



**I. BİLSEL ULUSLARARASI  
TURABDİN BİLİMSEL  
ARAŞTIRMALAR VE İNOVASYON  
KONGRESİ**

**KONGRE KİTABI**

**2. CİLT**

**MARDİN**

23-24 ARALIK 2023



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1. BİLSEL INTERNATIONAL TURABDİN SCIENTIFIC RESEARCHES AND INNOVATION, 23-24 DECEMBER, MARDİN/TÜRKİYE

**CONGRESS ID**  
**CONGRESS TITLE**

**1. BİLSEL INTERNATIONAL TURABDİN  
SCIENTIFIC RESEARCHES AND INNOVATION**

**DATE and PLACE**

**23-24 DECEMBER, 2023**  
**MARDİN/TÜRKİYE**

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Release Date: 26 DECEMBER 2023

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Yayın Tarihi: 26 ARALIK 2023

**ISBN: 978-625-98991-9-0**



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**1. BİLSEL INTERNATIONAL TURABDİN SCIENTIFIC RESEARCHES AND INNOVATION, 23-24 DECEMBER, MARDİN/TÜRKİYE**

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*Khemis Miliana University-Algeria*

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1. BİLSEL INTERNATIONAL TURABDİN SCIENTIFIC RESEARCHES AND INNOVATION, 23-24 DECEMBER, MARDİN/TÜRKİYE

**BİLSEL**  
**1. BİLSEL INTERNATIONAL TURABDİN**  
**SCIENTIFIC RESEARCHES AND INNOVATION**  
**CONGRESS**  
**23-24 DECEMBER**  
**MARDİN/TÜRKİYE**  
**CONGRESS PROGRAM**

**AÇILIŞ**

**Müzik Dinletisi (Ud Resitali):**

**Doç. Dr. Hakan EMRE ZIYAGİL**

**Join Zoom Meeting ID: 823 9174 3964**

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**NUMBER OF INTERNATIONAL PARTICIPANTS: 144**

**NUMBER OF TURKEY PARTICIPANTS: 137**

**TOTAL NUMBER: 281**



### **IMPORTANT**

- ◆ To be able to make a meeting online, login via <https://zoom.us/join> site, enter ID instead of “Meeting ID or Personal link Name” and solidify the session.
- ◆ The presentation will have 10 minutes .
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- ◆ The Zoom application can be used without registration.
- ◆ The application works on tablets, phones and PCs.
- ◆ Speakers must be connected to the session 10 minutes before the presentation time.
- ◆ All congress participants can connect live and listen to all sessions.

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- ◆ Make sure your computer has a microphone and is working.
- ◆ You should be able to use screen sharing feature in Zoom.
- ◆ Attendance certificates will be sent to you as pdf at the end of the congress.

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- ◆ Kongremizde Yazım Kurallarına uygun gönderilmiş ve bilim kurulundan geçen bildirimler için online (video konferans sistemi üzerinden) sunum imkanı sağlanmıştır.
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Zoom'a girişte sırayla salon numarasını ve ad soyadınızı  
yazınız

