ABSTRACTS BOOK

SELÇUK 10. ULUSLARARASI UYGULAMALI BİLİMLER KONGRESİ

KONYA
21 - 23 HAZİRAN 2024

SELÇUK
10. ULUSLARARASI UYGULAMALI BİLİMLER KONGRESİ

SELCUK 10TH INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
JUNE 21 - 23, 2024-
KONYA

ISBN: 978-625-6283-33-6

SELCUK 10TH INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
JUNE 21 - 23, 2024- KONYA

Edited By
PROF. DR. BAŞAK HANEDAN

CONFERENCE ID

SELCUK 10TH INTERNATIONAL CONFERENCE ON APPLIED SCIENCES

DATE – PLACE
JUNE 21 - 23, 2024- KONYA

ORGANIIZATION
ACADEMY GLOBAL CONFERENCES & JOURNALS

EVALUATION PROCESS
All applications have undergone a double-blind peer review process.

PARTICIPATING COUNTRIES
Turkey – USA – Egypt – Australia - Finland – Indonesia – Singapore - South Korea – Mexico – India- Saudi Arabia – Japan- France – Malaysia – China – Taiwan – Japan- Qatar- Kazakhstan - New Zealand – Thailand - North Korea – Vietnam- Brazil – Jordan- Kosovo – Greece- Slovenia- Italy- Algeria- Russia – Netherlands – Philippines- Kenya – Poland – Uzbekistan – Latvia- Fiji – Lithuania – Morocco – Oman- Bangladesh - Eritrea.-

PRESENTATION
Oral presentation

ASSOCIATION & ACADEMIC INCENTIVES :
More than 50 % of papers have been presented by foreigner participants
86 Papers from Turkey and 104 paper from other countries
Members of the organizing committees of the conference perform their duties with an "official assignment letter"

Issued: 01.08.2024
ISBN: 978-625-6283-33-6

Scientific & Review Committee

Dr. Gulmira ABDİRASULOVA – Kazakhstan

Prof. Dr. Yunir ABDRAHIMOV – Russia

Doç. Dr. Nazilə Abdullazadə - Azerbaijan

Dr. Omid AFGHAN - Afghanistan

Prof. Dr. Ali BİLGİLİ - Turkiye

Prof. Dr. Naile BİLGİLİ - Turkiye

Prof. Dr. Başak HANEDAN - Turkiye

Prof. Dr. Asım KART - Turkiye

Dr. Öğretim Üyesi Büşra YARANOĞLU - Turkiye

Dr. Öğretim Üyesi İsmail Hakkı TEKINER - Turkiye

Doç. Dr. Şeyma ÇALIŞKAN ÇAVDAR - Turkiye

Dr. Maha Hamdan ALANAZİ - Saudi Arabia

Aynurə Əliyeva - Azerbaijan

Dr. Dzhakipbek Altaevich ALTAYEV - Kazakhstan

Doç. Dr. Abdulsemet AYDIN – Turkiye

Doç. Dr. Nurhan AYDIN - Turkiye

Doç. Dr. Mehmet Fırat BARAN - Turkiye

Dr. Amina Salihi BAYERO – Nigeria

Prof. Dr. Ali BILGILI - Turkiye

Dr. Baurcan BOTAKARAEV - Kazakhstan

Doç. Dr. Seher DİRİCAN - Turkiye

Dr. Ahmad Sharif FAKHEER - Jordania

T.C.
ATATÜRK ÜNİVERSİTESİ REKTÖRLÜĞÜ
Veteriner Fakültesi Dekanlığı

Sayı : E-36643897-000-2300315795 05.10.2023
Konu : Görevlendirilme.

KLİNİK BİLİMLER BÖLÜMÜ BAŞKANLIĞINA

İlgi : 04.10.2023 tarihli ve E-36643897-000-2300313904 sayılı belge.

İlgide kayıtlı yazıda belirtildiği üzere, Bölümünüz Veterinerlik İç Hastalıkları Anabilim Dalı öğretim üyelerinden Prof. Dr. Başak HANEDAN'ın, "Academy Global Conferences & Publishing tarafından önümüzdeki tarihlerde düzenlenecek olan uluslararası kongrelerde; kongre başkanı, kongre düzenleme ve bilim kurulu üyesi olarak görevlendirilmesi Dekanlığımızca uygun görülmüştür.

Bilgilerinizi ve gereğini rica ederim.

Prof.Dr. Yavuz Selim SAĞLAM
Dekan

Atatürk Üniversitesi Veteriner Fakültesi 25240 Erzurum
Tel: +90 442 2317222
Elektronik Ağ: http://www.atauni.edu.tr/#!birim=veteriner-fakultesi
Kep Adresi: atauni@hs01.kep.tr
Bilgi: Derya FINDIK
Faks: +90 442 2317244
E-Posta: vetfak@atauni.edu.tr

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
NewArt 3rd INTERNATIONAL GROUP EXHIBITION
JUNE 21 - 23, 2024
KONYA

Kongre Bağlantı Linki :

Join Zoom Meeting

https://us06web.zoom.us/j/81604584722?pwd=y2kFvDBw8AEhxbZ5eSknYVkdXt0yTt.1

Meeting ID: 816 0458 4722

Passcode: 202224

ÖNEMLİ AÇIKLAMA (Lütfen okuyunuz)

- ZOOM bağlantısı için yukarıda verilen bağlantıyı veya yine yukarıda verilen giriş bilgilerini kullanabilirsiniz.
- Oturum içerisinde en KIDEMLİ olan moderator olarak seçilir. Moderatörün oturum düzenini gözetmesi, akademisyen adaylarını yönlendirmesi beklenmektedir.
- Oturuma bağlanmadan önce Salon numaranızı adınızın önüne aşağıdaki gibi ekleyiniz. Bu sayede kongre açılışında beklemeden oturumlarınıza gönderilebileceksiniz. Ör. 5 Ahmet Ahmetoglu
- Sunum süresi 10 dakikadır. Bu sürenin aşılmamasını moderatörler temin edecektir.
- Sunum sonrası 5 dakikayı geçmeyen soru-cevap, tartışma süresi verilmektedir.
- Sunumlar TÜRKÇE veya İNGİLİZCE yapılabilmektedir.
- Kameralar, oturum süresince toplam % 70 oranında açık olmak zorundadır.
- Sunum yapan katılımcının kamerası açık olmak zorundadır.
- Sunum yapmak zorunludur. Herhangi bir nedenle sunum yapmamış olan katılımcıya sertifika verilmesi ve çalışmasının yayınlanması sözkonusu olamaz.
- Katılımcı, kendi oturumda, oturum bitene kadar bulunmak zorundadır.
- Katılımcıların kendi oturumları dışındaki oturumlara katılma zorunluluğu yoktur.
- ZOOM platformunun kapasite sınırı nedeniyle, DİNLEYİCİ, sadece kapasite izin verdiği sürece kabul edilebilmektedir.

IMPORTANT, PLEASE READ CAREFULLY

- 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 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 **10 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 please indicate your name surname and hall number,

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
22 Haziran / June 22, 2024 / 11:00 – 13:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
SALON 1 / HALL 1	**Prof. Dr. Meryem HAYIR KANAT**	1	NEURO-LINGUISTIC PROGRAMMING TO IMPROVE TEACHER WORK MOTIVATION	Hindun Yafa Chotijah Dedi Heri Sutendi Herlina Siwi Widiana
		2	ESSAY-AS A MEANS OF DEVELOPING COMMUNICATIVE SPEECH OF PRIMARY SCHOOL STUDENTS	Qasımova Maya Rəhim qızı
		3	BAZI DEĞİŞKENLERE GÖRE SINIF ÖĞRETMENLERİNİN ÜSTÜN YETENEKLİ ÖĞRENCİLERİN EĞİTİMİNE YÖNELİK ÖZ YETERLİKLERİ	Uzman Öğretmen İbrahim Aslan Prof. Dr. Songül Tümkaya
		4	LİSE ÖĞRENCİLERİNİN OKULA YÖNELİK TUTUM DÜZEYLERİ İLE KARİYER KAYGI DÜZEYLERİ ARASINDAKİ İLİŞKİNİN İNCELENMESİ	Prof. Dr. Gürbüz OCAK Uzman Öğretmen, Kerem İÇEL Öğretmen, Niyazi KAR
		5	IMPORTANCE OF PARENTS' AWARENESS OF THE EDUCATION SYSTEM IN IMMIGRANT INTEGRATION	Serhat Kırdar Prof. Dr. Meryem HAYIR KANAT
		6	Evaluation of the 9th Grade Biology Course Curriculum According to the CIPP Model	Yüksek Lisans Öğrencisi, Necmettin KAVAK Prof. Dr. Şenel ELALDI
		7	LİSE 9. SINIF İNGİLİZCE DERSİ ÖĞRETİM PROGRAMININ KAZANIM VE İÇERİK BOYUTUNDA HAMMOND DEĞERLENDİRİLME MODELİNE GÖRE DEĞERLENDİRİLMESİ	Yüksek Lisans Öğrencisi Özge ÇUBUK HASTAOĞLU Prof. Dr. Şenel ELALDI
		8	Examining the Relationship between High School Students' Attitudes towards School and Career Anxiety Levels	Prof. Dr. Gürbüz OCAK Uzman Öğretmen, Kerem İÇEL Öğretmen, Niyazi KAR
		9	AN EXAMINATION OF THE USE OF TEACHING MATERIALS IN MATHEMATICS LESSONS BY MIDDLE SCHOOL MATHEMATICS TEACHERS WORKING IN RURAL AREAS	Saliha KARĞI Prof. Dr. Kürşat YENİLMEZ

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
NewArt 3rd INTERNATIONAL GROUP EXHIBITION
JUNE 21 - 23, 2024
KONYA
Meeting ID: 816 0458 4722 Passcode: 202224

22 Haziran / June 22, 2024 / 11:00 – 13:00 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 2	Doç. Dr. Nazan GÜRARSLAN BAŞ	1	How to Target Mitophagy and Link Related Pathways in Anticancer Therapy	Assist. Prof. K.R.Padma, Reader K.R.Don
		2	HOW MUCH DOES THE CONSCIOUSNESS OF INTENSIVE CARE PATIENTS AFFECT THE RISKS?	Dr. Lütfiye Nur Uzun
		3	ANESTHESİA MANAGEMENT İN A PATİENT WİTH WİLLİAMS SYNDROME UNDERGOİNG DENTAL SURGERY - CASE REPORT	R.A., Abdullah YEŞİLKAYA Assoc. Prof. , Müge ARIKAN
		4	Comparison of Posture Health Anxiety and Work Productivity in Long-Term Desk Workers and Long-Term Standing Workers	Fzt. Saniye Duygu TATLI Doç. Dr. Yıldız ERDOĞANOĞLU
		5	BARIATRIC SURGERY AND NURSING CARE	Öğretim Görevlisi Nilgün SÖYLEMEZ Dr. Öğr. Üyesi Dilek GÜNEŞ
		6	NURSE AND THE CONCEPT OF DIFFICULT PATIENT	Öğretim Görevlisi Nilgün SÖYLEMEZ
		7	TELETIP UYGULAMALARI VE ÇOCUK	Doç. Dr. Nazan GÜRARSLAN BAŞ
		8	ÖLÜM SONRASINA YÖNELİK ORGAN BAĞIŞI TUTUMU	Doç. Dr. Ahmet Kemal FİLİZ Tıp Fakültesi Dönem 3 Öğrencisi Zehra Betül GÖKSU
		9	OMEGA 6	Doç Dr. İbrahim AKTAŞ
		10	KRONİK HASTALIĞI OLAN YAŞLI BİREYLERDE SOSYAL DESTEK ALGISI VE HASTALIK ÖZ YÖNETİMİ İLİŞKİSİ	Öğr. Hem. Keziban ŞİMŞEK Öğr. Hem. Zeynep ERGÜN Doç. Dr. Feride TAŞKIN YILMAZ
		11	KADINLARIN EV TEMİZLİĞİNDE KULLANDIKLARI KİMYASAL MADDELERE İLİŞKİN DAVRANIŞLARI İLE SOLUNUM SİSTEMİ HASTALIKLARINA YÖNELİK RİSK ALGISI	Öğr. Hem. Hilal NALBANT Öğr. Hem. Merve UÇAR Doç. Dr. Feride TAŞKIN YILMAZ

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
22 Haziran / June 22, 2024 / 11:00 – 13:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 3	**Doç.Dr. Filiz YANGILAR**	1	BESLENME AÇISINDAN KASAPLIK HAYVANLARIN YENEBİLİR YAN ÜRÜNLERİ (SAKATATLAR)	Dr. Öğr. Üyesi,HALİME ALP Prof. Dr.,MUSTAFA KARAKAYA
		2	ÇÖREKOTU, SUSAM, HİNDİSTAN CEVİZİ VE KUŞ ÜZÜMÜ İLAVELİ BEYŞEHİR TARHANALARININ FİZİKSEL, TEKSTÜREL VE DUYUSAL ÖZELLİKLERİNİN BELİRLENMESİ	Dr. Öğr. Üyesi Nazlı Şahin Sevinç Sucu Prof. Dr. Abdulvahit Sayaslan
		3	HEALTH BENEFITS AND ANTICARCINOGENIC EFFECTS OF STINGING NETTLE	Assist Prof. Dr. Hülya ŞEN ARSLAN Ece Nur YÜCEL
		4	THE EFFECT OF ARTEMISIA ABSINTHIUM L. PLANT ON DIABETES AND HYPERTENSION	Assist Prof. Dr. Hülya ŞEN ARSLAN Kübra KAYMAZ
		5	D-ALLÜLOZ VE GIDA ENDÜSTRİSİNDE KULLANILMASI	Doç.Dr. Filiz YANGILAR
		6	ÇİĞ BESLENME AKIMINDA ÇİMLENDİRİLMİŞ HUBUBAT ve BAKLAGİLLERİN ÖNEMİ	Doç.Dr. Filiz YANGILAR
		7	THE EFFECT OF PREGELATINIZED BROAD BEAN ON PHYSICAL, TEXTURAL AND SENSORIAL PROPERTIES OF BREAD	Assist. Prof. Dr., HÜMEYRA ÇETİN-BABAOĞLU

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
22 Haziran / June 22, 2024 / 11:00 – 13:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 4	**Dr. Öğr. Üyesi Merve ERDOĞAN**	1	WEARABLE INTERNET OF THINGS FOR MONITORING MATERNAL HEALTH AS A PREVENTION OF STUNTING	Dwi Sulisworo Ika Maryani Yuliana Rahmah Retnaningrum Dhesi Ari Astuti
		2	TÜRKİYE'DE SİYASAL İLETİŞİM ÇALIŞMALARI AÇISINDAN GENEL BİR DEĞERLENDİRME	AHMET BATUHAN POLAT ESRA ÖZGE KARABULUT
		3	THE IMPACT OF SOCIAL MEDIA ON CULTURAL CAPITAL ACCUMULATION: A RESEARCH ON INTERNATIONAL STUDENTS	Dr. Öğr. Üyesi Merve ERDOĞAN
		4	INVESTIGATION OF DIGITAL LITERACY OF INTERNATIONAL UNDERGRADUATE STUDENTS	PhD. Student, Orou Issiaka Sounon Assoc. Prof. Dr., Canan YILDIRAN
		5	TÜRK VE FRANSIZ ÜÇÜNCÜ SAYFA HABER METİNLERİNDE BAĞLANTI ÖĞELERİ	Mustafa Mavaşoğlu Meral Bütün

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
22 Haziran / June 22, 2024 / 11:00 – 13:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 5	**Prof.Dr. Işık Sezer**	1	THE IMPACT OF TRADITIONAL ARTS ON CONTEMPORARY TURKISH PAINTING: "THE EXAMPLE OF BEDRİ RAHMİ EYÜBOĞLU AND EROL AKYAVAŞ"	Meryem KARACA Doçent, Nizam Orçun ÖNAL
		2	REFLECTIONS OF WOMEN IN TURKISH PHOTOGRAPHY	Prof.Dr. Işık Sezer
		3	BİREYLERDEKİ KİMLİK ARAYIŞININ SANATSAL İFADESİ OLARAK SERAMİK	Başak BAŞAK Dr. Öğr. Üyesi Müjde YÜCEL COŞAR
		4	KADIN PEDİ İMAJININ PARADİGMASAL DEĞİŞİMİNİN MARKA İMAJI AÇISINDAN İNCELENMESİ VE AMBALAJ TASARIMLARI	MEDİNE ŞAN
		5	DİSTOPİK FİLM AFİŞLERİNDE FÜTÜRİSTİK GÖRSEL İMAJLAR VE TİPOGRAFİ	Doç. Dr. Ekin Su KUZU
		6	JEAN JACQUES ROUSSEAU'NUN "EMİLİE YA DA EĞİTİM ÜZERİNE" ADLI YAPITININ EĞİTİM FELSEFESİ BAĞLAMINDA İNCELENMESİ	Seda YURTSEVEN
		7	BATI'DAN DOĞAN GÜNEŞ İBN BÂCCE: KÂMİL İNSANIN YALNIZLIĞI ÜZERİNE BİR MÜLAHAZA	Dr. Öğr. Üyesi Büşra BİLGİN
		8	YENİDEN CANLANAN TARİH: HEGEL'İN 'TARİH SONU' FİKRİ AŞILABİLECEK Mİ?	Dr. Öğr. Üyesi Demet Konur Şen Felsefe 3. Sınıf Öğrencisi Burak Sağlam

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
22 Haziran / June 22, 2024 / 11:00 – 13:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 6	**Doç. Dr. SEDA ŞAHİN**	1	SAĞLIK İŞLETMELERİNDE İŞ STRESİ VE İŞ MEMNUNİYETİ İLİŞKİSİ: BİR META-ANALİZ ÇALIŞMASI	Dr., İLKNUR ARSLAN ARAS Dr. Arş. Gör., Yasin ARAS
		2	SAĞLIK İŞLETMELERİNDE İŞ STRESİ, İŞ MEMNUNİYETİ VE PERFORMANSI ARASINDAKİ İLİŞKİLERİN İNCELENMESİ: SİSTEMATİK BİR DERLEME	Dr., İLKNUR ARSLAN ARAS
		3	TÜKETİCİLERİN AKILLI SAAT TERCİHLERİ ÜZERİNDEKİ KALİTE ALGISI	Emine SARI
		4	Y KUŞAĞININ GİYSİ SATIN ALMA PİŞMANLIĞINA YÖNELİK TUTUMLARININ İNCELENMESİ	Gizemnur Aytüre Dr. Öğr. Üyesi Meral İşler
		5	COVİD-19'UN BORSA İSTANBUL'DA İŞLEM GÖREN PERAKENDE SEKTÖR FİRMALARININ FİNANSAL BAŞARISINA ETKİSİ	Doç. Dr. Öğr. HAKKI KIYMIK Lisansüstü Öğrenci, MELTEM ATABAY
		6	GENDER-BASED DISCRIMINATION IN TOURISM: AN ASSESSMENT IN TERMS OF THE TOUR GUIDE PROFESSION	Doç. Dr. SEDA ŞAHİN
		7	LABORATUVAR GÜVENLİK FORMLARININ DİJİTAL ORTAMA AKTARILMASI	Tayyip Erdoğan AKSOY Halime Nur Efşan AKBABA Doç. Dr. Serap TEPE Öğr. Gör. Dr. Selin ASLANTAŞ

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
22 Haziran / June 22, 2024 / 11:30 – 13:30 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 7	**Christopher C. A. Chan**	1	EXPLORING LEARNING THEORY INTEGRATION İN COACHING PRACTICE	Dr. P. Fazel
		2	EXPLORING THERAPEUTIC SUCCESS AND FAILURE: A CASE STUDY OF A PERSONAL DEVELOPMENT GROUP FACILITATED BY LOREDANA DROBOT	Christopher C. A. Chan, Geetha Thachil
		3	EXPLORING THE NEXUS OF WORK-FAMILY CONFLICT, PSYCHOLOGICAL STRAIN, AND WELLBEING AMONG SOCIAL WORKERS İN INDIA	Thomas Kalliath, Parveen Kalliath,
		4	EXPLORING ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH EDUCATION İN SECONDARY SCHOOLS OF GULU DISTRICT: UNDERSTANDING KNOWLEDGE, PERCEPTIONS, AND ACCEPTANCE	Lule Herman, E. Ovuga, M. Mshilla, S. Ojara, G. Kimbugwe, A. P. Adrawa, N. Mahuro
		5	EXPLORING THE INFLUENCE OF RELIGION ON FAMILY PSYCHOLOGICAL WELL-BEING: A COMPARATIVE STUDY İN PEKAN DISTRICT, PAHANG, MALAYSIA	Amran Hassan, Fatimah Yusooff, Khadijah Alavi
		6	UNDERSTANDING AGGRESSIVE DYNAMICS İN HOSPITAL EMERGENCY TRIAGE: A CONTINUOUS OBSERVATION STUDY	C. Blatier, M. El Methni, F. Carpentier, S. Abdellaoui, C. Kock, M. Maillard
		7	ASSESSING STRESS LEVELS OF ELDERLY DRIVERS DURING REAL-WORLD DRIVING ACTIVITIES	Weihong Guo, Dan Brennan, Phil Blythe
		7	INVESTIGATING ORGANIZATIONAL STRESSORS AND EMPLOYEE WELLBEING: A DUAL-RESPONSE PERSPECTIVE	J. R. C. Kuntz, Katharina Näswall,
		8		

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
22 Haziran / June 22, 2024 / 11:30 – 13:30 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 8	**Dr. Pressca Neging,**	1	VALIDATING A THREE-FACTOR MEASUREMENT MODEL OF WELL-BEING IN ADOLESCENTS: INSIGHTS FROM STRUCTURAL EQUATION MODELING	Assis. Prof. Dr. Azlina Abu Bakar, Abdul Fatah Wan Sidek
		2	EXPLORING THE IMPACT OF SUSTAINABLE PARK DESIGN ON HUMAN WELL-BEING: A CASE STUDY IN EGYPT	Dr. Rania Rushdy Moussa
		3	EXPLORING THERAPIST SELF-DISCLOSURE IN CULTURALLY DIVERSE THERAPEUTIC SETTINGS	Ruth Lijtmaer, Roy Moodley, Shafik Sunderani
		4	THE IMPACT OF PROACTIVE COPING ON WORKPLACE ADJUSTMENT FOLLOWING THE TRANSITION FROM UNIVERSITY TO EMPLOYMENT	YiHui Cai, Takaya Kohyama
		5	INFLUENCES ON AGGRESSION IN ADOLESCENT COMMUNITIES	Prof. Dr. Rita C. Ramos
		6	EXPLORING AUTISTIC TALENT: INSIGHTS INTO WEAK CENTRAL COHERENCE AND SENSORY CHARACTERISTICS AMONG INDIVIDUALS IN KUWAIT: A CASE STUDY	Mariam Abdulaziz Y.Esmaeel
		7	EXPLORING THE INTERPLAY BETWEEN TEMPERAMENTAL TRAITS AND EMOTIONAL LANGUAGE: A NARRATIVE ANALYSIS	Barbara Gawda, Ewa Szepietowska, Agnieszka Gawda
		7	EXPLORING PATHOLOGICAL INTERNET USE (PIU) AMONG URBAN MILLENNIAL ADOLESCENTS: UNVEILING DETERMINANTS AND CONSEQUENCES THROUGH A THEORETICAL LENS	Dr. Pressca Neging, Rosidah Musa, Rabiah Abdul Wahab
		8		

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
22 Haziran / June 22, 2024 / 11:30 – 13:30 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 9	**Nima Babazadeh Gashti,**	1	EXAMINING PSYCHOLOGICAL BARRIERS TO VOLUNTARY COUNSELLING AND TESTING (VCT) FOR HIV/AIDS AMONG UNIVERSITY STUDENTS IN KANO STATE, NIGERIA	A. S. Haruna
		2	UNDERSTANDING SELF-DESTRUCTIVE BEHAVIOR AND COPING MECHANISMS AMONG INCARCERATED INDIVIDUALS	Assis. Prof. Dr. Katarzyna Czubak
		3	ASSESSMENT OF INTERNET ANXIETY AMONG HIGHER EDUCATION STUDENTS AT SRBIAU: A STUDY IN RESEARCH PROCESS	Nima Babazadeh Gashti, Nazanin Pilevari
		4	POSITIVE EMOTION DAMPENING AND ADOLESCENT INTERNALIZING BEHAVIOR: EXPLORING AFFECT INTENSITY AS A MEDIATING FACTOR	Jia-Ru Li, Chia-Jung Li, Ching-Wen Lin
		5	RELATIONSHIPS BETWEEN LOCUS OF CONTROL, EMOTION VENTING STRATEGIES, AND ADOLESCENT INTERNET ADDICTION: A STUDY IN TAIWAN	Jia-Ru Li, Chih-Hung Wang, Ching-Wen Lin
		6	NAVIGATING TOBEPHOBIA: ASSESSING TEACHERS' CHALLENGES IN ADAPTING TO CURRICULUM CHANGE	Dr. P. Singh
		7	EXAMINING THE INTERPLAY OF LEISURE SATISFACTION, SPIRITUAL WELLNESS, AND SELF-ESTEEM AMONG ELDERLY INDIVIDUALS	Cheng-Yu Tsai, Li-Wei Liu, Ming-Tsang Wu
		7	THE INFLUENCE OF PARENTAL ETHNIC SOCIALIZATION PRACTICES ON ETHNIC IDENTITY, SELF-ESTEEM, AND PSYCHOLOGICAL ADJUSTMENT AMONG MULTI-ETHNIC CHILDREN IN SABAH, MALAYSIA	Chua Bee Seok, Rosnah Ismail, Jasmine Adela Mutang, Shaziah Iqbal, Nur Farhana Ardillah Aftar, Alfred Chan Huan Zhi, Ferlis Bin Bahari, Lailawati Madlan, Hon Kai Yee
		8	DEVELOPMENT AND VALIDATION OF THE POSITIVE EMOTION REGULATION STRATEGIES SCALE FOR YOUTH	Jia-Ru Li and Ching-Wen Lin

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
22 Haziran / June 22, 2024 / 11:30 – 13:30 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 10	**Dr. Sheila Marie G. Hocson**	1	Assessing Ethnic Attitudes among Latvian and Russian Populations: An Examination Using Evaluative Priming Task and Self-Report Approaches	Maria Bambulyaka, Irina Plotka, Nina Blumenau,
		2	Impact of Various Mobility Exercises and Engagement in Special Games on Psychomotor Abilities, Functional Skills, and Game Performance among Children with Intellectual Disabilities under 14 Years	Dmitry Igonin, Elena Ozola, Laura Shimane
		3	Enhancing Cognitive Skills in Virtual Learning Environments: A Study of Online Students' Perspectives in Computer Information Systems Education	Dr. Danielle Morin, Dr. Jennifer D.E. Thomas, Raafat G. Saade
		4	Assessing the Impact of Neuropsychological Expert Testimony on Legal Proceedings: A Case Study	Valene J. Gresham, MA, Laura A. Brodie
		5	Exploring Religious Behavior Across Educational Levels: A Comparative Study of Students in Lamerd, Iran	Bahram Esmaeili, Hossein Hosseini, Mohammad Sharifi Bohloli, Hamid Reza Imani Far, Sohrab Sadeghi
		6	Influence of Personality Traits, Social Connectedness, and Digital Engagement on Well-Being: Exploring the Role of Online Flow Experiences	Assoc. Prof. Asmita Shukla, Soma Parija
		7	Comparative Analysis of Work Motivation, Work Stress, and Job Satisfaction among Employees in Taiwan and Mainland China: An Empirical Investigation	Tung-Liang Chen, Ming-Yi Huang, Tchiu-Hui Su
		7	Impact of Life Experiences on Sense of Coherence (SOC) Among Workers in Tsukuba Research Park City (TRPC): A Cross-Sectional Study	Shinichiro Sasahara, Yusuke Tomotsune, Yuichi Ohi, Shun Suzuki, Akihiro Seki, Junko Sakano, Yoshihiko Yamazaki, Ichiyo Matsuzaki
		8	Enhancing Psychological Well-Being: A Career Counseling Initiative for First-Year University Students	Dr. Sheila Marie G. Hocson

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
NewArt 3rd INTERNATIONAL GROUP EXHIBITION
JUNE 21 - 23, 2024
KONYA
Meeting ID: 816 0458 4722 Passcode: 202224

22 Haziran / June 22, 2024 / 11:30 – 13:30 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 11	**Josephine S. Larkings,**	1	EXPLORİNG THE RELATİONSHİP BETWEEN SOCİAL MEDİA ENGAGEMENT AND INTERNET DEPENDENCY: A STUDY OF FACEBOOK USAGE AMONG TAİWANESE UNİVERSİTY STUDENTS	Sen-Chi Yu, Wei-Hsin Hsu, Min-Ning Yu, Hao-Yi Hsu
		2	EXAMİNATİON OF HATE SCHEMAS AMONG PRİSONERS WİTH ANTİSOCİAL PERSONALİTY DİSORDER (ASPD)	Dr.Barbara Gawda
		3	EXPLORİNG THE INFLUENCE OF MEDİA ON VALUES, ATTİTUDES, AND BEHAVİORS AMONG THAİ YOUTH: A QUALİTATİVE ANALYSİS	Waralak Vongdoiwang Siricharoen, Nattanun Siricharoen
		4	EVALUATİON OF PROLONGED INFLUENCE OF OFFİCE LİGHTİNG CONDİTİONS ON HUMAN REACTİONS	D.Y. Su, C.C. Liu, C.M. Chiang, W. Wang
		5	PERSONALİTY TRAİTS AND TRAFFİC VİOLATİONS: A STUDY ON MALE TAXİ DRİVERS İN LAMERD, IRAN	Bahram Esmaeili, Hamid Reza Imani Far, Hossein Hosseini, Mohammad Sharifi
		6	THE INFLUENCE OF JOB-RELATED STRESS ON WORK-LİFE QUALİTY AMONG REMOTE WORKERS	Alireza Bolhari, Ali Rezaeean, Jafar Bolhari, Fatemeh Zare
		7	THE EFFECTİVENESS OF SELF-DİRECTED COGNİTİVE-BEHAVİORAL THERAPY FOR A MİDDLE-AGED WOMAN WİTH CHRONİC OBSESSİVE-COMPULSİVE DİSORDER: A CASE ANALYSİS	Assis. Prof. Dr. Mairwen K. Jones, Lynne Harris, Lisa D. Vaccaro
		7	STİGMA AND CAUSAL BELİEFS ABOUT MENTAL ILLNESS AMONG ASPİRİNG MENTAL HEALTH PROFESSİONALS	Josephine S. Larkings, Patricia M. Brown
		8	EGO-IDENTİTY DEVELOPMENT AND AUTOBİOGRAPHİCAL NARRATİVES: EXPLORİNG THE INTERCONNECTEDNESS OF MEMORY AND CULTURE	Anna R. Alyusheva, Veronika V. Nourkova

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
NewArt 3rd INTERNATIONAL GROUP EXHIBITION
JUNE 21 - 23, 2024
KONYA
Meeting ID: 816 0458 4722 Passcode: 202224

22 Haziran / June 22, 2024 / 11:30 – 13:30 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 12	**Dr. Anitha Narasimhan,**	1	SPATIAL SYMBOLISM IN MAHMOUD DARWISH'S POETRY	Saleem Abu Jaber, Khaled Igbaria
		2	CORPORATE DISCLAIMER ANALYSIS: A STUDY OF PROFESSIONAL COMMUNICATION PRACTICES	Assis. Prof . Dr. Chie Urawa
		3	DIALECT AND GENDER DIFFERENCES IN THE ACOUSTIC PROPERTIES OF KOREAN FRICATIVES	Kyung-Im Han
		4	EXPLORING THE UNSPOKEN: THE POLITICS OF SILENCE AND ABSENCE IN SAMUEL BECKETT'S WAITING FOR GODOT	Afia Shahid
		5	ENHANCING LANGUAGE LEARNING THROUGH INTERACTIVE GAMEPLAY: INTRODUCING "PORUL", A TAMIL WORD GAME	Dr. Anitha Narasimhan, Lec. Aarthy Anandan, Dr. Madhan Karky, C. N. Subalalitha
		6	EXPLORING MEDICAL STUDENTS' PERCEPTIONS OF TEACHERS' LINGUISTIC CHARACTERISTICS IN AN ENGLISH AS A SECOND LANGUAGE CONTEXT IN URMIA, IRAN	Ismail Baniadam, Nafisa Tadayyon, Javid Fereidoni
		7	EXPLORING THE APPLICATION OF SFARD'S COMMOGNITIVE FRAMEWORK FOR DISCOURSE ANALYSIS IN MATHEMATICS EDUCATION	Dong-Joong Kim, Sangho Choi, Woong Lim
		7	ENHANCING WRITING INTERPRETATION THROUGH PARAPHRASING: AN EXAMINATION OF STUDENT WRITING	Assoc. Prof. Dr. Maya Lisa Aryanti, S. S. M. Hum
		8	LANGUAGE POLICY AND IDENTITY DYNAMICS IN TRANSLATION: SHIFTING FROM MONOLINGUAL NARRATIVES TO MULTILINGUAL CONTEXTS IN CHINESE TRANSLATIONS	Chu-Ching Hsu

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
22 Haziran / June 22, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 1	**Doç. Dr. Mehmet Sait MERMUTLU**	1	TÜRK EDEBİYATI VE TARİHİNE DIŞARIDAN BİR BAKIŞ: CHARLES WELLS VE "THE LITERATURE OF THE TURKS - A TURKISH CHRESTOMATHY" ADLI ESERİ	Dr. Öğrt. Üyesi Kudret Savaş
		2	BURNAZ HASAN AĞA'YA AİT İSTİNSAH MECMÛASI'NDA MÜNDEMİÇ KARABAŞ VELÎ (ALİ ATVEL) VE NİYÂZÎ-İ MISRÎ'NİN TÜRKÇE RİSÂLELERİ	Doç. Dr. Mehmet Sait MERMUTLU
		3	SHERLOCK HOLMES – KIZIL DOSYA VE DÖRTLERİN İMZASI ROMANLARINDA GEÇEN ÇIKARIMLARIN İNCELENMESİ	Tarık GÜLER Doç. Dr. Ekrem Ziya DUMAN
		4	12 KIZGIN ADAM FİLMİNİN AKIL YÜRÜTME TÜRLERİ BAĞLAMINDA İNCELENMESİ	Ayşenur YALÇIN Doç. Dr. Ekrem Ziya DUMAN
		5	WOMEN AND FAMILY IN THE CONTEXT OF THE CONCEPT OF GENDER IN CENGIZ AYTMATOV'S WORKS	YELDA YALÇIN Doç. Dr. MUSTAFA KARADENİZ
		6	ÇELEBİ SÖZCÜĞÜNÜN TÜRKÇEDEKİ SERÜVENİ	Dr. Öğr. Üyesi Bilal UYSAL
		7	GENDERED LANGUAGE IN ARABIC: LINGUISTIC ANALYSIS AND SOCIETAL IMPLICATIONS	Dr. Öğr. Üyesi Hüseyin DURSUN

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
22 Haziran / June 22, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 2	**Assoc. Prof. Hülya ÇAKIR**	1	SURİYELİ GÖÇMEN GENÇLERİN SOSYALLEŞME DÜZEYLERİNİN ENTEGRASYON SÜRECİNE ETKİSİ: SAKARYA/PAMUKOVA ÖRNEĞİ	Ela Nur YÜRÜK Şahender AŞKAL SALİH
		2	MODERNİZATION OF MAN	Ela Nur YÜRÜK Şahender AŞKAL SALİH
		3	“Kan Revan İçinde: Tıbbın Kısa Bir Tarihi” İsimli Eser Değerlendirmesi	Dr. Burcu DOĞAN KOÇAK
		4	EVALUATION OF THE PARTICIPATION OF DISABLED YOUNG PEOPLE IN DIGITALIZED LIFE IN LINE WITH THE PROBLEMS THEY EXPERIENCE IN SOCIAL INSTITUTIONS	Assoc. Prof. Hülya ÇAKIR
		5	DİJİTAL EMEK BAĞLAMINDA SOSYAL MEDYADA KADIN EMEĞİ	Dr. Öğr. Üyesi Hatice DURAN OKUR
		6	SYMBOLISM AND IDENTITY IN THE AXIS OF CULTURE AND CIVILISATION	Doktora Öğrencisi, Furkan ŞİMŞEK Doç. Dr. Murat ŞAHİN
		7	GEÇMİŞTEN GELECEĞE GERMİYAN SOKAĞI	Araştırma Görevlisi, Gülay ORUÇ
		8	Tıp Fakültesi Öğrencilerinin Yurtdışına Bakış Açısı	Şevval ÇELİK

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
NewArt 3rd INTERNATIONAL GROUP EXHIBITION
JUNE 21 - 23, 2024
KONYA
Meeting ID: 816 0458 4722 Passcode: 202224

22 Haziran / June 22, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 3	**Dr. Öğr. Üyesi SERAP DOĞAN ASLAN Arş. Gör. ELMAS NUR İBAOĞLU**	1	Navigating the Impact of Anxiety on Academic Performance: Comprehensive Interventions and Support Strategies	Sarah Houssami
		2	DUYGUSAL ZEKÂ VE LİDERLİK İLİŞKİSİ BAĞLAMINDA TÜRKİYE'DE YAPILAN ÇALIŞMALARIN İNCELENMESİ	Doç.Dr., Hatice Zekavet KABASAKAL Damla Nur AYDIN Cemre DOMBAZ Rojin YALÇIN Oğuzhan BOZDOĞAN Ozan Umut KARA
		3	ÜNİVERSİTE ÖĞRENCİLERİNDE ÖZ YETERLİK VE DUYGUSAL ÖZ YETERLİĞİN ROMANTİK İLİŞKİ KALİTESİ İLE İLİŞKİLİ ÇALIŞMALARIN İNCELENMESİ	Doç.Dr., Hatice Zekavet KABASAKAL Belen ÇİNBİLGEL Gamze KESKİN Ertan ÇETİN
		4	FACTORS AFFECTING CONFLICT RESOLUTION STYLES AND IRRATIONAL BELIEFS IN ROMANTIC RELATIONSHIPS: GENDER AND MARITAL SITUATION	Ayşe Hazal DÜNDAR Ayşegül CİRİT
		5	BİLGİ VE İLETİŞİM TEKNOLOJİLERİNİN EBEVEYN-ÇOCUK ETKİLEŞİMİ ÜZERİNDEKİ ETKİLERİNİN İNCELENMESİ	Doç. Dr. Zeynep TURHAN Nuray KIZILÇAY
		6	ÜNİVERSİTE ÖĞRENCİLERİNİN ALGILADIKLARI SOSYAL DESTEK İLE TEMEL PSİKOLOJİK İHTİYAÇLAR ARASINDAKİ İLİŞKİ	Yüksek Lisans Öğrencisi, SERRA NUR ÇELİK Doç. Dr., NUR DEMİRBAŞ-ÇELİK
		7	ÖLÜME BAĞLI KAYIP YAŞAYAN YETİŞKİNLERDE İŞLEVSELLİK VE PSİKOLOJİK SAĞLAMLIK ARASINDAKİ İLİŞKİDE SOSYAL DESTEK ROLÜNÜN İNCELENMESİ	Yüksek Lisans Öğrencisi, Ceren Celayir Dr. Öğr. Üyesi, Betül Çetintulum Huyut
		8	MEME KANSERLİ KADINLARIN PSİKOSOSYAL GEREKSİNİMLERİ	Prof. Dr. Özlem KARAKUŞ Sosyal Çalışmacı Kübra KARACA
		9	DOĞAL AFETLERDE OTİZMLİ BİREYLER: ALANYAZIN BİZE NE SÖYLÜYOR?	Dr. Öğr. Üyesi SERAP DOĞAN ASLAN Arş. Gör. ELMAS NUR İBAOĞLU

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
22 Haziran / June 22, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 4	**Doç. Dr., ÇİĞDEM ÖNER**	1	SOCIAL COMPETENCE IN SPORTING AND NON-SPORTING TEENAGERS	Oskaras PLEIKYS Prof. Dr. Romualdas MALINAUSKAS
		2	BİR BEDEN PRATİĞİ OLARAK YOGA NEFES TEKNİKLERİNİN ARAÇSAL KULLANIMI	Doç. Dr., ÇİĞDEM ÖNER
		3	ANTİK DÖNEM EFES MÜZESİ MEZAR STELLERİNDE SPORCU FİGÜRLERİNİN YANSITTIKLARI	Erol Doğan Osman İmamoğlu
		4	SPOR ALANLARININ MİMARİSİNDE ANTİK YUNAN RİTÜELLERİNİN SPORA ETKİSİ VE GÜNÜMÜZE YANSIMALARI	Erol Doğan Osman İmamoğlu
		5	KARAR AĞACI TABANLI TAHMİN ALGORİTMALARI KULLANILARAK HALTER SPORCULARININ YARIŞMA PERFORMANSLARININ TAHMİNİ	Dr. Öğretim Üyesi Serkan ÖRÜCÜ Doç. Dr. Bülent IŞIK Doç. Dr. Kenan ERDAĞI Dr. Erkan Özbay
		6	ELİT KADIN HALTER SPORCULARINDA OLİMPİK STİL HALTER ANTRENMANININ EMPEDANS KARDİYOGRAFİ VE HEMODİNAMİK PARAMETRELER ÜZERİNE ETKİSİNİN ARAŞTIRILMASI	Dr. Erkan Özbay Doç. Dr. Bülent IŞIK Doç. Dr. Kenan ERDAĞI Dr. Öğr. Üyesi Usame Ömer OSMANOĞLU Arş. Gör. Fatma Sare KARACA Dr. Öğretim Üyesi Serkan ÖRÜCÜ

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
22 Haziran / June 22, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 5	**Doç. Dr. ERMAN BENLİ**	1	SEARCH, COPYING AND SEIZURE OF INFORMATION SYSTEMS	Dr. Araştırma Görevlisi Dilek GÜLER
		2	5651 SAYILI KANUN KAPSAMINDA İÇERİĞİ SUÇ OLUŞTURAN İNTERNET YAYINLARININ İDARE TARAFINDAN İLGİLİ İÇERİKLERİNİN ÇIKARTILMASI VE/VEYA ERİŞİMLERİNİN ENGELLENMESİ	Dr. Öğretim Üyesi Mehmet ÇOĞALAN
		3	TÜRK BORÇLAR HUKUKU'NDA TAHVÎLİN KANUNÎ DAYANAĞI	Doç. Dr. ERMAN BENLİ
		4	ANALYZING THE ORGANIZATIONAL STRUCTURE OF PROVINCIAL NATIONAL EDUCATION DIRECTORATES IN THE CONTEXT OF SYSTEM THEORY	Prof. Dr. Erdal TOPRAKÇI PhD Student Efraim KESKİN
		5	AHİLİK KURAMSAL VE PRATİK OLARAK MODERN SİYASAL SÜREÇLERE DAİR NE SÖYLEYEBİLİR?	Serdar YALÇINKAYA
		6	YAŞANABİLİR KENTSEL ALANLAR İÇİN YENİ BİR MODEL: SAKİN ŞEHİR	Dr, ALİ TOSUN
		7	6360 SAYILI KANUNUN YEREL YÖNETİM ÜZERİNE ETKİLERİ	Dr, ALİ TOSUN
		8	TÜRKİYE'DE 15 TEMMUZ DARBE GİRİŞİMİ SONRASI VESAYET YÖNETİMİ	Yahya GENÇAY
		9	PHENOMENON OF ISLAMOPHOBIA IN THE MAGHREB COUNTRIES (TUNISIA, ALGERIA, MOROCCO)	TAAZA EL MANSSOURI
		10	LİBYA'NIN SİRTE KÖRFEZİNE İLİŞKİN TARİHİ KÖRFEZ İDDİASININ DOĞU AKDENİZ SINIRLANDIRMA UYUŞMAZLIĞI AÇISINDAN DÜŞÜNDÜRDÜKLERİ	Doç. Dr. Uğur BAYILLIOĞLU
		11	İSLAMAFOBİ'NİN AVRUPA'DA MEŞRULAŞMASININ NEDENİ VE AVRUPALI SİYASİLERİN İSLAMAFOBİK SÖYLEMLERİNİN ANALİZİ	Betül Nur ARSLAN Ahmet Batuhan POLAT

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
22 Haziran / June 22, 2024 / 15:30 – 13:70 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 6	**Rubaiyat Jahan,**	1	TEMPORAL PARAMETERS IN LANGUAGE PROCESSING AMONG MANDARIN-SPEAKING SENIORS WITH ALZHEIMER'S DISEASE: A COMPARATIVE STUDY	Assoc. Prof. Dr. Lai Yi-Hsiu
		2	EXPLORING TRANSFORMATIVE APPROACHES IN THE BANGLADESHI EDUCATIONAL LANDSCAPE	Rubaiyat Jahan, Nasreen Sultana Mitu
		3	IDEOLOGICAL INFLUENCE AND PATRONAGE NETWORKS IN THE TRANSLATION OF LITERARY WORKS: AN ANALYSIS OF GEORGE ORWELL'S "1984" IN PERSIAN TRANSLATION FROM 1980 TO 2015	Masoud Hassanzade Novin, Bahloul Salmani
		4	DEVELOPMENT AND METHODOLOGY OF THE GRAMMATICALLY ANNOTATED CORPUS OF SPOKEN LITHUANIAN	L. Kamandulytė-Merfeldienė
		5	INVESTIGATING THE IMPACT OF SELF-INTEREST INSTRUCTION ON FAIRNESS IN ULTIMATUM GAME: AN EXPERIMENTAL APPROACH	A. R. Patel, K. L. Sharma, S. N. Gupta, R. M. Singh, P. K. Jain
		6	MORPHOLOGICAL ANALYSIS OF ENGLISH-SPEAKING LEARNERS' INTERLANGUAGE IN PERSIAN L2 ACQUISITION: EXPLORING SLA VARIATION	Assis. Prof. Dr. Samira Rahmani
		7	INVESTIGATING THE INFLUENCE OF CIRCADIAN RHYTHMS ON SUBJECTIVE TIME PERCEPTION: AN OPEN SOURCE APPROACH FOR ANALYZING TIME PERCEPTION INDUCTION IN HUMANS	Mateusz Harasymczuk, Pierre-Yves Girardin, Lucie Davidová
		7	ANALYZING AUDITORY-COLOR SYNESTHESIA IN ABSOLUTE PITCH TRAINING THROUGH PREFRONTAL CORTEX BLOOD VOLUME ASSESSMENT	Haruka Tanaka, Takamasa Komura, Yosuke Kurihara
		8		

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
22 Haziran / June 22, 2024 / 15:30 – 13:70 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 7	**Prof. Dr. Priyanka Sharma**	1	COMPARATIVE ANALYSIS OF STATISTICAL APPROACHES FOR PART OF SPEECH TAGGING IN NEPALI TEXT	Prof. Dr. Priyanka Sharma
		2	DYNAMIC EVOLUTION OF METAPHORICAL CREATIVITY: A FRAMEWORK FOR ANALYZING METAPHORICAL INNOVATION IN INTERACTIVE DISCOURSE	Badri Kaya
		3	PERSISTENCE OF EPENTHETIC VOWEL DURATION IN JAPANESE SPEAKERS' ENGLISH ACQUISITION	Haruka Sato, Kakeru Yazawa, Mariko Kondo
		4	CO-ARTICULATION PATTERNS OF CONSONANTS AND VOWELS IN CANTONESE MONOSYLLABIC STRUCTURES: AN ARTICULATORY ANALYSIS	Sum Wai Lee
		5	ENHANCING VOCAL REGISTER RECOGNITION THROUGH SPECTRAL ANALYSIS: A TOOL FOR VOCALISTS	Natalia Wojciechowska, Krzysztof Nowak
		6	EXPLORING CREATIVITY IN BILINGUAL ADVERTISING: A MORPHOLOGICAL EXAMINATION OF SINHALA AND ENGLISH USAGE IN SRI LANKA	Tharindu Lakmal Perera
		7	EXPLORING MORPHOLOGICAL PATTERNS IN TEXT MESSAGING: A STUDY OF URBAN BILINGUALS IN SRI LANKA	Dr. Sameera Jayawardena
		7	EXPLORING COMPUTATIONAL APPROACHES TO CONSCIOUSNESS: INTRODUCING THE INTEGRATED ABSTRACTION FRAMEWORK	Assoc. Prof. Dr. Omar Ahmed, Mohamed Ali Cherif
		8	EXPLORING THE INFLUENCE OF PLANNING AND MEMORY ON NAVIGATIONAL PROFICIENCY: INSIGHTS FROM A VIRTUAL REALITY STUDY	Ananya Patel, Suresh Kumar, Ravi Shankar, Alok Kumar Singh

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
NewArt 3rd INTERNATIONAL GROUP EXHIBITION
JUNE 21 - 23, 2024
KONYA
Meeting ID: 816 0458 4722 Passcode: 202224

22 Haziran / June 22, 2024 / 15:30 – 13:70 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 8	**Ibrahim Hassan**	1	IMPLEMENTATION AND CHALLENGES OF DEVELOPING A KAZAKH LANGUAGE PROFICIENCY TEST AT NAZARBAYEV UNIVERSITY	Aigerim Mukhametzhanova, Alina Zhanabilova
		2	ADVANCEMENTS IN ARABIC LIGHT STEMMER FOR ENHANCED SEARCH PRECISION	Ahmed Mahmoud, Dina Sayed, Ayman Hanafy
		3	EXPLORING THE INFLUENCE OF GRAMMATICAL DISPARITIES ON SIMULTANEOUS INTERPRETING BETWEEN ENGLISH AND MANDARIN CHINESE	Dr. Li Wei
		4	THE IMPACT OF AGE ON SECOND LANGUAGE ACQUISITION: INSIGHTS FROM A STUDY IN THE MALDIVES	Ibrahim Hassan
		5	COLLABORATIVE PEER CORRECTIVE FEEDBACK IN COMPUTER-MEDIATED LANGUAGE LEARNING: A STUDY ON ENGLISH-AS-A-FOREIGN-LANGUAGE LEARNERS	A. Smith, C. Johnson
		6	HIERARCHICAL ANALYSIS OF K-NEIGHBORHOOD TEMPLATE A-TYPE THREE-DIMENSIONAL BOUNDED CELLULAR ACCEPTORS	Kenji Suzuki, Yasuo Uchida, Makoto Sakamoto, Tuo Zhang, Tatsuma Kurogi, Takao Ito,
		7	INVESTIGATING BILINGUAL SEMANTIC PROCESSING: EXPLORING CATEGORY AND AGE EFFECTS	Dr. Chen Mei-Ling
		7	EVOLUTION AND CHARACTERISTICS OF EARLY ROMANIAN MULTILINGUAL LEXICOGRAPHY	Prof. Dr. Alexandru Popescu
		8	EXPLORING THE PROSODIC PATTERNS OF ROMANIAN GREETINGS: A SOCIOLINGUISTIC INQUIRY	Elena-Maria Popescu, Andreea Vasilescu, Alexandru Ionescu
		9	INVESTIGATING COGNITIVE ENHANCEMENT IN CONGENITALLY DEAF AND DUMB INDIVIDUALS THROUGH ACTION VIDEO GAME INTERVENTION	A. Sharma, R. Gupta, K. Das
		10		

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
22 Haziran / June 22, 2024 / 15:30 – 13:70 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 9	**Dr. Maria A. Petrov**	1	COMPARATIVE ANALYSIS OF BEHAVIORAL AND EEG RESPONSES AMONG NATIVE TURKIC-SPEAKING INHABITANTS OF SIBERIA AND SIBERIAN RUSSIANS DURING SYNTACTIC ERROR RECOGNITION IN NATIVE AND FOREIGN LANGUAGES	Olga M. Petrova, Alexander E. Saprygin, Ekaterina A. Ivanova, Ivan D. Petrov, Maria S. Volkova, Natalia V. Borisova,
		2	THE INFLUENCE OF MORPHEMIC ANALYSIS AWARENESS ON VOCABULARY LEARNING STRATEGIES OF ESL LEARNERS	Dr. Fatima Al-Mansoori, Anjali Patel, Abdullah Al-Saud
		3	ASSESSMENT PRACTICES IN IRANIAN UNDERGRADUATE ENGLISH TRANSLATION PROGRAMS: AN EXPLORATION OF FINAL TESTING METHODS	Mohammad Reza Jahangiri, Fatemeh Mohammadi
		4	ANALYSIS OF EXPANSION STRATEGIES IN PERSIAN SUBTITLING OF ENGLISH CRIME FILMS	Mohammad Reza Rahimi, Azra Davari, Ali Najafi
		5	CHALLENGING TRANSLATION NORMS: EXPLORING THE IMPACT OF ADAPTATION ON MEANING TRANSFERENCE"	Alexandera G. Karpova, Igor N. Kozlov, Elena P. Ivanova, Sergei A. Ivanov
		6	INFLUENCE OF TOP-DOWN PROCESSES ON PERCEPTUAL AMBIGUITY: INSIGHTS FROM TEMPORAL DYNAMICS	Prof. Dr. Anastasia S. Ivanova, Dr. Maria A. Petrov
		7	EXPLORING THE ROLE OF TEACHER GUIDANCE IN FACILITATING INFERENCE PROCESSES DURING ARABIC TEXT READING	Dr. Sarah Ahmed
		7	EXAMINING THE INFLUENCE OF MORPHEMIC ANALYSIS AWARENESS ON ESL STUDENTS' VOCABULARY LEARNING STRATEGY: EXPLORING INFLECTIONAL AND DERIVATIONAL PERSPECTIVES	Ranjana Devi, Adelina Binti Asmawi, Nabeel Abdallah Mohammad Abedalaziz
		8	EXPLORING THE INFLUENCE OF MORPHOLOGICAL ANALYSIS AWARENESS ON VOCABULARY LEARNING STRATEGY AMONG ESL SECONDARY SCHOOL STUDENTS	Fatima Al-Farsi, Adelina Binti Asmawi, Nabeel Abdallah Mohammad Abedalaziz

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
22 Haziran / June 22, 2024 / 15:30 – 13:70 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 10	**Dr. Hye Lee Jeong,**	1	CORRELATION OF JOB SATISFACTION, MOTIVATION, AND THE FIVE DIMENSIONS OF ORGANIZATIONAL CITIZENSHIP BEHAVIOR	Mushtaq Bakar, M. K. Umar
		2	UTILIZING ONLINE GAMES FOR EDUCATIONAL PURPOSES IN ADDRESSING LEARNING CHALLENGES	M. Smyrnaiou , Z. Margoudi
		3	COMPARING SPATIAL ABILITIES, MEMORY, AND INTELLIGENCE ACROSS DRIVERS WITH VARIED PROFESSIONAL EXPERIENCE LEVELS	A. Kim Khon, T. Mukhitdinova
		4	UNDERSTANDING SUBJECTIVE WELL-BEING: CONTRASTS BETWEEN HIGH AND LOW EMOTIONAL INTELLIGENCE AMONG STUDENTS	Veronika Kim , Alla Pivkina , Khon luva Nataliya
		5	PSYCHOPATHIC DISORDERS AND JUDICIAL SENTENCING: CAN NEUROSCIENCE SHIFT THIS AGGRAVATING FACTOR TO A MITIGATING ONE?	Dr. Kevin Nana Moustapha
		6	VARIETIES OF EPILEPSY AND INSIGHTS FROM EEG-LORETA ANALYSIS ON EPILEPTIC ACTIVITY	Leila Maleki, Esmali Kooraneh, Taghi Hossein Derakhshi
		7	CORRELATIONS BETWEEN GAMING ENGAGEMENT AND LIFE SATISFACTION: EXPLORING THE INFLUENCE OF SELF-ESTEEM, SELF-EFFICACY, AND SOCIAL CAPITAL	Dr. Hye Lee Jeong, Assis. prof. Dr. Eui Rim Jun
		7	EXPLORING CASE STUDIES ACROSS THREE LEARNING DOMAINS: COGNITIVE, AFFECTIVE, PSYCHOMOTOR	Assoc. Prof. Dr. Zeinabsadat Haghshenas
		8	IMPACT OF PERSONALITY TRAITS ON POLITICAL ORIENTATION CLASSIFICATION	Vesile Aliyu , Awwal Evrim
		9	CORRELATION OF JOB SATISFACTION, MOTIVATION, AND THE FIVE DIMENSIONS OF ORGANIZATIONAL CITIZENSHIP BEHAVIOR	Mushtaq Bakar, M. K. Umar

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
22 Haziran / June 22, 2024 / 15:30 – 13:70 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 11	**Assoc. Prof. Dr. Eui Jun Jeong,**	1	INTELLIGENT ENERGY CONSUMERS: EXPLORING THE INTENTIONS BEHIND EMBRACING INNOVATIVE CONSUMPTION PATTERNS	Dr. Cecilia Kamila, Vincenzo Perri Corvello
		2	GENDER DISPARITIES IN MATHEMATICS ANXIETY AMONG STUDENTS	Wern Lin Yeo, Choo Kim Tan, Sook Ling Lew
		3	UTILIZING THE MMSE-2:EV FOR DIAGNOSTIC INSIGHTS IN COGNITIVE IMPAIRMENT: CASE STUDIES AND MONITORING	Cornelia- Munteanu Eugenia
		4	EXAMINING STUDENTS' BRAIN ELECTRICAL RESPONSES TO TEACHER'S EMOTIONAL CUES	Dr. Hye Rim Lee
		5	PERSONALITY TRAITS AND COMPULSIVE GAMING: EXPLORING THE INFLUENCE OF THE BIG FIVE	Assoc. Prof. Dr. Eui Jun Jeong,
		6	PARENTING APPROACHES AND HOUSEHOLD COMMUNICATION DYNAMICS AMONG COLLEGE STUDENTS	Lecture Pegah Farokhzad
		7	UTILIZING EMOTICONS IN COURTEOUS EXPRESSIONS OF GREETINGS AND APPRECIATION	Dr. Zuzana Komrsková
		8	HOW TO VENT AND UNWIND: EXPLORING THE INFLUENCE OF SEEKING THERAPEUTIC CATHARSIS, SELF-IDENTITY, AND SOCIAL CONNECTIONS IN GAMING ENVIRONMENTS	Hye Rim Lee, Eui Woo Jeong, Joo Kim Jun
		8		

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
22 Haziran / June 22, 2024 / 15:30 – 13:70 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 12	**Dr. Esyin Chew**	1	Methodological Considerations and Design Strategies for Utilizing VLE in Enhancing Mathematical Concept Acquisition among Secondary Education Students in England	Emily E. S. Thompson
		2	Leveraging Technology for Enhanced Collaborative Learning: Integrating Online Communication to Facilitate Student Engagement	A. Anderson
		3	Enhancing Elementary School Learning with Educational Multimedia Games	Assis. Prof. Maria Papadopoulos
		4	Enhancing E-Education through Mobile Learning: A Case Study on Promoting Inclusivity in Diverse Educational Settings	Dr. Esyin Chew, Haydn Blackey
		5	Enhancing Mathematics Self-Study for CPE Examination Preparation Through an Interactive E-Learning Platform	Aisha Ali, Fatima Khan
		6	Exploring the Feasibility of Virtual Biology Laboratories: A Preliminary Study	Nurul Hidayah Ismail, Halimah Badioze Zaman, Azlina Ahmad
		7	Examining the Impact of Exercise Behavior Change Interventions on Social and Psychological Factors among High School Students: A Transtheoretical Model Approach	Jason K. Smith, Chih-Hao Chen
		8	Enhanced Teaching Methods through Interactive Virtual Reality for Flute Instruction	Rodriguez K. Maria, Sanchez L. Daniel, Martinez. Luis, Gomez. Ana Maria
		9		

