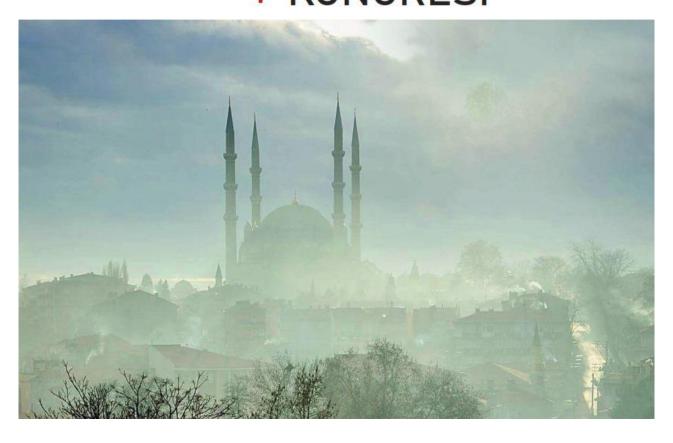
#### **ABSTRACT BOOK**



EDIRNE 6 - 8 Ekim 2023

# BALKAN 9. ULUSLARARASI UYGULAMALI BİLİMLER KONGRESİ



BALKAN 9TH INTERNATIONAL CONFERENCE ON APPLIED SCIENCES OCTOBER 6 - 8, 2023 - EDIRNE

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#### CONFERENCE ID

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DATE – PLACE OCTOBER 6 - 8, 2023 EDIRNE

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# BALKAN 9th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES 9th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES OCTOBER 6 - 8, 2023 EDIRNE

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- ZOOM bağlantısı için yukarıda verilen bağlantıyı veya yine yukarıda verilen giriş bilgilerini kullanabilirsiniz.
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- Sunum sonrası 5 dakikayı geçmeyen soru-cevap, tartışma süresi verilmektedir.
- Sunumlar TÜRKÇE veya İNGİLİZCE yapılabilmektedir.
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#### 9th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES 9th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES October 6 - 8, 2023 - Edirne

Meeting ID: 881 9370 7664 Passcode: 123456

6 Ekim/ October 6, 2023 / 14:00 – 16:00 Time zone in Turkey (C	GMT+3	)
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	0 Ekilly October 0, 2023 / 14.00 – 10.00 Time zone in Turkey (G.W1+3)					
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors		
		1	THE IMPORTANCE OF BODY LANGUAGE IN THE COMMUNICATION SKILLS OF MANAGERS	Dr.Öğr.Üyesi, SEVTAP SARIOĞLU UĞUR		
SALON 1	UĞUR	2	TURİZM TÜRÜ TERCİHLERİNİN ANALİTİK HİYERARŞİ YÖNTEMİNE GÖRE SIRALANMASI	Doç. Dr. UĞUR UĞUR		
	UĞUR UĞ	3	WHAT WE LIVE AND DIDN'T NOTICE: ORGANIZATIONAL DEHUMANIZATION	Dr. Öğretim Üyesi BANU AÇIKGÖZ		
	Doç. Dr.	4	İŞLETMELERDE YEŞİL İNSAN KAYNAKLARI YÖNETİMİ UYGULAMALARI	Öğr. Gör. Dr. Betül Gümüş		
		5	INVESTIGATION OF FACTORS AFFECTING E-COMMERCE USE IN TRANSPORTATION SERVICES IN TÜRKİYE	Prof. Dr. Ömer ALKAN Assist Prof Dr. Şeyda ÜNVER		













### 9th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES 9th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES October 6 - 8, 2023 - Edirne

			Meeting ID: 881 9370 7664 Passcode: 123456	
			$6$ Ekim/ October $6,2023$ / $14\!:\!00-16\!:\!00$ Time zone in Turkey (GMT-	+3)
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
SALON 2		1	DÜNYA VE TÜRKİYE'DE SPHECIFORMES'LER (INSECTA: HYMENOPTERA) HAKKINDA GÜNCEL BİLGİLER	Dr. Öğr. Üyesi, Emin KAPLAN
		2	KENGER (GUNDELIA) BİTKİSİNİN HALK ARASINDA KULLANIMLARI	Doç.Dr. Metin ARMAĞAN Prof. Dr. Osman TUGAY Doç.Dr. Aslı DOĞRU-KOCA Doç. Dr. Golshan ZARE Prof. Dr. Osman KOLA Prof. Dr. Nur TAN Prof. Dr. Mahmut MİSKİ Dr. Ernst P. VITEK
	3 ALGIN	EDIBLE AQUATIC PLANTS - AN ALTERNATIVE FOOD RESOURCE FOR FOOD SECURITY	Prof. Dr. Muhammad ASIM Dr. Nurettin BARAN Doç. Dr. Muhammad Azhar NADEEM Prof. Dr. Faheem Shehzad BALOCH	
	. HAKAN AT	Prof.Dr. S. HAKAN ATALGIN	ASSESSING SUNFLOWER GENETIC DIVERSITY THROUGH ISSR MARKERS: A LITERATURE REVIEW STUDY	Dr. Nurettin BARAN Doç. Dr. Muhammad Azhar NADEEM Prof. Dr. Muhammad ASIM Prof. Dr. Faheem Shehzad BALOCH
	of.Dr. Ş	5	SIĞIRLARIN TİBİA'SINDA FORAMEN NUTRICIUM'LARIN ANATOMİK ÖZELLİKLERİ VE YERLEŞİMLERİ	Prof.Dr. Ş. HAKAN ATALGIN Prof.Dr. MEHMET CAN
	Pre	6	SIĞIRLARIN FEMUR'UNDA FORAMEN NUTRICIUM'LARIN ANATOMİK ÖZELLİKLERİ VE YERLEŞİMLERİ	Prof.Dr. Ş. HAKAN ATALGIN Prof.Dr. ZEKERİYA ÖZÜDOĞRU
		7	MACROANATOMIC and MORPOMETRIC ANALYSIS of the MANDIBLE in a ANATOLIAN WILD GOAT	Associate Professor Gülseren KIRBAŞ DOĞAN Assistant Professor Fikret Özgür COŞKUN
		8	A STUDY on CRANIUM TYPOLOGY in an ANATOLIAN WILD GOAT	Associate Professor Gülseren KIRBAŞ DOĞAN Assistant Professor Fikret Özgür COŞKUN













#### BALKAN 9th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES 9th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES

October 6 - 8, 2023 - Edirne

Meeting ID: 881 9370 7664 Passe Passcode: 123456

	6 Ekim/ October 6, 2023 / 14:00 – 16:00 Time zone in Turkey (GMT+3)					
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors		
SALON 3		1	BİYOLOJİK SIVILARIN VE LEKELERİN ORİJİNİNİN BELİRLENMESİNDE mRNA ve ncRNA TEMELLİ YAKLAŞIMLAR	Öğr.Gör.Dr.,FATMA ÇAVUŞ YONAR		
			İZ DNA'DAN KİMLİK TESPİTİ VE ETKİ FAKTÖRLERİNİN ROLÜ	Öğr.Gör.Dr.,FATMA ÇAVUŞ YONAR		
	AZ	2	KONJENİTAL ANOMALİLİ BEBEKLERİN TERMİNASYON KARARINA ETKİ EDEN FAKTÖRLER: ANNE DENEYİMLERİ VE SAĞLIK PROFESYONELİ BAKIŞ AÇILARINA İLİŞKİN BİR VAKA SUNUMU	Uzm. Ebe, Zuhal GUKSU Dr. Öğr. Üyesi, Ayşe ÇUVADAR		
	FAŞKIN YILM	3	ÜREME ÇAĞINDAKİ KADINLARIN AİLE PLANLAMASINA YÖNELİK TUTUM VE BİLGİ DÜZEYLERİ: KARABÜK İLİ ÖRNEĞİ	DR. Öğr. Üyesi, Ayşe ÇUVADAR Ebe, İrem TUNÇ Ebe Şevval Ecem ERTUĞRUL Ebe Burcu Ece BUDAK		
	Doç. Dr. Feride TAŞKIN YILMAZ	4	ACCIDENTS AND INJURIES IN CHILDREN AND ADOLESCENTS WITH DISABILITIES	Öğr. Gör. Ayşe EROĞLU Prof. Dr. Nursan ÇINAR		
		NURSING CARE ACCORDING TO FUNCTIONAL HEALTH PATTERNS IN PATIENTS WITH SEPSIS AFTER ILEUS SURGERY: A CASE REPORT	Hem. Gülnaz ALTAŞ Doç. Dr. Selda ÇELİK Doç. Dr. Feride TAŞKIN YILMAZ			
		6	THE RELATIONSHIP OF HYPERTENSION KNOWLEDGE LEVEL AND TREATMENT COMPLIANCE IN HYPERTENSIVE WOMEN AT THE PERIOD OF MENOPAUSE	Doç. Dr. Feride TAŞKIN YILMAZ Doç. Dr. Gülbahtiyar DEMİREL		
		7	FACTORS AFFECTING SUBSTANCE USE IN ADOLESCENTS	Öğr. Gör. Dr., HAKAN AVAN		
		8	INTERRUPTED ACADEMIC LIFE AND HOSPITAL SCHOOLING IN HOSPITALIZED CHILDREN	Öğr. Gör. Dr., HAKAN AVAN		













# BALKAN 9th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES 9th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES October 6 - 8, 2023 - Edirne Meeting ID: 881 9370 7664 Passcode: 123456

	Meeting 1D: 881 93/0 /664 Passcode: 123456 6 Ekim/ October 6, 2023 / 14:00 – 16:00 Time zone in Turkey (GMT+3)					
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors		
		1	ORTAOKUL ÖĞRENCİLERİNDE KENDİNİ SABOTE ETME VE ÖZ-ŞEFKAT İLİŞKİSİ	FATMANUR AK		
		2	THE RELATIONSHIP BETWEEN GAME AWARENESS AND DECISION-MAKING SKILLS OF PHYSICAL SKILLS GAMES IN HIGH SCHOOL STUDENTS	Recep AĞKUŞ Doç. Dr. Hulusi ALP		
	Ą	3	HALK EĞİTİMİ'NDE DEĞERİN İŞLEVİ	Seda YURTSEVEN		
	BBASOV	4	Ədəbi dil normalarının tədrisində şagirdlərin idraki fəallığının təmin edilməsi	Assoc. Prof. Dr. Sevda ABBASOVA		
SALON 4	Assoc. Prof. Dr. Sevda ABBASOVA	5	DEĞERLER İLE İLGİLİ OLARAK 7. SINIF SOSYAL BİLGİLER ÖĞRETİM PROGRAMI VE SOSYAL BİLGİLER DERS KİTABININ İNCELENMESİ	Doç. Dr., Davut GÜREL Yüksek Lisans Öğrencisi, Koray GİRGİN		
	Assoc. Pro	6	DEVELOPING HISTORICAL THINKING SKILLS THROUGH SOCIAL STUDIES TEACHING SUPPORTED BY MUSEUM TRAINING WORKSHOP	Dr. Veysi AKTAŞ		
	7	7	ERGENLERDE OKULDA İYİ OLUŞUN YORDAYCISI OLARAK EBEVEYN BAŞARI DESTEĞİ VE OKULA BAĞLILIK	Dr.Öğr.Üyesi, Ahmet Çağlar ÖZDOĞAN		
		8	THE IMPACT OF SPORTS ON THE INCREASE IN SOCIAL VIOLENCE	Tuncay SARIİPEK		













# BALKAN 9th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES 9th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES October 6 - 8, 2023 - Edirne Meeting ID: 881 9370 7664 Passcode: 123456

	6 Ekim/ October 6, 2023 / 14:30 – 16:30 Time zone in Turkey (GMT+3)					
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors		
		1	SOCIAL MEDIA AND COUNSELING: OPPORTUNITIES, RISKS AND ETHICAL CONSIDERATIONS	Kyriaki G. Giota George Kleftaras		
		2	MATERNAL SMOKING AND RISK OF CHILDHOOD OVERWEIGHT AND OBESITY: A META-ANALYSIS	Martina Kanciruk Jac W. Andrews, Tyrone Donnon		
		3	THE EFFECTS OF THE PARENT TRAINING PROGRAM FOR OBESITY REDUCTION ON HEALTH BEHAVIORS OF SCHOOLAGE CHILDREN	Muntanavadee Maytapattana		
	C. F. Sun	4	UNDERSTANDING PRIMARY SCHOOL STUDENTS' BELIEFS REGARDING THE ADOPTION OF PRO-ENVIRONMENTAL BEHAVIORS	Assoc. Prof. Dr. Astrid de Leeuw Dr. Pierre Valois		
SALON 5	Assoc. Prof. Dr. Rachel C. F.	5	ASSOCIATION OF SENSORY PROCESSING AND COGNITIVE DEFICITS IN CHILDREN WITH AUTISM SPECTRUM DISORDERS – PIONEER STUDY IN SAUDI ARABIA	Rana M. Zeina Laila AL-Ayadhi Shahid Bashir		
	Assoc. Pro	6	WHAT ARE THE FACTORS UNDERLYING THE DIFFERENCES BETWEEN YOUNG SAUDI WOMEN IN TRADITIONAL FAMILIES THAT CHOOSE TO CONFORM TO THE SOCIETY NORMS, AND YOUNG SAUDI WOMEN WHO DO NOT CONFORM?	Assis. Prof. Mai Al- Subaie		
		7	COGNITIVE EMOTION REGULATION IN CHILDREN IS ATTRIBUTABLE TO PARENTING STYLE, NOT TO FAMILY TYPE AND CHILD'S GENDER	AKM Rezaul Karim Assoc. Prof. Dr. Tania Sharafat Abu Yusuf Mahmud		
		8	TEACHERS' AND STUDENTS' CAUSAL EXPLANATIONS FOR CLASSROOM MISBEHAVIOR: SIMILARITIES AND DIFFERENCES	Assoc. Prof. Dr. Rachel C. F. Sun		













# BALKAN 9th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES 9th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES October 6 - 8, 2023 - Edirne

			Meeting ID: 881 9370 7664 Passcode: 123456				
	6 Ekim/ October 6, 2023 / 14:30 – 16:30 Time zone in Turkey (GMT+3)						
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors			
		1	ENHANCING LEARNING FOR RESEARCH HIGHER DEGREE STUDENTS	Jenny Hall, Alison Jaquet			
		2	MECHANISMS IN REGULATING LANGUAGE PRACTICES IN ELECTRONICS ENGINEERING: A PROGRAM PLAN FOR OUTCOMES-BASED EDUCATION	Analiza Acuña- Assoc. Prof. Dr. Villacorte			
		3	EXPERIMENTING THE INFLUENCE OF INPUT MODALITY ON INVOLVEMENT LOAD HYPOTHESIS	Mohammad Hassanzadeh			
	skaya	4	IMPACT OF GRADE SENSITIVITY ON LEARNING MOTIVATION AND ACADEMIC PERFORMANCE	Dr. Salwa Aftab, Lecture. Dr. Sehrish Riaz			
SALON 6	Dr. Lena Shulyakovskaya	5	PROPOSED PROGRAM FOR POSTGRADUATES IN EGYPT TO ACQUIRE THE SKILLS AND TECHNIQUES FOR PRODUCING CONCEPT CARTOONS FOR KINDERGARTEN CHILDREN	Lec. Ahmed Amin Mousa, M. Abd El Salam			
	Dr. Le	6	THE EFFECT OF THE ANDALUS KNOWLEDGE PHASES AND TIMES MODEL OF LEARNING ON THE DEVELOPMENT OF STUDENTS' ACADEMIC PERFORMANCE AND EMOTIONAL QUOTIENT	Assoc. Prof. Dr. Sobhy Fathy A. Hashesh			
		7	MILLENNIAL TEACHERS OF CANADA: INNOVATION WITHIN THE BOXED-IN CONSTRAINTS OF TRADITION	Dr. Lena Shulyakovskaya			
		8	EMPLOYING QR CODE AS AN EFFECTIVE EDUCATIONAL TOOL FOR QUICK ACCESS TO SOURCES OF KINDERGARTEN CONCEPTS	Ahmed Amin Mousa, M. Abd El-Salam			













# 9th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES 9th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES October 6 - 8, 2023 - Edirne Meeting ID: 881 9370 7664 Passcode: 123456 1 Ekim/ October 6, 2023 / 14:30 - 16:30 Time zone in Turkey (GM)

	6 Ekim/ October 6, 2023 / 14:30 – 16:30 Time zone in Turkey (GMT+3)						
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors			
SALON 7		1	A FRAMEWORK OF MONTE CARLO SIMULATION FOR EXAMINING THE UNCERTAINTY-INVESTMENT RELATIONSHIP	Prof. Dr. George Yungchih Wang			
		2	THE EXCLUSION OF CONSUMER RIGHTS IN E-AUCTIONS – IS AN E-AUCTION REALLY AN AUCTION AT ALL?	Assis. Prof. Dr. Trish O'Sullivan			
	olović	3	E-PROCUREMENT, THE GOLDEN KEY TO OPTIMIZING THE SUPPLY CHAINS SYSTEM	Somayeh Farzin, Hossein Teimoori Nezhad			
	Prof. Dr. Jasminka Radolović	4	THE KEY CHALLENGES OF THE NEW BANK REGULATIONS	Petr Teply			
		5	THE PATH TO WEB INTELLIGENCE MATURITY	Zeljko Panian			
	Prof. Dr.	6	BARRIERS AND OPPORTUNITIES FOR THE ADOPTION OF E-GOVERNANCE SERVICES	Haroula N. Delopoulos			
		7	OPTIMIZATION OF TRANSFER PRICING IN A RECESSION WITH REFLECTION ON CROATIAN SITUATION	Prof. Dr. Jasminka Radolović			
		8	APPLICATIONS OF CONIC OPTIMIZATION AND QUADRATIC PROGRAMMING IN THE INVESTIGATION OF INDEX ARBITRAGE IN THE THAI DERIVATIVES AND EQUITY MARKETS	Satjaporn Tungsong, Gun Srijuntongsiri			













# BALKAN 9th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES 9th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES October 6 - 8, 2023 - Edirne Meeting ID: 881 9370 7664 Passcode: 123456

		6 Ek	tim/ October 6, 2023 / 14:30 – 16:30 Time zone in Turkey (GMT+3)	
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
		1	OCCUPANTS- BEHAVIOR AND SPATIAL IMPLICATIONS OF RIVERFRONT RESIDENTIAL IN YOGYAKARTA, INDONESIA	Hastuti Saptorini
		2	CITIZENS- EXPECTATIONS FROM RURAL TELECENTRES: A CASE STUDY OF IMPLEMENTATION OF COMMON SERVICE CENTRES IN MUSHEDPUR VILLAGE, HARYANA, INDIA	Charru Malhotra, Girija Krishnaswamy
	vic	3	RESEARCH OF POTENTIAL CLUSTER DEVELOPMENT IN PANNONIAN CROATIA	Mirjana Radman- Funarić, Katarina Potnik Galić
SALON 8 Prof. Dr. Tamara Diurickovic	1 Djuricko	4	THE IMPORTANCE OF CLASS ATTENDANCE AND CUMULATIVE GPA FOR ACADEMIC SUCCESS IN INDUSTRIAL ENGINEERING CLASSES	Suleiman Obeidat, Adnan Bashir, Wisam Abu Jadayil
	. Tamara	5	DEVELOPING OMS IN IHL	Suzana Basaruddin, Haryani Haron, Siti Arpah Noodin
	Prof. Dr	6	SOCIAL NETWORKS AND ABSORPTIVE CAPACITY	Rachelle Bosua, Nina Evans
		7	FROM E-GOVERNMENT TO E-DEMOCRACY CHALLENGES AND OPPORTUNITIES FOR DEVELOPMENT IN MONTENEGRO	Tamara Djurickovic
		8	SPATIAL THINKING ISSUES: TOWARDS RURAL SOCIOLOGICAL RESEARCH AGENDA IN THE THIRD MILLENNIUM	Abdel-Samad M. Ali











### 9th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES 9th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES October 6 - 8, 2023 - Edirne

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7 Ekim/ October 7, 2023 / 10:00 – 12:00 Time zone in Turkey (GMT+3)							
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors			
		1	BİRD FİGURES İN HİSTORİCAL MANSİONS İN KIRKAĞAÇ DİSTRİCT OF MANİSA	Prof. Dr. Ali Murat AKTEMUR			
		2	AN IMPORTANT EXAMPLE REPRESENTING THE ARCHITECTURAL CHARACTER OF HISTORICAL KIRKAĞAÇ MANSIONS: HAMDI NART MANSION	Prof. Dr. Ali Murat AKTEMUR			
	10R	3	YENİ NESİL AFİŞ; DİJİTAL EKRANLAR	Dr. Öğr. Üyesi, EMİN TOKSÖZ			
SALON 1	it AKTEN	4	TÜRKİYE TRAKYASI TÜMÜLÜSLERİNDEN BULUNMUŞ ESERLER	Arş. Gör. HARALAMBOS NİKOLAYİDİS			
	Prof. Dr. Ali Murat AKTEMUR	5	AN EXAMINATION OF THE MISCELLANEOUS ELEMENTS IN THE FILM THREE COLORS: BLUE THROUGH THE OBJECTS WITH DRAMATIC EMPHASIS	Dr Öğretim Görevlisi SAYGIN KORAY DOĞANER			
	Prof. I	6	RECYCLING OF FORESTS IN CONTEMPORARY ART	Dr.Öğr.Üyesi LALE ALTUNEL			
			FELSEFİ DAVRANIŞÇILIK VE ELEŞTİRİLERİ	Dr. Öğretim Üyesi Mehtap Doğan			
		7	INVESTIGATION OF THE LOGO DESIGNS OF GİRESUN PROVINCIAL AND DISTRICT MUNICIPALITIES FROM A SEMIOGICAL PERSPECTIVE	Lecturer Dr. Yunus Türkşad YEGİN			











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	1			
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
		1	Distopyacı Düşüncenin Sinemadaki Yansımaları	Dr. Öğr. Üyesi, EZGİ ÖREN
	AKCI	2	6 ŞUBAT DEPREMLERİ HABERLERİNİN GAZETECİLİK İLKELERİ AÇISINDAN OKUNMASI	Dr. Öğr. Üyesi Filiz Bilgin Ülken
	NUR TARAKC	3	YERLİ DİZİLERDE SINIFSAL FARKLILIKLARIN TEMSİLİ	Dr. Öğr. Üyesi Filiz Bilgin Ülken
<b>Z</b>	A NUF	4	PANDEMİ DÖNEMİNDEKİ E-TİCARET UYGULAMASINA MANUEL CASTELLSCİ BİR YAKLAŞIM	Doktora Öğrencisi LEYLA KANCA
SALON	Üyesi, HAVVA	5	ÇOCUKLAR İÇİN BİR KAÇIŞ ARACI OLARAK FANTASTİK SİNEMA: WHERE THE WILD THINGS ARE ÖRNEĞİ	Dr. Öğretim Üyesi Volkan EROL
	Üyesi,	6	RADYO TİYATROLARINDAN PODCAST DİZİLERE: EPİK OLMAYAN BİR AŞK HİKÂYESİ ÖRNEĞİ	Dr. Öğr. Üyesi Atacan Şimşek
	. Öğr.	7	DİJİTALLEŞME, AFET YÖNETİMİ VE KRİZ İLETİŞİMİ ÜÇGENİNDE MUHTEMEL RİSKLER	Dr. Öğr. Üyesi Nida Sümeyya ÇETİN
	Dr.	8	A BIBLIOMETRIC ANALYSIS on DIGITAL PUBLIC RELATIONS	Dr. Öğr. Üyesi, HAVVA NUR TARAKCI













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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors			
		1	6360 SAYILI KANUNUN BÜYÜKŞEHİRLERDE KIRSAL ALANA ETKİSİNİN DEĞERLENDİRİLMESİ: MANİSA ORMAN KÖYLERİ VE DAĞ ALANLARI ÖZELİNDE SAHA ARAŞTIRMASI	Prof, Dr. Rasim AKPINAR			
		2	KENTLİ HAKLARI BAĞLAMINDA MANİSA KENT İMGELERİ VE KENT KİMLİĞİ ÜZERİNE SÖZLÜ TARİH ÇALIŞMASI	Prof, Dr. Rasim AKPINAR			
	NAR	3	BÜTÇE AÇIKLARINA FİNANSMAN ARAYIŞLARI	Dr.Öğr.Üyesi, İREM ERASA AKÇA			
SALON 3	sim AKPI	4	SOCIO-ECONOMIC CAUSES OF THE RECENT FISCAL ARRANGEMENTS	Asst. Prof. Dr., ÖNER GÜMÜŞ			
SAI	Prof, Dr. Rasim AKPINAR	5	THE LINK BETWEEN SUSTAINABLE DEVELOPMENT AND NON-GOVERNMENTAL ORGANIZATIONS	Doç. Dr. Fatih AKBULUT Arş. Gör. Dr. Cihan Necmi GÜNAL			
	Pr	6	THE PHENOMENON OF CLIMATE CHANGE IN THE NATIONAL DEVELOPMENT PLANS OF TÜRKİYE	Doç. Dr. Fatih AKBULUT Ahmet İLHAN			
		7	DISASTER MANAGEMENT MODELS: A SYSTEMATIC REVIEW	Dr. Öğr. Üyesi, Bahadır TERCAN			
		8	CONTRIBUTION OF PUBLIC-PRIVATE PARTNERSHIPS TO SUSTAINABLE DEVELOPMENT GOALS: GLOBAL AND LOCAL PERSPECTIVES	Dr. Abdurrahman AYDIN			













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G 1							
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors			
		1	COMPLIANCE ASSESSMENT OF STATE UNIVERSITIES AND COLLEGES ON THE GOVERNMENT ENERGY MANAGEMENT PROGRAM FOR PROGRAM ENHANCEMENT	Steven Ivan Gonzales Caiña			
			INTRODUCTION TO GENOECONOMIC	Doç. Dr. Sezen GÜNGÖR			
		2	COMT Val158Met POLİMORFİZMİ VE KİŞİLİK	Doç. Dr. Sezen GÜNGÖR			
4	ÜNGÖR	3	DERİ ÜRÜNLERİNE KARŞI OLAN OLUMSUZ İMAJIN RFID TEKNOLOJİSİ İLE GİDERİLMESİ	Dr. Öğr. Üyesi HATİCE ER Öğr. Gör. ERTAN EROL			
SALON 4	Sezen G	Sezen G	PURCHASE BEHAVIORS OF COSMOPOLITAN CONSUMERS IN THE CONTEXT OF GLOBAL CONSUMER CULTURE	Öğr. Gör. Dr. Kader EROL			
∞ <u>i</u>	Doç. Dr. Sezen GÜNGÖR	5	EVALUATION OF DISEASES IN TÜRKİYE FROM SEASONALLY AND GEOGRAPHICALLY WITH GOOGLE SEARCH VOLUME DATA	Res. Asst., Gökçen ÖZLER Res. Asst., Ferda IŞIKÇELİK			
		6	ANALYSIS OF THE FINANCIAL STATUS OF HEALTH INSTITUTIONS BY MOORA METHOD	Res. Asst., Ferda IŞIKÇELİK Res. Asst., Gökçen ÖZLER			
			7	SAĞLIK TURİZMİNİN SÜRDÜRÜLEBİLİRLİK KRİTERLERİ İLE HİZMET SAĞLAYICILARIN ALGILANAN İMAJI ARASINDAKİ İLİŞKİ	Dr. Öğr. Üyesi FUAT YALMAN Prof. Dr., Yalçın KARAGÖZ		
		8	SAĞLIK PROFESYONELLERİNİN ÖRGÜTSEL GÜVEN VE ÖRGÜTSEL DESTEK ALGILARI İLE BİLGİ UÇURMA EĞİLİMLERİ ARASINDAKİ İLİŞKİLER	Prof. Dr. YALÇIN KARAGÖZ Dr. Öğr. Üyesi FUAT YALMAN			













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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors		
		1	PROVISION OF BEE SALE	Dr. Öğretim Üyesi İsmail YÜKSEK		
	SEK	2	MOLLA HÜSREV'İN (ö. 885/1480) KELÂM MÜTEALLİK bi't- TESMİYETİ ADIYLA KAYDEDİLEN RİSÂLESİ ve BESMELE'YE DAİR GÖRÜŞLERİ	Dr. Öğr. Üyesi Ceyda GÜRMAN		
0N S	Öğretim Üyesi İsmail YÜKSEK	3	NAMAZ İBADETİNİN SIHHATİNE MÂNİ OLAN OKUYUŞ HATALARININ GEREKÇELERİ ÜZERİNE BİR İNCELEME: HANEFİ MEZHEBİ ÖRNEĞİ	Muhammed Yasir OKŞAR		
SALON	tim Üyes	4	CYRUS INGERSON SCOFIELD THE FLIGHT RECORDER OF EVANGELICAL POLITICS	Dr. Öğr. Üyesi İLYAS AKYÜZOĞLU		
	Dr. Öğret	5	İLAHİYAT FAKÜLTESİ İLE EŞ ZAMANLI HAFIZLIK EĞİTİMİ PROJESİ KAPSAMINDA YER ALAN ÖĞRENCİLERİN KAYGI VE MOTİVASYON DÜZEYLERİNİN İNCELENMESİ	Aslı DOĞRUEL		
		6	AN EVALUATION OF THE CONCEPTS OF FATE AND RESPONSIBILITY IN THE CONTEXT OF RELIGIOUS CULTURE AND ETHICS EDUCATION COURSE	Dr. Fatma Kurttekin		











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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors		
		1	INVESTIGATION OF THE EFFECT OF MACHINING PARAMETERS ON BURR HEIGHT AND SURFACE ROUGHNESS IN DRILLING OF Ti-6Al-4V ALLOY	Dr. Öğr. Üyesi, Mahmut ÇELİK Ferhat DEMİRYÜREK		
		2	BIOINSPIRED ANTENNA DESIGN: BRIEF ANALYZING TECHNIQUES AND APPROACHES	Dr., Duygu Nazan GENÇOĞLAN		
	KÖKÜ	3	HOMOJENİZASYON PROSESİNİN EN AW 6082 BİYET MİKROYAPISI VE SERTLİĞİNE ETKİSİ	Dr.,FULYA KAHRIMAN Prof. Dr.,MUZAFFER ZEREN		
9 7	ne KAYAI	4	AN INVESTIGATION OF WILDFIRES USING THE dNBR INDICES ON THE GOOGLE EARTH ENGINE PLATFORM: A CASE STUDY OF THE 2023 ÇANAKKALE KIZILKEÇİLİ AND DAMYERİ WILDFIRES	Öğr. Gör. Dr., OSMAN SALİH YILMAZ		
SALON 6	Dr. Öğr. Üyesi, Halime KAYAKÖKÜ	5	GAMMA RADIATION DOSE MEASUREMENTS AROUND THE MINING SITE	Dr. Öğr. Üyesi, Halime KAYAKÖKÜ Dr. Öğr. Üyesi, Muhammed Fatih KULUÖZTÜRK		
	Dr. Öğr.	6	BOR KATKILI Ti6Al4V ALAŞIMININ BASINÇ DESTEKLİ SİNTERLEME İLE ÜRETİMİ	Dr. Funda Gül KOÇ Prof. Dr. Rıdvan YAMANOĞLU		
		7	EXAMINATION OF BIOMATERIAL PROPERTIES WITH AN INTERVAL TYPE-2 FUZZY AHP-FMEA METHODOLOGY: AN APPLICATION ON TITANIUM MATERIALS	Dr. HİLAL SİNGER Doç. Dr. TİJEN ÖVER ÖZÇELİK		
		8	AN INTEGRATED APPROACH FOR BREAST CANCER CLASSIFICATION	Doç. Dr. TİJEN ÖVER ÖZÇELİK Dr. HİLAL SİNGER		













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Salon	Salon Moderator Bildiri No ve Başlığı / Paper ID and Title Authors						
	Moderator	1	THE U.S. AND CENTRAL ASIA: RELIGION, POLITICS, IDEOLOGY	Zhanar Aldubasheva, Elnura Assyltayeva, Mukhtar Senggirbay, Gaziza Aldubashova			
		2	ANALYSIS ON THE GAME-PLAYING TENDENCY OF SNGS (SOCIAL NETWORK GAMES) USERS BY GENDER	Jooyeon Yook, Wonjun Ko			
	gu	3	E-VOTING: A TRUSTWORTHINESS IN DEMOCRATIC; A VIEW FROM TECHNOLOGY, POLITICAL AND SOCIAL ISSUE	Assis. Prof. Dr. Sera Syarmila Sameon, Assoc. Prof. Dr. Rohaini Ramli			
7.7	m Rekkla	4	DEFINITION OF FOOT SIZE MODEL USING KOHONEN NETWORK	Khawla Ben Abderrahim			
SALON 7	Prof. Dr. Pratoom Rekklang	5	THE IMPACT OF FINANCIAL SYSTEM ON MIXED USE DEVELOPMENT – UNREST IN UK AND SENSE OF SAFETY IN MIXED USE DEVELOPMENT	Dr. Tamara Kelly			
	Prof. D	6	POLITICAL INFORMATION EXPOSURES, POLITICIANS- PERCEPTIONS, POLITICAL ATTITUDES AND POLITICAL PARTICIPATIONS AMONG PEOPLE IN BANGKOK METROPOLITAN AREA	Prof. Dr. Pratoom Rekklang			
		7	URBAN TRANSFORMATIONS OF THE MEDITERRANEAN CITIES IN LIGHT OF DEVELOPMENTS IN THE MODERN ERA	Bakr Hashem Paumey Ahmed Alashwal			
		8	SPATIAL ANALYSIS AND STATISTICS FOR ZONING OF URBAN AREAS	Prof. Dr. Benedetto Manganelli, Dr. Lec. Beniamino Murgante			













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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors		
		1	CUSTOMER-SUPPLIER COLLABORATION IN CASTING INDUSTRY: A REVIEW ON ORGANIZATIONAL AND HUMAN ASPECTS	Taneli Eisto, Venlakaisa Hölttä		
		2	THE IMPACT OF WEBSITE PERSONALITY ON CONSUMERS' INITIAL TRUST TOWARDS ONLINE RETAILING WEBSITES	Jasmine Yeap Ai Leen, T. Ramayah, Azizah Omar		
	ı Tišlerová	3	CONTINUAL IMPROVEMENT WITH INTEGRATED MANAGEMENT SYSTEM	Dr. Sharareh Mirsaeidi Farahani , Assoc. Prof. Gholamreza Chitsaz		
SALON 8	Assis. Prof. Dr. Kamila Tišlerová	4	THE INTRODUCTION OF COMPULSORY ELECTRONIC EXCHANGE OF DOCUMENTS IN THE CZECH REPUBLIC: COMPARING EXPECTATION AND REALITY	Assis. Prof. Dr. Kamila Tišlerová		
	Assis. Prof.	5	ROLE OF CREDIT ON PRODUCTION EFFICIENCY OF FARMING SECTOR IN PAKISTAN(A DATA ENVELOPMENT ANALYSIS)	Saima Ayaz, Zakir Hussain, Maqbool Hussain Sial		
	₹	6	SUSTAINABILITY STRATEGY AND FIRM PERFORMANCE IN RESIDENTIAL TRADE AND INDUSTRY: A CONCEPTUAL ANALYSIS	Dr. Martin Macion		
		7	FACTORS PAVING THE WAY TOWARDS ISLAMIC BANKING IN PAKISTAN	Lecture Muhammad Mazhar Manzoor, Dr. Muhammad Aqeel, Abdul Sattar		













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		1	SUSTAINABILITY OF URBAN CEMETERIES AND THE TRANSFORMATION OF MALAY BURIAL PRACTICES IN KUALA LUMPUR METROPOLITAN REGION	Mohamed Afla, Mohamad Reza		
		2	THE CONTEXT-S INFLUENCE ON THE EVOLUTION OF CIORAN: THE OPTIONS OF AN ENGAGED PHILOSOPHER	Mara Magda Maftei		
		3	THE CHARACTERISTICS OF THAI MOVIES AND FACTORS CONTRIBUTING TO BECOMING WIDELY KNOWN IN INTERNATIONAL MARKETS	Tanyatorn Panyasopon		
	mag	4	THE GENESIS OF THE ART OF THE KAZAKH SALS, SERIS AND PALUANS IN CHARACTERISTIC COMPARISON TO EUROPEAN HISTRIONES AND RUSSIAN SKOMORKHS	D. Dosbatyrov		
6 NC	Prof. Dr. Khajornjit Bunnag	5	BORIA IN MALAYSIA	Farideh Alizadeh		
SAL	r. Khaj	6	FACTORS AFFECTING MEDIA LITERACY OF EARLY TEENAGERS	Prof. Dr. Khajornjit Bunnag		
	Prof. D	7	POWER DISTANCE AND KNOWLEDGE MANAGEMENT FROM A POST-TAYLORIST PERSPECTIVE	Dr. John Walton, Phd Candidate Vishal Parikh		
		8	ORNAMENT AS A UNIVERSAL LANGUAGE OF PEACE (BASED ON COMPARATIVE ANALYSIS OF CULTURES OF PROTOTURKIC PEOPLES AND INDIAN TRIBES OF NORTH AMERICA)	Zhamilya Boldykova, Assis. Prof. Assel Berdigulova		
		9	CAUSAL FACTORS AFFECTING ON TRUSTWORTHINESS AND SUCCESS OF THE NATIONAL PRESS COUNCIL OF THAILAND IN REGULATING PROFESSIONAL ETHICS IN VIEWS OF NEWSPAPER JOURNALISTS	Dr. Bubpha Makesrithongkum		
		10	FEATURES OF PARTY CONSTRUCTION IN THE COURSE OF POLITICAL MODERNIZATION OF KAZAKHSTAN	Lecture Zhankuliyeva S. A.		