**(Örnek: Session-1, Hall-1, Azat KALİ)**



23.12.2023  
TURKEY Local Time: 12:30-15:00

**HEAD OF SESSION: Prof. Dr. Orhan KAVAK**

**SESSION-1 HALL-1**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Prof. Dr. Orhan KAVAK</i>	<i>Dicle Üniversitesi</i>	<i>Afet Öncesi-Esnasi-Sonrasında Yapılması Gereken Temel Bilgiler</i>
<i>Prof. Dr. Orhan KAVAK</i>	<i>Dicle Üniversitesi</i>	<i>Afetlerinin Etkilerinin Azaltılması Ve Risk Yönetimi</i>
<i>Kemal Armagan, Sadik Alper Yıldız</i>	<i>Karamanoğlu Mehmetbey Üniversitesi,</i>	<i>İklim Değişikliklerinin Asfalt Yollara Olan Etkisi</i>
<i>Kemal Armagan, Sadik Alper Yıldız</i>	<i>Karamanoğlu Mehmetbey Üniversitesi,</i>	<i>İklim Değişikliklerinin Havaalanı Yollarına Olan Etkisi</i>
<i>Öğr.Gör., Ersin AYHAN Prof.Dr., Abdulhalim KARAŞİN Dr.Öğr.Üyesi ., Murat DOĞRUYOL</i>	<i>Dicle Üniversitesi, Siirt Üniversitesi,</i>	<i>Yüksek Sıcaklıkta Atık Çelik Lifi Betonun Dayanım, Ultrases Ve Kütle Kayıpları Arasındaki İlişkisi</i>
<i>Öğr.Gör., Ersin AYHAN Prof.Dr., Abdulhalim KARAŞİN Dr.Öğr.Üyesi ., Murat DOĞRUYOL</i>	<i>Dicle Üniversitesi, Siirt Üniversitesi</i>	<i>“Atık Taşıtların İçerikli Betonun Basınç Ve Eğilme Dayanımının Ultra Ses Dalga Geçiş Hızları İle Olan İlişkisi”,</i>
<i>Dr. Mehmet UZUN Mehmet Akif ARSLAN Prof.Dr. Mustafa Tolga ÇÖĞÜRCÜ</i>	<i>Konya Teknik Üniversitesi,</i>	<i>3d Baskı Beton Yapılar</i>
<i>Mehmet Akif ARSLAN Dr. Mehmet UZUN Prof.Dr. Mustafa Tolga ÇÖĞÜRCÜ</i>	<i>Konya Teknik Üniversitesi,</i>	<i>Kentsel Sürdürülebilirlik Göstergeleri Ve Kentsel Dönüşüm</i>
<i>Fatih Sezal Meltem Eken Turgay Battal</i>	<i>İskenderun Teknik Üniversitesi,</i>	<i>Değişime Yön Vermek: İklim Dirençli Liman Üstyapısı Ve Altyapısı İçin İşbirlikçi Stratejiler</i>



23.12.2023  
TURKEY Local Time: 12:30-14:30

**HEAD OF SESSION: Dr. Öğr. Üyesi, Işıl BOZKURT**

**SESSION-1 HALL-2**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Yüksek Lisans Öğrencisi, Esra Çiçek</i>	<i>Batman Üniversitesi,</i>	<i>Mardin Ve Yöresi Ağizlarında Üzüm Adları</i>
<i>Merve YAVUZ Prof. Dr. Fikret KORUR</i>	<i>Burdur Mehmet Akif Ersoy Üniversitesi</i>	<i>Fen, Mühendislik Ve Girişimcilik Uygulamalarının Öğrencilerin Bilimsel Süreç Becerilerine Etkisine Yönelik Öğretmen Görüşlerinin İncelenmesi</i>
<i>Merve KELEŞ</i>	<i>İstanbul Aydın Üniversitesi,</i>	<i>Öğrenim Düzeyinin Üniversite Öğrencilerinin Flört Şiddeti Tutumu, Kabulü Ve Duygusal Zeka Düzeyleri Üzerindeki Etkisi</i>
<i>Dr. Öğr. Üyesi Işıl BOZKURT</i>	<i>Harran Üniversitesi,</i>	<i>İlköğretim Matematik Öğretmen Adaylarının Matematik Öğretiminde Kipu Kullanımına İlişkin Görüşleri</i>