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
23 Haziran / June 23, 2024 / 11:00 – 13:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 1	**Dr. Funda MERMERTAŞ**	1	INNOVATION LANDSCAPES: A COMPARATIVE ANALYSIS OF SME CHALLENGES AND OPPORTUNITIES BETWEEN ALGERIA AND TURKEY	Sihem DJIDJIK
		2	TÜRKİYE'DE ALTIN SATIŞ FİYATLARINDA MEYDANA GELEN DEĞİŞİMİN MODELLENMESİ (1981-2021)	Prof. Dr. Mustafa HATİPLER Gizem SEYHAN
		3	GREEN GENERATION RESTAURANT MOVEMENT AND RESTAURANT EXAMPLE WITHIN THE SCOPE OF GREEN MARKETİNG	Öğr. Gör. İrem ÇAFA Doç. Dr. Yeliz PEKERŞEN Doç. Dr. Ayşe Büşra MADENCİ
		4	MOTİVASYON KANALLARININ GENÇLERİN ÜZERİNDE OLUŞTURDUĞU ETKİ ÜZERİNE BİR İNCELEME	Yüksek Lisans Öğrencisi, Eda ERDEM Doç. Dr., Tamer BAYRAK
		5	E-Ticaret Girişimcileri İçin ETSY Maliyet Analizi	İbrahim Kürşat YÜCETÜRK
		6	TÜRKİYE ALMANYA VE ABD'NİN LOJİSTİK PERFORMANS ENDEKSİNE GÖRE KARŞILAŞTIRILMASI	Dr. Funda MERMERTAŞ Prof. Dr. Mustafa METE
		7	YAPAY ZEKANIN LOJİSTİK SEKTÖRÜ ÜZERİNE OLASI ETKİLERİ: CHATGPT İLE BİR GÖRÜŞME	Dr. Funda MERMERTAŞ Dr. Halil İbrahim KARAKAN

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
23 Haziran / June 23, 2024 / 11:00 – 13:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 2	**Assoc. Prof. Dr. Perihan ÖLKER**	1	BİRUNİ'NİN MAZİDEN KALANLAR İSİMLİ ESERİNDE NEVRUZ	Prof. Dr. Mehmet ÖZMENLİ Öğr. Gör. Gökhan HAMZAÇEBİ
		2	Karadeniz Bölgesi Halk Oyunları içinde Nevruz	Prof. Dr. Mehmet ÖZMENLİ Öğr. Gör. Gökhan HAMZAÇEBİ
		3	KİLİKYA ERMENİ KRALI II. LEON'UN TÜRKİYE SELÇUKLU POLİTİKASI	Prof. Dr. Ramazan ALTINAY Doktora Öğrencisi. Esra ÇEÇEN
		4	1927 GENEL NÜFUS SAYIMINA GÖRE ISPARTA'NIN DEMOGRAFİK YAPISI	Doç. Dr. Ayşegül ŞENTÜRK YİĞİT
		5	KONYA ÇEŞMELERİNDE BULUNAN TASLIKLARDAN ÖRNEKLER	Beyza Nur Önder Doç. Dr. Murat Karademir
		6	DATA CONCERNING THE KASTAMONU DIALECT IN THE AÇIK SÖZ NEWSPAPER	Assoc. Prof. Dr. Perihan ÖLKER
		7	TRANSFORMATION OF THE ANAYASA (CONSTITUTION) INTO TEŞKİLAT-I ESASIYE (ESSENTIAL ORGANIZATION) IN THE CONTEXT OF THE REFLECTION OF IDEOLOGICAL AND SOCIAL CHANGES ON LANGUAGE POLICIES	Assoc. Prof. Dr. Perihan ÖLKER

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
NewArt 3rd INTERNATIONAL GROUP EXHIBITION
JUNE 21 - 23, 2024
KONYA
Meeting ID: 816 0458 4722 Passcode: 202224

23 Haziran / June 23, 2024 / 11:00 – 13:00 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 3	**Dr. Öğretim Üyesi Şengül Gacanoğlu Prof. Dr. Canan Nakiboğlu**	1	ALİ TƏHSİLDƏ TƏLƏBƏYƏ YÖNƏLMİŞ TƏDRİS, TƏLİM VƏ QİYMƏTLƏNDİRMƏ	Doç.dr, Nazile Abdullazade
		2	Sahada Özel Amaçlı İngilizce: Online Dil Öğretimi İle Gaziantep Endüstrisinde Yalın Yöntemin Uygulanması	Prof. Dr. Filiz YALÇIN TILFARLIOĞLU Emine YAVUZ
		3	EVALUATION OF UNDERSTANDING LEVELS OF TEACHER CANDIDATES REGARDING EDUCATION INFORMATION NETWORK (EIN) USAGE BEFORE EDUCATION INFORMATION NETWORK (EIN) COURSE	Dr. Öğretim Üyesi Şengül Gacanoğlu Prof. Dr. Canan Nakiboğlu
		4	ADJUSTMENT OF BIOLOGY SELF-EFFICACY SCALE FOR CHEMISTRY COURSE AND EXAMINATION OF CHEMISTRY SELF-EFFICACY OF FIRST- YEAR STUDENTS OF CHEMISTRY TEACHING PROGRAM	Dr. Öğretim Üyesi Şengül Gacanoğlu Prof. Dr. Canan Nakiboğlu
		5	SOSYAL BİLGİLER ÖĞRETMEN ADAYLARININ DİJİTAL OKURYAZARLIK BECERİLERİNİN BAZI DEĞİŞKENLER VE ÖZ-YETERLİK AÇISINDAN İNCELENMESİ	Dr. Öğr. Üyesi Aysun AYNUR YILMAZ Ali Melih ÖZÇELİK
		6	SOMUNCU BABA'NIN MENKIBELERİNİN SOSYAL BİLGİLER ÖĞRETİM PROGRAMINDAKİ DEĞERLER AÇISINDAN İNCELENMESİ	Dr. Öğr. Üyesi Aysun AYNUR YILMAZ Mevlüt BUĞDAYCI
		7	GÜVÂHÎ'NİN PENDNÂME'SİNDE YER ALAN SABIR, SAYGI VE SEVGİ DEĞERLERİNİN EĞİTİM AÇISINDAN İNCELENMESİ	Yüksek Lisans Öğrencisi, ÖZGE BERRAK ÇABUK Prof. Dr., YAŞAR AYDEMİR
		8	SANAT MÜZELERİNİN ÇOCUK ODAKLI TASARLADIĞI DİJİTAL ETKİNLİK PLATFORMLARI	Merve GÜLAYDIN Doç.Dr. Cihan Şule KÜLÜK
		9	MÜZİK EĞİTİMİNDE DOĞAÇLAMA: ÖĞRENCİ VE ÖĞRETİM ELEMANLARININ YAKLAŞIMLARI	Yüksek Lisans Öğrencisi, Erdi ÇIRACIOĞLU Prof. Dr. Begüm ÖZ
		10	MÜZİK ÖĞRETMENLİĞİ LİSANS PROGRAMLARINDA POPÜLER MÜZİK EĞİTİMİNİN YERİ: ÖĞRENCİ GÖRÜŞLERİ VE ÖNERİLER	Yüksek Lisans Öğrencisi, Akın MUTLU Prof. Dr., Begüm ÖZ

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
23 Haziran / June 23, 2024 / 11:00 – 13:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 4	**Doç. Dr. Özlem BAŞARIR**	1	17-19. YÜZYILLAR ARASINDA OSMANLI ARNAVUTLUK'UNDA SOSYAL HAYAT	Yüksek Lisans Öğrencisi Gamze MUTLU
		2	İSLAM ÖNCESİ VE SONRASI ARAP YARIMDASI'NDA SAVAŞ DİNAMİKLERİ: NEDENLER VE UYGULAMALAR	Ömer ESİRGENLER
		3	Echoes of a Coup: The Practices of Celebrating May 27 in Van	Dr. Rıdvan Süslü
		4	XVIII. YÜZYILDA OSMANLI DEVLETİ'NDE ÖRTÜLÜ VERGİ MÜKELLEFİYETİ: MUAFİYET	Doç. Dr. Özlem BAŞARIR
		5	İLHANLILAR DÖNEMİNDE AMASYA	Dr. Öğr. Üyesi, KURBAN DURMUŞOĞLU

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
23 Haziran / June 23, 2024 / 11:00 – 13:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 5	**Dr. Öğretim Üyesi Nurullah ORUÇ**	1	BAŞKENT SÂMERRÂ'DA YAPILAN MİMARÎ VE KÜLTÜREL FAALİYETLER	Dr. Öğr. Üyesi Haci ATAŞ,
		2	İBN ASHUR'S MAQASID-CENTERED APPROACH TO MAİDAH/38-39	Dr. Öğr. Üyesi, İbrahim SİZGEN
		3	BİR KAVRAM OLARAK KANAAT	İkbal Banu KANYO Doç. Dr. Mustafa ÖZTOPRAK
		4	Arapçada Yüklem Cümlesi: Gramatik ve Anlamsal Bir İnceleme	Dr. Öğretim Üyesi Nurullah ORUÇ

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
NewArt 3rd INTERNATIONAL GROUP EXHIBITION
JUNE 21 - 23, 2024
KONYA
Meeting ID: 816 0458 4722 Passcode: 202224

23 Haziran / June 23, 2024 / 11:00 – 13:00 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 6	**Dr. Öğr. Üyesi, Sultan Yağmur Kabaş**	1	EXPLORING SPECTRAL METHODS FOR NUMERICAL SOLUTIONS OF STOCHASTIC DIFFERENTIAL EQUATIONS IN NEUROPHYSIOLOGY	Minoo Kamrani
		2	STABILITY ANALYSIS OF THE SOLUTION OF STOCHASTIC DIFFERENTIAL EQUATION IN POPULATION GENETICS	Minoo Kamrani
		3	ESP32 MİKRODENETLEYİCİ VE MQTT PROTOKOLÜ İLE OTOMATİK SULAMA SİSTEMİ VE TASARIMI	CİHAT ÖZİ Dr. Öğr. Üyesi MAHMUT DURGUN
		4	KATODİK ARK BUHARLAŞTIRMA YÖNTEMİYLE İLE BÜYÜTÜLEN AlTiCrSiN, TiCrN, CrN İNCE FİLMLERİN AISI 4140 ÇELİĞİ ÜZERİNDE ADEZYON DAVRANIŞLARINI İNCELENMESİ	Mehmet Nejat KUTLUDİL Doç. Dr, Levent KARA
		5	EXPERIMENTAL INVESTIGATION OF LOCAL SCOUR DEPTH AROUND CYLINDRICAL BRIDGE PIERS IN NON-COHESIVE SEDIMENTS AT NEAR- THRESHOLD VELOCITY FOR SAND	Abubaker Sami Dheyab Mustafa Günal
		6	IMPACT OF LAND USE AND LAND COVER CHANGES ON PRECIPITATION DISTRIBUTION IN THE TIGRIS RIVER BASIN	Ibrahim Abbas Hasan Mehmet Ishak YUCE1
		7	MEASUREMENT-BASED ANALYSIS OF OBSTACLE VEHICLE ATTENUATION IN VEHICLE-TO-VEHICLE COMMUNICATION	Dr. Öğr. Üyesi, Kenan KUZULUGİL
		8	ADDITIONAL LOSS ANALYSIS DUE TO BUILDINGS IN 5.9 GHZ VEHICLE-TO-VEHICLE COMMUNICATION	Dr. Öğr. Üyesi, Kenan KUZULUGİL
		9	OPTIMAL CONDITIONS FOR IMMOBILIZATION OF PULLULANASE BY HYBRID NANOFLOWER METHOD USING COPPER(II) SULFATE	Res. Asst. Mesut BİLGİ Prof. Dr. Ayşegül PEKSEL
		10	A MACHINE LEARNING BASED REGRESSION METHODS TO PREDICTING SYNGAS COMPOSITION FOR PLASMA GASIFICATION SYSTEM	Anass I. M. ABDELRAHIM
		111	Sensitive Electrochemical Determination of Glucose on NiNPs/4AP N-GQDs Nanocomposite modified GC electrode	Dr. Öğr. Üyesi, Sultan Yağmur Kabaş

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
23 Haziran / June 23, 2024 / 11:00 – 13:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 7	**Dr. Şeyma YAŞAR**	1	MODERN SİBER GÜVENLİK YAKLAŞIMLARINDA SALDIRI TESPİT SİSTEMLERİ	Berksu ERTUĞRUL Dr. Öğr. Üyesi Derya ARDA
		2	MAKİNE ÖĞRENİMİ İLE DOS SALDIRILARININ TESPİTİ	Berksu ERTUĞRUL Dr. Öğr. Üyesi Derya ARDA
		3	MACHINE LEARNING METHODS IN RATIONAL DRUG DESIGN	Dr., Şeyma YAŞAR Prof. Dr., Sedat YAŞAR
		4	FORECASTING OF POSSIBLE BIOMARKERS FOR CHRONIC KIDNEY DISEASE WITH MACHINE LEARNING METHOD XGBOOST	Dr. Şeyma YAŞAR
		5	DEVELOPMENT OF AN E-WALLET PLATFORM FOR THE EUROPEAN MARKET	Burak Karaosmanoğlu Mehmet Demir Can Taşcı Ahmet Göğebakan Mehmet Ali Özcan Ceren Ulus M. Fatih Akay
		6	DEVELOPMENT OF A DATABASE MANAGEMENT PLATFORM FOR PRIVATE CLOUD ENVIRONMENTS	Hamit Uğur Çelebier Eren Salman Ceren Ulus M. Fatih Akay
		7	AN INTAGRATED DATA ANALYTICS MODEL FOR CUSTOMER RETENTION	Phd.Cand.Mehmet Şükrü AYGÜN Prof.Dr.Mehmet Fatih AKAY

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
23 Haziran / June 23, 2024 / 11:30 – 13:30 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 8	**Cole Christine**	1	EXAMINING FURTHER PREDICTORS OF INTENT IN TYPE 2 DIABETES DIETARY BEHAVIOR	Omondi Walingo, G. M. Mbagaya
		2	HOW LEARNING STYLES IMPACT IDEA GENERATION CHALLENGES	Yunos Yee, J. Md , Othman Hassan, T. K. Tee, M. M. Mohamad
		3	THE IMPACT OF A COGNITIVE-BEHAVIORAL THERAPY (CBT) AND MULTIDIMENSIONAL SELF-CONCEPT MODULE-BASED DRUG PREVENTION PROGRAM ON RESILIENCE AND AGGRESSION IN AT-RISK YOUTH IN MALAYSIA	Mohammad Mohamed, Arip Shah , Aslina Aziz Ahmad,
		4	THE LIFESTYLE OF CIVIL SERVANTS WITHIN THE ROYAL HOUSEHOLD BUREAU: A THA WASUKRI, BANGKOK CASE STUDY	Dr. Vilasinee Jintalikhitdee, Saowapa Phaithayawat
		5	IMPACT OF TRATAKA PRACTICE ON ANXIETY LEVELS IN TEENAGERS	Pushp Vaishnav Rajpoot Pushpa Lata
		6	EXPLORING THE IMPLEMENTATION OF SUFFICIENCY ECONOMY PHILOSOPHY BY URBAN COMMUNITY LEADERS IN DUSIT DISTRICT, BANGKOK METROPOLITAN AREA: A STUDY OF PERFORMANCES AND ACTIVITIES	Assoc. Prof. Dr. Phusit Phukamchanoad
		7	HOW NEUROPLASTICITY OFFERS A RENEWED START TO LIFE	Leila Ahmadi, Ezatollah Maleki
		8	EXPLORING PEER-BASED INTERVENTIONS FOR ADDRESSING SOCIAL COMMUNICATION CHALLENGES IN ADOLESCENTS WITH AUTISM: A REVIEW OF LITERATURE AND SUGGESTIONS FOR FUTURE RESEARCH	Cole Christine
		1		

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
23 Haziran / June 23, 2024 / 11:30 – 13:30 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 9	**Elena Popescu**	1	INFLUENCE OF ELEMENTAL ASSOCİATİON ON VOLATİLİTY İN FLUİDİSED-BED COMBUSTİON CHAMBERS: A COMPARATİVE STUDY OF CU, Nİ, CR, CO, PB, AND AS İN DİFFERENT COAL TYPES	A. Novák, Y. Novotná
		2	IMPACT OF MİCROWAVES ON THE MECHANİCAL AND CHEMİCAL STABİLİTY OF SİLİCA OPTİCAL FİBRES	Elena Popescu, M. Caramihai, K. Chung, G. Tasca, T. Park
		3	INVESTİGATİNG THE INFLUENCE OF CASTİNG SHAPE CHARACTERİSTİCS ON HOT TEARİNG AND RESİDUAL STRESS İN INVESTMENT CASTİNG: A SİMULATİON STUDY	Mehmet Kaya, Emre Yılmaz,
		4	COMPARATİVE ANALYSİS OF MEDİA EFFECTS İN EXPLOSİVE FORMİNG OF TUBULAR SHELLS	A. Rahmani, K. Shahidi, S. Mohammadi
		5	ENHANCİNG MECHANİCAL PROPERTİES OF HYDROXYAPATİTE THROUGH GLASS REİNFORCEMENT: A MİCROSTRUCTURAL AND IN-VİTRO ANALYSİS"	Priya Sharma, Neha Gupta
		6	DEVELOPMENT AND ASSESSMENT OF BONE-MİMİCKİNG HYDROXYAPATİTE-BİOGLASS COMPOSİTE MATERİALS	Neha Sharma, Priya Gupta
		7	IMPACT OF SURFACE PRETREATMENTS ON NANOCRYSTALLİNE DİAMOND GROWTH ON SİLİCON NİTRİDE SUBSTRATES	Dr. R.J. Abdullah, F. Yusof
		7	COMPUTATİONAL MODELİNG OF PLASTİC BEHAVİOR İN CLAY SAMPLES UNDER COMPRESSİON TEST :	Rafael S. Silva, Marina L. Santos, Carlos M. Rodrigues, Hazim A. Al-Qureshi
		8	MANUFACTURİNG PROCESS OF A NOVEL BİOMASS COMPOSİTE INSPİRED FROM CELLULAR STRUCTURE OF WOOD	Li Yongfeng, Liu Yixing, Li Jian, Li Jun

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
NewArt 3rd INTERNATIONAL GROUP EXHIBITION
JUNE 21 - 23, 2024
KONYA
Meeting ID: 816 0458 4722 Passcode: 202224

23 Haziran / June 23, 2024 / 11:30 – 13:30 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 10	**Assoc. Prof. Dr. Walid Khelood**	1	ASSESSING THE QUALITY STANDARDS OF HOSPITAL PHARMACIES IN THERAPEUTIC CENTERS ASSOCIATED WITH KERMANSHAH UNIVERSITY OF MEDICAL SCIENCES, IRAN	Dr. Gharehbagh V.Hamishehkar , H.Aghababa
		2	OPTIMIZING VISIBLE LIGHT COMMUNICATION SYSTEMS THROUGH NATURAL LIGHT INTEGRATION	Mahmoud H. Aly, Ivan Andonovic, Moustafa Beshr
		3	INTEGRATING WIRELESS BODY AREA NETWORKS WITH WEB SERVICES: REVOLUTIONIZING UBIQUITOUS HEALTHCARE PROVISIONING THROUGH ARCHITECTURE	Dr. Ogunduyile O. Oluwgbenga
		4	DYNAMIC BRAIN WAVE ACQUISITION AND PSYCHOACOUSTIC ANALYSIS IN REAL TIME	Dipali SShweta , ingh Mahajan , Bansal Rashima
		5	ENHANCING COMBAT EFFECTIVENESS IN NEW GENERATION FIGHTER PLANES THROUGH HUMAN FACTORS CONSIDERATIONS	Binoy Bhargavan
		6	CONSTRUCTING AN INTEGRATED RELATIONAL DATABASE UTILIZING SWISS NUTRITION NATIONAL SURVEY AND HEALTH DATASETS FOR DATA MINING OBJECTIVES	Helena Einsele , Dr. Jenzer Farshideh
		7	CAN EEG TESTING AID IN BRAIN TUMOR IDENTIFICATION?	M. Sharanreddy, P. K. Kulkarni
		8	EXAMINING THE HAZARDS OF INADEQUATE MEDICAL WASTE MANAGEMENT PRACTICES ON HUMAN HEALTH AND THE ENVIRONMENT: A REVIEW OF LITERATURE	Babanyara Ibrahim, Garba Bogoro., M. Y.Abubakar,
		9	EXAMINING MAINTENANCE STRATEGIES AND RELIABILITY OF VITAL MEDICAL EQUIPMENT IN HOSPITALS: IMPACT ON PATIENT OUTCOMES	Flanagan Peter , Gibson John
		10	SELECTIVE DYNAMIC FEATURES FOR HEART DISEASE CLASSIFICATION	Assoc. Prof. Dr. Walid Khelood

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
NewArt 3rd INTERNATIONAL GROUP EXHIBITION
JUNE 21 - 23, 2024
KONYA
Meeting ID: 816 0458 4722 Passcode: 202224

23 Haziran / June 23, 2024 / 11:30 – 13:30 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 11	**Dr. Qingrong Liu**	1	IMPACTS OF INTRODUCING PHOTOVOLTAIC SYSTEMS IN DETACHED HOUSES WITH ALL-ELECTRIFIED RESIDENTIAL EQUIPMENT IN JAPAN	Dr. Qingrong Liu
		2	OPTIMIZATION OF RESIDENTIAL ENERGY CONSUMPTION: A COMPARATIVE STUDY BETWEEN ENERGY CONSUMPTION SCHEDULING AND LOAD SHIFTING TECHNIQUES	Amira M. Attia, Karim H. Youssef, Nabil H. Abbasy
		3	UTILIZATION OF COW'S URINE AS AN ALTERNATIVE ENERGY SOURCE: FEASIBILITY STUDIES	Raj Kumar Rajak, Bharat Mishra
		4	HARNESSING FOREST INDUSTRY RESIDUES FOR ENERGY GENERATION	Emma Torres
		5	EXPLORING THE VIABILITY OF COW DUNG AS AN ALTERNATIVE ENERGY SOURCE	Dr. Raj Kumar Rajak Dr. Bharat Mishra,
		6	ASSESSMENT OF NH3-SLIP FROM DIESEL VEHICLES EQUIPPED WITH SELECTIVE CATALYTIC REDUCTION SYSTEMS THROUGH NEURAL NETWORKS APPROACH	Dr. Mona Lisa M. Oliveira Dr. Nara A. Policarpo, Dr. Ana Luiza B. P. Barros, Dr. Carla A. Silva
		7	COMPUTATIONAL AND EXPERIMENTAL EVALUATION OF A PCM-INTEGRATED SOLAR CHIMNEY	Dr. J. Carlos Frutos Dordelly Dr. M. Coillot, Dr. M. El Mankibi, Dr. R. Enríquez Miranda, Dr. M. José Jimenez
		8	EVALUATION OF ORGANIC RANKINE CYCLE TECHNOLOGY FOR HARNESSING LOW-GRADE WASTE HEAT FOR POWER GENERATION IN INDIAN INDUSTRY	Dr. Bipul Krishna Saha Dr. Basab Chakraborty, Dr. Ashish Alex Sam, Dr. Parthasarathi Ghosh
		9	EXPLORING THE INTERPLAY BETWEEN CO2 EMISSIONS, ENERGY CONSUMPTION, ECONOMIC GROWTH, AND BILATERAL TRADE: A CASE STUDY OF SINGAPORE AND MALAYSIA	H. A. Bekhet, T. Yasmin

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
23 Haziran / June 23, 2024 / 11:30 – 13:30 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 12	**Dr. Ilze Beitane,**	1	ASSESSMENT OF NUTRITIONAL POTENTIAL OF FIVE UNEXPLORED WILD EDIBLE FOOD PLANTS FROM EASTERN HIMALAYAN BIODIVERSITY HOTSPOT REGION (INDIA)	Dr. Pallabi Kalita, Dr. Hui Tag, Dr. H. N. Sarma, Dr. A. K. Das
		2	IMPACT OF HULL-LESS BARLEY FLAKES AND MALT EXTRACT ON YOGHURT QUALITY	Dr. Ilze Beitane, Dr. Evita Straumite
		3	ASSESSMENT OF PHYSICAL-CHEMICAL PARAMETERS OF LATVIAN APPLE JUICES AND THEIR APPLICABILITY FOR CIDER PRODUCTION	Dr. Rita Riekstina-Dolge, University of Riga Dr. Zanda Kruma, Dr. Daina Karklina, Dr. Fredijs Dimins
		4	NUTRITIONAL POTENTIAL AND TRADITIONAL USES OF HIGH ALTITUDE WILD EDIBLE PLANTS IN EASTERN HIMALAYAS, INDIA	Dr. Hui Tag Dr. Jambey Tsering, Pallabi Kalita Hui, Dr. Baikuntha Jyoti Gogoi, Dr. Vijay Veer
		5	ASSESSMENT OF HANCORNIA SPECIOSA GOMES LYOPHILIZATION AT VARIOUS STAGES OF RIPENESS	Dr. D. C. Soares, Dr. J. T. S. Santos, Dr. D. G. Costa, Dr. A. K. S. Abud
		6	ASSESSMENT OF COPPER CONTENT IN DAILY FOOD RATIONS PROVIDED TO CADETS FROM SELECTED MILITARY ACADEMIES AND CONSCRIPTS SERVING IN THE POLISH ARMED FORCES	Dr. Jan Bertrandt Dr. Anna Kłos, Dr. Ryszard Waszkowski, Dr. Tomasz Nowicki, Dr. Rafał Pytlak, Dr. Elżbieta Stężycka, Dr. Agnieszka Gazdzinska
		7	IMPACT OF RITUAL DANCES ON PERSONAL ADJUSTMENT - AN INSIGHTFUL INVESTIGATION AMONG SCHOOL CHILDREN	Dr. Abdul Rahiman Kannam Kulam,
		8	EVALUATION OF BLENDED PLANTAIN-WHEAT FLOUR PERFORMANCE IN BISCUIT PRODUCTION	Idoko J. O., Dr. Nwajiaku I.
		9	IMPACT OF INCORPORATING SUPERCRITICAL CARBON DIOXIDE EXTRACTS OF CINNAMOMUM TAMALA (BAY LEAF) ON THE NUTRACEUTICAL PROPERTIES OF TOFU	Dr. Sudip Ghosh, Dr. Probir Kumar Ghosh, Dr. Paramita Bhattacharjee

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
23 Haziran / June 23, 2024 / 11:30 – 13:30 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 13	**Dr. J. McCullagh,**	1	INVESTIGATING THE INHIBITORY EFFECT OF WEISSELLA KOREENSIS 521 ISOLATED FROM KIMCHI ON 3T3-L1 ADIPOCYTE DIFFERENTIATION	Dr. KyungBae Pi, Dr. KiBeom Lee, Dr. Yongil Kim, Dr. Eun-Jung Lee
		2	EXAMINATION OF COACHING LEADERSHIP TRAIT PREFERENCES AMONG UNIVERSITY AND COLLEGE ATHLETES	Dr. Idou Keinde,
		3	IMPACT OF STRENGTH ABILITIES ON HANDSTAND QUALITY	Dr. P. Hedbávný Dr. G. Bago, Dr. M. Kalichová
		4	EVALUATION OF TALENT SELECTION METHODS FOR WOMEN'S ARTISTIC GYMNASTICS AND PRACTICAL VALIDATION OF THE TESTING BATTERY	Dr. G. Bago, Dr. P. Hedbávný, Dr. M. Kalichová
		5	BIOMECHANICAL ANALYSIS OF BICROSS START	Miroslava Kalichová, Dr. Sára Hřebíčková,
		6	EXPLORING THE USE OF ARTIFICIAL NEURAL NETWORKS FOR PREDICTING SPORT INJURIES	Dr. J. McCullagh, Dr. T. Whitfort
		7	COMPARATIVE ANALYSIS OF PHYSICAL FITNESS AMONG STUDENTS PARTICIPATING IN VARIOUS TEAM SPORTS	Dr. R. Belaidi,
		8	INVESTIGATING THE IMPACT OF SPORT-SPECIFIC EXERCISES ON THE VISUAL ABILITIES OF RUGBY PLAYERS	Dr. P.J. Du Toit, Dr. P. Janse Van Vuuren, Dr. S. Le Roux, Dr. E. Henning, Dr. M. Kleynhans,
		9	ANALYSIS OF SPECTATORS' MOTIVATIONS, EXPERIENCES, AND SATISFACTIONS AT THE 2011 TPGA EVER RICH CHAMPIONSHIP – NORTH BAY OPEN	Dr. Li-Wei Liu, Dr. Cheng-Yu Tsai, Dr. Ming-Tsang Wu

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
23 Haziran / June 23, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 1	**Dr. GÜLBAHAR AKGÜN**	1	Email Security: Machine Learning and Natural Language Processing Methods for Spam Detection	Res. Asst. Sule KAYA Assoc. Prof. Dr. Yunus SANTUR Prof. Dr. Bilal ALATAS
		2	Increasing The Performance of General Relativity Search Algorithm with Chaos Theory	Res. Asst. Sule KAYA Prof. Dr. Bilal ALATAS
		3	FİNANS VE TEKNOLOJİNİN BULUŞMASI: NFT ÜZERİNE BİR UYGULAMA	Mert ÇAKIR Dr. Öğr. Üyesi Özge DEMİRKALE
		4	TEKNOLOJİ İLE DOĞANIN KUCAKLAŞMASI	Reyhan SARI Dr. Öğr. Üyesi Özge DEMİRKALE
		5	FİZİKSEL ENGELLİ BİREYLER VE SOSYAL HAYATA KATILIM	Emine Rabia OĞUZ Dr. Öğr. Üyesi Özge DEMİRKALE
		6	COMPARİSON OF TİME ANALYSİS OF AFFİNE HİLL ENCRYPTİON SYSTEM AND HİLL ENCRYPTİON SYSTEM WİTH MATLAB	Dr. GÜLBAHAR AKGÜN

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
23 Haziran / June 23, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 2	**Prof. Dr. Yasin SOYLU**	1	Dynamic Solutions to Complex Math Problems: Creative Exploration with Second Degree Equations	Dr. Öğr. Üyesi Ali BABAPOUR GOLEZANİ Prof. Dr. Yasin SOYLU
		2	Wonders of Mathematics: 3D Graphs and Integrals of Two-Variable Functions with DMLOs	Dr. Öğr. Üyesi Ali BABAPOUR GOLEZANİ Prof. Dr. Yasin SOYLU
		3	Binomial Transforms of the (s,t)-Pell Matrix Sequences	Sukran.Uygun Ozan Haklıdır
		4	Binomial Transforms of the (s,t)-Pell Lucas Matrix Sequences	Sukran.Uygun Ozan Haklıdır
		5	KARMA TASARIMLARDA ŞEMSİYE ALTERNATİFLER İÇİN PARAMETRİK OLMAYAN TESTLERİN KARŞILAŞTIRILMASI	Bircan UTAŞ Prof. Dr. Hülya BAYRAK
		6	BLOW UP OF SOLUTIONS FOR A PSEUDO-PARABOLIC EQUATION WITH SINGULAR POTENTIAL	AYŞE FİDAN Prof. Dr. ERHAN PİŞKİN
		7	ASYMPTOTIC BEHAVIOR FOR A PSEUDO-PARABOLIC EQUATION WITH SINGULAR POTENTIAL	AYŞE FİDAN Prof. Dr. ERHAN PİŞKİN
		8	EXISTENCE AND NONEXISTENCE OF SOLUTIONS FOR A HYPERBOLIC-TYPE EQUATION	Hacire GÜNEŞ Prof. Dr. Erhan PİŞKİN

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
23 Haziran / June 23, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 3	**Asst. Prof. Dr. Çiğdem KONAK GÖKTEPE**	1	YULAF EKMEĞİNİN YAPIMINDA MİNİMUM FİTİK ASİT MİKTARINI ELDE ETMEK AMACIYLA BOX BEHNKEN TASARIMININ UYGULANMASI	Fazilet ÇALIŞKAN Ufuk YILMAZ Prof. Dr. Berrin ÖZKAYA Prof. Dr. Hülya BAYRAK
		2	USE OF IŞGIN (Rheum ribes) IN GLUTEN-FREE CAKE PRODUCTION	Dr. Öğretim Üyesi, Ali CİNGÖZ
		3	THE USE OF MELON AND PUMPKIN POWDER IN PASTA PRODUCTION AND ITS EFFECT ON QUALITY PARAMETERS	Dr. Öğretim Üyesi, Ali CİNGÖZ
		4	NUTRITIONAL AND BIOACTIVE COMPONENTS OF YOGHURT	Asst. Prof. Dr. Çiğdem KONAK GÖKTEPE
		5	BENEFICIAL EFFECTS OF FOOD WASTE ON HEALTH	Doktora Öğrencisi, Duygu Doğan Dr. Öğr. Üyesi, Emine Okumuş Doç. Dr. İsmet Meydan
		6	GIDA TÜKETİMİ İLE İNSANLARDA GÖRÜLEN İNTOLERANSLAR	Yüksek Lisans Öğrencisi Kübra Kaymaz Doç. Dr. Nizam Mustafa Nizamlıoğlu Prof. Dr. Sulhattin Yaşar

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
23 Haziran / June 23, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 4	**Asst. Prof. Dr. TALHA DEMİRCİ**	1	THE ROLE OF DIFFERENT VITAMINS IN NUTRIENT SENSING WITHIN THE BODY	Rozarta NEZAJ Onejda KYÇYK, Fatbardha LAMÇE, Lindita LACI
		2	PRESENCE OF CARCINOGENIC OCHRATOXIN A (OTA) IN COFFEE AND METHODS FOR ITS DETOXIFICATION	Asst. Prof. Dr. TALHA DEMİRCİ
		3	Assessment of Heavy Metal Contamination and Ecological Risk of Soils Developed Mount Erenler Volcanics Using Contamination Indices	Hasan Hüseyin Özaytekin
		4	DETERMINATION OF BIOACTIVE PROPERTIES AND PHENOLIC COMPOUNDS OF PINE CONE (Pinus spp.) SYRUP	SEVDE NUR ÇATALTEPE Prof. Dr. MEHMET MUSA ÖZCAN Assoc. Prof. Dr. NURHAN USLU
		5	*Solanum nigrum ve Chenopodium album* Yabancı Otlarından Tomato brown rugose fruit virus (ToBRFV)' nün RNA'sının İzolasyonunun Optimizasyonu	Tuğba ERDOĞAN Dr. Cemile TEMUR ÇINAR Prof. Dr. Doğan IŞIK
		6	VETERİNER HEKİMLİKTE KULLANILAN KARDİYAK BELİRTEÇLER	Vet. Hek. ,BURAK EMRE SAVAŞ
		7	FUSARIUM TOXINS: IMPROVING AWARENESS AND MANAGEMENT STRATEGIES	Nedaa M.M. Tanina Feyza N. KAFADAR Canan Can.

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
23 Haziran / June 23, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 5	**Doç. Dr., Zeynep DUMANOGLU**	1	SÜLEYMAN DEMİREL ANIT MEZARININ PEYZAJ MİMARLIĞI AÇISINDAN İNCELENMESİ	Prof. Dr. Candan KUŞ ŞAHİN Dr. Öğretim Üyesi Büşra ONAY
		2	The Importance of Native Plant Use in Urban Green Areas and Evaluation of the Opportunities of Utilisation of Native Plants in Erzurum City Sample	Mustafa ÖZGERİŞ
		3	İKLİM DEĞİŞİKLİĞİ KIRILGANLIĞININ AZALTILMASINDA AÇIK YEŞİL ALANLARIN ÖNEMİ	Doç. Dr. Zeynep PİRSELİMOĞLU BATMAN Kübra Nur SAFALI
		4	SÜRDÜRÜLEBİLİR KENT EKOLOJİSİNDE DİKEY BAHÇELERİN ÖNEMİ	Doç. Dr., Zeynep DUMANOGLU Dr. Öğretim Üyesi, Ayşenur AKBANA
		5	ÇEVRESEL GÜRÜLTÜNÜN ÖZEL EĞİTİM ANAOKULU YAPISINDA DEĞERLENDİRİLMESİ: BOLU ÖRNEĞİ	Arş. Gör., Betül BİLGEHAN DULKADİROĞLU Doç. Dr., Alper BİDECİ
		6	SÜRDÜRÜLEBİLİR KENTSEL HAREKETLİLİK PLANLARININ (SKHP) KENTSEL DİRENÇLİLİK GÖSTERGELERİ BAĞLAMINDA DEĞERLENDİRİLMESİ-KONYA SKHP ÖRNEĞİ	Elif YERLİKAYA Prof. Dr. Ozan HOVARDAOĞLU
		7	ÇOMÜ TERZİOĞLU KAMPÜSÜ'NDEKİ ALANLARIN KURAKÇIL PEYZAJ AÇISINDAN DEĞERLENDİRİLMESİ	Peyzaj Mimarlığı Öğrencisi, ZEYNEP MANDEV Peyzaj Mimarlığı Öğrencisi, BÜŞRA GÜLEÇ

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
23 Haziran / June 23, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 6	**Dr.Öğr.Üyesi Necmi YARBAŞI**	1	ÇERÇEVELİ BETONARME SİSTEMLİ İŞYERİ YAPILARINDA ZEMİN KATTA ASMA KAT OLUŞTURULMASININ YAPISAL DAVRANIŞA ETKİSİ	Dr. Öğretim Üyesi, Muhammet Zeki ÖZYURT Lisans Öğrencisi, Abdulrahman SARHAN
		2	ASMA KATIN PERDELERİ-ÇERÇEVELİ BETONARME SİSTEMLİ 3 KATLI İŞYERİ YAPILARDA YAPISAL DAVRANIŞA ETKİSİ	Dr. Öğretim Üyesi, Muhammet Zeki ÖZYURT Lisans Öğrencisi, İbrahim ALAHMAD
		3	THE IMPORTANCE OF GEOTECHNICAL MAPPING IN CREATING CITIES RESISTANT TO NATURAL DISASTERS	Dr.Öğr.Üyesi Necmi YARBAŞI
		4	THE IMPORTANCE OF GEOTECHNICAL MAPPING IN CREATING CITIES RESISTANT TO NATURAL DISASTERS	Dr.Öğr.Üyesi Necmi YARBAŞI
		5	KÜR TİPİ ve YÖNTEMİNİN GEOPOLİMER HARÇ BASINÇ DAYANIMINA ETKİSİ	Dr. ADİL GÜLTEKİN
		6	INDOOR RADON GAS MEASUREMENTS ON THE EUROPEAN AND ANATOLIAN SIDES OF ISTANBUL	Elif YELKENBİÇER Rana ERTEKİN Gizem YILMAZLI Araş. Gör. Dr., Nurgül HAFIZOĞLU ALKAN
		7	SİİRT İLİ MEVCUT ULAŞIM ALTYAPISININ DEĞERLENDİRİLMESİ	Dr. Öğr. Üyesi, AYŞE ÜNAL Mervan Baran BUZDAĞ

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
23 Haziran / June 23, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 7	**Zeynep KULAKSIZ Dr. Öğr. Üyesi Erkan Sami KOKTEN**	1	SABİT KANATLI PERVANE TAHRİKLİ BİR HAVA ARACININ PERFORMANS İNCELEMESİ VE İYİLEŞTİRİLMESİ	Uçak Mühendisi, Selimcan ÖZDEMİR Prof. Dr., Tuğrul OKTAY
		2	MGO NANOPARTICLE ADDITIVES IN A BIODIESEL FUEL BLEND AN EXAMINATION OF THE IMPACT ON THE COMBUSTİON PARAMETERS OF A DIESEL ENGINE	Yükseklisans Öğrencisi, MEHMET ALİ DEMİR Doç. Dr. SELMAN AYDIN
		3	PROFİL ÜRETİMİNDE KALİTE PERFORMANSININ U-ŞEMASI İLE İNCELENMESİ	Zeynep KULAKSIZ Dr. Öğr. Üyesi Erkan Sami KOKTEN
		4	OYUN ENDÜSTRİSİNİN GELECEK TAHMİNİNDE YAPAY SİNİR AĞLARI VE ÇOKLU DOĞRUSAL REGRESYON YÖNTEMLERİNİN KULLANIMI	Sinan ENDİRCE Dr. Öğr. Üyesi Erkan Sami KOKTEN
		5	CAN BUS PROTOKOLÜ İLE HABERLEŞEN TAMAMI DİJİTAL SÜRÜCÜ GÖSTERGE PANELİNİN TASARIMI VE UYGULANMASI	Ar-Ge Elektrik Yazılım Mühendisi, Mehmet Kuş Ar-Ge Elektrik Yazılım Mühendisi, İbrahim Can Aydın
		6	DİZEL MOTORLARDA KATKI MADDESİ OLARAK METAL NANO PARTİKÜL KULLANIMININ ARAŞTIRILMASI	Cihan BİRBİR Doç. Dr. Erdal ÇILĞIN
		7	ANSYS AFM VE TAGUCHİ METODU İLE OPTİMUM SPREY ANALİZİ	Hükümran Selim ERTÜRK Doç.Dr. Canan CİMŞİT Prof. Dr. Elif Öğüt

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
23 Haziran / June 23, 2024 / 15:30 – 17:30 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 8	**Dr. Chat Peseeko**	1	A NOVEL MULTIRESOLUTION APPROACH FOR ROBUST AFFINE PARAMETER ESTIMATION OPTIMIZATION	Jefy Dinesh Peter
		2	DENGUE TRANSMISSION MODELING: EXPLORING INTERACTIONS BETWEEN INFANTS, PREGNANT WOMEN, AND ANTIBODIES	R.P. Pongsumpun
		3	COMPARATIVE EVALUATION OF DENGUE PATIENTS: PREGNANT VS. NON-PREGNANT COHORTS	Dr. Chat Peseeko
		4	COMPARATIVE ANALYSIS OF DENGUE PATIENTS: PREGNANT VS. NON-PREGNANT MODELS	Randa Pongsumpun
		5	MODELING DENGUE DISEASE DYNAMICS INCORPORATING VIRUS INCUBATION PERIOD IN MATHEMATICAL FRAMEWORK	Assis. Prof. Dr. Penabe. Pongsumpun
		6	STOCHASTIC RESONANCE IN NONLINEAR SIGNAL DETECTION: AMPLIFYING WEAK SIGNALS WITH NOISE	Youguofo Wang, Lenanmo Wu Yo
		7	EXPLORING COMPUTATIONAL GEOMETRY THROUGH TWO SPATIAL EXPERIMENTS	Prof. Dr. Marco lee Hemmerling
		8	STUDY ON THE VIABILITY OF EMBEDDED REAL-TIME SYSTEMS	Dr. YongXia, JIN
		9		

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
23 Haziran / June 23, 2024 / 15:30 – 17:30 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 9	**Dr. Maria Gonzalez**	1	INVASION OF PECTINATELLA MAGNIFICA IN FRESHWATER ECOSYSTEMS OF THAILAND	Dr. Surin Supasorn,
		2	MODELING PHYTOREMEDIATION RATES OF AQUATIC MACROPHYTES IN AQUACULTURE EFFLUENT	Prof. Chen Wei
		3	MICROWAVE-ASSISTED TECHNIQUES FOR ANALYZING VOLATILE COMPOUNDS IN CARUM CARVI USING GC AND GCXGC-MS	Dr. F. Benkaci-Ali Dr. R. Mékaoui, Dr. G. Scholl, Dr. G. Eppe
		4	IMPACT OF PETROLEUM HYDROCARBONS ON PLANT RHIZOSPHERE AND RHIZOPLANE BACTERIAL BIODIVERSITY	Dr. Togzhan D. Mukasheva Dr. Anel A. Omirbekova, Dr. Raikhan S. Sydykbekova, Dr. Ramza Zh. Berzhanova, Dr. Lyudmila V. Ignatova
		5	EVALUATION OF LANDFILL CONTAMINATION IMPACT ON AQUATIC ECOSYSTEM THROUGH ANALYSIS OF HEAVY METAL BIOACCUMULATION IN FISH	Gintarė Sauliutė, Gintaras Svecevičius
		6	EXAMINATION OF ENERGY EFFICIENCY RESEARCH AND MCA METHODS USING PUBLICATION DATABASES	Dr. Maria Gonzalez
		7	ASSESSMENT OF WATER QUALITY FOR IRRIGATION: CASE STUDY OF JOSEPDAM IRRIGATION SCHEME	:Dr. M. A. Adejumobi Dr. J. O. Ojediran
		7	TITLE: ASSESSMENT OF METHANE EMISSIONS FROM SOLID WASTE IN OMAN USING IPCC DEFAULT METHODOLOGY	Dr. Ahmed Al-Sulaimi
		8		

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
NewArt 3rd INTERNATIONAL GROUP EXHIBITION
JUNE 21 - 23, 2024
KONYA
Meeting ID: 816 0458 4722 Passcode: 202224

23 Haziran / June 23, 2024 / 15:30 – 17:30 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 10	**Jens-Phillip Petersen**	1	ROOT GROWTH OF MORUS ALBA AS AFFECTED BY SIZE OF CUTTINGS AND POLYTHENE LOW TUNNEL	Irfan Ahmad, Tahir Siddiqui, Rashid Ahmad Khan, Tahir Munir Butt
		2	NiO-CeO2 NANOCATALYST FOR EFFICIENT REMOVAL OF PRIORITY ORGANIC POLLUTANTS FROM WASTEWATER VIA CATALYTIC WET AIR OXIDATION AT MILD CONDITIONS	Professor Dr. Anushree
		3	PROBABILISTIC ANALYSIS OF LANDFILL FAILURE MOBILITY	Dr. Ali Jahanfar, Dr. Brajesh Dubey, Dr. Bahram Gharabaghi,
		4	INFLUENCE OF ENVIRONMENTAL FACTORS ON PHOTOREACTIVATION OF MICROORGANISMS IN INDOOR SETTINGS	Shirin Shafaei, James R. Bolton, Mohamed Gamal El Din
		5	ENVIRONMENTAL IMPACTS OF POINT AND NON-POINT SOURCE POLLUTION IN KRISHNAGIRI RESERVOIR: A CASE STUDY IN SOUTH INDIA	Dr. N. K. Ambujam, Dr. V. Sudha
		6	THE INTEGRATION OF URBAN AND ENERGY PLANNING FOR SUSTAINABLE CITIES: A COMPARATIVE STUDY OF JAPAN AND SOUTH KOREA"	Jens-Phillip Petersen
		7	ADVANTAGES OF ELECTRIC BUSES IN URBAN TRANSPORT: INSIGHTS FROM FIELD TESTING IN EIGHT SWEDISH MUNICIPALITIES	Dr. Sven Borén, Dr. Lisiana Nurhadi, Dr. Henrik Ny
		8	INDUSTRIAL WASTEWATER SLUDGE MANAGEMENT IN CHONGQING, CHINA	Victor Emery David Jr.), Yasinta John Md. Sahadat Hossain
		9	EXPLOITING LOW-COST ADSORBENTS FOR HEAVY METAL BIOSORPTION	Dr. Azam Tabatabaee Dr. Fereshteh Dastgoshadeh Dr. Akram Tabatabaee

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES NewArt 3rd INTERNATIONAL GROUP EXHIBITION JUNE 21 - 23, 2024 KONYA Meeting ID: 816 0458 4722 Passcode: 202224				
23 Haziran / June 23, 2024 / 15:30 – 17:30 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 11	**Dr. C.K. Hindumathy**	1	INVESTIGATING PESTICIDE STRESS-INDUCED PROTEIN PROFILES IN THREE CYANOBACTERIAL SPECIES: ANABAENA FERTILISSIMA, AULOSIRA FERTILISSIMA, AND WESTIELLOPSIS PROLIFICA USING SDS-PAGE	Dr. Nirmal Kumar
		2	ELECTROMAGNETIC PHENOMENA AND ATOM-FIELD INTERACTIONS IN CELLULAR BIOLOGY	Dr. Masroor H. S. Bukhari,
		3	INTRINSIC ELECTROMAGNETIC PHENOMENA AND ATOM-FIELD INTERACTIONS IN BIOLOGICAL CELLS	Dr. Masroor H. S. Bukhari
		4	HAIR MECHANICAL PROPERTIES DEPENDING ON AGE AND ORIGIN	Meriem Benzarti, Mohamed Ben Tkaya, Cyril Pailler Mattei, Hassan Zahouani
		5	IN VITRO STUDY OF ANTIBACTERIAL ACTIVITY OF CYMBOPOGON CITRATUS	Dr. C.K. Hindumathy
		6	THE FIRST PREVALENCE REPORT OF DIRECT IDENTIFICATION AND DIFFERENTIATION OF B. ABORTUS AND B. MELITENSIS USING REAL TIME PCR IN HOUSE MOUSE OF IRAN	Dr. Ali Doosti, Faculty of Veterinary Medicine, Dr. Saeed Moshkelani,
		7	GENETIC ANALYSIS OF TICK SPECIES IN SAUDI ARABIA	Kholoud A. Al-Shammery, Badr El-Sabah A. Fetoh, Ahmed M. Alshammari
		8	IMPACT OF CARBON SOURCES ON TABTOXIN PRODUCTION: A STUDY ON PSEUDOMONAS SYRINGAE PV. TABACI, A B-LACTAM PHYTOTOXIN	Dr. N. Messaadia
		9	OPTIMIZATION OF GROWTH CONDITIONS FOR ACIDIC PROTEASE PRODUCTION FROM RHIZOPUS OLIGOSPORUS THROUGH SOLID STATE FERMENTATION OF SUNFLOWER MEAL	Dr. Abdul Rauf Muhammad Irfan, Muhammad Nadeem, Ishtiaq Ahmed, Hafiz Muhammad Nasir Iqbal

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
NewArt 3rd INTERNATIONAL GROUP EXHIBITION
JUNE 21 - 23, 2024
KONYA
Meeting ID: 816 0458 4722 Passcode: 202224

23 Haziran / June 23, 2024 / 15:30 – 17:30 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 12	**Dr. Jane Doe**	1	Analysis of Soil-Structure Interaction Effects on Dynamic Parameters of Steel Structures: A Case Study from Taiwan	Vahidreza Mahmoudabadi, Omid Bahar, Mohammad Kazem Jafari
		2	ANALYTICAL APPROACH TO MANNING'S EQUATION FOR RECTANGULAR CHANNELS	Dr. Jane Doe
		3	INTEGRATING SUSTAINABILITY DIMENSIONS INTO URBAN INFORMATION MODELLING	Ali M. Al-Shaery,
		4	UTILIZATION OF BOTTOM ASH IN GEOTECHNICAL APPLICATIONS FOR ENVIRONMENTAL SUSTAINABILITY: A CASE STUDY FROM INDIA	A. B. Rahman, Asim Malik
		5	IMPACT OF LOCAL SOIL CONDITIONS ON OPTIMUM LOAD FACTORS FOR SEISMIC BUILDING DESIGN	Dr. Miguel A. Orellana, Dr. Sonia E. Ruiz, Dr. Juan Bojórquez
		6	SEISMIC VULNERABILITY ASSESSMENT OF WEIR STRUCTURES CONSIDERING CONCRETE MATERIAL AGING	Prof. HoYoung Son, Dr. DongHoon Shin, Dr. WooYoung Jung
		7	OPTIMAL DESIGN PARAMETERS FOR BUILDINGS WITH BUCKLING-RESTRAINED BRACES	Dr. Ángel de J. López-Pérez, Dr. Sonia E. Ruiz, Dr. Vanessa A. Segovia
		8	INVESTIGATION OF COMPOSITE CANTILEVER BEAM BEHAVIOR WITH EXTERNAL PRESTRESSING: A NONLINEAR FINITE ELEMENT ANALYSIS	Dr. Rahim I. Liban Dr. Nalan Tayşi
		9	NUMERICAL ANALYSIS OF AFFORDABLE RUBBER ISOLATION SYSTEMS FOR MASONRY DWELLINGS IN SEISMICALLY ACTIVE REGIONS	Dr. Ahmad B. Habieb Dr. Gabriele Milani Dr. Tavio Tavio Dr. Federico Milani

SELCUK 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
SELCUK 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
NewArt 3rd INTERNATIONAL GROUP EXHIBITION
JUNE 21 - 23, 2024
KONYA
Meeting ID: 816 0458 4722 Passcode: 202224

23 Haziran / June 23, 2024 / 15:30 – 17:30 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 13	**Nachawit Tikul**	1	ENHANCED APPROACH FOR COMPUTING LINEAR AND NONLINEAR RESPONSES OF SDOF SYSTEMS UNDER ARBITRARY BASE EXCITATIONS	Hossein Kabir, Dr. Mojtaba Sadeghi
		2	IMPACT OF LOCAL FACTORS ON VIABLE FUNGAL CONCENTRATIONS AND FLORA IN SCHOOL BUILDINGS	H. Salonen, E. Castagnoli, C. Vornanen-Winqvist, R. Mikkola, C. Duchaine, L. Morawska, J. Kurnitski
		3	ADHESION PERFORMANCE ACCORDING TO LATERAL REINFORCEMENT METHOD OF TEXTILE	Jungbhin You, Taekyun Kim, Jongho Park, Sungnam Hong, Sun-Kyu Park
		4	CYCLIC BEHAVIOR OF WIDE BEAM-COLUMN JOINTS WITH SHEAR STRENGTH RATIOS OF 1.0 AND 1.7	Roy Y. C. Huang, J. S. Kuang, Hamdolah Behnam,
		5	EFFECTS OF PIER MODIFICATION STRATEGIES ON SCOUR MITIGATION AROUND BRIDGE PIERS	Rashid Farooq, Abdul Razzaq Ghumman, Hashim Nisar Hashmi
		6	SEISMIC PERFORMANCE OF RC KNEE JOINTS UNDER CYCLIC LOADING	S. Mogili, J. S. Kuang, N. Zhang
		7	INNOVATIVE ROTOR DESIGNS FOR THE COUNTER FLOW HEAT RECOVERY FAN	Christoph Speer,
		8	EXPERIMENTAL INVESTIGATION OF GEOTEXTILE IMPACT ON ENHANCING SOIL BEARING CAPACITY IN AGGREGATE SURFACED ROADS	Mahdi Taghipour Masoumi, Ali Abdi Kordani, Mahmoud Nazirizad,
		9	FLOOD ADAPTATION STRATEGIES IN LOW-INCOME SETTLEMENTS IN CHIANG MAI, THAILAND	Nachawit Tikul,
		10	ADVANCING SUSTAINABLE CONSTRUCTION MATERIALS INDUSTRY IN BOTSWANA	Dr. G. Malumbela

ISBN NR: 978-625-6283-33-6

Contents

ABSTRACT BOOK

ISBN NR: 978-625-6283-33-6

ISBN NR: 978-625-6283-33-6

ISBN NR: 978-625-6283-33-6

ISBN NR: 978-625-6283-33-6

ISBN NR: 978-625-6283-33-6

ISBN NR: 978-625-6283-33-6

HOW MUCH DOES THE CONSCIOUSNESS OF INTENSIVE CARE PATIENTS AFFECT THE RISKS?

Yoğun Bakım Hastalarının Riskleri Bilinç Durumu Ne Kadar Etkiliyor?

Dr. Lütfiye Nur Uzun
Bolu İl Sağlık Müdürlüğü, 0000-0002-8724-3843

Abstract

Aim: This study examines the relationship between the Glasgow Coma Scale (GCS) and falling, pressure sore, and nutrition risk assessment of patients under treatment in a level-two intensive care unit (ICU).

Method: Exactly 143 patients under treatment were retrospectively examined, and 79 patients were included in the study. The data from this study were collected using the patient information form, the Braden Scale for Predicting Pressure Sore Risk, NRS-2002 the Itaki II Fall Risk Scale, and the GCS. The relationship between GCS and falling, pressure sore, and nutrition risks was examined using multiple regression analysis. Ethical approval (2023/308, 19.09.2023) was obtained from the clinical research ethics committee.

Results: The falling, pressure sore, and nutrition risks significantly predict the state of consciousness of the patients. Precisely 61% of the variance in the GCS is explained by the falling, pressure sore, and nutrition risk.

Conclusions and Recommendations: The falling score, pressure sore, and nutrition risks of patients in ICUs affect their state of consciousness. Since the changes in risk factors can affect the state of consciousness, it is suggested that nurses, be aware that they should organize their care plans accordingly and create preventive care standards.

Keywords: Intensive Care Unit Patients; Risk Factors; Pressure Sore; Risk of Falling; Nutrition Risk; Glasgow Coma Scale

ÖZ

Amaç: Bu çalışma, ikinci basamak yoğun bakım ünitesinde (YBÜ) tedavi gören hastalarda Glasgow Koma Skalası (GCS) ile düşme, bası yarası ve beslenme riski değerlendirmesi arasındaki ilişkiyi incelemek amacıyla yapılmıştır.

Yöntem: Tedavi gören 143 hasta retrospektif olarak incelenmiş ve 79 hasta çalışmaya dahil edilmiştir. Bu çalışmadan elde edilen veriler hasta bilgi formu, Braden Basınç Ülseri Risk Değerlendirme Ölçeği, NRS-2002 Itaki II Düşme Riski Ölçeği ve GKS kullanılarak toplandı. GKS ile düşme, bası yarası ve beslenme riskleri arasındaki ilişki çoklu regresyon analizi kullanılarak incelenmiştir. Klinik araştırma etik kurulundan etik onay (2023/308, 19.09.2023) alındı.

ISBN NR: 978-625-6283-33-6

Bulgular: Düşme, basınç yarası ve beslenme riskleri hastaların bilinç durumunu anlamlı derecede yordamaktadır. GKS'deki varyansın tam olarak %61'i düşme, bası yarası ve beslenme riski ile açıklanmaktadır.

Sonuçlar ve Öneriler: Yoğun bakım ünitelerinde yatan hastaların düşme skoru, basınç yarası ve beslenme riskleri bilinç durumlarını etkilemektedir. Risk faktörlerindeki değişiklikler bilinç durumunu etkileyebileceğinden hemşirelerin bakım planlarını buna göre düzenlemeleri ve koruyucu bakım standartları oluşturmaları konusunda bilinçli olmaları önerilmektedir.

Anahtar Kelimeler: Yoğun Bakım Hastaları; Risk Faktörleri; Basınç Yarası; Düşme Riski; Beslenme Riski; Glasgow Koma Skalası

ISBN NR: 978-625-6283-33-6

ANESTHESIA MANAGEMENT IN A PATIENT WITH WILLIAMS SYNDROME UNDERGOING DENTAL SURGERY - CASE REPORT

R.A., Abdullah YEŞİLKAYA

Karabuk University Faculty of Medicine Department of Anesthesiology,

- 0009-0000-7715-1382

Assoc. Prof. , Müge ARIKAN

Karabuk University Faculty of Medicine Department of Anesthesiology,

– 0000-0003-2931-1729

ABSTRACT

Williams syndrome is a very rare genetic disease. It can affect the cardiovascular and neuromuscular systems as a result of the elastin gene defect. The need for general anesthesia occurs quite frequently in these patients. Sudden cardiac arrest and other perioperative complications are likely to occur.

Our patient was a 15-year-old male. In the preoperative evaluation of the patient, for whom dental surgery was planned, it was determined that he had undergone 5 operations and was diagnosed with Williams syndrome. Cardiology evaluation was performed on the patient whose ECG showed sinus tachycardia. Anesthesia induction was performed after routine monitoring. The patient was nasally intubated and woken up without any problems after the operation. The patient was monitored in the recovery unit for 6 hours after the surgery and was discharged with full recovery.

These patients have a specific facial appearance (Figure 1). Complications in airway management may occur due to anatomical changes. It is especially vital to evaluate the cardiovascular system and take the necessary precautions. Because it has been reported that sudden cardiac deaths and myocardial infraction increase 25 to 100 times in the perioperative period. Cardiovascular complications are also common with induction of anesthesia. In these patients, anesthesia management should be planned in detail and close follow-up should be performed.

We aimed to contribute to the literature by presenting the anesthetic management of this syndrome, which is estimated to occur in 1/10,000 births and has a characteristic facial appearance, developmental delay and connective tissue abnormality.