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		1	THE ASPECT OF THE HUMAN BIAS IN DECISION MAKING WITHIN QUALITY MANAGEMENT SYSTEMS & LEAN THEORY	Adriana Ávila Zúñiga Nordfjeld		
		2	EFFICACY OF SELECTED MOBILITY EXERCISES AND PARTICIPATION IN SPECIAL GAMES ON PSYCHOMOTOR ABILITIES, FUNCTIONAL ABILITIES AND GAME PERFORMANCE AMONG INTELLECTUALLY DISABLED CHILDREN OF UNDER 14 AGE	Dr. J. Samuel Jesudoss		
	dfjeld	3	DEEP LEARNING AND VIRTUAL ENVIRONMENT	Danielle Morin Jennifer D.E.Thomas Raafat G. Saade		
N 10	Adriana Ávila Zúñiga Nordfjeld	4	IMPACT OF PERSONALITY AND LONELINESS ON LIFE: ROLE OF ONLINE FLOW EXPERIENCES	Prof. Dr. Asmita Shukla Dr. Soma Parija		
SALON 10	na Ávila Z	5	CAREER COUNSELING PROGRAM FOR THE PSYCHOLOGICAL WELL-BEING OF FRESHMEN UNIVERSITY STUDENTS	Sheila Marie G. Hocson		
	Adria	6	DIAGNOSIS OF HATE SCHEMAS IN PRISONERS WITH ANTISOCIAL PERSONALITY DISORDER (ASPD)	Phd. Can. Barbara Gawda		
		7	MEDIA AND INFORMATION LITERACY (MIL) FOR THAI YOUTHS	Waralak Vongdoiwang Siricharoen, Nattanun Siricharoen		
		8	THE IMPACT OF OCCUPATIONAL STRESS ON QUALITY OF WORK LIFE AMONG THE STAFF OF E-WORKSPACE	Assis. Prof. Alireza Bolhari Dr. Ali Rezaeean Jafar Bolhari Fatemeh Zare		











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		1	THE WIDER BENEFITS OF NEGOTIATIONS: AUSTRIAN PERSPECTIVE ON EDUCATIONAL LEADERSHIP AS A 'POWER GAME' FOR TRADE UNIONS	Rudolf Egger	
		2	IMPROVING LISTENING COMPREHENSION FOR EFL PRE- INTERMEDIATE STUDENTS THROUGH A BLENDED LEARNING STRATEGY	Heba Mustafa Abdullah	
		3	EXPLORATION OF INFLUENTIAL FACTORS ON FIRST YEAR ARCHITECTURE STUDENTS' PRODUCTIVITY	Shima Nikanjam, Badiossadat Hassanpour, Adi Irfan Che Ani	
	nen	4	QUALITY AND QUANTITY IN THE STRATEGIC NETWORK OF HIGHER EDUCATION INSTITUTIONS	Juha Kettunen	
SALON 11	Dr. Juha Kettunen	5	DIFFERENT ROLES FOR MENTORS AND MENTEES IN AN E- LEARNING ENVIRONMENT	Assis. Prof. Dr. Nidhi Gadura	
	Dr. Juh	6	ACHIEVING SUSTAINABLE DEVELOPMENT THROUGH TRANSFORMATIVE PEDAGOGIES IN UNIVERSITIES	Assoc. Prof. Dr. Eugene Allevato	
		7	THE STRATEGY OF THE INNOVATION ALLIANCE IN HIGHER EDUCATION	Dr. Juha Kettunen	
		8	USING COLLABORATIVE PICTURES TO UNDERSTAND STUDENT EXPERIENCE	Tessa Berg, Dr. Emma Guion Akdag	
		9	OTHERNESS OF ROMA IN INCLUSIVE EDUCATION OF ROMA PUPILS IN SLOVAKIA	Lec. Prof. Dr. Bibiana Hlebova	













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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors		
		1	The Evaluation and Examples of Invitation Letters for Muslim Turkish Citizens coming from Yugoslavia as Free Immigrants to Turkey	Prof.Dr.Serap Tabak		
		2	THE IMPACT OF THE REVOLUTIONS OF 1848 ON THE OTTOMAN EMPIRE: THE ISSUE OF HUNGARIAN REFUGEES	Master's Degree, Burcu KILIÇ		
		3	EDIRNE IN THE RUSSIAN PRESS DURING THE 1877-1878 OTTOMAN-RUSSIAN WAR	Doç. Dr. AHMET ÇELİK		
T 7	ET ÇELİR	4	Domination Policies of Russia and the Ottoman Empire Towards Eastern Europe in the First Half of the 18th Century With the Impact of the Peace of Westphalia	Dr. Öğr. Üyesi VEDAT KANAT		
SALON 1	Doç. Dr. AHMET ÇELİK	5	THE PROVINCE OF MAMURATUL-AZİZ (ELAZİZ) DURİNG WORLD WAR I	Dr. Yavuz Selim ÇELOĞLU		
	Doc. 2	6	KENESARI QASIMULI UPRISING	Doç. Dr. Vecihi Sefa Fuat HEKİMOĞLU		
		7	VICTIMS OF REPRESSION IN KAZAKHSTAN	Doç. Dr. Vecihi Sefa Fuat HEKİMOĞLU		
		8	TRAKYA VİLAYETLERİNDE İLKÖĞRETİM (1925-1926)	Doç. Dr. Mustafa Serhan YÜCEL		
		9	PRODUCTION ORGANISATION AND LABOUR RELATIONS IN THE OTTOMAN ARTISAN ORGANISATION MODEL: THE CASE OF GLAZIER GUILD	Assist. Prof. Dr. Üyesi Hacı Sarı		













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		1	THE EFFECTS OF ARAB SPRING ON TURKEY-YEMEN RELATIONS	Besra TOKTAŞ	
		2	NATO'NUN ASYA PASİFİK AÇILIMI	Dr. Seda Gözde TOKATLI	
	1AK	3	ÇOK KUTUPLU DÜNYA DÜZENİNE DOĞRU: TEORİK DEĞERLENDİRME	Dr. Seda Gözde TOKATLI	
Z 7	ÇAKMAK	4	ON ISRAELI POLITICAL SCIENTIST YORAM HAZONY'S POLITICAL THOUGHT	Doç. Dr. Diren ÇAKMAK	
SALON 2	r. Diren	5	THE PROPERTY OWNERSHIP DISPUTE IN SHIMON HATZADDIK IN ISRAEL	Doç. Dr. Diren ÇAKMAK	
	Doç. Dr.	6	ULUSLARARASI GÖÇÜN SOSYO-EKONOMİK ETKİLERİ: TÜRKİYE'DEKİ SURİYELİLER ÖRNEĞİ	Doç. Dr., Arzu GÜLER	
		7	BİTMEYEN TARTIŞMA: ULUSLARARASI HUKUKUN BÖLÜNMESİ	Arş. Gör. Dr., BETÜL GÜLTEKİN ALBAYRAK	
		8	TÜRKİYE'NİN AVRUPA BİRLİĞİ ENERJİ POLİTİKALARINA UYUM SÜRECİ	Dr. Öğr. Üyesi Mustafa Ozan Şahin	













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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors		
		1	İLKÖĞRETİM MATEMATİK ÖĞRETMEN ADAYLARININ MATEMATİK DERSLERİNDE KAVRAM KARİKATÜRLERİNİN KULLANILMASINA İLİŞKİN GÖRÜŞLERİ	Yüksek Lisans Öğrencisi ELİF ESEN Dr.Öğr.Üyesi ZUHAL ÜNAN		
		2	MATEMATİK ÖĞRETMEN ADAYLARININ GÖZÜYLE MATEMATİK TARİHİNE İLİŞİKİN BİLGİ SAHİBİ OLMANIN ÖNEMİ	Dr.Öğr.Üyesi ZUHAL ÜNAN		
	I	3	A QUALITATIVE STUDY ON VALUES EDUCATION PRACTICES	Doç. Dr. Güneş SALI		
N 3	Güneş SALI	4	TEACHER CANDIDATES' VIEWS ABOUT CLASSROOM MANAGEMENT STRATEGIES	Doç. Dr. Güneş SALI		
SALON 3	Doç. Dr. Gü	5	BAZI ALINTI KELİMELERDEKİ DEĞİŞMELERDE ANLAM BAKIMINDAN BULAŞMANIN ETKİSİ	Dr. Öğr. Üyesi İhsan Sabri ÇEBİ		
	Dog	6	TÜRKİYE TÜRKÇESİNİN AĞIZLARIYLA İLGİLİ ÇALIŞMALARDA AYIN VE HEMZE	Dr. Öğr. Üyesi İhsan Sabri ÇEBİ		
		7	FİZİK ÖĞRETMEN ADAYLARININ BİLİMSEL İŞLEM BECERİ DÜZEYLERİNİN BELİRLENMESİ	Nuray ÖNDER ÇELİKKANLI		
		8	FİZİK ÖĞRETMEN ADAYLARININ ÖĞRENİM GÖRDÜKLERİ ANABİLİM DALLARINA VE ÜNİVERSİTELERİNE UYUM SÜREÇLERİ	Nuray ÖNDER ÇELİKKANLI		













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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors		
		1	DISTRIBUTION UTILITY EVALUATION ON PREPAID ELECTRICITY SERVICE TOWARDS PROGRAM IMPROVEMENT	Melanie C. Papa Christopher C. Mantillas, Ph.D.		
		2	AKREDİTİFLİ ÖDEME YÖNTEMİNE AZALAN İLGİNİN NEDENLERİ VE ÇÖZÜM ÖNERİLERİ	Dr. Öğr. Üyesi, Oğuzhan ÖZÇELİK		
	ALOĞLU	3	ANALYSIS OF ORGANIZATIONAL DEVIATION USING SCIENTIFIC MAPPING TECHNIQUE: WEB OF SCIENCE EXAMPLE	Ph.D. Research Assistant, Fettah KAYRA		
4	AR DA	4	NÖROBİLİM VE MUHASEBE	DR. ÖĞR. ÜYESİ, PINAR DALOĞLU		
SALON 4	ESİ, PIN	5	DIGITAL WORK PLATFORMS AND THEIR IMPACT ON EMPLOYEES	Dr. Öğr. Üyesi Burçin ESER		
	DR. ÖĞR. ÜYESİ, PINAR DALOĞLU	6	EMOTIONAL LABOR IN HEALTH INSTITUTION EMPLOYEES, EXAMINING THE EFFECT OF WORK-FAMILY CONFLICT AND TURNOVER INTENTION	Buket URGUN Dr. Öğr.Üyesi Emine ATALAY		
	DR. Ö	7	RANKING OF THE HEALTHCARE SERVICE POTENTIALS OF METROPOLITAN CITIES IN TURKEY ON THE BASED OF THE INSTITUTIONS PROVIDING HEALTHCARE SERVICES AND INFRASTRUCTURE USING MULTI-CRITERIA DECISIONMAKING METHODS	Asist. Prof. Dr. Şenay Lezki		
		8	HALKA AÇIK PİYASA DEĞERİNİN ŞİRKETE ÖZGÜ BELİRLEYİCİLERİ ÜZERİNE BIST 100 ENDEKSİNDE BİR ARAŞTIRMA	Doç. Dr. YUSUF TEPELİ Dr. Öğr. Üyesi FİLİZ DAŞKIRAN		











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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
		1	A REVIEW OF AN ANALYSIS REGARDING PSYCHOSOCIAL STATUS OF IMMIGRANT SYRIAN MOTHERS WHO'VE LOST THEIR HUSBANDS	Doktor, ESİN TÜCCAR
		2	ERGENLERDE DUYARLI SEVGİ İLE ÖZ-ŞEFKAT ARASINDAKİ İLİŞKİ	Dr. Öğretim Üyesi Semra KİYE
	Dr. Öğr. Üy. SEZEN KIŞLAL	3	BİLİŞSEL DUYGU DÜZENLEME İLE PSİKOLOJİK İYİ OLUŞ ARASINDAKİ İLİŞKİ	Dr. Öğretim Üyesi Semra KİYE
ις Σ		4	GRUPLA PSİKOLOJİK DANIŞMA UYGULAMASININ PSİKOLOJİK DANIŞMA ÖZ YETERLİĞİNE ETKİSİ	Dr. Öğr. Üyesi İsmail AY
SALON		5	ORTA SEREBRAL ARTER OKLÜZYONU ÇALIŞMALARINDA KULLANILAN DAVRANIŞ TESTLERİ	Dr. Öğr. Üy. SEZEN KIŞLAL
		6	INVESTIGATION OF THE BIG FIVE PERSONALITY TRAITS IN A TURKISH SAMPLE	Assist. Prof. Dr. Muhammet Fatih YILMAZ
		7	Betrayal is a problem in the family	Mammadova Konul Allahverdi
		8	SURİYE'Lİ YAŞLI GÖÇMENLERDE DEPRESYON VE KÜLTÜREL ADAPTASYON	Dr. Öğr. Üyesi Serdar AYKUT Dr. Öğr. Üyesi Tahsin Barış DEĞER













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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors	
		1	CHARACTERISTICS OF COGNITIVE FUNCTIONS AMONG POLISH ADOLESCENCE WITH SPELLING DISORDERS	Izabela Pietras	
		2	THE FEMALE BEAUTY MYTH FOSTERED BY THE MASS MEDIA	Yoojin Chung	
	Subramaniam Chandran	3	SELF-ESTEEM AND STRESS LEVEL AMONG TRAUMATIC BRAIN INJURED ADULTS WITH MILD, MODERATE AND SEVERE INJURIES ATTENDING A DAY PROGRAM REHABILITATION FACILITY	Lec. Dr. Nicole S. McKinney	
		4	CLINICAL AND METHODOLOGICAL ISSUES IN THE RESEARCH ON THE RAPE MYTH	Assi. Prof: Ana Pauna Zbigniew Pleszewski	
SALON 7		5	COGNITIVE BEHAVIOUR THERAPY TO TREAT SOCIAL ANXIETY DISORDER: A PSYCHOLOGY CASE	Yasmin Binti Othman Mydin Mohd. Fadzillah Abdul Razak	
		6	EXPERT WITNESS TESTIMONY IN THE BATTERED WOMAN SYNDROME	Assoc. Ana Pauna	
		7	THE FLASHBULB MEMORY OF THE POSITIVE AND NEGATIVE EVENTS: WENCHUAN EARTHQUAKE AND ACCEPTANCE TO COLLEGE	Aiping Liu Xiaoping Ying Jing Luo	
		8	DYNAMIC OF AGGRESSIVE BEHAVIOR AT THE CONTEXT OF REFLECTIVE PROCESS	Dr. Elena Chernyshkova	
		9	HOW DOES PSYCHOANALYSIS HELP IN RECONSTRUCTING POLITICAL THOUGHT? AN EXERCISE OF INTERPRETATION	Subramaniam Chandran	
		10	COGNITIVE LANDSCAPE OF VALUES – UNDERSTANDING THE INFORMATION CONTENTS OF MENTAL REPRESENTATIONS	Prof. Dr. J. Maksimainen	











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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
SALON 8		1	IMPACT OF GOVERNMENT SPENDING ON PRIVATE CONSUMPTION AND ON THE ECONOMY: CASE OF THAILAND	Dr. Paitoon Kraipornsak
		2	A PROPOSAL OF COMMUNITY BASED FACILITY MANAGEMENT PERFORMANCE (CBFM) IN THE EDUCATION SYSTEM OF BATUBARA DISTRICT IN INDONESIA	Amilia Hasbullah, Wan Zahari Wan Yussof, Maziah Ismail
	Giovanis	3	CERTAIN IMPORTANT ASPECTS OF COST CONTRIBUTION ARRANGEMENTS IN FINANCIAL MANAGEMENT	Phd . Candidate Tomáš Brabenec
	Assoc. Prof. Dr. Eleftherios Giovanis	4	APPLICATION OF ADAPTIVE NEURO-FUZZY INFERENCE SYSTEM IN THE PREDICTION OF ECONOMIC CRISIS PERIODS IN USA	Assoc. Prof. Dr. Eleftherios Giovanis
		5	INTEGRATION PROCESS OF INDUSTRIAL DESIGN AND ENGINEERING DESIGN	Kazuhide Sugiyama, Hiroshi Osada
		6	ATTRIBUTIONS BY TEAM MEMBERS FOR TEAM OUTCOMES IN FINNISH WORKING LIFE	Assis. Prof. Maarit Valo, Pertti Hurme
		7	DOES CORPORATE GOVERNANCE OR TRANSPARENCY AFFECT FOREIGN DIRECT INVESTMENT?	Dr. Haksoon Kim
		8	ERP IMPLEMENTATION SUCCESS IN IRAN: EXAMINING THE ROLE OF SYSTEM ENVIRONMENT FACTORS	Shahin Dezdar, Sulaiman Ainin











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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors	
	Amruta Khairnar, Joy Sen	1	DESIGN MANAGEMENT APPLICATIONS TO IMPROVE WORK ENVIRONMENT FOR FEMALE ACADEMICS IN SAUDI ARABIA	Nouf Saad Alnassar, Susan Grant, Ray Holland	
		2	EXPANDING AFFORDABLE HOUSING THROUGH INCLUSIONARY ZONING IN THE CITY OF TORONTO	Sam Moshaver	
SALON 9		3	FOOD SAFETY CULTURE PARAMOUNT THAN TRADITIONAL FOOD SAFETY SYSTEM AND FOOD SAFETY CULTURE IN SOUTH AFRICAN FOOD INDUSTRIES	Oluwatosin A. Ijabadeniyi	
		4	ROLE OF DIRECTOR'S PHILOSOPHICAL APPROACH IN CINEMATOGRAPHIC EXPRESSION	Sedat Cereci	
		5	CONFLICT, CONFUSION, CHOICE: A PHENOMENOLOGICAL APPROACH TO ACTS OF CORRUPTION	Yvonne T. Haigh	
	Amruta	6	PLANNING FOR MINIMIZATION OF SOCIOECONOMIC INEQUALITIES WITHIN VIDARBHA REGION, MAHARASHTRA, INDIA	Amruta Khairnar, Joy Sen	
		7	KAZAKH LITERATURE IN EMIGRATION AND WORKS OF MAZHIT AITBAYEV	Nuraddin Sadykov, Altynai Zhussipova, Omirkhan Abdimanuly	
		8	FEATURES OF FOLLOWING THE CUSTOMS AND TRADITIONS IN TURKESTAN IN THE LATE XIXTH AND EARLY XXTH CENTURIES	M. Nogaibayeva, Zh. Kumganbayev	













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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors	
	Dr. Paitoon Kraipornsak	1	APPLICATION OF FEED-FORWARD NEURAL NETWORKS AUTOREGRESSIVE MODELS IN GROSS DOMESTIC PRODUCT PREDICTION	E. Giovanis	
		2	A NEW DIMENSION IN SOFTWARE RISK MANAGMENT	Assis. Prof. Masood Uzzafer	
		3	PROPOSAL OF ADDITIONAL FUZZY MEMBERSHIP FUNCTIONS IN SMOOTHING TRANSITION AUTOREGRESSIVE MODELS	Lec. E. Giovanis	
01		4	SUCCESS FACTORS OF LARGE SCALE ERP IMPLEMENTATION IN THAILAND	Assoc. Prof. Dr. Rotchanakitumnuai, Siriluck	
SALON 10		5	A DISCRIMINATORY REWARDING MECHANISM FOR SYBIL DETECTION WITH APPLICATIONS TO TOR	Asim Kumar Pal, Debabrata Nath, Sumit Chakraborty	
		6	FUNCTIONALITY OF NEGOTIATION AGENT ON VALUE-BASED DESIGN DECISION	Arazi Idrus, Christiono Utomo	
		7	IMPACT OF GOVERNMENT SPENDING ON PRIVATE CONSUMPTION AND ON THE ECONOMY: THE CASE OF THAILAND	Dr. Paitoon Kraipornsak	
		8	VALUE ENGINEERING AND ITS EFFECT IN REDUCTION OF INDUSTRIAL ORGANIZATION ENERGY EXPENSES	Habibollah Najafi, Amir Abbas Yazdani, Hosseinali Nahavandi	













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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
SALON 11		1	CORPORATE SUSTAINABLE DEVELOPMENT ASSESSMENT BASE ON THE CORPORATE SOCIAL RESPONSIBILITY	Sun Mei, Nagata Katsuya, Onoda Hiroshi
		2	STATE PROGRAMS ANALYSIS AND SOCIAL CRISIS MANAGEMENT IN THE REPUBLIC OF KAZAKHSTAN: A DESCRIPTIVE STUDY	Madina Kenzhegaranova, Aibol Mukhsiynov, Houman Sanandaji
	ř	3	APPLICATION OF MOTIVATIONAL FACTORS FOR UPLOADING FILMS TO WEBSITES ULOZTO.NET AND PIRATEBAY.ORG	Pavel Janak
	Prof. James Moir	THE NATIONAL SECURITY ASSURANCE OF THE REPUBLIC KAZAKHSTAN	THE NATIONAL SECURITY ASSURANCE OF THE REPUBLIC OF KAZAKHSTAN	Sholpan Zhandossova, Erden Ordabek, Yelbolsyn Nazarov
	Assoc. Prof	5	A CRITICAL SOCIAL RESEARCH PERSPECTIVE ON SELF- DIRECTED LEARNING AND INFORMATION TECHNOLOGY PRACTITIONERS	Assoc. Prof. Roelien Goede
	¥	6	THE PORTUGUESE PRESS PORTRAIT OF "ENVIRONMENTAL REFUGEES"	Prof. Dr. Inês Vieira
		7	STUDENTS, KNOWLEDGE AND EMPLOYABILITY	Assoc. Prof. James Moir
		8	MANAGING YOUR ONLINE REPUTATION: ISSUES OF ETHICS, TRUST AND PRIVACY IN A WIRED, "NO PLACE TO HIDE" WORLD	Dr. Karen Armstrong











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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors			
		1	AI - 1,1Sc ve AI -1,9Sc ALAŞIMLARININ BAZI MEKANİK ÖZELLİKLERİNİN DENEYSEL ve TEORİK OLARAK İNCELENMESİ	Prof.Dr. Hamza Yaşar OCAK			
		2	AI -Sc AIAŞIMLARINDA DİSLOKASYON YOĞUNLUĞUNUN YANSIMA DÜZLEMLERİNDE DENEYSEL OLARAK İNCELENMESİ	Prof.Dr. Hamza Yaşar OCAK			
		3	CURCUMIN: A REVIEW ON PROPERTIES AND MECHANISMS OF ACTION	Asst.Prof, SUREYYA HANCI MUSALLI			
SALON 1	Prof.Dr. Hamza Yaşar OCAK	4	INVESTIGATING THE CARBON ALLOTROPES EFFECT ON THE LaMnO 3 PERFORMANCE AS AN EFFICIENT BIFUNCTIONAL ELECTROCATALYST FOR ALKALINE WATER ELECTROLYSIS	Elham Fattahi Elham Mahmoudi Jafar Mostafaei Dr. Öğr. Üyesi Nagihan Delibaş Doç. Dr. Elnaz Asghari Prof. Dr. Ali Çoruh Prof. Dr. Aligholi Niaei			
	Prof.Dr	INVESTIGATION OF THE STRUCTURE AND COMPOSITION ELECTRON TRANSPORT MATERIALS IN PEROVSKITE SOIL CELLS THROUGH SCAPS-1D SIMULATIONS	INVESTIGATION OF THE STRUCTURE AND COMPOSITION OF ELECTRON TRANSPORT MATERIALS IN PEROVSKITE SOLAR CELLS THROUGH SCAPS-1D SIMULATIONS	Cihan Ataş Dr. Öğr. Üyesi Nagihan Delibaş Prof. Dr. Aligholi Niaei			
		ELEMENTAL ANALYSIS AND HEALTH ASSESSMENT OF WATERCRESS (Cardamine flexuosa) GROWING IN SIIRT ÇETIN DAM WATER	İdris Yolbaş				
		7	INVESTIGATION OF THE ABILITY OF LEONURUS CARDIACA STEM TO SEPARATE ISOMERS BY INVERSE GAS CHROMATOGRAPHY AT INFINITE DILUTION	Assist. Prof. Dr. Birol IŞIK			
		8	MISIR ÖZÜ YAĞI ÜRETİMİNDE SOĞUK PRESLEME VE ÇÖZÜCÜ EKSTRAKSİYON YÖNTEMLERİNİN YAĞ ASİDİ, TRİGLİSERİT, STEROL VE TOKOFEROL BİLEŞİMLERİ ÜZERİNE ETKİLERİ	CENNET IRK Doç.Dr. METİN ARMAĞAN Prof.Dr. OSMAN KOLA			













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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors			
		1	PREDICTION OF CONCRETE COMPRESSIVE STRENGTH USING ARTIFICIAL NEURAL NETWORKS FOR EARTHQUAKE RESILIENCE	Öğr. Gör. Dr. Mesut ULU			
		2	INVESTIGATION OF AİR TRANSPORT POTENTIAL OF BURSA PROVINCE	Res. Asst., Ahmet ÜNAL Prof. Dr., Ahmet TORTUM			
	UKÇU	3	EXAMINING TRANSPORTATION PROBLEMS IN BURSA AND REVEALING SOLUTION SUGGESTIONS	Res. Asst., Ahmet ÜNAL Prof. Dr., Ahmet TORTUM			
SALON 2	Üyesi Emre ÇUBUKÇU	4	AN ANALYSIS OF THE NREL RESEARCH SUPPORT FACILITY BUILDING WITHIN THE FRAMEWORK OF SUSTAINABLE ARCHITECTURAL DESIGN APPROACHES	Asst. Prof. Dr. Gökhan UŞMA			
SAL	Öğr. Üyesi 🛚		USE OF DAYLIGHT IN MASTER PLANS IN TERMS OF TOPOGRAPHY AND URBAN DESIGN	MEHMET SAİT CENGİZ			
	Dr. 0		ENVIRONMENTAL CONDITIONS AFFECTING THE LIGHT TRANSMITTANCE OF GLASS ROOFS	MEHMET SAİT CENGİZ			
		5	KARMA FONKSİYONLU YAPILARDA SÜRDÜREBİLİR YAKLAŞIM ALANLARINDAN ÇATI VE TERAS BAHÇELERİ: AVRUPA ÖRNEKLERİ	Dr. Öğr. Üyesi Emre ÇUBUKÇU			
		6	KARMA FONKSİYONLU YAPILARDA SÜRDÜREBİLİR YAKLAŞIM ALANLARINDAN ÇATI VE TERAS BAHÇELERİ: UZAKDOĞU ÖRNEKLERİ	Dr. Öğr. Üyesi Emre ÇUBUKÇU			













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	6 EARIN OCCUDE: 6, 2023 / 11:00 - 13:00 Time Zone in Turkey (GMT+3)					
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	Ahmed Yusuf SAR	1	ANALYZING EXPORT DYNAMICS AMONG BALKAN COUNTRIES: INSIGHTS FROM THE TRADE INTENSITY INDEX	Asst. Prof. Dr. Ahmed Yusuf SARIHAN		
		2	THE IMPACT OF RISK AVERSION ON TURKEY'S STOCK MARKET	Arş. Gör. Dr. SİNEM ATICI USTALAR		
SALON 4		3	İSTANBUL'UN İAŞE TEMİNİNDE BALKANLARIN İKTİSADİ ROLÜ VE ETKİSİ	Dr. Öğr. Üyesi R. HÜLYA ÖZTÜRK		
SA		4	EFFECTS OF ENTRY BARRIERS ON MARKET ONCENTRATION: THE CASE OF MANUFACTURING INDUSTRY	Araş.Gör.Dr, GÜLÇİN GÜREL GÜNAL		
	Asst. Prof. Dr.	5	KÜRESEL MARKALAR VE EKONOMİK BÜYÜME ÜZERİNE BİR DEĞERLENDİRME	Dr. Öğr. Üyesi , HASAN ÇEBİ BAL		
		6	THE ECONOMIC RECONSTRUCTION OF THE BALKAN STATES AFTER THE FIRST BALKAN WAR	Dr. Kazım BAYCAR		













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8 Ekim/ October 8, 2023 / 11:00 – 13:00 Time zone in Turkey (GMT+3)							
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors			
		1	ONE LIFE TWO MEMOIR OR THE MEMORIES OF EYÜP SABRİ FROM OHRİD	Dr. Öğr. Üyesi Serkan Erdal			
		2	AN EXAMINATION OF THE VERBS USED IN THE STORY OF MUSTAFA KUTLU I THE STORY OF THE "HUZURSUZ BACAK"	SEMİH ÇÖLMEKCİ			
		3	SAMIH RIFAT ŞIIRLERI ÜZERINE DEĞERLENDIRMELER	Dr. Öğr. Üyesi Özlem KAYABAŞI Dr. Öğr. Üyesi Esra Yalazı Doç. Dr. Emine AYAN			
21	ie AYAN	4	ATHENAIOS'UN DEIPNOSOPHISTAI ESERİ BAĞLAMINDA ŞÖLEN EDEBİYATI'NDA FİLOZOF PORTRELERİ				
SALON 5	Doç. Dr. Emine AYAN	5	A REVIEW ON THE STORIES IN HAKAN GUNDAY'S BOOK CALLED DERZ				
	Doç	6	BURHANEDDÎN MELUL'S WITNESSING ON THE OCCUPATION OF EDÎRNE AND WORK TITLED A VOICE FROM EDÎRNE	Bilge KARGA GÖLLÜ			
		7	BEN VE ÖTEKİNİN EZELİ HİKAYESİ: GÜRAY SÜNGÜ'NÜN BÜYÜK IRMAKLARDAN BİLE ROMANINDA OKSİDENTALİST BAKIŞ	Öğr. Gör. Dr. RAMAZAN KANDEMİR ENSER			
		8	AHMET HAMDİ TANPINAR'IN ROMANLARINDA TOPLUMSAL DEĞİŞİM VE DEVRİM	Öğr. Gör. Dr. RAMAZAN KANDEMİR ENSER			













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	8 Ekim/ October 8, 2023 / 11:50 – 13:50 Time zone in Turkey (GM1+3)					
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors		
SALON 6		1	LEARNERS' VIOLENT BEHAVIOUR AND DRUG ABUSE AS MAJOR CAUSES OF TOBEPHOBIA IN SCHOOLS	Prakash Singh		
		2	CO-AUTHORSHIP NETWORKS OF SCIENTIFIC COLLABORATION	Juha Kettunen		
		IMPACT OF FOUR READING AND LIBRARY FACTORS ON THE GRADE AVERAGE OF UGANDAN SECONDARY SCHOOL STUDENTS: A QUANTITATIVE STUDY	Valeda Dent			
	šová	4	THE BEST METHODS OF MOTIVATING AND ENCOURAGING THE STUDENTS TO STUDY: A CASE STUDY	Mahmoud I. Syam, Osama K. El-Hafy		
	Iva Košek Bartošová	5	THE EFFECT OF ICONIC AND BEAT GESTURES ON MEMORY RECALL IN GREEK'S FIRST AND SECOND LANGUAGE	Eleni Ioanna Levantinou		
	Iva Ko	6	DEVELOPMENT OF ELEMENTARY LITERACY IN THE CZECH REPUBLIC	Iva Košek Bartošová		
		7	STUDENTS AS GLOBAL CITIZENS: LESSONS FROM THE INTERNATIONAL STUDY TOUR	Ana Hol		
			PROSPECTIVE CLASS TEACHERS- COMPUTER EXPERIENCES AND COMPUTER ATTITUDES	Teresa Coffman, Mary Beth Klinger		
		VIRTUAL OR VIRTUALI IN SECOND LIFE	VIRTUAL OR VIRTUALLY U: EDUCATIONAL INSTITUTIONS IN SECOND LIFE	Nancy Jennings, Chris Collins		
		8	THE EFFECTS OF THE IMPACT OF INSTRUCTIONAL IMMEDIACY ON COGNITION AND LEARNING IN ONLINE CLASSES	Glenda A. Gunter		