23.12.2023  
TURKEY Local Time: 12:30-14:30

**HEAD OF SESSION: Doç.Dr. Fahriye Emgili**  
**SESSION-1 HALL-3**

AUTHORS	AFFILIATION	TOPIC TITLE
<i>Doç. Dr. Ercan GEÇGİN</i>	<i>Niğde Ömer Halisdemir Üniversitesi</i>	<i>Etkileşimsel Sapma Sosyolojisi Açısından ‘Şahsiyet’ Dizisi Üzerine</i>
<i>Doç. Dr. Yonca ALTINDAL</i>	<i>Balıkesir Üniversitesi,</i>	<i>Türkiye Örneği Üzerinden Kadın-Erkek Eşitliğinin Sosyolojik Okuması</i>
<i>Yüksek Lisans Öğrencisi, İzzettin Kahraman</i>	<i>Gaziantep Üniversitesi,</i>	<i>Üniversite Öğrencilerinde Toplumsal Cinsiyet Algı Düzeyinin Değerlendirilmesi</i>
<i>Doç.Dr. Fahriye Emgili</i>	<i>Mersin Üniversitesi,</i>	<i>Avusturya-Macaristan’ın Bosna-Hersek’teki Yönetimi (1878-1908)</i>
<i>Doç.Dr. Fahriye Emgili</i>	<i>Mersin Üniversitesi,</i>	<i>Balkanlar’da Türk imgesi ve göç</i>
<i>Dr. Öğr. Üyesi, Ertuğrul ERYÜCEL</i>	<i>Hitit Üniversitesi,</i>	<i>Jeopolitiğin Postmodern Bir Okuması: Eleştirel Jeopolitik</i>
<i>Graduate Student, Meral MIZRAK Assoc. Prof. Dr. Mesut ŞÖHRET</i>	<i>Gaziantep University,</i>	<i>Causal Relationship Between Colonialism And Migration</i>



23.12.2023

TURKEY Local Time: 12:30-14:30

**HEAD OF SESSION: Assoc. Prof. Dr. Gümrah UYSAL**

**SESSION-1 HALL-4**

AUTHORS	AFFILIATION	TOPIC TITLE
<i>Yeliz Çelik Asst. Prof. Dr. Turgay Battal Prof. Dr. Meltem Eken</i>	<i>Iskenderun Technical University,</i>	<i>Decarbonizing Ports: A Comprehensive Multi-Criteria Approach For Environmental Sustainability And Inter-Port Competition</i>
<i>Elif TAVZAR</i>	<i>Ege Üniversitesi,</i>	<i>Çok Kriterli Karar Verme Metodu İle Sürdürülebilirlik Performansının Ölçülmesi</i>
<i>Canan ASLANYÜREK, Tarık YERLİKAYA</i>	<i>Kırklareli Üniversitesi, Trakya Üniversitesi,</i>	<i>F-Skoru Kullanarak Web Veri Çıkarımı İçin Otomatik Düzenli İfade Üretimi</i>
<i>Assoc. Prof. Dr. Gümrah UYSAL</i>	<i>Karabük University,</i>	<i>On Radial Differentiability Properties Of Multivariate Singular Integrals</i>
<i>Yazılım Mühendisi Yasemin TURAÇ, Dr.Öğr.Üyesi Sinem AKYOL, Doç.Dr Fatih ÖZYURT</i>	<i>Fırat Üniversitesi,</i>	<i>Svm Sınıflandırıcısı Ve Hough Dönüşümü Kullanılarak Meme Kanserinin Erken Tespiti İçin Mamografi Sınıflaması</i>
<i>Serap ERÇEL, Dr.Öğr.Üyesi Sinem AKYOL, Doç.Dr Fatih ÖZYURT</i>	<i>Fırat Üniversitesi,</i>	<i>Kaos Teorisi İle Zenginleştirilmiş Mantis Arama Algoritması</i>
<i>Yazılım Mühendisi Eyyüp YALÇIN, Dr.Öğr.Üyesi Sinem AKYOL, Doç.Dr Fatih ÖZYURT</i>	<i>Fırat Üniversitesi</i>	<i>Suç Haritası Analizine Dayalı İç Görüler Ve Tahminler</i>