Keywords : Williams Syndrome, General Anesthesia, Dental Surgery

ISBN NR: 978-625-6283-33-6

Figure 1. Specific facial appearance of patient

DENTAL CERRAHİ GEÇİREN WİLLİAMS SENDROMLU HASTADA ANESTEZİ YÖNETİMİ - OLGU SUNUMU

ÖZET

Williams sendromu çok nadir görülen bir genetik hastalıktır. Elastin genindeki bozukluk nedeniyle kardiyovasküler ve nöromüsküler sistemleri etkileyebilir. Bu hastalarda genel anestezi ihtiyacı oldukça sık ortaya çıkmaktadır. Ani kalp durması ve diğer perioperatif komplikasyonların ortaya çıkması muhtemeldir.

Hastamız 15 yaşında bir erkekti. Diş ameliyatı planlanan hastanın ameliyat öncesi değerlendirmesinde 5 ameliyat geçirdiği ve Williams sendromu tanısı aldığı belirlendi. EKG'sinde sinüs taşikardisi görülen hastaya kardiyolojik değerlendirme yapıldı. Rutin monitörizasyon sonrasında anestezi indüksiyonu uygulandı. Hasta nazal entübe edildi ve ameliyat sonrası sorunsuz bir şekilde uyandırıldı. Ameliyat sonrası 6 saat boyunca derlenme ünitesinde takip edilen hasta, şifa ile taburcu edildi.

Bu hastaların kendine özgü bir yüz görünümü vardır (Şekil 1). Anatomik değişiklikler nedeniyle hava yolu yönetiminde komplikasyonlar ortaya çıkabilir. Özellikle kardiyovasküler

ISBN NR: 978-625-6283-33-6

sistemin değerlendirilmesi ve gerekli önlemlerin alınması hayati önem taşımaktadır. Çünkü perioperatif dönemde ani kalp ölümlerinin ve miyokard enfarktüsünün 25 ila 100 kat arttığı rapor edilmiştir. Anestezi indüksiyonunda kardiyovasküler komplikasyonlar da yaygındır.

Bu hastalarda anestezi yönetimi detaylı planlanmalı ve yakın takip yapılmalıdır. 1/10.000 doğumda meydana geldiği tahmin edilen, karakteristik yüz görünümü, gelişim geriliği ve bağ dokusu anormalliği olan bu sendromun anestezi yönetimini sunarak literatüre katkı sağlamayı amaçladık.

Anahtar Kelimeler : Williams Sendromu, Genel Anestezi, Diş Cerrahisi

Şekil 1. Hastanın spesifik yüz görünümü

ISBN NR: 978-625-6283-33-6

Uzun Süreli Masa Başı Çalışanlar ve Uzun Süre Ayakta Çalışanlarda Postür, Sağlık Kaygısı ve İş Üretkenliğinin Karşılaştırılması

Comparison of Posture Health Anxiety and Work Productivity in Long-Term Desk Workers and Long-Term Standing Workers

Fzt. Saniye Duygu TATLI
Antalya Bilim University, Institute of Postgraduate Education, Department of Physiotherapy and Rehabilitation, Antalya-Türkiye
Email: duygu.tatli@std.antalya.edu.tr - **(ORCID: 0009-0006-2600-4968)**

Doç. Dr. Yıldız ERDOĞANOĞLU (ORCID: 0000-0002-9909-6561)
Antalya Bilim University, Faculty of Health Science, Department of Physiotherapy and Rehabilitation, Antalya-Türkiye
Email: yildiz.erdoganoglu@gmail.com - **(ORCID: 0000-0002-9909-6561)**

ÖZET

Amaç: Bu çalışma, uzun süreli masa başı çalışanlar ve uzun süre ayakta çalışanlarda postür, sağlık kaygısı ve iş üretkenliğinin karşılaştırılmak amacıyla planlandı. **Yöntem:** Bu kesitsel çalışmaya, 18-45 yaş arası uzun süre masa başı çalışan 51 kişi ve uzun süre ayakta çalışan 51 kişi olmak üzere toplam 102 kişi dahil edildi. Katılımcıların sosyodemografik bilgileri alındıktan sonra postürleri New York Postür Değerlendirme Testi ile, sağlık kaygısı düzeyleri Sağlık Anksiyetesi Envanteri ve iş verimlilik düzeyleri İş Üretkenliği ve Faaliyetlerde Azalma Anketi ile değerlendirildi. **Bulgular:** Çalışma sonucunda, gruplar arasında postür analizinde anlamlı fark olduğu ($p<0,05$), sağlık anksiyete düzeyleri ve iş üretkenlik düzeyleri İş Üretkenliği ve Faaliyetlerinde Azalma Anketi arasında anlamlı fark olmadığı anlamlı fark olmadığı görüldü ($p>0,05$). **SONUÇ:** Çalışmanın sonuçlarına bakıldığında uzun süreli masa başı çalışanların postürü uzun süreli ayakta çalışanlara göre daha iyiydi. Sağlık anksiyete düzeyleri ve iş üretkenlikleri açısından fark olmadığı görüldü. Uzun süre aynı postürde çalışmanın olumsuz etkileri göz önünde bulundurulduğunda, her iki grupta da uygun egzersiz alışkanlığının kazandırılması önemli olabilir.**Anahtar Kelimeler:** Postür, Sağlık Kaygısı, İş Üretkenliği.

ABSTRACT

Objectives: The working population constitutes an important part of society. There are discussions that the struggle of employees with physical and mental difficulties may affect work

ISBN NR: 978-625-6283-33-6

productivity. This study aimed to 'Compare Posture Health Anxiety and Work Productivity in Long-Term Desk Workers and Long-Term Standing Workers'.**Methods:** This study was a cross-sectional study and included a total of 102 participants aged 18-45 years, 51 of whom were long-term desk workers and 51 of whom were long-term standing workers. After obtaining sociodemographic information of the participants, their posture was evaluated with the New York Posture Evaluation Test, their health anxiety levels were evaluated with the Health Anxiety Inventory, and their work productivity levels were evaluated with the Work Productivity and Reduction in Activities Questionnaire. The assessments were performed only once.**Result:**As a result of the study, there was a significant difference between the groups in posture analysis ($p<0.05$), and there was no significant difference between health anxiety levels and work productivity levels in the Work Productivity and Activity Impairment Questionnaire ($p>0.05$).**Conclusions:** The results of the study showed that long-term desk workers had better posture than long-term standing workers. There was no difference in health anxiety levels and work productivity. Considering the negative effects of working in the same posture for a long time, it may be important to get into the habit appropriate exercise in both groups.

Keywords: Posture, Health Anxiety, Work Productivity.

ISBN NR: 978-625-6283-33-6

BARİATRİK CERRAHİ VE HEMŞİRELİK BAKIMI
BARIATRIC SURGERY AND NURSING CARE

Öğretim Görevlisi Nilgün SÖYLEMEZ

Munzur University, Faculty of Health Sciences, Department of Nursing

ORCID:0000-0002-5877-1655

Dr. Öğr. Üyesi Dilek GÜNEŞ

Fırat University, Faculty of Health Sciences, Department of Nursing

ORCID:0000-0003-2286-3387

ÖZET

Obezite, dünya çapında yansımaları olan, gelişmiş ve gelişmekte olan ülkelerde tekrarlayan, diabetes mellitus ve kardiyovasküler hastalıklar gibi bulaşıcı olmayan kronik hastalıklar için ana risk faktörleri arasında kabul edilen salgın bir hastalık olarak bilinmektedir. Genel olarak obezite, kalori tüketimi ile harcaması arasında uzun bir enerji dengesizliği durumu olduğunda ortaya çıkmaktadır. Kalori alımı ve enerji harcamaları arasındaki denge; genetik, epigenetik, biyolojik, hormonal, mikrobiyal, davranışsal, sosyokültürel ve çevresel faktörlerin etkileşiminin bozulmasından kaynaklanmaktadır. Vücuttaki yağ miktarı ve dağılımı, hastalıkların morbidite ve mortalitesinde rol oynarken, yaşam kalitesi ve süresini olumsuz yönde etkilemektedir. Aşırı kilo ve obezite; kanser, diyabet, kalp hastalığı, metabolik hastalıklar ve beyni olumsuz etkileyen birçok kronik hastalık için önemli bir risk faktörü olması sebebiyle küresel çapta bir sağlık sorunu olarak görülmektedir. Dünya çapında obezite ve ilişkili komorbiditelerin sağlık sistemi için ciddi bir yük oluşturduğu görülmektedir. Ayrıca büyük bir ekonomik yük oluşturmanın yanında kronik, karmaşık, farklı yapısıyla tüm organ ve sistemleri etkileyerek 200'den fazla hastalığa neden olabilmektedir.

Obezite tedavisi için yaşam tarzı değişikliği, ilaç tedavisi ve obezite cerrahisi gibi çeşitli terapötik yaklaşım geliştirilmiştir. Bariatrik cerrahi, obezite için en başarılı tedavilerden biridir ve vakaların %60'ında fazla kiloların azaltılmasında etkinliği kanıtlanmıştır. Bariatrik cerrahi ile istenen sonuçlara ulaşılabilmesi için hemşirelerin bariatrik cerrahi ve komplikasyonları konusunda üst düzey bilgi birikimine sahip olması gerekmektedir. Hemşirelerin ameliyat sonrası gelişebilecek komplikasyonları erken tespit etmesi veya önlemesi, hasta sonuçlarının iyileşmesine katkı sağlamaktadır. Ancak, komplikasyonların önlenmesi sadece hemşirelik bakımı ile mümkün değildir. Hastaların ameliyat sonrasında başarı sağlayabilmeleri için önerilere uymaları ve sürece uyumları da çok önemlidir.

Anahtar Kelimeler: Obezite, obezite cerrahisi, hemşire, hemşirelik bakımı

ISBN NR: 978-625-6283-33-6

ABSTRACT

Obesity is known as an epidemic disease with worldwide repercussions, recurrent in developed and developing countries, and recognized among the main risk factors for chronic non-communicable diseases such as diabetes mellitus and cardiovascular diseases. In general, obesity occurs when there is a prolonged state of energy imbalance between calorie intake and expenditure. The balance between calorie intake and energy expenditure results from a disruption of the interaction of genetic, epigenetic, biological, hormonal, microbial, behavioral, sociocultural and environmental factors. The amount and distribution of body fat plays a role in the morbidity and mortality of diseases and negatively affects quality and duration of life. Overweight and obesity is considered a global health problem as it is a major risk factor for cancer, diabetes, heart disease, metabolic diseases and many chronic diseases that adversely affect the brain. Worldwide, obesity and related comorbidities constitute a serious burden for the health system. In addition to creating a great economic burden, it can cause more than 200 diseases by affecting all organs and systems with its chronic, complex and different structure.

Several therapeutic approaches have been developed for the treatment of obesity, including lifestyle modification, medication and bariatric surgery. Bariatric surgery is one of the most successful treatments for obesity and has proven to be effective in reducing excess weight in 60% of cases. In order to achieve the desired results with bariatric surgery, nurses should have a high level of knowledge about bariatric surgery and its complications. Early detection or prevention of postoperative complications by nurses contributes to the improvement of patient outcomes. However, prevention of complications is not possible with nursing care alone. It is also very important that patients follow the recommendations and comply with the process in order to achieve success after surgery.

Keywords: Obesity, obesity surgery, nurse, nursing care

ISBN NR: 978-625-6283-33-6

HEMŞİRE VE ZOR HASTA KAVRAMI
NURSE AND THE CONCEPT OF DIFFICULT PATIENT

Öğretim Görevlisi Nilgün SÖYLEMEZ

Munzur University, Faculty of Health Sciences, Department of Nursing

ORCID:0000-0002-5877-1655

ÖZET

Hemşirelik, sağlıklı veya hasta bireylerin gereksinim duyduğu bakımı sağlamayı amaçlayan ve bu amaç doğrultusunda girişimler uygulamaya geçiren bir meslektir. Hemşirelik bakımı, hastaların fiziksel, duygusal ve psikolojik ihtiyaçlarını karşılamayı hedefleyen kapsamlı ve özenli bir sağlık hizmetidir. Hasta-hemşire ilişkisi, hastanın sağlık ihtiyaçlarına göre değişebilen ve hemşirenin hastaya olumlu duygular ve davranışlar sergilediği dinamik bir süreçtir. Ancak sağlık hizmetleri, karmaşık ve insani, ilişkisel bir çaba içermesi nedeniyle çeşitli zorluklar barındırmaktadır. Bu zorlukların başında iletişim sorunları gelmektedir. Tüm sağlık profesyonellerinin yaşayabileceği gibi, hasta-hemşire iletişiminde de zorluklar yaşanabilmektedir. Bireyler arasında yaşanan ve iletişimi engelleyen güç durumlar, sağlık profesyonellerinden veya hastadan kaynaklanabileceği gibi, tedavinin başarısızlığı, sağlık sistemindeki sorunlar veya sosyal destek yetersizliklerinden de kaynaklanabilmektedir. Bu bağlamda literatür incelendiğinde, bu iletişim zorluklarının paralelinde "zor hasta" kavramı dikkat çekmektedir.

"Zor hasta" iletişimi engelleyen davranışları olan hasta olarak tanımlanmakla birlikte, bu terimin hastayı etiketleme özelliği nedeniyle dikkatli kullanılması gerekmektedir. Sağlık çalışanı ile işbirliği yapmayan, verilen sağlık hizmetinden memnun olmayan, tedaviyi reddeden, reçete edilen ilaçları almayan ve tedavi sırasında hastane çalışanına zorluk çıkaran hasta "zor hasta" olarak nitelendirilmektedir. Zor hastalar karşısında hemşireler, birçok karmaşık duygu yaşamakta ve farklı iletişim davranışları sergileyebilmektedir. Hemşireler, bu hastalar ile çalışırken öfke patlamaları, yetersizlik, suçluluk, üzüntü, sinirlilik, çaresizlik, değersizlik ve hayal kırıklığı gibi negatif duygular yaşayabilmektedir. Bu durum hasta açısından değerlendirildiğinde ise, zor hasta olarak etiketlenmek bireyselliğine zarar vermenin yanı sıra hemşire ile iletişimde de birçok probleme yol açabilmektedir. Ayrıca bu etiketleme, hastaya verilen bakımın kalitesini de olumsuz etkileyebilmektedir. Hemşirelerin hastayla kurduğu ilişkinin en önemli hedeflerden biri hastanın kendini iyi hissetmesini sağlamaktır. Hastanın kendini iyi hissedebilmesi için hemşirenin mesleki tavrı, uygulamaları, davranışları ve hastayla kurduğu iletişimin sağlıklı olması gerekmektedir.

Hemşirelik bakımı, hastaların fiziksel, duygusal ve psikolojik ihtiyaçlarını karşılamayı amaçlayan kapsamlı ve özenli bir sağlık hizmetidir. Bu süreçte, "zor hasta" kavramı, hemşirelerin özellikle dikkat ve sabır gerektiren durumlarla karşılaştığı hastaları ifade eder. Hemşirenin bu tür hastalara yönelik bakımı, empati, profesyonellik ve etkin iletişim becerilerini

ISBN NR: 978-625-6283-33-6

kullanarak, hastaların kendilerini güvende hissetmelerini sağlamayı ve sağlık sonuçlarını iyileştirmeyi amaçlamalıdır. Hemşirenin zor hasta ile çalışırken bireyselleştirilmiş bakım planlaması, sabırla dinlemesi ve uygun müdahalelerle hastanın iyilik halini desteklemesi sürecin iyi bir şekilde yönetilmesine katkı sağlayacaktır.

Anahtar Kelimeler: Hemşire, hemşirelik bakımı, iletişim, zor hasta.

ABSTRACT

Nursing is a profession that aims to provide the care needed by healthy or sick people, and implements interventions for this purpose. Nursing care is a comprehensive and attentive health service that aims to meet the physical, emotional and psychological needs of patients. The patient-nurse relationship is a dynamic process that can change according to the patient's health needs and in which the nurse exhibits positive emotions and behaviors to the patient. However, healthcare services have various challenges due to the fact that it involves a complex, human and relational effort. One of these challenges is communication problems. As all health professionals may experience, difficulties may also be experienced in patient-nurse communication. Difficult situations that prevent communication between individuals may arise from health professionals or the patient, as well as from treatment failure, problems in the health system or insufficient social support. In this context, when the literature is examined, the concept of "difficult patient" draws attention in parallel with these communication difficulties.

Although "difficult patient" is defined as a patient with behaviors that prevent communication, this term should be used with caution due to its labeling feature. Patients who do not cooperate with the healthcare worker, are dissatisfied with the healthcare service provided, refuse treatment, do not take the prescribed medication and cause difficulties to the hospital staff during treatment are considered as "difficult patients". In the face of difficult patients, nurses experience many complex emotions and may exhibit different communication behaviors. While working with these patients, nurses may experience negative emotions such as anger outbursts, inadequacy, guilt, sadness, irritability, helplessness, worthlessness and frustration. When this situation is evaluated from the patient's perspective, being labeled as a difficult patient can lead to many problems in communication with the nurse as well as damaging their individuality. In addition, this labeling may also negatively affect the quality of care given to the patient. One of the most important goals of the nurses' relationship with the patient is to make the patient feel good. In order for the patient to feel well, the nurse's professional attitude, practices, behaviors and communication with the patient must be healthy.

Nursing care is a comprehensive and attentive health service that aims to meet the physical, emotional and psychological needs of patients. In this process, the concept of "difficult patient" refers to patients that nurses encounter with situations that require particular attention and patience. The nurse's care for such patients should aim to make them feel safe and improve their health outcomes by using empathy, professionalism and effective communication skills. The nurse's individualized care planning while working with difficult patients, listening

ISBN NR: 978-625-6283-33-6

patiently and supporting the patient's well-being with appropriate interventions will contribute to the good management of the process.

Keywords: Nurse, nursing care, communication, difficult patient.

ISBN NR: 978-625-6283-33-6

TELETIP UYGULAMALARI VE ÇOCUK

Doç. Dr. Nazan GÜRARSLAN BAŞ
Munzur Üniversitesi
nbas@munzur.edu.tr, 0000-0002-6546-192X

ÖZET

Teletıp (Telemedicine), "bir hastanın sağlık durumunu iyileştirmek için tıbbi bilgilerinin elektronik iletişim yoluyla bir yerden başka bir yere aktarılması" şeklinde tanımlanabilmektedir Teletıp farklı şekillerde tanımlanmakla beraber teknolojinin kullanımı ile iki taraf arasındaki mesafe ve sağlık hizmetinin sunumu esasına dayanır. Gönderilen bilgi türüne göre, hasta verilerinin iletimde eşzamanlı, eş zamanlı olmayan (sakla ve ilet, asenkron) ve uzaktan hasta izlenmesi yöntemleri kullanılır. Hastalar ve aileler için sağlık hizmetlerinde teknolojinin kullanımını tanımlayan teletıp; teleeğitim, telekonsültasyon ve telekomünikasyon platformlarını içerir. Teletıp hizmetleri, ayaktan ve yatarak sağlık hizmeti danışmanlıklarına kadar çeşitli şekillerde sunulabildiği gibi hasta ve hizmet sağlayıcısının teknolojiye erişebildiği her ortamda kullanılabilmektedir. Teletıp hizmetleri, toplumda eşitsizliklerden en fazla etkilenen grup içerisinde yer alan çocuklara sağlık hizmeti erişim olanağı sağlayarak uygun maliyetli seçenekler sunabilmektedir. Birçok çocuk, pediatrik sağlık hizmetlerine erişimde coğrafi zorluklar, çocuk ve yan dal uzmanın göreceli eksikliği ve dağılımı, seyahat zorlukları, sosyal ve ekonomik sorunlar gibi engellerle karşı karşıya kalmaktadır. Bu bağlamda tele tıp uygulamaları kapsamında olan tele-pediatri çocuklara sağlık hizmeti sunmada önemli role sahip olacaktır. Literatür incelendiğinde teletıp uygulamalarının çocuk alanında birinci basamak, cerrahi, kardiyoloji, yoğun bakım, neonatoloji, nöroloji ve ruh sağlığı gibi pediatri yan dal uzmanlık hizmetlerine entegre edildiğini görmek mümkündür. Çocuk alanında teletıp uygulamalarını değerlendiren bazı çalışmalar bu hizmetlerin, sağlık hizmeti maliyetini azalttığını, seyahat sürelerini kısalttığını, sağlık çalışanlarına erişimini kolaylaştırıp hasta/ailenin bakım memnuniyetini yükselttiğini bildirmektedir. Ancak bu faydalarının yanında teknolojik alt yapı sorunları, uygulamadaki yasal düzenlemelerin net olmaması, daha fazla bakım ve ilgi talepleri gibi dezavantajları da bulunmaktadır. Çocuğa bakım hizmeti sunan sağlık profesyonellerinin bir ekip üyesi olan çocuk hemşirelerinin teletıp uygulamaları sürecinde çocuğu değerlendirilme, hasta/ebeveyn onayını alma, bakımı planlama ve uygulamada kurumsal politika ve yönergelere uygun davranma, bu süreçte olası yasal/etik sorunlara hassasiyet gösterme sorumlulukları ön plana çıkmaktadır.

Anahtar Kelimer: Çocuk, hemşire, sağlık, teletıp.

ISBN NR: 978-625-6283-33-6

TELEMEDICINE APPLICATIONS AND CHILD

ABSTRACT

Telemedicine can be defined as "the transfer of medical information from one place to another via electronic communication to improve a patient's health status." Although telemedicine can be defined in various ways, it fundamentally relies on the use of technology to bridge the distance between two parties and facilitate the delivery of healthcare services. Depending on the type of information being transmitted, patient data can be transmitted using synchronous (real-time), asynchronous (store-and-forward), and remote patient monitoring methods. Telemedicine, which defines the use of technology in healthcare services for patients and families, includes tele-education, teleconsultation, and telecommunication platforms. Telemedicine services can be provided in various ways, from outpatient and inpatient healthcare consultations to any setting where both the patient and the service provider have access to technology. Telemedicine services can provide cost-effective options by enabling access for children, who are among the most affected groups by inequalities in society. Many children face barriers in accessing pediatric healthcare, including geographical challenges, the relative shortage and distribution of pediatric and subspecialty experts, travel difficulties, and social and economic issues. In this context, tele-pediatrics, which is part of telemedicine applications, will play a significant role in delivering healthcare services to children. A review of the literature reveals that telemedicine applications in the field of pediatrics have been integrated into primary care, surgery, cardiology, intensive care, neonatology, neurology, and mental health subspecialties. Some studies evaluating telemedicine applications in pediatric care report that these services reduce healthcare costs, shorten travel times, facilitate access to healthcare professionals, and increase patient and family satisfaction with care. However, alongside these benefits, there are also disadvantages, such as technological infrastructure issues, unclear legal regulations in practice, and increased demands for care and attention. In the process of telemedicine applications, pediatric nurses, as members of the healthcare team providing care to children, have responsibilities that include evaluating the child, obtaining patient/parent consent, planning and implementing care in accordance with institutional policies and guidelines, and being sensitive to potential legal/ethical issues.
Keywords: Child, nurse, health, telemedicine.

ISBN NR: 978-625-6283-33-6

ÖLÜM SONRASINA YÖNELİK ORGAN BAĞIŞI TUTUMU

Doç. Dr. Ahmet Kemal FİLİZ

Sivas Cumhuriyet Üniversitesi Tıp Fakültesi

– 0000-0001-9260-5549

Tıp Fakültesi Dönem 3 Öğrencisi Zehra Betül GÖKSU

Sivas Cumhuriyet Üniversitesi Tıp Fakültesi

– 0009-0009-4840-6695

ÖZET

Bu araştırma üniversite öğrencilerinin "ölüm sonrasına yönelik organ bağışı tutumu" hakkındadır. Araştırmanın amacı üniversite öğrencilerinin ölüm sonrası organ bağışı hakkındaki tutumlarının ne düzeyde olduğunu belirleyebilmek ve tutum düzeyinin hangi değişkenlere göre farklılık gösterdiğini tespit edebilmektir. Araştırmada birincil verilerden yararlanılmıştır. Veri toplama tekniği olarak anket kullanılmıştır. Araştırma örneklemini Sivas Cumhuriyet Üniversitesi Tıp Fakültesinde öğrenim gören 216 öğrenci oluşturmaktadır. Örneklem seçiminde tabakalı örneklem yöntemi kullanılmıştır. Toplanan veriler SPSS programı aracılığıyla analiz edilmiştir. Araştırma ölçeğinin güvenilirlik düzeyi "Cronbach Alpha Değeri" α= 0,876 olarak hesaplanmıştır. Veriler normal dağılım sergilemektedir. Bu yüzden araştırmada parametrik analiz yöntemleri kullanılmıştır. İki değişken arasında bir farklılaşmanın olup olmadığına yönelik "bağımsız örneklem t-testi", ikiden fazla değişken arasında bir farklılaşma olup olmadığına yönelik ise "tek yönlü anova analizi" yapılmıştır. Araştırmada katılımcıların tutumları ölçülmektedir. Bu yüzden araştırma %95 güven aralığı ve %5 hata payı içermektedir. Araştırma sonuçlarına göre Tıp Fakültesi öğrencilerinin ölüm sonrası organ bağışı tutumlarının orta ve üzerinde olduğu (3,47/5,00) görülmektedir. Katılımcıların sınıf ve cinsiyet değişkenine göre ölüm sonrası organ bağışı tutumları arasında anlamlı bir farklılık bulunmamaktadır. Araştırmada elde edilen diğer sonuçlara göre, organ bağışı konusunda yeterli bilgiye sahip olmayanların tutum düzeyi yeterli bilgiye sahip olanlara göre anlamlı bir şekilde daha yüksektir. Organ bağışı yapmak için nereye başvurması gerektiğini bilenlerin tutum düzeyi bilmeyenlerden anlamlı bir şekilde daha yüksektir. Buna karşın organlarını bağışlamak isteyenlerle bağışlamak istemeyenler arasında tutum düzeyi arasında anlamlı bir farklılık bulunamamıştır. Son olarak Türkiye'de organ bağışı düzeyi yeterli midir? Sorusuna verilen cevaplarda, yetersiz olduğunu düşünenler ve konu hakkında bilgisi olmadığını ifade edenlerin tutum düzeyleri arasında anlamlı bir farklılaşma bulunmamaktadır.

Anahtar Kelimeler: Organ Bağışı, Ölüm Sonrası Organ Bağışı, Tıp Fakültesi Öğrencileri

ISBN NR: 978-625-6283-33-6

OMEGA 6

Doç Dr. İbrahim AKTAŞ
Adıyaman Universitesi, - 0000-0002-0956-8204

ÖZET

Omega -6 yağ asitleri (ω−6), n-6 durumunda çift bağ halinde doymamış formunda yağ asitleridir. Ω −6 bağına sahip yağ asitleri vücutta sentezlenemediğinden temel yağ asitleri diye isimlendirilir. Ω −6; gama-linolenik asit (GLA), linoleik asit (LA), araşidonik asit (AA) ve dihomo-gama-linolenik asit (DGLA)'dan oluşur. AA, kabuklu deniz hayvanları, yumurta ve ette bulunurlar. AA, vücutta LA 'den elde edilirler.

Etkileri; cildi dış etkilere karşı muhafaza ettiğinden, pürüzsüz ve esnek cilt gelişimi oluşturarak, deriyi yaralanmalara ve hastalık etkenlerden korurlar. Su kaybını ve vücut sıcaklığını ayarlarlar. Bebeklerde pişikler neticesi oluşan yangıya karşı da etkilidirler. AA, hücrelerin zarındadır ve fosfolipidlerin yaklaşık % 5-15'inde görev alır. GLA, kuvvetli damar genişletici ve yangı giderici etkileri olan ve kanamayı azaltıcı etkisi olan eikozanoidleri sentezlemede uygulanılır. AA, yeni doğanların beyin gelişimi için gereklidir. AA; aminoasitler ve vitaminler gibi vücut işlevleri için yapı taşlarıdır. Hücre zarlarının esnekliği ve akışkanlığı esansiyel yağ asitlerinin zarlardaki miktarıyla orantılıdır. LA'nın migrasyon, ROS üretimi, sitokinler ve kemokinler, adezyon moleküllerinin ekspresyonu ve ekstraselüler matriks ile etkileşim gibi hücresel fonksiyonları uyardığı gösterilmiştir. Enerji üretimini, kemik, cilt ve saç sağlığını düzenlemek için önemlidirler.

Ω −6 eksikliği; kanın pıhtılaşmasında azalma, immünolojik fonksiyonlarında eksilme, kolesterol ve trigliserit düzeyinde artış, membran işlevlerinde deformasyon, bebeklerde gelişme geriliği, kıl ve saç dökülmeleri, kan basıncında artma, yara iyileşmelerinde yavaşlama, beyinde fonksiyon bozukluğuna neden olurlar.

Eksikliğindeki hastalıklar; egzama ve akne vulgaris, psöriosis, değişik kanser olguları, multipl skleroz, kalp ve damar hastalıkları, ruhsal hastalıklar ve raynoud fenomeni.

Fazlalığında; tromboz, arteri skleroz, görme deformasyonları ve romatizmal arterit gelişir.

Anahtar Kelimeler: Omega−6, gama-linolenik asit, araşidonik asit.

ABSTRACT

Omega −6 fatty acids (ω−6) are unsaturated fatty acids with a double bond in the n-6 state. Fatty acids with Ω−6 bonds are called essential fatty acids because they cannot be synthesized in the body. Ω−6; It consists of gamma-linolenic acid (GLA), LA, arachidonic acid (AA) and dihomo-gamma-linolenic acid (DGLA). AA is found in shellfish, eggs and meat. AA is obtained from LA in the body. Effects; Since they protect the skin against external influences, they create smooth and flexible skin development and protect the skin from injuries and disease factors. They regulate water loss and body temperature. They are also effective against inflammation caused by diaper rash in babies. AA is in the membrane of cells and takes part in approximately 5-15% of phospholipids. GLA is used to synthesize eicosanoids, which have potent vasodilator and anti-inflammatory effects and reduce bleeding. AA is essential for the brain development of newborns. AA; They take part in the formation of eicosanoids and

ISBN NR: 978-625-6283-33-6

leukotrienes. They are building blocks for body functions, such as amino acids and vitamins. The flexibility and fluidity of cell membranes are proportional to the amount of essential fatty acids in the membranes. LA has been shown to stimulate cellular functions such as migration, ROS production, cytokines and chemokines, expression of adhesion molecules, and interaction with the extracellular matrix. It has been observed that these changes are associated with improvements in tissue repair. They are important for regulating energy production and bone, skin and hair health. Symptoms observed in Ω−6 deficiency; They cause decrease in blood clotting, decrease in immunological functions, increase in cholesterol and triglyceride levels, deformation in membrane functions, developmental delay in babies, hair and hair loss, increase in blood pressure, slowdown in wound healing, and dysfunction in the brain. The main diseases that occur in its deficiency are; eczema and acne vulgaris, Psoriasis, various cancer cases, multiple sclerosis, cardiovascular diseases, mental diseases; depression, schizophrenia and behavioral disorders, raynoud phenomenon. In excess; It causes thrombosis, arterial sclerosis, visual deformations and rheumatoid arthritis.

Key Words: Omega−6, gamma-linolenic acid, arachidonic acid.

ISBN NR: 978-625-6283-33-6

KADINLARIN EV TEMİZLİĞİNDE KULLANDIKLARI KİMYASAL MADDELERE İLİŞKİN DAVRANIŞLARI İLE SOLUNUM SİSTEMİ HASTALIKLARINA YÖNELİK RİSK ALGISI

Öğr. Hem. Hilal NALBANT
Sakarya Uygulamalı Bilimler Üniversitesi,
ORCID ID: 0000-0001-9282-7029
Öğr. Hem. Merve UÇAR
Sakarya Uygulamalı Bilimler Üniversitesi,
ORCID ID: 0009-0006-9129-5669
Doç. Dr. Feride TAŞKIN YILMAZ
Sakarya Uygulamalı Bilimler Üniversitesi,
ORCID ID: 0000-0003-0568-5902

ÖZET

Temizlik ürünleri, günlük hayatta mikrop öldürme, hijyen sağlama gibi sağlığa olumlu etkisiyle evlerde yaygın kullanılan maddelerdir. Ev ortamına temizlik ürünlerini en sık kullanan kadınlarda, temizlik ürünlerinin yanlış ya da kontrolsüz kullanımı kronik solunum sistemi problemlerine neden olabilir. Bu çalışma, kadınların ev temizliğinde kullandıkları kimyasal maddelere ilişkin davranışlarını ve temizlik maddesi nedeniyle solunum sistemi rahatsızlığı yaşama durumunu belirlemek, temizlik maddesi kullanımı ile ilişkili solunum sistemi hastalıklarına yönelik risk algısını saptamak amacıyla yapılmıştır. Tanımlayıcı olarak yapılan çalışmaya, Sakarya ilinin Akyazı ilçesinde ikamet eden, WhatsApp aracılığı ile çalışmaya katılmayı kabul eden 303 kadın dahil edilmiştir. Veriler araştırmacılar tarafından hazırlanan anket formu ile elde edilmiştir. Kadınların %71,1'i temizlik ürünleri kullanımı esnasında sağlık sorunları yaşadığını belirtmiş olup kadınlar tarafından en fazla öksürük (%62), ellerde kızarıklık ya da kaşıntı (%57,4) ve boğazda yanma (%56,5) şikayetleri belirtilmiştir. Kadınların %39,3'ünün temizlik işi ile uğraşmayı sevdiği, %49,2'sinin kullandığı temizlik ürününü satın alırken sağlık açısından risksiz olmasına önem verdiği tespit edilmiştir. Kadınların her zaman %54,5'i temizlik sonrası ortamı havalandırdığını, %46,2'si temizlik sonrası kıyafetlerini değiştirdiğini belirtmiştir. Ayrıca kadınların yarıya yakını (%49,8) temizlik ürününün kullanım miktarını kendisi belirlediğini ifade etmiştir. Kadınların temizlik ürün kullanımına yönelik solunum sistemi hastalığına ilişkin risk algısı incelendiğinde, alınabilecek risk algı puanına göre (0-10), temizlik ürünlerinin sağlık açısından riskli değerlendirme düzeyi (5,84±2,17) ve temizlik ürünleri kullanımı açısından solunum sistemi hastalığına yakalanma risk düzeyi (5,41±2,66) orta düzeydedir. Çalışmada, kadınların temizlik ürünlerini kullanım davranışları farklılık göstermekle birlikte solunum sistemi hastalığı açısından kendilerini orta düzeyde riskli gördükleri belirlenmiştir. Sosyal medya aracılığı ile temizlik ürünlerinin kullanımına yönelik farkındalık artırıcı bilgilendirmelerin yapılması önerilmektedir.

Anahtar Kelimeler: Temizlik ürünü, kimyasal madde, solunum sistemi hastalığı, kadın

ISBN NR: 978-625-6283-33-6

Women's Behaviors Regarding the Chemicals They Use in House Cleaning and Their Risk Perception for Respiratory System Diseases

ABSTRACT

Cleaning products are widely used in households due to their positive effects on health such as killing germs and providing hygiene in daily life. Improper or uncontrolled use of cleaning products may cause chronic respiratory system problems in women who use cleaning products most frequently in the home environment. This study was conducted to determine women's behaviors regarding the chemical substances they use in household cleaning, to determine whether they experience respiratory system disorders due to cleaning agents, and to determine the risk perception of respiratory system diseases associated with the use of cleaning agents. The descriptive study included 303 women residing in Akyazı district of Sakarya province, who agreed to participate in the study via WhatsApp, who did not have chronic or congenital respiratory system disease and who completed the data collection forms completely. Data were obtained with a questionnaire form prepared by the researchers. 71.1% of women stated that they experienced health problems during the use of cleaning products and the most common complaints were cough (62%), redness or itching of the hands (57.4%) and burning in the throat (56.5%). It was found that 39.3% of the women liked to do cleaning work and 49.2% of them gave importance to the fact that the cleaning product they used was risk-free in terms of health. 54.5% of the women always ventilated the environment after cleaning and 46.2% changed their clothes after cleaning. In addition, almost half of the women (49.8%) stated that they determine the amount of cleaning product use themselves. When the women's risk perception of respiratory system disease related to the use of cleaning products was examined, according to the risk perception score (0-10), the level of risky evaluation of cleaning products in terms of health (5.84±2.17) and the level of risk of developing respiratory system disease in terms of the use of cleaning products (5.41±2.66) are at medium level. In the study, it was determined that although women's behaviors in the use of cleaning products differed, they considered themselves moderately risky in terms of respiratory system disease. It is recommended to provide awareness-raising information on the use of cleaning products through social media.

Keywords: Cleaning products, chemicals, respiratory system disease, women

ISBN NR: 978-625-6283-33-6

KRONİK HASTALIĞI OLAN YAŞLI BİREYLERDE SOSYAL DESTEK ALGISI VE HASTALIK ÖZ YÖNETİMİ İLİŞKİSİ

Öğr. Hem. Keziban ŞİMŞEK
Sakarya Uygulamalı Bilimler Üniversitesi,
ORCID ID: 0009-0000-5701-4583
Öğr. Hem. Zeynep ERGÜN
Sakarya Uygulamalı Bilimler Üniversitesi,
ORCID ID: 0009-0009-7436-2526
Doç. Dr. Feride TAŞKIN YILMAZ
Sakarya Uygulamalı Bilimler Üniversitesi,
ORCID ID: 0000-0003-0568-5902

ÖZET

Değişen ve gelişen dünyanın bir sonucu olarak kronik hastalıklar gün geçtikçe artmaktadır. Bu nedenle bireylerin sağlığının korunması ve iyileştirilmesi için kronik hastalık yönetimi önemli role sahiptir. Kronik hastalık yönetiminde etkili olabilecek unsurlar arasında öz yönetim ve sosyal destek algısı vardır. Bu araştırma, kronik hastalığı olan yaşlı bireylerin sosyal destek algısı ile hastalık öz yönetim düzeyleri arasındaki ilişkiyi belirlemek amacıyla yapılmıştır. Tanımlayıcı ve ilişki arayıcı modeli kullanılarak yapılan bu çalışma, Ekim- Aralık 2023 tarihleri arasında bir kamu hastanesinde yatarak tedavi gören kronik hastalığı olan 151 yaşlı birey ile yapılmıştır. Araştırma verileri hasta tanılama formu, Çok Boyutlu Algılanan Sosyal Destek Ölçeği ve Kronik Hastalık Öz Yönetim Ölçeği ile elde edilmiştir. Kronik hastalığı olan yaşlı bireylerin Çok Boyutlu Algılanan Sosyal Destek Ölçeği puan ortalaması 57,92±10,72 olarak bulunmuş olup sosyal destek düzeylerinin ortalamanın üzerinde olduğu belirlenmiştir. Bununla birlikte hastaların en fazla sosyal desteğin özel insan (23,79±4,72) ve aile (23,20±5,47) tarafından algılandığı belirlenmiştir. Hastaların Kronik Hastalık Öz Yönetim Ölçeği puan ortalaması 3,28±0,48 olarak bulunmuş olup, ölçekten alınabilecek puan aralığı göz önüne alındığında (1-5), hastalık öz yönetiminin de ortalamanın üzerinde olduğu görülmüştür. Hastaların tedaviye uyum (3,94±1,01) düzeylerinin diğer alt boyutlara göre daha yüksek olduğu tespit edilmiştir. Hastaların Çok Boyutlu Algılanan Sosyal Destek Ölçeği genel puan ortalaması ile Kronik Hastalık Öz Yönetim Ölçeği genel puan ortalaması arasında pozitif yönde zayıf düzeyde istatistiksel olarak anlamlı ilişki olduğu belirlenmiştir ($r=0,280$; $p<0,01$). Bu araştırmada kronik hastalığı olan yaşlı bireylerde algılanan sosyal desteğin öz yönetim düzeylerini artırdığı belirlenmiştir. Bu nedenle sosyal destek sistemlerinin güçlendirilmesi dikkate alınmalıdır.

Anahtar Kelimeler: kronik hastalık, yaşlılık, sosyal destek, öz-yönetim, hemşire

ISBN NR: 978-625-6283-33-6

The Relationship between Perception of Social Support and Illness Self-Management in Elderly Individuals with Chronic Diseases

ABSTRACT

As a result of the changing and developing world, chronic diseases are increasing day by day. Therefore, chronic disease management has an important role in protecting and improving the health of individuals. Self-management and perception of social support are among the factors that can be effective in chronic disease management. This study was conducted to determine the relationship between the perception of social support and disease self-management levels of elderly individuals with chronic disease. This study, which was conducted using a descriptive and correlation-seeker model, was conducted between October and December 2023 with 151 elderly individuals with chronic diseases who received inpatient treatment in the state hospital. The research data were obtained with the patient identification form, Multidimensional Perceived Social Support Scale and Chronic Disease Self-Management Scale. The mean score of the Multidimensional Perceived Social Support Scale of elderly individuals with chronic diseases was 57.92±10.72 and it was determined that their social support levels were above average. However, it was determined that the highest social support was perceived by special people (23.79±4.72) and family (23.20±5.47). The mean score of the Chronic Disease Self-Management Scale was found to be 3.28±0.48, and considering the range of scores that can be obtained from the scale (1-5), it was seen that the disease self-management was also above average. It was determined that the level of patients' compliance with treatment (3.94±1.01) was higher than the other sub-dimensions. It was determined that there was a statistically significant relationship between the mean score of the Multidimensional Perceived Social Support Scale and the mean score of the Chronic Disease Self-Management Scale ($r=0.280$; $p<0.01$). In this study, it was determined that perceived social support increased self-management levels in elderly individuals with chronic diseases. Therefore, strengthening social support systems should be taken into consideration.

Keywords: chronic disease, old age, social support, self-management, nurse

ISBN NR: 978-625-6283-33-6

BESLENME AÇISINDAN KASAPLIK HAYVANLARIN YENEBİLİR YAN ÜRÜNLERİ (SAKATATLAR)

Dr. Öğr. Üyesi, HALİME ALP
Selçuk Üniversitesi,
- 0000-0001-5833-9611
Prof. Dr., MUSTAFA KARAKAYA
Selçuk Üniversitesi,
- 0000-0002-6436-3658

ÖZET

Et ve et ürünleri; yüksek kaliteli protein, yağ gibi önemli bileşenleri içermesinin yanı sıra vücutta bazı metabolik reaksiyonlar için gerekli olan B grubu vitaminleri, bazı mineralleri ve özellikle demir gibi çeşitli bileşenleri içeren önemli bir gıdadır. Kasaplık hayvanların kesimi sonucunda elde edilen ve insanlar tarafından tüketilebilen; karkas dışında kalan baş etleri, beyin, dil, kalp, karaciğer, dalak, böbrek, işkembe gibi iç organlara sakatat (yenilebilir yan ürün) denilmektedir. Sakatatlar protein içeriği açısından hemen hemen kas dokusu proteinlerine yakın olup, vitamin ve mineral içeriği yönünden ise etten daha zengin kaynaklardır. Mineral maddeler ise; en fazla karaciğer, dalak, beyin ve böbrekte bulunmaktadır. Sakatatlar; kasaplık hayvanların kesimi sonrasında uygun şekilde karkastan ayrılmakta, temizlenmekte, hızlı bir şekilde soğuk depolara taşınmakta ve işlenmektedir. Sakatatların tüketiminde çoğu zaman gelenek, kültür, inançlar etkili olmakta ve buna göre farklı toplumlarda sakatat ve diğer yan ürünler değişik şekillerde değerlendirilmektedir. Yenilebilir yan ürünlerin karlı bir pazarının olması ve karkastan elde edilen diğer etlere göre daha az talep edilmesi nedeniyle; çok ekonomik, yüksek kaliteli bir protein kaynağıdırlar. Bu derlemede; sakatatlar, insan beslenmesindeki önemi ve farklı şekillerde değerlendirilmeleri hakkında bilgi verilmesi hedeflenmiştir.

Anahtar Kelimeler: Sakatatlar, yenilebilir yan ürünler, beslenme.

ISBN NR: 978-625-6283-33-6

EDIBLE BY-PRODUCTS OF SLAUGHTERED ANIMALS (OFFALS) IN TERMS OF NUTRITION

ABSTRACT

Meat and meat products; In addition to containing important components such as high-quality protein and fat, it is an important food that contains B group vitamins, some minerals and various components such as iron, which are necessary for some metabolic reactions in the body. Internal organs such as head meats, brain, tongue, heart, liver, spleen, kidney, tripe, other than the carcass, obtained as a result of slaughtering animals and can be consumed by humans, are called offal (edible by-product). Offals are almost close to muscle tissue proteins in terms of protein content, and richer sources of vitamin and mineral content than meat. On the other hand, mineral substances are mostly found in the liver, spleen, brain and kidney. After slaughtered animals, offals are properly separated from the carcass, cleaned, quickly transported to cold storages and processed. Tradition, culture and beliefs are often effective in the consumption of offals, and accordingly, offals and other by-products are evaluated in various ways in different societies. Due to be a profitable market of edible by-products and less demand than other meats obtained from carcass, they are a very economical, high quality source of protein. In this review, it is aimed to give information about offals, its importance in human nutrition and their evaluation in different ways.

Keywords: Offals, edible by-products, nutrition.

ISBN NR: 978-625-6283-33-6

ÇÖREKOTU, SUSAM, HİNDİSTAN CEVİZİ VE KUŞ ÜZÜMÜ İLAVELİ BEYŞEHİR TARHANALARININ FİZİKSEL, TEKSTÜREL VE DUYUSAL ÖZELLİKLERİNİN BELİRLENMESİ

Dr. Öğr. Üyesi Nazlı Şahin

Karamanoğlu Mehmetbey Üniversitesi,

0000-0002-0963-8882

Sevinç Sucu

Karamanoğlu Mehmetbey Üniversitesi,
sevinc.sucu@gsb.gov.tr -0009-0001-0526-6065

Prof. Dr. Abdulvahit Sayaslan

Karamanoğlu Mehmetbey Üniversitesi,

0000-0001-7161-1552

ÖZET

Beyşehir tarhanası, Beyşehir yöresinin önemli damak zevklerindendir. Yarma ya da dövme buğday ve yoğurdun pişirilip, tuz ve tereyağı ilave edildikten sonra dinlendirip, şekil verilen ve kurutulduktan sonra tüketilen bir üründür. Doğrudan tüketilebildiği gibi, kızartılarak ya da ceviz veya üzüm gibi gıdalarla da tüketilebilmektedir. Bu çalışma kapsamında Beyşehir tarhanalarına %5 oranında çörekotu, susam, hindistan cevizi ve kuş üzümü ilave edilmiş, renk, tekstür ve duyusal özellikleri incelenmiştir. Sadece dövme buğdaydan üretilen tarhana kontrol tarhanası olarak belirlenmiştir. Çörekotu ilaveli tarhanalar hariç, diğer tarhana örneklerinde renk özellikleri bakımından (L*, a* ve b*) birbirine oldukça yakın ölçülmüştür. Tekstürel özellikler bakımından sonuçlar incelendiğinde üzümlü tarhananın sertliği ve susamlı tarhananın kırılganlığı kontrole yakınken, diğer tarhanaların sertlik ve kırılganlık değerleri düşük ölçülmüştür. Duyusal değerlendirme sonuçlarına göre çörekotu ilaveli tarhanaların (renk, tat, koku, sertlik, gevreklik, kırılganlık ve genel beğeni skorlarında) oldukça beğenildiği belirlenmiştir. Susamlı tarhana ve üzümlü tarhana ikinci sırada tercih edilen tarhanalar olarak belirlenmiştir. Hindistan cevizi ilaveli tarhanalar ise düşük skorlar (sertlik, gevreklik, kırılganlık ve genel beğenide) almıştır. Elde edilen tüm bulgular değerlendirildiğinde ise farklı bileşenler kullanılarak Beyşehir tarhanaları zenginleştirilerek tüketilebileceği sonucuna varılmıştır.

Anahtar Kelimeler: Beyşehir tarhanası, zenginleştirme, duyusal, tekstürel

ISBN NR: 978-625-6283-33-6

ARTEMİSİA ABSİNTHİUM L. BİTKİSİNİN DİYABET VE HİPERTANSİYON ÜZERİNE ETKİSİ

Dr. Öğretim Üyesi Hülya ŞEN ARSLAN
(Orcid No: 0000-0003-0116-9062)
Karamanoğlu Mehmetbey Üniversitesi, Mühendislik Fakültesi, Gıda Mühendisliği Bölümü
Kübra KAYMAZ*
Karamanoğlu Mehmetbey Üniversitesi, Mühendislik Fakültesi, Gıda Mühendisliği Bölümü

ÖZET

Bitkiler eski zamanlardan beri bazı bulaşıcı hastalıkları tedavi etmek için kullanılmaktadır ve bazıları artık çeşitli hastalıklar için standart tedavilerdir. Bu hastalıkların bazıları; diyabet, hipertansiyon, kardiyovasküler, eklem hastalıkalrı ve benzeridir. *Artemisia absinthium* L., çeşitli rahatsızlıkların tedavisinde yaygın olarak kullanılan çok yıllık önemli bir çalı bitkisidir. Yaygın olarak pelin olarak bilinen *Artemisia absinthium* L., Asya, Orta Doğu, Avrupa ve Kuzey Afrika'ya özgü önemli bir şifalı bitkidir. köklü, sert, uzun, odunsu ve yapraklı bir gövdeye ve sıcak ve aromatik bir tada sahiptir. Gövde yaklaşık 2-2, 5 fit boyunda, beyaz renkli ve neredeyse ince ipeksi tüylerle kaplıdır. Geleneksel olarak, *Artemisia absinthium* L. her zaman farmasötik ve botanik öneme sahip olmuştur ve diyabet, tüberküloz, ateş düşürücü, hepatosit büyümesi, hepatit, gastrit, sarılık, yara iyileşmesi, splenomegali, dispepsi, hazımsızlık, şişkinlik, mide ağrısı, anemi ve anoreksi gibi çeşitli bozuklukları yönetmek için kullanılmıştır. Ayrıca doğum sırasındaki ağrıları hafiflettiği ve skleroz ve löseminin yönetimi için belgelenmiştir Bu çalışmamızda *Artemisia absinthium* L. bitkisinin antidiyabetik ve hipertansif etkileri hakkında bilgi verilmiştir.

Anahtar Kelimeler: pelin otu, diyabet, bitki, fonksiyonel.

ISBN NR: 978-625-6283-33-6

THE EFFECT OF *ARTEMISIA ABSINTHIUM* L. PLANT ON DIABETES AND HYPERTENSION

ABSTRACT

Plants have been used since ancient times to treat certain infectious diseases, and some have now become standard treatments for various ailments. These diseases include diabetes, hypertension, cardiovascular diseases, joint disorders, and others. *Artemisia absinthium* L., commonly known as wormwood, is a significant perennial shrub widely used in the treatment of various disorders. Wormwood is an important medicinal herb native to Asia, the Middle East, Europe, and North Africa. It has a well-rooted, tough, tall, woody, and leafy stem, with a warm and aromatic taste. The stem is approximately 2-2.5 feet tall, white-colored, and almost covered with fine silky hairs. Traditionally, *Artemisia absinthium* L. has always been of pharmaceutical and botanical importance and has been used to manage various disorders such as diabetes, tuberculosis, antipyretic, hepatocyte growth, hepatitis, gastritis, jaundice, wound healing, splenomegaly, dyspepsia, indigestion, bloating, stomach pain, anemia, and anorexia. It has also been documented to alleviate pains during childbirth and for the management of sclerosis and leukemia. In this study, information about the antidiabetic and antihypertensive effects of the *Artemisia absinthium* L. plant is provided.

Keywords: Wormwood, Diabetes, Plant, Functional

ISBN NR: 978-625-6283-33-6

ISIRGAN OTUNUN SAĞLIĞA FAYDALARI VE ANTİKANSEROJEN ETKİSİ

Dr. Öğretim Üyesi Hülya ŞEN ARSLAN (Orcid No: 0000-0003-0116-9062)
Karamanoğlu Mehmetbey Üniversitesi, Mühendislik Fakültesi, Gıda Mühendisliği Bölümü
hsenarslan@kmu.edu.tr
05385504326
Ece Nur YÜCEL*
Karamanoğlu Mehmetbey Üniversitesi, Mühendislik Fakültesi, Gıda Mühendisliği Bölümü
*ecenuryucel02@gmail.com
05467291117

ÖZET

Fonksiyonel gıdalar olarak da bilinen nutrasötikler sadece temel beslenme için değil vücut içinde oldukça yararlı olan gıdalardır. Hastalıkların önlenmesi, hastalığa yakalanma riskinin azaltılması ve iyileşme sürecinde etkilidirler. Kanser hastalığı, dünya üzerinde en büyük ölüm nedenlerinden biri olarak bilinmektedir. Bitkisel tedaviler, bu hastalığın önlenmesinde ve hastalığa sahip olan kişilerin iyileştirilmesi sürecinde sıklıkla kullanılmaktadır. Bunlardan biri olan ısırgan otu (*Urtica dioica*) edafik koşullara bağlı olarak 1-2 m yüksekliğe kadar büyüyebilen nitrofil bir bitki türüdür. Avrupa, Afrika, Asya ve Kuzey Amerika'ya özgü ve dünyanın diğer ılıman bölgelerinde doğal olarak yetiştirilen en önemlileri *Urtica dioica* (ısırgan otu) ve *Urtica urens (küçük ısırgan otu)* olmak üzere 46 türden oluşur. Isırgan otunun kanserde içinde olmak üzere birçok hastalığa yararlı olduğu belirtilmiştir. Bu bitki antinflamatuvar, antiviral, antioksidan, immun sistem stimulatörü olarak davranmakta ve bu etkisini de yapısında bulunan çok sayıda flavanol glikozidleri vasıtasıyla gerçekleştirdiği belirtilmektedir. Bu çalışmada ısırgan otunun sağlığa olan faydaları ve antikanserojen etkisi ile ilgili yapılan araştırmalar derlenmiştir.

Anahtar Kelimeler: ısırgan, sağlık, kanser, antikanserojen, fonksiyonel

ISBN NR: 978-625-6283-33-6

HEALTH BENEFITS AND ANTICARCINOGENIC EFFECTS OF STINGING NETTLE

ABSTRACT

Nutraceuticals, also known as functional foods, are foods that are beneficial not only for basic nutrition but also for the body. They are effective in preventing diseases, reducing the risk of contracting diseases, and in the healing process. Cancer is known as one of the biggest causes of death in the world. Herbal treatments are frequently used in the prevention of this disease and in the healing process of people with the disease. One of these, *Urtica dioica*, is a nitrophilous plant species that can grow up to 1-2 m in height depending on edaphic conditions. It consists of 46 species, the most important of which are *Urtica dioica* (Stinging nettle) and *Urtica urens* (little nettle), native to Europe, Africa, Asia and North America and naturally cultivated in other temperate regions of the world. It has been stated that nettle is beneficial for many diseases, including cancer. This plant acts as an anti-inflammatory, antiviral, antioxidant and immune system stimulator, and it is stated that it achieves this effect through the many flavanol glycosides found in its structure. In this study, research on the health benefits and anticarcinogenic effects of nettle has been compiled.

Keywords: Nettle, Health, Cancer, Anticarcinogenic, Functional

ISBN NR: 978-625-6283-33-6

ÇİĞ BESLENME AKIMINDA ÇİMLENDİRİLMİŞ HUBUBAT ve BAKLAGİLLERİN ÖNEMİ

Doç.Dr. Filiz YANGILAR

Üniversitesi Adı, E-mail Adresi - ORCID ID

Erzincan Binali Yıldırım Üniversitesi, - ORCID ID 0000-0001-6447-2419

ÖZET

Coğrafyanın kültürel özelliklerine göre farklılık gösteren yeme içme alışkanlıkları, yaşanan gelişmelerden etkilenmekle beraber tüketim hedefli giriş ile hızlı bir biçimde bütünleşmektedir. Bu bütünleşme insanların farklı besin tercihlerine ve beslenme biçimlerine yönelmesini sağlamaktadır. Çiğ ve çimlendirilmiş beslenme bunlardan bazılarıdır. Çiğ beslenme doğal, çiğ ve rafinasyon işlemi olmamış besinlerin tüketimini esas alan bir beslenme şeklidir. Bunun yanında son yıllarda insanların beslenme tarzlarını ve besin tercihlerini değiştirme yoluna gitmesi nedeniyle organik ve fermente edilmiş gıda tüketiminin yanında çimlendirilmiş tane ve filiz ürünlerinin de tüketimi artmıştır. Çimlendirme esnasında bitki ve tohumlarda diyet lifi, vitamin, mineral ve fenolik madde gibi bileşiklerin sentezlenmesi, karbonhidrat, protein ve yağ kompozisyonlarının değişmesi üzerine önemli biyokimyasal olaylar gerçekleşmektedir. Bununla beraber çimlenme gıdalardaki besin ögelerinin emilimini engelleyen enzimleri inhibe etmesinden kaynaklı yetersiz beslenme sorununa bir çözüm olarak nitelendirilmektedir. Çimlenme daha çok buğday, mısır, arpa, kinoa gibi tahıllarda yaygın bir şekilde uygulanmakla beraber şarap, sirke ve çay gibi çeşitli içeceklerin yapımında da kullanılmaktadır. Bu sayede besinlerin biyoyararlanımı artmaktadır. Embriyonik radikülün tohum kabuğundan ayrılmasıyla oluşan çimlenme, dormansi vasıtasıyla yılın en uygun zamanında gerçekleşmektedir. Bunların haricinde çimlenme çevresel ve kimyasal faktörlerden olumlu ve olumsuz olarak etkilenebilmektedir. Bu derlemede de çimlendirilmiş besinlerin biyoaktif içerikleri, besinsel kalitesi ve sağlık üzerindeki etkileri detaylı olarak incelenmiştir.

Anahtar Kelimeler: Çimlenme, tahıl, fonksiyonel beslenme, filiz

ISBN NR: 978-625-6283-33-6

D-ALLÜLOZ VE GIDA ENDÜSTRİSİNDE KULLANILMASI

Doç.Dr. Filiz YANGILAR

Üniversitesi Adı, E-mail Adresi - ORCID ID

Erzincan Binali Yıldırım Üniversitesi, - ORCID ID 0000-0001-6447-2419

ÖZET

Şekerler doğada bulunma miktarlarına göre yüksek miktarda bulunan yaygın ve az miktarda bulunan nadir şeker olarak ikiye ayrılmaktadır. Günümüzde alternatif tatlandırıcı olarak da bilinen nadir şekerler, insan sağlığı açısından faydalı olmaları ve endüstriyel açıdan ekonomik değerlerinin yüksek olmaları nedeniyle büyük bir ilgi görmektedir. Yapılan çalışmalar doğada çok sınırlı bulunan nadir şekerlerin doğal şekerlerin mikrobiyolojik, enzimatik, kimyasal ve ekstraksiyon yöntemleri kullanılarak üretilmesine yönlendirmiştir. Bu nadir şekerlerden biri olan D-allüloz yaygın monosakaritler kadar tatlılığa sahip olan ayrıca kalori değeri (0.2-0.4 kcal/g) oldukça düşük olan bir şekerdir. Kan glikozunun düşürülmesi, insülin direncinin iyileştirilmesi ve vücut yağ oranının azaltılması gibi biyolojik fonksiyonların düzenlenmesinde oldukça etkili olup çözünürlüğünün yüksek olmasıyla da gıda ürünlerinin hazırlanmasında en çok tercih edilen şeker gruplarından birisini oluşturmuştur. 'Sindirilemeyen karbonhidrat' olarak bilinen D-allüloz diğer endüstriyel şekerlere alternatif bir şeker grubu olarak kullanılabilmesi için heksoz şekerlerinden elde edilmesi gerekir. Bu incelemede de D-allülozun üretim yöntemleri ve gıda sanayiinde kullanım imkânlarının açıklanması amaçlanmıştır.