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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors			
		1	KNOWLEDGE RELATIONSHIP MODEL AMONG USER IN VIRTUAL COMMUNITY	Fariba Haghbin, Othman Bin Ibrahim, Mohammad Reza Attarzadeh Niaki			
		2	DYNAMICS SIMULATION APPROACH IN ANALYZING PENSION EXPENDITURE	Hasimah Sapiri Anton Abdulbasah Kamil, Razman Mat Tahar, Hanafi Tumin			
		3	KNOWLEDGE MANAGEMENT APPLIED TO FORENSIC SCIENCES	Norma Rodrigues Gomes			
SALON 7	Dr. Numera Rafaqat	THE USED OF ENVIRONMENTAL ETHICS IN MET. AND TECHNIQUES OF ENVIRONMENTAL MANAGE  4	THE USED OF ENVIRONMENTAL ETHICS IN METHODS AND TECHNIQUES OF ENVIRONMENTAL MANAGEMENT	Amir Hossein Davami, A< li Gholami, Ebrahim Panahpour			
SAL	Dr. Nume	5	ADOPTABILITY ISSUES OF GPS IN PUBLIC SECTOR IN PAKISTAN	Dr. Asim Tanvir, Dr. Numera Rafaqat			
		6	SYSTEMS AND SOFTWARE SAFETY AND SECURITY	Assoc. Prof. Dr. Marzieh Mokhtaripour			
		7	A STUDY OF THE DAMAGES TO HISTORICAL MONUMENTS DUE TO CLIMATIC FACTORS AND AIR POLLUTION AND OFFERING SOLUTIONS	Shoureshe Kanani, Hassan Zandi			
		8	HOW DO POLITICIANS RECOVER THEIR COSTS? THE POLITICAL ECONOMY OF REPRESENTATIVE DEMOCRACY IN INDIA	Subramaniam Chandran			













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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors		
				1	A COMPARISON OF SVM-BASED CRITERIA IN EVOLUTIONARY METHOD FOR GENE SELECTION AND CLASSIFICATION OF MICROARRAY DATA	Rameswar Debnath, Haruhisa Takahashi
		2	BIOEFFICACY OF SOME OIL-MIXED PLANT DERIVATIVES AGAINST AFRICAN MUD CATFISH (CLARIAS GARIEPINUS) BEETLES, DERMESTES MACULATUS AND NECROBIA RUFIPES	Akinwumi F. Olusegun		
		3	THE ROLE OF IMMUNOGENIC ADHESIN VIBRIO ALGINOLYTICUS 49 K DA TO MOLECULE EXPRESSION OF MAJOR HISTOCOMPATIBILITY COMPLEX ON RECEPTORS OF HUMPBACK GROUPER CROMILEPTES ALTIVELIS	Uun Yanuhar		
	4	4	IDENTIFICATION CHARACTERIZATION AND PRODUCTION OF PHYTASE FROM ENDOPHYTIC FUNGI	Yetti Marlida , Rina Delfita , Neni Gusmanizar, Gita Ciptaan		
& Z	Olusegun		DIRECT AND INDIRECT SOMATIC EMBRYOGENESIS FROM PETIOLE AND LEAF EXPLANTS OF PURPLE FAN FLOWER (SCAEVOLA AEMULA R. BR. CV. 'PURPLE FANFARE')	Shyama Ranjani Weerakoon		
SALON 8	Akinwumi F. Olusegun	6	STRUCTURAL BASIS OF RESISTANCE OF HELICOBACTERPYLORI DNAK TO ANTIMICROBIAL PEPTIDE PYRRHOCORICIN	Musammat F. Nahar, Anna Roujeinikova		
	A	7	COMMUNITIES OF AMMONIA-OXIDIZING ARCHAEA AND BACTERIA IN ENRICHED NITRIFYING ACTIVATED SLUDGE	Puntipar Sonthiphand, Tawan Limpiyakorn		
		HUMAN ELASTIN-DERIVED BIOMIMETIC COATING SURFACE TO SUPPORT CELL GROWTH	Antonella Bandiera			
		9	A REPORT ON OCCURRENCE AND PARASITE-HOST OF LIGULA INTESTINALIS IN SATTARKHAN LAKE(EAST AZERBAIJAN-IRAN)	Mahbobeh Hajirostamloo		
		10	VOCAL COMMUNICATION IN SOOTY-HEADED BULBUL; PYCNONOTUS AURIGASTER	Surakan Payakkhabut		













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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors		
		1	THE IMPACT OF COPPER AND ZINC DEFICIENCY ON MILK PRODUCTION PERFORMANCES OF INTENSIVELY GRAZED DAIRY COWS ON THE NORTH-EAST OF ROMANIA	Alina Anton, Gheorghe Solcan, Carmen Solcan		
		2	TUBERCULIN, TETANUS IMMUNOGLOBULIN AND DPT VACCINE AS AN AVIAN IN VIVO T- LYMPHOCYTE MITOGENS	Ibrahim Mohammed Saeed Shnawa		
		3	THE APPROPRIATE TIME REQUIRED FOR NEWBORN CALF CAMEL TO GET OPTIMAL AMOUNT OF COLOSTRUMS IMMUNOGLOBULIN (IGG) WITH RELATION TO LEVELS OF CORTISOL AND THYROXIN	Amina M. Bishr, Ahmed B. Magdub, Abdul-Baset R. Abuzweda		
SALON 9	ati	4	THE EFFECT OF GOAT MILK FRACTIONS SUPPLEMENTATION ON SERUM IGE RESPONSE AND LEUKOCYTES COUNT IN DINITROCHLOROBENZENE SENSITIZED RAT	Phd. Candidate Nurliyani, E. Harmayani, Assoc. Prof. MHNE. Soesatyo		
	Diah Tri Widayati	5	EMBRYO TRANSFER AS AN ASSISTED REPRODUCTIVE TECHNOLOGY IN FARM ANIMALS	Diah Tri Widayati		
	Diah 1	6	ADDING OLIVE OIL INTO DILUENTS FOR IMPROVING SEMEN QUALITY AND STORAGE ABILITY OF ROOSTERS' SEMEN DURING LIQUID STORAGE	Assoc. Prof. Dr. Hazim J. Al-Daraji		
		7	THE EFFECTS OF FEEDING RAW FIBER CONCENTRATE ON GROWTH PERFORMANCE AND BLOOD METABOLITES OF SUCKLING HOLSTEIN CALVES	Mehdi Dehghan-Banadaky, Fridoon Niazi, Mohsen Ghiasvand		
			COMPARISON OF THE EFFECTS OF THREE DIFFERENT TYPES OF PROBIOTICS ON THE SUCRASE ACTIVITIES OF THE SMALL INTESTINE MUCOSA OF BROILER CHICKS	Fazlollah Moosavinasab, Dr. Zhila Motamedi		
		8	SPERM PRODUCTION RATE, GONADAL AND EXTRAGONADAL SPERM RESERVES IN THE SOKOTO RED (MARADI) BUCK IN A TROPICAL ENVIRONMENT	Immanuel I. Bitto, Thomas Agam		













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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors		
	_	1	INTERACTIVE FUZZY MULTI-OBJECTIVE PROGRAMMING IN LAND RE-ORGANISATIONAL PLANNING FOR SUSTAINABLE RURAL DEVELOPMENT	Bijaya Krushna Mangaraj, Deepak Kumar Das		
		2	SPATIAL STRUCTURE AND SPATIAL IMPACTS OF THE JAKARTA METROPOLITAN AREA: A SOUTHEAST ASIAN EMR PERSPECTIVE	Ikhwan Hakim, Bruno Parolin		
		SPATIAL PLANNING AS AN APPROACH TO ACHIEVE SUSTAINABLE DEVELOPMENT IN HISTORIC CITIES	Mohammad Ali Abdi, Sima Mehdizadegan Namin			
4 10	ss Jeffry	4	POSSIBLE UTILIZATION OF CIGARETTE BUTTS IN LIGHT-WEIGHT FIRED CLAY BRICKS	Aeslina Abdul Kadir, Prof. Dr. Abbas Mohajerani		
SALON 10	Prof. Dr. Ross Jeffry	5	DIGITAL FILTERS FOR HOT-MIX ASPHALT COMPLEX MODULUS TEST DATA USING GENETIC ALGORITHM STRATEGIES	Prof. Dr. Madhav V. Chitturi, Anshu Manik, Kasthurirangan Gopalakrishnan		
	4	6	PERFORMANCE ASSESSMENT OF COMPUTATIONAL GRIDON WEATHER INDICES FROM HOAPS DATA	Madhuri Bhavsar, Anupam K Singh, Shrikant Pradhan		
		ENHANCED CLUSTERING ANALYSIS AND VISUALIZATION USING KOHONEN'S SELF-ORGANIZING FEATURE MAP NETWORKS		Kasthurirangan Gopalakrishnan, lectureSiddhartha Khaitan, Anshu Manik		
		8	THE EFFECT OF CONFINEMENT SHAPES ON OVER-REINFORCED HSC BEAMS	Prof. Dr. Ross Jeffry, Dr. Muhammad N. S. Hadi		













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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors	
		1	GREEN TRADE WITHIN THE FRAMEWORK OF GREEN INVESTMENTS: A REVIEW ON OECD COUNTRIES	Dr. Öğretim Üyesi MÜCAHİT ÇİTİL	
		2	YEŞİL REKLAM, YEŞİL MARKA SADAKATİ, YEŞİL MARKA DENKLİĞİ VE YEŞİL MARKA İNOVASYONUNUN YENİDEN SATIN ALMA NİYETİ ÜZERİNDEKİ ETKİSİNİN BELİRLENMESİ	Dr. Öğr. Üyesi, BURAK YAPRAK	
		3	NEUROMANAGEMENT AS A NEW CONCEPT IN MANAGEMENT: SYSTEMATICAL REVIEW OF EXPERIMENTAL STUDIES	Dr. Öğr. Üyesi Şerife UĞUZ ARSU	
		4	KATASTROFİK SAĞLIK HARCAMALARI KAVRAMI VE TEMALARI ÜZERİNE BİBLİYOMETRİK ANALİZ	Dr. HASAN BAĞCI Öğretim Görevlisi Dr. HAKAN KAÇAK	
		5	ANALYSIS AND EXAMINATION OF BLOCK CHAIN TECHNOLOGY IN COMPARATION WITH TRADITIONAL WORKING METHODS.	Aynur SALAYEVA	
	HİT Çİ	6	ÖRGÜTSEL SESSİZLİK KONUSUNDA YAYINLANAN MAKALELERİN BİBLİYOMETRİK ANALİZİ	Dr. Öğr. Üyesi, ÖMER EMRE ARSLAN	
SALON 1	Dr. Öğretim Üyesi MÜCAHİT ÇİTİL	7	DİJİTAL PAZARLAMA	Dr. Öğr. Üyesi Bilge DOĞANLI Doç. Dr. Sadullah ÇELİK	
	Öğretim Ü	8	TURİST PERSPEKTİFİNDEN APİTURİZM: TRİPADVİSOR ÖRNEĞİ	Dr.Öğretim Üyesi Nermin AYAZ DÖNMEZ	
	Dr. C	9	SMART TOURISM AGAINST OVERTOURISM: THE CONTRIBUTION OF SOCIAL MARKING SITES TO DEVELOPING SUSTAINABLE AND RESPONSIBLE TOURIST BEHAVIOUR	Doç. Dr. Şükran KARACA Dr. Öğretim Üyesi Mehmet Halit AKIN	
		10	EVALUATION OF GREEN ICT APPLICATIONS IN TOURISM BUSINESSES WITHIN THE SCOPE OF SUSTAINABLE DEVELOPMENT GOALS	Dr. Öğretim Üyesi Mehmet Halit AKIN Doç. Dr. Şükran KARACA	
		11	MULTI-CRITERIA DECISION MAKING IN DETERMINING AN INTERNATIONAL TARGET MARKET IN TOURISM: THE CASE OF TÜRKİYE	Assist. Prof. Dr., FATİH GÜNAY Assist. Prof. Dr., DERYA TOKSÖZ KILIÇ	













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SALON 2		1	KARANLIK TURİZM ÜRÜNÜ OLARAK BOCUK GECESİ: YEREL HALKIN "BOCUK GECESİ" KORKU FESTİVALİNE YÖNELİK ALGILARININ FESTİVAL MEMNUNİYETİNE ETKİSİ	Uzm. MERVE KARAKAŞ Doç. Dr. SABRİYE ÇELİK UĞUZ		
		2	THE RELATIONSHIP BETWEEN HUMAN DEVELOPMENT AND CARBON EMISSIONS IN TURKIYE: EVIDENCE FROM FOURIER COINTEGRATION TEST	Dr. Meral ÇABAŞ Doç. Dr. Nazife Özge BEŞER		
	MEYDAN	3	THE TRADITION OF MAKING IT RAIN AND THE ÇÖMÇE BRIDE GAME OF THE GAGAUZ PEOPLE LIVING IN BULGARIA	Ph.D. Seyit GEZER		
	Doç. Dr. SELİN BİTİRİM OKMEYDAN	4	HOFSTEDE'IN KÜLTÜREL BOYUT PUANLARI TEKRAR TEST EDİLİYOR MU? TÜRKİYE'NİN KÜLTÜREL YAPISI ÇERÇEVESİNDE BİR DEĞERLENDİRME	Dr. Öğr. Üy., Hamit Murat ÖZCAN		
	SELÍN BÍ	5	İBN RÜŞD'ÜN PERSPEKTİFİNDE NEDENSELLİK VE MUCİZE SORUNU	Orhan Özdemir		
	Doç. Dr	6	SPRING FESTIVAL AS AN INTANGIBLE CULTURAL HERITAGE ELEMENT: HIDIRELLEZ	Araş. Gör. GÖKÇE EMEÇ YÜCESOY Doç. Dr. SELİN BİTİRİM OKMEYDAN Prof. Dr. METİN EKİCİ		
		7	HIDIRELLEZ AND WIDESPREAD RITUALS WITHIN THE SCOPE OF INTANGIBLE CULTURAL HERITAGE (ICH)	Doç. Dr. SELİN BİTİRİM OKMEYDAN Araş. Gör. GÖKÇE EMEÇ YÜCESOY Prof. Dr. METİN EKİCİ		













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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors			
		1	CERRAHİ BRANŞLARDA ROBOTİK CERRAHİ YÖNTEMİNİN KULLANIM SIKLIĞI	Op. Dr. Pınar KOÇATAKAN			
		2	CURRENT TREATMENT METHODS FOR OVARIAN CANCER	Şamil ÖZTÜRK			
		3	THE ROLE OF STEM CELLS IN THE TREATMENT OF ASHERMAN'S SYNDROME	Şamil ÖZTÜRK			
		4	DELAY AND CANCELLATION OF SURGERY FROM THE PERSPECTIVE OF CLINICIANS: A MULTICENTER QUALITATIVE STUDY	Ayşe Çelik Yılmaz İsmail Aşatır Aylin Akarsu Seçil Sağbaş Şefika Veremci			
SALON 3		BODUÇ	<b>5</b> 0000	EFFECTIVE THRESHOLDING METHOD FOR THE SEGMENTATION OF HEART SOUNDS	Doç.Dr., Yücel KOÇYİĞİT Araş.Gör., Ceyda BOZ		
	Asst. Prof. Dr. Erengül BODUÇ	6	PERSPECTIVE OF HEALTH VOCATIONAL SCHOOL CLASSES ON CADAVER AND ORGAN DONATION	Asst. Prof. Dr. Erengül BODUÇ Assoc. Prof. Dr. Tülay Diken ALLAHVERDİ			
	Asst. Prof	7	Huzurevinde Kalan Yaşlı Bireylerde Ölüm Kaygısı ve Sağlık Algısı	Dr.Öğr.Üyesi Akgün YEŞİLTEPE Öğr.Gör.Gözdenur TANRIKULU Öğr. Gör. Emine PİRİNÇ BAYRAKTAR			
			8	SOCCER PLAYERS IN AMATEUR LEAGUES AND THE IMPORTANCE OF SLEEP	Prof. Dr. Mahmut AÇAK Arş. Gör. Hakan BÜYÜKÇELEBİ Arş. Gör. Mehmet AKARSU		
		9	EXAMINATION OF AMATEUR LEAGUE FOOTBALL PLAYERS ANXIETY LEVELS TOWARDS INJURY	Doç. Dr. Serkan DÜZ Prof. Dr. Mahmut AÇAK Arş. Gör. Mehmet AKARSU Arş. Gör. Hakan BÜYÜKÇELEBİ			













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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors	
SALON 4		1	FEN EĞİTİMİNDE "TINKERING" ÖĞRENME YAKLAŞIMI TEMELLİ ÇALIŞMALARIN BETİMSEL İÇERİK ANALİZİ	Arş. Gör., MERAL ÇELİKOĞLU Doktora Öğrencisi TÜLİN HÜNDÜR Arş. Gör., HACI MEHMET YEŞİLTAŞ Prof. Dr., EROL TAŞ	
	13	2	KAVRAMSAL DEĞİŞİM YAKLAŞIMININ FEN EĞİTİMİNDE ETKİLİLİĞİ: BETİMSEL İÇERİK ANALİZİ	Doktora Öğrencisi Tülin HÜNDÜR Arş. Gör. Hacı Mehmet YEŞİLTAŞ Arş. Gör. Meral ÇELİKOĞLU Prof. Dr. Erol TAŞ	
	Doç. Dr. Cennet ŞANLI	3	ÖĞRETMEN ADAYLARININ TPAB BECERİLERİNİN İNCELENMESİ: FORMASYON GRUBU ÖRNEĞİ	Arş. Gör., MERAL ÇELİKOĞLU Arş. Gör., HACI MEHMET YEŞİLTAŞ Prof. Dr., EROL TAŞ	
	Doç. D	4	TEKNOOJİ DESTEKLİ ÖZ YÖNELİM ÇALIŞMALARINA KISA BİR BAKIŞ	Arş. Gör. Hacı Mehmet YEŞİLTAŞ Arş. Gör. Meral ÇELİKOĞLU Doktora Öğrencisi Tülin HÜNDÜR Prof. Dr. Erol TAŞ	
		5	ANALYSIS OF PROBLEM-SOLVING SKILLS OF GEOGRAPHY UNDERGRADUATE STUDENTS BASED ON THE REVISED BLOOM TAXONOMY	Doç. Dr. Cennet ŞANLI	
		6	SINIF ÖĞRETMENİ ADAYLARININ YANSITICI DÜŞÜNME DÜZEYLERİ	Öğr. Gör. Dr. Akın KARAKUYU	













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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors		
		1	THE EFFECT OF CHANGES IN THE KEYWORDS OF ASSOCIATE PROFESSOR (AUGUST 2023) ON PUBLIC ADMINISTRATION DISCIPLINE	Doç. Dr. Fatih GÜLER,		
		2	LAW OF POLITICAL PARTIES FROM THE PERSPECTIVE OF THE ILLEGAL LIVES MOVIE	Doç. Dr. Fatih GÜLER,		
	ER,	3	STATE SOVEREIGNTY VS. HUMANITY: A STUDY ON THE 6/2 SYRIA EARTHQUAKES	Asst. Prof. Dr. Sezai ÇAĞLAYAN Av. Feyza DİRİ		
SALON 5	Doç. Dr. Fatih GÜLER,	4	5901 SAYILI TÜRK VATANDAŞLIĞI KANUNU KAPSAMINDA VATANDAŞLIĞIN İPTALİ	Prof. Dr. Necla ÖZTÜRK Arş. Gör. Döndü KUŞCU		
SA	Doç. Dr.	5	TAŞINIR MALLARIN MÜLKİYETİNİN DEVRİNE UYGULANACAK HUKUK	ÇAĞLAYAN Av. Feyza DİRİ Prof. Dr. Necla ÖZTÜRK Arş. Gör. Döndü		
		6	TOPLUMSAL DEMOGRAFİK YAPININ KAMU YÖNETİMİNE YANSIMASI	HASRET ÖZTÜRK Öğr. Gör. HATİCE MESCİ		
		7	TÜRKİYE'DE BÜTÇE AÇIĞININ SÜRDÜRÜLEBİLİRLİĞİ: ZAMANLA DEĞİŞEN ADF			
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8 Ekim/ October 8, 2023 / 15:30 - 17:30 Time zone in Turkey (GMT+3)

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Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors		
SALON 6		1	PHOTOVOLTAIC SMALL-SCALE WASTEWATER TREATMENT PROJECT FOR RURAL AND NEW-CULTIVATED AREAS IN EGYPT	Fadia M. A. Ghali		
		2	A CONDITION RATING SYSTEM FOR WASTEWATER TREATMENT PLANTS INFRASTRUCTURES	Altayeb Qasem, Assis. Prof. Tarek Zayed, Dr. Zhi Chen		
	mamoto	3	EFFECT OF USING STONE CUTTING WASTE ON THE COMPRESSION STRENGTH AND SLUMP CHARACTERISTICS OF CONCRETE	Kamel K. Alzboon, Khalid N.Mahasneh		
	Assis. Prof. Kayoko Yamamoto	4	REMOVAL OF HEAVY METALS FROM WASTEWATER BY ADSORPTION AND MEMBRANE PROCESSES: A COMPARATIVE STUDY	Nermen N. Maximous, George F. Nakhla, W. K. Wan		
	<del>     </del>		STATISTICAL ANALYSIS-DRIVEN RISK ASSESSMENT OF			
	is. Prof	5	CRITERIA AIR POLLUTANTS: A SULFUR DIOXIDE CASE STUDY	Ehsan Bashiri		
	Assi	6	EFFECT OF A GRAVEL BED FLOCCULATOR ON THE EFFICIENCY OF A LOW COST WATER TREATMENT PLANTS	Alaa Hussein Wadi		
		7	CHARACTERISTICS OF E-WASTE RECYCLING SYSTEMS IN JAPAN AND CHINA	Dr. Bi Bo, Assis. Prof. Kayoko Yamamoto		
		8	PREDICTION OF DISSOLVED OXYGEN IN RIVERS USING A WANG-MENDEL METHOD – CASE STUDY OF AU SABLE RIVER	Dr. Mahmoud R. Shaghaghian		













		9th	October 6 - 8, 2023 - Edirne Meeting ID: 881 9370 7664 Passcode: 123456	
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SALON 7		1	A SYSTEMS MODELING APPROACH TO SUPPORT ENVIRONMENTALLY SUSTAINABLE BUSINESS DEVELOPMENT IN MANUFACTURING SMES	Manuel Seidel, Rainer Seidel, Des Tedford, Richard Cross, Logan Wait
		2	PROCESS-BASED BUSINESS TRANSFORMATION THROUGH SERVICES COMPUTING	Prof. Dr. Sinnakkrishnan Perumal, Dr. Nitish Pandey
	ian	3	PROPOSING ENTERPRISE WIDE INFORMATION SYSTEMS BUSINESS PERFORMANCE MODEL	Vineet Kansal
	Prof. Dr. Zeljko Panian	4	CONCEPTUAL METHOD FOR FLEXIBLE BUSINESS PROCESS MODELING	Adla Bentellis, Lecture Zizette Boufaïda
	Prof. Dr. Z	5	USING ONTOLOGY SEARCH IN THE DESIGN OF CLASS DIAGRAM FROM BUSINESS PROCESS MODEL	Wararat Rungworawut, Twittie Senivongse
		6	A QUANTITATIVE APPROACH TO STRATEGIC DESIGN OF COMPONENT-BASED BUSINESS PROCESS MODELS	Manuel Seidel, Rainer Seidel, Des Tedford, Richard Cross, Logan Wait  Prof. Dr. Sinnakkrishnan Perumal, Dr. Nitish Pandey  Vineet Kansal  Adla Bentellis, Lecture Zizette Boufaïda  Wararat Rungworawut,
		7	A NEW DIMENSION OF BUSINESS INTELLIGENCE: LOCATION-BASED INTELLIGENCE	
		8	COMPUTATIONAL MODELING IN STRATEGIC MARKETING	













#### **BALKAN** 9th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES 9th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES October 6 - 8, 2023 - Edirne Meeting ID: 881 9370 7664 Passcode: 123456 8 Ekim/ October 8, 2023 / 15:30 – 17:30 Time zone in Turkey (GMT+3) Salon Moderator Bildiri No ve Başlığı / Paper ID and Title Authors EFFECT OF COLLECTOR ASPECT RATIO ON THE THERMAL Abhishek Priyam, Prabha Chand PERFORMANCE OF WAVY FINNED ABSORBER SOLAR AIR 1 HEATER SIMILITUDE FOR THERMAL SCALE-UP OF A MULTIPHASE Prof. Dr. Mohammed W. Abdulrahman THERMOLYSIS REACTOR IN THE CU-CL CYCLE OF A 2 HYDROGEN PRODUCTION ENHANCEMENT OF THERMAL PERFORMANCE OF LATENT Assoc. Prof. Dr. HEAT SOLAR STORAGE SYSTEM Rishindra M. Sarviya, 3 Ashish Agrawal A ZVT-ZCT-PWM DC-DC BOOST CONVERTER WITH DIRECT Naim Suleyman Ting, Dr. Junjie Chen, POWER TRANSFER Yakup Sahin, 4 Ismail Aksoy SALON TECHNICAL ANALYSIS OF COMBINED SOLAR WATER Hossein Lotfizadeh, HEATING SYSTEMS FOR COLD CLIMATE REGIONS André McDonald, 5 Amit Kumar AN EXPERIMENTAL STUDY ON EVACUATED TUBE SOLAR Avadhesh Yadav, COLLECTOR FOR STEAM GENERATION IN INDIA Anunava Saraswat 6 COUPLING HEAT AND MASS TRANSFER FOR HYDROGEN-Dr. Junjie Chen, Deguang Xu ASSISTED SELF-IGNITION BEHAVIORS OF PROPANE-AIR 7 MIXTURES IN CATALYTIC MICRO-CHANNELS TECHNO-ECONOMIC PROSPECTS OF HIGH WIND ENERGY Marina Kapsali,

SHARE IN REMOTE VS. INTERCONNECTED ISLAND GRIDS









Dr. John S.

Anagnostopoulos



8



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alon / Hall	Oturum Başkanı / Session Chair		Eser Adı / Art Work	Artist	Tema ,
		1	Mitolojik	Dr.Öğr.Üyesi Merve KARAMAN	
	-	2	Büst	Dr.Öğr.Üyesi Merve KARAMAN	
		3	Helezon	Doç. Dr. Nermin ÖZCAN ÖZER	
		4	Lirik Sema	Doç. Dr. Nermin ÖZCAN ÖZER	
		5	Atamız Ankara'da	Öğr. Gör. Sıla TANIŞIK	
		6	Kumcağız Halk Plajı, Kandıra, Kocaeli	Doç. M. Çağatay Göktan	
		7	Zaman Daralıyor I/Time is running out I	Doç.Dr. Fırat Çalkuş	
		8	Zaman Daralıyor II/Time is running out II	Doç.Dr. Fırat Çalkuş	
		9	Barcode World	Dr. Öğr. Üyesi Amine Refika	
		10	Eski Yeni/ Old New	Doç. Dr. Filiz Öztürk	
		11	Tavus Kuşu	EMÎNE CANTÜRK	
		12	Keçeden bebek ev ayakkabısı	SAYARA YERGESHOVA	
		13	Giyside Alternatif malzemeler	SAYARA YERGESHOVA	
		14	"Anı Resimleri"/ "Memory Paintings"	Dr. Öğr. Üyesi Kerem ATAR	
		15	Katman	Dr. Öğr. Üyesi Bahar MARABA	
		16	Akış	Tuğba Zengin	
		17	koçbaşı	Ali KAYA	
		18	İsimsiz 1	Dr. Öğr. Üyesi Altay ALDOĞAN	
		19	İsimsiz 2	Dr. Öğr. Üyesi Altay ALDOĞAN	-













	Parça Parça	Dr. Öğr. Üyesi Koza Kurt Kırtay
20	Parça Parça	Dr. Ogr. Oyesi Koza Kun Kinay
21	Firtina Öncesi	Doç.Dr. Bengü Batu Ertung
22	Hatip Ebru	Dr. Öğr. Üyesi Yıldırım KARADENİZ
23	"Kral Haldi'nin İzinde"	Mehmet Şiran GÖKDEMİR
25	"Yıldız Savaşları"	Mehmet Şiran GÖKDEMİR
26	Haber / Newcast	Dr. Öğr. Gör. Saygın Koray Doğaner
27	Flanörler İçin Tavsiye	Doç. Ayşegül Türk
28	Femela	Arş. Gör. Beyzanur Karakuş
29	Bir Yerde/Somewhere	Doç. F. Nihan Şen
30	Persona ve Gölge / Persona and Shadow	Asst. Prof. Murat Benan Yıldız
31	Akdeniz'in Ayçiçekleri / Sunflowers of the Mediterranean	Dr. Handan NARİN KIZILTAN
32	"Bedenin Diyalektiği"	Dr. Aşkın BAHADIR
33	kuşlar	Uzm.ögrt.Aysel Sevgi ÖZTEN
34	Eylül/ September	Yüksel TOK
35	İsimsiz	Dr. Öğr. Üyesi Derya ÖZDEMİR
36	Teşhir I	Arş. Gör. Bilge ŞENGÜL
37	Bunlar Hep Sevgiden\ These are all about love	Arş. Gör. Hatice DÖNMEZ AYDIN













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#### MACROANATOMIC and MORPOMETRIC ANALYSIS of the MANDIBLE in a ANATOLIAN WILD GOAT

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#### **Abstract**

Goats are mammals that found the genus Capra from the subfamily Bovinae of the Bovidae family. In this study, it was aimed to determine the morphometric values and anatomical structure of the wild goat mandible. The superficial muscles of the mandible were dissected and then boiled and macerated. 18 morphometric measurements were taken from the right and left mandible with the help of digital caliper. The mean length of the mandible was measured as 165.5 mm on the right side and 165.7 mm on the left side. The mean height of the mandible was 65.12 mm on the right side and 65.36 mm on the left side. As a result, some findings of Wild goat mandibles, which are in the diversity of wildlife in Turkey but have started to become extinct, were obtained. It believe that the findings will contribute to anatomical, surgical, and archaeological studies.

**Keywords:** Anatomy, Mandible, Morfometry, Anatolian wild goat



#### A STUDY on CRANIUM TYPOLOGY in an ANATOLIAN WILD GOAT

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#### **Abstract**

Goats are mammals that situated the genus Capra from the subfamily Bovinae of the Bovidae family. In this study, it was aimed to determine the morphometric values and anatomical structure of the wild goat cranium. The superficial muscles of the cranium were dissected and then boiled and macerated. 43 morphometric measurements were taken from the cranium with the help of digital caliper and tape measure. The total length of the cranium was measured as 245 mm. Neurocranium length was determined as 160 mm and viscerocranium length was determined as 144 mm. The most important macroanatomically striking finding was the holes resembling the foramen nutricium, located in the same place on both sides in the cranial of the foramen infraorbitale. As a result, some findings of Wild goat cranium were obtained. It believe that the findings will contribute to anatomical, surgical, and archaeological studies.

Keywords: Anatomy, Cranium, Macroanatomy, Morfometry, Wild goat



## DÜNYA VE TÜRKİYE'DE SPHECIFORMES'LER (INSECTA: HYMENOPTERA) HAKKINDA GÜNCEL BİLGİLER

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#### ÖZET

Dünyada canlı yaşam formlarının büyük bir çoğunluğunu böcekler oluşturmaktadır. Böcekler (Insecta) eklem bacaklılar (Arthropoda) şubesinin tür biyoçeşitliliği bakımından en zengin sınıfını oluşturmaktadır. Ayrıca hemen hemen her gün yeni böcek türleri tanımlanarak bu sayıya ilave edilmektedir. Yapılan son taksonomik çalışmalarla 32 takımdan oluşan Böcekler sınıfının en zengin takımlarından birisi Zar Kanatlılar (Hymenoptera) olarak kabul edilmektedir. Hymenoptera takımı dünya çapında 150.000'den fazla tür içerir. Hymenoptera takımında Apoidea üstfamilyasına dâhil Spheciformes gurubu Ammoplanidae, Ampulicidae, Astatidae, Bembicidae, Crabronidae, Mellinidae, Pemphredonidae, Philanthidae, Psenidae ve Sphecidae olmak üzere toplam 10 familyadan oluşmaktadır. Spheciformes'ler dünya çapında 274 cins ve 10.156 tanımlanmış türe ulaşmıştır. Türkiye coğrafi konumu, iklimi ve habitat çeşitliliği nedeniyle Palearktik Bölge'deki ülkeler arasında Spheciformes''ler bakımından en zengin faunal alanlarından biri konumuna gelmiştir. Türkiye Spheciformes faunası, yapılan son çalışmalar ile birlikte 80 cinse ait 633 tür ve 25 alt tür olarak güncellenmiştir.

Spheciformes'lerin pek çok türünün ön bacakları toprakta kazmaya ve yuva yapmaya uygun olduğu için bu arılara "kazıcı yaban arıları" denilmektedir. Ayrıca bu türler ağaçlarda veya taş aralarında, diğer böceklerin yuvalarında veya insan yaşam alanlarında (duvarlarda, pencere, çatı ve kapı kenarlarında) çamurdan yuva yapma eğilimleri vardır. Spheciformes'lerin beslenme şekilleri birbirinden oldukça farklıdır. Erginleri polen veya nektarla beslenirken, larvaları etçildirler. Kışı diyapozda geçiren bu arılar predatör, parazitoid ve kleptoparazit olarak diğer böcekler üzerine baskı kurarak doğal denge zincirinin önemli bir halkasını oluştururlar. Kısa ağız parçalarına sahip olan Spheciformes'ler Compositae, Euphorbiaceae, Polygonaceae ve Umbellifera familyalarına ait kısa korollalı bitkilerle beslenirler. Genellikle soliter türlerdir.

Anahtar Kelimeler: Hymenoptera, Apoidea, Spheciformes, güncel bilgiler



#### KENGER (GUNDELIA) BİTKİSİNİN HALK ARASINDA KULLANIMLARI

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#### ÖZET

Gundelia tournefortii L. uzun yıllar monotipik bir cins olarak kabul edilmiştir. Fakat son yıllarda hem komşu ülkelerde hem de ülkemizde birçok yeni takson yayınlanmıştır. Gundelia, kayalık kireçtaşı veya magmatik yamaçlar, bozkır, meşe açıklıkları veya çam ormanları, bazen nadasa bırakılmış tarlalarda, arpa veya mısır tarlalarında, genellikle kırmızımsı topraklarda, bazen yol kenarında sık görülen, deniz seviyesinden (0-) 20-2500 m yükseklikte yaşayan yabani bir ottur. Türkiye'de, İran'da, Kafkaslar ve Ortadoğu'da halk Gundelia (Kenger)'yı doğadan toplayarak tüketmektedir. Bugün İsrail ve Cezayir'de Gundelia tournefortii'nin yetiştiriciliği yapılmaktadır. Ülkemizde Konya'nın kurak ve kumlu topraklarından Hakkari'nin dağ çayırlarına kadar doğal olarak pek çok farklı habitatta yayılış göstermektedir. Arazi çalışmaları ile Kenger'in halk arasında kullanımı ile ilgili bilgiler yüz yüze görüşme yöntemi ile derlenmiştir. Kişilerle soru-cevap şeklinde mülakata dayalı görüşmeler yapılmış ve konuşma anında kişilerin izniyle ses kaydı alınmıştır. Genelde sakız ve yemek yapımında kullanılmak üzere toplanmaktadır. Kenger (Gundelia) halk tarafından gıda olarak tüketilmektedir. Halk bitkiyi ilkbahar mevsiminde topraktan vejetatif kısmı ilk çıktığında toplamakta, bu taze gövdeleri temizleyerek çeşitli işlemlerden sonra kullanmaktadır. Genelde yumurtalı kavurması, pilavı, salamurası ve sakızı bilinmektedir. Ayrıca kahve olarak, çerez olarak ve hayvan yemi



olarak da tüketilmektedir. Özellikle Doğu ve Güneydoğu Anadolu Bölgeleri'nde halk doğadan toplayarak ya kendisi tüketmekte ya da satarak gelir elde etmektedir. Özellikle Kenger sakızı ve Kenger çerezi iyi bir gelir kaynağı olmuştur. Sakız için *G. munzuriensis*, *G. komagenensis* ve *G. glabra* kullanılmaktadır. Bitlis ve Muş'ta salamura yapımı çok fazla tercih edilmektedir. Bütün bunlar göz önüne alındığında özellikle Hakkari, Şırnak ve Van'da *G. rosea*'nın üretimi yapılarak ticaret hacmi ve ekonomik getirisi sağlanabilecektir.