23.12.2023

TURKEY Local Time: 12:30-14:30

**HEAD OF SESSION: Prof. Dr. Halis YILMAZ**

**SESSION-1 HALL-5**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Dr.Öğr.Üyesi, Tuba DEMİRCİ</i>	<i>Alanya Alaaddin Keykubat Üniversitesi,</i>	<i>Kavram Haritalarının İlişkisel Ve Öneri Doğruluğu Puanlama Yöntemi Kullanılarak Değerlendirilmesi</i>
<i>Dr.Öğr.Üyesi, Tuba DEMİRCİ</i>	<i>Alanya Alaaddin Keykubat Üniversitesi,</i>	<i>Kavram Yanılgularının Belirlenmesinde Alternatif Değerlendirme Yöntemleri</i>
<i>Doç. Dr. Abdullah Özkartal Seyran Esen</i>	<i>Van Yüzüncü Yıl Üniversitesi,</i>	<i>Boyaya Duyarlı Güneş Pilleri Yapısında <math>TiO_2</math> Ve <math>ZnO</math> Fotoanotların Pil Verimine Etkisi</i>
<i>Dr. Sevinç İlkar Erdağı</i>	<i>Kocaeli Üniversitesi,</i>	<i>Bazı Sapogenin Türevi Bileşiklerin Farmakokinetik Ve Toksikite Özelliklerinin İn Silico Tahmini</i>
<i>Deniz Rüzgar, Dr. Öğr. Üyesi Derya Yıldız</i>	<i>Eskişehir Osmangazi Üniversitesi,</i>	<i>Atık Seramik Fritinin <math>Nabh_4</math> Metanoliz Reaksiyonunda Katalizör Olarak Kullanımı</i>
<i>Prof. Dr. Halis YILMAZ</i>	<i>Dicle University,</i>	<i>Darboux Transformations For Integrable Systems</i>



1. BİLSEL INTERNATIONAL TURABDİN SCIENTIFIC RESEARCHES AND INNOVATION, 23-24 DECEMBER, MARDİN/TÜRKİYE

23.12.2023

TURKEY Local Time: 12:30-14:30

**HEAD OF SESSION: Dr. Öğr. Üyesi İbrahim SİZGEN**

**SESSION-1 HALL-6**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Dr. Öğr. Üyesi İbrahim SİZGEN</i>	<i>Hatay Mustafa Kemal Üniversitesi</i>	<i>Tâbiîn Hanım Müctehidlerinden Amre Bint Abdurrahman</i>
<i>Dr. Öğr. Üyesi İbrahim SİZGEN</i>	<i>Hatay Mustafa Kemal Üniversitesi</i>	<i>Eşler Arasında Anlaşmazlık: Nüşûz</i>
<i>Doç. Dr. Yusuf OKŞAR</i>	<i>Hatay Mustafa Kemal Üniversitesi,</i>	<i>İmanın Mahiyetine İlişkin Bir Değerlendirme: Marifetullah'ın Değeri</i>
<i>Doç. Dr. Ahmet GÖKDEMİR</i>	<i>İstanbul Üniversitesi,</i>	<i>Osmanlı Tecvîd Risâlelerinde Mîm Harfi İle İlgili Bazı Hususlar</i>
<i>Ayşenur ÇOBAN</i>	<i>İstanbul Sabahattin Zaim Üniversitesi,</i>	<i>2001-2022 Yılları Arasında Türkiye'de İslamofobi Bibliyografyası</i>



23.12.2023

TURKEY Local Time: 12:30-14:30

**HEAD OF SESSION: Doç. Dr. Mehmet Kaplan**

**SESSION-1 HALL-7**

AUTHORS	AFFILIATION	TOPIC TITLE
<i>Oğuz Yusuf ATASEL Yasin ŞEKER</i>	<i>Trabzon Üniversitesi, Hitit Üniversitesi,</i>	<i>Serbest Nakit Akışları Üzerine Yapılan Çalışmaların İncelenmesi</i>
<i>Oğuz Yusuf ATASEL Yasin ŞEKER</i>	<i>Trabzon Üniversitesi, Hitit Üniversitesi,</i>	<i>Enflasyon Muhasebesi Üzerine Yapılan Çalışmaların İncelenmesi</i>
<i>Master's Student, Çilem GÜNER Prof. Dr., Murat DONDURAN</i>	<i>Yıldız Technical University,</i>	<i>Market Insights: The Price Markup And Elasticity Of Substitution In German Firms</i>
<i>Dr.Kurtuluş MERDAN</i>	<i>Gümüşhane Üniversitesi,</i>	<i>Türkiye'de Süt Ve Süt Üretiminin Ekonomik Durumu, Sorunları Ve Çözüm Odaklı Öneriler</i>
<i>Doç. Dr. Ersin KIRAL Ezgin GEÇİT</i>	<i>Çukurova Üniversitesi,</i>	<i>Konya İli Partikül Madde (Pm10) Analizi</i>
<i>Doç. Dr. Ersin KIRAL Prof. Dr. Gülsen KIRAL</i>	<i>Çukurova Üniversitesi,</i>	<i>Türkiye'de Seçilmiş Nedenlere Göre Cinsiyetlerin İntihar Analizi</i>
<i>Dr. Öğr. Üyesi Berna Turak Kaplan Doç. Dr. Mehmet Kaplan</i>	<i>Isparta Uygulamalı Bilimler Üniversitesi,</i>	<i>Elektrikli Otomobil Endüstrisi: Bizi Neler Beklemekte? Küresel Ve Türkiye Odaklı Bir Okuma</i>
<i>Dr. Öğr. Üyesi Berna Turak Kaplan Doç. Dr. Mehmet Kaplan</i>	<i>Isparta Uygulamalı Bilimler Üniversitesi,</i>	<i>İnsan Kaynaklarının Stratejik Rolü Kobi'lere Nasıl Yansımaktadır? Türkiye'nin Kobi Cenneti Konya'da Bir Araştırma</i>