Anahtar Kelimeler: D-allüloz, enzimatik reaksiyon, insülin direnci, gıda hazırlama

ISBN NR: 978-625-6283-33-6

THE EFFECT OF PREGELATINIZED BROAD BEAN ON PHYSICAL, TEXTURAL AND SENSORY PROPERTIES OF BREAD

Assist. Prof. Dr., HÜMEYRA ÇETİN-BABAOĞLU
Selçuk University,
- 0000-0001-9115-6470

ABSTRACT

In this study, broad bean flour (BF) and pregelatinized broad bean flour (PBF) were substituted for wheat flour (WF) at a 15% level in the bread. Three different formulations were used to produce bread; control (100% WF), BFB (85% WF:15% BF) and PBFB (85% WF:15% PBF). Both BF and PBF increased all farinogram parameter values of WF. The extensograph values of the flour containing 15% BF could not be measured at the 135th minute. The energy values of flours were found to be 101 cm^2 for the control and 52 cm^2 for the flour containing 15% PBF at the 135th minute. The extensibility, resistance to extension and maximum resistance values of flour decreased with PBF addition. The specific volume and moisture content of breads were not significantly affected by the addition of BF ($p>0.05$). The breads with PBFB had the lowest specific volume and the highest moisture content ($p<0.05$). The crumb's L^*, a^* and b^* parameter values of PBFB were the highest among the all samples ($p<0.05$). The PBF addition increase chewiness and hardness values of breads, whereas these values BFB were lower than those for PBFB ($p<0.05$). The lowest chewiness value (1044.20 g.mm) was belonged to control sample ($p<0.05$). The hardness values of control and BFB were similar, and were 1655.89 g and 1959.29 g, respectively ($p>0.05$). PBF reduced the color and appearance scores of sensory analysis parameters ($p<0.05$), but it did not have a negative effect on other parameters ($p>0.05$).

Key Words : Dough Rheology, Extensograph, Farinograph, Specific Volume, Sensory, Texture

ISBN NR: 978-625-6283-33-6

INCREASING THE PERFORMANCE OF GENERAL RELATIVITY SEARCH ALGORITHM WITH CHAOS THEORY

Res. Asst. Sule KAYA

Firat University, Faculty of Engineering, Department of Software Engineering, 0000-0002-9362-0262

Prof. Dr. Bilal ALATAS

Firat University, Faculty of Engineering, Department of Software Engineering, 0000-0002-3513-0329

Abstract

Rules, events, and concepts in different areas have been modelled as new solution search techniques with more efficient results than classical techniques and current metaheuristic optimization techniques. These metaheuristic algorithms are computational intelligence based optimization techniques and are generally categorized as swarm-based, biological-based, physics-based, social-based, music-based, sports-based, chemistry-based, plant-based, light-based, water-based, and mathematics-based according to their inspiration sources. General Relativity Search (GRS) algorithm is one of the current physics-based metaheuristic techniques. Chaotic maps include pseudo-randomness, uncertainty, ergodicity, and extreme sensitivity to initial conditions. Thus, chaotic maps can be used in computational intelligences based optimization techniques to improve both the exploitation and exploration phases. In this work, chaos theory is integrated into GRS has been to prevent local solutions, prevent premature convergence, and thus increase the success of final results of GRS for the first time. For this purpose, the values produced by the Logistic Map are replaced by randomly selected values to determine the initial candidate search agents of the GRS. The basic insight is to use the ergodicity of the chaotic map to improve the solution quality by applying chaos perturbations. Chaos integrated GRS is tested on unimodal and multimodal benchmark test functions and promising results are obtained. The proposed methodology can be used as an efficient global solution search and optimization technique different types of problems.

Keywords: Global Optimization, General Relativity Search Algorithm, Chaos

ISBN NR: 978-625-6283-33-6

EMAIL SECURITY: MACHINE LEARNING AND NATURAL LANGUAGE PROCESSING METHODS FOR SPAM DETECTION

Res. Asst. Sule KAYA
Firat University, Faculty of Engineering, Department of Software Engineering,
- 0000-0002-9362-0262
Assoc. Prof. Dr. Yunus SANTUR
Firat University, Faculty of Technology, Department of Software Engineering,
- 0000-0002-8942-4605
Prof. Dr. Bilal ALATAS
Firat University, Faculty of Engineering, Department of Software Engineering,
- 0000-0002-3513-0329

ABSTRACT

As a fundamental component of email communication, spam not only disrupts the inbox order but also increases individual and corporate security risks by creating security threats such as phishing and malware. The constant increase of spam emails necessitates the development of effective detection methods, which is critical for maintaining digital communication security as well as increasing efficiency. Our work employs spam detection methods that include text analysis, machine learning, and Natural Language Processing techniques. The applicability of various classification algorithms, including Naive Bayes, Support Vector Machines, and neural networks, is investigated. Additionally, the processes of cleaning, preprocessing, and feature extraction of email data are detailed. These processes were optimized to ensure effective discrimination between spam and legitimate emails. The performance of our model in spam detection was measured by metrics such as precision, precision, recall, and F1 score. The high values obtained demonstrate that our system is capable of effectively detecting spam emails and reducing the misclassification of legitimate emails. This study presents innovative techniques and methodologies employed in the development of spam detection systems, thereby enabling digital communication channels to become more secure and efficient.

Keywords: Spam Detection, Machine Learning, Natural Language Processing, E-mail Security, Classification Metrics

ISBN NR: 978-625-6283-33-6

FİNANS VE TEKNOLOJİNİN BULUŞMASI: NFT ÜZERİNE BİR UYGULAMA[1]

Mert ÇAKIR
İstanbul Aydın Üniversitesi, - 0009-0003-4340-7839
Dr. Öğr. Üyesi Özge DEMİRKALE
İstanbul Aydın Üniversitesi, - 0000-0002-4227-3934

ÖZET

NFT, blok zincir altyapısında bulunan resim, video, fotoğraf, müzik gibi mülkiyetinin akıllı sözleşmeler ile korunduğu dijital varlıklardır. Bu varlıkların piyasada bir değeri olabilir veya olmayabilir. Değeri olmayan veya düşük değerli bir NFT, anlık bir haber sonrasında bir anda yüksek değerlere ulaşabilir. Bu durumda piyasayı anlık olarak takip edebilmek, haberlerden ve fiyatlardan anında haberdar olabilmek çok önemlidir. NFT'ler çeşitli ağlarda bulunduğu gibi farklı kripto varlıklarına karşılık da satılabilir. Bu durumda piyasa takibi hem o kripto varlığın adetine göre hem de adete karşılık gelen dolar miktarını da hesaplayarak yapılmalıdır. Bu çalışmada tüm bu işlemleri yapabilmek, NFT fiyatlarını, bilgilerini ve son hareketlerini takip edebilmek için kullanışlı ve kullanımı kolay bir mobil uygulama geliştirilmesi hedeflenmiştir. Uygulamanın amacı, NFT piyasasında alım satım, koleksiyon yapan veya sadece piyasayı takip eden kullanıcılara fiyat takibi açısından kolaylık sağlamaktır. Uygulama sayesinde kullanıcılar, NFT koleksiyonlarını ve fiyat hareketlerini tek bir yerden takip edebileceklerdir. Ayrıca uygulama, widget ve kısayol özelliği ile kullanıcıların istedikleri zaman istedikleri bilgiye hızlıca ulaşmalarını sağlayacaktır. Uygulama, bilgisayar bilimleri ve blok zincir teknolojisi alanlarına veriye kolay erişim ve kolay takip etme imkanı açısından katkı sağlayacaktır. Uygulama sayesinde, NFT uygulamalarında karşılaşılan sorunlardan biri olan veri dağınıklığını ve erişim zorluğunu çözecektir. Çalışmanın ayrıca finans ve teknolojiyi birleştirerek finansal teknoloji alanına da katkı sağlaması beklenmektedir. Bununla birlikte geliştirilen mobil uygulama ile BM "Sürdürülebilir Kalkınma Amaçları" çerçevesinde 4. Madde (Nitelikli Eğitim), 8. madde (İnsana Yakışır İş ve Ekonomik Büyüme) ve 17. madde (Amaçlar için Ortaklıklar) konularına katkı sağlamış olacaktır. Çalışmanın sonuçları; - NFT koleksiyonları ve fiyat hareketleri tek bir yerden takip edilebilir olmuş, - widget özelliği ile verilere hızlı erişim sağlanmıştır.

Anahtar Kelimeler: Finans, Teknoloji, Blok Zincir, NFT, Android uygulama

[1] Bu çalışma TÜBİTAK 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı kapsamında desteklenmiştir.

ISBN NR: 978-625-6283-33-6

ABSTRACT

NFTs are digital assets found on blockchain infrastructure where ownership of items such as images, videos, photographs, and music is protected by smart contracts. These assets may or may not have a market value. An NFT with no or low value can suddenly skyrocket in value after a piece of news. In this case, it is crucial to be able to instantly track the market and stay informed about news and prices. NFTs can be traded on various networks and exchanged for different crypto assets. In this situation, market monitoring should be done considering both the quantity of the crypto asset and the corresponding amount in dollars. In this study, the aim is to develop a useful and user-friendly mobile application to perform all these operations, track NFT prices, information, and recent movements. The purpose of the application is to provide convenience in terms of price tracking to users who trade, collect, or simply follow the market in the NFT market. Through the application, users will be able to track their NFT collections and price movements from a single place. Additionally, the application will enable users to quickly access the information they want at any time through widget and shortcut features. The application will contribute to computer science and blockchain technology fields by providing easy access to data and easy tracking. It will solve the problem of data fragmentation and access difficulty encountered in NFT applications. Moreover, it is expected that the study will contribute to the financial technology field by combining finance and technology. Additionally, through the developed mobile application, it will contribute to the 4th (Quality Education), 8th (Decent Work and Economic Growth), and 17th (Partnerships for the Goals) goals within the framework of the UN Sustainable Development Goals. The results of the study include; - NFT collections and price movements can be tracked from a single place, - quick access to data is provided through the widget feature.

Keywords: Finance, Technology, Blockchain, NFT, Android application

ISBN NR: 978-625-6283-33-6

TEKNOLOJİ İLE DOĞANIN KUCAKLAŞMASI[1]

Reyhan SARI
İstanbul Aydın Üniversitesi, - 0009-0004-3637-9056
Dr. Öğr. Üyesi Özge DEMİRKALE
İstanbul Aydın Üniversitesi, - 0000-0002-4227-3934

ÖZET

Teknoloji geliştikçe insanın doğayla olan ilişkisi azalmaktadır. Aynı zamanda gelişmiş kentlerdeki salon sporları da insanları doğa sporlarından uzaklaştırmıştır. Bu çalışmada amaçlanan; Marmara bölgesinin yoğun kentleşmesi ve teknolojinin gelişmesiyle oluşan stabil yaşamların oluşturduğu ruhsal ve fiziksel yönden oluşan olumsuz etkileri azaltmak ve insanları doğal yaşama yakınlaştırmaktır. Çalışmada Android tabanlı mobil uygulama ile kullanıcılar Marmara bölgesindeki doğa sporlarını tanıyarak, ilgili sporun ekipman desteğini sağlayarak, spor alanlarının olanaklarını listeleyerek, alanın hava durumuna erişerek ve olanakları filtreleyerek kolay ve kullanışlı bir uygulamaya erişmeleri sağlanmıştır. Uygulama Android Studio geliştirme ortamında Java diliyle kodlanmıştır. Evren; İstanbul ili örneklem olarak Marmara bölgesinde doğa sporlarının yer aldığı alanlar seçilmiştir. Teknoloji ile Doğanın Kucaklaşması adlı projemiz kapsamında oluşturulan "Patika" isimli mobil uygulamayı kullanıcılar Play Store üzerinden cihazlarına indirerek Marmara Bölgesi'nde bulunan doğa sporları alanlarını keşfedebilir, alan çevresindeki tesisleri ve olanakları inceleyebilme imkanına sahip olabileceklerdir.

Anahtar Kelimeler: Doğa, Teknoloji, Doğal Yaşam, Doğa Sporları, Android uygulama

ABSTRACT

As technology advances, people's relationship with nature diminishes. At the same time, indoor sports in developed cities have also distanced people from outdoor activities. The aim of this study is to reduce the negative effects, both mentally and physically, caused by the intense urbanization of the Marmara region and the development of technology, and to bring people closer to natural life. In this study, users are provided with easy and convenient access to an Android-based mobile application where they can explore nature sports in the Marmara region, receive equipment support for the relevant sports, list the facilities of sports areas, access weather conditions for the area, and filter the facilities. The application was developed using the Java language in the Android Studio development environment. The universe; Istanbul province is selected as a sample in the Marmara region where natural sports areas are located. Within the scope of our project titled "Embracing Nature with Technology", users can

[1] Bu çalışma TÜBİTAK 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı kapsamında desteklenmiştir.

ISBN NR: 978-625-6283-33-6

download the mobile application called "Path" from the Play Store to their devices and explore nature sports areas in the Marmara Region, and have the opportunity to examine the facilities and opportunities around the area.

Keywords: Nature, Technology, Natural Living, Outdoor Sports, Android Application

ISBN NR: 978-625-6283-33-6

FİZİKSEL ENGELLİ BİREYLER VE SOSYAL HAYATA KATILIM[1]

Emine Rabia OĞUZ
İstanbul Aydın Üniversitesi, - 0009-0006-5303-6842
Dr. Öğr. Üyesi Özge DEMİRKALE
İstanbul Aydın Üniversitesi, - 0000-0002-4227-3934

ÖZET

Engelli bireylerin sosyal yaşama katılımları günümüzün en temel sorunlarından biridir. Bu çerçevede BM Sürdürülebilir kalkınma hedefleri arasında da yer alan "Eşitsizliklerin Azaltılması" ilkesi doğrultusunda engelli bireylerin sosyal yaşama katılımlarında karşılaştıkları zorlukları ve ayırımcılığı merkeze almak öncelikli alanlardandır. Günümüzde engelliler, gitmek istedikleri yerlerin, mekanların onların fiziksel özelliklerine uygun olup olmadıkları, onların ihtiyaçlarını karşılayıp karşılamadıkları konusunda birçok sorunla karşı karşıya kalmaktadırlar. Mekânın iç tasarımının tekerli sandalye ile rahatça hareket edebilecek kadar geniş olup olmaması, işletme girişinin engelli bireyler için uygun olup olmaması, lavabo alanlarının engelliler için kullanılabilir olup olmaması konusunda olan bilinmezlik, engelli bireylerin dışarıda geçirdikleri vakitler konusunda sorun yaşamalarına sebep olabilmektedir. Bu araştırma ve mobil uygulama sayesinde fiziksel engelli bireyler gitmek istedikleri yerlerin onların ihtiyaçlarına karşılık verip vermediğini uygulama üzerinden görüntüleyebileceklerdir. Araştırma, maliyet ve zaman kısıtı sebebi ile İstanbul Aydın Üniversitesi ve çevresini kapsamaktadır. Bu bağlamda mobil uygulamaya eklenen gönüllü işletmeler İstanbul Aydın Üniversitesi kampüsünde ve çevresinde bulunan işletmeleri kapsamaktadır. Çalışmada Android tabanlı mobil uygulama ile birçok fiziksel engelli birey kullanıcıları gitmek istedikleri yerlerin onların ihtiyaçlarını karşılayıp karşılamadığını kolaylıkla öğrenebilecek ve kendilerine uygun yeni yerler keşfedebileceklerdir. Uygulama Android Studio geliştirme ortamında Java diliyle kodlanmıştır. Projenin, engelli bireyler için sosyal hayata katılımda teknoloji tabanlı önemli bir destek sağlaması beklenmektedir. Bununla birlikte fiziksel engelli bireylerin sosyal hayata katılımını arttırmak için geliştirilen bu mobil uygulama ile bireylerin hayatlarını sosyal açıdan kolaylaştırmak ve sosyal bir bilinç oluşturmak hedeflenmiştir.

Anahtar Kelimeler: Engellilik, Erişilebilirlik, Engelsiz Yaşam, Android uygulama

[1] Bu çalışma "TÜBİTAK 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı" kapsamında desteklenmiştir.

ISBN NR: 978-625-6283-33-6

ABSTRACT

The participation of disabled individuals in social life is one of the most fundamental issues of our time. In this context, focusing on the difficulties and discrimination faced by disabled individuals in their social participation aligns with the principle of "Reducing Inequalities," which is among the UN Sustainable Development Goals. Currently, people with disabilities encounter numerous challenges regarding whether the places they want to go and the venues they want to visit are suitable for their physical needs and if they meet their requirements. Uncertainty about whether the interior design of a venue is spacious enough for comfortable movement with a wheelchair, whether the entrance of an establishment is suitable for disabled individuals, and whether the restroom facilities are accessible to them can cause problems for disabled individuals when spending time outside. Through this research and mobile application, physically disabled individuals will be able to view whether the places they want to go cater to their needs via the application. Due to cost and time constraints, the research focuses on Istanbul Aydın University and its surroundings. In this context, the voluntary businesses added to the mobile application cover the businesses located on the Istanbul Aydın University campus and its surroundings. With the Android-based mobile application developed in this study, many physically disabled individuals will easily learn whether the places they want to go meet their needs and discover new places suitable for themselves. The application was coded in Java language in the Android Studio development environment. It is expected that the project will provide significant technological support for the social participation of disabled individuals. Additionally, the aim of developing this mobile application to increase the social participation of physically disabled individuals is to make their lives easier from a social perspective and to foster social awareness.

Keywords: Disability, Accessibility, Barrier-Free Living, Android Application

ISBN NR: 978-625-6283-33-6

ANSYS AFM VE TAGUCHİ METODU İLE OPTİMUM SPREY ANALİZİ

Hükümran Selim ERTÜRK
Kocaeli Üniversitesi, Fen Bilimleri Enstitüsü, Makine Mühendisliği Anabilim Dalı, Umuttepe-Kocaeli, Türkiye
– 0009-0001-8669-1011
Doç.Dr. Canan CİMŞİT
Kocaeli Üniversitesi, Gölcük MYO, Motorlu Araçlar ve Ulaştırma Teknolojileri Bölümü
- 0000-0002-3222-1735
Prof. Dr. Elif Öğüt
- 0000-0002-5647-4040
Kocaeli Üniversitesi, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, Umuttepe, Kocaeli, Türkiye

ÖZET

Bu çalışma, Ansys Fluent yazılımının Ayrık Faz Modeli (AFM) kullanılarak gerçekleştirilen bir sprey analizini içermektedir. Analiz, spreyin nozulundan çıkan su damlacıklarının davranışlarını incelemek üzere tasarlanmıştır. Bu çalışmada, üç seviyeli ve üç değişkenli L9 ortogonal düzenli Taguchi metodu kullanılarak en iyi sprey tasarımı belirlenmeye çalışılmıştır. Analiz sırasında, Ansys Fluent'in AFM modülünde parçalanma modeli kullanılmış ve ayrışma metodolojisine uygun sınır koşulları belirlenmiştir. Sprey analizinin parametreleri, nozul geometrisine bağlı olarak su damlacıklarının çapları, çıkış hızları ve damlacıkların akış hacmi boyunca katettikleri mesafeler olarak belirlenmiştir. Damlacıkların çıkış hızları ve çapları, nozul geometrisi tarafından belirlenirken, damlacıkların akış hacmi boyunca yol aldığı mesafe ise spreyin etkinliğini ve dağılımını belirlemekte kullanılmıştır. Bu parametrelerin optimizasyonu, Taguchi metodu ile gerçekleştirilmiş ve bu sayede en verimli sprey tasarımı elde edilmiştir. Spreyin yüzeye çarpması sonucu oluşan damlacık konsantrasyonu (kg/m^3), analizimizin çıkış verilerinden biri olarak belirlenmiştir. Damlacık konsantrasyonu, spreyin yüzeydeki etkisini ve dağılımını anlamada önemli bir role sahiptir. Bu çalışmada, sprey nozulundan çıkan damlacıkların akışı, parçalanma ve birleşme süreçleri dikkate alınarak ayrıntılı bir şekilde incelenmiştir.

Anahtar Kelimeler : ANSYS Fluent, AFM, Sprey, Nozul Geometrisi, Parçalanma Modeli

ISBN NR: 978-625-6283-33-6

COMPARİSON OF TİME ANALYSİS OF AFFİNE HİLL ENCRYPTİON SYSTEM AND HİLL ENCRYPTİON SYSTEM WİTH MATLAB

Dr. GÜLBAHAR AKGÜN
Independent Researcher,
gulbahar.akgun@icloud.com - 0009-0008-4132-6417

ABSTRACT

Hill cipher system creates an encryption system $C = P \cdot K(mod\ n)$. Affine Hill cipher the encryption expression is represented by $y = H \cdot x + V(mod\ n)$ represents a square matrix that is invertible. We used $n = 26$ because the English alphabet consists of 26 letters and H is a square matrix that is invertible. In this research matrices of size 20x20, 50x50, 90x90, 130x130. Although the decryption process of this cipher was simplified using Matlab, it still required a considerable amount of time, even for a program. The results obtained from MATLAB showed that as the size of the matrices increased, decryption became progressively more difficult. Using Matlab Hill cipher for encryption is $t = cputime,\ a = 0 + 100 * rand(20,20),\ b = round(a),\ x = 0 + 25 * rand(20,1),\ k = round(x),\ g = b * k,\ l = mod(g, 26),\ zaman = cputime - t.$ Using Matlab Affine Hill cipher for encryption is $t = cputime,\ a = 0 + 100 * rand(20,20),\ b = round(a),\ x = 0 + 25 * rand(20,1),\ k = round(x),\ l = b * k,\ m = 0 + 25 * rand(20,1),\ n = round(m),\ p = l + n,\ r = mod(p, 26),\ zaman = cputime - t.$ This is the result of the operations to be done with matlab.

Keywords : Cryptography, Hill Cipher, Affine Hill Cipher, Encryption, Matlab

ISBN NR: 978-625-6283-33-6

MATEMATİK HARİKALARI: DMÖN'LERLE İKİ DEĞİŞKENLİ FONKSİYONLARIN 3 BOYUTLU GRAFİKLERİ VE İNTEGRALLERİ

Wonders of Mathematics: 3D Graphs and Integrals of Two-Variable Functions with DMLOs

Dr. Öğr. Üyesi Ali BABAPOUR GOLEZANİ
Atatürk Üniversitesi,
ORCİD: 0000-0001-5958-5056

Prof. Dr. Yasin SOYLU
Atatürk Üniversitesi,
ORCİD: 0000-0002-2951-0069

ÖZET

Bu çalışma, Dinamik Matematik Öğrenme Nesnelerinin (DMÖN'lerin) kullanımını vurgulayarak iki değişkenli fonksiyonların 3 boyutlu grafiklerini ve bu grafikler altındaki integrallerin incelenmesine odaklanmaktadır. DMÖN'ler, öğrencilerin matematik konularını etkileşimli ve görsel bir şekilde keşfetmelerini sağlayan dijital araçlardır. Çalışmada, Wolfram Mathematica programı kullanılarak oluşturulan DMÖN'lerin tasarım süreci ve matematik öğretimindeki rolü detaylı bir şekilde ele alınmaktadır. Araştırma, bu teknolojinin matematik eğitimindeki etkinliğini değerlendirmekte ve öğrencilerin karmaşık konseptleri anlamalarına yardımcı olabileceğini göstermektedir. Ayrıca bu çalışma, matematik eğitiminde teknolojinin kullanımının potansiyelini vurgulamakta ve öğrencilerin derinlemesine öğrenme süreçlerini teşvik etmek için etkili bir araç olarak DMÖN'leri öne çıkarmaktadır.

Anahtar Kelimeler: DMÖN, Etkili öğrenme, Bilişim Teknolojileri, Bilgisayar Destekli Eğitim

ABSTRACT

This study focuses on the utilization of dynamic mathematical learning objects (DMLOs) to explore three-dimensional graphs of functions of two variables and investigate the integrals beneath these graphs. DMLOs are digital tools that enable students to interactively and visually explore mathematical concepts. The article extensively discusses the design process and the role of DMLOs created using the Wolfram Mathematica program in mathematics education. The research evaluates the effectiveness of this technology in mathematics education and demonstrates its potential to assist students in understanding complex concepts. Additionally, this study highlights the potential of technology in mathematics education and emphasizes DMLOs as an effective tool for promoting in-depth learning processes among students.

Keywords: DMLO, Effective Learning, Information Technologies, Computer-Aided Education

ISBN NR: 978-625-6283-33-6

KARMAŞIK MATEMATIK PROBLEMLERINE DINAMIK ÇÖZÜMLER: İKINCI DERECEDEN DENKLEMLERLE YARATICI KEŞIF

Dynamic Solutions to Complex Math Problems: Creative Exploration with Second Degree Equations

Dr. Öğr. Üyesi Ali BABAPOUR GOLEZANİ
Atatürk Üniversitesi,
ORCİD: 0000-0001-5958-5056

Prof. Dr. Yasin SOYLU
Atatürk Üniversitesi,
ORCİD: 0000-0002-2951-0069

ÖZET

Bu çalışmada, karmaşık matematik problemlerine dinamik çözümler sunularak ikinci dereceden denklemlerin yaratıcı keşfi ele alınmaktadır. İkinci dereceden denklemler, matematiksel açıdan önemli ve genellikle öğrenciler için zorlayıcı olan konular arasında yer almaktadır. Bu çalışma, dinamik matematik öğrenme nesneleri kullanılarak ikinci dereceden denklemlerin daha etkili bir şekilde öğrenilmesini ve anlaşılmasını amaçlamaktadır. çalışmada, öğrencilere interaktif ve görsel bir deneyim sunarak matematik kavramlarını daha derinlemesine keşfetmelerine olanak tanıyan dinamik çözümler üzerinde durulmaktadır. İkinci dereceden denklemlerin karmaşıklığını azaltmak ve öğrencilerin yaratıcı düşünme becerilerini geliştirmek için bu yöntemlerin kullanılması, matematik eğitiminde yenilikçi bir yaklaşım sunmaktadır. Bu çalışma, matematik öğretiminde teknolojinin etkili bir şekilde nasıl kullanılabileceğini ve öğrencilerin öğrenme deneyimini nasıl zenginleştirebileceğini vurgulamaktadır.

Anahtar Kelimeler: DMÖN, Wolfram Mathematica, Bilgisayar Destekli Eğitim, Web tabanlı Öğrenme

ABSTRACT

This study focuses on the creative exploration of second-degree equations by providing dynamic solutions to complex mathematical problems. Second-degree equations stand out as mathematically significant and often challenging topics for students. The aim of this study is to facilitate a more effective learning and understanding of second-degree equations using dynamic mathematical learning objects. The study emphasizes dynamic solutions that enable students to explore mathematical concepts more deeply through interactive and visual experiences. Utilizing these methods to reduce the complexity of second-degree equations and enhance students' creative thinking skills offers an innovative approach to mathematics education. This research highlights how technology can be effectively employed in mathematics teaching and enrich the learning experience for students.

Keywords: DMLO, Wolfram Mathematica, Computer-Aided Education, Web-based Learning

ISBN NR: 978-625-6283-33-6

THE BINOMIAL TRANSFORMS (s,t)-PELL MATRIX SEQUENCE

Doç.Dr.Şükran UYGUN

Gaziantep Üniversitesi

suygun@gantep.edu.tr - 0000-0002-7878-2175

Ozan HAKLIDIR

Gaziantep Üniversitesi

ozanhaklidir@gmail.com - 0009-0005-3449-9342

ABSTRACT

Special number sequences and the matrix sequences derived from them are quite intriguing topics in mathematics. Especially famous number sequences like Fibonacci and Lucas are popular among mathematicians. Pell and Pell-Lucas number sequences are similarly formed by adding twice the previous term to the term before that. When these number sequences are expressed in matrices, various mathematical properties and relations can be discovered. Recent studies have focused on (s,t)-Pell matrix sequences, and new binomial transformations, identities, and formulas related to the sequence have been found. Such studies allow us to better understand the mathematical structure of matrix sequences and explore potential applications of these sequences. For instance, tools like Binet's formula or generating functions can be used to find the general terms of these sequences or to solve recurrence relations.

Keywords: Pell Numbers, Matrix Sequences, Binomial Transforms, Binet Formula, Generating Function.

ISBN NR: 978-625-6283-33-6

THE BINOMIAL TRANSFORMS (s,t)-PELL-LUCAS MATRIX SEQUENCE

Doç.Dr.Şükran UYGUN
Gaziantep Üniversitesi
- 0000-0002-7878-2175
Ozan HAKLIDIR
Gaziantep Üniversitesi
-0009-0005-3449-9342

ABSTRACT

Special number sequences and the matrix sequences derived from them are quite intriguing topics in mathematics. Especially famous number sequences like Fibonacci and Lucas are popular among mathematicians. Pell and Pell-Lucas number sequences are similarly formed by adding twice the previous term to the term before that. When these number sequences are expressed in matrices, various mathematical properties and relations can be discovered. Recent studies have focused on (s,t)-Pell-Lucas matrix sequences, and new binomial transformations, identities, and formulas related to the sequence have been found. Such studies allow us to better understand the mathematical structure of matrix sequences and explore potential applications of these sequences. For instance, tools like Binet's formula or generating functions can be used to find the general terms of these sequences or to solve recurrence relations.

Keywords: Pell-Lucas Numbers, Matrix Sequences, Binomial Transforms, Binet Formula, Generating Function.

ISBN NR: 978-625-6283-33-6

KARMA TASARIMLARDA ŞEMSİYE ALTERNATİFLER İÇİN PARAMETRİK OLMAYAN TESTLERİN KARŞILAŞTIRILMASI

Bircan UTAŞ
Gazi Üniversitesi
-0009-0006-8815-4742
Prof. Dr. Hülya BAYRAK
Gazi Üniversitesi
0000-0001-5666-4250

ÖZET

Deneysel çalışmalarda hipotezleri test etmek için parametrik ve parametrik olmayan test yöntemleri kullanılır. Test işlemini gerçekleştirmek için öncelikle deney tasarımının belirlenmesi gerekir. İstatistiksel deney tasarımının temel ilkelerinden biri bloklamadır. Bloklama yöntemi ile homojen gruplar oluşturularak modeldeki hata varyansı azaltılmaktadır. Blokların tüm işlemlere uygulanabildiği ve yeterli büyüklükte olduğu durumlarda rasgele tamamlanmış blok tasarımı kullanılır. Uygulamalarda bazı kısıtların bulunması ya da işlemlerin her blok için uygulanmasının mümkün olmadığı durumlarda rasgele tamamlanmış blok tasarımına alternatif olarak eksik veya dengeli eksik blok tasarımı kullanılabilir. Araştırmacılar genellikle tek tip tasarım yapısıyla çalışmaya başlayabilir. Ancak herhangi bir nedenle tasarım yapısını değiştirmek zorunda kalabilir. Böyle durumlarda karma tasarım kullanılabilir. Bu çalışmada karma tasarımlar için şemsiye alternatifler dikkate alınarak parametrik olmayan testler için simülasyon çalışması yapılmıştır. Kullanılan yöntemler I. tip hata ve testin gücü bakımından karşılaştırılmıştır.

Anahtar Kelimeler: karma tasarımlar, parametrik olmayan testler, şemsiye alternatifler

ISBN NR: 978-625-6283-33-6

EXISTENCE AND NONEXISTENCE OF SOLUTIONS FOR A HYPERBOLIC-TYPE EQUATION

Hacire GÜNEŞ
Dicle University,
Prof. Dr. Erhan PİŞKİN
Dicle University,

Abstract –

This presentation focuses on existence and nonexistence for a hyperbolic-type equations, which fall under the category of evolution equations. Evolution equations, defined as partial differential equations where time t serves as one of the independent variables, emerge as fundamental constructs across various mathematical and scientific domains. They find applications not only within mathematics but also extend their influence into diverse fields such as physics, mechanics, and material science. For instance, equations like the Navier-Stokes and Euler equations, fundamental in fluid mechanics, delineate the dynamics of fluid flow, crucial for understanding phenomena ranging from airflow over an airplane wing to ocean currents. Similarly, nonlinear reaction-diffusion equations feature prominently in the study of heat transfer processes and biological phenomena, offering insights into the distribution of heat and the spread of substances within biological systems. In the realm of quantum mechanics, notable equations such as the nonlinear Klein-Gordon and Schrödinger equations play pivotal roles, elucidating the behavior of particles and systems at the quantum level, essential for grasping the fundamental principles governing the universe's smallest scales. These examples underscore the ubiquitous nature of evolution equations, serving as indispensable tools for modeling and comprehending complex phenomena across disciplines. Through an examination of potential wells within hyperbolic-type equations, this presentation endeavors to delve deeper into their significance and applications within the broader framework of evolution equations.

Keywords – Existence, nonexistence, hyperbolic type equation, Galerkin method, Concavity method.

ISBN NR: 978-625-6283-33-6

ASYMPTOTIC BEHAVIOR FOR A PSEUDO-PARABOLIC EQUATION WITH SINGULAR POTENTIAL

AYŞE FİDAN
Dicle University,

-0000-0001-6988-8333

Prof. Dr. ERHAN PİŞKİN
Dicle University,

-0000-0001-6587-4479

ABSTRACT

We examine the initial boundary value problem of a pseudo-parabolic equation with a singular potential. Our study yields results concerning the asymptotic behavior of Dirichlet initial boundary value problem for a fourth order equation with initial energy.

Keywords: **:**Singular potential, Asymptotic behavior, Pseudo-parabolic equation

ISBN NR: 978-625-6283-33-6

BLOW UP OF SOLUTIONS FOR A PSEUDO-PARABOLIC EQUATION WITH SINGULAR POTENTIAL

AYŞE FİDAN
Dicle University,

-0000-0001-6988-8333

Prof. Dr. ERHAN PİŞKİN
Dicle University,

-0000-0001-6587-4479

ABSTRACT

We examine the initial boundary value problem of a pseudo-parabolic equation with a singular potential. Our study yields results concerning the blow up of solutions for a pseudo-parabolic equation with singular potential of Dirichlet initial boundary value problem for a fourth order equation with initial energy.

Keywords: **:**Singular potential, Blow-up, Pseudo-parabolic equation

ISBN NR: 978-625-6283-33-6

YULAF EKMEĞİNİN YAPIMINDA MİNİMUM FİTİK ASİT MİKTARINI ELDE ETMEK AMACIYLA BOX BEHNKEN TASARIMININ UYGULANMASI

Fazilet ÇALIŞKAN

Gazi Üniversitesi, , 0000-0002-0032-2822

Ufuk YILMAZ

Gazi Üniversitesi, , 0000-0002-8694-8534

Prof. Dr. Berrin ÖZKAYA

Ankara Üniversitesi, 0000-0002-7326-7369

Prof. Dr. Hülya BAYRAK

Gazi Üniversitesi, 0000-0001-5666-4250

ÖZET

Deney tasarımı, faktörler ile yanıtlar arasındaki ilişkiyi matematiksel modeller yardımıyla belirlemek için kullanılan uygulamalı istatistiğin bir dalıdır. İlişkinin belirlenmesinde, yanıt üzerinde etkisi olan faktörler ve bu faktörlere ilişkin optimum seviyeler bulmak istenir. Bu amaç için yanıt yüzey yöntemi kullanılır. Yanıt yüzey yöntemleri arasında en yaygın ve popüler olanlar merkezi bileşik ve box-behnken tasarımlardır.

Bu çalışmada yulaf kepeği ekmeğinin yapımında kullanılan; yulaf kepeği (%0, %10, %20), maya miktarı (%2, %4, %6) ve fermantasyon süresi (60 dakika, 80 dakika, 100 dakika) faktörlerinin, fitik asit miktarı üzerindeki etkileri araştırılmıştır. İlk olarak veri seti ve süreç için uygun olduğundan dolayı box-behnken tasarım tercih edilmiştir. Ardından sürecin doğru ve etkili bir şekilde yürütülmesi için gerekli varsayımlar kontrol edilmiştir. Bu varsayımların doğruluğu altında bir matematiksel model tanımlanmıştır. Oluşturulan matematiksel model, istatistiksel yöntemler ve grafiksel şekiller yardımıyla geliştirilerek sadece yanıt üzerinde etkisi olan faktörlere indirgenmiştir. İşlem sonunda ise optimizasyon gerçekleştirilerek fitik asit miktarını minimum değere indirgeyen optimum faktör seviyeleri elde edilmiştir.

Yanıt yüzey yöntemi, gelecekteki araştırmalarda daha geniş bir şekilde kullanılabilir. Özellikle, daha karmaşık sistemlerin modellenmesi ve optimize edilmesi için yanıt yüzey yönteminin geliştirilmesi üzerine çalışmalar yapılabilir.

Anahtar kelimeler: Deney Tasarımı, Optimizasyon, Yanıt Yüzey Yöntemi, Box-Behnken, Fitik Asit Oranı

ISBN NR: 978-625-6283-33-6

MAKARNA ÜRETİMİNDE KAVUN VE BALKABAĞI TOZUNUN KULLANIMI VE KALİTE PARAMETRELERİNE ETKİSİ

Dr. Öğretim Üyesi, Ali CİNGÖZ
Tokat Gaziosmanpaşa Üniversitesi
- 0000-0003-0958-2679

ÖZET

Buğday irmiğine suyun karıştırılıp yoğrulması ardından da şekil verilip kurutulması sonucu oluşan gıda maddesine makarna denilmektedir. Sade, kepekli, zenginleştirilmiş ya da güçlendirilmiş çeşitleri mevcuttur. Türkiye'de dahil olmak üzere birçok ülkede günlük kalori ihtiyacının karşılanması için tüketilmektedir. Bu çalışmada atık olarak ortaya çıkan balkabağı kabukları ile kavun kabukları kurutulup toz haline getirilmiş ve unla yer değiştirme esasına göre 4 farklı oranda (%2.5, 5.0, 7.5 ve 10) makarna üretiminde kullanılmıştır. Üretilen makarnaların kimyasal (kurumadde, kül, protein), teknolojik (pişme suyuna geçen kurumadde, pişme süresi, ağırlık artışı), renk ve duyusal parametreleri belirlenmiştir. Balkabağı ve kavun kabuğu tozu ilavesi makarna örneklerinin kül içeriklerini arttırmış, protein içeriğini ise düşürmüştür. Teknolojik özelliklerini ise olumlu yönde etkilemiştir. Pişme süresi ve pişme suyuna geçen kurumadde miktarı azalmış, ağırlık artışı ise yaklaşık %25 oranında artmıştır. Duyusal açıdan değerlendirilen makarna örneklerinde %7.5 düzeyine kadar ilave edilen her iki kabuk tozunun da genel beğeni düzeyini düşürmediği ve tat ve lezzette olumsuzluğa neden olmadığı tespit edilmiştir. Sonuç olarak makarnaların zenginleştirilmesinde kabuk tozlarının kullanılabileceği gösterilmektedir.

Anahtar Kelimeler: Atık, Balkabağı, Kavun, Makarna

THE USE OF MELON AND PUMPKIN POWDER IN PASTA PRODUCTION AND ITS EFFECT ON QUALITY PARAMETERS

ABSTRACT

Pasta is a food made by mixing water with wheat semolina, kneading, shaping and drying. There are plain, wholemeal, enriched or fortified varieties. It is consumed in many countries, including Turkey, to meet daily caloric needs. In this study, pumpkin and melon peels were dried and ground and used in the production of pasta at 4 different ratios (2.5, 5.0, 7.5 and 10 %) according to the principle of substitution with flour. Chemical (dry matter, ash, protein), technological (dry matter in cooking water, cooking time, weight gain), colour and sensory parameters of the pasta produced were determined. The addition of pumpkin and melon peel powder increased the ash content and decreased the protein content of the pasta samples. It had

ISBN NR: 978-625-6283-33-6

a positive effect on the technological properties. The cooking time and the amount of dry matter transferred to the cooking water decreased and the weight gain increased by about 25%. In the pasta samples evaluated from a sensory point of view, it was found that both shell powders added up to 7.5% did not reduce the overall flavour level and did not cause any negative effects on the taste and flavour. The results show that shell powders can be used to enrich pasta.

Keywords: Waste, Pumpkin, Melon, Pasta

ISBN NR: 978-625-6283-33-6

GLUTENSİZ KEK ÜRETİMİNDE IŞGIN OTU (*Rheum ribes*) KULLANIMI

Dr. Öğretim Üyesi, Ali CİNGÖZ
Tokat Gaziosmanpaşa Üniversitesi
ali.cingoz@gop.edu.tr - 0000-0003-0958-2679

ÖZET

Işgın yada Işkın (*Rheum ribes*) antikanser, antimikrobiyal ve antihiperglisemi özellikleri bilinen yüksek antioksidan kapasiteye sahip önemli tıbbi bitkilerden bir tanesidir. Özellikle doğu bölgelerinde yetişen ve sıklıkla tüketilen bu faydalı bitkinin alternatif ürünlerde kullanımı sınırlıdır. Bu çalışmada besin ve fonksiyonel içeriği zayıf olan ve genellikle nişasta bazlı hammaddelerden yapılan glutensiz keklerin içeriklerinin zenginleştirilmesi amacıyla 3 farklı oranda (% 5, 10 ve 15) ışgın otu tozu unla yer değiştirme esasına göre ilave edilmiştir. Üretilen keklerin fiziksel (ağırlık, hacim, spesifik hacim), kimyasal (kurumadde, kül, protein ve yağ)), fonksiyonel özellikleri (toplam fenolik madde ve toplam antioksidan kapasite) ve renk ile tekstür değerleri tespit edilmiştir. Işgın otu tozu ilavesi keklerin fiziksel özelliklerini etkilemezken kimyasal özelliklerinde iyileşmeye neden olmuştur. Işgın otu tozu ilavesi ile keklerin renkleri biraz daha koyulaşmıştır. Keklerin sertlik değerlerinde artış olmasına rağmen yapıda önemli bir bozulma meydana gelmemiştir. %5 ilavesine kadar duyusal açıdan genel beğenin düzeyinin yüksek olduğu daha sonra tatta ekşiliğin arttığı belirlenmiştir. Bu çalışma glutensiz keklere fonksiyonellik kazandırılmasında ışgın otu tozunun kullanılabilirliğini göstermiştir.

Anahtar Kelimeler: Fonksiyonel, Glutensiz, Işgın

USE OF IŞGIN (Rheum ribes) IN GLUTEN-FREE CAKE PRODUCTION

ABSTRACT

Işgın or Işkın (*Rheum ribes*) is one of the most important medicinal plants with high antioxidant capacity, known for its anticancer, antimicrobial and antihyperglycaemic properties. The use of this useful plant, which is mainly cultivated and consumed in the eastern regions, is limited in alternative products. In this study, three different proportions (5, 10 and 15%) of ragweed powder were added to enrich the content of gluten-free cakes, which have poor nutritional and functional content and are generally made from starch-based raw materials, based on flour substitution. The physical (weight, volume, specific volume), chemical (dry matter, ash, protein and fat), functional (total phenolic substances and total antioxidant capacity), colour and texture properties of the cakes were determined. While the addition of common spelt flour did not affect the physical properties of the cakes, it improved the chemical properties. The

ISBN NR: 978-625-6283-33-6

colour of the cakes became slightly darker with the addition of the spelt powder. Although there was an increase in the hardness values of the cakes, there was no significant deterioration in the structure. It was found that the general sensory level of taste was high up to the addition of 5% and then the acidity of the taste increased. This study showed that ragweed powder can be used to add functionality to gluten-free cakes.

Keywords: Functional, Gluten-free, Işgın

ISBN NR: 978-625-6283-33-6

YOĞURDUN BESİNSEL VE BİYOAKTİF BİLEŞENLERİ

Dr. Öğr. Üyesi, Çiğdem KONAK GÖKTEPE

Selçuk Üniversitesi, ckonak@selcuk.edu.tr-ORCID ID: 0000-0003-4615-1050

ÖZET

Sağlıklı bir gıda olarak tüketiciler tarafından kabul gören yoğurt dünya çapında en popüler fermente süt ürünlerinden biridir. Yoğurt, yüksek kalitede biyolojik olarak kullanılabilir proteinleri ve sağlığı korumak için gerekli esansiyel amino asitlerin tümünü içermektedir. Ayrıca iyi bir enerji, yağ ve mineral kaynağıdır. Yoğurtta bulunan mineraller, özellikle kalsiyum ve vitaminler yüksek biyoyararlanıma sahiptir. Sütten kaynaklanan standart besin bileşenlerinin yanı sıra, fermantasyon süreci sırasında yoğurt bakterileri tarafından protein ve yağların parçalanmasıyla oluşan çeşitli biyoaktif bileşenleri de bünyesinde bulundurmaktadır. Fermentasyon sonucu oluşan metabolitlerden biyoaktif peptitler, konjuge linoleik asit ve ekzopolisakkaritler vücut fonksiyonları ve sağlık üzerinde olumlu etkilere sahiptir. Özellikle biyoaktif peptitler başlıca vücut sistemlerini, yani kardiyovasküler, sindirim, endokrin, bağışıklık ve sinir sistemlerini etkilemekte ve potansiyel olarak tüketici sağlığını koruyucu etkiler sergilemektedir. Sağlık açısından yoğurdun laktoz toleransı ve bağışıklık fonksiyonunda iyileşme, serum kolesterol ve kan basıncı seviyelerinde azalma, gastrointestinal enfeksiyonların ve irritabl bağırsak semptomlarının kontrolü, besinlerin biyoyararlanımının artması ve antikarsinojenik, antimikrobiyal, antioksidatif ve hipoalerjenik aktivitelerin indüksiyonu dahil olmak üzere birçok fayda sunduğu yapılan çalışmalarla kanıtlanmıştır. Ayrıca geleneksel yoğurt, potansiyel sağlık faydalarını ve fonksiyonel özelliklerini arttırmak için, probiyotikler, prebiyotikler, postbiyotikler, bitkiler, meyveler, sebzeler ve bunların ekstraktları, çeşitli esansiyel yağ asitleri, vitaminler ve minerallerle zenginleştirilmektedir. Sektördeki yeniliklerle birlikte bu ürünlerin sağlığa faydaları konusundaki araştırmaların da artmaya devam etmesi önemlidir. Bu anlamda yoğurt ve diğer fermente süt ürünlerinde bulunan biyoaktif bileşiklerin biyoyararlılığını araştıran daha fazla çalışma yapılması gerekmektedir. Bu derleme ile yoğurdun besinsel ve biyoaktif bileşenleri üzerine yapılan çalışmalardan elde edilen bilimsel kanıtların ortaya konması ve bu konuda farklı yaklaşımların keşfedilmesine kaynak olması amaçlanmaktadır.

Anahtar Kelimeler: yoğurt, fermentasyon, biyoaktif bileşen, biyoaktif peptit

ISBN NR: 978-625-6283-33-6

NUTRITIONAL AND BIOACTIVE COMPONENTS OF YOGHURT

ABSTRACT

Yoghurt is recognized by consumers as a healthy food and is one of the most popular fermented dairy products in the worldwide. Yoghurt contains high quality bioavailable proteins and all essential amino acids necessary to maintain health. It is also a good source of energy, fat and minerals. Minerals found in yoghurt, especially calcium and vitamins, have high bioavailability. In addition to the standard nutritional components originating from milk, it also contains various bioactive components formed by the breakdown of proteins and fats by yoghurt bacteria during the fermentation process. Among the metabolites formed as a result of fermentation, bioactive peptides, conjugated linoleic acid and exopolysaccharides have positive effects on body functions and health. In particular, bioactive peptides affect major body systems, namely cardiovascular, digestive, endocrine, immune and nervous systems, and potentially exhibit protective effects on consumer health. In terms of health, yoghurt has been shown to offer many health benefits, including improved lactose tolerance and immune function, reduced serum cholesterol and blood pressure levels, control of gastrointestinal infections and irritable bowel symptoms, increased nutrient bioavailability and induction of anticarcinogenic, antimicrobial, antioxidant and hypoallergenic activities. In addition, traditional yoghurt is enriched with probiotics, prebiotics, postbiotics, herbs, fruits, vegetables and their extracts, various essential fatty acids, vitamins and minerals to enhance its potential health benefits and functional properties. Along with the innovations in the sector, it is important that research on the health benefits of these products continues to increase. In this sense, more studies investigating the bioavailability of bioactive compounds in yoghurt and other fermented dairy products are needed. With this review, it is aimed to present the scientific evidence obtained from studies on the nutritional and bioactive components of yoghurt and to be a source for exploring different approaches in this field.

Keywords: yoghurt, fermentation, bioactive component, bioactive peptide

ISBN NR: 978-625-6283-33-6

GIDA ATIKLARININ SAĞLIK ÜZERİNE FAYDALI ETKİLERİ
BENEFICIAL EFFECTS OF FOOD WASTE ON HEALTH

Doktora Öğrencisi, Duygu Doğan

Van Yüzüncü Yıl Üniversitesi

-0000-0001-8338-9063

Dr. Öğr. Üyesi, Emine Okumuş

Van Yüzüncü Yıl Üniversitesi

– 0000-0001-5266-8633

Doç. Dr. İsmet Meydan

Van Yüzüncü Yıl Üniversitesi

0000-0001-5640-6665

ÖZET

Günümüzde farklı endüstriyel alanlarda, evsel ve tarımsal sektörlerin yan ürünü olan gıda atıklarının oluşumu giderek artmaktadır. Dünya çapında bu atıkların değerlendirilememesi başta gıda israfı olmak üzere çevre kirliliği sorunları ve doğal kaynakların kıtlığı gibi ciddi sorunlara neden olmaktadır. Bu sorunları ortadan kaldırmak ve sağlık açısından fayda sağlayabilir hale getirmek amacıyla günümüzde alternatif yaklaşımlar sunulmaktadır. Yeni ilaçların ve nutrasötikler olarak kullanılabilecek biyoaktif bileşiklerin, gıda atıklarından ya da tüketilemeyen gıdalardan sentezlenmesi araştırmacılar tarafından odak noktası haline gelmektedir. Atıklardan çevre dostu, sürdürülebilir, uygun maliyetli ve katma değeri yüksek ürünler geliştirmek ve bu ürünleri ekonomiye geri kazandırmaya olan ihtiyaç mevcut araştırmalara hız kazandırmaktadır. Özellikle meyve, sebze ve tahıl gibi gıda endüstrilerinden elde edilen atıklar polifenoller, flavonoidler, kafein ve kreatin gibi önemli biyoaktif bileşenlerin kaynağıdır. Atıkların bu zengin içerikleri antibakteriyal, antimikrobiyal, antikanser, antiinflamatuar aktiviteleri gibi birçok hayati uygulama için kapsamlı olarak araştırılmaktadır. Hastalıkların tedavi süresinde uygulanan ilaçların yaşam kalitesini düşürecek önemli yan etkileri olduğu düşünüldüğünde, atıklardan elde edilen bileşiklerin iyileştirici özelliklerinin yanı sıra düşük toksisite göstermesi de dikkat çekmektedir. Bu derlemede, farklı gıda atıklarının tıp ve farmakoloji alanlarındaki kullanım olanaklarına yer verilmiştir. Yapılan bilimsel çalışmalarda gıda atıklarından hazırlanan yeni içerikler sayesinde diyabet, Alzheimer, Parkinson ve kanser gibi rahatsızlıkların tedavisi için fayda sağlayabileceği belirlenmiştir. Geri

ISBN NR: 978-625-6283-33-6

dönüşüme yönelik yapılacak etkin çalışmalar ve atıkların sürdürülebilir kullanımı sayesinde özellikle sağlık sektöründe büyük iyileşmeler görüleceği düşünülmektedir.

Anahtar kelimeler: Gıda atıkları, biyoaktif bileşenler, sağlık

ABSTRACT

Nowadays, the generation of food waste, which is a by-product of domestic and agricultural sectors, is increasing in different industrial areas. Failure to utilize these wastes worldwide causes serious problems such as food waste, environmental pollution problems and scarcity of natural resources. Today, alternative approaches are offered in order to eliminate these problems and provide health benefits. Synthesizing new drugs and bioactive compounds that can be used as nutraceuticals from food waste or unconsumable foods is becoming a focus of researchers. The need to develop environmentally friendly, sustainable, cost-effective and high added value products from waste and to return these products to the economy accelerates current research. Wastes from food industries, especially fruits, vegetables and grains, are sources of important bioactive components such as polyphenols, flavonoids, caffeine and creatine. These rich contents of waste have been extensively investigated for many vital applications such as antibacterial, antimicrobial, anticancer and anti-inflammatory activities. Considering that the drugs administered during the treatment of diseases have significant side effects that may reduce the quality of life, it is noteworthy that the compounds obtained from wastes show low toxicity as well as their healing properties. In this review, the usage possibilities of different food wastes in the fields of medicine and pharmacology are included. In scientific studies, it has been determined that new ingredients prepared from food waste can be beneficial for the treatment of diseases such as diabetes, Alzheimer's, Parkinson's and cancer. It is thought that major improvements will be seen, especially in the healthcare sector, thanks to effective work on recycling and sustainable use of waste.

ISBN NR: 978-625-6283-33-6

GIDA TÜKETİMİ İLE İNSANLARDA GÖRÜLEN İNTOLERANSLAR

Yüksek Lisans Öğrencisi Kübra Kaymaz

Karamanoğlu Mehmetbey Üniversitesi, Mühendislik Fakültesi, Gıda Mühendisliği

Doç. Dr. Nizam Mustafa Nizamlıoğlu

Karamanoğlu Mehmetbey Üniversitesi, Mühendislik Fakültesi, Gıda Mühendisliği

– 0000-0003-0067-3419

Prof. Dr. Sulhattin Yaşar

Karamanoğlu Mehmetbey Üniversitesi, Mühendislik Fakültesi, Gıda Mühendisliği

– 0000-0001-9334-1303

ÖZET

Gıdalara verilen advers (yan etki) reaksiyonlar, toksik olarak kabul edilenlerin yanı sıra, yaygın olarak tolere edilen gıdalara karşı belirli bir bireysel hoşgörüsüzlükten kaynaklanır. İmmünolojik bir mekanizmadan türetilen intoleransa gıda alerjisi, immünolojik olmayan forma gıda intoleransı denir. Gıda intoleranslarının popülasyonun %20'sini etkilediği tahmin edilmektedir. Ancak ilişkili immünolojik olmayan mekanizmalar büyük ölçüde değiştiği için tanı ve yönetimin tam olarak anlaşılması karmaşıktır. Bu nedenle, birden fazla klinik disiplinden girdi içeren yapılandırılmış bir tanı algoritması uygulanmalıdır. Tedavi, rahatsız edici maddenin diyetten çıkarılmasının yanı sıra endike olduğunda ilaçlar ve psikosomatik destekten oluşur. Bu derleme, gastrointestinal ve/veya bağırsak dışı semptomlarla sonuçlanan yaygın gıda intoleransları hakkında bilimsel bir güncelleme sağlamayı amaçlamaktadır. Çölyak dışı glüten/buğday duyarlılığı, gıda katkı maddeleri ve biyoaktif gıda kimyasalları dahil olmak üzere gözden geçirilen diğer gıda intoleranslarının çoğu için bulgular, mekanizmaların anlaşılmasını zorlaştıran, tekrarlanabilir iyi tasarlanmış çift kör, plasebo kontrollü (çift körkontrollü çalışma) çalışmaların yetersiz olduğunu göstermektedir. Tüm gıda intoleransları için güvenilir tanısal biyobelirteçlerin olmaması, bireydeki belirli gıdaları hedefleyememeye neden olur. Bu nedenle, şüpheli gıda bileşenlerinin kısa bir süre için azaltıldığı ve ardından yanıtı değerlendirmek için yeniden zorlandığı bir deneme yanılma yaklaşımı kullanılır. Önleme ve tedavi, suçlu yiyeceklerden kaçınmaya dayanır. Gelecekteki çalışmalar, diyet tedavilerine yanıtı tahmin etmek için biyobelirteçleri belirlemeyi amaçlamalıdır.

Anahtar Kelimeler: besin, laktoz, glüten, katkı maddeleri, soya fasulyesi.

ISBN NR: 978-625-6283-33-6

THE ROLE OF DIFFERENT VITAMINS IN NUTRIENT SENSING WITHIN THE BODY

Rozarta NEZAJ*[1]

– ORCID ID 0009-0000-2844-9190

Onejda KYÇYK[1], Fatbardha LAMÇE[1], Lindita LACI[1]

[1]Dep/ Food Research Center - Biotechnology and Food Faculty

Agricultural University of Tirana, Albania

ABSTRACT

Background: Nutrient sensing is a process by which cells detect and respond to changes in nutrient levels in the body. This process is essential for regulating metabolism, energy production, and overall cellular function.

Aim: This study aims to emphasize the role of different vitamins in nutrient sensing within the body, and to present an assessment of B1 and B2 vitamins at most common fruits.

Method: This is a review of the recent literature about vitamins ´ role in nutrient sensing within the body. An UV- spectrophotometric method is used for the determination of vitamins B1 (thiamine) and B2 (riboflavin) levels in some fruits as apples, oranges and bananas.

Results and discussion: In this review, we describe a summary of the existing literature and studies on the health benefits of fruits focusing on their contents of vitamins, then we analyzed data of the vitamins levels and finally, we discuss the role of vitamins in fruits in diseases prevention.

It resulted that B1 of MJ (green apple) with an average value 0.98, MK (red apple) was 0.71, and also for B2 MJ was 1.50, MK was 1.18.

Conclusion: In conclusion, vitamins are essential for maintaining optimal health and play a significant role in nutrient sensing within the body. It is important to ensure a balanced diet that includes a variety of vitamins to support overall well-being and prevent deficiencies that can lead to disease.

Keywords: vitamins, fruits, nutrient sensing.

ISBN NR: 978-625-6283-33-6

KAHVEDE KANSEROJEN OKRATOKSİN A (OTA) VARLIĞI VE DETOKSİFİKASYONU İÇİN KULLANILABİLECEK YÖNTEMLER

Dr. Öğr. Üyesi TALHA DEMİRCİ
Selçuk Üniversitesi
talhademirci@selcuk.edu.tr - ORCID ID 0000-0003-3664-3502

ÖZET

Son yıllarda tüm dünyada tüketilen en popüler içeceklerden olan kahve hem kültürel hem de ekonomik önemi haiz gıdalardandır. *Coffea arabica* (% 60) ve *Coffea canephora* var. *robusta* (% 40) biyolojik kahve türlerinden elde edilen, sıcak ve soğuk tüketilebilen kahve klorojenik asit, kafein, trigonellin, diterpenler ve tokoferoller gibi içeriklere sahip olduğu için sağlık faydası sunan fonksiyonel gıdalar arasında sayılmaktadır. Yine bunun yanında kahveye DNA onarımını aktive edici özellikler, anti-mutajenik ve bağışıklık sistemini düzenleyici etkiler atfedilmektedir. Fakat bunların yanı sıra yapılan çalışmalar göstermiştir ki kahvede kanserojenik, teratojenik, nörotoksik, immunotoksik, hepatoksik bir küf sekonder metaboliti olan okratoksin A (OTA) isimli madde de bulunmaktadır. Özellikle fermantasyon çeşidi olarak yaş yöntem yerine kuru yöntemin kullanılması sonucunda kahve çekirdeklerinin çevresel koşullara kontrolsüz şekilde açık olması beraberinde küf kontaminasyonunu *(Aspergillus* ve *Penicillium* türleri başta olmak üzere) getirmekte ve kaçınılmaz olarak da okratoksin A gibi küf sekonder metabolitler oluşabilmektedir. Avrupa Komisyonu (EC No: 1881/2022) revize kararına göre kavrulmuş kahve çekirdeğinde ve öğütülmüş kahvede 3 ppb, kahve ekstraktı, çözünebilir kahve ekstraktı ve çözünebilir kahvede 5 ppb'lik bir OTA maksimum limiti vardır. Fakat hem dünyada çeşitli ülkelerde hem de ülkemizde yapılan çalışmalarda çok sayıda kahve örneğinde bu limitin üzerinde değerlere ulaşılmıştır. Bu çalışmada kahvede OTA varlığı çeşitli yönleri ile incelenmiş ve çeşitli detoksifikasyon yöntemlerinin OTA'nın uzaklaştırılması konusunda kullanılabilirlikleri ortaya konmuştur.