Anahtar Kelimeler: Kenger, sakız, kahve, yemek, kültür, geleneksel gıda.



## ASSESSING SUNFLOWER GENETIC DIVERSITY THROUGH ISSR MARKERS: A LITERATURE REVIEW STUDY

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#### **ABSTRACT**

In breeding programs, information about genetic dissimilarity in the evaluated germplasm is very crucial as it facilitates the breeders to identify novel genetic variations that can be used for the development of new cultivars. Genetic diversity investigation through germplasm characterization is considered a prerequisite to breeding activities. Genetic diversity can be investigated at phenotypic and molecular level. Phenotypic markers have been found timeconsuming, laborious, and less trustable because of environmental effects. DNA-based molecular markers overcome all limitations present in the phenotypic markers and have been successfully used in the marker-assisted breeding of various crops. Among the various developed molecular markers, the Inter-Simple Sequence Repeats (ISSR) marker is a PCRbased dominant marker system having various advantages i.e., highly polymorphic, reproducible, cost-effective, and easy to use. ISSR marker system has been successfully used to investigate genetic diversity and population structure of various crops. Oilseed crops are an important group of plants having both nutritional and industrial value. Their importance in human nutrition and industrial applications cannot be overstated. Among various oilseeds, sunflower (Helianthus annuus) is one of the most significant oilseed crops, with a global production value estimated at USD 20 billion per year. Continuous efforts are ongoing to develop climate-resilient sunflower cultivars and molecular markers are playing a key role in these breeding activities. Through this review study, we will provide the most recent information about genetic diversity and population assessment through ISSR markers.

Keywords: Helianthus annuus, ISSR, Molecular marker, Industrial crop



## EDIBLE AQUATIC PLANTS - AN ALTERNATIVE FOOD RESOURCE FOR FOOD SECURITY

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#### **ABSTRACT**

Food security is one of the major issues in developing countries and the continuous depleting of food resources will cause serious issues in the coming future. There is a need to find alternative food resources to overcome the issue and edible aquatic plants may offer the best solution. Aquatic plants are the major constituent and primary producer of the aquatic ecosystem by releasing oxygen into the water bodies. Aquatic plants are rich in minerals, vitamins, carbohydrates, and proteins and hence used as food or food material for both humans and other organisms living within or in the vicinity of the water bodies. The use of aquatic or semi-aquatic plants as human food is increasing all over the World due to their nutraceutical values. These edible aquatic plants can be divided into edible marine and edible freshwater plants. Macro-algae and seaweed are well-known and consumable marine plants. Plants like Colocasia, water chestnut, water spinach, lotus, water mimosa, blue-green algae, water caltrop, cattail, and wild rice are the major freshwater edible plants used all over the World. Besides that, localized freshwater aquatic plants have also been utilized. The present study highlights the potential edible plants which can serve as alternative food resources in the future.

**Key Words**: Alternative food resources, edible aquatic plants, fresh water, food security, marine



### SIĞIRLARIN TİBİA'SINDA FORAMEN NUTRICIUM'LARIN ANATOMİK ÖZELLİKLERİ VE YERLEŞİMLERİ

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#### ÖZET

Çalışma, en sık yetiştirilen çiftlik hayvanlarından biri olan sığır tibia'ları üzerinde gerçekleştirildi. Sığır tibia'sının üzerinde bulunan foramina nutricia (NF) sayısını, bulunduğu konumu, deliklerin açılış yönlerini, morfometrik değerlerini saptamak ve literatürdeki hayvan türleri ile karşılaştırılması amaçlandı. Balıkesir Üniversitesi Veteriner Fakültesi Anatomi Anabilim Dalı laboratuvarlarında bulunan 7 adet sığır tibia'sı incelendi. Çalışmada incelenecek olan tibia'ların sağlıklı ve kusur ihtiva etmeyenleri seçildi. Kullanılacak olan materyallerde yaş ve cinsiyet özellikleri dikkate alınmadı. Kemikler ilk olarak çıplak göz ile incelendi. Sadece diyafiz bölgesinde bulunan ve belirgin bir şekilde tanımlanmış olan foramen nutricium'lar kabul edildi. Materyallerden; tibia'nın toplam uzunluğu (TLT), foramen nutricium (NF) ile tibia'nın proximal ucu arası uzaklık (NFP), foramen nutricium (NF) ile tibia'nın distal ucu arasındaki uzaklık ölçüldü ve elde edilen veriler doğrultusunda foraminal index (FI) hesaplanarak foramen nutricium'ların lokalizasyonu hakkında morfometrik sonuçlara ulaşıldı. Tibia'ların 5 tanesinin sağ, 2 tanesinin sol extermiteye ait olduğu tespit edildi. Çalışılan tibia'ların tamamında foramen nutricium tek olarak görüldü. Materyallerde foramen nutricium'ların yönlerinin proximale doğru olduğu saptandı. FI'ya göre foramen nutricium'lar 3 adet tibia'nın proximal 1/3 konumunda, 2 adet orta 1/3 konumunda tip 2 ve 2 adet distal 1/3 konumunda lokalize oldukları tespit edildi. Çalışılan materyallerin %100'ünde foramen nutricium'lar facies caudaliste ve lateralde konumlanmış şekilde gözlemlendi. Verimli ve yoğun olarak üreticiliğine devam edilmekte bir çiftlik hayvanı türü olan sığırların tibia'larının sağ ve sol extremiteleri arasındaki farklar ortaya konuldu. Yapılan çalışma ile tibia'ya kan teminin sağlanması ile ilgili gelişebilecek patolojik bozukluklara gerçekleştirilecek teşhis ve tedavi amaçlı girişimlerde veteriner hekimlere yardımcı olacağı ve konuya ilişkin anatomik çalışmalara yol göstereceği kanaatine varılmıştır.

Anahtar Kelimeler: Anatomi, Foramen nutricium, Tibia, Sığır.



### BİYOLOJİK SIVILARIN VE LEKELERİN ORİJİNİNİN BELİRLENMESİNDE mRNA ve ncRNA TEMELLİ YAKLAŞIMLAR

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#### ÖZET

Adli uygulamalarda olay yerlerinden elde edilen vücut sıvılarının orijinini doğru bir şekilde tespit etmek delil ile iddia edilen suç arasındaki bağlantının kurulması ve neticede olayın aydınlatılması açısından oldukça önemlidir. Bu bağlamda adli olgularda olay yerinden toplanan biyolojik örnekler kimyasal, analitik, immünolojik ve ışık kaynaklarına dayalı yöntemler ile analiz edilmektedir. Ancak adli olgularda bulunan biyolojik örneğin ne olduğundan çok kaynağının ne olduğunun anlaşılması yani orijininin belirlenmesi daha önemlidir. Olay yerinde bulunan kan örneğinin vücudun neresinden geldiğinin tespiti bizi olayın çözümüne yaklaştırabilmekte, soruşturmanın seyrini değiştirebilmektedir. Bu nedenle araştırmacılar vücut genetik bağlamında kimliklendirilmesinde sıvılarının adli cesitli biyobelirtecler kullanmaktadır. Dokuya özgü ekspresyon değerlerine sahip olan ve adli genetik analizlerde sıklıkla kullanılan mRNA molekülleri bu belirteçlerin başında gelmektedir. İlerleyen çalışmalarla beraber araştırmacılar kimliklendirmede daha hızlı ve yüksek doğrulukta sonuç veren, stabilitesi yüksek ve boyutu daha küçük olan miRNA'lar üzerine de yoğunlaşmıştır. Bununla beraber piRNA, circRNA gibi farklı ncRNA türleri de vücut sıvılarının kimliklendirilmesinde kullanılmaktadır. Adli bilimlerde vücut sıvısının tanımlanmasında RNA temelli en uygun yaklaşımı belirlemek zordur. Araştırmacılar tarafından tespit edilen RNA biyobelirteçlerinin, kriminal laboratuvarlarda gerçek vakalara uygulanmadan önce geliştirilmeye ve valide edilmeye ihtiyacı vardır. Bununla birlikte, genel olarak, DNA karşısında RNA bazlı teknolojilerin rutin analizlere dahil edilmesine ilişkin direnç de göz ardı edilmemesi gereken bir diğer husustur. Bu dirence RNA'nın stabilitesi konusundaki endişeler, maliyet, raporlamada standardizasyon eksikliği ve ticari kitlerin ulaşılabilirliği konusundaki kısıtlamalar sebebiyet vermektedir. Buna rağmen RNA bazlı teknolojilerin vücut sıvılarının tanımlanmasında geleneksel yöntemlerin yerini alma potansiyeli yüksektir. Ek olarak, Kantitatif Gerçek Zamanlı PCR Deneylerinin Yayınlanması için Minimum Bilgi (Minimum Information for Publication of Quantitative Real-Time PCR Experiments, MIQE) Kılavuzları'nın geliştirilmesi, güvenilir RT-qPCR sonuçlarının oluşturulmasını laboratuvarlar arası karşılaştırmayı da kolaylaştıracaktır. Literatür taramasına dayalı bu çalışma ile farklı RNA türlerinin dokulardaki ekspresyon seviyeleri ve biyobelirteç olarak seçicilikleri incelenerek adli olgularda vücut sıvılarının kimliklendirilmesine katkı sağlanması amaçlanmıştır.

Anahtar Kelimeler: Kimliklendirme, Vücut Sıvıları, miRNA, piRNA, mRNA



#### İZ DNA'DAN KİMLİK TESPİTİ VE ETKİ FAKTÖRLERİNİN ROLÜ

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#### ÖZET

Adli DNA analizleri, olay yerinden tespit edilen zorlu ve degrade örneklerden DNA profillemesi konusunda önemli ilerlemeler kaydetti. Bunun yanı sıra dokunma ile yüzeye veya cilde bırakılan deri veya epitel hücrelerden DNA profillemesine ilişkin geliştirilen analiz yöntemlerindeki gelişmeler, gelişen teknoloji ile birlikte ivme kazanmıştır. Son çalışmalarda deriden veya dokunulan nesnelerden dokunana ilişkin DNA profili tespitinde kullanılan analiz metadojileri, daha az miktarda biyolojik materyal gereksinimi olacak şekilde dizayn edilmektedir. Deri döküntüleri çekirdek içermeyen keratinize epitel hücreler olduklarından iz DNA ile kimlik tespiti mümkündür. Bir nesne üzerinde biriken iz DNA'nın kalitesi ve miktarı, ekstraksiyon sonrası DNA geri kazanımını etkiler. Bunun yanı sıra nesne yüzeyinden toplanan DNA miktarı, yüzeyin özelliklerine, DNA'nın bırakıldığı ve toplandığı aralıktaki zamansal süreye, çevresel etkilere, biyolojik örnek toplama şekline, nesneye dokunan kişinin biyolojik ve fizyolojik özelliklerine, kişinin dokunma öncesindeki faaliyetlerine bağlı olarak değişkenlik göstermektedir. Dökülen hücre sayısındaki artış, DNA analizi için gerekli hücrelerin temas edilen yüzeye transferini arttırmaktadır. DNA analizi için yüzeye yeterli epitel hücre veya ter bırakan kişilerin toplanan örneklerinden iz DNA ile kimliklendirme yapılabilir. Buna karşılık sağlıklı bireylerin düz bir yüzey üzerine, standart deneysel koşullar kullanıldığında, tam profillendirmeyi olası kılacak miktarda hücresel materyal bırakamayacağı da kabul gören bir görüştür. Bu nedenle çalışmamızda, adli vakalarda iz DNA analizini iyileştirebilecek yeni metodolojiler ve teknikler önermek amacıyla iz DNA'nın geri kazanımını etkileyen faktörlerin incelenmesi amaçlandı. Bu amaç kapsamında incelenen literatürler, DNA profillemesine yönelik örnek toplama, ekstraksiyon, nicelik belirleme ve amplifikasyon teknikleri gibi iz DNA analizi alanında yayınlanmış araştırmalardaki yaygın kullanımlarına ve adli genetik laboratuvarları arasındaki popülerliklerine göre seçilmiştir. İncelenen araştırmalarda; yüzeydeki birikim süresinin, epitel hücrelerin yüzeye tutunma durumunun, dokunmanın meydana geldiği yüzeyin özellikleri ile ekstraksiyon öncesinde svabı nemlendirme tekniklerinin ve svap özelliklerinin, tercih edilen ekstraksiyon yönteminin DNA geri kazanımı üzerinde anlamlı etkisi olduğu belirlenmiştir.

Anahtar Kelimeler: İz DNA, Profilleme, DNA Geri Kazanımı, Olay Yeri, Adli Genetik



#### ÜREME ÇAĞINDAKİ KADINLARIN AİLE PLANLAMASINA YÖNELİK TUTUM VE BİLGİ DÜZEYLERİ: KARABÜK İLİ ÖRNEĞİ

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#### ÖZET

Bu araştırma üreme çağındaki 18-49 yaş arası evli kadınların aile planlaması hakkındaki bilgi, tutum ve davranışlarını belirlemek amacıyla yapıldı. Tanımlayıcı tipte olan araştırmanın örneklemini Mayıs-Ağustos 2023 tarihleri arasında Karabük ilinde çalışmayı kabul eden 140 evli kadınlar oluşturdu. Veriler, "Kişisel Bilgi Formu" ve "Aile Planlaması Tutum Ölçeği (APTÖ)" ile online olarak toplandı. Verilerin analizinde tanımlayıcı istatistikler, Mann Whitney U, Kruskal-Wallis, Dunn testleri ve Spearman Kolerasyon Analizi kullanıldı. Katılımcıların sosyo-demografik özellikleri incelendiğinde; yaş ortalamalarının 33,15±8,25 yıl olduğu, %70,7'sinin il merkezinde ikamet ettiği, büyük çoğunluğunun üniversite ve üzerinde öğrenim düzeyine sahip olduğu görüldü. Kadınların "Aile Planlaması Tutum Ölçeği" ve alt boyutlarından aldıkları puanların ortalamalarına bakıldığında; "Aile Planlaması Tutum Ölçeği" toplam puan ortalaması 128,52±33,50'dir. "Toplumun Aile Planlamasına İlişkin Tutumu", "Aile Planlaması Yöntemlerine İlişkin Tutumu", "Doğuma İlişkin Tutum" alt boyut puan ortalamaları sırasıyla 55,78±14,87, 41,05±11,46 ve 31,68±8,59 olarak bulundu. Öğrenim durumu ilkokul olan kadınların APTÖ puan ortalaması 95,00±14,74, üniversite mezunlarının 138,77±2,50'dir (p < 0,005). Ev hanımı olan kadınların APTÖ puan ortalaması 113,54±4,78, kamuda çalışan kadınların ise  $141,32\pm3,87$ 'dir (p < 0,001).

Bu sonuçlar, katılımcıların yaş, ikamet yeri, öğrenim düzeyi ve meslek durumu gibi sosyodemografik özelliklerinin, aile planlaması tutumlarını ve alt boyutlarını etkileyebileceğini göstermektedir. Ayrıca, üniversite mezunu olan ve kamuda çalışan kadınların daha olumlu aile planlaması tutumlarına sahip oldukları gözlenmiştir.

Anahtar Kelimeler: Aile planlaması, kadın, tutum, bilgi, gebelik



# KONJENİTAL ANOMALİLİ BEBEKLERİN TERMİNASYON KARARINA ETKİ EDEN FAKTÖRLER: ANNE DENEYİMLERİ VE SAĞLIK PROFESYONELİ BAKIŞ AÇILARINA İLİŞKİN BİR VAKA SUNUMU

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#### ÖZET

Bu çalışmanın amacı, konjenital anomalili bebeklerin gebelik sürecinde sonlandırılması (terminasyon) kararını etkileyen faktörleri daha derinlemesine anlamak ve bu faktörleri farklı perspektiflerden ele alarak incelemektir. Nitel bir çalışma kapsamında, konjenital anomalili bebek tanısı sonrası terminasyon kararı alan bir kadın ve bu süreci takip eden bir sağlık profesyoneli ile yüz yüze görüşmeler gerçekleştirildi. Katılımcı Bilgi Formu ve Yarı Yapılandırılmış Görüşme Formu kullanılarak 6 sosyo-demografik ve 12 terminasyon deneyimi odaklı soru yöneltilmiştir. Katılımcı haklarının korunması amacıyla önceden 'Bilgilendirilmiş Olur Formu' ve 'Gönüllü Olur Formu' alınmıştır. Vakada, 25 yaşında ve 5 yıllık evli bir kadının durumu ele alınmıştır. İkinci gebeliğinde kistik higroma ve 9,6 mm Nukal Ford (NF) kalınlığı tanısı, bebeklerinin kromozomlarında duplikasyon artışı ve eşinde 3. kromozomda translokasyon belirlenmiştir. İlk gebeliğinde de benzer nedenlerle bir terminasyon geçmişi vardır. Terminasyon süreci deneyimleri incelendiğinde, kadının duygusal olarak zor bir süreç yaşadığı görülmektedir. Haberi aldığında hayatın anlamını sorgulayarak "Neden benim başıma geldi?" düşüncelerine kapılmış, çevresindeki ailelerin bile çocuklarını istemediğini düşünerek umutsuzluk hissi yaşamıştır. Bu dönemde yoğun duygusal sarsıntılar yaşamış, ancak yetersiz psikososyal destek nedeniyle süreci yalnız yönetmek zorunda kalmıştır. Zamanla kabullenmeye başladığında sürecin daha hızlı ve düşük duygusal yükle geçtiğini ifade etmiştir. Terminasyon kararını ailesi ve eşiyle paylaşarak engelli bir çocuğun bakımının zorluğunu vurgulamış, gelecekteki gebeliklerde genetik testler ve nakil seçeneklerini düşündüklerini belirtmiştir.

Sağlık profesyoneli perspektifinden terminasyon sürecinin etkileri incelendiğinde, genetik testlerin gebeliğin farklı aşamalarında yapıldığı ve konjenital anomaliler sonucu terminasyonun yasal olarak mümkün olduğu belirtilmiştir. Kararın aileye bırakıldığı ve danışmanlık hizmetlerinin sağlandığı bir süreç olduğu ifade edilmiştir. Perinatologlar, genetikçiler, çocuk kardiyologlar ve nörologlar gibi uzmanlar, rapor sürecinde iş birliği yapmaktadır. Terminasyon sürecinde, sık vajinal muayeneler ve ilaç kullanımının bireyi olumsuz etkilediği ve yan etkiler nedeniyle yaşadığı zorluklar ifade edilmektedir. Ayrıca, sağlık çalışanları tarafından gelecekteki gebeliklerde embriyonun genetiğinin incelenerek nakil işlemi yapılacağının belirtilmesi, bireyin geleceğe dair planlarını yapmasına yardımcı olmuştur.

Anahtar Kelimeler: Konjenital anomali, gebelik, terminasyon.



#### ENGELLİ ÇOCUK ve ADÖLESANLARDA KAZA ve YARALANMALAR

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#### ÖZET

Etkileri çocuk ve ailesi üzerinde sınırlı kalmayan kaza ve yaralanmalar küresel bir sağlık sorunudur. Gelişimsel faktörler çocuk ve adölesanları erişkinlere kıyasla kasıtsız yaralanmalara daha yatkın hale getirir. Dünyada her yıl yaralanmalar nedeniyle beş milyon ölüm meydana gelmektedir. Bu ölümlerin %12'sini çocuklar oluşturmaktadır. Her yıl 18 yaşın altındaki 900.000'den fazla çocuk kasıtsız yaralanmalar nedeniyle yaşamını yitirmektedir. Kaza ve yaralanmalar, çocukluklarda mortalite ve morbiditenin önde gelen nedenlerindendir.

Bilişsel engelli çocuk ve adölesanlar, engellerinden kaynaklanan özellikleri (motor kontrolün bozulması, bilişsel bozukluklar veya antisosyal davranışlar gibi) nedeniyle engeli bulunmayan çocuklardan daha yüksek yaralanma veya kaza riski altındadır. Dikkat eksikliği hiperaktivite bozukluğu (DEHB) en sık görülen nörogelişimsel bozukluktur ve dünya çapında çocuklar ve ergenler arasında %3 ila %5 arasında tahmin edilmektedir. DEHB'nin temel semptomları (dikkatsizlik, hiperaktivite ve dürtüsellik), kazaya eğilim ve yaralanma riskini artırabilecek davranışlara sebep olmaktadır. Serebral Palsi (SP)li çocuklarda en sık rastlanan yaralanma nedeninin düşme olduğu, yaralanan kısımların çoğunlukla alt uzuvlar ile baş ve boyun olduğu bildirilmiştir. Buna ek olarak, yaralanmaların çoğunlukla iç mekanlarda ve dinlenme, uyuma veya rahatlama sırasında meydana geldiği tespit edilmiştir. Bu durum günlük yaşam için özel bakıma ihtiyaç duyan SP'li çocukların zamanlarının çoğunu tekerlekli sandalyelerde veya yataklarda geçirmeleri ile ilişkilidir. Duyusal engelli çocukların (körlük veya sağırlık), çevredeki potansiyel tehlikeleri tanımlama ve bunlara uygun yanıt vermedeki zorlukların bir sonucu olarak yaralanma riskinin artabileceği varsayılmaktadır.

Kanıtlar, gelişimsel engelleri veya kronik tıbbi durumları olan çocukların, bu koşullara sahip olmayan çocuklardan daha yüksek yaralanma veya kaza riski altında olduğunu göstermektedir. Engelli çocuklar kaza ve yaralanmalar açısından daha savunmasız bir gruptur. Bu nedenle bu sunumda engelli çocuk ve adölesanların kaza ve yaralanma riski konusunda farkındalığı artırmak amaçlanmıştır.

Anahtar Kelimeler: Çocuk, adölesan, engellilik, kaza, kaza riski

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### ACCIDENTS AND INJURIES IN CHILDREN AND ADOLESCENTS WITH DISABILITIES

#### **ABSTRACT**

Accidents and injuries, the effects of which are not limited to children and their families, are a global health problem. Developmental factors make children and adolescents more prone to unintentional injury than adults. Five million deaths occur due to injuries worldwide each year. Children constitute 12% of these deaths. More than 900,000 children under the age of 18 die each year from unintentional injuries. Accidents and injuries are the leading causes of mortality and morbidity in childhood.

Children and adolescents with cognitive disabilities are at higher risk of injury or accidents than children without disabilities due to characteristics resulting from their disability (such as impaired motor control, cognitive impairments or antisocial behaviors). Attention deficit hyperactivity disorder (ADHD) is the most common neurodevelopmental disorder, estimated at between 3% and 5% among children and adolescents worldwide. The core symptoms of ADHD (inattention, hyperactivity and impulsivity) lead to behaviors that can increase the risk of accidents and injuries. It has been reported that the most common cause of injury in children with Cerebral Palsy (CP) is falls, and the injured parts are mostly the lower limbs and the head and neck. In addition, injuries were found to occur mostly indoors and during rest, sleep or relaxation. This is related to the fact that children with CP who need special care for daily living spend most of their time in wheelchairs or beds. It is hypothesized that children with sensory disabilities (blindness or deafness) may be at increased risk of injury as a result of difficulties in identifying and responding appropriately to potential hazards in the environment.

Evidence shows that children with developmental disabilities or chronic medical conditions are at higher risk of injury or accidents than children without these conditions. Children with disabilities are a more vulnerable group in terms of accidents and injuries. Therefore, this presentation aims to raise awareness about the risk of accidents and injuries in children and adolescents with disabilities.

Keywords: Child, adolescent, disability, accident, accident risk



# MENOPOZ DÖNEMİNDEKİ HİPERTANSİF KADINLARDA HİPERTANSİYON BİLGİ DÜZEYİNİN TEDAVİYE UYUM İLE İLİŞKİSİ

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#### ÖZET

Hipertansiyon, menopoz sonrası kadınlarda oldukça sık görülmektedir. Hipertansiyon tedavisinde en önemli problem, bilgi eksikliği ve buna bağlı hastaların tedaviye uyum sağlayamamalarıdır. Araştırma, menopoz dönemindeki hipertansif kadınlarda hipertansiyon bilgi düzeyini ve tedaviye uyumu belirlemek, hipertansiyon bilgi düzeyinin tedaviye uyum ile ilişkisini ortaya koymak amacıyla yapılmıştır. Tanımlayıcı olarak gerçekleştirilen çalışmaya Nisan-Temmuz 2023 tarihleri arasında bir aile sağlığı merkezine kayıtlı olan ve menopoz döneminde bulunan 299 kadın dahil edilmiştir. Veriler tanıtıcı bilgi formu, Hipertansiyon Bilgi Düzeyi Ölçeği (HİB-DÖ) ve İlaç Tedavisine Bağlılık/Uyum Öz-Etkililik Ölçeği (İBOS) ile toplanmıştır. Kadınların yaş ortalaması 56,48±7,46 yıl olup hipertansiyon hastalık süresi 6,80±5,26 yıldır. Kadınların %55,2'si hipertansiyon tanısının menopozdan sonra konulduğunu belirtmiştir. Kadınların HİB-DÖ toplam puan ortalaması 11,86±2,53 olup sadece %12,7'sinin hipertansiyon bilgi düzeyi yüksektir. Kadınların İBOS toplam puan ortalaması ise 34,92±8,47 olup ilaç tedavisine bağlılık/uyum öz-etkililik düzeyi orta düzeydedir. Kadınların HİB-DÖ ve İBOS puan ortalamaları karşılaştırıldığında, ölçek genelinde istatistiksel olarak anlamlı farklılık bulunmamakla birlikte (p>0.05), sadece ilaçlara bağlılık ve yaşam biçimi alt boyutunda bilgi düzeyi ile ilaç tedavisine bağlılık/uyum öz-etkililik arasında anlamlı ilişki olduğu saptanmıştır (p<0,05). Çalışmada yaş değişkeni ile HİB-DÖ puan ortalaması arasında pozitif yönlü zayıf düzeyde ilişki olduğu belirlenmiştir (p<0,01). Ailesinde hipertansiyon hastası olan katılımcıların HİB-DÖ puan ortalaması, olmayanlara göre daha yüksek bulunmuştur (p<0,05). Ayrıca, yaş arttıkça kadınların ilaç tedavisine bağlılık/uyum öz-etkililik düzeyinin de arttığı, hipertansiyon ilacı kullanma yılı 15 yıl arası olanların ve hipertansiyon tanısını menopoz döneminden sonra alanların ilaç tedavisine bağlılık/uyum öz-etkililik düzeyinin daha yüksek olduğu tespit edilmiştir (p<0,05). Sonuç olarak, menopoz döneminde olan hipertansiyon hastası kadınların hipertansiyon bilgi düzeylerinin düşük, ilaç tedavisine bağlılık/uyum öz-etkililik düzeyinin orta düzeyde olduğu; hipertansiyon bilgi düzeyi ile ilaç tedavisine bağlılık/uyum özetkililik arasında ilişki olmadığı belirlenmiştir. Sağlık profesyonellerinin, menopoz döneminde olan kadınları ortaya çıkabilecek hastalıklar konusunda bilgilendirmesi, özellikle hipertansiyon tanısı konulduktan itibaren hastalara düzenli bilgilendirmeler yapması ve bilgi gereksinimlerini değerlendirmesi önerilmektedir.

Anahtar Kelimeler: Menopoz, hipertansiyon, tedaviye uyum, kadın



# THE RELATIONSHIP OF HYPERTENSION KNOWLEDGE LEVEL AND TREATMENT COMPLIANCE IN HYPERTENSIVE WOMEN AT THE PERIOD OF MENOPAUSE

#### **ABSTRACT**

Hypertension is quite common in postmenopausal women. The most important problem in the treatment of hypertension is the lack of information and the resulting inability of patients to comply with the treatment. The research was conducted to determine the level of hypertension knowledge and compliance with treatment in hypertensive women during menopause and to reveal the relationship between hypertension knowledge level and compliance with treatment. This descriptive study included 299 women who were registered in a family health center between April and July 2023 and were in menopause. Data were collected with an introductory information form, Hypertension Knowledge Level Scale (HKLS) and Medication Adherence/Adherence Self-Efficacy Scale (MASS). The average age of women is 56.48±7.46 years and the duration of hypertension disease is 6.80±5.26 years. 55.2% of women stated that hypertension was diagnosed after menopause. The women's HKLS total mean score is 11.86±2.53, and only 12.7% of them have a high level of hypertension knowledge. The mean IBOS total score of women is 34.92±8.47, and the self-efficacy level of adherence/compliance with medication is at a medium level. When the women's HKLS and MASS score averages were compared, although there was no statistically significant difference in the overall scale (p>0.05), it was determined that there was a significant relationship only between the level of knowledge in the adherence to medications and lifestyle sub-dimensions and the self-efficacy of adherence/compliance to medication treatment (p<0.05). In the study, it was determined that there was a weak positive relationship between the age variable and the HKLS score average (p<0.01). The average HKLS score of participants with a family history of hypertension was found to be higher than those without (p<0.05). Additionally, it was determined that the selfefficacy level of women's adherence/compliance to drug treatment increased as age increased, and that the self-efficacy level of adherence/compliance to drug treatment was higher in those who had been using hypertension medication for 15 years and those diagnosed with hypertension after menopause (p<0.05). As a result, women with hypertension who are in menopause have low hypertension knowledge levels and medication adherence/compliance self-efficacy levels are moderate; It was determined that there was no relationship between hypertension knowledge level and medication adherence/compliance self-efficacy. It is recommended that health professionals inform women in menopause about the diseases that may occur, provide regular information to patients, especially after the diagnosis of hypertension, and evaluate their information needs.

**Keywords:** Menopause, hypertension, compliance with treatment, women



### İLEUS AMELİYATI SONRASI SEPSİS GELİŞEN HASTADA FONKSİYONEL SAĞLIK ÖRÜNTÜLERİNE GÖRE HEMŞİRELİK BAKIMI: OLGU SUNUMU

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#### ÖZET

Sepsis ölümcül seyretmesi nedeniyle özellikle yoğun bakım ünitelerinde çok erken dönemde müdahale edilmesi gereken acil bir tablodur. Gordon tarafından geliştirilen Fonksiyonel Sağlık Örüntüleri (FSÖ) modeli, hasta bakımının planlanması ve hemşirelik girişimlerinin bütüncül bir biçimde uygulanmasında hemşirelere yön vermektedir. Bu olgu sunumunda, ileus ameliyatı sonrası sepsis gelişen hastanın Gordon'un FSÖ Modeline göre hemşirelik bakım yaklaşımları ve iyileşme sürecinin değerlendirilmesi amaçlandı. 68 yaşında olan kadın hastanın altı gün önce karın bölgesinde kramp şeklinde ağrı, bulantı, kusma şikayetleri ile genel cerrahi kliniğine ileus şüphesi ile yaşı yapıldı. Hastaya dört gün sonra cerrahi operasyon yapıldı. Cerrahi operasyon sonrası yoğun bakıma alınan hastada dört gün sonra sepsis gelişti. Yoğun bakım ünitesinde fonksiyonel sağlık örüntü modeli kullanılarak toplanan veriler doğrultusunda hemşirelik bakımı planlandı ve uygulandı. Problem saptanan alanlar ile ilişkili olarak yedi tanesi mevcut (sağlığını yönetme, beslenmede dengesizlik: gereksiniminden az beslenme, eliminasyonunda değişim: diyare, etkisiz solunum örüntüsü, duyusal algılamada bozulma, beden imgesinde rahatsızlık ve bireysel baş etmede yetersizlik) ve beş tanesi risk tanısı (sıvı volüm dengesizliği riski, elektrolit dengesizliği riski, enfeksiyon riski, etkisiz doku perfüzyonu riski ve kardiyak doku perfüzyonunda azalma riski) olmak üzere toplam 12 hemşirelik tanısı belirlendi. Hastanın 46 günlük yoğun bakım tedavisi ve Gordon'un FSÖ Modeline göre hemşirelik bakımı doğrultusunda, genel durumunda iyileşme sağlındı ve hasta genel cerrahi kliniğine taburcu edildi. Olgu çıktılarına göre, FSÖ Modelinin etkili olduğu düşünülmektedir. Bu doğrultuda, sepsis gelişen hastalarda bütüncül bir bakım vermek için modele dayalı hemşirelik bakım uygulamalarının artırılması önerilir.

Anahtar Kelimeler: Sepsis, Fonksiyonel Sağlık Örüntüleri, hemşirelik, olgu



## NURSING CARE ACCORDING TO FUNCTIONAL HEALTH PATTERNS IN PATIENTS WITH SEPSIS AFTER ILEUS SURGERY: A CASE REPORT

#### **ABSTRACT**

Sepsis is an emergency situation that needs to be intervened very early, especially in intensive care units, due to its fatal course. The Functional Health Patterns (FHP) model developed by Gordon guides nurses in planning patient care and implementing nursing interventions in a holistic manner. In this case report, it was aimed to evaluate the nursing care approaches and recovery process of a patient who developed sepsis after ileus surgery according to Gordon's FHP Model. Six days ago, a 68-year-old female patient was admitted to the general surgery clinic with the suspicion of ileus, with complaints of cramp-like pain in the abdomen, nausea and vomiting. The patient underwent surgery four days later. The patient, who was taken to the intensive care unit after surgery, developed sepsis four days later. Nursing care was planned and implemented in line with the data collected using the functional health pattern model in the intensive care unit. A total of 12 nursing diagnoses were identified, seven of which were present (ineffective management of health, nutritional imbalance: undernutrition, change in bowel elimination: diarrhea, ineffective respiratory pattern, impaired sensory perception, disturbance in body image and inability to cope individually) and five were risk diagnoses (risk of fluid volume imbalance, risk of electrolyte imbalance, risk of infection, risk of ineffective tissue perfusion, and risk of decreased cardiac tissue perfusion), in relation to the problem areas. In line with the 46-day intensive care treatment of the patient and nursing care according to Gordon's FHP Model, the general condition of the patient improved and the patient was discharged to the general surgery clinic. According to the case outputs, the FHP Model is considered to be effective. In this direction, it is recommended to increase model-based nursing care practices in order to provide holistic care in patients who develop sepsis.

**Keywords:** Sepsis, Functional Health Patterns, nursing, case



#### ADÖLESANLARDA MADDE KULLANIMINA ETKİ EDEN FAKTÖRLER

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#### ÖZET

Küresel nüfusun beşte birini temsil eden adölesanlar, sağlıklı oldukları düşünüldüğü için sağlıkları sıklıkla ihmal edilmektedir. Adölesan dönem önemli psikolojik hassasiyetin de olduğu bir dönemdir. Erken yaşam stresi, sosyal izolasyon ve can sıkıntısı, adölesanlarda depresyon ve madde kullanım bozukluklarının gelişimi için bilinen risk faktörleridir. Zihinsel, nörolojik ve madde kullanım bozukluklarının oranları adölesan ve erken yetişkinlik döneminde en yüksek düzeyde olduğu bilinmektedir.