1. BİSEL INTERNATIONAL TURABDİN SCIENTIFIC RESEARCHES AND INNOVATION, 23-24 DECEMBER, MARDİN/TÜRKİYE

23.12.2023

TURKEY Local Time: 12:30-14:30

**HEAD OF SESSION: Doç. Dr. Hakan Emre Ziyagil**

**SESSION-1 HALL-8**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Doruk OKUYUCU</i>	<i>İstanbul Teknik Üniversitesi,</i>	<i>Kayıtlı Müzik Üretiminde Miks Aşamasının Kültürel Tını Algısı Kavramı Perspektifinden İncelenmesi</i>
<i>Doç. Dr. Hakan Emre Ziyagil</i>	<i>Niğde Ömer Halisdemir Üniversitesi,</i>	<i>Sosyal Medya Ve Müzik Dinleme Arasındaki Bağlantı</i>
<i>Petek SANCAKLI Recep AYGÜL</i>	<i>Maltepe Üniversitesi</i>	<i>Kurgunun Analogdan Dijitale Geçişiyile Ön Plana Çıkan Dikey Kurgu Kavramı, Etkileri Ve Kurgucuların Yaşadığı Sorunlar</i>
<i>Öğr. Gör. Dr. Ferda BAŞGÜN</i>	<i>Fırat Üniversitesi,</i>	<i>Temel Fotoğrafçılık Dersi Kapsamında Sinema Film Afişlerinin Yeniden Yorumlanması</i>



1. BİLSEL INTERNATIONAL TURABDİN SCIENTIFIC RESEARCHES AND INNOVATION, 23-24 DECEMBER, MARDİN/TÜRKİYE

23.12.2023

TURKEY Local Time: 12:30-14:30

**HEAD OF SESSION: Dr. Öğr. Üyesi Havva AKPINAR**

**SESSION-1 HALL-9**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Araştırma Görevlisi, Aslıhan ÖZTÜRK ÇETİN</i>	<i>İzmir Bakırçay Üniversitesi,</i>	<i>Oral Mukozit Yönetiminde Karadut Kullanımı: Tez İncelemesi</i>
<i>Öğr. Gör. Mehmet CAN Öğr. Gör. Dr. Mehmet SELÇUK</i>	<i>Ankara Üniversitesi, Karamanoğlu Mehmetbey</i>	<i>Temporal Kemik Kırıklarında Odyolojik Bulgular</i>
<i>Dr. Öğr. Üyesi Havva AKPINAR MSc. Fatmanur ÖZCAN MİRCALI Prof. Dr. Nezihe BULUT UĞURLU</i>	<i>Muğla Sıtkı Koçman Üniversitesi</i>	<i>Halüsinojenik Madde Kullanımında Görülen Psikososyal Sorunlar Ve Psikiyatri Hemşireliği Yaklaşımı</i>
<i>Dr. Öğr. Üyesi Havva AKPINAR MSc. Fatmanur ÖZCAN MİRCALI Prof. Dr. Nezihe BULUT UĞURLU</i>	<i>Muğla Sıtkı Koçman Üniversitesi</i>	<i>Lityum Karbonat Kullanımında Dikkat Edilmesi Gereken Noktalar, Psikiyatri Hemşiresinin Rolü Ve Sorumlulukları</i>
<i>Barış Alperen ÖZDEN Pınar DURU</i>	<i>Eskişehir Osmangazi Üniversitesi,</i>	<i>Hemşirelerin Sağlık Teknolojilerine Yönelik Tutumlarının Tıbbi Yapay Zekaya Hazır Bulunışluklarına Etkisinde Yapay Zekâ Kaygılarının Aracı Rolünün Değerlendirilmesi</i>
<i>Araştırma Görevlisi, Aslıhan ÖZTÜRK ÇETİN</i>	<i>İzmir Bakırçay Üniversitesi,</i>	<i>Girişimler Sırasında Uygulanan Stres Topu İle İlgili Hemşirelik Tezlerinin İncelenmesi</i>
<i>Dr. Öğr. Üyesi Havva AKPINAR</i>	<i>Muğla Sıtkı Koçman Üniversitesi</i>	<i>Hastanede Yatan Hastalarda Hasta Düşmesi Nedir? Nasıl Önlenir?</i>
<i>Dr. Öğr. Üyesi Havva AKPINAR</i>	<i>Muğla Sıtkı Koçman Üniversitesi</i>	<i>Gebelik Döneminde Görülen Yeme Bozukluğu, Pregoreksiya Nedir?</i>