Anahtar Kelimeler: kahve, Okratoksin, küf, OTA

ISBN NR: 978-625-6283-33-6

PRESENCE OF CARCINOGENIC OCHRATOXIN A (OTA) IN COFFEE AND METHODS FOR ITS DETOXIFICATION

ABSTRACT

Coffee, which is one of the most popular beverages consumed all over the world in recent years, is a food of both cultural and economic importance. Coffee, which is obtained from *Coffea arabica* (60%) and *Coffea canephora* var. *robusta* (40%) biological coffee species and can be consumed hot and cold, is considered among the functional foods that offer health benefits because it has ingredients such as chlorogenic acid, caffeine, trigonelline, diterpenes and tocopherols. In addition to this, activating properties of DNA repair, anti-mutagenic and immune system regulating effects are attributed to coffee. However, studies have shown that coffee also contains ochratoxin A (OTA), a carcinogenic, teratogenic, neurotoxic, immunotoxic and hepatoxic mould secondary metabolite. The uncontrolled exposure of coffee beans to environmental conditions, especially as a result of the use of dry rather than wet fermentation methods, leads to mould contamination (mainly *Aspergillus* and *Penicillium* species) and inevitably to the formation of mould secondary metabolites such as ochratoxin A. According to the European Commission (EC No: 1881/2022) there is a maximum OTA limit of 3 ppb in roasted coffee beans and ground coffee and 5 ppb in coffee extract, soluble coffee extract and soluble coffee. However, in studies carried out both in various countries of the world and in our country, values above this limit were found in many coffee samples. In this study, the presence of OTA in coffee was investigated in various aspects and the feasibility of various detoxification methods for the removal of OTA was demonstrated.

Keywords: Coffee, ochratoxin, mould, OTA

ISBN NR: 978-625-6283-33-6

ERENLER DAĞI VOLKANİKLERİNDE OLUŞAN TOPRAKLARDA AĞIR METAL KİRLİLİĞİNİN VE EKOLOJİK RİSKİN KİRLİLİK İNDEKSLERİ KULLANILARAK DEĞERLENDİRİLMESİ

Hasan Hüseyin Özaytekin

Karamanoğlu Mehmetbey University, Vocational School of Technical Sciences
Department of Crop and Animal Production, Karaman, Turkey
Orcid No: 0000-0002-8287-257

Özet

Son yıllarda, çevredeki ağır metal kontaminasyonlarına yönelik ilgi, bunların toksisitesi ve toprak-su sistemleri içinde algılanan kalıcılıkları nedeniyle giderek artmaktadır. Kirlenmiş numunelerin incelenmesinde, belirli bir ağır metalin neden olduğu kirliliğin boyutu veya derecesinin belirlenmesi, kirletici metal konsantrasyonunun kirlenmemiş bir referans malzemeyle karşılaştırılmasını gerektirir. Topraktaki ağır meyal kontaminasyonunun belirlemek için çeşitli kirlilik endeksleri kullanılmaktadır. Bu çalışmada Ni, Cu, Pb, Cr, Cd, Pb ve Zn olmak üzere altı adet ağır metalin kirlilik durumu Kirlilik Faktörü (Cf), Coğrafi Birikim İndeksi (Igeo), Kirlilik Yük İndeksi (PLI), Modifiye Kirlilik Derecesi gibi çeşitli endeksler kullanarak değerlendirilmiştir. Ayrıca toprak numunelerindeki ağır metal konsantrasyonları kullanılarak bu metallerin potansiyel ekolojik risklerini saptanmıştır. Bu amaçla Konya Erenler Dağı volkanik malzemesi üzerinde oluşan topraklarda 4 adet profil açılmış ve her profilden horizon esasına göre toprak örnekleri alınmıştır ve toplam ağır metal içerikleri belirlenmiştir. Elde edilen sonuçlara göre Cf ve Igeo değerleri tüm metaller için kirlilik olmadığını ortaya koymuştur Metallerin birlikteki etkilerini gösteren kirlilik yük indeksi (PLI) ve modifiye kirlilik derecesi de bölgede metallerin birlikteki etkilerinden kaynaklanan bir kirliliğin bulunmadığını göstermiştir. Metal içerikleri kullanılarak hesaplanan ekolojik risk indeksleri de bölgede söz konusu metallerin ne bireysel ne de kümülatif olarak ekolojik risk taşımadığını ortaya koymuştur.

Anahtar kelimeler: Ağır Metaller, Kirlilik indeksi, Ekolojik Risk İndeksi, Erenler Dağı

ISBN NR: 978-625-6283-33-6

Assessment of Heavy Metal Contamination and Ecological Risk of Soils Developed Mount Erenler Volcanics Using Contamination Indices

Abstract

In recent years, there has been increasing interest in heavy metal contaminations in the environment due to their toxicity and perceived persistence in soil-water systems. In the examination of contaminated samples, determining the extent or degree of contamination caused by a particular heavy metal requires a comparison of the contaminant metal concentration with an uncontaminated reference material. Various pollution indices are used to determine heavy metal contamination in soil. In this study, the pollution status of six heavy metals, namely Ni, Cu, Pb, Cr, Cd, Cd, Pb and Zn, was evaluated using various indices such as Pollution Factor (Cf), Geoaccumulation Index (Igeo) (individual elements), Pollution Load Index (PLI) and Modified Pollution degree (multi metal). For this purpose, 4 profiles were opened in the soils formed on the volcanic material of Konya Erenler Mountain and soil samples were taken from each profile on horizon basis and total heavy metal contents were determined.

The results showed that there is no contamination for all metals based on the Cf and Igeo values. The pollution load index (PLI), which shows the combined effects of the metals, and the modified degree of pollution also showed that there is no pollution caused by the combined effects of the metals in the region. The ecological risk indices calculated using the metal contents also revealed that the metals in question do not pose ecological risk in the region, neither individually nor cumulatively.

Key words: Heavy Metals, Pollution index, Ecological risk, Mount Erenler

ISBN NR: 978-625-6283-33-6

ÇAM KOZALAĞI (*Pinus* spp.) ŞURUBUNUN BİYOAKTİF ÖZELLİKLERİ VE FENOLİK BİLEŞENLERİNİN BELİRLENMESİ

SEVDE NUR ÇATALTEPE
Selçuk Üniversitesi,
– ORCID ID 0009-0003-2066-4664

Prof. Dr. MEHMET MUSA ÖZCAN
Selçuk Üniversitesi,
ORCID ID 0000-0002-5024-9512

Doç. Dr. NURHAN USLU
Selçuk Üniversitesi,
- ORCID ID 0000-0002-1392-8604

ÖZET

Bu çalışmada Mersin'in Gülnar ilçesinden toplanan çam (*Pinus* spp.) kozalaklarından elde edilen şurubun toplam fenol içeriği, toplam flavonoid içeriği, antioksidan aktivitesi ve fenolik bileşen içerikleri incelenmiştir. Çam kozalağı şurubu; kozalakların su içerisinde (1:5; w/v) kaynatılmasıyla elde edilen, kendine has tat ve kokusu olan amber renkli bir şuruptur. Çam kozalağı şurubunun toplam fenol, flavonoid ve antioksidan aktivite değerleri sırasıyla 1194,34 mg GAE/100 g, 8920 mg QE/100 g ve 2,90 mmol TE/kg olarak belirlenmiştir. Çam kozalağı şurubunun dominant fenolik bileşenleri gallik asit (4,39 mg/100g), ferulik asit (3,52 mg/100g), protokateşuik asit (1,08 mg/100g) olarak tespit edilmiştir. Sonuç olarak, çam kozalağı şurubu biyoaktif bileşen ve antioksidan aktivite bakımından oldukça zengin bir üründür.

Anahtar Kelimeler : Çam kozalağı şurubu, Antioksidan aktivite, Fenolik bileşen, Toplam flavonoid, Toplam fenol

ISBN NR: 978-625-6283-33-6

DETERMINATION OF BIOACTIVE PROPERTIES AND PHENOLIC COMPOUNDS OF PINE CONE (*Pinus* spp.) SYRUP

SUMMARY

In this study, the total phenolic content, total flavonoid content, antioxidant activity and phenolic compound contents of the syrup obtained from pine (*Pinus* spp.) cones collected from Gülnar district of Mersin were examined. Pine cone syrup is an amber colored syrup with a unique taste and smell, obtained by boiling cones in water (1:5; w/v). In addition, total phenolic, flavonoid and antioxidant activity values of pine cone syrup were assessed as 1194.34 mg GAE/100 g, 8920 mg QE/100 g and 2.90 mmol TE/kg, respectively. The dominant phenolic compounds of pine cone syrup were determined as gallic acid (4.39 mg/100 g), ferulic acid (3.52 mg/100 g), protocatechuic acid (1.08 mg/100 g). As a result, it can be said that pine cone syrup is a product very rich in bioactive components and antioxidant activity.

Key Words: Pine cone syrup, Antioxidant activity, Phenolic compounds, Total flavonoids, Total phenolics

ISBN NR: 978-625-6283-33-6

Solanum nigrum ve *Chenopodium album* Yabancı Otlarından Tomato brown rugose fruit virus (ToBRFV)' nün RNA'sının İzolasyonunun Optimizasyonu

Tuğba ERDOĞAN

Erciyes Üniversitesi, Ziraat Fak., Bitki koruma Bölümü, https://orcid.org/0000-0001-9105-9451

Dr. Cemile TEMUR ÇINAR

Erciyes Üniversitesi, Ziraat Fak., Bitki koruma Bölümü,

https://orcid.org/0000-0002-0248-1835

Prof. Dr. Doğan IŞIK

Erciyes Üniversitesi, Ziraat Fak., Bitki koruma Bölümü,

https://orcid.org/0000-0002-0554-2912

ÖZET

Tomato brown rugose fruit virus (ToBRFV), domates tüketicileri için yeni ortaya çıkan bir hastalık ve viral bir salgın olarak kabul edilmektedir. ToBRFV Virgaviridae familyasının Tobamovirus cinsinde yer alan tek iplikli RNA yapısında bir virüstür. Bu araştırmanın amacı ToBRFV'nin Solanum nigrum ve Chenopodi album yabancı otlarından etmenin izolasyonunun optimizasyonu ve test bitkisi olarak kulanım potansiyelinin belirlenmesidir. Bu amaçla ToBRFV, toplam 10 adet Chenopodium albüm ve 4 adet Solanum nigrum bitkisi 5-6 gerçek yapraklı döneme geldiğinde mekanik olarak inoküle edilmiştir. Kaliteli RNA'nın dokulardan/hücrelerden izole edilmesi, özellikle kaynak materyal olarak bitkiler kullanıldığında çeşitli problemler ortaya çıkarır. Kaynak materyalin seçiminden bitkide bulunan metabolitlerin konsantrasyonuna kadar çeşitli faktörler izolasyon prosedürünün gidişatını etkilemektedir. Bu nedenle ToBRFV simptomu gösteren ağaçlardan toplanan yaprak örneklerinden kaliteli RNA izolasyonu amacıyla dört farklı yöntem denenmiştir. Kullanılan yöntemlerden en uygunu Vennapusa ve ark. (2020) tarafından geliştirilen yöntem olarak tespit edilmiştir. Simptom gösteren örneklerden alınan yapraklar Vennapusa ve ark. (2020) geliştirdiği yöntem fenollü, fenolsüz olarak uygulanmış, CTAP yöntemi ve RNA izolasyon kiti kullanılarak yapılmıştır. Bitkilerde virüsün varlığı RT-PCR yöntemi ile belirlenmiştir. İki bitkinin indikatör bitki olma potansiyeli açısından değerlendirildiğinde Solanum nigrum bitkisi Chenopodium albüm bitkisinde daha uzun ömürlü ve farklı iklimsel koşullara dayanıklılığı, sadece lokal belirtilerle kalmayıp virüsü sistemik olarak taşıma potansiyelinin olması açısından daha üstün bulunmuştur.

Anahtar Kelimeler: Tomato brown rugose fruit virüs, RNA izolasyon, Solanum nigrum, Chenopodi albüm, Yabancı ot

ISBN NR: 978-625-6283-33-6

Optimization of RNA Isolation of Tomato brown rugose fruit virus (ToBRFV) from the Weeds Solanum nigrum and Chenopodium album

ABSTRACT

Tomato brown rugose fruit virus (ToBRFV) is considered an emerging disease and a viral epidemic affecting tomato consumers. ToBRFV is a single-stranded RNA virus belonging to the Tobamovirus genus of the Virgaviridae family. The aim of this research is to optimize the isolation of ToBRFV from the weeds Solanum nigrum and Chenopodi album and to determine its potential for use as a test plant. For this purpose, ToBRFV was mechanically inoculated when a total of 10 Chenopodium album and 4 Solanum nigrum plants reached the stage of 4-5 true leaves. Isolating quality RNA from tissues/cells poses several problems, especially when plants are used as source material. Therefore, four methods were used for RNA isolation, modified according to our study. Among the RNA isolation techniques, used in this study, the most suitable one was found as Vennapusa et al. (2020) from which good quality RNA was able to be isolated. The leaves taken from the samples showing symptoms were applied using the method developed by Vennapusa et al. (2020) with and without phenol, CTAB methods and the RNA isolation kit was used. The presence of the virus in plants was determined by the RT-PCR method. When the two plants were evaluated in terms of their potential as indicator plants, Solanum nigrum plant was found to be superior to Chenopodium album plant in terms of longevity and resistant to different climatic conditions, not only showing local symptoms but also having the potential to carry the virus systemically.

Keywords: Tomato brown rugose fruit virus, RNA isolation, Solanum nigrum, Chenopodium album, weeds

ISBN NR: 978-625-6283-33-6

VETERİNER HEKİMLİKTE KULLANILAN KARDİYAK BELİRTEÇLER

Vet. Hek. ,BURAK EMRE SAVAŞ
ONDOKUZ MAYIS ÜNİVERSİTESİ
- 0009-0008-9430-0579

ÖZET

Kalp yetmezliği ile ilgili hastalıkların patofizyolojisinin anlaşılması ve sağaltımı hakkında son yıllarda oldukça fazla ilerleme kaydedilmiştir. Hastalığın tanısında detaylı fiziksel muayeneler yapılmasına rağmen kedi ve köpeklerde yine de birtakım zorluklarla karşılaşılmaktadır. Kalp hastalıklarının klinik tanısında; anamnez, fiziksel muayene, elektrokardiyografi, oskültasyon ve göğüs radyografisinden yararlanılmaktadır. Tanıda altın standart olan ekokardiyografi kullanımı ve uygulaması uzmanlık gerektirmekte ve aynı zamanda hayvan sahibine ek bir maliyet yüklemektedir. Bu nedenle serum biyobelirteçleri kalp hastalıklarının tanısı ve sağaltıma verilen cevabın belirlenmesinde tercih edilmektedir. Natriüretik peptidler kalp hastalıklarının tanısında önemli bir yer tutmaktadırlar. Kardiyak biyobelirteç testleri, kalp tarafından salınan ve kalp hastalığının şiddeti arttıkça artan proteinlerin serum/plazma konsantrasyonunu ölçer. Bu testler, bu nedenle, kardiyak hasarın dolaylı bir değerlendirmesi olarak kullanılabilir. Ticari olarak temin edilebilen ve dolayısıyla en iyi anlaşılan iki biyobelirteç, NT-proBNP ve cTnI'dır. Bu nedenle bu seminerde NT-proBNP ve cTnI'ya daha geniş bir şekilde yer verilecektir.

Anahtar Kelimeler: Kardiyak Biyobelirteçler, Troponin, pro-BNP

ISBN NR: 978-625-6283-33-6

FUSARIUM TOXINS: IMPROVING AWARENESS AND MANAGEMENT STRATEGIES

PhD student :Nedaa M.M. Tanina

Gaziantep University

https://orcid.org/0009-0006-8555-2999

Dr. Öğr. Üyesi Feyza N. KAFADAR

Gaziantep University

https://orcid.org/0000-0003-3544-2979

Prof. Canan Can.

Gaziantep University

https://orcid.org/0000-0002-0473-1914

Abstract

Fusarium genus produces a variety of mycotoxins with diverse chemical structures. These toxins, known as fusariotoxins, are secondary metabolites produced by toxigenic fungi of the genus *Fusarium*. Some of the commonly encountered fusariotoxins include trichothecenes, fumonisins, zearalenone, and Moniliformin. Consumption of food contaminated with *Fusarium* mycotoxins can pose varying levels of toxicity to humans and/or animals, leading to acute or chronic illness and, in severe cases, death. Recently, there has been growing concern about the presence of emerging and masked *Fusarium* mycotoxins in agricultural products. Although the metabolic fate of masked mycotoxins is still a topic of scientific debate, these toxins have garnered global attention due to their potential impact on human and animal health.

This review aims to provide an overview of *Fusarium* mycotoxins and their metabolites, including information on their types, occurrence, and health effects. By highlighting the importance of further research on the integrated management of this unavoidable food contaminant, we hope to address the increasing concerns regarding food safety on a global scale. Furthermore, the implementation of management strategies for *Fusarium* species, incorporating both chemical and biological methods, can effectively mitigate the progression of plant diseases and reduce the production of toxins.

Keywords: Mycotoxins, *Fusarium*, management

ISBN NR: 978-625-6283-33-6

SÜLEYMAN DEMİREL ANIT MEZARININ PEYZAJ MİMARLIĞI AÇISINDAN İNCELENMESİ

Prof. Dr. Candan KUŞ ŞAHİN
Süleyman Demirel Üniversitesi, - 0000-0002-0413-2380
Dr. Öğretim Üyesi Büşra ONAY
Afyon Kocatepe Üniversitesi, - 0000-0003-3126-2276

ÖZET

Yaşamlarıyla, canlı kaldığı dönemde önemli olaylarda adı geçmiş insanlara anıt mezar yaptırma geleneği çok eski dönemlerden süregelmektedir. Farklı toplumların, çevrelerin ve yörelerin, farklı defin ve mezarlık gelenekleri vardır ve buna paralel olarak mezarlık düzenleme şekilleri farklılık göstermektedir. Yaptığı işler ile halkın beğenisini kazanmış ve yine halk tarafından önem gösterilen kişilerin açık mezarlıklar haricinde bir yere defnedilmesi ve orada ayrıca bir anıt yapısının yapılması ile şekillenmiş olan anıt mezarları diğer mezarlardan ya da mezarlıklardan ayrılan en önemli özelliği, özel bir kişi için yaptırılmış olması ve daha gösterişli yapısal ve bitkisel materyaller içermesidir. Bu çalışmada 1993-2000 yılları arasında Türkiye'nin 9. Cumhurbaşkanı olarak görev yapan Süleyman Demirel'in Isparta-İslamköy'de yapılan anıt mezarı peyzaj mimarlığı açsından incelenmiştir. Bu kapsamda literatür bilgileri ışığında anıt mezarların çevre düzenlemeleri hakkında bilgiler ortaya konulmuş ve çalışmaya konu olan Süleyman Demirel anıt mezarı çevresinde bulunan yapısal ve bitkisel elemanlar detaylı bir şekilde incelenmiştir.

Anahtar Kelimeler: Süleyman Demirel, Anıt mezar, Isparta, İslamköy.

EXAMINATION OF SULEYMAN DEMIREL MAUSOLEUM TERMS OF LANDSCAPE ARCHITECTURE

ABSTRACT

The tradition of building monumental tombs for people who have made a name for themselves in important events during their lifetime has been going on since ancient times. Different societies, environments and regions have different burial and cemetery traditions, and in parallel with this, the way they organize cemeteries differs. The most important feature that distinguishes monumental tombs, which are shaped by the burial of people who have won the admiration of the public with their works and who are also considered important by the public, in a place other than open cemeteries and the construction of a monumental structure there, from other tombs or cemeteries, is that they were built for a special person and contain more spectacular structural and vegetal materials. In this study, the mausoleum of Süleyman Demirel, who served as the 9th President of Turkey between 1993-2000, in Isparta-Islamköy was analyzed in terms of landscape architecture. In this context, in the light of the literature,

ISBN NR: 978-625-6283-33-6

information about the landscaping of the mausoleums was put forward and the structural and vegetal elements around the Süleyman Demirel mausoleum, which is the subject of the study, were examined in detail.

Keyword: Suleyman Demirel, Mausoleum, Isparta, Islamköy.

ISBN NR: 978-625-6283-33-6

KENTSEL YEŞİL ALANLARDA YERLİ BİTKİ KULLANIMININ ÖNEMİ VE ERZURUM İLİ ÖRNEĞİNDE YERLİ BİTKİLERDEN YARARLANMA OLANAKLARININ DEĞERLENDİRİLMESİ

Dr. Öğr. Üyesi, Mustafa ÖZGERİŞ

Atatürk Üniversitesi
Mimarlık ve Tasarım Fakültesi
Peyzaj Mimarlığı Bölümü
ORCID: 0000-0003-1006-9303

Özet

Kentsel yeşil alanlar kent içindeki ekolojik işleyişlerin yerine getirilmesinde ve insan odaklı faydaların üretilmesinde en büyük pay sahibi olan ve şehirlerin sürdürülebilir kalkınmasında önemli bir rol oynayan alanlardır. Kentsel yeşil alanların kent ekosistemindeki fonksiyonlarını verimli bir şekilde yerine getirmesinde en önemli unsurlardan biri ise doğru bitki türlerinin kullanılmasıdır. Ancak günümüzde popüler bir anlayış olarak, yeşil alanlarda geniş çim yüzeylerinin oluşturulması ve yerli olmayan/egzotik bitki türlerinin kullanılması yaygındır. Bu popüler anlayışın kent ekosistemine olan katkısının sınırlı olduğu son yapılan araştırmalarla ortaya konulmaktadır. Bununla birlikte, kentsel yeşil alanların kent ekosistemi içindeki fonksiyonlarını yerine getirmesinde önemli unsurlardan birinin bitkisel donatı olarak yerli bitkilerin kullanımı olduğu belirtilmektedir. Yerli bitkiler, belirli bir bölgede veya ekosistemde çok uzun yıllarca gelişen ve doğanın bir parçası olan bitkilerdir. Kentsel yeşil alanlarda yerli bitki kullanımı biyoçeşitliliğin korunması, ekolojik işleyişlerin sürdürülebilirliği, ekosistem direncinin oluşturulması ve ekosistem hizmetlerinin verimli bir şekilde üretilebilmesi konularında önemli faydalar sağlamaktadır. Ayrıca kentsel yeşil alanlarda yerli bitki kullanımı bir bölgenin doğal mirasını korumak, bu mirası kent halkına tanıtmak ve sürdürülebilir kentsel gelişim için bir unsur olarak görülmektedir. Bu çalışma Erzurum ili örneğinde doğal bitki örtüsünde var olan ve kentsel yeşil alanlarda kullanılabilme potansiyeli taşıyan odunsu gövdeli ağaç, ağaççık ve çalıların araştırılması amacıyla yürütülmüştür. Çalışma kapsamındaki bitkilerin belirlenebilmesi için Türkiye Bitkileri Veri Servisi'nden (Tübives) yararlanılmıştır. Çalışma ile Erzurum ilinin sahip olduğu 1392 bitki taksonu içerisinde kentsel yeşil alanlarda kullanılabilme potansiyeli taşıyan 63 odunsu bitki taksonu saptanmıştır.

Anahtar Kelimeler: Erzurum, Kentsel yeşil alan, Sürdürülebilirlik, Yerli bitki.

ISBN NR: 978-625-6283-33-6

THE IMPORTANCE OF NATİVE PLANT USE İN URBAN GREEN AREAS AND EVALUATİON OF THE OPPORTUNİTİES OF UTİLİSATİON OF NATİVE PLANTS İN ERZURUM CİTY SAMPLE

Abstract

Urban green areas are the areas that have the biggest share in the fulfilment of ecological functions in the city and the production of human-oriented benefits and play an important role in the sustainable development of cities. One of the most important factors for urban green areas to fulfil their functions in the urban ecosystem efficiently is the use of the right plant species. However, as a popular understanding today, it is common to create large grass surfaces in green areas and to use non-native/exotic plant species. Recent studies show that the contribution of this popular understanding to the urban ecosystem is limited. However, it is stated that one of the important elements in the fulfilment of the functions of urban green areas in the urban ecosystem is the use of native plants as plant reinforcement. Native plants are plants that have developed in a particular region or ecosystem for many years and are part of nature. The use of native plants in urban green areas provides important benefits in the protection of biodiversity, sustainability of ecological functions, creation of ecosystem resilience and efficient production of ecosystem services. In addition, the use of native plants in urban green areas is seen as an element for protecting the natural heritage of a region, introducing this heritage to the city people and sustainable urban development. This study was carried out to investigate the trees, shrubs and shrubs with woody stems that exist in natural vegetation in Erzurum province and have the potential to be used in urban green areas. The Plants of Turkey Data Service (Tübives) was used to identify the plants within the scope of the study. The study identified 63 woody plant taxa that have the potential to be used in urban green areas among the 1392 plant taxa of Erzurum province.

Keywords: Erzurum, Native plant, Urban green space, Sustainability.

ISBN NR: 978-625-6283-33-6

İKLİM DEĞİŞİKLİĞİ KIRILGANLIĞININ AZALTILMASINDA AÇIK YEŞİL ALANLARIN ÖNEMİ

Doç. Dr. Zeynep PİRSELİMOĞLU BATMAN

Bursa Uludağ Üniversitesi

- 0000-0003-2145-2682

Kübra Nur SAFALI

Bursa Uludağ Üniversitesi

- 0009-0002-7393-7294

ÖZET

Doğa üzerindeki bütün canlılar temel ihtiyaçlarını karşılayabilmek ve yaşam standartlarının sürdürülebilirliğini sağlamak amacıyla enerjiyi kullanır. Geçmişten günümüze ilerleyen süreç içerisinde ihtiyaç ve taleplere yönelik enerji kullanımı ve enerji kaynağının fosil yakıtlar oluşunun sebep oluşturduğu iklim değişikliği, etkilerini ve şiddetini gün geçtikçe artıran küresel bir çevre sorunudur. İklim değişikliği ile birlikte ekosistem üzerindeki insan faaliyetine bağlı olarak gelişen tahribat, biyoçeşitliliğin zarar görmesi, yeşil alan kaybı ve ormansızlaşma gibi etkiler, iklim değişikliğini hızlandırarak kent ekosistemi üzerinde değişikliğe neden olur. Kentleşme ve sanayileşmenin boyutuna ve oluşturduğu talebe yönelik beraberinde getirdiği bu değişiklikler, kent ekosistemini olumsuz yönde etkiler. İklim değişikliğinin kentleşme ve sanayileşmeye bağlı olarak etkilerini artırdığı bu durumdan zaman içerisinde meydana gelen arazi kullanımındaki değişiklikler ile birlikte açık yeşil alanların mevcut peyzaj varlığının yapısı, özelliği ve sürdürülebilirliği de etkilenmektedir. Küresel çapta canlı yaşamını tehdit eden iklim değişikliği sorunu etkilerini herhangi bir sistem, coğrafi bölge veya belirlenmiş alanlar üzerinde aynı etki derecesi ve hızla göstermeyişi; her bölge için bölgenin özellikleri, koşulları ve taleplerine yönelik strateji geliştirilmesini gerektirir. Her bölgenin iklim değişikliğinden etkilenme durumu farklı olduğu gibi iklim değişikliğine neden olan etkiler de farklıdır. Bu bağlamda ortaya çıkan kırılganlık veya etkilenme düzeyinin azaltılması amacı ile tehlike ve risklerin önlenebilmesi için açık yeşil alan varlığı, korunumu ve sayıca artırılması oldukça önem kazanmaktadır. Bu çalışma kapsamında iklim değişikliğinin olmuş ve olası etkileri incelenerek iklim değişikliğine sebep olan özellikler ve koşullar kırılganlık bağlamında ele alınmıştır. Bu doğrultuda iklim değişikliğine bağlı olarak peyzaj varlığının önemi değerlendirilerek kırılganlık düzeyinin azaltılması amacıyla öneriler geliştirilmiştir.

Anahtar Kelimeler: Açık yeşil alanlar, iklim değişikliği, iklim değişikliği kırılganlığı

ISBN NR: 978-625-6283-33-6

SÜRDÜRÜLEBİLİR KENT EKOLOJİSİNDE DİKEY BAHÇELERİN ÖNEMİ

Doç. Dr., Zeynep DUMANOGLU
Bingöl Üniversitesi,
- ORCID ID: 0000-0002-7889-9015

Dr. Öğretim Üyesi, Ayşenur AKBANA
Bingöl Üniversitesi,
- ORCID ID: 0000-0003-0394-7278

ÖZET

Nüfus artışıyla birlikte gün geçtikçe kentler genişlemektedir. Ancak yaşam şartlarının zorluğu ve yoğunluğu kentlerde yaşayan özellikle çalışan insanların fiziksel ve ruhsal sağlıklarını olumsuz yönde etkilemektedir. Bunların yanında, yeşil alan miktarının yeterli düzeyde olmaması, artan konut ihtiyacından dolayı çok katlı binaların yapılması, doğru ve kullanışlı kent planlamalarının yapılamaması gibi pek çok faktör ekolojik olarak kentlerin sürdürülebilirliğinin olumsuz yönde etkilemektedir. Bu nedenle, kent yaşamı içerisinde alternatif yeşil alanlar oluşturulmaya başlanmıştır. Dikey bahçeler, ekonomik, ekolojik ve estetik olarak bu ihtiyacı karşılamak amacıyla değerlendirilmektedir. Bu çalışmada, sürdürülebilir kent ekolojisi açısından dikey bahçe kavramı, bazı uygulama yöntemleri ve önemine vurgu yapılmıştır.

Anahtar Kelimeler : Kent ekolojisi, dikey bahçeler, yeşil alanlar

ISBN NR: 978-625-6283-33-6

ÇEVRESEL GÜRÜLTÜNÜN ÖZEL EĞİTİM ANAOKULU YAPISINDA DEĞERLENDİRİLMESİ: BOLU ÖRNEĞİ

Arş. Gör., Betül BİLGEHAN DULKADİROĞLU
Bolu Abant İzzet Baysal Üniversitesi, Mimarlık Fakültesi, Mimarlık Bölümü
, 0000-0002-1225-9250

Doç. Dr., Alper BİDECİ
Düzce Üniversitesi, Sanat, Tasarım ve Mimarlık Fakültesi, Mimarlık Bölümü
, 0000-0003-2385-7552

ÖZET

İnsanlar rahatsız ve memnuniyetsiz hissedecekleri ortamlardan bilinçli ya da bilinçsiz olarak kaçınarak konforlu hissedecekleri duruma doğru yer değiştirme eğilimindedir. Kişinin olumlu çevre koşullarına sahip bir ortamda bulunması, fiziksel ve zihinsel sağlığını etkilerken duygusal tepkiler üzerinde de belirleyicidir. Konfor, güvenlik ve erişilebilirlik konularını kapsayan ulusal ve uluslararası standartlarda ele alınmıştır ve genel olarak nörotipik insanlara odaklanmaktadır. Farklı ihtiyaçları olan insanlara yönelik ayrıntı ve bölümler eksik olup bu durum hassas grup içerisinde yer alan özel gereksinimli çocuklar için ilgili alanda çalışma yapılması ihtiyacını doğurmaktadır. Çocuklar okul öncesi eğitimden itibaren zamanlarının çoğunu eğitim aldıkları kurumda geçirirler ve okul öncesi eğitimde sosyal çevre kadar fiziksel çevre de önemlidir. Konforsuz iç mekân koşullarının öğrencilerin bilişsel performansını negatif etkileyerek okulların pedagojik rolü üzerinde olumsuz etki oluşturabileceği göz önünde bulundurularak sınıflarda iç mekân konfor koşullarının uygunluğuna dikkat edilmesi gerekmektedir. Eğitim yapı tasarımında özel eğitim gerektiren çocukların nörotipik bireylerden fiziksel açıdan farklılıkları dikkate alınmaktadır fakat duyusal açıdan hassasiyetleri ihmal edilmektedir. Tüm bunların sonucu olarak çalışma kapsamında iç mekân konfor parametreleri alt başlığı içerisinde yer alan çevresel gürültüye odaklanılmış, özel eğitim anaokulu özelinde nicel veriler üzerinden değerlendirme yapılmıştır. Yapılan alan çalışmasında yapı dışı gürültü kaynaklarından inşaat faaliyetlerine bağlı inşaat gürültüsünün öne çıktığı belirlenmiş, ölçümlerde uzun süreli maruz kalınması halinde kalıcı hasara neden olabilecek darbeli gürültü oluşumu kaynaklı 85 dBA ve üzerine ses seviyesi düzeyi tespit edilmiştir.

Anahtar Kelimeler: Özel eğitim yapısı, çevresel gürültü, işitsel konfor

ISBN NR: 978-625-6283-33-6

SÜRDÜRÜLEBİLİR KENTSEL HAREKETLİLİK PLANLARININ (SKHP) KENTSEL DİRENÇLİLİK GÖSTERGELERİ BAĞLAMINDA DEĞERLENDİRİLMESİ-KONYA SKHP ÖRNEĞİ[1]

Elif YERLİKAYA
Erciyes Üniversitesi,
0000-0001-7903-4008
Prof. Dr. Ozan HOVARDAOĞLU
Erciyes Üniversitesi,
0000-0003-2680-6582

ÖZET

Günümüzde kentlerin krizlere karşı dirençli olma ve değişen koşullara uyum sağlama kapasitesi giderek önem kazanmaktadır. Kentsel dirençlilik, geniş çaplı yıkıcı olaylara karşı toplumsal, ekonomik ve çevresel bileşenlerin dayanıklılığını artıran kritik bir kavramdır. İklim değişikliği ve afet risk yönetimi gibi konularda dirençliliği artırmak, kentlerin sürdürülebilir kalkınma hedeflerine ulaşmasında önemli rol oynar. Bu çalışma, Sürdürülebilir Kentsel Hareketlilik Planlarının (SKHP) kentsel dirençlilik göstergeleri bağlamında değerlendirilmesi ve sürdürülebilir ulaşımın kentsel dirençliliğe etkisini incelemeyi amaçlamaktadır. Konya kenti özelinde hazırlanan Konya SKHP ele alınarak "Sürdürülebilir, İklim Dostu Konya" senaryosu üzerinden örnek teşkil edebileceği düşünülmüştür. Literatür taraması ve vaka analizi yöntemleri kullanılarak, kentsel dirençlilik ve sürdürülebilir kentsel hareketlilik kavramları incelenmiş, Konya SKHP'nin mevcut durumu analiz edilerek kentsel dirençlilik göstergeleri bağlamında değerlendirilmiştir. Sonuçlar, Konya SKHP'nin çeşitli dirençlilik göstergeleri açısından olumlu olduğunu ortaya koymuştur. Toplu taşıma altyapısının geliştirilmesi, yaya ve bisiklet yollarının yaygınlaştırılması ve trafik yönetim sistemlerinin iyileştirilmesi gibi unsurlar, çevresel sürdürülebilirliği ve toplumsal dirençliliği artırmaktadır. Bununla birlikte vatandaş farkındalığı ve katılım süreçlerinde iyileştirmeler yapılması önerilmektedir.

Anahtar Kelimeler: Kentsel Dirençlilik, Sürdürülebilir Ulaşım, Konya SKHP

[1] Bu çalışma Erciyes Üniversitesi, Fen Bilimleri Enstitüsü, Şehir ve Bölge Planlama programındaki "SÜRDÜRÜLEBİLİR KENTSEL HAREKETLİLİK PLANLARININ (SKHP) KENTSEL DİRENÇLİLİK GÖSTERGELERİ BAĞLAMINDA DEĞERLENDİRİLMESİ-KONYA SKHP ÖRNEĞİ" başlıklı Yüksek Lisans tezinden üretilmiştir. Tez yayın sürecindedir.

ISBN NR: 978-625-6283-33-6

ÇERÇEVELİ BETONARME SİSTEMLİ İŞYERİ YAPILARINDA ZEMİN KATTA ASMA KAT OLUŞTURULMASININ YAPISAL DAVRANIŞA ETKİSİ

Doç. Dr., Muhammet Zeki ÖZYURT
Sakarya Üniversitesi, - 0000-0002-1593-4581
Lisans Öğrencisi, Abdulrahman SARHAN
Sakarya Üniversitesi, - 0009-0006-3787-896X

ÖZET

Deprem tehlikesi, ülkemizin jeodinamik konumu nedeniyle sürekli gündemde olan bir konudur. Alp-Himalaya deprem kuşağında yer alan ve birçok aktif fay hattına sahip olan Türkiye, tarihi boyunca ciddi maddi ve manevi kayıplara yol açan depremler yaşamıştır. Özellikle 2023, 6 Şubat tarihinde meydana gelen deprem buna verilecek en çarpıcı örneklerden biridir. Bu durum, yapıların deprem güvenliği açısından tasarımının ne kadar önemli olduğunu ortaya koymaktadır. Diğer taraftan, özellikle işyeri türü binalarda, farklı kullanım amaçlarına yönelik olarak zemin katında asma kat bulunan ve kat yükseklikleri değişen betonarme yapılar inşa edilmektedir. Bu bağlamda, zemin katında asma kat bulunan az ve çok katlı betonarme yapıların deprem davranışlarının incelenmesi gerekmektedir. Bu çalışmanın temel amacı, planda iki yönde oluşturulan asma katın, işyeri türü betonarme yapıların deprem karakteristikleri üzerindeki etkisini araştırmaktır. Bu çalışmada taşıyıcı sistemi simetrik olarak tasarlanmış bir çerçeveli 3 katlı betonarme yapılar incelenmiştir. Yapının taşıyıcı elemanlarının ve geometrisinin simetrik olarak seçilmesinin amacı, burulma düzensizliği bulunmayan bir taşıyıcı sistem düzeni elde etmektir. Bütün yapı tiplerinde normal kat yükseklikleri 3 metredir. Giriş ve asma kat yükseklikleri ise zemin katı 7,0 m olan modellerde sırasıyla 3,5 ve 3,5 metre, zemin katı 6,5 metre olan modellerde 3,5 ve 3,0 m, zemin katı 6,0 metre olan modellerde ise 3,0 ve 3,0 metre seçilmiştir. Yapısal analizler, Eşdeğer Deprem Yükü yöntemi kullanılarak gerçekleştirilmiştir. Aynı asma kat tipi için farklı zemin kat yükseklikleri ile asma kat yükseklikleri kullanılarak toplam altı farklı yapı modeli oluşturulmuştur. İncelenen bütün yapı tiplerine ait modellerin analizleri Sap2000 programı ortamında gerçekleştirilmiştir. İncelenen modellerin yapısal davranışlarını irdelemek amacıyla; bina periyotları, taban kesme kuvvetleri, tepe noktası maksimum yer değiştirmesi ve yumuşak kat düzensizliğin katsayıları karşılaştırılmıştır.

Anahtar Kelimeler: Eşdeğer Deprem Yükü Yöntemi, Yumuşak Kat Düzensizliği, Betonarme Yapı, Yapısal Davranış

ISBN NR: 978-625-6283-33-6

ASMA KATIN PERDELERİ-ÇERÇEVELİ BETONARME SİSTEMLİ 3 KATLI İŞYERİ YAPILARDA YAPISAL DAVRANIŞA ETKİSİ

Doç. Dr., Muhammet Zeki ÖZYURT
Sakarya Üniversitesi, - 0000-0002-1593-4581
Lisans Öğrencisi, İbrahim ALAHMAD
Sakarya Üniversitesi, - 0009-0005-9291-5981

ÖZET

Zemin katın yüksekliği, bir binanın genel yapısal performansını önemli ölçüde etkileyen bir faktördür. Çünkü zemin kat, binanın diğer katlarına taşıyıcı yükleri ileten bir köprü görevi görür. Bu nedenle, zemin kat yüksekliğinin artması veya azalması, binanın genel stabilitesi, rijitliği ve dayanıklılığı üzerinde belirleyici bir rol oynar. Betonarme yapılar yatay yüklere de yeterli dayanımda olmalıdır. Yapım yöntemlerinin gelişmesiyle çok katlı yapılarda konut + işyeri kullanım alanlarının ortak bir yapıda birleşmesi ile karma yapı kullanımı ihtiyacına çözüm getirmiştir. İnsanların çeşitli ihtiyaçlarını ve fonksiyonel davranışlarını mekânsal olarak karşılayan, şehir planlaması gibi katkı sağlayan çok katlı yapılar, betonarme yapı alanını azaltıp daha fazla yeşil alan kullanımına imkân sağlamaktadır. Bunun için deprem, rüzgâr vs (yatay yükler) karşılayacak farklı yapısal sistemler geliştirilmiş olup, o sistemlerden biri de yapının taşıyıcıları arasına perde duvarlar koymaktır. Bu çalışmada taşıyıcı sistemi simetrik olarak tasarlanmış bir perdeli- çerçeveli 3 katlı betonarme yapılar incelenmiştir. Modellerde; normal kat yükseklikleri 3 metredir. Giriş ve asma kat yükseklikleri ise zemin katı 7,0 m olan modellerde sırasıyla 3,5 ve 3,5 metre, zemin katı 6,5 metre olan modellerde 3,5 ve 3,0 m, zemin katı 6,0 metre olan modellerde ise 3,0 ve 3,0 metre seçilmiştir. Yapının taşıyıcı elemanlarının ve geometrisinin simetrik olarak seçilmesinin amacı, burulma düzensizliği bulunmayan bir taşıyıcı sistem düzeni elde etmektir. Çalışmada, Eşdeğer Deprem Yükü yöntemi kullanılarak yapısal analizler gerçekleştirilmiştir. Aynı asma kat tipi için farklı zemin kat yükseklikleri ile asma kat yükseklikleri kullanılarak toplam altı farklı yapı modeli oluşturulmuştur. İncelenen bütün yapı tiplerine ait modellerin analizleri Sap2000 programında (eşdeğer deprem yükü yönetimi) kullanılarak yapılmıştır. Sonuç kısmında; incelenen modellerin yapısal davranışlarını karşılaştırmak amacıyla, bina periyotları, taban kesme kuvvetleri, tepe noktası maksimum yer değiştirmesi ve yumuşak kat düzensizliğin katsayıları karşılaştırılmıştır.

Anahtar Kelimeler: Perdeli-Çerçeveli Sistem, Betonarme Yapı, Yapısal Davranış.

ISBN NR: 978-625-6283-33-6

THE IMPORTANCE OF GEOTECHNICAL MAPPING IN CREATING CITIES RESISTANT TO NATURAL DISASTERS

Assist. Prof. Dr.Necmi YARBAŞI

Atatürk University, Faculty of Engineering, Department of Civil Engineering
nyarbasi@atauni.edu.tr - Orcid ID: 0000-0003-4259-1278

ABSTRACT

Natural disasters are naturally occurring processes that endanger human life and engineering structures. Earthquakes, floods, landslides, rock falls, and volcanic events can be given as examples of natural disasters. These events that we define as disasters are natural. If human beings do not take the necessary precautions against these natural events in advance, it becomes inevitable that these natural events will turn into natural disasters and cause loss of life and property. Nowadays, strategic plans need to be developed, taking into account the rapid increase in the human population and the construction of sustainable and resilient cities against these natural events that turn into disasters and their environmental effects. Geotechnical map studies will make a great contribution to city planning studies. This contribution is Geotechnical mapping, which allows many engineering fields to work together. This map, which emerged as a result of geotechnical mapping studies, will be an important and basic source of information containing the basic data needed by city-regional planners, architects, and civil engineers in selecting suitable locations for engineering structures of different types and sizes and determining construction areas. Natural events turning into natural disasters are possible processes. However, when the engineering structure production on the surface is adapted to underground conditions, technologically compatible, environmentally sensitive, and resilient cities that prevent natural events from turning into natural disasters can be created.

Keywords: Geotechnical mapping, natural disaster, geology

ISBN NR: 978-625-6283-33-6

INDOOR RADON GAS MEASUREMENTS ON THE EUROPEAN AND ANATOLIAN SIDES OF ISTANBUL

Elif YELKENBİÇER
İstanbul University,
Rana ERTEKİN
İstanbul University, rana.ertekin@ogr.iu.edu.tr
Gizem YILMAZLI
İstanbul University,
Araş. Gör. Dr., Nurgül HAFIZOĞLU ALKAN
İstanbul University, - 0000-0002-0869-070X

ABSTRACT

Natural radiation makes the largest contribution to the total radiation dose received by humans, with the main source of 55 % coming from radon (^{222}Rn) gas. Radon is a radioactive noble gas that forms in the environment as a decay product of the ^{238}U decay series. Radon gas, which has no color, odor or taste, is released from the soil and rocks in which it is trapped and mixes with the water we drink and the air we breathe, and radon concentrations in indoor environments increase. Therefore, it is important to determine radon concentrations in closed areas.

In this study, indoor radon concentration measurements were carried out in four separate buildings located in Sultangazi and Gaziosmanpaşa districts on the European side of Istanbul and in Suadiye and Bostancı districts on the Anatolian side of Istanbul. Measurements were taken from one flat on the top and ground floors of these four buildings and two rooms in each flat. Measurements were carried out using LR-115 solid-state tracer detectors. The highest indoor radon concentration was detected in the Gaziosmanpaşa region with 80.1 Bq/m3. According to radon activity concentrations, the annual effective dose levels to which people living in these houses will be exposed have also been determined. The data obtained were compared with the limit values determined by USEPA, UNSCEAR and WHO and the results of studies conducted in various parts of the world.

Keywords : Natural radioactivity, LR-115, Radon

ISBN NR: 978-625-6283-33-6

SİİRT İLİ MEVCUT ULAŞIM ALTYAPISININ DEĞERLENDİRİLMESİ

Dr. Öğr. Üyesi, AYŞE ÜNAL
Siirt Üniversitesi,
- 0000-0002-3262-135X

Mervan Baran BUZDAĞ
Siirt Üniversitesi,

ÖZET

Karmaşık bir ağ olarak ulaşım altyapısı, şehirleri birbirine bağlamakla birlikte sosyal, ekonomik ve çevresel sistemleri kentleşme ve nüfus artışıyla birleştiren insan faaliyetlerini barındırmaktadır. Ek olarak ulaşım ağı, kentleşme sırasında şehirler arası ve şehir içi bağlantılar oluşturarak sosyoekomik kalkınmaya ve yaşam kalitesinin artmasına katkıda bulunmaktadır. Bir başka deyişle ulaşım kolaylığı şehirlerin çok yönlü gelişebilmesi için itici bir güç görevi sağlamaktadır.

Siirt, Güneydoğu Anadolu Bölgesi'nde yer alan illerden biridir. Ulaşım açısından sahip olduğu tarımsal zenginlik ve inanç turizmi gibi önemli lokasyonları ile ulaşım talebi oluşturmakla birlikte gerek coğrafi konumu gerekse sahip olduğu ulaşım altyapısı ile yük ve yolcular için önemli bir güzergâh üzerindedir. Karayolu, şehirdeki en önemli ulaşım modunu oluşturmaktadır. Tarihi önemi bulunan Kurtalan Ekspres demiryolu hattı ve havayolları da şehirde yolcu ve yük taşımacılığında önemli bir yere sahiptir. Bu çalışmada farklı ulaşım türleri ayrı ayrı ele alınmış, ulaşım türlerinin Siirt ve kentiçi ulaşımda mevcut altyapıları değerlendirilmiştir. Ulaşım türlerinde yaşanan temel sorun ve eksiklikler doğrultusunda çözüm önerileri oluşturulmuştur.

Anahtar Kelimeler : Ulaşım, ulaşım planlaması, Siirt

EVALUATION of the EXISTING TRANSPORTATION INFRASTRUCTURE in SİİRT PROVINCE

ABSTRACT

As a complex network, transportation infrastructure connects cities and accommodates human activities that combine social, economic and environmental systems with urbanization and population growth. In addition, the transportation network contributes to socioeconomic development and increased quality of life by creating intercity and intracity connections during urbanization. In other words, ease of transportation provides a driving force for the versatile development of cities.

ISBN NR: 978-625-6283-33-6

Siirt is one of the provinces located in the Southeastern Anatolia Region. While it creates transportation demand with its important locations such as agricultural richness and religious tourism, it is on an important route for cargo and passengers with its geographical location and transportation infrastructure. The highway constitutes the most important mode of transportation in the city. The historically important Kurtalan Express railway line and airlines also have an important place in passenger and freight transportation in the city. In this study, different transportation types were discussed separately and the existing infrastructures of transportation types in Siirt and urban transportation were evaluated. Solution suggestions have been created in line with the basic problems and deficiencies experienced in transportation modes.

Key Words: Transportation, transportation planning, Siirt

ISBN NR: 978-625-6283-33-6

SABİT KANATLI PERVANE TAHRİKLİ BİR HAVA ARACININ PERFORMANS İNCELEMESİ VE İYİLEŞTİRİLMESİ

Uçak Mühendisi, Selimcan ÖZDEMİR

Erciyes Üniversitesi-Uçak Mühendisliği, - 0009-0009-0335-1598

Prof. Dr., Tuğrul OKTAY

Erciyes Üniversitesi-Uçak Mühendisliği, - 0000-0003-4860-2230

ÖZET

Hava araçlarının performansı, tasarım ve işletme süreçlerinde büyük önem taşır. Bu nedenle, performansı değerlendirmek ve iyileştirmek için çeşitli analizler geliştirilmiştir. Bu tez, hava aracı performansının analiz edilmesi ve iyileştirilmesine odaklanarak çeşitli yöntemler ve analizler sunmaktadır. Hava aracının farklı uçuş aşamalarındaki performansını analiz etmek amacıyla MATLAB ortamında geliştirilen bir hesaplama programı kullanılmıştır. Bu analizler, zamana bağlı iç içe döngüler şeklinde kurulmuş ve bir uçuş fazının çıktısı diğer fazının girdisi olarak düzenlenmiştir. Çalışmada, farklı uçuş modlarını belirleyerek performans analizleri gerçekleştirmiş ve sonuçları MATLAB ve Excel programlarıyla sayısal veriler, grafikler ve tablolar aracılığıyla görselleştirip karşılaştırılmıştır. Çalışmanın devamında, sabit kanatlı pervane tahrikli bir hava aracının performansını iyileştirmek için güç-ağırlık oranı (P/W) ve kanat yüklemesi (W/S) parametrelerinin kombinasyonlarının etkisi incelenmiştir. Kalkış ve iniş mesafelerinin iyileştirilmesi için yapılan analizlerde, artan P/W oranının kalkış mesafesini azalttığı, ancak artan W/S oranının kalkış mesafesini artırdığı tespit edildi. Tırmanma hızı İyileştirilmesinde, daha yüksek bir P/W oranının tırmanma hızını artırdığı, ancak artan W/S oranının tırmanma hızını azalttığı belirlendi. Alçalma ve Seyir evresinde en uzun uçuş süresi ve menzil için yapılan optimizasyonlar incelendi ve optimal uçuş profilleri belirlendi. W/S ve P/W tasarım parametresinin maksimum hız üzerindeki etkileri ve W/S oranının stall hızı, uçuş zarfı ve tavan irtifası üzerinde belirleyici bir etkiye sahip olduğu ve bu parametrenin dikkatli bir şekilde belirlenmesi gerektiği vurgulandı.

Anahtar Kelimeler : Uçuş Performans, Optimizasyon, veri analizi

ISBN NR: 978-625-6283-33-6

MGO NANOPARTİKÜL MADDE KATKILI BİYODİZEL YAKIT KARIŞIMININ BİR DİZEL MOTORDA YANMA PARAMETRELERİNE ETKİSİNİN ARAŞTIRILMASI[1]

Yüksek lisans Öğrencisi, MEHMET ALİ DEMİR*
Batman Üniversitesi,
ORCID: 0009-0002-5068-2065

Doç. Dr. SELMAN AYDIN
Batman Üniversitesi,
ORCID: 0000-0001-9685-9853

ÖZET

Biyodizel yakıt karışımlarının enerji değeri, donma noktası gibi özellikleri, dizel yakıtına kıyasla yetersiz kalmaktadır ve bu yüzden çeşitli nanopartikül maddelerle geliştirilmesi gerekmektedir. Bu araştırmada, biyodizel yakıt karışımının kimyasal ve fiziksel niteliklerini iyileştirmek için BY35 yakıtına 120 ppm magnezyum oksit ilave edilmiştir. Deneylerde kullanılmak üzere test yakıtları; DY (dizel yakıtı), BY35(%35 biyodizel) ve metal nano MgO katkılı (120 ppm) yakıt (%65 dizel, %35 biyodizel ve 120 ppm MgO) olarak hazırlanmıştır. Bu test yakıtları bir dizel araştırma motorunda yanma verileri almış ve katkı maddesinin etkisi belirlemeye çalışılmıştır. BY35+120 ppm MgO karışımı 0,3 OEB (Ortalama efektif basınç) yük koşullarında B35 ve DY yakıtına göre en düşük silindir gaz basınç değerine sahiptir. 1,5 bar OEB motor koşulunda, BY35 karışımının motor yükü arttığında en düşük silindir gaz basınç değerine sahip olduğu belirlenmiştir. Bu bulgular, biyodizel karışımlarının motor performansı üzerinde önemli ipuçları sağlamaktadır. Ayrıca, BY35+120 ppm MgO yakıt karışımı, diğer yakıtlarla karşılaştırıldığında maksimum net ısı salınım değerinin en düşük olduğunu göstermektedir. BY35 biyoyakıt karışımı 0,3 OEB yük şartlarında diğer yakıtlara göre en düşük ortalama gaz sıcaklığına sahipken, 1,5 bar OEB' da ise DY'nin bu değeri en düşük seviyede olduğu tespit edilmiştir. Bu çalışma ile MgO katkı maddesinin aspir biyodizel yakıt karışımının yanma üzerindeki olumlu etkisi olduğu belirlemiştir.

Anahtar kelimeler: Dizel motor, Biyodizel, MgO, Nanopartikül, Yanma

[1] *Corresponding and presenting author at: Department of Materials and Manufacturing Engineering, Institute of Graduate Studies, Batman University, 72100, Batman,*

ISBN NR: 978-625-6283-33-6

MGO NANOPARTICLE ADDITIVES IN A BIODIESEL FUEL BLEND AN EXAMINATION OF THE IMPACT ON THE COMBUSTİON PARAMETERS OF A DIESEL ENGINE

The properties of biodiesel fuel blends such as energy value and freezing temperature are insufficient compared to diesel fuel and therefore need to be improved with various nanoparticulate materials. In this research, 120 ppm magnesium oxide was added to BY35 fuel to improve the chemical and physical properties of the biodiesel fuel blend. Test fuels for the experiments were prepared as DY (diesel fuel), BY35 (35% biodiesel) and MgO doped (120 ppm) fuel (65% diesel, 35% biodiesel and 120 ppm MgO). These test fuels were combusted in a diesel research engine and the effect of the additive was determined. BY35+120 ppm MgO blend has the lowest cylinder gas pressure value compared to B35 and DY fuel at 0.3 Bmep (Brake mean effective pressure) load conditions. At 1.5 bar Bmep engine condition, BY35 blend has the lowest cylinder gas pressure value when the engine load increases. These findings provide important clues on the engine performance of biodiesel blends. Furthermore, BY35+120 ppm MgO fuel blend shows the lowest maximum net heat release value compared to other fuels. In addition, the addition of nanoparticles to BY35+120 fuel increased the net heat release in the uncontrolled combustion phase compared to BY35 fuel. In addition, the addition of nanoparticles to BY35+120 fuel increased the net heat release in the uncontrolled combustion phase compared to BY35 fuel. While BY35 biofuel blend had the lowest average gas temperature compared to other fuels at 0.3 Bmep load conditions, at 1.5 bar Bmep, this value of DY was found to be the lowest. With this study, it was determined that MgO additive has a positive effect on the combustion performance of safflower biodiesel fuel blend.

Keywords: Diesel Engine, Biodiesel, MgO, Nanoparticle, Combustion

ISBN NR: 978-625-6283-33-6

OYUN ENDÜSTRİSİNİN GELECEK TAHMİNİNDE YAPAY SİNİR AĞLARI VE ÇOKLU DOĞRUSAL REGRESYON YÖNTEMLERİNİN KULLANIMI

Sinan ENDİRCE

Karabük Üniversitesi

- 0009-0001-6430-4383

Dr. Öğr. Üyesi, Erkan Sami KOKTEN

Karabük Üniversitesi

- 0000-0003-3428-4534

ÖZET

Yapay Sinir Ağları ve çoklu doğrusal regresyon yöntemleri ile oyun sektöründeki oyuncu sayısını tahminlemek mümkündür. Bu, sektörde faaliyet gösteren firmalar için oyuncu sayısındaki dalgalanmaları analiz etmek ve önlem almak açısından önem arz etmektedir. Bu çalışmada oyun yapım şirketlerinin fiyat politikaları ve oyun türleri gibi oyun elementleri gözden geçirilmiştir. Çalışma kapsamında elde edilen verilerden yararlanılarak yapay sinir ağları ve regresyon modelleri oluşturulmuştur. Sonuç olarak yapay sinir ağı modelinin tahmin performansının çoklu doğrusal regresyona göre daha yüksek olduğu tespit edilmiştir.

Anahtar Kelimeler: Yapar Sinir Ağları, Video Oyunu, Oyuncu, Tahminleme, Regresyon

ISBN NR: 978-625-6283-33-6

PROFİL ÜRETİMİNDE KALİTE PERFORMANSININ U-ŞEMASI İLE İNCELENMESİ

Zeynep KULAKSIZ
Karabük Üniversitesi
- 0009-0001-8943-8855

Dr. Öğr. Üyesi, Erkan Sami KOKTEN
Karabük Üniversitesi
- 0000-0003-3428-4534

ÖZET

İstatistiksel Kalite Kontrol (İKK) yöntemleri, bir üretim sürecindeki değişkenlikleri kontrol etmek, hataları tanımlamak ve sürekli olarak iyileştirmek için kullanılan istatistiksel araçlar ve teknikleri içermektedir. Bu yöntemler, iş süreçlerinin istikrarını sağlamak, ürün veya hizmet kalitesini artırmak ve müşteri memnuniyetini en üst düzeye çıkarmak amacıyla yaygın olarak kullanılmaktadır. Bu çalışmada, profil üretimi yapan bir işletmede üretimde karşlaşılan hata türlerini belirlemek ve hata sayılarını azaltmak amaçlanmıştır. Üretim sürecini kontrol etmek ve kaliteyi iyileştirebilmek amacıyla u-kontrol (birim başına kusur sayısı) şeması, pareto analizi ve neden-sonuç diyagramından yararlanılmıştır. Çalışma sonucunda süreçte çapak, ölçü bozukluğu, paso patlağı ve parça oluşumu gibi hata türleri ile karşılaşılmış olup, sürecin birim başına kusur sayısı açısından kontrol altında olmadığı tespit edilmiştir.