Pek çok adölesanın ilk kez bu dönemde alkol, tütün ve esrar gibi psikoaktif maddelere maruz kalmaktadır. Madde kullanımına başlama vakalarının %50'sinden fazlası 15-19 yaşları arasında meydana gelmektedir. Üstelik, kullanmaya başlama yaşının daha erken olması, yaşamın ilerleyen dönemlerinde madde kullanımı bozukluğuna yakalanma riskiyle önemli ölçüde ilişkisi bulunmaktadır. Madde kullanımının etiyolojisinin daha eksiksiz bir şekilde anlaşılmasını sağlamak için bireysel, biyolojik, aile, akran, davranış kalıpları ve sosyal çevre bağlamları dahil olmak üzere adölesan davranışını etkileyen ilgili tüm faktörleri gözden geçirmek gerekmektedir.

Bu derlemede adölesan ve çocuk sağlığı ile ilgilenen araştırmacılar için adölesan madde kullanımına etki eden faktörlere yönelik çıkarımlarda bulunmak amaçlanmıştır.

Anahtar Kelimeler: Adölesan, Madde Kullanımı, Bağımlılık, Hemşire

#### FACTORS AFFECTING SUBSTANCE USE IN ADOLESCENTS

#### **ABSTRACT**

Adolescents, who represent one fifth of the global population, are often neglected because they are considered to be healthy. Adolescence is a period of significant psychological vulnerability. Early life stress, social isolation and boredom are known risk factors for the development of depression and substance use disorders in adolescents. Rates of mental, neurological and substance use disorders are known to be highest in adolescence and early adulthood.

Many adolescents are exposed to psychoactive substances such as alcohol, tobacco and cannabis for the first time during this period. More than 50 per cent of substance use initiation cases occur between the ages of 15 and 19. Moreover, an earlier age of initiation is significantly associated with a higher risk of developing a substance use disorder later in life. To provide a more complete understanding of the aetiology of substance use, it is necessary to review all relevant factors that influence adolescent behaviour, including individual, biological, family, peer, behavioural patterns and social environmental contexts.



In this review, it is aimed to make inferences about the factors affecting adolescent substance use for researchers interested in adolescent and child health.

Keywords: Adolescent, Substance Abuse, Addiction, Nurse



### HASTANEDE YATAN ÇOCUKLARDA KESİNTİYE UĞRAYAN AKADEMİK YAŞAM VE HASTANE OKULU

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#### ÖZET

Önemli sayıda çocuk kronik veya uzun süreli hastalıklarla mücadele etmektedir. Bu durum uzun süreli okula devamsızlığa neden olmaktadır. Kronik veya uzun süreli hasta çocukların sürekli olarak okuldan uzak kalması problem oluşturmaktadır. Çünkü eğitim çocukların bilişsel gelişimini, normal olma duygusunu ve psikososyal refahlarını yükseltmede ve devam ettirmede kapsamlı bir rol oynamaktadır. Hastanede eğitim, sık veya uzun süreli hastanede kalış nedeniyle eğitimi kesintiye uğrayan okul çağındaki çocukların bakımı açısından kritik öneme sahiptir. Hastane okulu öğretmeni, hastanede yatan çocuklar için umut, normal olduğunu hissetme ve rutini sağlamada önemli bir rol oynamaktadır. Hastane okulu programı, geleneksel eğitime katılamayacak çocuklar için akademik sürekliliğin sürdürülmesinde esastır.

Bu derlemede amacımız hastanede yatmanın çocuk ve akademik yaşamına etkilerini değerlendirmek, hastane temelli eğitim programlarının önemini vurgulamak ve gelecekteki araştırmalara rehberlik etmektir.

Anahtar Kelimeler: Çocuk, Hastalık, Eğitim, Hastane, Okul

## INTERRUPTED ACADEMIC LIFE AND HOSPITAL SCHOOLING IN HOSPITALIZED CHILDREN

#### **ABSTRACT**

A significant number of children struggle with chronic or long-term illnesses. This leads to long-term school absenteeism. The persistent absence of children with chronic or long-term illnesses from school is problematic. This is because education plays a comprehensive role in promoting and sustaining children's cognitive development, sense of normalcy and psychosocial well-being. Education in hospital is critical to the care of school-age children whose education is interrupted by frequent or prolonged hospitalization. The hospital school teacher plays an important role in providing hope, a sense of normalcy and routine for hospitalized children. The hospital school program is essential in maintaining academic continuity for children who cannot participate in traditional education.

Our aim in this review is to evaluate the effects of hospitalization on children and their academic life, to emphasize the importance of hospital-based educational programs and to guide future research.

Keywords: Child, Illness, Education, Hospital, School



### Ti-6Al-4V ALAŞIMININ DELİNMESİNDE İŞLEME PARAMETRELERİNİN ÇAPAK YÜKSEKLİĞİ VE YÜZEY PÜRÜZLÜLÜĞÜ ÜZERİNDEKİ ETKİSİNİN ARAŞTIRILMASI

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#### ÖZET

Titanyum ve alaşımları sahip oldukları yüksek mukavemet, korozyon direnci, ısı direnci ve düşük ağırlık özelliklerinden dolayı havacılık-uzay, otomotiv ve biyo-medikal sektöründe sıklıkla tercih edilmektedir. Titanyum alaşımlarının sahip oldukları bu üstün özellikler, bu alaşımların işlenebilirliklerini ise sınırlandırmaktadır. Geleneksel talaşlı imalat sırasında, malzemenin sahip olduğu düşük termal iletkenlik ve yüksek mukavemet sebebiyle kesici takım ile iş parçası arasında yüksek sıcaklıklar meydana gelmektedir. Artan sıcaklıkla birlikte iş parçası ile kesici takım arasında kimyasal tepkimeler gerçekleşmekte ve sonuç olarak iş parçası kesici takımın yüzeyine yapışmakta ve hızla aşınarak işlenen yüzeyin kalitesini düşürmektedir. Bu sebeple titanyum alaşımlarının talaşlı imalatı sürecinde işleme parametrelerinin optimizasyonu büyük önem arz etmektedir. Bu çalışmada, Ti-6Al-4V titanyum alaşımı kuru delme koşullarında sürekli delme deneylerine tabi tutulmuştur. Deneylerde kesme hızı (V), ilerleme miktarı (f) ve matkap uç açısı (Ø) parametreleri, belirli sınırlar içerisinde değiştirilerek ve bu faktörlerin yüzey pürüzlülüğü ve çapak yüksekliği üzerindeki etkileri deneysel olarak tespit edilmiştir. Çalışma ile delik yüzeylerinin pürüzlülük değerlerini ve çapak yüksekliklerini en düşük seviyede tutarak delik kalitesi artırılmış ve her iki çıktı için de optimum delme parametrelerini belirlenmiştir.

Anahtar Kelimeler: Ti6Al4V, Yüzey kalitesi, Delme, Çapak yüksekliği

### Investigation of The Effect of Machining Parameters On Burr Height and Surface Roughness in Drilling of Ti-6Al-4V Alloy

#### **ABSTRACT**

Titanium and its alloys are frequently preferred in the aerospace, automotive and biomedical sectors due to their high strength, corrosion resistance, heat resistance and low weight properties. These superior properties of titanium alloys limit the machinability of these alloys. During traditional machining, high temperatures occur between the cutting tool and the workpiece due to the low thermal conductivity and high strength of the material. With increasing temperature, chemical reactions take place between the workpiece and the cutting tool, and as a result, the workpiece adheres to the surface of the cutting tool and wears rapidly, reducing the quality of the machined surface. For this reason, optimization of machining



parameters is of great importance in the machining process of titanium alloys. In this study, Ti-6Al-4V titanium alloy was subjected to continuous drilling tests under dry drilling conditions. In the experiments, the cutting speed (V), feed rate (f) and drill bit angle (Ø) parameters were changed within certain limits and the effects of these factors on the surface roughness and burr height were determined experimentally. With the study, the hole quality was increased by keeping the roughness values of the hole surfaces and the burr heights at the lowest level and the optimum drilling parameters were determined for both outputs.

Keywords: Ti6Al4V, Surface quality, Drilling, Burr height



# BIOINSPIRED ANTENNA DESIGN: BRIEF ANALYZING TECHNIQUES AND APPROACHES

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#### **ABSTRACT**

The intersection of bioinspired antennas and machine learning applications presents a transformative paradigm for enhancing wireless communication systems. In this study, the convergence of these two domains are explored their potential to revolutionize diverse applications such as smart devices, healthcare monitoring, and wearable technology. Bioinspired Antennas serve as the cornerstone of this study, drawing inspiration from the exquisite designs found in nature. These antennas, ranging from morphing to textile, dielectric resonator to reconfigurable, and metamaterial to smart skin antennas, offer adaptability, efficiency, and novel functionalities. By mimicking the forms and behaviors of biological structures, they provide innovative solutions for modern wireless technologies. Machine Learning, a potent tool in artificial intelligence, seamlessly integrates with bioinspired antennas to optimize their performance. Machine learning algorithms enable real-time adaptation, interference mitigation, and predictive maintenance, while also unlocking context-awareness and energy efficiency. This combination extends the boundaries of wireless communication, making it adaptable to dynamic environments and user-centric requirements. In this paper, the diverse bioinspired antenna design techniques are delved into to emphasize their applications in narrow-band, wideband, ultra-wideband, WLAN, and mobile communications. The usage of Machine Learning Techniques is also explored to optimize bioinspired antennas, demonstrating their capability to enhance performance, reduce power consumption, and facilitate adaptive functionalities. Machine learning's role in automating design processes and exploring design possibilities is showcased, underlining its significance in antenna engineering. Furthermore, the integration of bioinspired antennas into wearable technology are investigated, emphasizing the comfort, aesthetics, and energy efficiency they bring. Coupled with machine learning, bioinspired wearable antennas adapt intelligently to user movements and environmental dynamics, revolutionizing healthcare monitoring and personalized communication. The combination of bioinspired antennas and machine learning applications has the potential to transform wireless communication across various domains. From healthcare to smart cities, from industrial automation to IoT, this integrated approach offers adaptable, efficient, and context-aware solutions. This study underscores the promise of bioinspired antennas and machine learning, offering a glimpse into a future where nature's wisdom and artificial intelligence converge to create wireless systems that are truly intelligent, adaptive, and seamlessly integrated into our lives.

**Keywords:** Bioinspired Antennas, Machine Learning, Wearable Technology



### HOMOJENIZASYON PROSESININ EN AW 6082 BİYET MİKROYAPISI VE SERTLİĞİNE ETKİSİ

### EFFECT OF HOMOGENIZATION PROCESS ON EN AW 6082 BILLET MICROSTUCTURE AND HARDNESS

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#### ÖZET

Endüstriyel uygulamalarda homojenizasyon prosesinin döküm biyetin daha kolay ve daha hızlı ekstrüde edilebilmesini sağladığı iyi bilinmektedir. Ayrıca döküm biyete daha iyi yüzey kalitesi ve daha yüksek çekme özellikleri kazandırmaktadır. EN AW 6082 alaşımının homojenizasyon prosesi, ekstrüzyon gibi sonraki işlemler sırasında kolayca yeniden çözünebilecek morfoloji ve boyuta sahip mümkün olduğu kadar çok miktarda Mg<sub>2</sub>Si fazının yeniden çökelmesini sağlayacak şekilde tasarlanmalıdır. Ayrıca EN AW 6082 alaşımına deformasyon yapısını korumak için ilave edilen ve yüksek sıcaklarda kararlı bileşikler oluşturan zirkonyum elementinin de homojenizasyon prosesindeki etkisi de incelenmelidir. Bu çalışmada, endüstriyel bir uygulamada dikey yarı sürekli döküm yöntemi ile üretilen EN AW 6082 ve ağırlıkça %0.3 oranında zirkonyum içeren EN AW 6082 biyetler için homojenizasyon proses koşullarının mikroyapı ve sertliğe etkisi araştırılmıştır. Bu amaçla biyetler, döküm işlemini takiben 500 °C'de 10 saat ve 580 °C'de 6 saat tutulduktan sonra havada soğutularak iki faklı homojenizasyon prosesine tabi tutulmuştur. Daha sonra döküm ve homojen biyetlerden numuneler alınarak metalografik olarak hazırlanmış, ışık mikroskobu ile incelenmiş ve sertlik ölçümleri yapılmıştır. Sonuçlar 500 °C'de 10 saat yapılan homojenizasyon işlemi sonrasında α-Al dendritleri arasındaki interdendritik bölgelerde bulunan intermetalik bileşiklerin kısmen çözünmesi ile boyutlarının kısmen azalmasına rağmen ağsı yapılarını koruduklarını göstermiştir. 580 °C'de 6 saat yapılan homojenizasyon prosesinden sonra ise intermetalik bileşiklerin çözünmesine bağlı olarak interdendritik bölgelerin azaldığı görülmüştür. Elde edilen bu bulgular EN AW 6082 alaşımının homojenizasyon prosesinde tutma süresinden çok tutma sıcaklığının daha etkili olduğunu göstermiştir. Ayrıca zirkonyum ilavesinin bu sonuçları daha da olumlu yönde etkilediği görülmüştür.

Anahtar Kelimeler: EN AW 6082 alüminyum alaşımı, homojenizasyon, mikroyapı, sertlik.



# AN INVESTIGATION OF WILDFIRES USING THE dNBR INDICES ON THE GOOGLE EARTH ENGINE PLATFORM: A CASE STUDY OF THE 2023 CANAKKALE KIZILKEÇİLİ AND DAMYERİ WILDFIRES

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#### **ABSTRACT**

Wildfires are a natural disaster affecting ecosystems and sustainable development, primarily in the Mediterranean and Aegean regions of Türkiye. These fires not only result in the destruction of trees but also lead to the extinction of many species. Recent advances in satellite technology have become a particularly useful tool for post-fire damage assessment without the need for in situ work. In this study, wildfires that occurred in Kızılkeçili village in Çanakkale on July 16, 2023, and in Damyeri on August 22, 2023, were analysed. The normalized burn ratio (NBR) indices pre- and post-fire were calculated using Sentinel-2 (MSI) images. The differenced Normalised Burn Ratio (dNBR) indices was calculated using the NBR indices difference on the Google Earth Engine (GEE) platform, and fire severity maps were produced. The burn severity maps produced by the dNBR indices are divided into four different classes: low, moderate-low, moderate-high, and high severity burned areas. In the study low, moderate-low, moderate-high, and high severity burned areas in Kızılkeçili village were calculated as 2672.19, 681.90, 41.78, and 0.00 hectares, respectively. Similarly, in the forest fire that broke out in the Damyeri district, low, moderate-low, moderate-high, and high severity burned areas were calculated as 2503.94, 1607.19, 672.61 and 0.34 hectares, respectively. A total of 8213.61 hectares area was affected by wildfires that broke out in both regions on different dates. The accuracy of the study was evaluated using overall accuracy (OA) and kappa statistics. The OA value for Kızılkeçili village was 79.00% and kappa statistic was 0.536, while the OA value for Damyeri district was 86.00% and kappa statistic was 0.705. This study has shown that using RS techniques on the GEE platform is a very practical and reliable method for detecting burned areas.

**Keywords:** dNBR, Google Earth Engine, Çanakkale, Remote Sensing, Wildfires, Kızılkeçili, Damyeri



#### GAMMA RADIATION DOSE MEASUREMENTS AROUND THE MINING SITE

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#### **ABSTRACT**

Environmental radiation measurements are carried out in order to determine the radiation dose that people receive from environmental sources and to assess the health risk that it may pose. In the regions where mining sites are densely located in Hekimhan and Kuluncak districts of Malatya, measurements were made in the air at a height of approximately 1 m above the ground to determine the gamma dose rates absorbed in the open air. The measurements were carried out with the help of a portable device containing a scintillation detector with a 2"×2" NaI (Tl) crystal. Annual effective dose rate and lifetime cancer risk values were calculated to see the impact of the obtained results on the environment and living organisms. As a result of the measurements and calculations, the highest value was obtained for T-15 (Deveci) point, while the lowest value was obtained for T-6 (Güzelyurt) point. The average of the measured values for absorbed gamma dose rates was calculated as 71 nGy/h. This value is above the world average value (60 nGy/h) recommended by UNSCEAR (2000). The average values obtained for the annual effective dose rate and lifetime cancer risk were 53.1 μSv/y and 0.18×10<sup>-3</sup>, respectively. These values are below the recommended world average values. Based on the results of the study, it can be concluded that there is no inhalation-related radiation risk for the people living in these regions, except for the measurement points T-10 (Bıyıkboğazı) and T-15 (Deveci).

**Keywords:** Scintillation detector, Radiation, Environmental gamma, Absorbed dose, Cancer risk



### BOR KATKILI Ti6AI4V ALAŞIMININ BASINÇ DESTEKLİ SİNTERLEME İLE ÜRETİMİ

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#### ÖZET

Titanyum ve alaşımları sahip oldukları yüksek spesifik mukavemet, nispeten düşük elastisite modülü, üstün korozyon direnci ve biyouyumluluk özellikleri nedeniyle medikal alanda yaygın kullanıma alanına sahiptirler. Ti6Al4V alaşımı endüstriyel olarak en yaygın kullanılan titanyum alaşımlarıdır. Bu çalışma kapsamında Ti6Al4V alaşımına ağırlıkça %1 oranında bor ilave edilerek borun titanyum alaşımının mikroyapısına etkisi incelenmiştir. Bu amaçla Ti6Al4V ve bor tozları homojen bir karışım sağlanması için bilyalı değirmende 30 dakika süre ile karıştırılmıştır. Bor ilaveli Ti6Al4V alaşım tozu 950 °C'de 30 dakika süre ile 10<sup>-4</sup> vakum atmosferi altında sıcak pres ile sinterlenmiştir. Sinterleme sırasında 50 MPa basınç uygulanmıştır. Borun alaşımın yoğunluğuna etkisi incelenmiş ardından ışık mikroskobu ve EDX ataçmanlı elektron mikroskobu (SEM) ile mikroyapı incelemeleri gerçekleştirilmiştir. Mikroyapı incelemelerinde Ti6Al4V alaşımına bor ilavesi ile tane sınırlarında TiB intermetaliklerinin oluştuğu gözlemlenmiştir.

Anahtar Kelimeler: Ti6Al4V, Bor, Toz Metalurjisi, Sıcak Pres, Mikroyapı



### BİR ARALIKLI TİP-2 BULANIK AHP-HTEA METODOLOJİSİ İLE BİYOMALZEME ÖZELLİKLERİNİN İNCELENMESİ: TİTANYUM MALZEMELERİ ÜZERİNE BİR UYGULAMA

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#### ÖZET

Metal esaslı biyomalzemeler, mekanik performansları nedeniyle bir hastalık veya kaza sonucu zarar görmüş sert dokuların değiştirilmesinde ve iyileştirilmesinde sıkça kullanılmaktadır. Medikal implantların uygulamalardaki kullanımının sıklaşması biyomalzemeler üzerindeki çabaların hızlandırılmasını gerektirmiştir. Bu çalışmada, metalik biyomalzemeler sınıfı altında yer alan titanyumun bazı özellikleri bir aralıklı tip-2 bulanık AHP (analitik hiyerarşi prosesi) - HTEA (hata türleri ve etkileri analizi) metodolojisi aracılığıyla değerlendirilmektedir. Aralıklı tip-2 bulanık AHP risk faktörlerinin önemini tespit ederken, aralıklı tip-2 bulanık HTEA her malzeme özelliğinin risk öncelik katsayısını hesaplamaktadır. Ayrıca, risk göstergeleri arasındaki benzerliğin nicel olarak belirlenmesi için verteks uzaklığına dayalı benzerlik ölçüsü kullanılmaktadır. Sonuçlara göre, reaktivite en yüksek öncelik katsayısına; alerjenik etki ise en düşük öncelik katsayısına sahiptir. Minimum ve maksimum verteks skorları ise sırasıyla toksiklik - kanserojenlik ve reaktivite - alerjenik etki ikilileri için saptanmıştır. Bu çalışma, biyomalzeme özelliklerinin tarafsız değerlendirilmesine ve önceliklendirilmesine katkıda bulunmaktadır.

Anahtar Kelimeler: AHP, aralıklı tip-2 bulanık küme, biyomalzeme, HTEA, titanyum

#### EXAMINATION OF BIOMATERIAL PROPERTIES WITH AN INTERVAL TYPE-2 FUZZY AHP-FMEA METHODOLOGY: AN APPLICATION ON TITANIUM MATERIALS

#### **ABSTRACT**

Metallic biomaterials have been widely utilized in the replacement and healing of hard tissues damaged by a disease or an accident owing to their mechanical performance. The increasing use of medical implants in applications has necessitated the acceleration of efforts on biomaterials. In this study, some properties of titanium, which fall within the category of metallic biomaterials, are evaluated through an interval type-2 fuzzy AHP (analytic hierarchy process) - FMEA (failure modes and effects analysis) methodology. The interval type-2 fuzzy AHP detects the importance of the risk factors, while the interval type-2 fuzzy FMEA calculates the risk priority coefficient of each material property. Additionally, a similarity measure based on the vertex distance is used to quantify the similarity between the risk indicators. According to the results, reactivity and allergenic effect have the highest and lowest priority coefficients,



respectively. Minimum and maximum vertex scores are determined for toxicity - carcinogenicity and reactivity - allergenic effect, respectively. This study contributes to the objective evaluation and prioritization of biomaterial properties.

**Keywords:** AHP, interval type-2 fuzzy set, biomaterial, FMEA, titanium



#### GÖĞÜS KANSERİ SINIFLANDIRMASI İÇİN BÜTÜNLEŞİK BİR YAKLAŞIM

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#### ÖZET

Göğüs kanseri, kadınlar arasında daha fazla görülen bir kanser türüdür. Geç tanı ve tedaviye bağlı olarak birçok göğüs kanseri hastası hayatını kaybettiği için erken teşhis hayati öneme sahiptir. Bu çalışmada, göğüs kanseri sınıflandırması için bütünleşik bir yaklaşım önerilmiştir. Çalışmada, adaptif ağ tabanlı bulanık çıkarım sistemi (ANFİS) girdi seçimine dayalı ileri beslemeli ve geri yayımlı çok katmanlı bir yapay sinir ağı (YSA) modeli geliştirilerek göğüs kanseri sınıflandırması gerçekleştirilmiştir. Amaç doğrultusunda verilerden 87 tanesi eğitim, kalan 29 tanesi ise test verisi olarak rastgele seçilmiştir. ANFİS girdi seçimi yaklaşımı ile çıktı değişkenine en çok etki eden girdi değişkenleri belirlenmiş ve bu değişkenler ile YSA modeli geliştirilmiştir. Ağın ürettiği değerler en yakın tam sayıya yuvarlanarak sınıflandırma sağlanmıştır. Yaklaşık olarak %90 başarı sağlayan model önerilen bütünleşik yaklaşımın başarılı bir performans sergilediğini göstermiştir.

Anahtar Kelimeler: göğüs kanseri, nitelik indirgeme, sınıflandırma, yapay sinir ağı, adaptif ağ tabanlı bulanık çıkarım sistemi

#### AN INTEGRATED APPROACH FOR BREAST CANCER CLASSIFICATION

#### **ABSTRACT**

Breast cancer is a type of cancer that is more commonly observed among women. Early diagnosis is of vital importance because many breast cancer patients lose their lives due to late diagnosis and treatment. In this study, an integrated approach for breast cancer classification is proposed. In the study, breast cancer classification is carried out by developing a feedforward and backpropagation multilayer artificial neural network (ANN) model based on adaptive network fuzzy inference system (ANFIS) input selection. In accordance with the objective, 87 of the data points are selected for training, while the remaining 29 are selected as testing data. The input variables that have the most impact on the output variable are determined using the ANFIS input selection approach, and the ANN model is developed with these variables. The values produced by the network are rounded to the nearest integer number to achieve classification. The model achieved approximately 90% success demonstrates that the proposed integrated approach exhibits successful performance.

**Keywords:** breast cancer, feature reduction, classification, artificial neural network, adaptive network fuzzy inference system



#### GÜÇ SİSTEMLERİNDE OLUŞAN ARIZALARIN ENERJİ KALİTESİNE ETKİSİ

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#### ÖZET

Elektrik enerjisi genel anlamda bir ürün olarak değerlendirilmekte olup her ürün gibi belirli standartları sağlaması gerekmektedir. Güç sistemlerinde elektrik enerjisi önceden belirlenmiş gerilim seviyelerinde üretilir, iletilir ve dağıtılır. Bu sistemlerde gerilim ve akım için dalga şekillerinin tam sinüzoidal olması talep edilmekle birlikte bu durum uygulamada tamamen sağlanamaz. Doğrusal olmayan yüklerin sistemde mevcudiyeti enerji kalitesini bozabileceği gibi güç sistemlerinde ortaya çıkacak çeşitli arızalar da enerji kalitesi üzerinde bozucu etkiler yaratacaktır.

Bu çalışmanın temel motivasyonunu güç sistemlerinde oluşması muhtemel arızaların son tüketiciye ulaştırılan enerjinin kalitesi üzerinde yapacağı bozulmaların incelenmesi oluşturmaktadır. Bu kapsamda MATLAB/Simulink platformu altında bir güç sistemi benzetim modeli tasarlanmıştır. Daha sonra bu modelin arızalar içeren çeşitli çalışma koşullarında analizi yapılmış ve Hızlı Fourier Dönüşümü (Fast Fourier Transform – FFT) yaklaşımı kullanılarak güç kalitesi bozulmaları tespit edilmiştir. Elde edilen veri seti ile normal çalışma koşullarının kıyaslamalı analizi yapılarak arızaların olası etkileri ortaya çıkarılmış, bu kapsamda çözüm önerileri sunulmuştur.

Anahtar Kelimeler: Elektrik güç sistemleri, Enerji kalitesi, MATLAB



# AYDINLATMA TESİSLERİNDE ENERJİ VERİMLİLİĞİNİ ARTIRMA YAKLAŞIMLARI

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#### ÖZET

Teknolojinin hızla ilerlemesi, insanlığa büyük faydaları olmakla birlikte, ivmelenme hızına yetişemeyen bazı alanlarda sorunların ortaya çıkmasına neden olmaktadır. Bu sorunların başında elektrik enerjisine olan ihtiyacın artması gelmektedir. Bu nedenle enerji verimliliği kavramı son yıllarda literatürde fazla sayıda çalışmaya konu olmuştur. Ülkemizde tüketim bandında yer alan elektrik enerjisinin yaklaşık %20'sinin genel aydınlatma amaçlı kullanıldığı göz önünde bulundurulduğunda, aydınlatma sistemlerinde enerji verimliliği konusu da bu kapsamda öne çıkmaktadır.

Aydınlatma sistemlerinde enerji verimliliğinin artırılması, enerji tüketiminin ve çevresel etkinin azaltılması için çok önemlidir. Bu sistemlerde verimli çalışma bölgesi sınırlarında kalmak için çeşitli yaklaşımlar geliştirilmiştir. Bu modeller donanımsal müdahalelerden kullanıcı davranışlarını değiştirmeye kadar geniş bir yelpazede dağılmaktadır.

Bu çalışmada gerek iç mekanlarda gerekse dış aydınlatma amacıyla kullanılan sistemlerde enerji verimliliğinin elde edilebilmesi için uygulanabilecek yöntemler incelenmiştir. Bu kapsamda aydınlatma elemanı üretiminden kontrole, bakımdan kullanıcıların eğitimine kadar farklı başlıklar değerlendirilmiş, her yaklaşımın avantaj ve dezavantajları irdelenmiştir. Çalışma sonucunda enerji verimliliğinin optimum düzeye ulaşılabilmesinde uygulanabilecek öneriler özetlenmiştir.

Anahtar Kelimeler: Aydınlatma sistemleri, Enerji verimliliği, Aydınlatma elemanları.



# SYSTEMATIC OF NUCLEAR GYROMAGNETIC FACTORS (g) IN ODD-MASS <sup>125</sup><sup>153</sup>CE ISOTOPE CHAIN\*

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#### **ABSTRACT**

In this study, the systematic of nuclear gyromagnetic factor (g) in odd-mass  $^{125\text{-}153}$ Ce nuclei located in the rare earth region of the periodic table has been investigated using the Quasiparticle Phonon Nuclear Model (QPNM). The model includes an axially symmetric mean-field potential, monopole pairing, spin-dependent residual interactions, and the restoration forces determined according to Pyatov's prescription. The obtained results have been compared with existing experimental data. There is an excellent agreement between measured and predicted g-factors. Analyzes show that the g-factor strongly depends on the single particle Nilsson configurations and collective gyromagnetic factors ( $g_R$ ).

**Keywords:** <sup>125-153</sup>Ce, QPNM, g-factor, g<sub>R</sub> factor

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### ARABALI ÇİFT TERS SARKAÇ İÇİN CS ALGORİTMASI İLE İKİ FARKLI HİBRİT KONTROL TASARIMI

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#### ÖZET

Hareket kontrol uygulamaları alanında Arabalı Çift Ters Sarkaç (AÇTS) sistemi, kararsız ve doğrusal olmayan yapısıyla modelleme ve kontrol tasarımı açısından zor konulardan biridir. Bu çalışmada, ACTS sisteminin Euler-Lagrange yaklaşımı ile doğrusal durum uzay modeli elde edilerek, araba konumu ve sarkaç açılarının kontrol başarımını iyileştirmek için iki farklı hibrit kontrol yöntemi: PID+LQR (Oransal-İntegral-Türevsel+Lineer Kuadratik Regülatör) ve FOPID+LQR (Kesir Dereceli Oransal-İntegral-Türevsel+Lineer Kuadratik Regülatör) önerilmiştir. Literatürde önerilmiş hibrit kontrol yaklaşımlarından farklı olarak, bu çalışmada arabalı çift ters sarkaç sisteminin üç kontrol değişkeninin ( $x_c$ ,  $\alpha$ ,  $\theta$ ) her biri için ayrı bir PID ve Kesir Dereceli PID kontrolcü tasarlanmıştır. Böylece tüm kontrol sisteminin serbestlik derecesi artırılarak daha esnek bir kontrol yapısı oluşturulması ve kontrol başarımının iyileştirilmesi amaclanmıştır. Ayrıca önerilen her iki hibrit kontrol yönteminde kontrol parametreleri Guguk Kuşu (CS) Algoritması ile optimize edilerek belirlenmiştir. Optimizasyon için amaç fonksiyonu (J) olarak Mutlak Hatanın Zaman Ağırlıklı İntegrali (ITAE) metodu kullanılmıştır. Sistemin modellenmesi, yöntemlerinin tasarımı parametrelerin optimizasyonu kontrol ve MATLAB/Simulink ortamında gerçekleştirilmiştir. Önerilen hibrit kontrol yöntemlerinin performansları, araba konumu ve sarkaç çubuklarının dengede tutulması ve dış bozucuya karşı dayanaklıkları açısından karşılaştırılmıştır. Elde edilen simülasyon sonuçları, FOPID+LQR hibrit kontrol yönteminin daha iyi bir performans sağladığını göstermektedir.

**Anahtar Kelimeler:** Arabalı Çift Ters Sarkaç, LQR Kontrol, PID Kontrol, Kesir Dereceli PID Kontrol, Hibrit Kontrol, CS Algoritması

### TWO DIFFERENT HYBRID CONTROL DESIGN WITH CS ALGORITHM FOR DOUBLE INVERTED PENDULUM ON A CART

#### **ABSTRACT**

In the field of motion control applications, the Double Inverted Pendulum on a Cart (DIPC) is one of the difficult issues in terms of modeling and control design with its unstable and non-linear complex structure. In this study, two different hybrid control methods: PID+LQR (Proportional Integral Derivative+Linear Quadratic Regulator) and FOPID+LQR (Fractional Order Proportional Integral Derivative+Linear Quadratic Regulator) are proposed to improve the control performance of car position and pendulum angles by obtaining a linear state-space model of the DIPC system with the Euler-Lagrange approach. Unlike the hybrid control



approaches proposed in the literature, in this study, a separate PID and Factional Order PID controller is designed for each of the three control variables ( $x_c$ ,  $\alpha$ ,  $\theta$ ) of the double inverted pendulum on a cart system. Thus, it is aimed to create a more flexible control structure and increase control performance by increasing the degrees of freedom of the entire control system. In addition, in both proposed hybrid control methods, the parameters of the controller were determined by optimizing with the Cuckoo Search (CS) Algorithm. Time Weighted Integral of Absolute Error (ITAE) method was used as the objective function (J) for optimization. Modeling of the system, design of the control methods, and optimization of the parameters were carried out in the MATLAB/Simulink environment. The performances of the proposed hybrid control methods are compared in terms of keeping the car position and pendulum rods in balance and their robustness to external disturbances. The obtained simulation results show that the FOPID+LQR hybrid control method provides better performance.

**Keywords**: Double Inverted Pendulum on a Cart, LQR Control, PID Control, Factional Order PID Control, Hybrid Control, CS Algorithm



# OPTIMAL ALLOCATION AND SIZING OF DISTRIBUTED GENERATION IN THE UNBALANCED DISTRIBUTION SYSTEM USING GWOCS ALGORITHM

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#### **ABSTRACT**

The rapid increase in energy demand due to population and economic growth has posed challenges for the centralized generation of electricity. The deployment of Distributed Generation (DG) technologies in distribution systems provides solutions to these challenges. Determining the optimal location and size of the DG is crucial to improve the efficiency and reliability of the network. In this paper, hybrid grey wolf optimization—cuckoo search algorithm (GWOCS) has been employed to find the optimal location and size for multiple DGs within an unbalanced distribution system. The proposed algorithm has been validated on IEEE 34 node test feeder system, which is an unbalanced distribution system. The implementation of the optimization algorithm and the power flow analysis have been carried out on the OpenDSS - MATLAB co-simulation platform. The results demonstrate that optimally located and sized DGs not only reduce power losses but also enhance the voltage profile of the distribution network.

**Keywords:** Hybrid grey wolf optimization—Cuckoo search algorithm (GWOCS), Optimal allocation of DGs, Three-phase unbalanced distribution system, Distributed generation, Optimal power flow.



# DYE SENSITIVE SOLAR CELL MATERIALS AND DENSITY FUNCTIONAL THEORY APPLICATIONS

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#### **ABSTRACT**

Dye-sensitized solar cells (DSSC) are in the third generation photovoltaics class, which are formed in the form of semiconductor thin films between the electrolyte and the photosensitive anode. In such solar cells, dye sensitizers are excited and from there an electron is injected into the conduction band of the mesoporous oxide film. In our study, optimized simulations for suitable conformers of the ruthenium-based complex as DSSC material have been obtained and their electronic and spectral properties have been examined with the help of Density Functional Theory. The highest occupied molecular orbital energy, lowest unoccupied molecular orbital energy and energy gap values of the selected dye sensitizers have been calculated. Orbitals are be defined as each of the potential electron density patterns that can be formed by electrons and represented as a wave function in molecular structures. As soon as the light at the required frequency that the electron in the highest occupied band can absorb hits the electron, the electron moves to the upper, lower energy unoccupied band. The high performance of DSSCs is associated with the substituted effects of the highest energy occupied molecular orbitals of the sensitizer on orderable groups and their small energy band gaps. In addition, in the photovoltaic system, the low energy gaps of the material causes the capacity of photon absorption at a longer wavelength to increase and to produce more current. In our study, the highest occupied orbital levels for dye sensitizers have been compared with the redox couple of the  $I^-/I^{-3}$  electrolyte. In addition, the orbital energy levels of the sensitizers at the excited level have been compared with the energy level at the conduction band edge on the TiO<sub>2</sub> surface.