23.12.2023  
TURKEY Local Time: 12:30-14:30

**HEAD OF SESSION: Prof. Dr. Mehmet Emin Deniz**

**SESSION-1 HALL-10**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Dr. Mikail Başıyigit</i>	<i>Marmara Üniversitesi,</i>	<i>Doğaltaşlarda Numune Narinliğinin Basma Dayanımına Etkisinin Araştırılması</i>
<i>YUNUS TÜREN, HAYRETTİN AHLATÇI, FATMA MEYDANERİ TEZEL</i>	<i>Necmettin Erbakan University, Karabük University,</i>	<i>Al-21. lfe Alaşımına Mg-Katkısının Ve Uygulanan Homojenleştirme İşleminin Mekanik Özelliklere Etkisi</i>
<i>HAYRETTİN AHLATÇI , YUNUS TÜREN, FATMA MEYDANERİ TEZEL</i>	<i>Karabük University, Necmettin Erbakan University,</i>	<i>DÖKÜM VE HOMOJENLEŞTİRİLEN Alfe VE Alfe-Xmg (X=4,5) ALAŞIMLARININ KOROZYON ÖZELLİKLERİ</i>
<i>Dr. Öğr. Üyesi Betül AYMAN</i>	<i>Erciyes Üniversitesi,</i>	<i>Kobilerde Endüstri 4.0'a İlişkin Yapılan Bilimsel Çalışmaların Görsel Ağ Haritalama İle Bibliyometrik Analizi</i>
<i>Dr. Öğr. Ü. Çisem GÜNEŞ AKTAŞ</i>	<i>Abdullah Gül University,</i>	<i>Singular Quartic Surfaces With Simple Singularities</i>
<i>Prof. Dr. Mehmet Emin Deniz Prof. Dr. Ramazan Karakuzu</i>	<i>Batman Üniversitesi, Dokuz Eylül Üniversitesi,</i>	<i>İnterply Hibrit Kompozit Tabakaların Tekrarlı (Çoklu) Darbe Direnci Üzerine Delik Mesafesi Ve Sayısının Etkisi</i>
<i>Prof. Dr. Mehmet Emin Deniz Prof. Dr. Ramazan Karakuzu</i>	<i>Batman Üniversitesi, Dokuz Eylül Üniversitesi,</i>	<i>İnterply Ve İnterply Kompozit Tabakaların Tekrarlı Darbe Davranışı Üzerine Hibritlemenin Etkisi</i>