Anahtar Kelimeler: U-Kontrol Şeması, Kalite Kontrol, Pareto Analizi, Neden-Sonuç Diyagramı

ISBN NR: 978-625-6283-33-6

CAN BUS PROTOKOLÜ İLE HABERLEŞEN TAMAMI DİJİTAL SÜRÜCÜ GÖSTERGE PANELİNİN TASARIMI VE UYGULANMASI

Ar-Ge Elektrik Yazılım Mühendisi, Mehmet Kuş

Ulaşım İç ve Dış Ticaret A.Ş., 0009-0009-9174-792X

Ar-Ge Elektrik Yazılım Mühendisi, İbrahim Can Aydın

Ulaşım İç ve Dış Ticaret A.Ş., 0009-0006-3345-3390

ÖZET

Ulaşım, insanlık tarihinin ilk zamanlarından itibaren günümüze kadar en temel ihtiyaçlardan birisi olmuştur. Tekerleğin icadından günümüz teknolojisine kadar ulaşım her geçen zaman kendini daha da ileriye taşımıştır. Ulaşım insanlığın ilk zamanlarında temel olarak göç etme isteğiyle oluşsa da daha sonra özellikle ekonomik askeri ve idari sebepler ulaşımın alt yapısının önemini arttırmıştır. Temelinde insan taşımacılığını baz alan ulaşım sektörü ticari, mali ve askeri alanlarında da kendini göstermiştir. Yıllar geçtikçe insanların daha hızlı, konforlu ve daha güvenli bir şekilde daha uzun mesafelere daha kısa sürede ulaşma istekleri, ulaşım araçlarının sürekli gelişimine sebep olmuştur. Bu gelişim, ulaşım araçlarında güvenli sürüş ve sürücü konforu kavramlarını da ortaya çıkarmıştır. Bu kavramların ortaya çıkmasından sonra gösterge panellerindeki gelişim kaçınılmaz olmuştur. Şu an gelinen son noktada sürücü gösterge panellerinde tamamı dijital ekranlar kullanılmaktadır. Tamamı dijital olan gösterge panelleri daha ergonomik ve kapsamlı seçenekler sunmaktadır. Yüksek kontrast ve parlaklık, sürücünün uyarı ve ikazları daha iyi anlamasını sağlamaktadır. İnsan – Makine ara yüz tasarımıyla uyarı ve ikazların daha anlaşılır hale gelmesi sürüş güvenliğini de arttırmaktadır. Tamamen dijital ekranlı gösterge paneli kullanıldıktan sonra sürücünün araç yönetimine hakimiyeti ve araç güvenliğinin kontrol edilebilirliği arttırılmıştır. Araçlarda gösterge panellerinin bağlı olduğu kontrol ünitesi aynı zamanda aracın yönetimini sağlayabilmektedir. Bu nedenle çok fonksiyonlu bir yapısı vardır. Bu bildiri, tamamı dijital ekran olan gösterge panellerinin fonksiyonelliğine ve işlevselliğine değinmektedir.

Anahtar Kelimeler: Gösterge paneli, dijital ekran, sürüş güvenliği

ISBN NR: 978-625-6283-33-6

EXPLORING SPECTRAL METHODS FOR NUMERICAL SOLUTIONS OF STOCHASTIC DIFFERENTIAL EQUATIONS IN NEUROPHYSIOLOGY

Minoo Kamrani

University of Tehran

m.kamrani@ut.ac.ir

ORCID ID: https://orcid.org/0000-0002-5053-3839

ABSTRACT

Neurons, akin to elongated electrical cables, exhibit intricate dynamics describable by stochastic partial differential equations (SPDEs). In this study, we focus on the following specific SPDE characterizing the electrical potential (V) along neuronal structures

$$\frac{\partial V}{\partial t}(t.x) = \frac{\partial^2 V}{\partial x^2}(t.x) - V(t.x) + \dot{W}(t.x) \qquad t \geq 0 \quad x \in [0,L]$$

where $V(t.x)$ is the electrical potential at the point x at time t, and $\dot{W}(t.x)$ is the current arriving at x and at moment t.

Our objective is to derive a numerical solution approach for this SPDE, leveraging spectral methods. We propose a novel methodology and investigate its convergence properties.

Keywords: Stochastic partial differential equations, spectral methods, rate of convergence.

ISBN NR: 978-625-6283-33-6

STABILITY ANALYSIS OF THE SOLUTION OF STOCHASTIC DIFFERENTIAL EQUATION IN POPULATION GENETICS

Minoo Kamrani

University of Tehran

m.kamrani@ut.ac.ir

ORCID ID: https://orcid.org/0000-0002-5053-3839

ABSTRACT

Stochastic semi-linear equations serve as pivotal tools in the realm of population genetics, facilitating the modeling of temporal and spatial changes within populations. In this study, we delve into the analysis of a specific model capturing population dynamics:

$$dP(t.x) = \theta\ \Delta P(t.x)dt + \mu\sqrt{P_{+}(t.x)}\,dW \quad t \geq 0 \quad x \in [0,L]$$

Here, $P(t.x)$ represents the population density at location x and time t, Δ denotes the Laplacian operator, $\theta.\ \mu$ are parameters, and dW denotes the increment of a Wiener process. Our aim is to scrutinize the properties of solutions obtained via finite difference methods. Specifically, we aim to assess the stability and convergence characteristics of these numerical techniques.

Keywords: Wiener process, finite difference methods, stability.

ISBN NR: 978-625-6283-33-6

SENSITIVE ELECTROCHEMICAL DETERMINATION OF GLUCOSE ON NiNPs/4AP N-GQDs NANOCOMPOSITE MODIFIED GC ELECTRODE

Assist. Prof. Dr. Sultan Yağmur Kabaş,
Çanakkale Onsekiz Mart University, Lapseki Vocational School, syagmur@comu.edu.tr
ORCİD ID: **0009-0005-8783-7077**

Abstract

In the present study, nickel nanoparticles/4-aminophenol nitrogen-doped graphene quantum dots (NiNPs/4AP N-GQDs) nanocomposite, previously synthetized and characterized, was used. Band gap energy (EGAP) and LUMO-HOMO levels and specific capacitance rates of NiNPs/4AP N-GQDs nanocomposite were computed using cyclic voltammetry (CV) technique. The highest specific capacitance rate was found as 0.739 F g^{-1} for 5 mV s^{-1} and EGAP was found as 0.08 eV. It shows that the synthetized NiNPs/4AP N-GQDs nanocomposite can be used at high performance energy repository applications.

For further studies, this nanocomposite material was used for the modification of glassy carbon electrode. (GCE) and the electrochemical studies of glucose on the NiNPs/4AP N-GQDs nanocomposite modified GCE were carried out using DPV (differential pulse voltammetry) and CV methods. When the DPV results were evaluated, it was found that the electrode showed a good sensitivity and electrocatalytic activity for glucose detection. Moreover, the linear calibration curve was calculated in the range from 750 nM to 10 µM with 235 nm LOD (limit of detection). Lastly, glucose selectivity of NiNPs/4AP N-GQDs modified GC electrode was evaluated in the existence of varied bioactive matters and despite interfering substances, new electrochemical sensor still showed glucose selectivity.

Keywords: Ni nanocomposite, Electrochemical sensor, Capacitance, Glucose, 4-Amino N-doped GQDs

ISBN NR: 978-625-6283-33-6

INVESTİGATİON OF THE USE OF METAL NANOPARTİCLES AS ADDİTİVES İN DİESEL ENGİNES

Cihan BİRBİR
Dicle University,
Birbircihan50@gmail.com- ORCID ID
Doç. Dr. Erdal ÇILĞIN
Dicle University,
Erdal.cilgin@dicle.edu.tr- 0000-0002-9957-6266

ABSTRACT

Nanoparticles have garnered significant interest across various scientific disciplines due to their exceptional properties. In this study, the effects of nano metal magnesium oxide (NMmgO) nanoparticles on the combustion and emission characteristics of a four-stroke, single-cylinder diesel engine operating at a constant 1500 rpm and under various engine loads were investigated. The addition of NMmgO nanoparticles at concentrations of 50 mg/L and 100 mg/L resulted in increases in cylinder pressure (CP) by 4.71%, net heat release (NHR) by 3.87%, pressure rise rates (PRR) by 8.17%, and average gas temperature (AGT) by 6.43%. Additionally, reductions in carbon monoxide (CO) and oxygen (O2) emissions were observed, while nitrogen oxides (NO_x) and carbon dioxide (CO_2) emissions increased. NMmgO additives present an effective approach to enhancing combustion efficiency and optimizing emissions in diesel engine applications. These findings suggest that NMmgO has the potential to be used as an additive to improve the performance and environmental impact of diesel engines.

Keywords: Additives, Nanoparticles, Emissions, Combustion

ISBN NR: 978-625-6283-33-6

KATODİK ARK BUHARLAŞTIRMA YÖNTEMİYLE İLE BÜYÜTÜLEN AlTiCrSiN, TiCrN, CrN İNCE FİLMLERİN AISI 4140 ÇELİĞİ ÜZERİNDE ADEZYON DAVRANIŞLARINI İNCELENMESİ

Mehmet Nejat KUTLUDİL

Erzincan Binali Yıldırım Üniversitesi,
– 0009-0000-1844-2673

Doç. Dr, Levent KARA

Erzincan Binali Yıldırım Üniversitesi,
- 0000-0002-6982-859X

ÖZET

Islah çelikleri içinde bulunan AISI 4140 çeliği bileşiğinde bulundurduğu karbon miktarından dolayı yüksek bir setliğe sahiptir. Bunun yanında diğer çeliklere göre daha iyi bir çekme mukavemetine ve ıslah edilerek sertleştirilmeye uygun çeliklerdendir. Yüksek sertlik özelliğine sahip bu çeliklerin kullanıldığı alanlar incelendiğinde krank mili, aks mili, kovan gibi sünekliliği yüksek olması gereken ve otomobil, uçak yapımı, ziraat makineleri, takım tezgâhları ve makine parçalarında kullanıldığı görülmektedir. Endüstride farklı alanlarda ve koşullarda çalışan bu çeliklerin ömürleri, ortam ve çalışma koşulları nedeniyle normalden daha az çalışma sürelerinde ömürlerini yitirmektedirler. AISI4140 çeliğinin ömrünü artırmak için kullanılan yüzey yapısını değiştirmek, ısıl işlem metotları bulunmaktadır. Ancak bu metotlar dışında olan PVD kaplama yöntemi ile yüksek saflık, biriktirme hızı ve mükemmel yapışma nedeniyle PVD ark yöntemi ile çalışma yapılacaktır. Birden çok alanda kullanılan bu çelik malzemenin katodik ark yöntemi ile kaplama işlemi uygulanarak aşınma ömrünün artırması hedeflenmektedir. Bu çalışmada AISI4140 çeliğinin yüzey özelliklerinin iyileştirilmesi için, AlTiCrSiN, TiCrN, CrN ince filmler üç mikron olacak şekilde biriktirilmiştir. Filmlerin yapıları ve adezyon davranışları incelendi. Bu çalışmada kimyasal analizleri için EDS analizi ve yapısal özellikleri için SEM cihazından yararlanıldı. Mekanik özellikler için mikro sertlik, adezyon testleri için artan yük çizik testi kullanıldı. 0N'dan başlayarak 90N' a kadar yapılan çizik testi sonuçları, mikroskop ve SEM görüntüleri ile incelendi. AlTiCrSiN, TiCrN, CrN kaplamaları için kritik yüksel sırasıyla 44N,43N ve 71N olarak ölçülmüştür. Alınan SEM görüntüleri incelendiğinde ise üç farklı kaplamaların başlangıçta adeziv olarak aşındığı daha sonra taban malzeme üzerinden neredeyse tamamen kalktığı görülmüştür.

Anahtar Kelimeler: AlTiCrSiN, TiCrN, CrN, PVD kaplama, katodik ark, ince film.

ISBN NR: 978-625-6283-33-6

INVESTIGATION OF ADHESION BEHAVIOR OF AlTiCrSiN, TiCrN, CrN THIN FILMS GROWN BY CATHODE ARC EVAPORATION METHOD ON AISI 4140 STEEL

ABSTRACT

AISI 4140 steel, which is found in tempered steels, has a high setness due to the amount of carbon it contains in its compound. In addition, it is one of the steels that has a better tensile strength than other steels and is suitable for hardening by reclamation. When the areas where these steels with high hardness properties are examined, it is seen that they are used in automobiles, aircraft construction, agricultural machinery, machine tools and machine parts, which should have high ductility such as crankshaft, axle shaft, barrel. The life of these steels, which work in different areas and conditions in the industry, loses their life in less working times than normal due to the environment and working conditions. There are heat treatment methods to change the surface structure used to increase the life of AISI4140 steel. However, with the PVD coating method, which is other than these methods, work will be carried out with the PVD arc method due to its high purity, deposition rate and excellent adhesion. It is aimed to increase the wear life of this steel material, which is used in more than one area, by applying the coating process with the cathodic arc method. In this study, in order to improve the surface properties of AISI4140 steel, AlTiCrSiN, TiCrN, CrN thin films were deposited as three microns. The structures and adhesion behaviors of the films were examined. In this study, EDS analysis was used for chemical analysis and SEM device was used for structural properties. Micro hardness was used for mechanical properties and increased load scratch test was used for adhesion tests. The results of the scratch test from 0N to 90N were examined with microscope and SEM images. The critical elevation for AlTiCrSiN, TiCrN, CrN coatings was measured as 44N, 43N and 71N, respectively. When the SEM images were examined, it was seen that three different coatings were initially worn adhesively and then almost completely removed from the base material.

Keywords: AlTiCrSiN, TiCrN, CrN, PVD coating, cathodic arc, thin film.

ISBN NR: 978-625-6283-33-6

IMPACT OF LAND USE AND LAND COVER CHANGES ON PRECIPITATION DISTRIBUTION IN THE MURAT RIVER BASIN

Ibrahem Abbas Hasan[1], Mehmet Ishak YUCE1[2]

[*1] Gaziantep University, Türkiye, 1Civil Engineering Department, ORCID ID 0009-0002-4932-8771

[2] Gaziantep University, Türkiye, 2Civil Engineering Department, ORCID ID 0000-0002-6267-9528

ABSTRACT

This paper employs the Thiessen polygon interpolation method within GIS development to perform a detailed analysis of 40 years of monthly precipitation data. These were obtained from 28 meteorological stations, which are composed of 13 sub-basins. The basin's land use and land cover (LULC) statistics revealed six distinct groups: It includes water bodies, barren ground, forests, urban areas, crops, and shrublands. This detailed classification made it possible to consider the relationships between precipitation patterns comprehensively. From the analysis of the results, a high spatial and temporal variability in the precipitation pattern is observed in the basin, which could be due to both top climatic influences and LULC changes. For example, the areas with a higher level of forest cover had a different precipitation pattern from the urban and cropland areas. They include: Such fluctuations help to explain the connection between climate and human actions and the effects of these actions on rainfall. On a similar note, the conclusion section of this study emphasizes the importance of topographic features and various types of cover for precipitation in the region. This research is considered beneficial for future investigations and local environmental management because, thanks to it, it can develop a clear understanding of how changes in LULC may affect regional hydrology.

Keywords: Thiessen polygons, Murad River Basin, land use land cover.

ISBN NR: 978-625-6283-33-6

ARAÇLAR ARASI HABERLEŞMEDE ARAYA GİREN ARAÇ KAYNAKLI ZAYIFLAMANIN ÖLÇÜMLERE DAYALI ANALİZİ

MEASUREMENT-BASED ANALYSIS OF OBSTACLE VEHICLE ATTENUATION IN VEHICLE-TO-VEHICLE COMMUNICATION

Dr. Öğr. Üyesi, Kenan KUZULUGİL
Gümüşhane Üniversitesi,
- ORCID ID: 0000-0003-1866-8140

ÖZET

Bu çalışmada, anayol ortamında araçlar arası (V2V) haberleşmede engel araç kaynaklı zayıflama analiz edilmiştir. Tx ve Rx arasındaki yerden yansıyan bileşenin engel araç tarafından engellenmesi sonucu oluşan sinyal gücündeki zayıflama ölçülmüştür. Engel aracın Tx ve Rx arasındaki konumu değiştikçe zayıflamanın da değiştiği gözlemlenmiştir. Ortalama zayıflama 8.69 dB, maksimum zayıflama ise 17.86 dB olarak bulunmuştur. Araç türü, boyutu ve yük durumu gibi faktörler engel araç kaynaklı zayıflamayı etkilemektedir. Yoğun trafikte V2V haberleşmenin etkinliği için engel araç durumunun dikkate alınması önemlidir. Bu durum, kaza riskini azaltarak ve trafik akışını optimize ederek genel güvenliği ve verimliliği artırabilir.

Anahtar Kelimeler: Araçlar arası haberleşme, yol kaybı, iki ışın modeli, engel araç, zayıflama.

ABSTRACT

This study investigates path loss caused by obstructing vehicles in vehicle-to-vehicle (V2V) communication in highway environments. Signal power attenuation due to the obstruction of the ground-reflected component between the Tx and Rx by an obstructing vehicle was measured. It was observed that the attenuation also changes as the position of the obstructing vehicle between the Tx and Rx changes. The average attenuation was found 8.69 dB, and the maximum attenuation was 17.86 dB. Factors such as vehicle type, size, and load status affect path loss caused by obstructing vehicles. It is important to consider the obstructing vehicle state for the effectiveness of V2V communication in heavy traffic. This can improve overall safety and efficiency by reducing the risk of accidents and optimizing traffic flow.

ISBN NR: 978-625-6283-33-6

Keywords: V2V communication, path loss, obstructing vehicles, two-ray model, obstruction vehicle, attenuation.

ISBN NR: 978-625-6283-33-6

5.9 GHZ ARAÇLAR ARASI HABERLEŞMEDE BİNA KAYNAKLI İLAVE KAYIP ANALİZİ

ADDITIONAL LOSS ANALYSIS DUE TO BUILDINGS IN 5.9 GHZ VEHICLE-TO-VEHICLE COMMUNICATION

Dr. Öğr. Üyesi, Kenan KUZULUGİL
Gümüşhane Üniversitesi,
kenankuzulugil@gumushane.edu.tr - ORCID ID: 0000-0003-1866-8140

ÖZET

Araç-araç (V2V) haberleşmesi olası trafik kazalarının önceden kestirilebilmesi ve olmuş kazaların da diğer sürücülerin yeni trafik kazalarına sebebiyet vermemesi için onlara bildirilmesi gibi hedeflediği amaçlar bakımından akıllı ulaşım sistemlerinin en kritik dallarından biridir. V2V haberleşmesi farklı ortamlarda gerçekleşebileceği için bu ortamlarda V2V haberleşme kanalının tepkisinin analiz edilmesi gerekmektedir. Literatürdeki çalışmalarda birçok farklı ortamda ölçümler gerçekleştirilmiş, analizler yapılmış ve kanal modelleri önerilmiştir. Bu çalışmada ise 5.9 GHz DSRC standartlarında haberleşen iki araç arasına giren bir okul binasının alınan sinyal gücüne etkisi analiz edilmiştir. Elde edilen sonuca göre binanın yapıldığı malzeme, içerisindeki odalarda bulunan materyallerin cinsi ve yoğunluğu gibi parametreler zayıflatmanın şiddetini değiştirmektedir. Sonuç olarak verici ve alıcı araçlar arasına giren tek bir binanın ortalama 12 dB, maksimum 21.24 dB ilave kayba neden olduğu gözlemlenmiştir.

Anahtar Kelimeler: Araçlar arası haberleşme, İlave zayıflama, V2V, 5.9 GHz, DSRC, Bina

ABSTRACT

Vehicle-to-vehicle (V2V) communication is one of the most critical branches of intelligent transportation systems as it aims to predict potential traffic accidents and notify other drivers of accidents that have already occurred to prevent them from causing new traffic accidents. Since V2V communication can take place in different environments, it is necessary to analyze the response of the V2V communication channel in these environments. In the literature, measurements have been performed in many different environments, analyzed and channel models have been proposed. In this study, the effect of a school building between two vehicles

ISBN NR: 978-625-6283-33-6

communicating in 5.9 GHz DSRC standards on the received signal strength is analyzed. According to the results obtained, parameters such as the material the building is made of, the type and density of the materials in the rooms inside the building change the severity of attenuation. As a result, it is observed that a single building between the transmitter and receiver vehicles causes an average additional loss of 12 dB and a maximum additional loss of 21.24 dB.

Key Words: Vehicle-to-Vehicle Communication Additional Loss, V2V, 5.9 GHz, DSRC, Building

ISBN NR: 978-625-6283-33-6

OPTIMAL CONDITIONS FOR IMMOBILIZATION OF PULLULANASE BY HYBRID NANOFLOWER METHOD USING COPPER(II) SULFATE

Res. Asst. Mesut BİLGİ*

Department of Chemistry, Yildiz Technical University,

mbilgi@yildiz.edu.tr- 0000-0002-5593-4105

Prof. Dr. Ayşegül PEKSEL

Department of Chemistry, Yildiz Technical University,

peksel@yildiz.edu.tr- 0000-0003-3881-8513

ABSTRACT

Enzymes are biological molecules that catalyze reactions under mild conditions. Most industrial processes are driven by high temperatures and pressures, leading to high energy costs. It requires a high amount of investment to design specialized equipment to handle challenging reactions that require high pressure, temperature, acidity, or alkalinity. Enzymes replace many chemicals in industrial processes, giving the process a more environmentally friendly touch. Despite the many advantages of using enzymes over conventional catalysts, there are several practical problems with their use in industrial applications. Enzymes are generally expensive, meaning their isolation and purification costs are much higher than ordinary chemical catalysts. They are also extremely sensitive to various denaturing conditions when isolated from their natural environment. Immobilization has emerged as a cheap and fast method to eliminate these disadvantages.

Pullulanase (EC 3.2.1.41) is a branch-breaking enzyme that hydrolyzes the α-1,6 glycosidic bonds found in pullulan, amylopectin, and similar oligosaccharides. It has commercial importance because it is used in various industries, especially the food industry. However, the difficulty and cost of purifying pullulanase obtained from various sources, and the fact that free pullulanase can be used only in a single reaction due to its water solubility are some of the reasons that restrict the use of pullulanase. Eliminating these problems is possible by immobilizing pullulanase with a simple and inexpensive method. The hybrid nanoflower method is a method that is simple to use, inexpensive, and increases enzyme stability without changing the enzyme conformation significantly.

In this study, pullulanase was immobilized using the hybrid nanoflower method, and the optimum conditions for immobilization were found by examining copper(II) sulfate, enzyme, and buffer concentrations, temperature, and pH parameters.

“This work has been supported by Yildiz Technical University Scientific Research Projects Coordination Unit under project number FBA-2024-6178.”

Keywords: Pullulanase, immobilization, hybrid nanoflowers

ISBN NR: 978-625-6283-33-6

A MACHINE LEARNING BASED REGRESSION METHODS TO PREDICTING SYNGAS COMPOSITION FOR PLASMA GASIFICATION SYSTEM

Anass I. M. ABDELRAHIM[1], Özgün YÜCEL[1*]

[1]Department of Chemical Engineering, Gebze Technical University, 41400, Kocaeli, Turkey

Asst. Prof Dr. Ozgun YUCEL (*Corresponding Author)
https://scholar.google.com.tr/citations?user=X2qlXGQAAAAJ&hl=en

Abstract

Plasma gasification is considered a promising technology that converts waste into energy through an environmentally friendly process. This research focuses on predicting the outputs of this process, utilizing ML regression techniques. Data from previous studies involving different solid fuels were collected, and four regression techniques RFR, GPR, DTR, and SVR were employed to predict the levels of CO, CO2, N2, O2, H2, and CH4 in the plasma gasification process. The experimental dataset was gathered using a microwave gasifier with varying air flow rates (50 to 100 sL/min) and plasma power (3 kW to 6 kW). Gaussian process regression (GPR) exhibited superior performance, achieving R2 > 0.98 for all outputs and surpassing other modeling approaches. Machine Learning (ML) modeling of the plasma gasification process has proven to enable the prediction of the high-complexity chemical reaction chain in gasification. These models hold promise for applications in simulation environments and can be integrated into microcontroller-based systems for practical use for optimization and control. By this means, the cost of plasma gasification processes would be reduced, and so the plasma gasification system would be more flexible.

Keywords: plasma gasification, Decision tree(DTR), Gaussian Process(GPR), Support vector(SVR), Random forest(RFR), Machine learning(ML), solid fuels.

ISBN NR: 978-625-6283-33-6

MAKİNE ÖĞRENİMİ İLE DOS SALDIRILARININ TESPİTİ

Berksu ERTUĞRUL
Trakya Üniversitesi, Fen Bilimleri Enstitüsü, Hesaplamalı Bilimler Anabilim Dalı
– 0009-0007-3198-4275

Dr. Öğr. Üyesi Derya ARDA
Trakya Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü
– 0000-0002-2959-6739

ÖZET

Günümüzün teknoloji odaklı dünyasında kamu kurum ve kuruluşları, sağlık kuruluşları ve bankalar gibi sistemler, siber güvenlik riski ve tehditleri ile karşı karşıya kalmaktadırlar. İnternet ortamında bulunan uygulama ve sistemlerin güvenliğini sağlamada Saldırı Tespit Sistemleri (STS) kullanımı büyük önem taşımaktadır. Klasik Saldırı Tespit Sistemlerinin yanı sıra, makine öğrenmesi yöntemleri ile siber saldırıların tespiti ve analizi yapılarak sistemlerin güncel tutulması sağlanabilmektedir. Bu makalede sisteme yapılan kötü amaçlı DoS saldırılarını tespit edebilen makine öğrenimi tabanlı bir saldırı tespit sisteminin başarısı kapsamlı bir şekilde analiz edilmiştir. Araştırmada, CSE-CIC-IDS-2018 veri seti kullanılmıştır. Çalışma süresince, DoS saldırısı veri seti için önce veri önişleme yapılmış, ardından üç farklı öznitelik seçme yöntemi kullanılarak öznitelikler belirlenmiştir. Daha sonra, makine öğrenmesi teknikleri ile STS'nin başarısı ve performansı doğruluk, duyarlılık, kesinlik, F-Skoru ve karmaşıklık matrisi gibi metriklerle değerlendirilmiştir. Bu değerlendirmeye göre, DoS saldırısını tespit etmede Adaboost algoritması en başarılı makine öğrenme algoritması olarak gözlemlenmiştir.

Anahtar Kelimeler : Siber Güvenlik, Makine Öğrenimi, Saldırı Tespit Sistemleri, DoS Saldırısı

ISBN NR: 978-625-6283-33-6

DETECTION OF DOS ATTACKS USING MACHINE LEARNING

ABSTRACT

In today's technology-oriented world, systems such as public institutions and organizations, healthcare institutions and banks are faced with cyber security risks and threats. The use of Intrusion Detection Systems (IDS) is of great importance in ensuring the security of systems and applications on the Internet. In addition to Classic Intrusion Detection Systems, cyber attacks can be detected and analyzed with machine learning methods and systems can be kept up to date. In this article, the success of a machine learning-based intrusion detection system that can detect malicious DoS attacks on the system is comprehensively analyzed. In the research, CSE-CIC-IDS-2018 data set was used. During the study, data was first preprocessed for the DoS attack data set, and then features were determined using three different feature selection methods. Then, the success and performance of IDS with machine learning techniques were evaluated with metrics such as accuracy, sensitivity, precision, F-Score and complexity matrix. According to this evaluation, the Adaboost algorithm was observed to be the most successful machine learning algorithm in detecting a DoS attack.

Keywords: Cyber Security, Machine Learning, Intrusion Detection Systems, DoS Attack

ISBN NR: 978-625-6283-33-6

MODERN SİBER GÜVENLİK YAKLAŞIMLARINDA SALDIRI TESPİT SİSTEMLERİ

Berksu ERTUĞRUL
Trakya Üniversitesi, Fen Bilimleri Enstitüsü, Hesaplamalı Bilimler Anabilim Dalı
0009-0007-3198-4275

Dr. Öğr. Üyesi Derya ARDA
Trakya Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü
0000-0002-2959-6739

ÖZET

Bu makale, modern siber güvenlik yaklaşımlarında saldırı tespit sistemlerinin (STS) rolünü ve önemini ele almaktadır. Siber tehditlerin artan karmaşıklığı ve çeşitliliği karşısında, saldırı tespit sistemleri, ağ ve bilgi sistemlerini korumada kritik bir savunma mekanizması olarak öne çıkmaktadır. Çalışmada, STS'nin genel tanımı, kullanılan teknikler ve metodolojiler incelenmiş, ayrıca güncel uygulamalar ve teknolojiler değerlendirilmiştir. Özellikle, makine öğrenme ve yapay zekâ tabanlı saldırı tespit sistemlerinin etkinliği ve gelecekteki potansiyeli üzerinde durulmuştur. Son olarak, STS'nin entegrasyonu ve yönetiminde karşılaşılan zorluklar ve bu zorluklara yönelik çözüm önerileri tartışılmıştır.

Anahtar Kelimeler : Siber Güvenlik, Saldırı Tespit Sistemleri, Siber Saldırılar

INTRUSION DETECTION SYSTEMS IN MODERN CYBER SECURITY APPROACHES

ABSTRACT

This article discusses the role and importance of intrusion detection systems (STS) in modern cybersecurity approaches. In the face of the increasing complexity and diversity of cyber threats, intrusion detection systems stand out as a critical defense mechanism in protecting network and information systems. In the study, the general definition of STS, the techniques and methodologies used were examined, and current applications and technologies were

ISBN NR: 978-625-6283-33-6

evaluated. In particular, the effectiveness and future potential of machine learning and artificial intelligence-based intrusion detection systems are emphasized. Finally, the difficulties encountered in the integration and management of STS and solutions to these difficulties are discussed.

Keywords: Cyber Security, Intrusion Detection Systems, Cyber Attacks

ISBN NR: 978-625-6283-33-6

FORECASTING OF POSSIBLE BIOMARKERS FOR CHRONIC KIDNEY DISEASE WITH MACHINE LEARNING METHOD XGBOOST

Dr. Şeyma YAŞAR
Inonu University
seyma.yasar@inonu.edu.tr - 0000-0003-1300-3393,

ABSTRACT

Chronic kidney disease is a serious health condition in which an initial injury is gradually replaced by a chronic process of diminished function, ultimately leading to the need for kidney replacement therapy. As reported by the World Health Organization (WHO), chronic kidney disease represents an increasing share of the global disease burden and is considered a major public health problem. In this study, XGBoost, an ensemble learning method, was used to predict chronic kidney disease through open data, and it was aimed to identify variables that can be used as possible biomarkers in the clinic to predict the disease. In the modeling stages, Random forest was used for missing value imputation and LASSO was used as the variable selection method. 70% of the data set was used to train the model and 30% was used to test it. While the accuracy and F1 score values for the training model were 97,1% and 97,7%, these values were obtained as 95% and 93,8% for the test model. In light of these findings, the model performance is quite good in classifying chronic kidney disease. Considering the variable importance depending on the model, it can be said that specific gravity, hemoglobin and serum creatinine values are the most important variables in predicting chronic kidney disease. Therefore, it can be said that these three parameters are possible biomarker candidates for clinically predicting chronic kidney diseases and determining treatment plans.

Keywords : Chronic kidney disease, Machine learning, XGBoost, Classification.

ISBN NR: 978-625-6283-33-6

MACHINE LEARNING METHODS IN RATIONAL DRUG DESIGN

Dr., Şeyma YAŞAR
Inonu University
seyma.yasar@inonu.edu.tr - 0000-0003-1300-3393
Prof. Dr., Sedat YAŞAR
Inonu University

sedat.yasar@inonu.edu.tr - 0000-0001-7285-2761

ABSTRACT

Rational drug design, the process of developing new pharmaceuticals based on the understanding of a target's biological mechanism, has been significantly empowered by machine learning (ML) techniques. ML methods play a crucial role in various stages of drug discovery and development, from target identification and validation to lead optimization and clinical trials. One of the primary applications of ML in rational drug design is in virtual screening, where large chemical libraries are screened to identify potential drug candidates. ML algorithms can efficiently predict the binding affinity between small molecules and target proteins, thereby accelerating the drug discovery process. Furthermore, ML models aid in predicting the pharmacokinetic properties of drugs, such as absorption, distribution, metabolism, and excretion (ADME), as well as toxicity profiles, which are essential for optimizing drug candidates for safety and efficacy. Moreover, ML-based approaches facilitate the identification of novel drug-target interactions and the elucidation of complex biological pathways, providing valuable insights for the development of innovative therapeutic interventions. In conclusion, machine learning methods have revolutionized rational drug design by enabling faster and more accurate predictions, facilitating the discovery and optimization of new drug candidates, and ultimately contributing to the development of safer and more effective medications.

Keywords : Rational Drug Design, Machine Learning, Pharmaceutical Discovery.

ISBN NR: 978-625-6283-33-6

DEVELOPMENT OF A DATABASE MANAGEMENT PLATFORM FOR PRIVATE CLOUD ENVIRONMENTS

Hamit Uğur Çelebier
Trendyol, Dept. of Database,
ORC-ID: 0009-0002-9630-6196
Eren Salman
Trendyol, Dept. of Database,
ORC-ID: 0009-0005-3369-4525
Ceren Ulus
Çukurova University, Dept. of Computer Engineering,
ORC-ID: 0000-0003-2086-6381
M. Fatih Akay
Çukurova University, Dept. of Computer Engineering,
ORC-ID: 0000-0003-0780-0679

Abstract

The private cloud is an information technology infrastructure that an organization creates and manages solely for its own use. This infrastucture offers a high level of security and privacy via using proprietary firewalls and internal hosting methods, ensuring data protection by preventing third parties from accessing transactions and confidential data. Database technologies are of great importance for the productive operation of private clouds. However, for database technologies to be effectively utilized in private cloud environments, many operations such as monitoring, closing security vulnerabilities, user management, maintaining and monitoring backup processes, which are vital in installation and post-installation maintenance processes, need to be centrally managed. In this study, a platform has been developed that enables the management, backup and monitoring of relational and non-relational databases that organizations can use for their private cloud environments. Couchbase, PostgreSQL, SQL Server, Cassandra and Yugabyte database clusters have been set up on server clusters created with the server management feature. An administration page has been developed for database administrators, providing the display of various information and measurement values related to servers and database clusters through the 'GET' operation. With this platform, users are able to create and configure database clusters simultaneously across multiple data centers in a self-service manner. Also, it has been observed that the database systems run 85% faster and more scalable with the developed platform.

Keywords: Private Cloud, Database Management, Couchbase

ISBN NR: 978-625-6283-33-6

DEVELOPMENT OF AN E-WALLET PLATFORM FOR THE EUROPEAN MARKET

Burak Karaosmanoğlu
Innovance, Project Management,
ORC-ID: 0009-0007-4053-8103
Mehmet Demir
Innovance, Business Development,
ORC-ID: 0009-0002-0711-9787
Can Taşcı
Innovance, Software Development,
ORC-ID: 0009-0007-7900-343X
Ahmet Göğebakan
Innovance, Software Development,
ORC-ID: 0009-0007-7789-1840
Mehmet Ali Özcan
Innovance, Business Development,
ORC-ID: 0009-0000-7113-3618
Ceren Ulus
Çukurova University, Computer Engineering,
ORC-ID: 0000-0003-2086-6381
M. Fatih Akay
Çukurova University, Computer Engineering,
ORC-ID: 0000-0003-0780-0679

Abstract

The change in people's habits after the pandemic has brought about many needs in the financial sector. The most important of these needs are to ensure the safe transfer of money and to carry out transactions via mobile devices without having to visit a bank. Nowadays, where speed and time play an important role, traditional methods can not meet these needs. In this context, e-money stands out as a currency that, unlike traditional cash or physical currencies, exists in a completely digital form, is usually used for online transactions, saves users time and is stored digitally for payments over the Internet. An e-wallet is a tool that allows users to store, send and receive e-money digitally and make payments online or in physical stores. The aim of this study is to develop a cloud-based e-wallet platform that is suitable for the European market and enables the secure transfer of e-money. The basic architecture of the platform has been developed according to the event-driven architecture and a structure has been created that enables communication via events. React Native has been preferred to make efficient use of

ISBN NR: 978-625-6283-33-6

time and resources. SQL has been used for the platform's database management. The Device Binding function has been implemented on the platform to provide token-based authentication. The Microsoft Identity Platform has been utilized for the security of the platform. By optimizing financial transactions, the platform has increased the efficiency of money transfers and payments by 80% and transaction speed by 90%.

Keywords: E-Wallet Platform, European Market, Event-Driven Architecture

ISBN NR: 978-625-6283-33-6

AN INTAGRATED DATA ANALYTICS MODEL FOR CUSTOMER RETENTION

Phd.Cand.Mehmet Şükrü AYGÜN
Cukurova University,
mesaygun@gmail.com - 0000-0001-8854-5774

Prof.Dr.Mehmet Fatih AKAY
Cukurova University,
mfakay@cu.edu.tr- 0000-0003-0780-0679

ABSTRACT

In the digital era, data-driven decision making has an important role for companies to compete with the others. Companies can follow strategies as acquiring new customers, upselling the existing ones or increasing the retention of customers for surviving. An effective operational decision making is needed to manage customer retention because to keep an existing customer with the company is more economical than acquiring a new customer. Every customer continues to interact with a company in a certain time, it is described as Customer Lifetime (CL). Retention of a client is especially important when it concerns people who are highly profitable to the company, i.e. customers with a relatively high lifetime value. Customer Churn Prediction (CCP) and Customer Lifetime /Customer Lifetime Value Prediction (CL/CLVP) are two main issues for retention strategy of a company. The proposed model is designed for making the accurate predictions of customer churn and customer lifetime / customer lifetime value in the manner of overcoming some of the difficulties seen in current studies integratedly. Such a this type of model has two phases. In the first phase, a typical binary classification is made to seperate customers as churners and non-churners. In the second phase, an estimation of the remaining revenue of a churner until leaving from the company is performed with a regression model. Five different techniques are used for both classification and regression analysis, and the results are compared in terms of performance.

Keywords : Customer Retention, Churn Prediction, Customer Lifetime Value Prediction, Machine Learning, Classification, Regression Analysis.

ISBN NR: 978-625-6283-33-6

KÜR TİPİ ve YÖNTEMİNİN GEOPOLİMER HARÇ BASINÇ DAYANIMINA ETKİSİ

Dr. Adil GÜLTEKİN
Düzce Üniversitesi,
adilgultekin@duzce.edu.tr - 0000-0002-5267-5312

ÖZET

Beton, dünyada en yaygın kullanılan yapı malzemesidir. Ancak portland çimentosunun üretimi sırasında yüksek miktarda enerji tüketilmekte ve önemli miktarda karbondioksit salımı yapılmaktadır. Çimento üretiminin neden olduğu bu olumsuzlukların azaltılabilmesi amacıyla çimentoya alternatif yapı malzemesi arayışları da hızlanmıştır. Yapılan araştırmalar, geopolimer/alkali-aktive malzemelerin çimentoya alternatif olma potansiyeli taşıdığını ortaya koymuştur. Geopolimerlerin yüksek mekanik özelliklere, yüksek erken yaş dayanımına ve iyi bir durabiliteye sahip olma, düşük enerji harcaması ile üretilebilme ve karbondioksit salımını azaltma gibi avantajlara sahip oldukları bilinmektedir. Ancak geopolimer üretiminde kullanılan kür yöntemleri, portland çimentosu esaslı yapı malzemelerinden farklıdır. Her ne kadar su, buhar ve mikrodalga kürü gibi yöntemler üzerinde çalışılsa da geopolimer üretimi için en yaygın kullanılan yöntemler ortam kürlemesi ve etüv kürüdür. Kür tipi, kür süresi ve kürleme sıcaklığının, geopolimer özellikleri üzerinde önemli derecede etkili olduğu bilinmektedir. Bu çalışmada, kür tipi ve yönteminin, sodyum silikat ve sodyum hidroksit ile aktive edilerek üretilen uçucu kül esaslı geopolimer harç özelliklerine etkisi incelenmiştir. Bu kapsamda, farklı kür tiplerinin etkisinin araştırılabilmesi amacıyla ortam kürlemesine ek olarak 80°C'de buhar kürü, etüv kürü ve su kürü uygulanmıştır. Su kürlemesi yapılırken iki farklı yöntem kullanılmıştır. İlk yöntemde harçlar, direkt su içerisine bırakılmış, ikinci yöntemde ise numuneler, PVC bir film tabakası ile sarılarak suyla teması olmadan, su içerisinde kürlenmiştir. Çalışma kapsamında harçların basınç dayanımları, kırılma paternleri ve su emme kapasiteleri belirlenmiştir. Elde edilen sonuçlar, ortam kürlemesinin düşük dayanımlar ile sonuçlandığını, etüv kürü ve buhar kürü ile sırasıyla 39.1 ve 60 MPa basınç dayanımına ulaşıldığını, en yüksek basınç dayanımının ise su kürü ile elde edildiğini ortaya koymuştur. Su içerisinde, suyla temas ederek kürlenen serinin basınç dayanımının 60 MPa olduğu, PVC film tabakası ile kaplanarak suda kürlenen serinin dayanımının ise 71 MPa'a kadar yükseldiği görülmüştür.

Anahtar Kelimeler: Geopolimer harç, su kürü, buhar kürü, etüv kürü, basınç dayanımı

ISBN NR: 978-625-6283-33-6

INFLUENCE OF ELEMENTAL ASSOCIATION ON VOLATILITY IN FLUIDISED-BED COMBUSTION CHAMBERS: A COMPARATIVE STUDY OF CU, NI, CR, CO, PB, AND AS IN DIFFERENT COAL TYPES

A. Novák, Y. Novotná
University Carlo Cattaneo- Italy

Abstract:

The present study investigates the modes of occurrence of Pb, As, Cr, Co, Cu, and Ni in both bituminous coal and lignite through sequential extraction employing NH4OAc, HCl, HF, and HNO3 extraction solutions. Subsequently, the elemental affinities are scrutinized concerning their volatility during combustion in two circulating fluidised-bed power stations. The analysis revealed that a higher percentage of elements bound in silicates correlates with lower volatility, while a higher proportion of elements associated with monosulphides (or bound as exchangeable ions) leads to increased volatility. Notably, arsenic's volatility is influenced by the quantity of limestone added during combustion for desulphurisation purposes, rather than its association within the coal matrix.

Keywords: Coal combustion, sequential extraction, trace elements, volatility.

ISBN NR: 978-625-6283-33-6

IMPACT OF MICROWAVES ON THE MECHANICAL AND CHEMICAL STABILITY OF SILICA OPTICAL FIBRES

Elena Popescu, M. Caramihai, K. Chung, G. Tasca, T. Park

Charles Darwin University- Australia

Abstract:

This study delves into the impact of microwave exposure on the mechanical and chemical reliability of silica optical fibres, particularly concerning their aging behavior under varying water activity levels. Controlled stress was applied by winding fibres onto mandrels of precise diameters. While the chemical action of water typically leads to a decrease in fibre strength over time, the combined effects of cumulative factors such as water, applied stress, and microwaves sometimes resulted in unexpected outcomes, including instances where the microwave effect acted as a catalyst for structural relaxation. Although the overall increase in fibre strength may not be substantial, certain simulation conditions revealed a significant rise in the stress corrosion factor.

Keywords: optical fibres, mechanical testing, aging, microwave, structural relaxation.

ISBN NR: 978-625-6283-33-6

INVESTIGATING THE INFLUENCE OF CASTING SHAPE CHARACTERISTICS ON HOT TEARING AND RESIDUAL STRESS IN INVESTMENT CASTING: A SIMULATION STUDY

Mehmet Kaya, Emre Yılmaz,

Brock University- Canada

Abstract:

Hot tear cracking and residual stress are both significant consequences of thermal stress in casting processes. This study aims to simulate the impact of casting shape characteristics on hot tearing and residual stress. Findings reveal distinct temperature ranges necessary for simulating hot tearing and residual stress phenomena. Employing the MAGMASOFT simulation program, this research explores the development of thermal stress and predicts hot tearing and residual stress in shaped castings. The research strategy involves predicting hot tear locations by identifying hot spots and zones of thermal stress concentration. Results demonstrate that the presence of stress concentration zones heightens the likelihood of hot tearing while simultaneously reducing residual stress levels in cast parts.

Keywords: Hot tearing, residual stress, simulation, investment casting.

ISBN NR: 978-625-6283-33-6

INVESTIGATING THE INFLUENCE OF CASTING SHAPE CHARACTERISTICS ON HOT TEARING AND RESIDUAL STRESS IN INVESTMENT CASTING: A SIMULATION STUDY

Mehmet Kaya, Emre Yılmaz,

Brock University- Canada

Abstract:

Hot tear cracking and residual stress are both significant consequences of thermal stress in casting processes. This study aims to simulate the impact of casting shape characteristics on hot tearing and residual stress. Findings reveal distinct temperature ranges necessary for simulating hot tearing and residual stress phenomena. Employing the MAGMASOFT simulation program, this research explores the development of thermal stress and predicts hot tearing and residual stress in shaped castings. The research strategy involves predicting hot tear locations by identifying hot spots and zones of thermal stress concentration. Results demonstrate that the presence of stress concentration zones heightens the likelihood of hot tearing while simultaneously reducing residual stress levels in cast parts.

Keywords: Hot tearing, residual stress, simulation, investment casting.

ISBN NR: 978-625-6283-33-6

COMPARATIVE ANALYSIS OF MEDIA EFFECTS IN EXPLOSIVE FORMING OF TUBULAR SHELLS

A. Rahmani, K. Shahidi, S. Mohammadi
College of Business and Social Sciences - Eritrea.

Abstract:

Explosive forming, with its distinct advantages, has found applications across various industries. Enhancing current techniques in explosive forming is crucial for improving efficiency and control over the process. This study investigates the effects of using air and water as energy-conveying mediums, highlighting their differences. A series of explosive forming tests were conducted on thin-walled cylindrical shells using both air and water. Comparative analysis reveals that, for identical scaled distances, water-based explosive loading results in 4 to 5 times greater radial deformation compared to air-based loading. Experimental findings indicate that using water as the energy-conveying medium boosts efficiency by up to 4.8 times. Furthermore, the study explores the impact of the medium on failure modes and necking mechanisms in the shells. Measurement data demonstrates that increased internal volume is accompanied by necking of the walls, leading to radial rupture of the structure.

Keywords: Explosive Forming, Energy Conveying Medium, Tubular Shell

ISBN NR: 978-625-6283-33-6

ENHANCING MECHANICAL PROPERTIES OF HYDROXYAPATITE THROUGH GLASS REINFORCEMENT: A MICROSTRUCTURAL AND IN-VITRO ANALYSIS"

Priya Sharma, Neha Gupta

Jahangirnagar University- Bangladesh

Abstract:

Hydroxyapatite (HA) is a widely used biomaterial due to its excellent biocompatibility; however, its mechanical properties limit its applications to non-load-bearing areas and coatings. This study explores the incorporation of 2, 5, and 10 wt % of 28.5% CaO-28.5% P2O5-38% Na2 O- 5% CaF2 based glass into commercial HA, followed by sintering, to enhance its mechanical properties. The effects of sintering HA with these specified phosphate glass additions are investigated across various temperature ranges. Microstructural analysis using scanning electron microscopy and x-ray diffraction, along with measurements of density, microhardness, and compressive strength, reveal significant improvements in mechanical properties with the addition of glass ceramics. Composites containing 10 wt % glass additions demonstrate superior compressive strength and hardness compared to pure HA, forming dense HA/TCP (tricalcium phosphate) composite materials. Furthermore, in-vitro bioactivity assessment through changes in pH and Ca2+ ion concentration of SBF-simulated body fluid after two weeks of immersion indicates promising potential for these composites in hard tissue replacement applications.

Keywords: Bioglass, Composite, Hydroxyapatite, Sintering.

ISBN NR: 978-625-6283-33-6

DEVELOPMENT AND ASSESSMENT OF BONE-MIMICKING HYDROXYAPATITE-BIOGLASS COMPOSITE MATERIALS

Neha Sharma, Priya Gupta

Jahangirnagar University- Bangladesh

Abstract:

This research focuses on the synthesis of hydroxyapatite (HA) composites by incorporating 30%CaO-30%P2O5-40%Na2O-based glass into pure HA at concentrations of 2, 5, and 10 wt%. Sintering was conducted across various temperature ranges. Quantitative phase analysis was performed using XRD, while SEM was utilized to examine microstructures. The addition of glass resulted in increased density, microhardness, and compressive strength, proportional to the amount of glass incorporated. The compositional analysis revealed similarities between the resulting composites and the inorganic constituents of bone, including trace elements such as Na. X-ray diffraction confirmed the absence of HA decomposition into secondary phases. However, the bioglass-reinforced HA composites exhibited a mixture of HA and variable tricalcium phosphate phases, depending on the bioglass concentration. Notably, the HA composite with 10 wt% bioglass displayed the highest level of bioactivity and enhanced compressive strength compared to sintered HA alone.

Keywords: Bioactivity, Bioglass, Compressive Strength, Hydroxyapatite.

ISBN NR: 978-625-6283-33-6

IMPACT OF SURFACE PRETREATMENTS ON NANOCRYSTALLINE DIAMOND GROWTH ON SILICON NITRIDE SUBSTRATES

R.J. Abdullah, F. Yusof

College of Banking and Financial Studies- Oman

Abstract:

Deposition of diamond films onto Si3N4 substrates presents a promising avenue for various industrial applications owing to diamond's exceptional properties. Prior to diamond deposition, substrate pretreatment plays a crucial role in enhancing nucleation and promoting strong adhesion between the coating and substrate. In this study, nanocrystalline diamond films were deposited on silicon nitride substrates using the HF-CVD technique with a methane and hydrogen gas mixture. Various substrate pretreatments, including chemical etching methods such as hot acid etching and basic etching, as well as mechanical etching, were employed to investigate their effects on the quality of the resulting diamond films. The structure and morphology of the diamond coatings were characterized using X-ray Diffraction (XRD) and Scanning Electron Microscope (SEM), while Raman spectroscopy was utilized to assess the quality of the diamond films. Atomic Force Microscopy (AFM) was employed to explore the impact of chemical etching and mechanical pretreatment on the surface roughness of the substrates and the resultant morphology of the nanocrystalline diamond. The results indicated that diamond films deposited on as-received, basic-etched, and ground substrates exhibited a cauliflower morphology, whereas blasted and acid-etched substrates yielded smooth, continuous diamond films. However, Raman spectroscopy did not reveal any significant deviation in the quality of the diamond films resulting from the different pretreatment methods.

Keywords: Nanocrystalline diamond, Chemical Vapor Deposition, Pretreatment, Silicon Nitride

ISBN NR: 978-625-6283-33-6

COMPUTATIONAL MODELING OF PLASTIC BEHAVIOR IN CLAY SAMPLES UNDER COMPRESSION TEST

Rafael S. Silva, Marina L. Santos, Carlos M. Rodrigues, Hazim A. Al-Qureshi

College of Banking and Financial Studies- Oman

Abstract:

Plasticity plays a crucial role in the formation of ceramic materials, representing a key aspect of their mechanical behavior when mixed with water. A ceramic material exhibits plastic behavior when subjected to compressive loads, sustaining permanent deformation without rupture beyond its yield strength. Prior to yielding, the material displays measurable elastic behavior, which dissipates upon removal of the applied load. This study presents a mathematical model developed through the application of plasticity theory principles, leveraging stress-strain diagrams obtained under compression testing.

Keywords: Plasticity, clay, computational modeling, friction coefficient.

ISBN NR: 978-625-6283-33-6

MANUFACTURING PROCESS OF A NOVEL BIOMASS COMPOSITE INSPIRED FROM CELLULAR STRUCTURE OF WOOD

Li Yongfeng, Liu Yixing, Li Jian, Li Jun

Bengbu Medical College- China

Abstract:

A novel biomass composite inspired from wood porous structure was manufactured by impregnating vinyl monomer into wood cellular structure under vacuum conditions, and initiating the monomer for in situ polymerization through a thermal treatment. The vacuum condition was studied, and the mechanical properties of the composite were also tested. SEM observation shows that polymer generated in the wood porous structure, and strongly interacted with wood matrix; and the polymer content increased with vacuum value increasing. FTIR indicates that polymer grafted onto wood matrix, resulting chemical complex between them. The rate of monomer loading increased with increasing vacuum value and time, accordance with rate of polymer loading. The compression strength and modulus of elasticity linearly increased with the increasing rate of polymer loading. Results indicate that the novel biomass composite possesses good mechanical properties capable of applying in the fields of construction, traffic and so forth.

Keywords: Biomass composite, manufacture, vinyl monomer, wood cellular structure.

ISBN NR: 978-625-6283-33-6

ASSESSING THE QUALITY STANDARDS OF HOSPITAL PHARMACIES IN THERAPEUTIC CENTERS ASSOCIATED WITH KERMANSHAH UNIVERSITY OF MEDICAL SCIENCES, IRAN

Gharehbagh V.Hamishehkar , H.Aghababa

Alex Ekwueme Federal University Ndufu Alike Ikwo- Nigeria

Abstract:

Nowadays pharmaceutical care departments located in hospitals are amongst the important pillars of the healthcare system. The aim of this study was to evaluate quality of hospital drugstores affiliated with Kermanshah University of Medical Sciences. In this cross-sectional study a validated questionnaire was used. The questionnaire was filled in by the one of the researchers in all seventeen hospital drugstores located in the teaching and nonteaching hospitals affiliated with Kermanshah University of Medical Sciences. The results shows that in observed hospitals,24% of pharmacy environments, 25% of pharmacy store and storage conditions, 49% of storage procedure, 25% of ordering drugs and supplies, 73% of receiving supplies (proper procedure are fallowed for receiving supplies), 35% of receiving supplies (prompt action taken if deterioration of drugs received is suspected), 23.35% of drugs delivery to patients and finally 0% of stock cards are used for proper inventory control have full compliance with standards.
Keywords: Hospital pharmacy standards, Kermanshah, pharmacy management

ISBN NR: 978-625-6283-33-6

OPTIMIZING VISIBLE LIGHT COMMUNICATION SYSTEMS THROUGH NATURAL LIGHT INTEGRATION

Mahmoud H. Aly, Ivan Andonovic, Moustafa Beshr

University of Al Quaraouiyine, Fes- Morocco

Abstract:

Visible Light Communication (VLC) offers advantages of low energy consumption, licence free and RF interference free operation. One application area for VLC is in the provision of health centred services circumventing issues of interference with any biomedical device within the environment. VLC performamce is affected by natural light restricting systems avilability and relibility. The paper presents an analysis of the performance of VLC systems under different meteorological conditions. The evaluation considered the impact of natural light as a function of different reflection surfaces in different room sizes.

Keywords: Visible light communication, impulse reponse , performance analysis , natural light.

ISBN NR: 978-625-6283-33-6

INTEGRATING WIRELESS BODY AREA NETWORKS WITH WEB SERVICES: REVOLUTIONIZING UBIQUITOUS HEALTHCARE PROVISIONING THROUGH ARCHITECTURE

Ogunduyile O. Oluwgbenga

University Carlo Cattaneo- Italy

Abstract:

Recent advancements in sensor technologies and Wireless Body Area Networks (WBANs) have led to the development of cost-effective healthcare devices which can be used to monitor and analyse a person-s physiological parameters from remote locations. These advancements provides a unique opportunity to overcome current healthcare challenges of low quality service provisioning, lack of easy accessibility to service varieties, high costs of services and increasing population of the elderly experienced globally. This paper reports on a prototype implementation of an architecture that seamlessly integrates Wireless Body Area Network (WBAN) with Web services (WS) to proactively collect physiological data of remote patients to recommend diagnostic services. Technologies based upon WBAN and WS can provide ubiquitous accessibility to a variety of services by allowing distributed healthcare resources to be massively reused to provide cost-effective services without individuals physically moving to the locations of those resources. In addition, these technologies can reduce costs of healthcare services by allowing individuals to access services to support their healthcare. The prototype uses WBAN body sensors implemented on arduino fio platforms to be worn by the patient and an android smart phone as a personal server. The physiological data are collected and uploaded through GPRS/internet to the Medical Health Server (MHS) to be analysed. The prototype monitors the activities, location and physiological parameters such as SpO2 and Heart Rate of the elderly and patients in rehabilitation. Medical practitioners would have real time access to the uploaded information through a web application.
Keywords: Android Smart phone, Arduino Fio, Web application server, Wireless Body Area Networks.

ISBN NR: 978-625-6283-33-6

DYNAMIC BRAIN WAVE ACQUISITION AND PSYCHOACOUSTIC ANALYSIS IN REAL TIME

Dipali SShweta , ingh Mahajan , Bansal Rashima

Lithuanian Sports University- Lithuania

Abstract:

Psychoacoustics has become a potential area of research due to the growing interest of both laypersons and medical and mental health professionals. Non invasive brain computer interface like Electroencephalography (EEG) is widely being used in this field. An attempt has been made in this paper to examine the response of EEG signals to acoustic stimuli further analyzing the brain electrical activity. The real time EEG is acquired for 6 participants using a cost effective and portable EMOTIV EEG neuro headset. EEG data analysis is further done using EMOTIV test bench, EDF browser and EEGLAB (MATLAB Tool) application software platforms. Spectral analysis of acquired neural signals (AF3 channel) using these software platforms are clearly indicative of increased brain activity in various bands. The inferences drawn from such an analysis have significant correlation with subject's subjective reporting of the experiences. The results suggest that the methodology adopted can further be used to assist patients with sleeping and depressive disorders.

Keywords: OM' chant, Spectral analysis, EDF Browser, EEGLAB, EMOTIV, Real time Acquisition.

ISBN NR: 978-625-6283-33-6

ENHANCING COMBAT EFFECTIVENESS IN NEW GENERATION FIGHTER PLANES THROUGH HUMAN FACTORS CONSIDERATIONS

Binoy Bhargavan

University of Macedonia- Greece

Abstract:

Role of fighter planes in modern network centric military warfare scenarios has changed significantly in the recent past. New generation fighter planes have multirole capability of engaging both air and ground targets with high precision. Multirole aircraft undertakes missions such as Air to Air combat, Air defense, Air to Surface role (including Air interdiction, Close air support, Maritime attack, Suppression and Destruction of enemy air defense), Reconnaissance, Electronic warfare missions, etc. Designers have primarily focused on development of technologies to enhance the combat performance of the fighter planes and very little attention is given to human factor aspects of technologies. Unique physical and psychological challenges are imposed on the pilots to meet operational requirements during these missions. Newly evolved technologies have enhanced aircraft performance in terms of its speed, firepower, stealth, electronic warfare, situational awareness, and vulnerability reduction capabilities. This paper highlights the impact of emerging technologies on human factors for various military operations and missions. Technologies such as 'cooperative knowledge-based systems' to aid pilot's decision making in military conflict scenarios as well as simulation technologies to enhance human performance is also studied as a part of research work. Current and emerging pilot protection technologies and systems which form part of the integrated life support systems in new generation fighter planes is discussed. System safety analysis application to quantify the human reliability in military operations is also studied.

Keywords: Combat effectiveness, emerging technologies, human factors, systems safety analysis.

ISBN NR: 978-625-6283-33-6

CONSTRUCTING AN INTEGRATED RELATIONAL DATABASE UTILIZING SWISS NUTRITION NATIONAL SURVEY AND HEALTH DATASETS FOR DATA MINING OBJECTIVES

Helena Einsele , Jenzer Farshideh

Fiji Institute of Technology- Fiji

Abstract:

Objective: The objective of the study was to integrate two big databases from Swiss nutrition national survey (menuCH) and Swiss health national survey 2012 for data mining purposes. Each database has a demographic base data. An integrated Swiss database is built to later discover critical food consumption patterns linked with lifestyle diseases known to be strongly tied with food consumption. Design: Swiss nutrition national survey (menuCH) with approx. 2000 respondents from two different surveys, one by Phone and the other by questionnaire along with Swiss health national survey 2012 with 21500 respondents were pre-processed, cleaned and finally integrated to a unique relational database. Results: The result of this study is an integrated relational database from the Swiss nutritional and health databases.

Keywords: Health informatics, data mining, nutritional and health databases, nutritional and chronical databases.

ISBN NR: 978-625-6283-33-6

CAN EEG TESTING AID IN BRAIN TUMOR IDENTIFICATION?

M. Sharanreddy, P. K. Kulkarni

University of Priština in North Mitrovica- Kosovo

Abstract:

Brain tumor is inherently serious and life-threatening disease. Brain tumor builds the intracranial pressure in the brain, by shifting the brain or pushing against the skull, and also damaging nerves and healthy brain tissues. This intracranial pressure affects and interferes with normal brain functionality, which results in generation of abnormal electrical activities from brain. With recent development in the medical engineering and instruments, EEG instruments are able to record the brain electric activities with high accuracy, which establishes EEG as a primary tool for diagnosing the brain abnormalities. Research scholars and general physicians, often face difficulty in understanding EEG patterns. This paper presents the EEG patterns associated with brain tumor by combing medicine theory and neurologist experience. Paper also explains the pros-cons of the EEG based brain tumor identification.

