processes more effective and enriching. However, in order for this potential to become sustainable, strategic steps should be taken and the use of technology should be considered in a broader framework. In addition, in order to strengthen the role of technology in education, teachers should be supported with professional development programmes and technology infrastructure should be improved. In this context, studies and policies to be made for the effective integration of technology in visual arts education will be a guide.

Key words: Visual Arts Education, Instructional Technologies, Augmented Reality, Digital Curation, Creativity in Education, Technological Pedagogy

HYDROTHERAPY-INSPIRED ALARM CLOCKS: A NOVEL APPROACH TO WAKING UP NATURALLY

Jebasingh Jeremiah Rajesh Jesudoss Hynes

Faculty of Electrical Engineering, Automatic Control and Informatics, Opole University of Technology, Proszkowska 76, 45-758 Opole, Poland

ABSTRACT

The Water-spray Alarm Clock represents an innovation in alarm clock technology and sleep science. It specifically targets the challenge of waking up gently and naturally, enhancing the overall sleep-wake transition. This invention utilizes principles from hydrotherapy and sleep psychology to curate a unique waking experience. Traditional alarm clocks are limited to auditory or vibratory stimulation, which can be jarring and result in sleep inertia. The Water-spray Alarm Clock takes a different route in relying on the calming properties of water. The inspiration behind it is the hushing, healing effect of morning mist or light rain, which the aim is to replicate as it slowly wakes up people from sleep. The Water-spray Alarm Clock is a novel approach to waking up that combines the soothing effects of water with the functionality of an alarm clock. This invention, unlike alarm clocks that wake users up by loud sounds or vibrations, wakes users up by the fine mist of water sprayed at adjustable intervals. It is a small piece of kit that can be placed on a bedside table that contains a water reservoir, a pump, and a nozzle. Using a friendly user interface, users can adjust the alarm time and the strength of the water spray. When the alarm sounds, a pump activates, spraying a fine mist of water in front of the user's face.

Keywords: Water-spray alarm clock; Gentle alarm clock innovation; Hydrotherapy alarm technology; Sleep psychology

EVALUATION OF THE RELATIONSHIP BETWEEN THE HIGHER EDUCATION SYSTEM AND THE LABOR MARKET IN THE CONTEXT OF SKILLS SHORTAGE IN TURKEY

Yasemin DUMANLI GÜRLER

Marmara University Institute of Social Sciences Labor Economics Doctorate Program

Istanbul, Turkey

ORCID ID: https://orcid.org/0000-0002-3499-0917

ABSTRACT

Introduction and Purpose: This study aims to determine the factors and results that cause the weak link between the higher education system and the labor market in Turkey by examining the relationship between the higher education system and the labor market. Therefore, firstly, higher education policies, curricula and higher education practices in Turkey were investigated in this study. Secondly, it was tried to determine to what extent the higher education graduates employed in Turkey meet the skill needs required by the labor market. Finally, considering the results of skill mismatch in the labor market, the real and potential effects of higher education outcomes on the sectors were examined.

Materials and Methods: In this study, the reasons and effects of skill mismatch in Turkey were investigated. For this purpose; a literature review was conducted on the concepts related to the subject. The information and data obtained by using primary and secondary sources were systematically classified with the descriptive analysis method and were critically evaluated within the framework of the relationships between the concepts. In addition to the studies in the literature, reports and data from organizations such as TÜİK, İŞKUR, OECD, WORLD BANK, EUROSTAT were also used. The information obtained was systematically classified, analyzed and critically evaluated. Thus, the findings reached within the scope of the research were associated with previous studies. In order to better match the supply and demand of skills and to transform this information into action, education-employment models and policy recommendations aimed at training the workforce with the necessary skills, increasing employability and strengthening the relationship between the higher education system and the labor market were presented.

Results: The incompatibility between the labor market and higher education institutions in Turkey generally results in qualified graduates working for lower wages. The excess supply of graduates who have received education in some fields in the labor market in Turkey, while the shortage of qualified labor in some fields, is an indicator of the incompatibility between higher education and the labor market. This situation negatively affects growth and innovation in sectors. The incompatibility between higher education institutions and the labor market reveals the need to update education programs. Since curricula and education programs that are suitable for the needs of industry and the business world in Turkey are not created, there is a supply-demand mismatch in the labor market. In order to reduce this mismatch, universities need to cooperate more strongly with the business world.