Keywords: DSSC Sensitizer, Density Functional Theory, Molecular Orbital Analysis



### Al - 1,1Sc ve Al -1,9Sc ALAŞIMLARININ BAZI MEKANİK ÖZELLİKLERİNİN DENEYSEL ve TEORİK OLARAK İNCELENMESİ

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#### ÖZET

Oda sıcaklığında Al fcc, Sc hcp fazında olup, Al - 1,1Sc ve Al - 1,9Sc alaşımları fcc yapıda ve L12 fazındadır. İç etkileşme enerjileri birbirine yakın olan Al ve Sc elementlerinden elde edilen AlSc (Sc<<) alaşımları mekanik özellikleri bakımından tercih edilmektedir. Bu çalışmada ilk olarak alaşımların örgü parametreleri XRD analiz sonuçlarından hesaplandı. Alaşımlarının Young sabitleri ( $E_{hkl}$ ) ve maksimum stresler ( $T_{hkl}$ ) yansıma düzlemlerine göre incelendi. Ayrıca alaşımların tetragonel kayma ve izotropik kayma sabitleri (C', G), Poisson oranı, B/G büyüklüğü, Pugh sabiti (k) ile sertlikleri (Hv, Hm) incelendi. Hesaplamalarda teorik ve deneysel sonuçlar birlikte kullanıldı. Teorik hesaplamalar için Wien2k yöntemiyle hesaplanan ikinci derece elastik sabitlerden yararlanıldı. Her iki alaşımda hem yansıma düzlemlerine hem de Sc oranlarına göre sonuçların değiştiği ve Al-1,1Sc alaşımının mekanik olarak Al-1,9Sc alaşımından daha iyi olduğu görüldü. Ayrıca yansıma düzlemlerinde hesaplanan ortalama  $E_{(hkl)}$  büyüklüğünün tek kristal metodundan hesaplanan  $E_{[110]}$  ile çok yakın sonuca sahip olduğu anlaşıldı.

Anahtar Kelimeler: Al-Sc Alaşımları, Örgü Parametresi, Young Sabiti, Maksimum Stres



### Al -Sc AIAŞIMLARINDA DİSLOKASYON YOĞUNLUĞUNUN YANSIMA DÜZLEMLERİNDE DENEYSEL OLARAK İNCELENMESİ

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#### Özet

Oda sıcaklığında Al fcc, Sc hcp fazında iken, Al - 1,1 Sc ve Al - 1,9 Sc alaşımları ise fcc yapısında ve L12 fazındadır. Bu metallerin iç etkileşme enerjileri birbirine çok yakındır. Bu elementlerden elde edilen AlSc (Sc<<) alaşımları daha çok mekanik özelliklerinden dolayı tercih edilmektedir. Bu çalışmada yüksek Sc oranlı AlSc alaşımlarının dislokasyon yoğunlukları yansıma düzlemlerine göre inceledi. İlk olarak yansıma düzlemlerindeki pik genişlikleri ( $\beta$ ) XRD piklerinden elde edildi. Scherrer yöntemi kullanılarak, pik genişliklerine bağlı olarak tanımlanan kristal boyutları (D) ve buna bağlı olarak da dislokasyon yoğunlukları ( $\delta$ ), (hkl) düzlemlerine göre hesaplandı. Yansıma düzlemleri küçüldükçe dislokasyon yoğunluğunun arttığı, Al-1,1Sc alaşımının dislokasyon yoğunluğunun daha büyük olduğu sonucuna ulaşıldı.

Anahtar Kelimeler: Al-Sc Alaşımları, Pik Genişliği, Kristal Boyutu, Dislokasyon Yoğunluğu



#### CURCUMIN: A REVIEW ON PROPERTIES AND MECHANISMS OF ACTION

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#### **ABSTRACT**

More recently, the spice Turmeric comes from the root of tropical plant Curcumi longa has received wide attention in Turkey as well as around the world for its multiple health benefits.

Research shows that Curcumin-a polyphenol found in turmeric- has cardioprotective, anti-inflammatory, anticancer and antioxidant, neuroprotective, properties that benefit the brain, heart, digestive system, and more. Chemically, curcumin is a naturally polyphenol denominated (1E,6E)-1,7-bis (4-hydroxy-3- methoxyphenyl)-1,6-heptadiene-3,5-dione) (Figure 1)

Figure 1. Chemical Structure of Curcumin (diferuloylmethane)

Curcumin acts primarily through its anti-oxidant and anti-inflammatory mechanisms. Antioxidants prevent free radical induced tissue damage by preventing the formation of radicals, scavenging them, or by promoting their decomposition. Curcumins target free radicals through various mechanisms.

In this review, properties and mechanisms of action of curcumin briefly discussed. Due to the increasing interest in the use of turmeric, it was also mentioned how black pepper could help make curcumin more bioavailable.

Keywords: curcumin, turmeric, antioxidant, free radicals



#### CURCUMIN: A REVIEW ON PROPERTIES AND MECHANISMS OF ACTION

#### ÖZET

Son zamanlarda, tropikal bitki olan Curcumi longa kökünden elde edilen zerdeçal baharatı sağlık açısından pek çok faydası nedeniyle, tüm dünyada olduğu gibi Türkiye'de de büyük ilgi görmektedir.

Araştırmalar göstermiştir ki; zerdeçalda bulunan ve polifenol olan kurkumin; kalp koruyucu, antiflamatuar (Mukhopadhyay ve diğerleri., 1982), antikanser (Huang et al., 1994; Rao et al., 1995; Babu and Srinivasan, 1997), antioksidan (Sharma, 1976; Kunchandy, 1990) ve nöroprotektif özellikleri nedeniyle beyne, kalbe, dolaşım sistemine olmak üzere daha pek çok yararı vardır. Kurkumin kimyasal olarak (1E,6E)-1,7-bis(4-hidroksi-3-metoksifenil)-1,6-heptadien-3,5-dion olarak adlandırılan doğal bir polifenoldür (Şekil 1).

Şekill. Kurkumin Kimyasal Yapısı (diferüloilmetan)

Kurkumin öncelikle antioksidant ve antiflamatuar mekanizmalar yoluyla etki eder. Antioksidanlar; serbest radikallerin oluşumlarını engelleyerek, temizleyerek ya da bozulmalarını sağlayarak, neden olduğu doku hasarlarını engellerler. Kurkumin çeşitli mekanizmalar yoluyla serbest radikalleri hedef alır.

Bu derlemede kurkuminin özellikleri ve etki mekanizmaları kısaca ele alınmıştır. Zerdeçalın kullanımına olan ilginin artması nedeniyle, karabiberin kurkuminin biyoyararlığını artırmaya nasıl yardımcı olabileceğinden de bahsedilmiştir.

Anahtar kelimeler: kurkumin, zerdeçal, antioksidan, serbest radikal



# INVESTIGATION OF THE STRUCTURE AND COMPOSITION OF ELECTRON TRANSPORT MATERIALS IN PEROVSKITE SOLAR CELLS THROUGH SCAPS-1D SIMULATIONS

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#### **ABSTRACT**

In the realm of solar cell research, our primary objective is to identify cost-effective materials that demonstrate high efficiency. We are particularly focused on materials with exceptional light absorption capabilities and efficient charge transport properties. This study centers on the evaluation of perovskite materials to determine their suitability for use in solar cells. To achieve this, we employ the SCAPS-1D computer program to gain insights into how perovskites perform under various conditions.

Within this study, we have endeavored to simulate several configurations of perovskite solar cells (PSCs) using the SCAPS-1D simulation tool. Generally, a PSC structure comprises three distinct active layers: the light-absorbing perovskite layer, electron transport materials (ETM), and hole transport materials (HTM). These active layers can exist in various organic and inorganic forms, and our study simulates PSC constructions based on these specific combinations. In the pursuit of optimizing material properties, we have explored the variation of perovskite layer thickness, favoring relatively higher values, and transport layer thickness, favoring relatively lower values. Additionally, we have suggested lower additive densities for the active layers.

To optimize the operating parameters of PSCs, we have found that lower temperatures, series resistors, and composite structure resistors are often desirable. During the selection phase for PSC configurations, our results encompass single, tandem, and composite configurations for the absorbent, ETM and HTM layers, respectively.

**Keywords :** Perovskite solar cells, electron transport materials (ETM), and hole transport materials (HTM), SCAPS-1D simulation.



# SİİRT ÇETİN DAM LAKE: A COMPREHENSIVE STUDY ON WATER QUALITY AND POTABLE

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#### **ABSTRACT**

Water is essential for life and critical for various sectors, including drinking water supply, agriculture, and fisheries. Siirt Çetin Dam Lake serves as a crucial water source for drinking, irrigation, and fishing. This study assesses its water quality using ICP-MS elemental analysis.

Samples from the lake underwent ICP-MS analysis, revealing notable element concentrations. For instance, lithium (Li) was found at 38.238 ppb, boron (B) at 670.200 ppb, and sodium (Na) at an exceptionally high 59.304.331 ppb. Magnesium (Mg) and calcium (Ca) levels measured 30.881.205 ppb and 141.689.014 ppb, respectively.

These findings confirm the suitability of Siirt Çetin Dam Lake water for various purposes, including drinking, irrigation, and fisheries, emphasizing its potential to meet local water needs and providing a scientific basis for sustainable development and resource management.

In conclusion, this investigation validates the health suitability of Siirt Çetin Dam Lake water through elemental analysis, stressing the importance of sustainable water resource management and preservation. Future research should expand the analysis of similar water sources, promote interdisciplinary long-term monitoring, and develop policies for sustainable water resource management.

Keywords: Water, ICP-MS, Siirt Cetin Dam, elemental analysis



### HOMOJENIZASYON PROSESININ EN AW 6082 BİYET MİKROYAPISI VE SERTLİĞİNE ETKİSİ

### EFFECT OF HOMOGENIZATION PROCESS ON EN AW 6082 BILLET MICROSTUCTURE AND HARDNESS

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#### ÖZET

Endüstriyel uygulamalarda homojenizasyon prosesinin döküm biyetin daha kolay ve daha hızlı ekstrüde edilebilmesini sağladığı iyi bilinmektedir. Ayrıca döküm biyete daha iyi yüzey kalitesi ve daha yüksek çekme özellikleri kazandırmaktadır. EN AW 6082 alaşımının homojenizasyon prosesi, ekstrüzyon gibi sonraki işlemler sırasında kolayca yeniden çözünebilecek morfoloji ve boyuta sahip mümkün olduğu kadar çok miktarda Mg<sub>2</sub>Si fazının yeniden çökelmesini sağlayacak şekilde tasarlanmalıdır. Ayrıca EN AW 6082 alaşımına deformasyon yapısını korumak için ilave edilen ve yüksek sıcaklarda kararlı bileşikler oluşturan zirkonyum elementinin de homojenizasyon prosesindeki etkisi de incelenmelidir. Bu çalışmada, endüstriyel bir uygulamada dikey yarı sürekli döküm yöntemi ile üretilen EN AW 6082 ve ağırlıkça %0.3 oranında zirkonyum içeren EN AW 6082 biyetler için homojenizasyon proses koşullarının mikroyapı ve sertliğe etkisi araştırılmıştır. Bu amaçla biyetler, döküm işlemini takiben 500 °C'de 10 saat ve 580 °C'de 6 saat tutulduktan sonra havada soğutularak iki faklı homojenizasyon prosesine tabi tutulmuştur. Daha sonra döküm ve homojen biyetlerden numuneler alınarak metalografik olarak hazırlanmış, ışık mikroskobu ile incelenmiş ve sertlik ölçümleri yapılmıştır. Sonuçlar 500 °C'de 10 saat yapılan homojenizasyon işlemi sonrasında α-Al dendritleri arasındaki interdendritik bölgelerde bulunan intermetalik bileşiklerin kısmen çözünmesi ile boyutlarının kısmen azalmasına rağmen ağsı yapılarını koruduklarını göstermiştir. 580 °C'de 6 saat yapılan homojenizasyon prosesinden sonra ise intermetalik bileşiklerin çözünmesine bağlı olarak interdendritik bölgelerin azaldığı görülmüştür. Elde edilen bu bulgular EN AW 6082 alaşımının homojenizasyon prosesinde tutma süresinden çok tutma sıcaklığının daha etkili olduğunu göstermiştir. Ayrıca zirkonyum ilavesinin bu sonuçları daha da olumlu yönde etkilediği görülmüştür.

Anahtar Kelimeler: EN AW 6082 alüminyum alaşımı, homojenizasyon, mikroyapı, sertlik.



# DEPREM DAYANIKLILIĞI İÇİN YAPAY SİNİR AĞLARI KULLANILARAK BETON BASINÇ DAYANIMININ TAHMİNİ

## PREDICTION OF CONCRETE COMPRESSIVE STRENGTH USING ARTIFICIAL NEURAL NETWORKS FOR EARTHQUAKE RESILIENCE

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#### ÖZET

Deprem, tarihsel olarak inşaat sektörü için büyük bir tehdit olmuştur. Bu tehdit, yapıların dayanıklılığını artırmak ve insan yaşamını korumak için sürekli olarak ele alınması gereken bir sorundur. Depremlerin yol açtığı yıkımın en aza indirilmesi, yapı malzemelerinin doğru bir şekilde karakterize edilmesi ve tasarım süreçlerinin iyileştirilmesi ile mümkün olmaktadır. Bu bağlamda betonun dayanımı, yapıların deprem dayanıklılığı üzerinde kritik bir rol oynamaktadır.

Beton, inşaat sektöründe yaygın olarak kullanılan temel yapı malzemelerinden biridir. Dünyada beton tüketimi kişi başına oranı  $0.8-1.0~\text{m}^3$  civarında değiştiği ön görüldüğünde, beton dünyada yapay malzeme olarak en fazla kullanıldığını söylemek mümkündür. Türkiye'de de bu durumun dünyaya benzerlik göstermekte olduğundan beton tüketim oranları  $1.0~\text{m}^3$  üzerinde olduğu bilinmektedir. Türkiye de yapı dağılımının çoğunu beton olduğu ve özellikle geçmiş yıllarda her deprem sonucunda yıkılan binalarda suçlu olarak görülen betonarme yapılar, betonun basınç dayanımlarının önemine sebep olmuştur.

Beton kalitesini belirli bir proses içinde meydana gelen işlemler sonucu ile şekillenmekte olup birçok faktör betonun kalitesini etkilemektedir. Bu çalışmada beton basınç dayanımlarını sekiz faktör dikkate alınarak yapay sinir ağları kullanılarak tahmin edilmiştir. Yapay sinir ağları, betonun dayanımını tahmin etme sürecini daha verimli ve doğru hale getirerek yapıların daha güvenli hale gelmesine katkı sağlamaktadır. Elde edilen sonuçlar, yapıların depreme karşı dayanıklılığını artırmak için beton bileşenlerini daha iyi optimize etme konusunda değerli bir araç sunmaktadır. Ayrıca, depreme dayanıklı yapıların tasarımında daha güvenilir bir yaklaşım sunarak, toplumsal güvenlik açısından da önemli bir katkı sağlayabilir.

Anahtar Kelimeler: Yapay Sinir Ağları, Tahmin, Beton, Basınç Dayanımı

#### **ABSTRACT**

Historically, earthquakes have posed a significant threat to the construction industry. Addressing this threat is an ongoing concern for enhancing the resilience of structures and safeguarding human lives. Minimizing the devastation caused by earthquakes necessitates accurate characterization of building materials and continuous improvement of design



processes. In this context, the compressive strength of concrete plays a critical role in the earthquake resistance of structures.

Concrete is one of the fundamental building materials widely used in the construction sector. When considering that worldwide concrete consumption per capita varies from 0.8 to 1.0 m<sup>3</sup>, it is evident that concrete is one of the most extensively utilized artificial materials globally. Since this situation in Turkey is similar to the world, it is known that the consumption rates of concrete are above 1.0 m<sup>3</sup>. In Turkey, most of the structure distribution is concrete and especially in the past years as a result of each earthquake collapsed buildings are seen as the culprit reinforced concrete structures, the importance of the pressure resistance of concrete has caused.

Concrete quality is shaped by various processes within a defined framework, and numerous factors influence its quality. This study predicts concrete compressive strengths by considering eight factors using artificial neural networks. Artificial neural networks enhance the process of predicting concrete strength, making it more efficient and accurate, thereby contributing to the safety of structures. The results obtained provide a valuable tool for optimizing concrete components to increase the earthquake resilience of buildings. Additionally, by offering a more reliable approach to the design of earthquake-resistant structures, this study can make a significant contribution to societal safety.

Keywords: Artificial Neural Networks, Prediction, Concrete, Compressive Strength



# INVESTIGATION OF AİR TRANSPORT POTENTIAL OF BURSA PROVINCE

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## **ABSTRACT**

The desire of human beings to go from one place to another has always existed throughout history. These demands have changed according to the conditions in the period they lived in, and today they can travel by very different means of transportation. One of the most widely used means of transportation today is undoubtedly passenger planes. Flight routes are created by taking into account many different parameters in the determination of flight schedules and the selection of airport ground constructions. Bursa province is Turkey's 4th largest city in terms of population and is one of the important cultural, commercial and industrial cities. With this study, firstly, the position of Bursa in air transportation was determined. Then, the air transport potential of Bursa province was examined and its current situation and its potential status were compared. Due to the fact that Bursa is especially close to Istanbul, people mostly meet their transportation needs with flights from and to Istanbul. For this reason, the departure-arrival flights from Bursa are very few compared to the transportation needs Finally, within the scope of the study, suggestions were presented to overcome the low number of flights, despite the high potential of Bursa in air transportation.

**Keywords**: Bursa, air transportation, İstanbul



# EXAMINING TRANSPORTATION PROBLEMS IN BURSA AND REVEALING SOLUTION SUGGESTIONS

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#### **ABSTRACT**

Today, the increase in population in metropolitan cities has caused problems in the field of transportation, as in many areas. In particular, the increase in individual vehicle ownership causes an increase in urban traffic density in metropolitan cities; makes city traffic unbearable. Bursa province, on the other hand, is the 4th most populous city in Turkey in terms of population, as well as one of the important tourism, trade and industrial centers of the country. In addition to these features, Bursa's location connecting the cities of Istanbul and Izmir further increases the geopolitical importance of the city. Due to this location, Bursa is a place to be visited by people, a city to be reached. Due to these features, transportation problems arise, especially in urban traffic, due to the desire of people to move. It is important for human health and psychology to solve these problems and make the city more livable. In this study, the transportation problems in Bursa were examined and it was tried to put forward suggestions to solve these problems.

**Keywords**: Bursa, transportation problems, traffic



# AN ANALYSIS OF THE NREL RESEARCH SUPPORT FACILITY BUILDING WITHIN THE FRAMEWORK OF SUSTAINABLE ARCHITECTURAL DESIGN APPROACHES

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## **ABSTRACT**

Energy is used at every stage of a building's life cycle. The energy consumption of buildings can be significantly reduced at every stage of a building's life cycle. Sustainable design approaches are highly effective in this process. In this context, the aim of the study is to highlight the importance of sustainable design approaches and to address the issue through a sample building. The research analyses the Research Support Facility (RSF) at the National Renewable Energy Laboratory (NREL), which is a model of high-performance office building design for the US Department of Energy. As a large office building, the building exhibits highperformance design features. It is located on NREL's main campus in Colorado. Construction of the building was completed in June 2010. Many of the technologies and strategies used in the building are a direct result of NREL's energy efficiency and renewable energy research. This gives the building a unique characteristic. It is stated that the building uses 50 per cent less energy than a building built according to the country's current commercial codes. The building received 92 points out of 110 points in the LEED green building rating system developed by the US Green Building Council and was entitled to be certified at Platinum level. Researchers at RSF use real-time building performance data to analyze the building's energy use and make adjustments. In this way, the building is a laboratory for staff to learn and work in. The project, which was selected as a result of a national design competition, went through an energy and environment-oriented process in terms of building layout, form occurrence and mass positioning during the design process, and different layout and form alternatives were tested with simulations. Passive architectural strategies are used to provide natural ventilation and daylighting. The building form is arranged in long office wings approximately 18 metres wide for optimum solar orientation. While placing solar panels in different parts of the building for energy generation, it is seen that the integration of panel placements with the architectural



design is taken into consideration. Transpired solar collectors on south facade of building, are integrated to the façade design. Louvered sunshade is applied on entrance façade to protect glazing at the entrance lobby. Radiant floors provide heating and cooling from the exposed structure above. Manually operated windows provide natural ventilation, while automatically operated windows can be opened on summer nights to clean the rooms with cool air throughout the night. The open office plan, located on the upper floor and connected to the terrace, allows for favorable daylight and natural ventilation, creating an alternative working environment. The thermal labyrinth circulating under the building stores passively cooled and heated air for future use. With the aforementioned qualities of the building, it is seen that the building was designed with sustainable approaches in the architectural design process.

**Keywords:** Sustainable Architectural Design, Design Process, NREL Research Support Facility



# ENVIRONMENTAL CONDITIONS AFFECTING THE LIGHT TRANSMITTANCE OF GLASS ROOFS

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## **ABSTRACT**

The main environmental conditions that affect the light transmittance of glass roofs are whether the glass surface is new or old, surface defects during manufacturing assembly, the angle of sun incidence on the glass surface, and the dust-pollution effect of the glass roof. Contamination of the glass roof may be caused by environmental conditions, design, quality of materials used, workmanship, or surface roughness of the glass. Glass roofs have maximum light transmittance if the environmental conditions are favorable and the glass surface is clean. This light transmittance decreases due to dust, dirt, pollen, bird feces, and various particles adhering to glass surfaces over time. Glass surfaces that are installed in a dirty and dusty environment and are constantly left outdoors lose efficiency in terms of light transmittance due to external influences. The decrease in light transmittance caused by contamination of glass surfaces depends on the type of contamination, the time since the last rainfall, and the routine cleaning period. It has been observed that rain is effective in cleaning dust if the angle of inclination of glass surfaces in the horizontal plane is greater than 15 degrees. Therefore, the efficiency loss due to dusting at angles greater than 15 degrees is around 0.5%. If the angle of the glass surfaces is less than 15 degrees, or if the rainfall is low-infrequent, and the area is exposed to special dustiness and industrial pollution, a decrease in light transmittance is observed. As glass surfaces become dusty, the difference in daylight transmittance between the clean glass surface and the dusty glass surface increases. Because they provide daylight illumination in the space by taking advantage of sunlight according to the dust level of glass surfaces located side by side under equal conditions. Accordingly, as dusting increases, the light transmittance of glass surfaces decreases proportionally (%) and the ambient illumination tends to decrease accordingly.

**Keywords:** Daylight, glass surface, dustiness, pollution.



# USE OF DAYLIGHT IN MASTER PLANS IN TERMS OF TOPOGRAPHY AND URBAN DESIGN

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### **ABSTRACT**

Master planning of an area or region is an ideal opportunity to provide solar access. Planning solar access at the largest scale makes it advantageous to facilitate natural light design at the building scale. The topography in an area can be used to provide shade or access more sunlight. Solar access between buildings and obstructions can increase reach when correctly oriented and placed. In urban design; Large buildings often shade nearby medium- and small-sized buildings, restricting access to daylight. Zoning codes in many urban areas do not include daylight or access to sunlight requirements to regulate building orientation. Parameters that determine daylight access improve daylight access or viewing views. The parameters determining access to sunlight must be calculated taking into account the temporal orientation of the sun and solar angles. For these reasons, the use of daylight in the building can be increased or decreased according to need by paying attention to the parameters that determine the building's access to daylight: Sun envelopes, building orientation, horizontal lighting openings, the volumetric shape of the building, room proportions and reflection coefficients are some of the daylight access parameters of the building.

**Keywords:** Daylight topography, urban design



# KARMA FONKSİYONLU YAPILARDA SÜRDÜREBİLİR YAKLAŞIM ALANLARINDAN ÇATI VE TERAS BAHÇELERİ: UZAKDOĞU ÖRNEKLERİ

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## ÖZET

Uzakdoğu ülkelerinde 21. yüzyılın ilk çeyreği ile birlikte etkisini gösteren çatı ve teras bahçeleri, özellikle nüfusu yoğun olan büyük şehirlerdeki konut, ofis, otel, alışveriş merkezi gibi yapıların tasarım yaklaşımlarıyla birlikte karma fonksiyonlu yapılar olmak üzere etkisini göstermektedir. Büyük şehirlerde artan nüfusun, yeni kentleşme yapılarına yön çizerek, azalan yeşil ve boş alanların yerine tasarım yaklaşımlarıyla birlikte çatı ve teras bahçeleri kullanıcılara alternatif bir çözüm yolu sunmaktadır. Gelişmiş birçok teknik detay, yeni malzemelerin ortaya çıkışı, yapım-çözüm teknikleri olmak üzere kullanıcıların ihtiyaç ve talepleri doğrultusunda, ortaya çıkan ekolojik, sürdürebilir sorunlarını minimum seviyeye çekerek; şehir-kullanıcı-çevre bağlamında katkı sunan uygulama yaklaşımlarını ortaya çıkarmaktadır.

Birçok gelişen Uzakdoğu'daki büyük şehirlerde, hızla artan nüfus ve düzensiz gelişim neticesinde yaşam alanlarında büyük oranda beton ve çarpık yapılaşma ile karşı karşıya kalmaktadır. Bu durum karşısında gerek şehir gerekse kullanıcı açısından olumsuz birçok faktör ortaya çıkmaktadır. Yeşil alanların yerine çok amaçlı çeşitli mimari yapıların yapılması ve talepler doğrultusunda artan sayıları kentsel çevre sorunlarının başında bulunmaktadır.

Binaların yaşayan çevreye uyum sağlaması ve ilerleyen süreçte de diğer nesillere daha iyi bir yaşam kalitesi sunabilmesi için yeşil çatılara ihtiyaç duyulma noktasına gelinmektedir. Uzakdoğu'nun birçok gelişmiş şehirlerinde önemi git gide artan çatı bahçelerinin şehir ekolojisine sağladığı fiziksel faydalar yanında ekonomik, ekolojik, sosyal, fiziksel ve psikolojik olarak birçok şehir ve kullanıcı açısından katkı sağlamaktadır. Kullanıcılarda oturma-dinlenme, yürüyüş-koşu, spor ve oyun alanları gibi birçok aktivitenin gerçekleşmesini sağlayan alanların yaratılmasına olanak sağlamaktadır. Diğer canlı türleri için yaşam alanı olanakları tanımaktadır.

Bu çalışmanın amacı; Uzakdoğu ülkelerinde mimaride sürdürebilir bir yaklaşım olan çatı ve teras bahçelerinin karma fonksiyonlu yapıların örneklerle incelenmesidir. Çalışma nitel araştırma yöntemlerinden, betimsel durum analizi kullanılarak gerçekleştirilmiştir. Araştırma kapsamında birinci eksende çatı ve teras bahçeleri, ikinci eksende karma yapılarındaki çatı ve teras bahçeleri, üçüncü eksende Uzakdoğu ülkelerinde yer alan çatı ve teras bahçeli karma yapıları örneklerle incelenmiştir.

Anahtar Kelimeler: Karma Yapılar, Çatı ve Teras Bahçeleri, Sürdürebilirlik, Uzakdoğu



# CERRAHİ BRANŞLARDA ROBOTİK CERRAHİ YÖNTEMİNİN KULLANIM SIKLIĞI

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# ÖZET

**Amaç:** Robotik cerrahi, cerrahi mesleğini bir üst aşamaya taşıyan yeni bir teknolojidir. Amacımız robotik cerrahinin güncel rolünü tartışmak ve hangi branşlarda ne sıklıkta kullanıldığını ortaya koymaktır.

Gereç ve Yöntemler: Minimal invazif cerrahi 1987 yılında ilk olarak laparoskopik kolesistektomi ile başlamıştır. O zamandan günümüze teknolojide yaşanan gelişmeler ve cerrahların teknik becerilerinde gelişmeler sayesinde laparoskopik olarak gerçekleştirilen prosedürlerden robotik cerrahi sistemine geçiş sağlanmıştır. Laparoskopinin bu alanda kullanılmaya başlanmasıyla birlikte cerrahide büyük aşama kaydedildi. Robotik cerrahinin uygulamaları birçok farklı cerrahi disiplinde hızla yayılmaktadır. Ortopedik cerrahide, jinekolojide, genel cerrahi, üroloji, göğüs cerrahisi, plastik cerrahi ve kalp cerrahisi dahil olmak üzere diğer cerrahi branşlarda kullanılmaya başlanmıştır. Minimal invazif yaklaşımla; intaroperatif kan kaybının en aza indirilmesi, post operatif ağrının az olması, hastanın erken çalışma hayatına dönme vb. avantajlarından faydalanılmaktadır.

Kamu Hastaneleri Genel Müdürlüğü'ne bağlı 11 adet robotik cerrahi merkezi bulunmaktadır. Bu merkezlerde son 6 yılda yedi branşta gerçekleştirilen robotik cerrahi operasyonlarının sayısı hesaplandı. Bu süreçte robotik cerrahi yönteminin en çok üroloji bölümü tarafından kullanıldığı, genel cerrahinin ikinci sırada, kadın doğum hastalıklarının ise üçüncü sırada yer aldığı belirlendi.

**Bulgular:** 2017-2022 yılları arasında; üroloji bölümünde robotik yöntemle 5.780 operasyon gerçekleştirilirken, genel cerrahi bölümünde 1.361, kadın hastalıkları ve doğum kliniğinde 940, kalp ve damar cerrahisi kliniğinde 775, göğüs cerrahisinde 248, kulak burun boğaz kliniğinde 254, çocuk cerrahi bölümünde 31 operasyon robotik cerrahi yöntemiyle gerçekleştirilmiştir.

**Sonuç ve Öneriler:** Robotik cerrahi tekniğini kullanmaya başlayan branşların sayısı giderek artıyor. Artık çabalar, minimal invaziv yaklaşımlarla daha karmaşık vakaların operasyonları üzerine odaklanmak. Ancak robotik cerrahinin geleneksel tekniklere göre maliyeti ve faydaları konusunda geniş çaplı çalışmalara ihtiyaç bulunmaktadır.

Anahtar Kelimeler: Robotik cerrahi, bölümler, sıklık



# YUMURTALIK KANSERİNDE GÜNCEL TEDAVİ YÖNTEMLERİ

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# ÖZET

Yumurtalık kanseri dünya çapında en sık görülen üçüncü jinekolojik malignitedir. Ancak asemptomatik seyretmesi, geç tanı konması ve nüks sıklığı nedeniyle kanserler arasında ölüm oranı en yüksek olanıdır. Tanı konulduğunda genellikle omental tutulum, yaygın malign asit ve intraperitoneal metastazlarla ilişkili olduğu görülür. Mevcut verilere göre yumurtalık kanseri, geleneksel kemoterapötiklere karşı direnç geliştirebiliyor ve bu da nüksetmeye katkıda bulunuyor. Yumurtalık kanserinin spesifik etiyolojisi hala bilinmemektedir ve bu kanserler ileri evrelerde ortaya çıkma eğiliminde olduğundan gelişimin altında yatan erken moleküler olaylar bilinmemektedir. Yumurtalık kanseri hastalarında zamanla gelişen ilaç direnci gibi birçok önemli faktörün etkili tedavi yöntemleri ile en aza indirilmesi ve başarı oranı yüksek tedavi seçeneklerinin oluşturulması amacıyla hedefe yönelik çalışmalar her geçen gün artmaktadır. Geliştirilen tüm tedavi stratejilerine rağmen yumurtalık kanserinin ölüm oranı hala yüksek. Son yıllarda yumurtalık kanserinde hedefe yönelik tedavi stratejileri kapsamında yapılan birçok çalışma yolaklara ve bu yolaklara özgü tedavi seçeneklerine odaklanmaktadır. Bu çalışmada yumurtalık kanseri tedavisinde kullanılan etkinliği kanıtlanmış güncel tedavi yöntemleri tartışılmıştır.

**Anahtar Kelimeler:** Kanser, kanser tedavisi, yumurtalık, kemoterapi

## CURRENT TREATMENT METHODS FOR OVARIAN CANCER

Ovarian cancer is the 3th most common gynecological malignancy worldwide. However, it has the highest mortality rate among cancers due to its asymptomatic course, late diagnosis and recurrence. When diagnosed, it is usually associated with omental involvement, diffuse malignant ascites and intraperitoneal metastases. According to available data, ovarian cancer can develop resistance to conventional chemotherapeutics, which contributes to recurrence. The specific etiology for ovarian cancer is still unknown and the early molecular events underlying development are unknown as these cancers tend to occur in advanced stages. Targeted studies



are increasing day by day in order to minimize many important factors such as drug resistance that develops over time in ovarian cancer patients with effective treatment methods and to create treatment options with high success rates. Despite all the treatment strategies developed, ovarian cancer still has a high mortality rate. In recent years, many studies conducted within the scope of targeted therapy strategies in ovarian cancer focus on pathways and treatment options specific to these pathways. In this study, the current treatment methods with proven efficacy used in the treatment of ovarian cancer were discussed.

**Keywords:** Cancer, cancer treatment, ovary, chemotherapy



# ASHERMAN SENDROMU TEDAVİSİNDE KÖK HÜCRELERİN ROLÜ

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# ÖZET

Rahim içi yapışıklıklar veya Asherman Sendromu (AS), artan tanılarla birlikte çok yönlü eksikliklere neden olan bir klinik tablo olarak karşımıza çıkmaktadır. Her ne kadar sıklıkla rahim kürtajından sonra ortaya çıksa da, herhangi bir rahim ameliyatı AS'a neden olabilir. AS'lu kadınların çoğunda amenore veya hipomenore vardır, ancak bazılarının adet düzenleri normal olabilir. AS'lu kadınların çoğu menstrüel bozuklukların yanı sıra kısırlık veya tekrarlayan spontan düşükler ile kliniğe başvururlar. Son 50 yıldır histeroskopi bu durumun teşhis ve tedavisinde standart tedavi haline geldi. Yapışma ve skar oluşumunu önlemek için çeşitli teknikler önerilmiştir. Bu noktada endometrial yaralanmalarda cerrahi yöntem ve medikal tedavilere alternatif olabileceği birçok çalışmada gösterilen kök hücrelerin etkilerine odaklandık. AS'da adezyonların ayrılması için ideal bir teknik yoktur. Ancak amaç rahim boşluğunu tamamen normalleştirmektir. Ayrıca tedavide eşlik eden semptomların düzeltilmesi ve yeniden yapışıklık oluşumunun engellenmesine çalışılır. Bu derlemede kök hücreler kullanılarak AS'nun en tipik patolojisi olan epitelyal adezyonların giderilmesi, doku hasarının yenilenmesi ve kısırlık bariyerinin aşılmasına yönelik çalışmalar tartışıldı.