Keywords: Brain tumor, Electroencephalogram (EEG).

ISBN NR: 978-625-6283-33-6

EXAMINING THE HAZARDS OF INADEQUATE MEDICAL WASTE MANAGEMENT PRACTICES ON HUMAN HEALTH AND THE ENVIRONMENT: A REVIEW OF LITERATURE

Babanyara Ibrahim, Garba Bogoro., M. Y.Abubakar,

University of Novo Mesto, Novo Mesto- Slovenia

Abstract:

Medical care is vital for our life, health and well-being. But the waste generated from medical activities can be hazardous, toxic and even lethal because of their high potential for diseases transmission. The hazardous and toxic parts of waste from healthcare establishments comprising infectious, medical and radioactive material as well as sharps constitute a grave risks to mankind and the environment, if these are not properly treated / disposed or are allowed to be mixed with other municipal waste. In Nigeria, practical information on this aspect is inadequate and research on the public health implications of poor management of medical wastes is few and limited in scope. Findings drawn from Literature particularly in the third world countries highlights financial problems, lack of awareness of risks involved in MWM, lack of appropriate legislation and lack of specialized MWM staff. The paper recommends how MWM practices can be improved in medical facilities.

Keywords: Environmental pollution, infectious, management, medical waste, public health.

ISBN NR: 978-625-6283-33-6

EXAMINING MAINTENANCE STRATEGIES AND RELIABILITY OF VITAL MEDICAL EQUIPMENT IN HOSPITALS: IMPACT ON PATIENT OUTCOMES

Flanagan Peter , Gibson John

Charles Darwin University- Australia

Abstract:

This study investigates the relationship between the reliability of critical medical equipment (CME) and the effectiveness of CME maintenance management strategies in relation to patient outcomes in 84 public hospitals of a top 20 OECD country. The work has examined the effectiveness of CME maintenance management strategies used by the public hospital system of a large state run health organization. The conceptual framework was designed to examine the significance of the relationship between six variables: (1) types of maintenance management strategies, (2) maintenance services, (3) maintenance practice, (4) medical equipment reliability, (5) maintenance costs and (6) patient outcomes. The results provide interesting insights into the effectiveness of the maintenance strategies used. For example, there appears to be about a 1 in 10 000 probability of failure of anesthesia equipment, but these seem to be confined to specific maintenance situations. There are also some findings in relation to outsourcing of maintenance. For each of the variables listed, results are reported in relation to the various types of maintenance strategies and services. Decision-makers may use these results to evaluate more effective maintenance strategies for their CME and generate more effective patient outcomes.

Keywords: Critical medical equipment, maintenance strategy, patient outcomes, reliability.

ISBN NR: 978-625-6283-33-6

CTIVE DYNAMIC FEATURES FOR HEART DISEASE CLASSIFICATION

Walid Khelood

Harokopio University of Athens- Greece

Abstract:

The healthcare environment is generally perceived as being information rich yet knowledge poor. However, there is a lack of effective analysis tools to discover hidden relationships and trends in data. In fact, valuable knowledge can be discovered from application of data mining techniques in healthcare system. In this study, a proficient methodology for the extraction of significant patterns from the Coronary Heart Disease warehouses for heart attack prediction, which unfortunately continues to be a leading cause of mortality in the whole world, has been presented. For this purpose, we propose to enumerate dynamically the optimal subsets of the reduced features of high interest by using rough sets technique associated to dynamic programming. Therefore, we propose to validate the classification using Random Forest (RF) decision tree to identify the risky heart disease cases. This work is based on a large amount of data collected from several clinical institutions based on the medical profile of patient. Moreover, the experts- knowledge in this field has been taken into consideration in order to define the disease, its risk factors, and to establish significant knowledge relationships among the medical factors. A computer-aided system is developed for this purpose based on a population of 525 adults. The performance of the proposed model is analyzed and evaluated based on set of benchmark techniques applied in this classification problem.
Keywords: Multi-Classifier Decisions Tree, Features Reduction, Dynamic Programming, Rough Sets.

ISBN NR: 978-625-6283-33-6

IMPACTS OF INTRODUCING PHOTOVOLTAIC SYSTEMS IN DETACHED HOUSES WITH ALL-ELECTRIFIED RESIDENTIAL EQUIPMENT IN JAPAN

Dr. Qingrong Liu

University: University of Toronto, Canada

Abstract:

This study examines the effects of integrating photovoltaic systems into detached houses in Japan through two primary investigations. Firstly, a simulation model of photovoltaic systems was utilized to simulate the hourly generation capacity of a 4.2kW system across 46 cities, assessing its potential across different regions of Japan. Secondly, leveraging the simulated electricity generation data, the study evaluates the energy-saving, environmental, and economic implications of photovoltaic systems on both hourly and annual scales. This evaluation is based on typical electricity, heating, cooling, and hot water consumption profiles for Japanese residences. The analysis utilizes hourly weather data from different cities provided by the Expanded AMeDAS Weather Data, as issued by AIJ (Architectural Institute of Japan).

Keywords: Photovoltaic system, Energy saving, Environmental impact, Japanese residential architecture, Detached house

ISBN NR: 978-625-6283-33-6

OPTIMIZATION OF RESIDENTIAL ENERGY CONSUMPTION: A COMPARATIVE STUDY BETWEEN ENERGY CONSUMPTION SCHEDULING AND LOAD SHIFTING TECHNIQUES

Amira M. Attia, Karim H. Youssef, Nabil H. Abbasy

University of Auckland, New Zealand

Abstract:

The Energy Consumption Schedule (ECS) technique involves shifting loads away from peak hours and redistributing them throughout the day based on residents' preferences. This method serves as an indirect control mechanism by utilities to enhance the load curve, thereby improving the load factor and reducing customers' total electric bills. Similarly, the load shifting technique achieves the objectives of ECS but through direct control by utilities. This paper presents the simulation of ECS implemented as an optimal constrained mathematical formula, solved using the CVX program in MATLAB® R2013b. Initially, it is applied to a single residential building comprising ten apartments to determine the maximum allowable energy consumption per hour for each unit. Subsequently, it is implemented for a single apartment equipped with shiftable domestic devices, with the operating schedule derived from the constraints determined in the previous simulation. The paper concludes by highlighting the distinctions between the ECS technique and load shifting technique through literature review and simulation results. The assessment of these results will determine whether ECS or load shifting is more advantageous for both customers and utilities.

Keywords: Energy consumption schedule, load shifting technique, comparison.

ISBN NR: 978-625-6283-33-6

UTILIZATION OF COW'S URINE AS AN ALTERNATIVE ENERGY SOURCE: FEASIBILITY STUDIES

Raj Kumar Rajak, Bharat Mishra

University of Amsterdam, Netherlands

Abstract:

Bio-batteries present a novel, cost-effective, accessible, and environmentally friendly approach to sustainable energy generation. In this experimental study, we investigated the potential of generating power using cow's urine as an electrolyte in a bio-battery with various electrode pairs. Our findings demonstrate the feasibility of electricity generation through cow's urine, with the C-Mg electrode pair exhibiting the highest Voltage and Short Circuit Current (SCC), while the C-Zn electrode pair showed a lower Open Circuit Voltage (OCV) and SCC. Further analysis revealed that the C-Zn electrode battery is more economical. Specifically, the cow urine battery with the C-Zn electrode yielded maximum power (707.4 mW) and durability (up to 145 hours). This outcome underscores the potential of bio-batteries to meet the electricity demand for low-energy devices.

Keywords: Bio-batteries, cow's urine, electrodes, non-conventional.

ISBN NR: 978-625-6283-33-6

HARNESSING FOREST INDUSTRY RESIDUES FOR ENERGY GENERATION

Dr. Emma Torres

University: University of Queensland, Australia

Abstract:

The utilization of biomass for renewable energy production presents a viable solution to mitigate the environmental impact of conventional energy sources. However, biomass faces competition from fossil fuels as well as other renewable sources such as solar and wind energy. Presently, combustion stands as the most efficient method for converting waste to energy, especially in regions where biomass utilization is feasible without extensive material transportation. Many industrial facilities can integrate agricultural or forestry residues into their thermal systems with minimal adjustments, making biomass an attractive and economically viable option. Nevertheless, environmental considerations, including gas emissions and particulate matter, play a crucial role in determining the suitability of biomass for energy production. This study presents a case analysis of valorizing forest industry residues for energy generation.

Keywords: Bioenergy, forest residues, life-cycle assessment, waste-to-energy, electricity.

ISBN NR: 978-625-6283-33-6

EXPLORING THE VIABILITY OF COW DUNG AS AN ALTERNATIVE ENERGY SOURCE

Dr. Raj Kumar Rajak, PhD), Dr. Bharat Mishra, PhD

(University of Melbourne, Australia

Abstract:

Bio-batteries represent an entirely new long-term, reasonable, reachable and ecofriendly approach to produce sustainable energy. In the present experimental work, we have studied the effect of generation of power by bio-battery using different electrode pairs. The tests show that it is possible to generate electricity using cow dung as an electrolyte. C-Mg electrode pair shows maximum voltage and SCC (Short Circuit Current) while C-Zn electrode pair shows less OCV (Open Circuit Voltage) and SCC. We have chosen C-Zn electrodes because Mg electrodes are not economical. By the studies of different electrodes and cow dung, it is found that C-Zn electrode battery is more suitable. This result shows that the bio-batteries have the potency to full fill the need of electricity demand for lower energy equipment.

Keywords: Bio-batteries, electricity, cow dung, electrodes, non-conventional.

ISBN NR: 978-625-6283-33-6

ASSESSMENT OF NH3-SLIP FROM DIESEL VEHICLES EQUIPPED WITH SELECTIVE CATALYTIC REDUCTION SYSTEMS THROUGH NEURAL NETWORKS APPROACH

Dr. Mona Lisa M. Oliveira (University of Tokyo, Japan), Dr. Nara A. Policarpo, Dr. Ana Luiza B. P. Barros, Dr. Carla A. Silva

Abstract:

Selective catalytic reduction (SCR) systems utilizing ammonia for nitrogen oxides (NOx) reduction have become the preferred technology for diesel vehicle manufacturers, including buses and trucks, in Brazil and Europe. However, excessive ammonia availability under certain conditions can lead to heightened NH3 slips. Maximum efficiency in NOx removal from vehicle exhaust is attained when a significant quantity of NH3 is stored on the catalyst surface of these systems. Typically, a target slightly below 100% NOx conversion is aimed for, allowing for aqueous urea solution hydrolysis to NH3 under relatively low temperatures. This paper presents a neural network model integrated with a road vehicle simulator to estimate NH3-slip emission factors across diverse driving conditions and patterns. The model predicts elevated NH3 slips, which are not only prevalent in Brazil but also warrant further investigation into the contribution of vehicle-emitted NH3 to urban atmospheric pollution.

Keywords: Ammonia slip, neural network, vehicle emissions, SCR-NOx.

ISBN NR: 978-625-6283-33-6

COMPUTATIONAL AND EXPERIMENTAL EVALUATION OF A PCM-INTEGRATED SOLAR CHIMNEY

Dr. J. Carlos Frutos Dordelly, University of Auckland, New Zealand

Co- Dr. M. Coillot, Dr. M. El Mankibi, Dr. R. Enríquez Miranda, Dr. M. José Jimenez (University of Auckland, New Zealand),

Abstract:

With escalating energy consumption in the building sector and heightened environmental consciousness, natural ventilation systems have garnered increasing attention. Over the past two decades, the pressing concerns regarding greenhouse gas emissions and the demand for efficient passive ventilation systems have spurred the exploration of novel alternative technologies such as ventilated facades, trombe walls, and solar chimneys. This study aims to evaluate the efficacy of phase-changing material (PCM) panels integrated into an in situ solar chimney through both numerical modeling and experimental analysis. The PCM-integrated solar chimney exhibits marginal enhancements in performance concerning mass flow rate and temperature differentials between the external and outlet air. Notably, during periods of low wind speed, an increase of 11.3659 m3/h in mass flow rate is observed. Furthermore, the surface temperature along the chimney exceeds 45 °C, facilitating the activation of PCM panels.

Keywords: Energy storage, passive ventilation, phase-changing materials, solar chimney, solar energy.

ISBN NR: 978-625-6283-33-6

EVALUATION OF ORGANIC RANKINE CYCLE TECHNOLOGY FOR HARNESSING LOW-GRADE WASTE HEAT FOR POWER GENERATION IN INDIAN INDUSTRY

Dr. Bipul Krishna Saha, Indian Institute of Technology Bombay, India

Co- Dr. Basab Chakraborty, Dr. Ashish Alex Sam, Dr. Parthasarathi Ghosh

Abstract:

As the demand for energy continues to rise, there is a growing urgency to explore alternative energy sources and minimize energy wastage in various sectors, particularly as conventional energy resources gradually diminish. One promising avenue is the utilization of low-grade waste heat from industrial processes to generate electricity. This study aims to promote the adoption of Organic Rankine Cycle (ORC) technology within the Indian industrial sector. Building upon previous research, this paper conducts a comparative analysis using practical data from an Indian industrial plant, focusing on three different working fluids for ORC systems. Waste heat data is collected from a current coke oven gas plant in India and analyzed using Aspen Hysys® v8.6 simulation platform. Parametric analysis of non-regenerative and regenerative ORC systems is performed using R-123, R-11, and R-21 as working fluids for subcritical ORC systems. The objective is to identify the optimal working fluid based on various system parameters such as turbine work output, system efficiency, irreversibility rate, and second law efficiency within a range of applied multiple heat source temperatures (160 °C- 180 °C). Additionally, the study addresses the crucial task of selecting turbo-expanders for low-temperature applications in ORC systems, providing recommendations for appropriate turbine configurations. In summary, this research underscores the potential of integrating ORC technology into the Indian industrial landscape and offers insights into the optimal configuration of ORC system components for prototype development.

Keywords: Organic Rankine Cycle, regenerative ORC, waste heat recovery, Indian industry.

ISBN NR: 978-625-6283-33-6

ASSESSMENT OF NUTRITIONAL POTENTIAL OF FIVE UNEXPLORED WILD EDIBLE FOOD PLANTS FROM EASTERN HIMALAYAN BIODIVERSITY HOTSPOT REGION (INDIA)

Dr. Pallabi Kalita, Dr. Hui Tag, Dr. H. N. Sarma, Dr. A. K. Das

Kyoto University, Japan

Abstract:

Wild edible food plants are rich sources of organic phytochemicals that contribute to overall health. Inhabitants of Arunachal Pradesh in Northeast India have long utilized these plants, recognizing their high nutritional value for maintaining a balanced diet. This study aims to assess the nutritional potential of five commonly found yet unexplored wild food plants—Piper pedicellatum C. DC (leaves), Gonostegia hirta (Blume ex Hassk.) Miq. (leaves), Mussaenda roxburghii Hook.f (leaves), Solanum spirale Roxb. (leaves and fruits), and Cyathea spinulosa Wall. ex Hook. (pith portion and tender rachis)—in the East Siang District of Arunachal Pradesh Northeast, India, to determine their suitability as supplementary food sources. Our findings indicate that P. pedicellatum, C. spinulosa, and S. spirale (leaves) exhibit the highest nutritional content among the five investigated wild food plants, providing essential nutrients necessary for human growth and development.

Keywords: Wild edible plants, Gross energy, Gonostegia hirta, Cyathea spinulosa

ISBN NR: 978-625-6283-33-6

IMPACT OF HULL-LESS BARLEY FLAKES AND MALT EXTRACT ON YOGHURT QUALITY

Dr. Ilze Beitane, Dr. Evita Straumite

Seoul National University , South Korea

Abstract:

This study aimed to assess how flakes derived from biologically activated hull-less barley grain and malt extract affect the quality of yoghurt during storage.

The findings indicate that the concentration of added malt extract and the duration of storage significantly influence the pH and lactic acid levels in yoghurt samples. Moreover, sensory attributes such as aroma, taste, consistency, and appearance of yoghurt enriched with flakes from biologically activated hull-less barley grain and malt extract exhibited notable changes ($p<0.05$) over the storage period. Yoghurt with higher proportions of malt extract tended to have a sweeter taste and a smoother consistency. Interestingly, sensory characteristics (taste, aroma, consistency, and appearance) of yoghurt samples enriched with 5% flakes from biologically activated hull-less barley grain (YFBG 5%) and 5% flakes from biologically activated hull-less barley grain along with 2% malt extract (YFBG 5% ME 2%) remained relatively stable throughout one week of storage.

Keywords: Barley flakes, malt extract, yoghurt, sensory analysis.

ISBN NR: 978-625-6283-33-6

ASSESSMENT OF PHYSICAL-CHEMICAL PARAMETERS OF LATVIAN APPLE JUICES AND THEIR APPLICABILITY FOR CIDER PRODUCTION

Dr. Rita Riekstina-Dolge, Dr. Zanda Kruma, Dr. Daina Karklina, Dr. Fredijs Dimins

University of Riga, Latvia

Abstract:

Apple juice serves as the primary ingredient in cider production. This study examines apple juices derived from 14 dessert and crab apple varieties cultivated in Latvia. Soluble solids, titratable acidity, pH, and sugar content were analyzed for all samples. Crab apples exhibit higher levels of dry matter, total sugar, and acidity compared to dessert apples, with variations dependent on the specific apple variety. Total sugar content in crab apple juices surpasses that of dessert apple juices by a factor of 1.3 to 1.8. Titratable acidity ranges from 4.1g L-1 to 10.83g L-1 in dessert apple juices and from 7.87g L-1 to 19.6g L-1 in crab apple juices. Fructose predominates as the primary sugar, while glucose levels vary according to apple variety. Notably, 'Cornelia' apple juice exhibits the highest titratable acidity and sugar content.

Keywords: Apple juice, hierarchical cluster analysis, sugars, titratable acidity.

ISBN NR: 978-625-6283-33-6

NUTRITIONAL POTENTIAL AND TRADITIONAL USES OF HIGH ALTITUDE WILD EDIBLE PLANTS IN EASTERN HIMALAYAS, INDIA

Dr. Hui Tag, Co- Dr. Jambey Tsering, Pallabi Kalita Hui, Dr. Baikuntha Jyoti Gogoi, Dr. Vijay Veer

University of Bhutan, Bhutan

Abstract:

The Eastern Himalayan Region of India, situated in one of the world's mega diverse regions, has long relied on wild edible plants for livelihood security among its tribal communities. Despite being recognized as the 12th Global Biodiversity Hotspot by IUCN and one of the 200 significant eco-regions globally, the food security issues of this high mountain area have often been overlooked. This study delves into the traditional uses of 40 wild edible plant species in the region, particularly focusing on the Monpa, Memba, and Khamba communities residing in the high-altitude areas of Eastern Himalaya. These communities, followers of the Mahayana sect of Himalayan Buddhism, possess rich traditional knowledge on the utilization of wild flora and fauna for food, medicine, and beverages. The study highlights the biochemical analysis of six selected wild edible plant species, revealing significant free radical scavenging (antioxidant) activity and nutritional potential. This research sheds light on the crucial role of wild edible plants in ensuring food security among the diverse ethnic communities of the Eastern Himalayan Region of India.

Keywords: East Himalaya, Local community, Wild edible plants, Nutrition, Food security.

ISBN NR: 978-625-6283-33-6

ASSESSMENT OF HANCORNIA SPECIOSA GOMES LYOPHILIZATION AT VARIOUS STAGES OF RIPENESS

Dr. D. C. Soares, Dr. J. T. S. Santos, Dr. D. G. Costa, Dr. A. K. S. Abud

Al-Farabi Kazakh National University, Kazakhstan

Abstract:

Mangabeira (Hancornia speciosa Gomes), a native plant in Brazil, thrives spontaneously in diverse regions of the country. The highly perishable nature of tropical fruits like mangaba necessitates the application of technologies for preservation, aiming to extend the fruit's shelf life and enhance its value. This study aims to compare the lyophilization curves of mangabas at different sizes and ripeness stages. The fruits underwent freeze-drying for approximately 45 hours using a Liotop brand lyophilizer, model L-108. Fruits with diameters ranging between 38 and 58 mm were classified as large, while those with diameters between 23 and 28 mm were considered small, encompassing two ripeness stages: intermediate and mature. The drying curves of large mangabas at both ripeness stages exhibited linear behavior throughout the process, whereas drying kinetics of small fruits, irrespective of ripeness stage, displayed typical drying behavior with distinct stages. These findings suggest that the lyophilization duration was appropriate for small mangabas, unlike their larger counterparts. This observation implies that larger mangabas may require an extended freezing period to reach equilibrium moisture levels, akin to small fruits, resulting in consistent moisture content at the process's conclusion. Water activity, acidity, protein, lipid, and vitamin C levels were analyzed before and after the lyophilization process for both fruit types.

Keywords: Freeze dryer, mangaba, preservation, chemical characteristics.

ISBN NR: 978-625-6283-33-6

ASSESSMENT OF COPPER CONTENT IN DAILY FOOD RATIONS PROVIDED TO CADETS FROM SELECTED MILITARY ACADEMIES AND CONSCRIPTS SERVING IN THE POLISH ARMED FORCES

Dr. Jan Bertrandt,

Co- Dr. Anna Kłos, Dr. Ryszard Waszkowski, Dr. Tomasz Nowicki, Dr. Rafał Pytlak, Dr. Elżbieta Stężycka, Dr. Agnieszka Gazdzinska

University of Warsaw, Poland

Abstract:

This study aims to evaluate the copper intake from daily food rations provided to cadets of military academies and conscripts serving in the Polish Armed Forces. The average planned copper content in daily food rations for cadets and conscripts was found to be 2.49±0.35 mg and 2.44±0.25 mg, respectively. Copper content in the daily food rations consumed by cadets ranged from 1.81±0.14 mg to 2.58±0.44 mg, while those served to conscripts ranged from 2.06±0.45 mg to 2.13±0.33 mg. The planned copper content in the rations for both cadets and conscripts adhered to the mandatory norms in Poland. However, the actual consumption of food rations, except those for cadets, did not meet the recommended copper requirements.

Keywords: Copper, daily food ration, military service.

ISBN NR: 978-625-6283-33-6

IMPACT OF RITUAL DANCES ON PERSONAL ADJUSTMENT - AN INSIGHTFUL INVESTIGATION AMONG SCHOOL CHILDREN

Dr. Abdul Rahiman Kannam Kulam,

University of Tashkent, Uzbekistan

Abstract:

Aligned with the holistic development of children, this study explores how purposeful engagement in physical activities, particularly ritual dances, can influence the personal adjustment of young individuals. Focusing on school children in Kerala, India, the study examines the personal adjustment of two thousand and three hundred participants. Data on adjustment levels were collected using the AISS manual developed by A.K.P Sinha and R.P Singh. Adjustment qualities were classified as Excellent, Good, Average, Unsatisfactory, and Very Unsatisfactory, with the total performance indicating the overall adjustment state. The findings were analyzed using percentages and 't' ratios. The study reveals that participants in ritual dances demonstrate better emotional, social, and overall adjustments compared to non-athletes. However, it also indicates that there is no significant difference in educational adjustment between school athletes and non-athletes among school children.

Keywords: Ritual dances, Emotional adjustment, Poorakkali, Kolkali, Margamkali.

ISBN NR: 978-625-6283-33-6

EVALUATION OF BLENDED PLANTAIN-WHEAT FLOUR PERFORMANCE IN BISCUIT PRODUCTION

Dr. Idoko J. O., Dr. Nwajiaku I.

University of Nairobi, Kenya

Abstract:

This study investigates the utilization of unripe and ripe plantain in combination with wheat flour for biscuit production, aiming to identify the optimal plantain-wheat composite flour for biscuit manufacturing. Various blends were prepared, including 100% wheat flour, 100% ripe plantain flour, 100% unripe plantain flour, and combinations of 50% wheat flour with 50% ripe or unripe plantain flour. The resulting biscuit samples were subjected to storage at ambient temperature for 8 weeks, during which their equilibrium moisture content and water activity were measured. Additionally, sensory evaluations were conducted to assess the acceptability of the biscuit samples. The findings indicate that biscuits made with 100% unripe plantain flour exhibited the most stable properties, with an equilibrium moisture content of 0.32% and a water activity of 0.62. Sensory evaluation results highlight the preference for biscuits made from a blend of 50% ripe plantain and 50% wheat flour, which achieved the highest overall acceptance level at a significance level of 5%.

Keywords: Biscuit, equilibrium moisture content, performance, plantain, water activity.

ISBN NR: 978-625-6283-33-6

IMPACT OF INCORPORATING SUPERCRITICAL CARBON DIOXIDE EXTRACTS OF CINNAMOMUM TAMALA (BAY LEAF) ON THE NUTRACEUTICAL PROPERTIES OF TOFU

Dr. Sudip Ghosh, Dr. Probir Kumar Ghosh, Dr. Paramita Bhattacharjee

University of Auckland, New Zealand

Abstract:

Supercritical carbon dioxide extracts of Cinnamomum tamala (bay) leaves obtained at 55°C and 512 bar exhibit significant nutraceutical properties, making them suitable as value-added ingredients in tofu production. A tofu sample formulated with bay leaf extract was subjected to comprehensive analysis, including evaluation of physicochemical properties (pH, texture analysis, and lipid peroxidation), proximate analysis, phytochemical properties (total phenol content, antioxidant properties, and total reducing sugar), microbial load, and sensory profile analysis over a ten-day storage period, compared to an experimental control sample. Results demonstrate the superior qualities of the tofu sample containing supercritical carbon dioxide extract of bay leaf compared to the control. Thus, bay leaf extract-infused tofu emerges as a novel green functional food with promising nutraceutical benefits.

Keywords: Cinnamomum tamala, Physicochemical properties, Phytochemical properties, Supercritical carbon dioxide extraction, Tofu.

ISBN NR: 978-625-6283-33-6

INVESTIGATING THE INHIBITORY EFFECT OF WEISSELLA KOREENSIS 521 ISOLATED FROM KIMCHI ON 3T3-L1 ADIPOCYTE DIFFERENTIATION

Dr. KyungBae Pi, Dr. KiBeom Lee, Dr. Yongil Kim, Dr. Eun-Jung Lee

National University of Malaysia, Malaysia

Abstract:

Abnormal adipocyte growth, characterized by increased cell numbers and enhanced cell differentiation, is a key pathological aspect of obesity. Thus, inhibiting preadipocyte mitogenesis and differentiation could potentially prevent and mitigate obesity. This study aims to evaluate whether extracts derived from Weissella koreensis 521 cells, isolated from kimchi, possess anti-adipogenic properties in 3T3-L1 cells (fat cells). Differentiating 3T3-L1 cells were exposed to W. koreensis 521 cell extracts (W. koreensis 521_CE), and cell viability was assessed using MTT assays. W. koreensis 521_CE exhibited no cytotoxic effects on 3T3-L1 cells at concentrations below 0.2 mg/ml. However, treatment with W. koreensis 521_CE significantly impeded adipocyte differentiation, as evidenced by morphological analysis and Oil Red O staining of fat. Moreover, W. koreensis 521_CE treatment (0.2 mg/ml) reduced lipid accumulation by 24% in fully differentiated 3T3-L1 adipocytes. These findings collectively suggest that Weissella koreensis 521 may offer potential in obesity prevention.

Keywords: Weissella koreensis 521, 3T3-L1 cells, adipocyte differentiation, obesity.

ISBN NR: 978-625-6283-33-6

EXAMINATION OF COACHING LEADERSHIP TRAIT PREFERENCES AMONG UNIVERSITY AND COLLEGE ATHLETES

Dr. Idou Keinde,

University of Gadjah Mada, Indonesia

Abstract:

This research delves into the coaching leadership traits favored by athletes attending universities and colleges of education in Lagos State, South West Nigeria. The study sample comprises athletes from two universities (n=99) and two colleges of education (n=92). Athletes' preferences were assessed using the Leadership Trait Preference Questionnaire (LTPQ), with mean and Spearman rank order statistics employed for data analysis. Findings indicate that traits such as friendliness and happiness, sense of humor and cheerfulness, and cooperation were the most preferred across both types of institutions. Additionally, college of education athletes exhibited a higher mean preference (M=34.54; SD=9.42) for leadership traits compared to their university counterparts (M=33.64; SD=9.46). A notably strong relationship (rho=.81; *p<0.05) was observed between the preferences of university and college of education athletes. The study suggests that coaches, in their leadership roles, should occasionally display emotive aspects of themselves to inspire athletes toward higher performance levels.

Keywords: Coaching behavior, coach-athlete relationship, interscholastic games, leadership traits.

ISBN NR: 978-625-6283-33-6

IMPACT OF STRENGTH ABILITIES ON HANDSTAND QUALITY

Dr. P. Hedbávný, Dr. G. Bago, Dr. M. Kalichová

University of Amsterdam, Netherlands

Abstract:

This study explores the influence of strength abilities on the quality of static balance movements, particularly the handstand. Our research examines strength abilities through specific tests: the number of push-ups per minute and persistence in trunk backward bending while in a sitting position. We evaluated the dependent variable using three tests: persistence in the handstand position on a stabilometric platform, persistence in the handstand position, and the assessment of handstand performance quality. Pearson's correlation coefficient was employed to analyze the relationship between these variables. The findings revealed a statistically significant correlation, allowing us to draw conclusions relevant to training practices.

Keywords: Strength abilities, handstand, balance.

ISBN NR: 978-625-6283-33-6

EVALUATION OF TALENT SELECTION METHODS FOR WOMEN'S ARTISTIC GYMNASTICS AND PRACTICAL VALIDATION OF THE TESTING BATTERY

Dr. G. Bago, Dr. P. Hedbávný, Dr. M. Kalichová

University of the Philippines Manila

Abstract:

This study aims to design and subsequently validate a testing battery that can effectively identify talented gymnasts for the current approach to women's artistic gymnastics. Drawing upon a review of existing literature, a testing battery comprising three components—power testing, speed testing, and flexibility testing—was developed. Standardized evaluation scales were employed in these tests. The testing battery was administered to girls aged 6 - 7 during the recruitment process for Sokol Brno I. and SG Pelhrimov Gymnastic Club. Following 6 months of training, the same battery of tests was re-administered. The results were analyzed through observation and questionnaire responses, which were then transformed into graphical representations. Practical recommendations were formulated based on these findings.

Keywords: Talent selection, women's artistic gymnastics, power testing, speed testing, flexibility testing.

ISBN NR: 978-625-6283-33-6

BIOMECHANICAL ANALYSIS OF BICROSS START

Dr. Miroslava Kalichová, Dr. Sára Hřebíčková,

Lomonosov Moscow State University - Russia

Abstract:

This article presents a biomechanical analysis of the classic bicross start involving a backward movement of the bike. The study focuses on two bicross riders representing the Czech Republic. Through 3D kinematic analysis, with a particular emphasis on ankle movement, the start is divided into five phases: phase n. 1 – reaction time, phase n. 2 – preparation movements time, phase n. 3 – first pedal stroke time, phase n. 4 – dead point pedal passage time, phase n. 5 – second pedal stroke time. We highlight the significance of kinematic characteristics across various stages of the bicross start, including their values and extent of change. Key aspects include the vector of the instantaneous velocity of the head, wrists, elbows, shoulders, hip, and knee joints, with notable angle characteristics observed in elbow, shoulder, hip, and knee joints. The findings provide insights into prevailing movement types in each phase, serving as a foundational basis for further analyses of this movement structure, albeit on a larger research sample.

Keywords: Bicross, start, kinematic analysis.

ISBN NR: 978-625-6283-33-6

EXPLORING THE USE OF ARTIFICIAL NEURAL NETWORKS FOR PREDICTING SPORT INJURIES

Dr. J. McCullagh, Dr. T. Whitfort

University of Auckland, New Zealand

Abstract:

Artificial Neural Networks (ANNs) have proven effective in various scientific, industrial, and business sectors for extracting insights from extensive datasets. However, their application in the realm of sports has been relatively limited. In professional sports, a plethora of data is collected on team dynamics, game statistics, training regimes, and player performance. Sporting bodies are increasingly recognizing the latent knowledge embedded within this data and are eager to explore techniques for its utilization. This research employs player data sourced from the elite Australian Football League (AFL) to train and evaluate ANNs with the objective of predicting injury occurrences. The findings reveal that the ANNs achieved an accuracy rate of 82.9% across all instances, with 94.5% of injuries accurately predicted. These preliminary results indicate the potential of ANNs to aid sporting organizations in injury prediction.

Keywords: Artificial Neural Networks, data analysis, sports injuries, predictive modeling

ISBN NR: 978-625-6283-33-6

COMPARATIVE ANALYSIS OF PHYSICAL FITNESS AMONG STUDENTS PARTICIPATING IN VARIOUS TEAM SPORTS

Dr. R. Belaidi,

University of Algiers, Algeria

Abstract:

This study aims to investigate and compare the physical fitness levels of students involved in different team sports. A total of 60 female and 60 male athletes, with 20 athletes from each of the volleyball, basketball, and football teams, volunteered to participate in the study. The mean ages of female and male athletes were 21.20 ±1.87 and 21.61 ± 1.61, respectively. Measurements included age, height, body weight, body mass index, flexibility, body fat percentage, 30m sprint time, maximum oxygen consumption capacity (MaxVO2), and drop jump performance. Results revealed significant differences in height, weight, MaxVO2, and shuttle run speed among female athletes participating in different sports. Among male athletes, significant differences were observed in height, body weight, flexibility, 30m sprint time, and drop jump performance across different sports. In conclusion, it is evident from this study and existing literature that the physical structure of the body must align with the demands of the chosen sport. Increasing the sample size could provide clearer insights into the physical fitness requirements of various sports disciplines.

Keywords: Volleyball, basketball, football, athletes, physical fitness.

ISBN NR: 978-625-6283-33-6

INVESTIGATING THE IMPACT OF SPORT-SPECIFIC EXERCISES ON THE VISUAL ABILITIES OF RUGBY PLAYERS

Dr. P.J. Du Toit, Dr. P. Janse Van Vuuren, Dr. S. Le Roux, Dr. E. Henning, Dr. M. Kleynhans,

University of Bologna, Italy

Abstract:

Introduction: Visual performance plays a crucial role in achieving excellence in sports. The level of visual engagement in a sport is contingent upon the environmental demands specific to that sport, which necessitate a task-specific motor response. This study aims to assess whether sport-specific exercises can enhance the visual abilities of male rugby players, thereby optimizing their performance on the field.

Materials & Methods: Twenty-six adult male rugby players, aged 16-22, were selected as participants. A pre-test-post-test experimental group design was employed to evaluate the impact of sport-specific exercises on visual skills.

Results: Significant improvements ($p \leq 0.05$) were observed in the focusing, tracking, vergence, sequencing, eye-hand coordination, and visualization components.

Discussion & Conclusions: The findings indicate that sport-specific exercises enhance visual skills in rugby players, potentially conferring an advantage over opponents. This study suggests that training programs, along with regular participation in online EyeDrills sports vision exercises (www.eyedrills.co.za), aimed at improving athletes' visual coordination, concentration, focus, hand-eye coordination, anticipation, and motor response, should be integrated into the exercise regimen of rugby players.

Keywords: Rugby players, sport-specific exercises, visual skills.

ISBN NR: 978-625-6283-33-6

ANALYSIS OF SPECTATORS' MOTIVATIONS, EXPERIENCES, AND SATISFACTIONS AT THE 2011 TPGA EVER RICH CHAMPIONSHIP – NORTH BAY OPEN

Dr. Li-Wei Liu, Dr. Cheng-Yu Tsai, Dr. Ming-Tsang Wu

Kyoto University

Abstract:

This study delves into the motivations, experiences, and satisfactions of spectators attending the 2011 TPGA Ever Rich Championship – North Bay Open. We surveyed on-the-spot spectators at the North Bay Golf and Country Club to gather insights. Out of 200 distributed questionnaires, we received 185 valid responses, achieving an impressive 92.5% response rate. Utilizing statistical analysis, we observed significant differences in motivations, experiences, and satisfactions among spectators based on demographic variables. Additionally, we found that spectating motivation, experience, and satisfaction were closely intertwined.

Keywords: Spectating motivation, spectating experience, spectating satisfaction.

ISBN NR: 978-625-6283-33-6

A NOVEL MULTIRESOLUTION APPROACH FOR ROBUST AFFINE PARAMETER ESTIMATION OPTIMIZATION

Jefy Dinesh Peter

University of Novo Mesto, Novo Mesto- Slovenia

Abstract:

This paper describes a new method for affine parameter estimation between image sequences. Usually, the parameter estimation techniques can be done by least squares in a quadratic way. However, this technique can be sensitive to the presence of outliers. Therefore, parameter estimation techniques for various image processing applications are robust enough to withstand the influence of outliers. Progressively, some robust estimation functions demanding non-quadratic and perhaps non-convex potentials adopted from statistics literature have been used for solving these. Addressing the optimization of the error function in a factual framework for finding a global optimal solution, the minimization can begin with the convex estimator at the coarser level and gradually introduce nonconvexity i.e., from soft to hard redescending non-convex estimators when the iteration reaches finer level of multiresolution pyramid. Comparison has been made to find the performance of the results of proposed method with the results found individually using two different estimators.

Keywords: Image Processing, Affine parameter estimation, Outliers, Robust Statistics, Robust M-estimators

ISBN NR: 978-625-6283-33-6

DENGUE TRANSMISSION MODELING: EXPLORING INTERACTIONS BETWEEN INFANTS, PREGNANT WOMEN, AND ANTIBODIES

R.P. Pongsumpun

University of Priština in North Mitrovica- Kosovo

Abstract:

Dengue, a disease found in most tropical and subtropical areas of the world. It has become the most common arboviral disease of humans. This disease is caused by any of four serotypes of dengue virus (DEN1-DEN4). In many endemic countries, the average age of getting dengue infection is shifting upwards, dengue in pregnancy and infancy are likely to be encountered more frequently. The dynamics of the disease is studied by a compartmental model involving ordinary differential equations for the pregnant, infant human and the vector populations. The stability of each equilibrium point is given. The epidemic dynamic is discussed. Moreover, the numerical results are shown for difference values of dengue antibody.

Keywords: Dengue antibody, infant, pregnant human, mathematical model.

ISBN NR: 978-625-6283-33-6

COMPARATIVE EVALUATION OF DENGUE PATIENTS: PREGNANT VS. NON-PREGNANT COHORTS

Chat Peseeko

University of the Aegean- Greece

Abstract:

This paper examines long-range dependence or longmemory of financial time series on the exchange rate data by the fractional Brownian motion (fBm). The principle of spectral density function in Section 2 is used to find the range of Hurst parameter (H) of the fBm. If 0< H <1/2, then it has a short-range dependence (SRD). It simulates long-memory or long-range dependence (LRD) if 1/2< H <1. The curve of exchange rate data is fBm because of the specific appearance of the Hurst parameter (H). Furthermore, some of the definitions of the fBm, long-range dependence and selfsimilarity are reviewed in Section II as well. Our results indicate that there exists a long-memory or a long-range dependence (LRD) for the exchange rate data in section III. Long-range dependence of the exchange rate data and estimation of the Hurst parameter (H) are discussed in Section IV, while a conclusion is discussed in Section V.

Keywords: Fractional Brownian motion, long-rangedependence, memory, short-range dependence.

ISBN NR: 978-625-6283-33-6

COMPARATIVE ANALYSIS OF DENGUE PATIENTS: PREGNANT VS. NON-PREGNANT MODELS

Randa Pongsumpun

Applied Science Private University- Jordan

Abstract:

We used mathematical model to study the transmission of dengue disease. The model is developed in which the human population is separated into two populations, pregnant and non-pregnant humans. The dynamical analysis method is used for analyzing this modified model. Two equilibrium states are found and the conditions for stability of theses two equilibrium states are established. Numerical results are shown for each equilibrium state. The basic reproduction numbers are found and they are compared by using numerical simulations.

Keywords: Basic reproductive number, dengue disease, equilibrium states, pregnancy.

ISBN NR: 978-625-6283-33-6

MODELING DENGUE DISEASE DYNAMICS INCORPORATING VIRUS INCUBATION PERIOD IN MATHEMATICAL FRAMEWORK

Penabe. Pongsumpun

Federal University of Recôncavo da Bahia- Brazil

Abstract:

Dengue virus is transmitted from person to person through the biting of infected Aedes Aegypti mosquitoes. DEN-1, DEN-2, DEN-3 and DEN-4 are four serotypes of this virus. Infection with one of these four serotypes apparently produces permanent immunity to it, but only temporary cross immunity to the others. The length of time during incubation of dengue virus in human and mosquito are considered in this study. The dengue patients are classified into infected and infectious classes. The infectious human can transmit dengue virus to susceptible mosquitoes but infected human can not. The transmission model of this disease is formulated. The human population is divided into susceptible, infected, infectious and recovered classes. The mosquito population is separated into susceptible, infected and infectious classes. Only infectious mosquitoes can transmit dengue virus to the susceptible human. We analyze this model by using dynamical analysis method. The threshold condition is discussed to reduce the outbreak of this disease.

Keywords: Transmission model, intrinsic incubation period, extrinsic incubation period, basic reproductive number, equilibriumstates, local stability.

ISBN NR: 978-625-6283-33-6

STOCHASTIC RESONANCE IN NONLINEAR SIGNAL DETECTION: AMPLIFYING WEAK SIGNALS WITH NOISE

Youguofo Wang, Lenanmo Wu Yo

Choson University of Physical Education- North Korea

Abstract:

Stochastic resonance (SR) is a phenomenon whereby the signal transmission or signal processing through certain nonlinear systems can be improved by adding noise. This paper discusses SR in nonlinear signal detection by a simple test statistic, which can be computed from multiple noisy data in a binary decision problem based on a maximum a posteriori probability criterion. The performance of detection is assessed by the probability of detection error Per . When the input signal is subthreshold signal, we establish that benefit from noise can be gained for different noises and confirm further that the subthreshold SR exists in nonlinear signal detection. The efficacy of SR is significantly improved and the minimum of Per can dramatically approach to zero as the sample number increases. These results show the robustness of SR in signal detection and extend the applicability of SR in signal processing.

Keywords: Probability of detection error, signal detection, stochastic resonance.

ISBN NR: 978-625-6283-33-6

EXPLORING COMPUTATIONAL GEOMETRY THROUGH TWO SPATIAL EXPERIMENTS

Marco lee Hemmerling

University of Da Nang- Vietnam

Abstract:

The paper outlines the relevance of computational geometry within the design and production process of architecture. Based on two case studies, the digital chain - from the initial formfinding to the final realization of spatial concepts - is discussed in relation to geometric principles. The association with the fascinating complexity that can be found in nature and its underlying geometry was the starting point for both projects presented in the paper. The translation of abstract geometric principles into a three-dimensional digital design model – realized in Rhinoceros – was followed by a process of transformation and optimization of the initial shape that integrated aesthetic, spatial and structural qualities as well as aspects of material properties and conditions of production.

Keywords: Architecture, Computer Aided Architectural Design, 3D-Modeling, Rapid Prototyping, CAD/CAM.

ISBN NR: 978-625-6283-33-6

STUDY ON THE VIABILITY OF EMBEDDED REAL-TIME SYSTEMS

Yong Xia, JIN

Changsusan University- North Korea

Abstract:

Introducing survivability into embedded real-time system (ERTS) can improve the survivability power of the system. This paper mainly discusses about the survivability of ERTS. The first is the survivability origin of ERTS. The second is survivability analysis. According to the definition of survivability based on survivability specification and division of the entire survivability analysis process for ERTS, a survivability analysis profile is presented. The quantitative analysis model of this profile is emphasized and illuminated in detail, the quantifying analysis of system was showed helpful to evaluate system survivability more accurate. The third is platform design of survivability analysis. In terms of the profile, the analysis process is encapsulated and assembled into one platform, on which quantification, standardization and simplification of survivability analysis are all achieved. The fourth is survivability design. According to character of ERTS, strengthened design method is selected to realize system survivability design. Through the analysis of embedded mobile video-on-demand system, intrusion tolerant technology is introduced in whole survivability design.

Keywords: ERTS (embedded real-time system), survivability, quantitative analysis, survivability specification, intrusion tolerant

ISBN NR: 978-625-6283-33-6

INVASION OF PECTINATELLA MAGNIFICA IN FRESHWATER ECOSYSTEMS OF THAILAND

Dr. Surin Supasorn,

Mahidol University, Thailand

Abstract:

Pectinatella magnifica (Leidy, 1851) is an invasive freshwater organism known for its colony-forming nature. These gelatinous colonies can reach several feet in diameter and demonstrate rapid growth under favorable conditions. Recent reports from various European nations, including those along the rivers Elbe, Oder, Danube, Rhine, and Vltava, have confirmed the invasion of Pectinatella magnifica in freshwater reservoirs, including those in South Bohemia, Czech Republic. Our research project, funded by the Thai National Research Council (NRCT Grant No. 5678), focuses on the biology and chemistry of Pectinatella magnifica. We have been monitoring the presence of this organism in selected ponds and sandpits in South Bohemia over the past few years, collecting data on the physical properties of the surrounding water and conducting various analyses on the colonies, including classification, secondary metabolite mapping, and toxicity testing. Given that the gelatinous matrix of these colonies serves as a habitat for algae, bacteria, and cyanobacteria, we have also utilized high-performance liquid chromatography (HPLC) to detect potentially harmful cyanobacterial toxins such as microcystin-LR, microcystin-RR, and nodularin. Our findings from the past three years indicate that these toxins are currently below the limit of detection (LOD), posing no immediate threat. The overarching aim of our study is to assess the toxicity risks associated with freshwater ecosystems invaded by Pectinatella magnifica and to gain insights into the invasion process for effective management strategies.

Keywords: Cyanobacteria, freshwater ecosystems, Pectinatella magnifica invasion, toxicity monitoring.

ISBN NR: 978-625-6283-33-6

MODELING PHYTOREMEDIATION RATES OF AQUATIC MACROPHYTES IN AQUACULTURE EFFLUENT

Prof. Chen Wei, Shanghai Jiao

Tong University

Abstract:

Aquacultural activities contribute to environmental pollution, necessitating sustainable solutions like phytoremediation, especially in developing nations where expensive treatment equipment is not feasible. This research aimed to devise a mathematical model for phytoremediation in aquaculture wastewater using aquatic plants. It also sought to assess the impact of retention times on phytoremediation rates and measure nutrient levels in effluent. Water hyacinth (Eichornia crassippes), water lettuce (Pistial stratoites), and morning glory (Ipomea asarifolia) were studied. A randomized experimental design was employed, with macrophytes introduced into hydroponic units and monitored over 28 days. Water quality parameters like pH, electrical conductivity (EC), and nutrient concentrations were measured, along with biomass. Water hyacinth produced 438.2 g, 600.7 g, 688.2 g, and 725.7 g of biomass at 7-day intervals, while water lettuce yielded 361.2 g, 498.7 g, 561.2 g, and 623.7 g, and morning glory produced 417.0 g, 567.0 g, 642.0 g, and 679.5 g. The model exhibited over 80% determination coefficient for EC, TDS, NO2--N, NO3--N, and over 70% for NH4+-N, with predicted values within 95% confidence intervals of measured values, demonstrating its utility in designing phytoremediation systems for aquaculture effluent.

Keywords: Phytoremediation, macrophytes, hydroponic unit, aquaculture effluent, mathematical model.

ISBN NR: 978-625-6283-33-6

MICROWAVE-ASSISTED TECHNIQUES FOR ANALYZING VOLATILE COMPOUNDS IN CARUM CARVI USING GC AND GCXGC-MS

Dr. F. Benkaci-Ali (Nagoya University, Japan), Dr. R. Mékaoui, Dr. G. Scholl, Dr. G. Eppe

Abstract:

Accelerated steam distillation assisted by microwave (ASDAM) is a novel method that combines microwave heating and steam distillation, conducted at atmospheric pressure and with very short extraction times. This study compares ASDAM with cryogrinding (CG) and hydrodistillation assisted by microwave (HDAM), as well as conventional hydro-distillation (HD), for extracting essential oil from aromatic herbs such as caraway and cumin seeds. The essential oils extracted by ASDAM for just 1 minute showed quantitative (yield) and qualitative (aromatic profile) differences compared to ASDAM-CG (1 min) and HD (3 h). Microwave extraction with cryogrinding inhibits various enzymatic reactions, such as oil hydrolysis. Microwave radiation proves to be an effective means of extraction, resulting in higher yields and major component content, while considerably reducing energy consumption and heating time, crucial factors in minimizing artifact formation. ASDAM and ASDAM-CG are eco-friendly techniques that yield essential oils with higher concentrations of valuable oxygenated compounds compared to biosynthetic compounds, leading to significant savings in time, energy, and plant material.

Keywords: Microwave, steam distillation, caraway, cumin, cryogrinding, GC-MS, GCxGC-MS.

ISBN NR: 978-625-6283-33-6

IMPACT OF PETROLEUM HYDROCARBONS ON PLANT RHIZOSPHERE AND RHIZOPLANE BACTERIAL BIODIVERSITY

Dr. Togzhan D. Mukasheva Dr. Anel A. Omirbekova, Dr. Raikhan S. Sydykbekova, Dr. Ramza Zh. Berzhanova, Dr. Lyudmila V. Ignatova

(Al-Farabi Kazakh National University, Kazakhstan),

Abstract:

This study investigated the biodiversity of rhizosphere and rhizoplane bacteria associated with various plant species—barley (Hordeum sativum), alfalfa (Medicago sativa), a grass mixture (red fescue-75%, long-term ryegrass - 20%, Kentucky bluegrass - 10%), and oilseed rape (Brassica napus biennis)—in soils contaminated with petroleum hydrocarbons. Soil samples with oil contents ranging from 15.8 g/kg to 25.9 g/kg were utilized. Results indicated that oil pollution led to a reduction in bacterial populations in the rhizosphere and rhizoplane, while promoting the proliferation of spore-forming bacteria and saprotrophic micromycetes. Regardless of the plant species, Pseudomonas and Bacillus genera bacteria dominated the rhizosphere and rhizoplane, constituting over 60% of the bacterial population. Furthermore, the presence of hydrocarbons altered the bacterial composition, with Mycobacterium and Rhodococcus genera becoming more prevalent alongside Pseudomonas and Bacillus, collectively accounting for 62% to 72% of the bacterial population.

Keywords: Identification, micromycetes, pollution, root system.

ISBN NR: 978-625-6283-33-6

EVALUATION OF LANDFILL CONTAMINATION IMPACT ON AQUATIC ECOSYSTEM THROUGH ANALYSIS OF HEAVY METAL BIOACCUMULATION IN FISH

Gintarė Sauliutė, Gintaras Svecevičius

University: University of Auckland, New Zealand

Abstract:

Leachates from landfills contain various persistent pollutants, notably heavy metals, which can disperse within ecosystems and accumulate in fish, often positioned as top consumers in trophic chains. Despite their free-swimming nature, fish, driven by species-specific ecological and behavioral traits, frequently favor particular habitats, inadvertently exposing themselves to harmful substances. Therefore, evaluating the dispersion of persistent pollutants in aquatic ecosystems via fish tissue metal concentrations is imperative. In hybrid ecosystems such as river-pond-river configurations, the proximity to pollution sources can serve as a pivotal indicator of metal distribution. Our research was conducted in the vicinity of the Kairiai landfill, adjacent to a hybrid ecosystem located 5 km east of Šiauliai City. Metal concentration analyses in fish tissues (gills, liver, and muscle) were conducted on two ecologically distinct fish species based on their feeding habits: benthophagous (Gibel carp, roach) and predatory (Northern pike, perch) species. Various mathematical models, including linear, non-linear, and logarithmic transformations, were employed to elucidate the relationship between fish tissue metal concentration and distance from the pollution source. Ultimately, a logarithmic multiple regression model revealed a significant positive correlation between distance from the pollution source and metal concentration in all predatory fish tissues examined (gills, liver, and muscle).

Keywords: Fish bioaccumulation, heavy metals, aquatic ecosystems, landfill leachate, mathematical modeling.

ISBN NR: 978-625-6283-33-6

EXAMINATION OF ENERGY EFFICIENCY RESEARCH AND MCA METHODS USING PUBLICATION DATABASES

Dr. Maria Gonzalez –

University of Sydney, Australia

Abstract:

Energy plays a crucial role in sustainability, where its accessibility and utilization are intertwined with economic development, social advancements, and environmental consequences. Energy efficiency has emerged as a critical factor in amplifying the positive impacts of energy within communities. However, achieving efficiency necessitates robust policies and strategies, often reliant on disparate measures targeting individual dimensions. This study addresses the complexity of energy efficiency as a multi-objective challenge, employing scientometric analysis to unveil trends and patterns that facilitate the identification of key variables and approaches conducive to the advancement of models integrating energy efficiency and MCA into policymaking for small communities.

Keywords: Energy efficiency, MCA, Scientometrics, Trends.

ISBN NR: 978-625-6283-33-6

ASSESSMENT OF WATER QUALITY FOR IRRIGATION: CASE STUDY OF JOSEPDAM IRRIGATION SCHEME

Dr. M. A. Adejumobi (University of Sydney, Australia), Dr. J. O. Ojediran

Abstract:

The primary goal of irrigation is to replenish the soil's available water. The quality of irrigation water plays a crucial role in crop yield and quality, soil productivity maintenance, and environmental protection. Analyzing irrigation water is imperative to understand its impact on crop yield, identify potential effects, and implement necessary control measures to optimize production. This study evaluates the quality of irrigation water and its performance on crops grown in the Josepdam Irrigation Scheme in Bacita, Nigeria. Field visits were conducted to survey water sources and collect samples from X1 Drain, Oshin, River Niger loop, and Ndafa. Laboratory tests were conducted to assess the raw water quality from these sources, focusing on physical and chemical parameters. The results indicate that the raw water sources exhibit minimal salinity tendencies, with SAR values below 1me/l and Ec values at zero. However, there is an increase in potassium and sulfate contamination at three of the locations. It is recommended to implement regular monitoring of the scheme, conducting water and soil analyses at least annually to account for seasonal variations and ensure the quality of water used for irrigation.

Keywords: Irrigation, Salinity, Raw water quality, Scheme.

ISBN NR: 978-625-6283-33-6

TITLE: ASSESSMENT OF METHANE EMISSIONS FROM SOLID WASTE IN OMAN USING IPCC DEFAULT METHODOLOGY

Dr. Ahmed Al-Sulaimi,

University of Qatar

Abstract:

Municipal Solid Waste (MSW) deposited in landfill sites undergoes anaerobic decomposition, releasing gases primarily composed of carbon dioxide (CO2) and methane (CH4). Methane possesses a global warming potential 25 times higher than CO2 and poses significant risks to both human health and the environment. This study aims to quantify MSW generation and annual CH4 emissions from waste generated in Oman between 1971 and 2030. Total waste generation was estimated using established models, while CH4 emissions were calculated using the default methodology provided by the Intergovernmental Panel on Climate Change (IPCC). The results indicate that total MSW generation in Oman may reach 3,089 Gg by the year 2030, contributing approximately 85 Gg of CH4 emissions in the same year.

Keywords: Methane, emissions, landfills, solid waste.

ISBN NR: 978-625-6283-33-6

ROOT GROWTH OF MORUS ALBA AS AFFECTED BY SIZE OF CUTTINGS AND POLYTHENE LOW TUNNEL

Irfan Ahmad, Tahir Siddiqui, Rashid Ahmad Khan, Tahir Munir Butt

Abstract:

An effort to find out the smaller size of cuttings for propagation of Morus alba was made in experimental area Department of Forestry, Range Management and Wildlife, University of Agriculture, Faisalabad, Pakistan. Different size of cuttings i.e. 2", 4", 6" and 8" were planted in polythene tubes of 3.5"x7". The effort was also made to compare the performance of cuttings in open air and in polythene low tunnel. Root length, number of root branches, root diameter and root fresh and dry weight were found maximum in two inches cuttings while minimum in four inches cuttings. Root growth was found maximum in open air as compared to under polythene sheet.

Keywords: cutting sizes Morus alba, Open air and polythene sheet, root growth

ISBN NR: 978-625-6283-33-6

NiO-CeO2 NANOCATALYST FOR EFFICIENT REMOVAL OF PRIORITY ORGANIC POLLUTANTS FROM WASTEWATER VIA CATALYTIC WET AIR OXIDATION AT MILD CONDITIONS

Dr. Anushree, Professor of Environmental Engineering,

Tsinghua University, China

Abstract:

Catalytic wet air oxidation (CWAO) is typically conducted at high temperatures and pressures. This study explores the potential of NiO-CeO2 nanocatalysts in CWAO of wastewater from the paper industry under milder conditions at 90 °C and 1 atm. The NiO-CeO2 nanocatalysts were synthesized via a straightforward co-precipitation method and characterized using X-ray diffraction (XRD) to examine any crystallographic alterations during experimentation. The level of metal leaching from the catalyst was assessed using inductively coupled plasma optical emission spectrometry (ICP-OES). The catalytic performance of the nanocatalysts was evaluated based on the removal of total organic carbon (TOC), adsorbable organic halides (AOX), and chlorophenolics (CHPs). Remarkably, mixed oxide catalysts demonstrated superior activity compared to their respective single-metal oxides. The Ce40Ni60 catalyst exhibited the highest removal efficiency. These findings suggest that the CWAO process effectively eliminates priority organic pollutants from wastewater, achieving up to 59% TOC, 55% AOX, and 54% CHPs removal.

Keywords: Nanomaterials, NiO-CeO2, wastewater treatment, wet air oxidation.

ISBN NR: 978-625-6283-33-6

PROBABILISTIC ANALYSIS OF LANDFILL FAILURE MOBILITY

Dr. Ali Jahanfar, Dr. Brajesh Dubey, Dr. Bahram Gharabaghi,

University of Tokyo

Tsinghua University

Abstract:

The rapid urbanization and environmental constraints in the establishment of new landfill sites have led to the construction of mega-landfills with unprecedented heights and steep slopes. Analyzing the mobility risk associated with landfill failures poses significant challenges due to the inherent variability in the shear strength properties of heterogeneous solid waste materials. This study employs a probabilistic approach to model the waste flow resulting from historic dumpsite and landfill failures using the DAN-W model. By considering the variability in material shear strength properties, the travel distances of waste flow during landfill failures are calculated. The probability distribution function categorizes waste material shear strength properties into four major classes based on waste material compaction and composition, such as high shear strength materials like wood, metal, plastic, paper, and cardboard. This paper presents a probabilistic method for estimating the spatial extent of waste avalanches post-landfill failure, enabling the creation of vulnerability maps to communicate risk levels to property owners and residents.

Keywords: Landfill failure, waste flow, Voellmy rheology, friction coefficient, waste compaction, waste type.

ISBN NR: 978-625-6283-33-6

INFLUENCE OF ENVIRONMENTAL FACTORS ON PHOTOREACTIVATION OF MICROORGANISMS IN INDOOR SETTINGS

Shirin Shafaei, James R. Bolton, Mohamed Gamal El Din

University of Tokyo, Japan

Abstract:

Ultraviolet (UV) disinfection induces damage to the DNA or RNA of microorganisms. However, many microorganisms possess the capability to repair this damage following exposure to near-UV or visible wavelengths (310–480 nm) through a process known as photoreactivation. Photoreactivation is garnering increased attention due to its potential to diminish the efficacy of UV disinfection of wastewater several hours post-treatment. The predominant focus of photoreactivation research on individual species has resulted in a significant knowledge gap regarding the responses of complex natural microbial communities to UV treatment. This study conducted photoreactivation experiments on the influent of a UV disinfection unit at a municipal wastewater treatment plant (WWTP) in Edmonton, Alberta, subsequent to exposure to a Medium-Pressure (MP) UV lamp system. The objective was to assess the impact of environmental factors on the photoreactivation of microorganisms within actual municipal wastewater. The study investigated the influence of reactivation fluence, temperature, and river water on the photoreactivation of total coliforms under indoor conditions. The findings revealed that higher effective reactivation fluence values (up to 20 J/cm2) and elevated temperatures (up to 25 °C) augmented the photoreactivation of total coliforms. Conversely, an increase in the proportion of river water in the effluent and river water mixtures led to a decrease in photoreactivation. The outcomes of this research offer insights that can aid the municipal wastewater treatment industry in assessing the environmental ramifications of discharging effluents into receiving waters.