Discussion and Conclusion: Türkiye'de bilgi yoğun sektörlerde yüksek nitelikli işgücünün bulunmaması, bu sektörlerin büyüme potansiyelini sınırlandırmaktadır. Yükseköğretim kurumları, özellikle teknoloji alanında, sektörel ihtiyaçlara uygun becerilere sahip işgücü

yetiştirmede yetersiz kalmaktadır. Türkiye'deki "düşük beceri dengesi", işgücü piyasasındaki arz-talep dengesiyle ilgili ekonomik ve sosyal dinamiklerden kaynaklanmaktadır. Türkiye'deki eğitim sisteminden mezun olan bireylerin çoğunun gerekli teknik ve dijital becerilere sahip olmaması, işgücü piyasasında düşük becerili işgücü arzını artırmaktadır. Bu durumda, işverenler genellikle düşük becerili işlere uygun, daha basit, rutin işlere odaklanmaktadır. Dolayısıyla, düşük becerili işlere olan talep artarken, yüksek becerili işlerin yaratılması kısıtlanmaktadır.

Key Words: Education, Skill Mismatch, Skills Gap, Higher Education System, Labour Market, Employment, Employability, Human Capital

THE EFFECT OF USING ALGODOO IN SCIENCE EDUCATION ON THE LEARNING OF STUDENTS WITH SPECIFIC LEARNING DISABILITIES

Zeynep HASANOĞLU
Yildiz Technical University, Department of Mathematics and Science Education, Science Education Master's Program, Istanbul, Turkey
ORCID ID: https://orcid.org/0009-0007-0386-7338

Prof. Dr. Mutlu ŞAHİN
Yildiz Technical University, Department of Mathematics and Science Education, Science Education Program, Istanbul, Turkey
ORCID ID: https://orcid.org/0000-0002-4430-1767

ABSTRACT

Introduction and Purpose: The aim of this study is to determine the effectiveness of teaching the topics included in the "Light Unit" to 5th-grade inclusive students with specific learning disabilities using Algodoo software.

Materials and Methods: This study involved three 5th-grade students diagnosed with special learning difficulties. A multiple-probe design across subjects, one of the single-subject research models, was used in the study. The data collection tools included the "Light Unit Academic Achievement Test," created from questions prepared by the Ministry of National Education (MEB), which was used in baseline, collective probes, and follow-up sessions. Additionally, the "Light Unit Daily Attendance Questions," prepared by the researcher and validated by experts for suitability, were used in daily attendance sessions.

Findings: The study found that the Algodoo software was effective in learning the "Light Unit". Although a decline in the percentage of correct answers was observed in the follow-ups conducted at one-week intervals after the instruction ended, it was noted that two students retained their knowledge. However, one student was observed to have not retained their knowledge.

Keywords: Science Education, Algodoo Software, Special Learning Difficulties, Inclusion.

CRYPTOCURRENCY AND STOCK MARKETS: RELATIONSHIPS IN TIME AND FREQUENCY DOMAINS

Nuray YÜZBAŞIOĞLU

Adnan Menderes University, Nazilli Vocational School, Aydın, Turkey

ORCID ID: https://orcid.org/0000-0001-7409-4263.

ABSTRACT

Introduction and Purpose: This study aims to examine the short- and long-term relationships between five selected cryptocurrencies (Bitcoin, Ethereum, Ripple, Binance Coin, Solana) and the BIST 100 index using wavelet analysis. The dynamic interactions between the highly volatile nature of cryptocurrencies and the relatively stable structure of traditional stock markets, such as the BIST 100, are evaluated across time and frequency domains. The study seeks to provide strategic insights for investors and policymakers by identifying the relationships between these two distinct markets.

Materials and Methods: The study utilizes daily price data from January 1, 2015, to December 31, 2024. The selected cryptocurrencies include Bitcoin (BTC), Ethereum (ETH), Ripple (XRP), Binance Coin (BNB), and Solana (SOL), which are compared with the daily closing values of the BIST 100 index. Daily returns were calculated from the price series and incorporated into the analysis. Continuous Wavelet Transform (CWT) and Wavelet Coherence Analysis (WTC) methods were employed to investigate the relationships between the two markets across time and frequency domains. The analyses were conducted using the R programming language and the WaveletComp package.

Results: According to the wavelet analysis, the short- and long-term dynamics between the selected cryptocurrencies and the BIST 100 index differ significantly. In the short term, especially during crisis periods (e.g., the COVID-19 pandemic), a high correlation between the two markets was observed. Bitcoin and Ethereum exerted stronger short-term influences on the BIST 100 compared to other cryptocurrencies. Ripple and Solana exhibited long-term effects at low frequencies, while Binance Coin showed low correlation with the BIST 100 in both the short and long term. Overall, a low long-term correlation was identified between cryptocurrencies and the BIST 100, highlighting a significant advantage for portfolio diversification.

Key Words: Bitcoin, Ethereum, Ripple, Binance Coin, Solana, BIST 100, Wavelet Analysis

ABSTRACTS BOOK

ISBN: 979-8-89695-021-9