Anahtar Kelimeler: Rahim içi yapışıklık, kısırlık, kök hücre, endometriyum

# THE ROLE OF STEM CELLS IN THE TREATMENT OF ASHERMAN'S SYNDROME

Intrauterine adhesions or Asherman's Syndrome (AS) is a condition that causes multifaceted deficiencies with the increasing number of diagnosed cases. Any uterine surgery can cause AS, although it often occurs after a uterine abortion. Many women with AS have amenorrhoea or hypomenorrhea, but some may have normal menstrual levels. Most women with AS present with menstrual disorders as well as infertility or recurrent spontaneous abortion. In the last half century, hysteroscopy has become the standard treatment for diagnosing and treating this condition. Various techniques have been proposed to prevent adhesion and scar formation. At this point, we focused on the effects of stem cell therapy as an alternative to surgical methods and medical treatments in endometrial injuries. There is no ideal technique for separation of



adhesions in AS. But the goal is to completely normalize the uterine cavity. In addition, treatment is tried to correct the accompanying symptoms and prevent re-adhesion formation. In the study, studies aiming to remove epithelial adhesion caused by AS, regenerate tissue damage and overcome the infertility barrier by using stem cells were compiled.

Keywords: Intrauterine adhesion, infertility, stem cell, endometrium



# DELAY AND CANCELLATION OF SURGERY FROM THE PERSPECTIVE OF CLINICIANS: A MULTICENTER QUALITATIVE STUDY

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## **Abstract**

**Background:** Delay or cancellation of elective surgical procedures is a worldwide multifactoral problem that can vary from one hospital to another. Delays or cancellations of surgeries for any reason cause undesirable consequences for both the institution and the patient.

**Aim:** This study aims to identify the reasons and effects of unexpected changes in the elective surgical program from the perspective of healthcare professionals and determine the strategies implemented to reduce delays and cancellations.

**Methods:** A descriptive qualitative approach was used to explore the experiences of anaesthesiologists, surgeons, and nurses working in the surgical team (n=18). Twelve semi-structured interviews were conducted face-to-face in five hospitals in Turkey between January 1, 2023, and May 30, 2023. The interviews were transcribed and thematically analyzed.

**Results:** Five themes and ten subthemes were identified through the analysis process.

**Conclusion:** In the study, it was determined that all of the participants faced surgical cancellations. Participants stated that the most common reasons for surgical cancellation were the patients abnormal vital signs, changes in medical condition, not coming to an appointment, insufficient beds in the intensive care unit, and prioritizing emergency cases. According to the survey, good preoperative care, employing competent/experienced personnel, establishing a separate operating room for emergency cases, and proper and up-to-date surgical planning can prevent cancellations.

**Keywords:** Cancellation of surgery, Elective surgery, Preoperative clinic, Surgical delay, Surgical team



# KALP SESLERİNİN SEGMENTASYONU İÇİN ETKİLİ EŞİKLEME YÖNTEMİ

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# ÖZET

Farklı bileşenlere sahip olan ve kalbin kasılması ile gevşemesi sırasında oluşan titreşimlerin bir sonucu olarak meydana gelen kalp sesleri, kardiyovasküler sistemdeki işleyişin bir yansıması olarak ortaya çıkan önemli biyolojik seslerdir. Kalp sesleri, özellikle kalp hastalıklarının erken teşhisi için temel bilgiler sağlama konusunda kritik bir rol oynar ve aritmi, kapak bozuklukları, kalp yetmezliği dahil olmak üzere çeşitli kardiyovasküler sorunları detaylı analizlerle değerlendirmek için kullanılmaktadır. Kalp sesi bileşenlerinin doğru tespiti, sistolik veya diyastolik (örneğin S1 ve S2) bölgelerin doğru tanımlanması için çok önemlidir. Böylece bu bölgelerdeki patolojik durumlar net bir şekilde ortaya konabilmektedir. Bu nedenle kalp seslerinin ön işleminde sinyal enerji dağılımını, S1 ve S2 seslerine karşılık gelen belirgin zirve noktalarını tespit etmek için kullanılan matematiksel bir ölçüm olan Shannon Enerji yönteminden yararlanılmaktadır.

Kalp seslerinin analizinin ilk aşaması, kalp sesi sinyallerinin segmentasyonunu içermektedir. Çalışmalarda kalp seslerinin segmentasyonunda eşik (threshold) değerini belirlemek için geleneksel yöntem olan diğer eşikleme yöntemi ile ortalama ve standart sapma değerlerini belirleyerek hesaplanan adaptif eşikleme yöntemi gibi yöntemler kullanılmaktadır. Ancak bu yöntemler genellikle zaman alıcı ve karmaşık aşamaları içermektedir. Bu çalışmada ise kalp seslerinin Otsu eşikleme ile sistolik ve diyastolik bölümlerin kolaylıkla tespit edebilen bir eşikleme yöntemi uygulanmıştır. Elde edilen sonuçlar, bu yöntemin diğer yapılan yöntemlere göre S1 ve S2 bölgelerinin verimli bir şekilde tespit edilmesine yardımcı olduğunu göstermektedir. Bu yaklaşım, kalp hastalıklarının teşhisinde ve izlenmesinde önemli bir kaynak olarak potansiyel taşımaktadır. Shannon Enerji ve Otsu eşikleme gibi gelişmiş tekniklerin kullanımı, kalp sesi analizinin doğruluğunu artırmanın yanı sıra, aynı zamanda kardiyovasküler sağlık değerlendirmesi alanında umut verici bir çözümler bulunmasına katkı sağlamaktadır.

Anahtar Kelimeler: Kalp sesleri, segmentasyon, Shannon Enerji, eşikleme, Otsu.

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# 'PERSPECTIVE OF HEALTH VOCATIONAL SCHOOL CLASSES ON CADAVER AND ORGAN DONATION'

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## **ABSTRACT**

Cadaver and organ donation is a very important issue that is becoming more and more important day by day and requires public awareness. Cadaver serves as the first patient in the training of physicians and healthcare professionals, which will reduce possible professional practice errors in the future. Today, cadavers have become an indispensable element not only in undergraduate and associate degree education but also in postgraduate surgical training courses. However, especially in our country, availability and donations are very low. Organ donation is literally a second chance at life given to people. Increasing public awareness about organ donation and increasing donors saves a life every second. In this study, the opinions of the anesthesia and paramedic classes of the health vocational school were taken about organ and cadaver donation. The results obtained were compared with the chi-square test and the significance ratio of the answers given by two different classes was examined. Raising people's awareness about the theme of organ and cadaver donation, especially starting from health schools, will increase the level of awareness on this issue and make great contributions to the field of health.

Key words: Cadaver, Donation, Organ donation, Organ transplantation, Students' perpective



# HUZUREVİNDE KALAN YAŞLI BİREYLERDE ÖLÜM KAYGISI VE SAĞLIK ALGISI

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#### **ABSTRACT**

**Amaç:** Bu araştırmanın amacı huzurevinde kalan yaşlı bireylerde ölüm kaygısı ve sağlık algısını incelemektir.

Yöntem: Tanılmayıcı tipte olan bu araştırmanın verileri, Ankara'ya bağlı bir huzurevinde konaklayan 156 yaşlıdan Ocak 2022- Nisan 2023 tarihleri arasında araştırma toplanmıştır. JAMOVİ 2.3.2.1 ve SPSS 25 programı kullanılarak analiz yapılmıştır.. Kullanılan verilerin normal dağılıp dağılmadığı Skewness ve Basıklık değerleri ile test edilmiştir. Student t ve One Way ANOVA testi uygulanmıştır. Ayrıca basit ve çoklu regresyon etkiyi saptamada kulanılmıştır.

**Bulgular:** Araştırmaya katılan yaşlıları ölüm kaygısı puan ortalaması 6.48±5.68, sağlık algısı puan ortalaması 48.47±13.38 olarak bulunmuştur. Pearson korelasyon analizi sonucuna göre; ölüm kaygısı ölçeği ve sağlık algısı arasında anlamlı negatif bir ilişki saptanmıştır (r=-0.661, p=0.000). Ölüm kaygısının, sağlık algısı üzerindeki etkisini araştırmak üzere basit doğrusal regresyon analizi yapılmıştır. Ölüm kaygısı, mutluluk üzerindeki değişimin %43.3'ünü açıklandığı görülmektedir (R²=0.433). İş doyumu ile mutluluk arasında negatif yönlü ve anlamlı bir ilişki olduğu görülmüştür (Beta=-0.661; p<0.05). Ölüm kaygısındaki 1 birimlik artış, sağlık algısı üzerindeki 0.281'lik azalışa neden olmaktadır (β=0.281)

**Sonuç:** Huzurevinde kalan yaşlı bireylerde ölüm kaygısı, sağlık algısının önemli bir yordayıcısıdır. Yaşlılara, yaşlılık döneminde oluşan sorunlara yönelik eğitimler verilmeli ve sorunlarla etkin baş etme yöntemleri anlatılmalıdır.

Anahtar Kelimeler: Ölüm kaygısı, sağlık algısı, yaşlı, huzurevi

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# AMATÖR LİGLERDEKİ FUTBOLCULAR VE UYKU DÜZENİNİN ÖNEMİ

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## ÖZET

Uyku, en temel biyolojik aktivitelerden bir tanesi olarak tanımlanabilir. Vücut dokularının gün boyunca işleyen metabolik süreçlerden yoksun kaldığı ve vücudu ertesi güne hazırladığı bir süreçtir. Spor performansı çok yönlüdür ve etkilenebilen bir süreçtir. Yapılan bu çalışmada ise 2022-2023 sezonunda Süper Amatör ve Bölgesel Amatör Ligde oynayan sporcuların uyku davranışlarının incelenerek bu durumun oynadıkları liglere göre etkisini tespit etmek amaçlanmıştır.

Çalışmanın örneklemini, 2022-2023 sezonunda Süper Amatör ve Bölgesel Amatör Ligde oynayan sporcu grubu oluşturmaktadır. Araştırmada verileri toplamak için nicel veri toplama yöntemi olan anket tekniği uygulanmıştır. Anket iki bölümden oluşmaktadır. Buna göre, birinci bölümde, katılımcıların demografik özellikleri hakkında bilgi elde etmek için 12 soru sorulmuştur. İkinci bölüme ise, Driller ve ark. (2018) tarafından geliştirilen, Darendeli ve ark. (2019) tarafından Türkçeye çevrilmiş 'Sporcu Uyku Davranış Anketi' isimli, 17 maddelik anket uygulanmıştır. Çalışmada ilişkisel tarama yöntemi uygulanmıştır. Verilerin analizi için ise SPSS 25 programı kullanılmıştır.

Çalışmada, lig ve yaş değişkenine göre sporla ilişkili faktörlerde, uyku kalitesinde, verimli uyku alışkanlığında ve uyku bozukluğunda anlamlı farklılıklar tespit edilmiştir (p<0.05). Eğitim durumları değişkeninde ise sporla ilişkili faktörler alt boyutunda anlamlı farklılık bulunmamıştır (p>0.05). Söz konusu alt boyut dışındaki tüm alt boyutlarda anlamlı farklılık tespit edilmiştir (p<0.05). Ayrıca alt seviyedeki sporcuların uyku davranış düzeylerinin üst seviyedeki liglerdeki sporculara oranla daha düşük olduğu belirlenmiştir.

Alt seviyedeki sporcuların üst seviyedeki sporculara göre uyku davranış düzeylerinin daha düşük olması, düşük seviyedeki liglerde oynayan sporcuların yaşlarının daha düşük olmasıyla açıklanabilir. Yaşı küçük sporcuların uykunun önemi hakkında daha az bilgiye sahip olduğu ve uykuya daha az önem verdiği düşünülmektedir. Sporcuların uyku davranış düzeylerindeki düzensizlik ve yeterli uykuyu alamamaları sonraki müsabakaya hazırlanmalarını zorlaştırır. Bununla birlikte sportif performansları da olumsuz yönde etkilenir. Özellikle genç yaştaki



sporcuların gelişiminde uykunun rolü daha iyi açıklanmalı ve sporcular tarafından benimsenmelidir.

**Anahtar Kelimeler:** Futbol, uyku, amatör, antrenör.

# SOCCER PLAYERS IN AMATEUR LEAGUES AND THE IMPORTANCE OF SLEEP

## **ABSTRACT**

Sleep can be defined as one of the most fundamental biological activities. It "s a process in which the body tissues are deprived of the metabolic processes that operate during the day and prepare the body for the next day. Sports performance is multifaceted and can be affected. In this study, it was aimed to examine the sleep behaviors of the athletes playing in the Super Amateur and Regional Amateur League in the 2022-2023 season and to determine the effect of this situation according to the leagues they play.

The sample of the study consists of athletes group of playing in the Super Amateur and Regional Amateur League in the 2022-2023 season. The survey technique, which is a quantitative data collection method, was applied to collect data in the study. The questionnaire consists of two parts. Accordingly, in the first part, 12 questions were asked to obtain information about the demographic characteristics of the participants. In the second part, a 17-item questionnaire called 'Athlete Sleep Behavior Questionnaire' developed by Driller et al. (2018) and translated into Turkish by Darendeli et al. (2019) was applied. Relational screening method was applied in the study. SPSS 25 program was used for data analysis.

In the study, significant differences were found in sports-related factors, sleep quality, productive sleep habits and sleep disturbance according to league and age variables (p<0.05). No significant difference was found in the sub-dimension of sport-related factors in the variable of educational status (p>0.05). Significant differences were found in all sub-dimensions except the sub-dimension in question (p<0.05). In addition, it was determined that the sleep behavior levels of the lower level athletes were lower than the athletes in the upper level leagues.

The lower sleep behavior levels of lower level athletes compared to higher level athletes can be explained by the lower age of athletes playing in lower level leagues. It is thought that younger athletes have less knowledge about the importance of sleep and give less importance to sleep. The irregularity in the sleep behavior levels of athletes and their inability to get enough sleep make it difficult for them to prepare for the next competition. In addition, their sportive performance is also negatively affected. The role of sleep in the development of young athletes should be better explained and adopted by athletes.

**Keywords:** Football, sleep, amateur, coach.



# AMATÖR LİGLERDEKİ FUTBOLCULARIN SAKATLANMAYA YÖNELİK KAYGI DÜZEYLERİNİN İNCELENMESİ

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# ÖZET

Sportif başarının artırılabilmesi için fiziksel kapasitenin yüksek olması tek başına yeterli değildir. Günümüz şartları göz önünde bulundurulduğunda sporcuların psikolojik durumları en az fiziksel kapasiteleri kadar önemlidir. Sporcuların içsel ve dışsal faktörlere maruz kalarak sakatlanmaya yönelik kaygılarını etkileyen unsurlar da merak konusudur. Yapılan bu çalışmada da amatör futbol kulüplerinde oynayan oyuncuların yaralanma kaygı düzeylerinin belirli demografik değişkenlere göre incelenmesi amaçlanmıştır.

Çalışma, genel tarama modellerinden, nedensel karşılaştırma modeliyle gerçekleştirilmiştir. Çalışmanın evrenini, Avrupa yakasındaki amatör futbol kulüplerinde forma giyen amatör futbolcular oluşturmaktadır. Örneklemi ise Çorlu, Kapaklı ve Çerkezköy ilçelerinde faal 5 futbol kulübünde lisanslı 88 sporcu yer oluşturmaktadır. Örneklem grubu basit tesadüfi yöntemle belirlenmiştir. Sporcuların yaralanma kaygı düzeylerinin tespitinde, Rex ve Metzler'in (2016) geliştirdiği, uyarlamasını Caz vd. (2019) tarafından Türkçeye çevrilerek yapılan Spor Yaralanması Kaygı Ölçeğinden faydalanılmıştır. SPSS 24.0 istatistik programıyla yapılan inceleme sonucunda verilerin normal dağılmadığı tespit edilmiştir. Veri analizinde ise non-parametrik testlerden Mann-Whitney U ve Kruskal Wallis Testi kullanılmıştır.

Çalışma sonucuna göre, amatör futbolcuların yaralanma kaygı düzeylerinin eğitim düzeyi, yaş, mevki ve futbol oynama yaşına göre anlamlı farklılık göstermediği belirlenmiştir (p>0.05). Ancak, sakatlık geçmişi olan sporcularda kaygı düzeyinde anlamlı farklılık olduğu, sakatlanma süresinin de söz konusu kaygı düzeyini arttıran faktörlerden olduğu ortaya konmuştur (p<0.05). Geçmişte yaşanılan sakatlıklar da kaygı düzeylerini anlamlı olarak farklılaştırmaktadır (p<0.05).

Bu bilgiler ışığında futbolcuların yaşamış olduğu sakatlık geçmişinin kaygı düzeylerini de arttırdığı, bu durumun sporcunun performansına olumsuz etkilerinin olabileceği söylenebilir. Dolayısıyla futbolcuların spor yaralanmaları konusunda bilinçli hale gelmesi ve güncel



gelişmeleri yakından takip etmesi önerilmektedir. Bununla birlikte sakatlık yaşayan bir sporcunun rehabilitasyon ve sahaya dönüş sürecinde antrenörlerin de sorumluluğu büyüktür. Antrenör, zihinsel olumsuzlukların önüne geçme amacıyla sporcuyla yakından ilgilenmeli ve gerekli durumlarda spor psikologlarından yardım alınması konusunda teşvik edici rol üstlenmelidir.

Anahtar Kelimeler: Futbol, sakatlık, kaygı, antrenör.

# EXAMINATION OF AMATEUR LEAGUE FOOTBALL PLAYERS ANXIETY LEVELS TOWARDS INJURY

## **ABSTRACT**

In order to increase sportive success, it is not enough to have a high physical capacity alone. Considering today's conditions, the psychological state of athletes is at least as important as their physical capacity. The factors that affect the anxiety of athletes towards injury by being exposed to internal and external factors are also a matter of curiosity. In this study, it was aimed to examine the injury anxiety levels of players playing in amateur football clubs according to certain demographic variables.

The study was conducted with the causal comparison model, one of the general survey models. The population of the study consists of amateur football players playing in amateur football clubs on the European side. The sample consists of 88 athletes licensed in 5 football clubs active in Çorlu, Kapaklı and Çerkezköy districts. The sample group was determined by simple random method. In determining the injury anxiety levels of the athletes, the Sports Injury Anxiety Scale developed by Rex and Metzler (2016) and adapted and translated into Turkish by Caz et al. (2019) was used. As a result of the examination with the SPSS 24.0 statistical program, it was determined that the data were not normally distributed. Mann- Whitney U and Kruskal-Wallis Test were used in data analysis.

According to the results of the study, it was determined that injury anxiety levels of amateur football players did not differ significantly according to education level, age, position and age of playing football (p>0.05). However, it was revealed that there was a significant difference in the level of anxiety in athletes with a history of injury, and the duration of injury was one of the factors that increased the level of anxiety (p<0.05). Past injuries also significantly differentiate anxiety levels (p<0.05).

Based on this information, it can be said that the injury history of football players increases their anxiety levels and this situation may have negative effects on the performance of the athlete. Therefore, it is recommended that football players should become aware of sports injuries and follow current developments closely. In addition, coaches have a great responsibility in the rehabilitation and return to the field process of an injured athlete. The coach should take a close interest in the athlete in order to prevent mental negativities and should take an encouraging role in getting help from sports psychologists when necessary.

**Keywords:** Football, injury, anxiety, coach.



# A COMPARISON OF SVM-BASED CRITERIA IN EVOLUTIONARY METHOD FOR GENE SELECTION AND CLASSIFICATION OF MICROARRAY DATA

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#### **Abstract:**

An evolutionary method whose selection and recombination operations are based on generalization error-bounds of support vector machine (SVM) can select a subset of potentially informative genes for SVM classifier very efficiently [7]. In this paper, we will use the derivative of error-bound (first-order criteria) to select and recombine gene features in the evolutionary process, and compare the performance of the derivative of error-bound with the error-bound itself (zero-order) in the evolutionary process. We also investigate several error-bounds and their derivatives to compare the performance, and find the best criteria for gene selection and classification. We use 7 cancer-related human gene expression datasets to evaluate the performance of the zero-order and first-order criteria of error-bounds. Though both criteria have the same strategy in theoretically, experimental results demonstrate the best criterion for microarray gene expression data.

**Keywords:** support vector machine, generalization error-bound, feature selection, evolutionary algorithm, microarray data



# BIOEFFICACY OF SOME OIL-MIXED PLANT DERIVATIVES AGAINST AFRICAN MUD CATFISH (CLARIAS GARIEPINUS) BEETLES, DERMESTES MACULATUS AND NECROBIA RUFIPES

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## **Abstract:**

The efficacy of the separate mixing of four tropical spicy and medicinal plant products: Dennettia tripetala Baker (pepper fruit), Eugenia aromatica Hook (clove), Piper guineense (Schum and Thonn) (black pepper) and Monodora myristica (Dunal) (African nut-meg) with a household vegetable oil was evaluated under tropical storage conditions for the control and reproductive performance of Dermestes maculatus (De Geer) (hide beetle) and Necroba rufipes (De Geer) (copra beetle) on African catfish, Clarias gariepinus (Burchell). Each of the plant materials was pulverized into powder and applied as a mix of 1ml of oil and plant powder at 2.5, 5.0, 7.5 and 10.0g per 100g of dried fish, and allowed to dry for 6h. Each of the four oilmixed powder treatments evoked significant (P < 05) mortalities of the two insects compared with the control (oil only) at 1, 3 and 7 days post treatment. The oil-powder mixture dosages did not prevent insect egg hatchability but while the emergent larvae on the treated samples died, the emergent larvae in the control survived into adults. The application of oil-mixed powders effectively suppressed the emergence of the larvae of the beetles. Similarly, each of the oil-powder mixtures significantly reduced weight loss in smoked fish that were exposed to D. maculatus and N. rufipes when compared to the control (P < 05). The results of this study suggest that the plant powders rather than the domestic oil demonstrated protective ability against the fish beetles and confirm the efficacy of the plant products as pest control agents.

**Keywords:** Catfish, Fish beetles, Fish preservation, Oil-powder mix, Plant products.



# THE ROLE OF IMMUNOGENIC ADHESIN VIBRIO ALGINOLYTICUS 49 K DA TO MOLECULE EXPRESSION OF MAJOR HISTOCOMPATIBILITY COMPLEX ON RECEPTORS OF HUMPBACK GROUPER CROMILEPTES ALTIVELIS

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### **Abstract:**

The purpose of research was to know the role of immunogenic protein of 49 kDa from V.alginolyticus which capable to initiate molecule expression of MHC Class II in receptor of Cromileptes altivelis. The method used was in vivo experimental research through testing of immunogenic protein 49 kDa from V.alginolyticus at Cromileptes altivelis (size of 250 - 300 grams) using 3 times booster by injecting an immunogenic protein in a intramuscular manner. Response of expressed MHC molecule was shown using immunocytochemistry method and SEM. Results indicated that adhesin V.alginolyticus 49 kDa which have immunogenic character could trigger expression of MHC class II on receptor of grouper and has been proven by staining using immunocytochemistry and SEM with labeling using antibody anti MHC (anti mouse). This visible expression based on binding between epitopes antigen and antibody anti MHC in the receptor. Using immunocytochemistry, intracellular response of MHC to in vivo induction of immunogenic adhesin from V.alginolyticus was shown.

**Keywords:** C.altivelis, immunogenic, MHC, V.alginolyticus.



# IDENTIFICATION CHARACTERIZATION AND PRODUCTION OF PHYTASE FROM ENDOPHYTIC FUNGI

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## **Abstract:**

Phytases are acid phosphatase enzymes, which efficiently cleave phosphate moieties from phytic acid, thereby generating myo-inositol and inorganic phosphate. Thirty four isolates of endophytic fungi to produce of phytases were isolated from leaf, stem and root fragments of soybean. Screening of 34 isolates of endophytic fungi identified the phytases produced by Rhizoctonia sp. and Fusarium verticillioides. The phytase production were the best induced by phytic acid and rice bran compared the others inducer in submerged fermentation medium used. The phytase produced by both Rhizoctonia sp. and F. verticillioides have pH optimum at 4.0 and 5.0 respectively. The characterization of phytase from Fusarium verticillioides showed that temperature optimum was 500C and stability until 600C, the pH optimum 5.0 and pH stability was 2.5 – 6.0, and substrate specificity were rice bran>soybean meal>corn> coconut cake, respectively.

Keywords: endophytic fungus, phytase, soybean, Rhizoctoniasp., Fusarium verticillioides,



# DIRECT AND INDIRECT SOMATIC EMBRYOGENESIS FROM PETIOLE AND LEAF EXPLANTS OF PURPLE FAN FLOWER (SCAEVOLA AEMULA R. BR. CV. 'PURPLE FANFARE')

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## **Abstract:**

Direct and indirect somatic embryogenesis (SE) from petiole and leaf explants of Scaevola aemula R. Br. cv. 'Purple Fanfare' was achieved. High frequency of somatic embryos was obtained directly from petiole and leaf explants using an inductive plant growth regulator signal thidiazuron (TDZ). Petiole explants were more responsive to SE than leaves. Plants derived from somatic embryos of petiole explants germinated more readily into plants. SE occurred more efficiently in half-strength Murashige and Skoog (MS) medium than in full-strength MS medium. Non-embryogenic callus induced by 2, 4-dichlorophenoxyacetic acid was used to investigate the feasibility of obtaining SE with TDZ as a secondary inductive plant growth regulator (PGR) signal. Non-embryogenic callus of S. aemula was able to convert into an "embryogenic competent mode" with PGR signal. Protocol developed for induction of direct and indirect somatic embryogenesis in S. aemula can improve the large scale propagation system of the plant in future.

**Keywords:** Petiole and leaf explants, Scaevola aemula, Somaticembryogenesis



# STRUCTURAL BASIS OF RESISTANCE OF HELICOBACTERPYLORI DNAK TO ANTIMICROBIAL PEPTIDE PYRRHOCORICIN

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## **Abstract:**

Bacterial molecular chaperone DnaK plays an essential role in protein folding, stress response and transmembrane targeting of proteins. DnaKs from many bacterial species, including Escherichia coli, Salmonella typhimurium and Haemophilus infleunzae are the molecular targets for the insect-derived antimicrobial peptide pyrrhocoricin. Pyrrhocoricin-like peptides bind in the substrate recognition tunnel. Despite the high degree of crossspecies sequence conservation in the substrate-binding tunnel, some bacteria are not sensitive to pyrrhocoricin. This work addresses the molecular mechanism of resistance of Helicobacter pylori DnaK to pyrrhocoricin. Homology modelling, structural and sequence analysis identify a single aminoacid substitution at the interface between the lid and the  $\beta$ -sandwich subdomains of the DnaK substrate-binding domain as the major determinant for its resistance.

**Keywords:** Helicobacter pylori, molecular chaperone DnaK, pyrrhocoricin, structural biology.



# COMMUNITIES OF AMMONIA-OXIDIZING ARCHAEA AND BACTERIA IN ENRICHED NITRIFYING ACTIVATED SLUDGE

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#### **Abstract:**

In this study, communities of ammonia-oxidizing archaea (AOA) and ammonia-oxidizing bacteria (AOB) in nitrifying activated sludge (NAS) prepared by enriching sludge from a municipal wastewater treatment plant in three continuous-flow reactors receiving an inorganic medium containing different ammonium concentrations of 2, 10, and 30 mM NH4 +-N (NAS2, NAS10, and NAS30, respectively) were investigated using molecular analysis. Results suggested that almost all AOA clones from NAS2, NAS10, and NAS30 fell into the same AOA cluster and AOA communities in NAS2 and NAS10 were more diverse than those of NAS30. In contrast to AOA, AOB communities obviously shifted from the seed sludge to enriched NASs and in each enriched NAS, communities of AOB varied particularly. The seed sludge contained members of N. communis cluster and N. oligotropha cluster. After it was enriched under various ammonium loads, members of N. communis cluster disappeared from all enriched NASs. AOB with high affinity to ammonia presented in NAS 2, AOB with low affinity to ammonia presented in NAS 30, and both types of AOB survived in NAS 10. These demonstrated that ammonium load significantly influenced AOB communities, but not AOA communities in enriched NASs.

**Keywords:** ammonia-oxidizing bacteria, ammonia-oxidizingarchaea, nitrifying activated sludge.



# HUMAN ELASTIN-DERIVED BIOMIMETIC COATING SURFACE TO SUPPORT CELL GROWTH

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#### Abstract:

A new sythetic gene coding for a Human Elastin-Like Polypeptide was constructed and expressed. The recombinant product was tested as coating agent to realize a surface suitable for cell growth. Coatings showed peculiar features and different human cell lines were seeded and cultured. All cell lines tested showed to adhere and proliferate on this substrate that has been shown also to exert a specific effect on cells, depending on cell type.

**Keywords:** elastin, recombinant protein, coating, cell adhesion.



# A REPORT ON OCCURRENCE AND PARASITE-HOST OF LIGULA INTESTINALIS IN SATTARKHAN LAKE(EAST AZERBAIJAN-IRAN)

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### **Abstract:**

Ligula intestinalis is a three-host life-cycle Pseudophyllidean Cestode which in its plerocercoid stage infests a range of fresh water species. The objective of the present study was the worm occurrence within planctonic copepods, fishes and piscivorous birds and examine of parasitehosts samples in the Lake of Sattarkhan Dam (near the city of Ahar, East Azerbaijan, Iran). Fish sample were collected with fyke and gill nets and the abdominal cavity was examined for the presence of ligula. Zooplanktons were captured using a planktonic net and occurrence of parasitic larval form in the body cavity was determined. Piscivorous birds were selected by telescope, they hunted and dissected for presence of parasite eggs in their gut. Results indicated that prevalence of infection was 16% for cyclopid copepoda and majority of infected cyclopid were female Cyclops. Investigation of 310 fishes specimens were indicated to infection of five species of cyprinid fishes. In addition, results indicated to manipulation of six species of migratory aquatic and semi aquatic birds by ligula. Obtained results are in agreement by previous studies. Its definite in this study that all of fishes in Sattarkhan Lake capable to infection, its important for health because they capture by native people and it is documented that ligula can be introduce as a zoonose. It's seemed that to prevent from disperses of parasite and restricted of infection, biological elimination can be effective and it's necessary to inform native people about sanitation.

**Keywords:** Ligula intestinalis, parasite-host, Sattarkhan Lake, Iran.



# VOCAL COMMUNICATION IN SOOTY-HEADED BULBUL; PYCNONOTUS AURIGASTER

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### **Abstract:**

Studies of vocal communication in Sooty-headed Bulbul were carried out from January to December 2011. Vocal recordings and behavioral observations were made in their natural habitats at some localities of Lampang, Thailand. After editing, cuts of high quality recordings were analyzed with the help of Avisoft- SASLab Pro (version 4.40) software. More than one thousand element repertoires in five groups were found within two vocal structures. The two structures were short sounds with single element and phrases composed of elements, the frequency ranged from 1-10 kHz. Most phrases were composed of 2 to 5 elements that were often dissimilar in structure, however, these phrases were not as complex as song phrases. The elements and phrases were combined to form many patterns. The species used ten types of calls; i.e. alert, alarm, aggressive, begging, contact, courtship, distress, exciting, flying and invitation. Alert and contact calls were used more frequently than other calls. Aggressive, alarm and distress calls could be used for interspecific communication among some other bird species in the same habitats.

Keywords: Vocal communication, Call, Bird, Sooty-headed Bulbul



# THE IMPACT OF COPPER AND ZINC DEFICIENCY ON MILK PRODUCTION PERFORMANCES OF INTENSIVELY GRAZED DAIRY COWS ON THE NORTHEAST OF ROMANIA

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### Abstract:

The influence of copper and zinc supplements on milk production performances and health indicators was tested in a 20- week feeding trial, with 40 Holstein-Friesian lactating cows, devided in four groups (copper, zinc, copper-zinc and control). Correlations of the Cu and Zn plasma values with some animal performance criteria of health (body condition score and somatic cell counts) and production (milk yield, peak milk yield, fat and crude protein content) were done. During the 140 days of the experiment, the two added minerals caused a statistically significant increase (p < 0.05) of their plasma values after the peak of the cows' lactations. It was also observed that subjects that have received copper and zinc supplements had the lowest number of somatic cell counts in milk. The Pearson correlation test showed a positive corellation (p = 0.007, r = + 0.851) between the plasma Zn and the milk production. The improvement of the nutritional status improved the milk production performances of the cows as well as their health performances.

Keywords: Copper, dairy cows, health, milk production, zinc



# TUBERCULIN, TETANUS IMMUNOGLOBULIN AND DPT VACCINE AS AN AVIAN IN VIVO T- LYMPHOCYTE MITOGENS

## **Ibrahim Mohammed Saeed Shnawa**

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Abstract:

The avian phytohaemagglutinin skin test is being proved as an in vivo system for the evaluation an avian in vivo T cell mitogenicity. The test system was one week old Gallus domesticus broiler Chickens. Five replicates were done for each of the whole, 1:10 dilutions of each of 0.05 IU tuberculin, tetanus immunoglobulin and DPT vaccine as test materials. The evaluation parameters were the skin indurations and lymphoblast percentages in bone marrow lymphocytes. Tuberculin indurations were 2.06 and 1.26mm for 0.05 IU respectively while lymphoblast percent were 0.234 and 0.1 accordingly. The skin indurations of 135mg/ml and 1.35mg/ml tetanus immunoglobulin were 4.86 and 3.96mm while lymphoblast percentages were 0.3 and 0.14 respectively. The whole DPT and 1:10 concentration were with 4.5 and 3.2mm while their lymphoblast percentages were 0.28 and 0.12 accordingly. Thus the mitogenicity of the test materials was of dependant type.

Keywords: DPT, Mitogenicity, Tetenus, immunoglobulin, Tubercular.



# THE APPROPRIATE TIME REQUIRED FOR NEWBORN CALF CAMEL TO GET OPTIMAL AMOUNT OF COLOSTRUMS IMMUNOGLOBULIN (IGG) WITH RELATION TO LEVELS OF CORTISOL AND THYROXIN

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### **Abstract:**

A major challenge in camel productivity is the high mortality rate of camel calves in the early stage due to the lack of colostrums. This study investigates the time required for the calves to obtain the optimum amount of the immunoglobulin (IgG). Eleven pregnant female camels (Camelus Dromedarus) were selected randomly and variant in age and gestation. After delivery, 7 calves were obtained and used for this investigation. Colostrum samples were collected from mothers immediately after parturition. Blood samples were obtained from the calves as follow: 0 day (before suckling), 24, 48, 72, 96, 120 and 144 hours, 2nd, 3rd, and 4th weeks post suckling. Blood serum and colostrums whey were separated and used to determine IgG concentration, total protein and concentration of Cortisol and Thyroxin. The results showed high levels of IgG in camel colostrums (328.8  $\pm$  4.5 mg/ml). The IgG concentration in serum of calves was the highest within 1st 24 h after suckling (140.75 mg/ml), and then declined gradually reached lower level at 144 h (41.97 mg/ml). The average turnover rate (t 1/2) of serum IgG in the all cases was 3.22 days. The turnover of ranged from 2.56 days for calves have values of IgG more than average and 7.7 days for those with values below average. In spite of very high levels of thyroxin in sera of new born the results showed no correlation between cortisol and thyroxin with IgG levels.