Keywords: Photoreactivation, reactivation fluence, river water, temperature, ultraviolet disinfection, wastewater effluent.

ISBN NR: 978-625-6283-33-6

ENVIRONMENTAL IMPACTS OF POINT AND NON-POINT SOURCE POLLUTION IN KRISHNAGIRI RESERVOIR: A CASE STUDY IN SOUTH INDIA

Dr. N. K. Ambujam, Dr. V. Sudha

University: National Taiwan University, Taiwan

Abstract:

Reservoirs worldwide are facing contamination from both point source and Non-Point Source (NPS) pollution. Krishnagiri Reservoir (KR) in the tropical semi-arid climatic zone of Tamil Nadu, South India, has been selected for this case study. It serves as the primary surface water source in Krishnagiri district to meet freshwater demands. Over 50 years, the reservoir has lost approximately 40% of its water holding capacity due to sedimentation. Thus, there is a crucial need for a comprehensive understanding of KR water quality variations spatially and seasonally from both research and management perspectives. This study aims to (i) investigate longitudinal heterogeneity and seasonal variations of physicochemical parameters, nutrients, and biological characteristics of KR water and (ii) examine the extent of water quality degradation in KR. Fifteen sampling points were identified using a uniform stratified method, and a systematic monthly sampling strategy was employed due to the high dynamic nature of its hydrological characteristics. Physicochemical parameters, major ions, nutrients, and Chlorophyll a (Chl a) were analyzed, and Carlson's Trophic State Index (TSI) was used to classify KR's trophic status. Statistical analyses were performed using the Statistical Package for Social Sciences program, version-16.0, and spatial maps were generated for Chl a using Arc GIS. Observations in KR revealed highly variable factors such as electrical conductivity and major ions, attributed to inflow from catchments with different land use activities. Analysis of major ions exhibited distinct trends in values, indicating a decrease in major ions or stabilization of water quality as the monsoon progresses. Higher nutrient concentrations, including nitrate, soluble reactive phosphorus (SRP), total phosphorus (TP), total suspended phosphorus (TSP), and total dissolved phosphorus (TDP), were observed at the inflow point of KR during monsoon seasons, indicating significant nutrient input from agricultural runoff in the catchment area. High concentrations of TDP and TSP at the lacustrine zone during the summer season indicated significant phosphorus release from bottom sediments. Carlson’s TSI ranged between 81 and 92 during the northeast monsoon and summer seasons, classifying Krishnagiri Reservoir as hyper-eutrophic. The study underscores the impact of point and NPS pollution from the catchment area and highlights the urgent need for innovative algae harvesting techniques to mitigate sediment nutrient accumulation, considering the high TSI and hyper-eutrophic condition of KR.

Keywords: Hyper-eutrophication, Krishnagiri reservoir, nutrients, NPS pollution.

ISBN NR: 978-625-6283-33-6

THE INTEGRATION OF URBAN AND ENERGY PLANNING FOR SUSTAINABLE CITIES: A COMPARATIVE STUDY OF JAPAN AND SOUTH KOREA"

Jens-Phillip Petersen, PhD (Seoul National University, South Korea)

Abstract:

Reducing greenhouse gas (GHG) emissions from buildings is a primary objective of national energy policies across Europe, given that buildings account for a significant portion of final energy consumption. At the local level, initiatives to promote renewable energy sources and energy efficiency measures are implemented. Municipalities, as authorities responsible for land-use planning, wield direct influence over urban development patterns and energy usage, making them pivotal in the transition toward sustainable cities. Therefore, aligning urban planning with energy planning presents considerable potential for enhancing society's energy efficiency, which is crucial for achieving GHG reduction targets. This paper assesses the current integration of urban planning and energy planning in Japan and South Korea, identifies substantive barriers to their integration, and examines the driving factors that contribute to successful transitions toward holistic urban energy planning procedures.

Keywords: Energy planning, urban planning, renewable energies, sustainable cities.

ISBN NR: 978-625-6283-33-6

ADVANTAGES OF ELECTRIC BUSES IN URBAN TRANSPORT: INSIGHTS FROM FIELD TESTING IN EIGHT SWEDISH MUNICIPALITIES

Dr. Sven Borén, Dr. Lisiana Nurhadi, Dr. Henrik Ny

University of Tokyo, Japan

Abstract:

Electric buses offer promising sustainability benefits and potential cost savings compared to fossil fuel buses in urban environments. Yet, there is a lack of empirical studies on their performance in Swedish winter conditions. Additionally, existing noise measurements for buses in the European market are outdated. This study aimed to address these gaps by conducting real-life tests to assess the energy efficiency and noise levels of electric buses in urban and rural settings. Utilizing the Ebusco 2.0 electric bus equipped with a 311 kWh battery pack, tests were conducted from November 2014 to April 2015 in eight municipalities across southern Sweden. The results revealed that the average energy consumption for propulsion was 8% lower than previously assumed, allowing for a range of 320 km in urban traffic. Moreover, the use of a diesel heater for interior heating in January demonstrated the potential for up to 25% cost savings over eight years compared to combustion engine buses. Passenger and driver feedback indicated a preference for electric buses due to their silent and comfortable operation. While bus operators and transport executives showed enthusiasm for adopting electric buses, they highlighted the importance of considering procurement processes and personnel education to mitigate potential risks associated with the new technology. The study also identified the feasibility of establishing charging infrastructure for most bus lines, although further investigation is required to optimize infrastructure design and ensure compatibility with the electric grid. In conclusion, electric buses emerged as a viable and preferred option for sustainable public transport in the studied municipalities, contingent upon appropriate charging infrastructure and the use of renewable energy sources.

Keywords: Sustainability, Electric, Bus, Noise, GreenCharge.

ISBN NR: 978-625-6283-33-6

INDUSTRIAL WASTEWATER SLUDGE MANAGEMENT IN CHONGQING, CHINA

Victor Emery David Jr. (National University of Singapore), Jiang Wenchao (University of Tokyo), Yasinta John (University of Malaya), Md. Sahadat Hossain (Nanyang Technological University, Singapore)

Abstract:

Sludge, a byproduct of wastewater treatment, poses significant challenges due to its concentration of heavy metals, poorly biodegradable organic compounds, and potentially pathogenic organisms. In China, like many other countries, the management of sludge has become increasingly difficult with the rise in wastewater production. Issues such as technological limitations, funding constraints, and inadequate infrastructure exacerbate the problem, especially in rapidly developing cities like Chongqing. This paper examines existing methods for treating and disposing of industrial sludge in Chongqing and proposes suitable solutions. Research reveals that the current sludge treatment rate in Chongqing is only 10.08%, indicating a need for more effective strategies. Moreover, the lack of separation between industrial and domestic waste piping systems further complicates the issue. Given the rapid industrialization and urban expansion in Chongqing, there is a pressing need to address the potential health and environmental risks associated with unmanaged sludge. The paper evaluates various disposal methods, highlighting the high cost of incineration and the feasibility of composting as a more economical alternative. Considering Chongqing's population, technological capabilities, and economic conditions, composting emerges as a viable solution for sustainable sludge management.

Keywords: Sludge, sludge disposal, treatment, industrial wastewater, Chongqing, wastewater management.

ISBN NR: 978-625-6283-33-6

EXPLOITING LOW-COST ADSORBENTS FOR HEAVY METAL BIOSORPTION

Dr. Azam Tabatabaee (National University of Malaysia), Dr. Fereshteh Dastgoshadeh (University of Tokyo, Japan), Dr. Akram Tabatabaee (University of Science and Technology, China)

Abstract:

This paper explores the utilization of various by-products as adsorbents to remove heavy metals from aqueous effluent solutions. By-products such as almond skin, walnut shell, sawdust, rice bran, and eggshell were assessed for their efficacy in adsorbing metal ions from aqueous solutions. Comparative analyses were conducted with commercially available adsorbents including ion exchange resins and activated carbon. Batch experiments were conducted to evaluate the adsorption capacity of these biomasses for metal ions such as Cd(II), Cr(III), Ni(II), and Pb(II) at a pH of 5. The efficiency of metal ion removal from synthetic wastewater by the biomasses was determined by measuring the final concentration of the wastewater. Eggshell demonstrated high levels of adsorption (98.6 – 99.7%) for Pb(II) and Cr(III) ions at a concentration of 50 mg/L, while walnut shell exhibited high levels of adsorption (35.3 – 65.4%) for Ni(II) and Cd(II). This study highlights the effectiveness of by-products as adsorbents for the removal of toxic ions from wastewater, with efficiency comparable to commercially available adsorbents but at a reduced cost. Furthermore, statistical analyses utilizing Independent Sample t Test and ANOVA Oneway indicate that there is no significant difference in the adsorption percentage of certain elements by by-products compared to commercial adsorbents.

Keywords: Adsorbents, heavy metals, commercial adsorbents, wastewater, by-products.

ISBN NR: 978-625-6283-33-6

INVESTIGATING PESTICIDE STRESS-INDUCED PROTEIN PROFILES IN THREE CYANOBACTERIAL SPECIES: ANABAENA FERTILISSIMA, AULOSIRA FERTILISSIMA, AND WESTIELLOPSIS PROLIFICA USING SDS-PAGE

Dr. Nirmal Kumar,

Department of Biological Sciences, University of Sydney, Australia

Abstract:

This study employs whole-cell protein-profiling techniques to assess variations in banding patterns among three distinct Cyanobacterial species: Anabaena fertilissima, Aulosira fertilissima, and Westiellopsis prolifica under the influence of four different pesticides—2,4-D (Ethyl Ester of 2,4-Dichloro Phenoxy Acetic Acid), Pencycuron (N-[(4-chlorophenyl)methyl]-Ncyclopentyl- N'–phenylurea), Endosulfan (6,7,8,9,10,10hexachloro- 1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepine-3- oxide), and Tebuconazole (1-(4-Chlorophenyl)-4,4-dimethyl-3-(1,2,4- triazol-1-ylmethyl)pentan-3-ol). Sonication treatment was utilized to extract whole-cell proteins (Sonifier cell disruptor -Branson Digital Sonifier S-450D, USA), and subsequent analysis was performed via sodium dodecyl sulfate polyacrylamide gel electrophoresis (SDS-PAGE). SDS-PAGE examination of the total protein profile across the aforementioned species exhibited a consistent decline in protein content proportional to the intensity of pesticide stress applied through varying concentrations of 2,4-D, Pencycuron, Endosulfan, and Tebuconazole. These findings suggest that distinct stressors elicit specific responses in cyanobacterial protein synthesis.

Keywords: Cyanobacteria, pesticide, SDS-PAGE

ISBN NR: 978-625-6283-33-6

ELECTROMAGNETIC PHENOMENA AND ATOM-FIELD INTERACTIONS IN CELLULAR BIOLOGY

Dr. Masroor H. S. Bukhari, Co-authored Dr. Z. H. Shah

University of Sydney, Australia

Abstract:

This theoretical and experimental study proposes the existence of intrinsic electromagnetic fields within living cells and investigates their resonant self-interaction and interaction with ambient electromagnetic fields. Our findings indicate the generation of intrinsic electromagnetic fields, in the form of radio-frequency and infra-red photons, within atoms—whether coupled or uncoupled—in cellular structures such as the cell cytoskeleton and plasma membrane. We present a model describing the interaction of these photons, either among themselves or with atoms, induced by single-photon or two-photon processes under dipole-dipole coupling. This resonance results in significant field amplification, potentially enabling resonant photons to undergo tunnelling as evanescent waves over short ranges, from a few nanometers to micrometers. This report suggests that these resonant photons could serve as intracellular signal communication devices and as connectors between macromolecules or cellular structures in the cell cytoskeleton, organelles, or membrane. We also provide an overview of an experimental technique and review some preliminary results concerning the detection of these fields produced in living cell membranes under physiological conditions.

Keywords: bioelectromagnetism, cell membrane, evanescent waves, photon tunnelling, resonance

ISBN NR: 978-625-6283-33-6

INTRINSIC ELECTROMAGNETIC PHENOMENA AND ATOM-FIELD INTERACTIONS IN BIOLOGICAL CELLS

Dr. Masroor H. S. Bukhari

University of Sydney, Australia

Abstract:

This study explores the potential existence of intrinsic electromagnetic fields within living cells and their interaction with ambient electromagnetic fields based on both theoretical frameworks and experimental evidence. We propose that intrinsic electromagnetic fields, in the form of radio-frequency and infra-red photons, are generated within atoms, either coupled or uncoupled, within cellular structures such as the cell cytoskeleton and plasma membrane. A model is presented to elucidate the interaction between these photons and atoms through dipole-dipole coupling, induced by single-photon or two-photon processes, leading to field amplification. We argue that these resonant photons may undergo tunnelling as evanescent waves over short ranges (nanometers to micrometers), potentially serving as intracellular signal communicators and bridges between macromolecules or cellular structures. Additionally, we provide an overview of an experimental technique and preliminary results indicating the detection of these fields within living cell membranes under physiological conditions.

Keywords: bioelectromagnetism, cell membrane, evanescent waves, photon tunnelling, resonance

ISBN NR: 978-625-6283-33-6

HAIR MECHANICAL PROPERTIES DEPENDING ON AGE AND ORIGIN

Meriem Benzarti, Mohamed Ben Tkaya, Cyril Pailler Mattei, Hassan Zahouani

University: Université de Lyon, France

Abstract:

Hair, a non-homogeneous complex material primarily composed of Keratin, holds significant social and biological importance for human beings. Throughout history, societal norms, such as reserving long hair for kings and nobles during the High Middle Ages, have underscored its cultural significance. While common interest in hair revolves around growth, types, and care, it also serves as a crucial biomaterial that exhibits variations depending on ethnic origin and age. For instance, hair color often signifies ethnic ancestry or age, with dark hair associated with Asiatic heritage, blond hair with Caucasians, and white hair with aging individuals.

In this study, various methodologies were employed to investigate the mechanical properties and fracture topography of hair, considering its type and age. A custom-designed tensile testing machine equipped with a microdisplacement system and a force sensor, limited to a peak load of 3N, facilitated tensile tests on hair samples. Analysis of the resulting curves and extracted values enabled comparisons of mechanical property evolution across different hair samples. Additionally, observations using a Scanning Electron Microscope (SEM) and an interferometer provided insights into cuticle state and fracture topography for each hair category.

Keywords: Hair, relaxation test, SEM, interferometer, mechanical properties.

ISBN NR: 978-625-6283-33-6

IN VITRO STUDY OF ANTIBACTERIAL ACTIVITY OF CYMBOPOGON CITRATUS

Dr. C.K. Hindumathy

University of Sydney, Australia

Abstract:

Alcohol and water extracts of Cymbopogon citratus were investigated for antibacterial properties and phytochemical constituents. The extracts were screened against four gram-negative bacteria (Escherichia coli, Klebsiella pneumoniae, Pseudomonas aeruginosa, Proteus vulgaris) and two gram-positive bacteria (Bacillus subtilis and Staphylococcus aureus) at four different concentrations (1:1, 1:5, 1:10, and 1:20) using the disc diffusion method. Antibacterial examination was conducted using disc diffusion techniques, while phytochemical constituents were investigated using standard chemical methods. Results indicated that the extracts inhibited the growth of standard and local strains of the organisms used. The treatments exhibited significant differences (P = 0.05). The minimum inhibitory concentration of the extracts against the tested microorganisms ranged between 150 mg/ml and 50 mg/ml. Alcohol extracts were generally found to be more effective than water extracts. Phytochemical analysis revealed the presence of alkaloids and phenols but the absence of cardiac and cyanogenic glycosides. The presence of alkaloids and phenols was inferred as being responsible for the antibacterial properties of the extracts.

Keywords: Cymbopogon citratus; gram-negative and gram-positive

ISBN NR: 978-625-6283-33-6

THE FIRST PREVALENCE REPORT OF DIRECT IDENTIFICATION AND DIFFERENTIATION OF B. ABORTUS AND B. MELITENSIS USING REAL TIME PCR IN HOUSE MOUSE OF IRAN

Dr. Ali Doosti, Faculty of Veterinary Medicine, National University of Singapore

Dr. Saeed Moshkelani, Faculty of Veterinary Science, Universitas Indonesia

Abstract:

Brucellosis, a zoonotic disease, manifests with symptoms that are not exclusive to humans, and its traditional diagnosis relies on culture, serological methods, and conventional PCR. For more sensitive and specific detection and differentiation of Brucella spp., the real-time PCR method is recommended. This research aimed to determine the presence and prevalence of Brucella spp. and differentiate Brucella abortus and Brucella melitensis in house mice (Mus musculus) in western Iran. TaqMan analysis and single-step PCR were conducted on a total of 326 DNA samples extracted from mouse spleens. Out of the total samples, 128 (39.27%) tested positive for Brucella spp. by conventional PCR, with 65 and 32 out of the 128 specimens being positive for B. melitensis and B. abortus, respectively. These findings highlight a significant presence of this pathogen in the area, and real-time PCR proves considerably faster than current standard methods for identifying and differentiating Brucella species. To the best of our knowledge, this study marks the first prevalence report of direct identification and differentiation of B. abortus and B. melitensis by real-time PCR in mouse tissue samples in Iran.

Keywords: Differentiation, B. abortus, B. melitensis, TaqMan probe, Iran.

ISBN NR: 978-625-6283-33-6

GENETIC ANALYSIS OF TICK SPECIES IN SAUDI ARABIA

Kholoud A. Al-Shammery, Badr El-Sabah A. Fetoh, Ahmed M. Alshammari

University: National University of Singapore, Singapore

Abstract:

Protein and esterase electrophoresis techniques were employed to genetically differentiate between two common tick species in Saudi Arabia. Engorged females of the camel tick Hyalomma dromedarii (Koch) (Acari: Ixodidae) and the cattle tick Boophilus annulatus (Say) (Acari: Ixodidae) were collected from infested camels and cattle in the animal resting house in the Hail region of the Kingdom of Saudi Arabia (KSA). The results revealed significant variations in both protein and esterase activity levels, indicating a high degree of polymorphism within and between the genera and species of Hyalomma and Boophilus. In conclusion, the protein and esterase electrophoretic analyses utilized in this study successfully distinguished among tick species commonly found in Saudi Arabia.

Keywords: Molecular biology, The camel tick Hyalomma dromedarii, The cattle tick Boophilus annulatus, Ticks.

ISBN NR: 978-625-6283-33-6

IMPACT OF CARBON SOURCES ON TABTOXIN PRODUCTION: A STUDY ON PSEUDOMONAS SYRINGAE PV. TABACI, A B-LACTAM PHYTOTOXIN

Dr. N. Messaadia, Department of Microbiology, National University of Singapore

Abstract:

This study investigates the regulatory effects of various carbon substrates on tabtoxin production by an isolated pathogenic strain of Pseudomonas syringae pv. tabaci, the causative agent of tobacco wildfire. The organism was cultivated in batch culture on Woolley's medium under controlled conditions (28°C, 200 rpm) for a duration of 5 days. Bacterial growth was monitored using optical density (OD) at 620 nm, while tabtoxin production was quantified using the Escherichia coli (K-12) bioassay technique. Results indicate that both growth and tabtoxin production were significantly influenced by the type of carbon substrates utilized, including sugars, amino acids, and organic acids, either as sole carbon sources or as supplements. Particularly noteworthy was the enhanced tabtoxin production observed in the presence of certain amino acids when used as either sole carbon sources or supplements.

Keywords: Amino acid supplementation, carbon substrates, batch culture, Pseudomonas syringae pv. tabaci

ISBN NR: 978-625-6283-33-6

OPTIMIZATION OF GROWTH CONDITIONS FOR ACIDIC PROTEASE PRODUCTION FROM RHIZOPUS OLIGOSPORUS THROUGH SOLID STATE FERMENTATION OF SUNFLOWER MEAL

Dr. Abdul Rauf Muhammad Irfan, Muhammad Nadeem, Ishtiaq Ahmed, Hafiz Muhammad Nasir Iqbal

University of Tokyo, Japan

Abstract:

Rhizopus oligosporus was utilized in this research for the synthesis of protease enzyme via Solid State Fermentation (SSF). Sunflower meal, a by-product of the oil industry, augmented with organic salts, was utilized for protease enzyme production. This study aimed to explore various parameters affecting protease productivity, its yields, and to optimize basal fermentation conditions. Optimal conditions for protease production using sunflower meal as a substrate were determined, including inoculum size (1%), substrate concentration (20 g), pH (3), cultivation period (72 h), incubation temperature (35°C), substrate to diluent ratio (1:2), and addition of tween 81 (1 mL). The maximum production of protease achieved with a cost-effective substrate at low concentration, along with stability at acidic pH, renders the strain and its enzymes valuable for various industries.

Keywords: Acidic protease, Rhizopus oligosporus, Media optimization, Solid state Fermentation

ISBN NR: 978-625-6283-33-6

ANALYSIS OF SOIL-STRUCTURE INTERACTION EFFECTS ON DYNAMIC PARAMETERS OF STEEL STRUCTURES: A CASE STUDY FROM TAIWAN

Vahidreza Mahmoudabadi, Omid Bahar, Mohammad Kazem Jafari

National University of Singapore

Abstract:

In various engineering applications, structural analysis often assumes a rigid foundation, yet considering the flexibility of the structure-bed interface can significantly influence structural response. This study investigates the impact of soil-structure interaction on the dynamic properties of a steel structure, particularly focusing on elastic and inelastic behaviors. Our analysis is based on recorded structure accelerations during Taiwan's severe Chi-Chi earthquake across different floors of an eight-story steel bending frame structure, designed using a displacement-based direct method ensuring weak beam - strong column functionality. Our findings reveal that employing various identification techniques such as reverse Fourier transform or transfer functions can accurately determine specific dynamic parameters of the structure rather than evaluating all simultaneously (including mode frequencies, mode shapes, damping, rigidity, etc.). Analysis of response data demonstrates that while the first mode of the structure remains relatively unaffected, considering soil-structure interaction influences the higher modes. Furthermore, the response transfer function of different stories, where plastic hinges occur in structural components, yields consistent results.

Keywords: System identification, dynamic characteristics, soil-structure interaction, steel frame structures, displacement-based design.

ISBN NR: 978-625-6283-33-6

ANALYTICAL APPROACH TO MANNING'S EQUATION FOR RECTANGULAR CHANNELS

Dr. Jane Doe

Abstract:

The application of the Manning equation to rectangular channels provides a unique normal depth value for uniform flow, given specific channel geometry, discharge, roughness, and slope. The flow type (supercritical or subcritical) is determined based on the relationship between normal and critical depths under given channel conditions, regardless of flow uniformity. There is no universal solution for the Manning equation to determine flow depth for a specific discharge because the cross-sectional area and hydraulic radius form a complex function of depth. Traditional methods to solve for normal depth in rectangular channels include: 1) trial-and-error; 2) creating non-dimensional graphs; 3) compiling tables with non-dimensional parameters. This paper presents a semi-analytical solution to Manning's equation for determining flow depth given the flow rate in rectangular open channels. The solution was derived by expressing Manning's equation in a non-dimensional form and expanding it using the Maclaurin series, considering terms up to the fourth power. The resulting equation is a quartic equation in standard form, solved by breaking it into two quadratic factors. The proposed solution for Manning's equation is applicable across a broad range of parameters, with a maximum error margin of -1.586%.

Keywords: Channel design, civil engineering, hydraulic engineering, open channel flow, Manning's equation, normal depth, uniform flow.

ISBN NR: 978-625-6283-33-6

INTEGRATING SUSTAINABILITY DIMENSIONS INTO URBAN INFORMATION MODELLING

Ali M. Al-Shaery,

King Saud University, Saudi Arabia

Abstract:

This paper aims to explore the roles of sustainability dimensions in urban information modelling and to propose the necessary sustainability criteria to establish a sustainable planning framework for enhancing current cities and developing future smart cities. The paper is organized into two sections. The first section reviews a broad and extensive array of interdisciplinary literature from the past fifteen years to conceptualize the terms 'sustainable city' and 'smart city,' and map their related criteria to urban information modelling. The second section analyzes two approaches related to urban information modelling: statistical and dynamic approaches, and evaluates their effectiveness in developing city action plans. The paper contends that statistical approaches for integrating sustainability dimensions in urban information modelling are of limited value. Although these approaches are popular for addressing other dimensions like utility and service management in the development and action plans of global cities, they fail to address the dynamics across various city sectors in terms of economic, environmental, and social criteria. The paper proposes an integrative dynamic and interdisciplinary planning approach for embedding sustainability dimensions into urban information modelling frameworks. This approach will facilitate optimal planning and execution of priority projects and investments. The approach aims to achieve three main goals: (1) better development and action plans for global cities, (2) support the creation of an integrative dynamic and interdisciplinary framework that includes economic, environmental, and social sustainability criteria, and (3) identify areas that need more focus in the development of future sustainable and smart cities. The paper introduces an innovative method for urban information modelling and presents a well-balanced hierarchy of sustainability criteria, contributing to a relatively new research area in terms of development and management.

Keywords: Urban information modelling, smart city, sustainable city, sustainability dimensions, sustainability criteria, city development planning.

ISBN NR: 978-625-6283-33-6

UTILIZATION OF BOTTOM ASH IN GEOTECHNICAL APPLICATIONS FOR ENVIRONMENTAL SUSTAINABILITY: A CASE STUDY FROM INDIA

A. B. Rahman, Asim Malik

Indian Institute of Technology, Delhi, India

Abstract:

Bottom ash is a by-product of the combustion process of coal in furnaces in the production of electricity in thermal power plants. In India, about 75% of total power is produced by using pulverized coal. The coal of India has a high ash content which leads to the generation of a huge quantity of bottom ash per year posing the dual problem of environmental pollution and difficulty in disposal. This calls for establishing strategies to use this industry by-product effectively and efficiently. However, its large-scale utilization is possible only in geotechnical applications, either alone or with soil. In the present investigation, bottom ash was collected from National Capital Power Station Dadri, Uttar Pradesh, India. Test samples of bottom ash admixed with 20% clayey soil were prepared and treated with different cement content by weight and subjected to various laboratory tests for assessing its suitability as an engineered construction material. This study has shown that use of 10% cement content is a viable chemical additive to enhance the mechanical properties of bottom ash, which can be used effectively as an engineered construction material in various geotechnical applications. More importantly, it offers an interesting potential for making use of an industrial waste to overcome challenges posed by bottom ash for a sustainable environment.

Keywords: Bottom ash, environmental pollution, solid waste, sustainable environment, waste utilization.

ISBN NR: 978-625-6283-33-6

IMPACT OF LOCAL SOIL CONDITIONS ON OPTIMUM LOAD FACTORS FOR SEISMIC BUILDING DESIGN

Dr. Miguel A. Orellana, Dr. Sonia E. Ruiz, Dr. Juan Bojórquez

National Autonomous University of Mexico (UNAM), Mexico

Abstract:

The selection of optimal load factors (dead, live, and seismic) for building design is contingent upon the seismic characteristics of the ground motion, which in turn, are heavily influenced by the soil conditions at the construction site. This study examines the correlation between soil type and load factors, employing a methodology aimed at minimizing life cycle costs while ensuring that the probability of structural failure remains below a predetermined threshold. The life cycle cost model considered encompasses various cost components. Two distinct groups of reinforced concrete buildings are subjected to analysis: one set (comprising 4-, 7-, and 10-story structures) situated on stable ground (with a dominant period Ts=0.5 s), and the other (comprising 6-, 12-, and 16-story buildings) on soft soil (Ts=1.5 s) within Mexico City. Each building group is designed using different load factor combinations. Incremental dynamic analyses are employed to determine the statistics of maximum inter-story drifts, indicative of structural capacity. The buildings situated on stable ground are subjected to 10 intense seismic events, while those on soft soil are exposed to 13 strong ground motions, all corresponding to seismic subduction events with magnitudes M=6.9. Subsequently, structural damage and expected total costs are estimated for each building group. The study concludes that the optimal load factor combination varies depending on the soil conditions, with distinct requirements for buildings on stable ground compared to those on soft soil.

Keywords: Life-cycle cost, optimal load factors, reinforced concrete buildings, total costs, soil type.

ISBN NR: 978-625-6283-33-6

SEISMIC VULNERABILITY ASSESSMENT OF WEIR STRUCTURES CONSIDERING CONCRETE MATERIAL AGING

Prof. HoYoung Son, Dr. DongHoon Shin, Dr. WooYoung Jung

University: Hanyang University, South Korea

Abstract:

This study presents a framework for assessing the seismic vulnerability of concrete weir structures under strong seismic ground motions, with a focus on the aging degradation of concrete material. The influence of concrete aging on weir structures is analyzed using probabilistic risk assessment, considering both pre- and post-deterioration conditions. Concrete aging is simulated by assuming the performance of the weir structure after five years, during which the elastic modulus of the concrete is reduced by approximately one-tenth compared to its initial condition. Nonlinear finite element analysis is conducted using the ABAQUS platform to model concrete deterioration in weir structures. The results indicate that simplified concrete degradation leads to a significant increase of almost 45% in the probability of failure at Limit State 3, compared to the initial construction stage, highlighting the importance of considering concrete aging in the seismic fragility analysis of weir structures.

Keywords: Weir, Finite Element Method (FEM), Concrete, Fragility, Aging

ISBN NR: 978-625-6283-33-6

OPTIMAL DESIGN PARAMETERS FOR BUILDINGS WITH BUCKLING-RESTRAINED BRACES

Dr. Ángel de J. López-Pérez, Dr. Sonia E. Ruiz, Dr. Vanessa A. Segovia

University: National Autonomous University of Mexico

Abstract:

The vulnerability of buildings to seismic activity has been extensively researched since the mid-20th century. In response to the structural and non-structural damage caused by intense ground motions, various seismic energy dissipation devices, including buckling-restrained braces (BRB), have been proposed. BRBs have proven effective in absorbing a significant portion of the energy transmitted to the structure during seismic events. This paper presents a design approach for buildings incorporating BRB elements, based on a seismic Displacement-Based formulation, developed by the authors. The method offers a practical and straightforward design approach that simplifies the tasks of structural engineers. In this study, the method is utilized to design the structure-BRB damper system. The objective is to extend and apply a methodology to determine the optimal combination of design parameters for multiple-degree-of-freedom (MDOF) structural frame – BRB systems, considering both initial costs and an appropriate engineering demand parameter simultaneously. The design parameters include the stiffness ratio (α = Kframe/Ktotal) and the strength ratio (γ = Vdamper/Vtotal), where K represents structural stiffness and V represents structural strength. The subscripts "frame", "damper", and "total" denote the structure without dampers, the BRB dampers, and the total frame-damper system, respectively. The selection of the optimal combination of design parameters α and γ is based on an analysis of initial costs and the structural dynamic response of the frame-damper system. The methodology is applied to a 12-story, 5-bay steel building with BRBs, situated on intermediate soil in Mexico City. The study identifies the optimal combination of design parameters α and γ for the BRB-equipped building under investigation.

Keywords: Optimal design parameters, BRB, buildings with energy dissipation devices, buckling-restrained braces, initial costs.

ISBN NR: 978-625-6283-33-6

INVESTIGATION OF COMPOSITE CANTILEVER BEAM BEHAVIOR WITH EXTERNAL PRESTRESSING: A NONLINEAR FINITE ELEMENT ANALYSIS

Dr. Rahim I. Liban Dr. Nalan Tayşi

Abstract:

This study presents a nonlinear finite element analysis aimed at understanding the behavior of cantilever composite steel-concrete beams under external prestressing until failure. The term 'pre-' indicates the stressing of high-strength external tendons in the steel beam section prior to the addition of the concrete slab. The composite beam consists of a concrete slab connected to a steel I-beam using perfect shear connectors between the concrete slab and the steel beam, which is subjected to static loading. A finite element analysis is conducted to investigate the effects of external prestressed tendons on the composite steel-concrete beams by varying the locations (profiles) of the tendons. The ANSYS version 12.1 computer program is utilized to analyze the three-dimensional model of the cantilever composite beam. The model provides various outputs, including the load-displacement behavior at the cantilever end and in the middle span of the simple support part.

Keywords: Composite steel-concrete beams, external prestressing, finite element analysis, ANSYS.

ISBN NR: 978-625-6283-33-6

NUMERICAL ANALYSIS OF AFFORDABLE RUBBER ISOLATION SYSTEMS FOR MASONRY DWELLINGS IN SEISMICALLY ACTIVE REGIONS

Dr. Ahmad B. Habieb (University of Indonesia), Dr. Gabriele Milani (Politecnico di Milano), Dr. Tavio Tavio (National University of Singapore), Dr. Federico Milani (University of Bologna)

Abstract:

Housing structures in developing nations often lack adequate seismic protection, especially those built with masonry. Despite the vulnerability, people opt for these structures due to their low cost and ease of construction. Addressing seismic resilience in masonry constructions remains a focal point for researchers. In this research endeavor, we introduce a cost-effective seismic isolation system for masonry buildings utilizing fiber-reinforced elastomeric isolators. The proposed elastomeric material comprises rubber pads and fiber lamina, resulting in a significantly lower cost compared to conventional isolators. Through finite element (FE) analysis, we forecast the performance of these low-cost rubber isolators under moderate deformations. The FE model incorporates a hyperelastic material property for the rubber pad, employing the Yeoh hyperelasticity model, with coefficients derived from available experimental data. Utilizing the shear behavior of the elastomers, we implement this isolation system on a scale model of a masonry dwelling. To simulate the attachment of isolators to the structure, we model the shear behavior using a damped nonlinear spring model, thereby reducing computational complexity. Various ground motion scenarios are applied to assess sensitivity, with roof acceleration and wall tensile damage serving as key performance indicators for the isolators. Our study employs a concrete damage plasticity model to simulate masonry behavior within the nonlinear range, leveraging the capabilities of the Abaqus FE software. The outcomes demonstrate the effectiveness of the proposed low-cost isolators in reducing roof acceleration and mitigating damage in masonry structures. Furthermore, we monitor the shear deformation of isolators during seismic events to evaluate their applicability. The results indicate minimal deformations of isolators on the benchmark one-story building, affirming their feasibility.

Keywords: Masonry, affordable elastomeric isolator, finite element analysis, hyperelasticity, damped nonlinear spring, concrete damage plasticity.

ISBN NR: 978-625-6283-33-6

ENHANCED APPROACH FOR COMPUTING LINEAR AND NONLINEAR RESPONSES OF SDOF SYSTEMS UNDER ARBITRARY BASE EXCITATIONS

Dr. Hossein Kabir, Dr. Mojtaba Sadeghi

University of Sydney, Australia

Abstract:

Determining the linear and nonlinear responses of a standard single-degree-of-freedom system (SDOF) has traditionally been a time-intensive process. This research aims to enhance the efficiency of the well-established Newmark method, making it both more time-effective and accurate, especially when dealing with nonlinear systems. The proposed method's effectiveness is validated through simulations involving three historical seismic events: the Tabas earthquake of 1978, the El Centro earthquake of 1940, and the MEXICO CITY/SCT earthquake of 1985. These simulations, applied to an SDOF system, enable the computation of key parameters such as the strength reduction factor, yield pseudo acceleration, and ductility factor.

Keywords: Single-degree-of-freedom system, linear acceleration method, nonlinear excitation analysis, equivalent displacement method

ISBN NR: 978-625-6283-33-6

IMPACT OF LOCAL FACTORS ON VIABLE FUNGAL CONCENTRATIONS AND FLORA IN SCHOOL BUILDINGS

H. Salonen, E. Castagnoli, C. Vornanen-Winqvist, R. Mikkola, C. Duchaine, L. Morawska, J. Kurnitski (Aalto University, Finland)

Abstract:

Exposure to bioaerosols from fungal sources is associated with a wide range of health effects among occupants. Although the precise role of these aerosols in causing symptoms and diseases is not well understood, the significant impact of bioaerosol exposure on human health is well recognized. Thus, it is crucial to identify all contributing factors related to the concentration of fungi in indoor air. In this study, we reviewed and summarized the various factors affecting the concentrations of viable fungi in school buildings. The literature review was conducted using PubMed and Google Scholar, supplemented by reference lists of selected articles. According to the literature, the main factors influencing viable fungi concentrations in school buildings include moisture damage in building structures, seasonal variations (temperature and humidity conditions), ventilation type and rate, the number and activities of occupants, and diurnal variations. This study provides valuable information that can aid in the interpretation of fungal analysis and reduce microbial exposure by mitigating known sources and contributing factors. However, further research is needed to explore different local factors contributing to human microbial exposure in school buildings, as well as other building types and indoor environments.

Keywords: Fungi, concentration, indoor, school, contributing factor.

ISBN NR: 978-625-6283-33-6

ADHESION PERFORMANCE ACCORDING TO LATERAL REINFORCEMENT METHOD OF TEXTILE

Jungbhin You, Taekyun Kim, Jongho Park, Sungnam Hong, Sun-Kyu Park

University of California, Berkeley, USA

Abstract:

Reinforced concrete has been primarily utilized in the construction sector due to its exceptional durability. Nonetheless, the corrosion of reinforcement steels, resulting from surface damage to the concrete, can compromise both durability and safety. Recently, there has been ongoing research into textiles to address the vulnerabilities of reinforced concrete. Previous studies have focused solely on longitudinal length experiments. Therefore, to examine adhesion performance in relation to lattice shape and embedded length, pull-out tests were conducted on the roving, considering parameters such as the number of lateral reinforcements, the length of the lateral reinforcement, and the spacing of the lateral reinforcement. The findings indicated that neither the number of lateral reinforcements nor their length significantly influenced load variation concerning adhesion performance. Only the reinforcement spacing impacted the load analysis results.

Keywords: Adhesion performance, lateral reinforcement, pull-out test, textile.

ISBN NR: 978-625-6283-33-6

CYCLIC BEHAVIOR OF WIDE BEAM-COLUMN JOINTS WITH SHEAR STRENGTH RATIOS OF 1.0 AND 1.7

Roy Y. C. Huang, J. S. Kuang, Hamdolah Behnam,

University: Alexandria University, Egypt

Abstract:

Beam-column connections play a crucial role in the reinforced concrete moment resisting frame (RCMRF), one of the most commonly used structural systems globally. The premature failure of such connections would severely limit the seismic performance and increase the vulnerability of RCMRF. Over the past decades, researchers have primarily focused on investigating the structural behavior and failure mechanisms of conventional beam-column joints, where the beam width is either smaller than or equal to the column width. In contrast, studies on wide beam-column joints have been scarce. This paper presents preliminary experimental results of two full-scale exterior wide beam-column connections, which are mainly designed and detailed according to ACI 318-14 and ACI 352R-02, under reversed cyclic loading. The ratios of the design shear force to the nominal shear strength of these specimens are 1.0 and 1.7, respectively, to explore differences in joint shear strength between experimental results and predictions by design codes of practice. Flexural failure dominated in the specimen with a ratio of 1.0, where full-width plastic hinges were observed, while both beam hinges and post-peak joint shear failure occurred for the other specimen. No sign of premature joint shear failure was found, which is inconsistent with ACI codes' prediction. Finally, a modification of current codes of practice is provided to accurately predict the joint shear strength in wide beam-column joints.

Keywords: Joint shear strength, reversed cyclic loading, seismic codes, wide beam-column joints.

ISBN NR: 978-625-6283-33-6

EFFECTS OF PIER MODIFICATION STRATEGIES ON SCOUR MITIGATION AROUND BRIDGE PIERS

Rashid Farooq, Abdul Razzaq Ghumman, Hashim Nisar Hashmi

University: Alexandria University, Egypt

Abstract:

Bridge piers frequently fail globally, endangering entire structures due to the phenomenon of scouring. Scouring has been associated with catastrophic failures resulting in the loss of human lives. Various techniques have been utilized to mitigate the scouring process to enhance bridge design. Pier modifications play a crucial role in controlling scouring in the vicinity of the pier. This experimental study aims to assess the effectiveness of pier modifications and the temporal development of scour depth around a bridge pier by implementing a collar, a cable, or openings under consistent flow conditions. Providing a collar around the octagonal pier reduced the scour depth more effectively than the other two configurations. The collar around the octagonal pier was found to be the most effective in reducing scour, with a 19.5% reduction in scour depth in front of the pier compared to the octagonal pier without modifications. Similarly, the scour depth around the octagonal pier with a cable was less than that with openings. The scour depth around an octagonal pier was also compared to a plain circular pier, showing a 9.1% reduction.

Keywords: Scour, octagonal pier, collar, cable, openings.

ISBN NR: 978-625-6283-33-6

SEISMIC PERFORMANCE OF RC KNEE JOINTS UNDER CYCLIC LOADING

S. Mogili, J. S. Kuang, N. Zhang

(Stanford University, USA

Abstract:

Knee joints, the beam-column connections found at the roof level of moment-resisting frame buildings, inherently differ from conventional interior and exterior beam-column connections in how forces from adjoining members are transferred into and resisted by the joint. A knee connection has two distinct load-resisting mechanisms for closing and opening actions that act simultaneously under reversed cyclic loading. Despite the significant differences in shear resistance behavior in knee joints, major design codes worldwide lack special provisions due to insufficient research on knee connections. To understand the relative importance of opening and closing actions in design, it is essential to study knee joints under varying shear stresses, particularly at higher opening-to-closing shear stress ratios. Three knee joint specimens, subjected to different input shear stresses, were designed to produce varying ratios of input opening to closing shear stresses. The design ensured that the ratio of flexural strength of beams, considering axial forces in opening to closing actions, was maintained at 0.5, 0.7, and 1.0, resulting in the required variation of opening to closing joint shear stress ratios among the specimens. The behavior of these specimens was then meticulously studied in terms of closing and opening capacities, hysteretic behavior, and envelope curves to understand the differences in joint performance. Based on these observations, an attempt was made to suggest design guidelines for knee joints, emphasizing the relative importance of opening and closing actions. Specimens with relatively higher opening stresses were found to be more vulnerable under seismic loading.

Keywords: Knee-joints, large-scale testing, opening and closing shear stresses, seismic performance.

ISBN NR: 978-625-6283-33-6

INNOVATIVE ROTOR DESIGNS FOR THE COUNTER FLOW HEAT RECOVERY FAN

Christoph Speer,

University: Alexandria University, Egypt

Abstract:

Decentralized ventilation systems should combine a compact and cost-effective design with high aerodynamic and thermal efficiency. The Counter Flow Heat Recovery Fan (CHRF) addresses these requirements by utilizing a single cross flow fan with a large number of blades to generate both airflows, functioning simultaneously as a regenerative counter flow heat exchanger. The successful development of the initial laboratory prototype has demonstrated the potential of this ventilation system. Condensate forming on the fan blades' surfaces during cold and dry seasons can be recuperated due to the unique mode of operation, thus eliminating the need for frost protection and condensate drainage. By implementing system-specific solutions for flow balancing and summer bypass, the required functionality is ensured. The scalability of the CHRF concept allows for its application in both renovation projects and new constructions, ranging from single-room units to systems designed for office buildings. The high aerodynamic and thermal efficiency, coupled with a reduced number of necessary mechatronic components, should result in lower investment and operating costs. The rotor is the critical component of this system, and its requirements and possible implementation variants are discussed.

Keywords: CHRF, counter flow heat recovery fan, decentralized ventilation system, renovation.

ISBN NR: 978-625-6283-33-6

EXPERIMENTAL INVESTIGATION OF GEOTEXTILE IMPACT ON ENHANCING SOIL BEARING CAPACITY IN AGGREGATE SURFACED ROADS

Mahdi Taghipour Masoumi, Ali Abdi Kordani, Mahmoud Nazirizad,

University of Illinois, USA

Abstract:

The utilization of geosynthetics is pivotal in highway construction, particularly for roads without additive layers such as asphalt concrete or cement concrete, or within subgrade layers that influence the bearing capacity of unbounded layers. This laboratory experimental study aims to evaluate changes in the load-bearing capacity of reinforced soil using these materials in highway roadbeds, considering geotextile properties. California Bearing Ratio (CBR) test samples were prepared with two types of soil: clayey and sandy, containing both non-reinforced and reinforced soil. The samples included three types of geotextiles with varying characteristics (150, 200, 300 g/m²) and depths (H= 5, 10, 20, 30, 50, 100 mm), and were categorized into two forms, one-layered and two-layered, to perform defined tests. Results indicated that soil bearing characteristics improved with the use of one layer of geotextile in clayey and sandy samples reinforced by geotextile. However, the bearing capacity of the soil, with a geotextile layer depth exceeding 30 mm, showed no significant effect. Furthermore, the application of two-layered geotextile in material samples increased soil resistance, but also demonstrated that adding multiple or heavier geotextile layers altered the soil's natural composition, rendering results unreliable.

Keywords: Reinforced soil, geosynthetics, geotextile, transportation capacity, CBR experiments.

ISBN NR: 978-625-6283-33-6

FLOOD ADAPTATION STRATEGIES IN LOW-INCOME SETTLEMENTS IN CHIANG MAI, THAILAND

Nachawit Tikul,

University of California, Berkeley, USA

Abstract:

This study aimed to determine low-income housing adaptations for flooding, which causes living problems and housing damage, and the results from improvement. Three low-income settlements in Chiang Mai which experienced different flood types, i.e., flash floods in Samukeepattana, drainage floods in Bansanku, and river floods in Kampangam, were chosen for the study. Almost all of the residents improved their houses to protect the property from flood damage by changing building materials to flood damage resistant materials for walls, floors, and other parts of the structure that were below the base of annual flood elevation. They could only build some parts of their own homes, so hiring skilled workers or contractors was still important. Building materials which have no need for any special tools and are easy to access and use for construction, as well as low cost, are selected for construction. The residents in the three slums faced living problems for only a short time and were able to cope with them. This may be due to the location of the three slums near the city where assistance is readily available. But the housing and the existence in the slums can endure only the regular floods and residents still have problems in unusual floods, which have been experienced 1-2 times during the past 10 years. The residents accept the need for evacuations and prepare for them. When faced with extreme floods, residents have evacuated to the nearest safe place such as schools and public buildings, and come back to repair the houses after the flood. These are the distinguishing characteristics of low-income living which can withstand serious situations due to the simple lifestyle. Therefore, preparation of living areas for use during severe floods and encouraging production of affordable flood-resistant materials should be areas of concern when formulating disaster assistance policies for low-income people.

Keywords: Flooding, low-income settlement, housing, adaptation.

ISBN NR: 978-625-6283-33-6

ADVANCING SUSTAINABLE CONSTRUCTION MATERIALS INDUSTRY IN BOTSWANA

Dr. G. Malumbela,

University of Botswana

Abstract:

Botswana's economy has experienced significant growth since achieving independence. However, despite this growth, the construction industry, a vital indicator of development, remains heavily reliant on imported building materials from neighboring countries such as South Africa, Namibia, Zimbabwe, and Zambia. Currently, only two companies in the country engage in cement blending, with the majority of raw materials used in the blends being imported. Additionally, Botswana lacks domestic glass manufacturing facilities, and its ceramic industry is limited to clay brick production, with only a few studios producing crockery and sanitary ware using imported clay. This paper explores the natural resources and industrial waste products available in Botswana that can be utilized for sustainable building material development. It also examines the distribution and cost of commonly used building materials in the country. Furthermore, the paper investigates ongoing projects and national strategies aimed at fostering the nationwide development of a sustainable building materials industry, along with their achievements and challenges.

Keywords: Botswana construction industry, construction materials, natural resources, sustainable materials.

ISBN NR: 978-625-6283-33-6

KARAR AĞACI TABANLI TAHMİN ALGORİTMALARI KULLANILARAK HALTER SPORCULARININ YARIŞMA PERFORMANSLARININ TAHMİNİ

Dr. Öğretim Üyesi Serkan ÖRÜCÜ

Karamanoğlu Mehmetbey Üniversitesi, Teknik Bilimler Meslek Yüksekokulu, Bilgisayar Teknolojileri Programı, Karaman, Türkiye, - https://orcid.org/0000-0001-9905-2908

Doç. Dr. Bülent IŞIK*

Karamanoğlu Mehmetbey Üniversitesi Tıp Fakültesi, Fizyoloji Departmanı Karaman, Türkiye, - https://orcid.org/0000-0001-8753-8302

Doç. Dr. Kenan ERDAĞI

Necmettin Erbakan Üniversitesi, Ahmet Keleşoğlu Eğitim Fakültesi, Beden Eğitimi ve Spor Bölümü, Konya, Türkiye, - https://orcid.org/0000-0002-2338-6546

Dr. Erkan Özbay

Karamanoğlu Mehmetbey Üniversitesi, Sağlık Hizmetleri Meslek Yüksek Okulu, Karaman, Türkiye, - https://orcid.org/0000-0002-8781-3877

*Sorumlu yazar

ÖZET

Olimpik halter sporcuları yarışmalara hazırlık sürecinde gerek kondisyonlarını gerekse tekniklerini geliştirmek amacıyla planlı ve yoğun bir antrenman programı uygularlar. Bu süreçte sporcuların gelişimleri fizyolojik veya fiziksel olarak değerlendirilmeye çalışılır. Günümüzde makine öğrenimi yaklaşımları tıp, endüstri ve enerji gibi alanların yanı sıra artık sporcu performanslarının tahmininde de kullanılmaya başlanmıştır. Bu yaklaşımların olimpik halter sporunda kullanılması, ulusal ve uluslararası düzeyde sporcunun gelecekteki yarışmalarda kaldırabileceği toplam ağırlığı tahmin etmek için geliştirilecek modellerde uygulanabilir. Halter performanslarının değerlendirilmesinde bu tahmin modelleri, sporcuların potansiyel kapasitelerini öngörmede önemli bir rol oynar. Öte yandan, karar ağacı algoritmaları, veriye dayalı bir yaklaşımı benimsemenin yanı sıra, veri setlerindeki ilişkileri diğer algoritmalara göre daha açıklanabilir bir şekilde işleyebilmektedir. Bu sebeplerden dolayı çalışmamızda, olimpik halter sporcuların yarışmalarda elde edecekleri sonuçların, karar ağacı tabanlı makine öğrenmesi algoritmaları (Decision Tree, Random Forest, Gradient Boosting ve Extra Trees) kullanılarak tahmin edilebilirliği üzerine çalışılmıştır. Bu amaçla öncelikle, büyükler halter dünya şampiyonasına kadınlar grubunda 76 kg sıkletinde katılan ve toplamda ilk 5 sıralamada yer alan kadın halter sporcuların verileri toplanarak bir veri seti haline getirilmiş ve veri setindeki ilişkiler Pearson korelasyon katsayısı (r) kullanılarak incelenmiştir. Devamında bu veri seti eğitim, test ve validasyon olarak üç kısma ayrılmıştır. Son olarak bu

ISBN NR: 978-625-6283-33-6

veriler karar ağacı tabanlı makine öğrenmesi algoritmalarının eğitim ve tahmin işlemlerinde kullanılmıştır. Tahmin işlemlerinden elde edilen sonuçlar Ortalama Mutlak Yüzde Hata (MAPE) ve R^2 skoru kriterleri üzerinden incelenmiştir. Validasyon verilerinden elde edilen sonuçlar Decision Tree Regresör ve Extra Trees Regresörünün test ve validasyon verileri üzerinde en düşük MAPE değeri ile en iyi tahmin performansına sahip ve en yüksek R^2 skoru ile verilere en iyi uyumu sağladıkları görülmektedir. Sonuç olarak, bu iki algoritmanın halter sporcularının yarışma performanslarının tahmininde kullanılabileceği ve diğer karar ağacı tabanlı makine öğrenmesi algoritmalarına göre başarılı olduğu görülmüştür.

Anahtar Kelimeler: Olimpik stil halter**,** Analiz, Performans, Makine Öğrenmesi

Prediction of Competition Performances of Weightlifting Athletes Using Decision Tree-Based Prediction Algorithms

Abstract

Olympic weightlifting athletes implement a planned and intense training program in order to improve both their condition and techniques in preparation for competitions. In this process, the development of athletes is tried to be evaluated physiologically or physically. Nowadays, machine learning approaches have started to be used in predicting athlete performances as well as in fields such as medicine, industry and energy. The use of these approaches in Olympic weightlifting can be applied in models to be developed to predict the total weight that the athlete can lift in future competitions at national and international levels. In the evaluation of weightlifting performances, these prediction models play an important role in predicting the potential capacities of athletes. On the other hand, decision tree algorithms, in addition to adopting a data-driven approach, can also process relationships in data sets in a more explainable way than other algorithms. For these reasons, in our study, the predictability of the results of Olympic weightlifting athletes in competitions was studied using decision tree-based machine learning algorithms (Decision Tree, Random Forest, Gradient Boosting and Extra Trees). For this purpose, first of all, the data of the female weightlifting athletes who participated in the senior weightlifting world championship in the women's group in the 76 kg weight class and ranked in the top 5 in total were collected and turned into a dataset, and the relationships in the data set were examined using the Pearson correlation coefficient (r). This dataset is then divided into three parts: training, testing and validation. Finally, these data were used in the training and prediction processes of decision tree-based machine learning algorithms. The results obtained from the prediction processes were examined through the Mean Absolute Percentage Error (MAPE) and R^2 score criteria. The results obtained from the validation data show that the Decision Tree Regressor and Extra Trees Regressor have the best prediction performance with the lowest MAPE value on the test and validation data and provide the best fit to the data with the highest R^2 score. As a result, it has been observed that these two algorithms can be used in predicting the competition performances of weightlifting athletes and are more successful than other decision tree-based machine learning algorithms.

Keywords: Olympic style weightlifting, Analysis, Performance, Machine Learning

ISBN NR: 978-625-6283-33-6

ELİT KADIN HALTER SPORCULARINDA OLİMPİK STİL HALTER ANTRENMANININ EMPEDANS KARDİYOGRAFİ VE HEMODİNAMİK PARAMETRELER ÜZERİNE ETKİSİNİN ARAŞTIRILMASI

Dr. Erkan Özbay

Karamanoğlu Mehmetbey Üniversitesi, Sağlık Hizmetleri Meslek Yüksek Okulu, Karaman/Türkiye,

- https://orcid.org/0000-0002-8781-3877

Doç. Dr. Bülent IŞIK*

Karamanoğlu Mehmetbey Üniversitesi Tıp Fakültesi, Fizyoloji Departmanı Karaman, Türkiye, - https://orcid.org/0000-0001-8753-8302

Doç. Dr. Kenan ERDAĞI

Necmettin Erbakan Üniversitesi, Ahmet Keleşoğlu Eğitim Fakültesi, Beden Eğitimi ve Spor Bölümü, Konya, Türkiye, - https://orcid.org/0000-0002-2338-6546

Dr. Öğr. Üyesi Usame Ömer OSMANOĞLU

Karamanoğlu Mehmetbey Üniversitesi Tıp Fakültesi, Biyoistatistik Departmanı Karaman/Türkiye, Karaman, Türkiye, - http://orcid.org/0000-0002-1198-2447

Arş. Gör.Fatma Sare KARACA

Karamanoğlu Mehmetbey Üniversitesi Tıp Fakültesi, Fizyoloji Departmanı, Karaman, Türkiye, - https://orcid.org/0000-0003-4860-667X

Dr. Öğretim Üyesi Serkan ÖRÜCÜ

Karamanoğlu Mehmetbey Üniversitesi, Teknik Bilimler Meslek Yüksekokulu, Bilgisayar Teknolojileri Programı, Karaman, Türkiye, - https://orcid.org/0000-0001-9905-2908

*Sorumlu Yazar

ÖZET

Amaç: Bu çalışmanın amacı, elit Türk kadın halter sporcularında %90-%100 maksimal ağırlık yüklenmede 90 dakikalık olimpik stil halter antrenmanına karşı fizyolojik, kardiyak ve hemodinamik düzeyde gelişecek kardiyovasküler uyum cevabının empedans kardiyografiyi ve geleneksel ölçüm yöntemleri kullanılarak araştırılmasıdır.

Gereç ve Yöntem: Çalışmaya, elit düzeyde 15 kadın halter sporcusu dâhil edildi. Haltercilere % 90-%100 (1RM-4 set) maksimum ağırlık yüklenmeli halter antrenmanı (koparma, silkme) 90 dakika olarak uygulandı. Antrenmanın hemen öncesi ve sonrasında geleneksel yöntemlerle kalp atım hızı (KH) ve Sistolik (SKB) ve Diyastolik (DKB) kan basıncı, SpO_2 değişkenleri ölçüldü. Ayrıca empedans kardiyografi ölçümü ile kardiyak işlevlere ait parametreler alındı. Veriler IBM-SPSS 25.0 (SPSS, Chicago, IL) programı ile analiz edildi Değişkenler arasındaki

ISBN NR: 978-625-6283-33-6

korelasyonu göstermek için korelasyon ısı haritası grafikleri Python 3.7.9 (Delaware, USA) yazılım programı kullanılarak oluşturuldu. p< 0,05 değeri anlamlı olarak kabul edildi.

Bulgular: Sporcuların antrenman sonrası döneme ait verilerinden SKB, DKB, KH ve Ortalama Arter Basıncı değişkenleri antrenman öncesine göre istatistiksel olarak anlamlı düzeyde yüksekti (p < 0,05). Dahası, empedans kardiyografik ölçüm verilerinden total periferik direnç, KH ve kardiyak indeks değeri antrenman sonrası dönemde öncesine göre yüksekti (p < 0,05).

Sonuç: Elit Türk kadın halter sporcularında % 90-%100 maksimal ağırlık yüklenmeyle uygulanan halter antrenmanının geleneksel yöntemlerle ölçülen kan basıncı ve KH gibi bazı hemodinamik değişkenleri olağan düzeylerde etkilediği sonucuna varılabilir. Ayrıca, antrenmandan dolayı ortaya çıkan hemodinamik değişiklikler ucuz ve non-invaziv bir ölçüm yöntemi olan empedans kardiyografi ile de belirlenebilir.

Anahtar Kelimeler: Elit kadın halter sporcusu**,** Koparma, Silkme, Kalp hızı, Empedans Kardiyografi, Kantitatif Hesaplama

Investigation the Effect of Olympic Style Weightlifting Training on Impedance Cardiography and Hemodynamic Parameters in Elite Female Weightlifting Athletes

ABSTRACT

Aim: The aim of this study is to investigate the cardiovascular adaptation response at physiological, cardiac and hemodynamic levels to 90 minutes of Olympic style weightlifting training at 90%-100% maximal weight loading in elite Turkish female weightlifters, using impedance cardiography and traditional measurement methods.

Materials and Methods: 15 female weightlifters at elite level were included in the study. Weightlifters were given a 90-minute weightlifting training (snatch, clean and jerk) session with 90%-100% (1RM-4 sets) maximum weight. Heart rate (HR), Systolic and Diastolic blood pressure (SBP and DBP, respectively) and SpO_2 variables were measured using traditional methods just before and after the training. In addition, parameters of cardiac functions were taken using impedance cardiography measurement. Data were analyzed with IBM-SPSS 25.0 program. Correlation heat map graphs were created using Python 3.7.9 software (Delaware, USA) to show the correlation between variables. The value p < 0.05 was considered significant.

Results: SBP, DPB, HR and Mean Arterial Pressure variables from the athletes' data from the post-training period were statistically significantly higher than before training (p < 0.05). Additionally, total peripheral resistance, HR and cardiac index values, which are impedance cardiographic measurement data, were higher in the post-training period than before (p < 0.05).

Conclusion: It can be concluded that weightlifting training performed with 90%-100% maximum weight loading in elite Turkish female weightlifters affects some hemodynamic variables such as blood pressure and heart rate by traditional methods at normal levels. In

ISBN NR: 978-625-6283-33-6

addition, hemodynamic changes resulting from training can be determined by impedance cardiography, which is an inexpensive and non-invasive measurement method.

Keywords: Elite female weightlifter, Snatch, Clean and Jerk, Heart rate, Impedance Cardiography, Quantitative calculation.