**Keywords:** Camel, cortisol, IgG, thyroxin, turn-over rate.



# THE EFFECT OF GOAT MILK FRACTIONS SUPPLEMENTATION ON SERUM IGE RESPONSE AND LEUKOCYTES COUNT IN DINITROCHLOROBENZENE SENSITIZED RAT

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#### **Abstract:**

In Indonesia, goat milk is often consumed and believed as anti-allergy. The objective of this research was to study the effect of goat milk and their fractions (casein and whey) supplementation on total serum IgE concentrations and leukocytes count in rat sensitized with contact allergen dinitrochlorobenzene (DNCB). Female Wistar rats 6-8 weeks old were divided into four groups: 1) whey, 2) casein, 3) whole milk supplementation and 4) phosphate-buffered saline/PBS (control). The results showed that supplementation of goat milk on rats did not affects on total serum IgE concentrations and number of leukocytes. After sensitized with DNCB, the monocyte percentage in rats was higher (P<0.01) than before. In conclusion, goat milk or their fractions supplementation unable to decrease the total serum IgE concentrations and also had no effect on leukocytes count. However, 1% DNCB could increase the number of monocytes, but could not induce the IgE response.

**Keywords:** Dinitrochlorobenzene, Goat Milk Fractions, IgE, Leukocytes.



# EMBRYO TRANSFER AS AN ASSISTED REPRODUCTIVE TECHNOLOGY IN FARM ANIMALS

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### **Abstract:**

Various assisted reproductive techniques have been developed and refined to obtain a large number of offspring from genetically superior animals or obtain offspring from infertile (or subfertile) animals. The embryo transfer is one assisted reproductive technique developed well, aimed at increased productivity of selected females, disease control, importation and exportation of livestock, rapid screening of AI sires for genetically recessive characteristics, treatment or circumvention of certain types of infertility. Embryo transfer also is a useful research tool for evaluating fetal and maternal interactions. This technique has been applied to nearly every species of domestic animal and many species of wildlife and exotic animals, including humans and nonhuman primates. The successful of embryo transfers have been limited to within-animal, homologous replacement of the embryos. There are several examples of interspecific and intergeneric embryo transfers in which embryos implanted but did not develop to term: sheep and goat, mouse and rat. An immunological rejections and placental incompatibility between the embryo and the surrogate mother appear to restrict interspecific embryo transfer/interspecific pregnancy. Recently, preimplantation embryo manipulation procedures have been applied, such as technique of inner cell mass transfer. This technique will possible to overcome the reproductive barrier interspecific embryo transfer/interspecific pregnancy, if there is a protective mechanism which prevents recognition of the foreign fetus by the mother of the other species

**Keywords:** Embryo Transfer, Assisted Reproductive Techology, Intraspesific-Interspesific Pregnancy, Inner cell mass.



# ADDING OLIVE OIL INTO DILUENTS FOR IMPROVING SEMEN QUALITY AND STORAGE ABILITY OF ROOSTERS' SEMEN DURING LIQUID STORAGE

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### **Abstract:**

The aim of this study was to investigate the effects of supplementing the diluent of roosters' semen with different levels of olive oil on motility, viability, morphology and acrosome integrity of chicken spermatozoa after in vitro storage for up to 72 h. Semen was collected from 60 White Layer males (62 wk of age) kept in separated floor pens and randomly divided into six treatment groups (10 males in each group). Experimental groups were as follows: T1 :fresh semen, T2 : semen extended 1:1 with Al – Daraji 2 diluent (AD2D) alone, T3 – T6 :semen samples extended 1:1 with AD2D supplemented with 2 ml, 4 ml, 6 ml or 8 ml of olive oil / 100 ml of diluent, respectively. Semen samples were then stored at 5 °C for 24 h, 48 h or 72 h. There was a clear influence of diluent supplementation with olive oil on the spermatozoa motility profile; olive oil groups (T3, T4, T5 and T6) recorded the highest scores of mass activity and individual motility during all storage periods compared to T1 and T2 groups. In addition, the inclusion of olive oil into semen diluent (T3, T4, T5 and T6) gave significantly higher percentages of viable spermatozoa, normal morphologically spermatozoa and intact acrosomes irrespective of storage period. These results clearly show that supplementation the diluent of roosters' semen with olive oil can improve semen quality when semen samples in vitro stored at 5 °C for up to 72 h.

**Keywords:** Olive oil, diluent, liquid storage, semen quality of roosters.



### THE EFFECTS OF FEEDING RAW FIBER CONCENTRATE ON GROWTH PERFORMANCE AND BLOOD METABOLITES OF SUCKLING HOLSTEIN CALVES

#### Mehdi Dehghan-Banadaky, Fridoon Niazi, Mohsen Ghiasvand

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#### **Abstract:**

Sixteen female Holstein calves allocated in three treatments including: 1: control, 2: fed raw fiber concentrate (RFC) for 45 days and 3: fed RFC for 90 days. RFC supplement (Vitacel® 200) was added to milk immediately before feeding (10 g/L milk). Withers height and body weights of calves were measured monthly. Individual dry matter intake was recorded daily. Blood samples were taken monthly. The result showed that calves consumed RFC had significantly greater weaning and final body weight. Treatment effect on dry matter intake was not significant (p>0.05). Calves fed RFC had better feed efficiency. Withers height of calves fed RFC were taller than the control group (p<0.05). Plasma cholesterol and total proteins concentrations in calves fed RFC were less than control group. We conclude that feeding RFC for 45 or 90 days in suckling period caused to achieve better feed efficiency and higher growth performance in Holstein calves.

**Keywords:** Holstein calves, raw fiber concentrate, growth, blood metabolites.



# COMPARISON OF THE EFFECTS OF THREE DIFFERENT TYPES OF PROBIOTICS ON THE SUCRASE ACTIVITIES OF THE SMALL INTESTINE MUCOSA OF BROILER CHICKS

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#### **Abstract:**

An experiment was conducted to study the effects of different types of probiotic on Sucrase enzyme activity of the small intestine mucosa in male broilers. The experimental design was arranged as randomized completely blocks in 4 × 2 factorial arrangement of treatment. 180 male broilers of Ross 308 commercial hybrid were designated into 4 groups. Three replicates of 15 birds were assigned to each treatment. Control treatments (diet contained no probiotic) were fed according to the NRC as base diet and three treatment groups were fed from the same diet plus three different types of probiotics. Birds were slaughtered after 21 and 42 days and different segments of small intestine (at 1,10,30,50,70 and 90% of total length the small intestine) were taken from each replicates (N=2) Sucrase enzyme activities were measured and recorded. Obtained data were analyzed by Spss (P<0.05). In three treatment groups, probiotic had no significant effect on sucrase activity in different ages and segments of small intestine (P<0.05). These data suggested that probiotics administration had no significant effect on treatments comparing to the control group.

**Keywords:** Broiler, Chicks, Probiotics, Small Intestine, Sucrase



# SPERM PRODUCTION RATE, GONADAL AND EXTRAGONADAL SPERM RESERVES IN THE SOKOTO RED (MARADI) BUCK IN A TROPICAL ENVIRONMENT

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#### **Abstract:**

28 healthy adult Maradi bucks were used to evaluate sperm production and sperm storage capacity in the breed. Daily sperm production (DSP) averaged 0.55±0.05x109, while the daily sperm production/g (DSP/g) was 1.37±0.12 x107. Gonadal sperm reserve was 1.99±0.18 x109, while the caput, upper corpus and lower corpus averaged 0.58±0.04 x109, 0.36±0.02 x109 and 0.33±0.08 x109 respectively. The proximal cauda, mid cauda, distal cauda and ductus deferens had values of 0.68±0.10 x109, 1.23±0.16 x109,1.87±0. x109and 0.17±0.05 x109 respectively. The relative contributions of the respective epididymal sections and ductus deferens to the total extragonadal sperm reserves were, 11.11%, 6.89%, 6.32%, 13.03%, 23.56%, 35.82% and 3.26% respectively. Gonadal sperm reserves were significantly higher (p<0.05) than caput reserves, upper corpus reserves, lower corpus reserves, proximal cauda reserves and ductus deferens reserves. Gonadal reserves were however similar (p>0.05) to mid cauda and distal cauda epididymal reserves.

Keywords: Goats, Reserves, Sperm, Tropics



### INTERACTIVE FUZZY MULTI-OBJECTIVE PROGRAMMING IN LAND RE-ORGANISATIONAL PLANNING FOR SUSTAINABLE RURAL DEVELOPMENT

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#### **Abstract:**

Sustainability in rural production system can only be achieved if it can suitably satisfy the local requirement as well as the outside demand with the changing time. With the increased pressure from the food sector in a globalised world, the agrarian economy needs to re-organise its cultivable land system to be compatible with new management practices as well as the multiple needs of various stakeholders and the changing resource scenario. An attempt has been made to transform this problem into a multi-objective decisionmaking problem considering various objectives, resource constraints and conditional constraints. An interactive fuzzy multi-objective programming approach has been used for such a purpose taking a case study in Indian context to demonstrate the validity of the method.

**Keywords:** Land re-organisation, Crop planning, Multiobjective Decision-Making, Fuzzy Goal Programming.



### SPATIAL STRUCTURE AND SPATIAL IMPACTS OF THE JAKARTA METROPOLITAN AREA: A SOUTHEAST ASIAN EMR PERSPECTIVE

#### Ikhwan Hakim, Bruno Parolin

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#### **Abstract:**

This paper investigates the spatial structure of employment in the Jakarta Metropolitan Area (JMA), with reference to the concept of the Southeast Asian extended metropolitan region (EMR). A combination of factor analysis and local Getis-Ord (Gi\*) hot-spot analysis is used to identify clusters of employment in the region, including those of the urban and agriculture sectors. Spatial statistical analysis is further used to probe the spatial association of identified employment clusters with their surroundings on several dimensions, including the spatial association between the central business district (CBD) in Jakarta city on employment density in the region, the spatial impacts of urban expansion on population growth and the degree of urban-rural interaction. The degree of spatial interaction for the whole JMA is measured by the patterns of commuting trips destined to the various employment clusters. Results reveal the strong role of the urban core of Jakarta, and the regional CBD, as the centre for mixed job sectors such as retail, wholesale, services and finance. Manufacturing and local government services, on the other hand, form corridors radiating out of the urban core, reaching out to the agriculture zones in the fringes. Strong associations between the urban expansion corridors and population growth, and urban-rural mix, are revealed particularly in the eastern and western parts of JMA. Metropolitan wide commuting patterns are focussed on the urban core of Jakarta and the CBD, while relatively local commuting patterns are shown to be prevalent for the employment corridors.

**Keywords:** Jakarta Metropolitan Area, Southeast Asian EMR, spatial association, spatial statistics, spatial structure.



### SPATIAL PLANNING AS AN APPROACH TO ACHIEVE SUSTAINABLE DEVELOPMENT IN HISTORIC CITIES

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#### **Abstract:**

Sustainable development is a concept which was originated in Burtland commission in 1978. Although this concept was born with environmental aspects, it is penetrated in all areas rapidly, turning into a dominate view of planning. Concentrating on future generation issue, especially when talking about heritage has a long story. Each approach with all of its characteristics illustrates differences in planning, hence planning always reflects the dominate idea of its age. This paper studies sustainable development in planning for historical cities with the aim of finding ways to deal with heritage in planning for historical cities in Iran. Through this, it will be illustrated how challenges between sustainable concept and heritage could be concluded in planning. Consequently, the paper will emphasize on: Sustainable development in city planning Trends regarding heritage Challenges due to planning for historical cities in Iran For the first two issues, documentary method regarding the sustainable development and heritage literature is considered. As the next step focusing on Iranian historical cities require considering the urban planning and management structure and identifying the main challenges related to heritage, so analyzing challenges regarding heritage is considered. As the result it would be illustrated that key issue in such planning is active conservation to improve and use the potential of heritage while it's continues conservation is guaranteed. By emphasizing on the planning system in Iran it will be obvious that some reforms are needed in this system and its way of relating with heritage. The main weakness in planning for historical cities in Iran is the lack of independent city management. Without this factor achieving active conservation as the main factor of sustainable development would not be possible.

Keywords: Active conservation, city planning, heritage, sustainable development.



### POSSIBLE UTILIZATION OF CIGARETTE BUTTS IN LIGHT- WEIGHT FIRED CLAY BRICKS

#### Aeslina Abdul Kadir, Abbas Mohajerani

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#### **Abstract:**

Over a million tonnes of cigarette butts (CBs) are produced worldwide annually. These CBs accumulate in the environment due to the poor biodegradability of the cellulose acetate filters and pose a serious environmental risk. This paper presents some of the results from a continuing study on recycling CBs into fired clay bricks. Properties including compressive strength, flexural strength, density, water absorption and thermal conductivity of fired clay bricks are reported and discussed. Furthermore, leaching of heavy metals from the manufactured clay bricks was tested. The results show that the density of fired bricks was reduced by about 8 – 30 %, depending on the percentage of CBs incorporated into the raw materials. The compressive strength of bricks tested was 12.57, 5.22 and 3.00 MPa for 2.5, 5.0 and 10 % CB content respectively. Water absorption and initial rate of absorption values increased as density, and hence porosity, of bricks decreased with increasing CB volume. The leaching test results revealed trace amounts of heavy metals.

**Keywords:** Cigarette butts, Fired clay bricks, Light bricks, Recycling waste, Thermal conductivity.



# DIGITAL FILTERS FOR HOT-MIX ASPHALT COMPLEX MODULUS TEST DATA USING GENETIC ALGORITHM STRATEGIES

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#### **Abstract:**

The dynamic or complex modulus test is considered to be a mechanistically based laboratory test to reliably characterize the strength and load-resistance of Hot-Mix Asphalt (HMA) mixes used in the construction of roads. The most common observation is that the data collected from these tests are often noisy and somewhat non-sinusoidal. This hampers accurate analysis of the data to obtain engineering insight. The goal of the work presented in this paper is to develop and compare automated evolutionary computational techniques to filter test noise in the collection of data for the HMA complex modulus test. The results showed that the Covariance Matrix Adaptation-Evolutionary Strategy (CMA-ES) approach is computationally efficient for filtering data obtained from the HMA complex modulus test.

**Keywords:** HMA, dynamic modulus, GA, evolutionary computation.



### PERFORMANCE ASSESSMENT OF COMPUTATIONAL GRIDON WEATHER INDICES FROM HOAPS DATA

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#### Abstract:

Long term rainfall analysis and prediction is a challenging task especially in the modern world where the impact of global warming is creating complications in environmental issues. These factors which are data intensive require high performance computational modeling for accurate prediction. This research paper describes a prototype which is designed and developed on grid environment using a number of coupled software infrastructural building blocks. This grid enabled system provides the demanding computational power, efficiency, resources, user-friendly interface, secured job submission and high throughput. The results obtained using sequential execution and grid enabled execution shows that computational performance has enhanced among 36% to 75%, for decade of climate parameters. Large variation in performance can be attributed to varying degree of computational resources available for job execution. Grid Computing enables the dynamic runtime selection, sharing and aggregation of distributed and autonomous resources which plays an important role not only in business, but also in scientific implications and social surroundings. This research paper attempts to explore the grid enabled computing capabilities on weather indices from HOAPS data for climate impact modeling and change detection.

Keywords: Climate model, Computational Grid, GridApplication, Heterogeneous Grid



### ENHANCED CLUSTERING ANALYSIS AND VISUALIZATION USING KOHONEN'S SELF-ORGANIZING FEATURE MAP NETWORKS

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#### **Abstract:**

Cluster analysis is the name given to a diverse collection of techniques that can be used to classify objects (e.g. individuals, quadrats, species etc). While Kohonen's Self-Organizing Feature Map (SOFM) or Self-Organizing Map (SOM) networks have been successfully applied as a classification tool to various problem domains, including speech recognition, image data compression, image or character recognition, robot control and medical diagnosis, its potential as a robust substitute for clustering analysis remains relatively unresearched. SOM networks combine competitive learning with dimensionality reduction by smoothing the clusters with respect to an a priori grid and provide a powerful tool for data visualization. In this paper, SOM is used for creating a toroidal mapping of two-dimensional lattice to perform cluster analysis on results of a chemical analysis of wines produced in the same region in Italy but derived from three different cultivators, referred to as the "wine recognition data" located in the University of California-Irvine database. The results are encouraging and it is believed that SOM would make an appealing and powerful decision-support system tool for clustering tasks and for data visualization.

**Keywords:** Artificial neural networks, cluster analysis, Kohonen maps, wine recognition.



### THE EFFECT OF CONFINEMENT SHAPES ON OVER-REINFORCED HSC BEAMS

#### Ross Jeffry, Muhammad N. S. Hadi

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#### **Abstract:**

High strength concrete (HSC) provides high strength but lower ductility than normal strength concrete. This low ductility limits the benefit of using HSC in building safe structures. On the other hand, when designing reinforced concrete beams, designers have to limit the amount of tensile reinforcement to prevent the brittle failure of concrete. Therefore the full potential of the use of steel reinforcement can not be achieved. This paper presents the idea of confining concrete in the compression zone so that the HSC will be in a state of triaxial compression, which leads to improvements in strength and ductility. Five beams made of HSC were cast and tested. The cross section of the beams was 200×300 mm, with a length of 4 m and a clear span of 3.6 m subjected to four-point loading, with emphasis placed on the midspan deflection. The first beam served as a reference beam. The remaining beams had different tensile reinforcement and the confinement shapes were changed to gauge their effectiveness in improving the strength and ductility of the beams. The compressive strength of the concrete was 85 MPa and the tensile strength of the steel was 500 MPa and for the stirrups and helixes was 250 MPa. Results of testing the five beams proved that placing helixes with different diameters as a variable parameter in the compression zone of reinforced concrete beams improve their strength and ductility.

**Keywords:** Confinement, ductility, high strength concrete, reinforced concrete beam.



# PREDICTION OF DISSOLVED OXYGEN IN RIVERS USING A WANG-MENDEL METHOD – CASE STUDY OF AU SABLE RIVER

#### Mahmoud R. Shaghaghian

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#### **Abstract:**

Amount of dissolve oxygen in a river has a great direct affect on aquatic macroinvertebrates and this would influence on the region ecosystem indirectly. In this paper it is tried to predict dissolved oxygen in rivers by employing an easy Fuzzy Logic Modeling, Wang Mendel method. This model just uses previous records to estimate upcoming values. For this purpose daily and hourly records of eight stations in Au Sable watershed in Michigan, United States are employed for 12 years and 50 days period respectively. Calculations indicate that for long period prediction it is better to increase input intervals. But for filling missed data it is advisable to decrease the interval. Increasing partitioning of input and output features influence a little on accuracy but make the model too time consuming. Increment in number of input data also act like number of partitioning. Large amount of train data does not modify accuracy essentially, so, an optimum training length should be selected.

**Keywords:** Dissolved oxygen, Au Sable, fuzzy logic modeling, Wang Mendel.



### A SYSTEMS MODELING APPROACH TO SUPPORT ENVIRONMENTALLY SUSTAINABLE BUSINESS DEVELOPMENT IN MANUFACTURING SMES

#### Manuel Seidel, Rainer Seidel, Des Tedford, Richard Cross, Logan Wait

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#### **Abstract:**

Small and Medium Sized Enterprises (SMEs) play an important role in many economies. In New Zealand, for example, 97% of all manufacturing companies employ less than 100 staff, and generate the predominant part of this industry sector-s economic output. Manufacturing SMEs as a group also have a significant impact on the environment. This situation is similar in many developed economies, including the European Union. Sustainable economic development therefore needs to strongly consider the role of manufacturing SMEs, who generally find it challenging to move towards more environmentally friendly business practices. This paper presents a systems thinking approach to modelling and understanding the factors which have an influence on the successful uptake of environmental practices in small and medium sized manufacturing companies. It presents a number of causal loop diagrams which have been developed based on primary action research, and a thorough understanding of the literature in this area. The systems thinking model provides the basis for further development of a strategic framework for the successful uptake of environmental innovation in manufacturing SMEs.

**Keywords:** Environmentally benign manufacturing, SMEs, Systems modeling.



### PROCESS-BASED BUSINESS TRANSFORMATION THROUGH SERVICES COMPUTING

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#### **Abstract:**

Business transformation initiatives are required by any organization to jump from its normal mode of operation to the one that is suitable for the change in the environment such as competitive pressures, regulatory requirements, changes in labor market, etc., or internal such as changes in strategy/vision, changes in the capability, change in the management, etc. Recent advances in information technology in automating the business processes have the potential to transform an organization to provide it with a sustained competitive advantage. Process constitutes the skeleton of a business. Thus, for a business to exist and compete well, it is essential for the skeleton to be robust and agile. This paper details "transformation" from a business perspective, methodologies to bring about an effective transformation, process-based transformation, and the role of services computing in this. Further, it details the benefits that could be achieved through services computing.

**Keywords:** Business Transformation, Services Oriented Architecture, Business Processes, Process-based Transformation.



### PROPOSING ENTERPRISE WIDE INFORMATION SYSTEMS BUSINESS PERFORMANCE MODEL

#### **Vineet Kansal**

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#### **Abstract:**

Enterprise Wide Information Systems (EWIS) implementation involves the entire business and will require changes throughout the firm. Because of the scope, complexity and continuous nature of ERP, the project-based approach to managing the implementation process resulted in failure rates of between 60% and 80%. In recent years ERP systems have received much attention. The organizational relevance and risk of ERP projects make it important for organizations to focus on ways to make ERP implementation successful. Once these systems are in place, however, their performance depends on the identified macro variables viz. 'Business Process', 'Decision Making' and 'Individual / Group working'. The questionnaire was designed and administered. The responses from 92 organizations were compiled. The relationship of these variables with EWIS performance is analyzed using inferential statistical measurements. The study helps to understand the performance of model presented. The study suggested in keeping away from the calamities and thereby giving the necessary competitive edge. Whenever some discrepancy is identified during the process of performance appraisal care has to be taken to draft necessary preventive measures. If all these measures are taken care off then the EWIS performance will definitely deliver the results.

**Keywords:** Enterprise Systems, performance, technology



#### CONCEPTUAL METHOD FOR FLEXIBLE BUSINESS PROCESS MODELING

#### Adla Bentellis, Zizette Boufaïda

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#### **Abstract:**

Nowadays, the pace of business change is such that, increasingly, new functionality has to be realized and reliably installed in a matter of days, or even hours. Consequently, more and more business processes are prone to a continuous change. The objective of the research in progress is to use the MAP model, in a conceptual modeling method for flexible and adaptive business process. This method can be used to capture the flexibility dimensions of a business process; it takes inspiration from modularity concept in the object oriented paradigm to establish a hierarchical construction of the BP modeling. Its intent is to provide a flexible modeling that allows companies to quickly adapt their business processes.

**Keywords:** Business Process, Business process modeling, flexibility, MAP Model.



### USING ONTOLOGY SEARCH IN THE DESIGN OF CLASS DIAGRAM FROM BUSINESS PROCESS MODEL

#### Wararat Rungworawut, Twittie Senivongse

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#### **Abstract:**

Business process model describes process flow of a business and can be seen as the requirement for developing a software application. This paper discusses a BPM2CD guideline which complements the Model Driven Architecture concept by suggesting how to create a platform-independent software model in the form of a UML class diagram from a business process model. An important step is the identification of UML classes from the business process model. A technique for object-oriented analysis called domain analysis is borrowed and key concepts in the business process model will be discovered and proposed as candidate classes for the class diagram. The paper enhances this step by using ontology search to help identify important classes for the business domain. As ontology is a source of knowledge for a particular domain which itself can link to ontologies of related domains, the search can give a refined set of candidate classes for the resulting class diagram.

**Keywords:** Business Process Model, Model DrivenArchitecture, Ontology, UML Class Diagram.



### A QUANTITATIVE APPROACH TO STRATEGIC DESIGN OF COMPONENT-BASED BUSINESS PROCESS MODELS

#### Eakong Atiptamvaree, Twittie Senivongse

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#### **Abstract:**

A new paradigm for software design and development models software by its business process, translates the model into a process execution language, and has it run by a supporting execution engine. This process-oriented paradigm promotes modeling of software by less technical users or business analysts as well as rapid development. Since business process models may be shared by different organizations and sometimes even by different business domains, it is interesting to apply a technique used in traditional software component technology to design reusable business processes. This paper discusses an approach to apply a technique for software component fabrication to the design of process-oriented software units, called process components. These process components result from decomposing a business process of a particular application domain into subprocesses with an aim that the process components can be reusable in different process-based software models. The approach is quantitative because the quality of process component design is measured from technical features of the process components. The approach is also strategic because the measured quality is determined against business-oriented component management goals. A software tool has been developed to measure how good a process component design is, according to the required managerial goals and comparing to other designs. We also discuss how we benefit from reusable process components.

**Keywords:** Business process model, process component, component management goals, measurement



# A NEW DIMENSION OF BUSINESS INTELLIGENCE: LOCATION-BASED INTELLIGENCE

#### Zeljko Panian

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#### **Abstract:**

Through the course of this paper we define Locationbased Intelligence (LBI) which is outgrowing from process of amalgamation of geolocation and Business Intelligence. Amalgamating geolocation with traditional Business Intelligence (BI) results in a new dimension of BI named Location-based Intelligence. LBI is defined as leveraging unified location information for business intelligence. Collectively, enterprises can transform location data into business intelligence applications that will benefit all aspects of the enterprise. Expectations from this new dimension of business intelligence are great and its future is obviously bright.

**Keywords:** Business intelligence, geolocation, location-based intelligence, innovation, location-intelligent business



#### COMPUTATIONAL MODELING IN STRATEGIC MARKETING

#### Petr Cernohorsky, Jan Voracek

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#### **Abstract:**

Well-developed strategic marketing planning is the essential prerequisite for establishment of the right and unique competitive advantage. Typical market, however, is a heterogeneous and decentralized structure with natural involvement of individual or group subjectivity and irrationality. These features cannot be fully expressed with one-shot rigorous formal models based on, e.g. mathematics, statistics or empirical formulas. We present an innovative solution, extending the domain of agent based computational economics towards the concept of hybrid modeling in service provider and consumer market such as telecommunications. The behavior of the market is described by two classes of agents - consumer and service provider agents whose internal dynamics are fundamentally different. Customers are rather free multi-state structures, adjusting behavior and preferences quickly in accordance with time and changing environment. Producers, on the contrary, are traditionally structured companies with comparable internal processes and specific managerial policies. Their business momentum is higher and immediate reaction possibilities limited. This limitation underlines importance of proper strategic planning as the main process advising managers in time whether to continue with more or less the same business or whether to consider the need for future structural changes that would ensure retention of existing customers or acquisition of new ones.

**Keywords:** Agent-based computational economics, hybrid modeling, strategic marketing, system dynamics.



# EFFECT OF COLLECTOR ASPECT RATIO ON THE THERMAL PERFORMANCE OF WAVY FINNED ABSORBER SOLAR AIR HEATER

#### Abhishek Priyam, Prabha Chand

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#### **Abstract:**

A theoretical investigation on the effect of collector aspect ratio on the thermal performance of wavy finned absorber solar air heaters has been performed. For the constant collector area, the various performance parameters have been calculated for plane and wavy finned solar air heaters. It has been found that the performance of wavy finned solar air heater improved with the increase in the collector aspect ratio. The performance of wavy finned solar air heater has been found 30 percent higher than those of plane solar air heater. The obtained results for wavy fin solar air heaters are compared with the available experimental data of most common type solar air heaters.

**Keywords:** Wavy fin, aspect ratio, solar air heater, thermal efficiency, collector efficiency factor, temperature rise.



# SIMILITUDE FOR THERMAL SCALE-UP OF A MULTIPHASE THERMOLYSIS REACTOR IN THE CU-CL CYCLE OF A HYDROGEN PRODUCTION

#### Mohammed W. Abdulrahman

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#### **Abstract:**

The thermochemical copper-chlorine (Cu-Cl) cycle is considered as a sustainable and efficient technology for a hydrogen production, when linked with clean-energy systems such as nuclear reactors or solar thermal plants. In the Cu-Cl cycle, water is decomposed thermally into hydrogen and oxygen through a series of intermediate reactions. This paper investigates the thermal scale up analysis of the three phase oxygen production reactor in the Cu-Cl cycle, where the reaction is endothermic and the temperature is about 530 °C. The paper focuses on examining the size and number of oxygen reactors required to provide enough heat input for different rates of hydrogen production. The type of the multiphase reactor used in this paper is the continuous stirred tank reactor (CSTR) that is heated by a half pipe jacket. The thermal resistance of each section in the jacketed reactor system is studied to examine its effect on the heat balance of the reactor. It is found that the dominant contribution to the system thermal resistance is from the reactor wall. In the analysis, the Cu-Cl cycle is assumed to be driven by a nuclear reactor where two types of nuclear reactors are examined as the heat source to the oxygen reactor. These types are the CANDU Super Critical Water Reactor (CANDU-SCWR) and High Temperature Gas Reactor (HTGR). It is concluded that a better heat transfer rate has to be provided for CANDU-SCWR by 3-4 times than HTGR. The effect of the reactor aspect ratio is also examined in this paper and is found that increasing the aspect ratio decreases the number of reactors and the rate of decrease in the number of reactors decreases by increasing the aspect ratio. Finally, a comparison between the results of heat balance and existing results of mass balance is performed and is found that the size of the oxygen reactor is dominated by the heat balance rather than the material balance.

**Keywords:** Clean energy, Cu-Cl cycle, heat transfer, sustainable energy.



# ENHANCEMENT OF THERMAL PERFORMANCE OF LATENT HEAT SOLAR STORAGE SYSTEM

#### Rishindra M. Sarviya, Ashish Agrawal

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#### **Abstract:**

Solar energy is available abundantly in the world, but it is not continuous and its intensity also varies with time. Due to above reason the acceptability and reliability of solar based thermal system is lower than conventional systems. A properly designed heat storage system increases the reliability of solar thermal systems by bridging the gap between the energy demand and availability. In the present work, two dimensional numerical simulation of the melting of heat storage material is presented in the horizontal annulus of double pipe latent heat storage system. Longitudinal fins were used as a thermal conductivity enhancement. Paraffin wax was used as a heat-storage or phase change material (PCM). Constant wall temperature is applied to heat transfer tube. Presented two-dimensional numerical analysis shows the movement of melting front in the finned cylindrical annulus for analyzing the thermal behavior of the system during melting.

**Keywords:** Latent heat, numerical study, phase change material, solar energy.



# TECHNICAL ANALYSIS OF COMBINED SOLAR WATER HEATING SYSTEMS FOR COLD CLIMATE REGIONS

#### Hossein Lotfizadeh, André McDonald, Amit Kumar

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#### **Abstract:**

Renewable energy resources, which can supplement space and water heating for residential buildings, can have a noticeable impact on natural gas consumption and air pollution. This study considers a technical analysis of a combined solar water heating system with evacuated tube solar collectors for different solar coverage, ranging from 20% to 100% of the total roof area of a typical residential building located in Edmonton, Alberta, Canada. The alternative heating systems were conventional (non-condensing) and condensing tankless water heaters and condensing boilers that were coupled to solar water heating systems. The performance of the alternative heating systems was compared to a traditional heating system, consisting of a conventional boiler, applied to houses of various gross floor areas. A comparison among the annual natural gas consumption, carbon dioxide (CO<sub>2</sub>) mitigation, and emissions for the various house sizes indicated that the combined solar heating system can reduce the natural gas consumption and CO<sub>2</sub> emissions, and increase CO<sub>2</sub> mitigation for all the systems that were studied. The results suggest that solar water heating systems are potentially beneficial for residential heating system applications in terms of energy savings and CO<sub>2</sub> mitigation.

**Keywords:** CO2 emissions, CO2 mitigation, natural gas consumption, solar water heating system, tankless water heater.



### An EXPERIMENTAL STUDY ON EVACUATED TUBE SOLAR COLLECTOR FOR STEAM GENERATION IN INDIA

#### Avadhesh Yadav, Anunaya Saraswat

National Institute of Technology, India

#### **Abstract:**

An evacuated tube solar collector is experimentally studied for steam generation. When the solar radiation falls on evacuated tubes, this energy is absorbed by the tubes and transferred to water with natural conduction and convection. A natural circulation of water occurs due to the inclination in tubes and header. In this experimental study, the efficiency of collector has been calculated. The result shows that the collector attains the maximum efficiency of 46.26% during 14:00 to 15:00h. Steam has been generated for two hours from 13:30 to 15:30 h on a winter day. Maximum solar intensity and maximum ambient temperatures are 795W/m² and 19°C respectively on this day.

**Keywords:** Evacuated tube, solar collector, hot water, steam generation.



### COUPLING HEAT AND MASS TRANSFER FOR HYDROGEN-ASSISTED SELF-IGNITION BEHAVIORS OF PROPANE-AIR MIXTURES IN CATALYTIC MICRO-CHANNELS

#### Junjie Chen, Deguang Xu

Henan Polytechnic University, China

#### **Abstract:**

Transient simulation of the hydrogen-assisted self-ignition of propane-air mixtures were carried out in platinum-coated micro-channels from ambient cold-start conditions, using a twodimensional model with reduced-order reaction schemes, heat conduction in the solid walls, convection and surface radiation heat transfer. The self-ignition behavior of hydrogen-propane mixed fuel is analyzed and compared with the heated feed case. Simulations indicate that hydrogen can successfully cause self-ignition of propane-air mixtures in catalytic microchannels with a 0.2 mm gap size, eliminating the need for startup devices. The minimum hydrogen composition for propane self-ignition is found to be in the range of 0.8-2.8% (on a molar basis), and increases with increasing wall thermal conductivity, and decreasing inlet velocity or propane composition. Higher propane-air ratio results in earlier ignition. The ignition characteristics of hydrogen-assisted propane qualitatively resemble the selectively inlet feed preheating mode. Transient response of the mixed hydrogen- propane fuel reveals sequential ignition of propane followed by hydrogen. Front-end propane ignition is observed in all cases. Low wall thermal conductivities cause earlier ignition of the mixed hydrogenpropane fuel, subsequently resulting in low exit temperatures. The transient-state behavior of this micro-scale system is described, and the startup time and minimization of hydrogen usage are discussed.

**Keywords:** Micro-combustion, Self-ignition, Hydrogen addition, Heat transfer, Catalytic combustion, Transient simulation.



### TECHNO-ECONOMIC PROSPECTS OF HIGH WIND ENERGY SHARE IN REMOTE VS. INTERCONNECTED ISLAND GRIDS

#### Marina Kapsali, John S. Anagnostopoulos

National Technical University of Athens, Greece

#### **Abstract:**

On the basis of comparative analysis of alternative "development scenarios" for electricity generation, the main objective of the present study is to investigate the techno-economic viability of high wind energy (WE) use at the local (island) level. An integrated theoretical model is developed based on first principles assuming two main possible scenarios for covering future electrification needs of a medium—sized Greek island, i.e. Lesbos. The first scenario (S1), assumes that the island will keep using oil products as the main source for electricity generation. The second scenario (S2) involves the interconnection of the island with the mainland grid to satisfy part of the electricity demand, while remarkable WE penetration is also achieved. The economic feasibility of the above solutions is investigated in terms of determining their Levelized Cost of Energy (LCOE) for the time-period 2020-2045, including also a sensitivity analysis on the worst/reference/best Cases. According to the results obtained, interconnection of Lesbos Island with the mainland grid (S2) presents considerable economic interest in comparison to autonomous development (S1) with WE having a prominent role to this effect.

**Keywords:** Electricity generation cost, levelized cost of energy, mainland, wind energy surplus.