23.12.2023

TURKEY Local Time: 12:30-14:30

**HEAD OF SESSION: Prof. Dr. Esin BASIM**

**SESSION-1 HALL-11**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Prof. Dr. Esin BASIM Prof. Dr. Hüseyin BASIM</i>	<i>Akdeniz University,</i>	<i>Comparative Analysis Of Plant Protection Problems Of Greenhouse Producers In Different Greenhouse Production Areas Of Antalya Province</i>
<i>Prof. Dr. Esin BASIM Prof. Dr. Hüseyin BASIM</i>	<i>Akdeniz University,</i>	<i>Plant Protection Problems And Perspectives Of Agricultural Chemical Dealers In Söğüt District Of Burdur Province On Organic Agriculture</i>
<i>MEHDEB, D. AROUS A. CHADLI A. BOUCHAMA S. AMAR H.</i>	<i>Higher School of Agronomy,</i>	<i>Effect of nettle purin and nettle powder on the growth of two varieties of tomato (Lycopersicon esculentum Mill.)</i>
<i>Mustafa Mahir KİDHİR Associate professor Özgür KUZUKIRAN Assistant professor İlker ŞİMŞEK</i>	<i>Çankırı Karatekin University,</i>	<i>Nanoparticles Used For Antifungal And Antiviral Purposes In Human And Animal Health</i>
<i>Academimician Dr Ivan Pavlovic</i>	<i>Scientific Institute of Veterinary Medicine of Serbia,</i>	<i>Coccidiosis Of Sheep In Northeast Part Of Serbia</i>
<i>Profesor Kiril Postolov, Profesor Risto Elenov, Bojan Kitanovikj,</i>	<i>University of Cyril and Methodius, North Macedonia</i>	<i>Agriculture 4.0: An Operations Management Perspective Of The Use Of Drones In Contemporary Agricultural Enterprises</i>



24.12.2023  
TURKEY Local Time: 11:00-13:00

**HEAD OF SESSION: Diána Vigh**

**SESSION-1 HALL-1**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Hekuran Sabedini Marigona Rama Sabedini</i>	<i>State University of Tetovo, “&amp;quot;Hasan Prishtë” Pristina, Kosovo.</i>	<i>EFFECTIVE WAYS OF STRESS MANAGEMENT IN THE FAMILY</i>
<i>Hayat Souidi Yassine Mouniane</i>	<i>University Sidi Mohamed Ben Abdellah, Morocco</i>	<i>Analysis of User Opinions on Mon e-ID Maroc: Between Technical Advantages and Challenges</i>
<i>Diána Vigh</i>	<i>Eötvös Lóránd University, Hungary</i>	<i>CONFLICTS IN THE WORKPLACE CAUSED BY THE GENERATION GAP</i>
<i>Chems Eddine BOUKHEDIMI</i>	<i>University of Tizi Ouzou,</i>	<i>Examination of the nexus between outbound tourism and the perceived risks: Survey based in Algeria</i>
<i>Chems Eddine BOUKHEDIMI</i>	<i>University of Tizi Ouzou,</i>	<i>Measuring the impact of educational level on online shopping in Algeria</i>
<i>Izzavell Lurinsius, Amyra Natasyah Binti Ismail</i>	<i>Keningau Vocational College,</i>	<i>Dumpling With Filling Made of Mushroom</i>
<i>Shahiratul Athiyrra Buhairah, Clarrisa Octelly Silverius, Alchellis Ivar</i>	<i>Keningau Vocational College,</i>	<i>A Baking Workshop To Help Community Boost Sales</i>
<i>Plamen Iliev</i>	<i>New Bulgarian University</i>	<i>Economic Crises And The Development Of Electronic Trade</i>



24.12.2023

TURKEY Local Time: 11:00-13:00

**HEAD OF SESSION: Dr. Mohammad Jafar Chamankar**

**SESSION-1 HALL-2**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Hendri Hermawan Adinugraha Ardia Puspita Dewi</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>A Bibliometric Analysis: Analysis Of The Role Of Religious Moderation To Build Harmony Interreligious Relations In Indonesia</i>
<i>Agung Mohammad Robbi Maulana Rofiyana Hendri Hermawan</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>Definiton Of Fasting</i>
<i>Mohammad Robbi Maulana Agung Rofiyana Hendri Hermawan</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>Reason For Fasting In Science</i>
<i>Miko Ibnu Ibrahim Dwi Sintia Rahmawanti Rossidah Rihadatul Aisi Dwi Ayu Sepityani Hendri Hermawan Adinugraha</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>Overeating</i>
<i>Khikmatul Marfuah Hendri Hermawan Adinugraha</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>Transformation Of The Religious Behavior Of Islamic Teenagers Through The Use Of The Tiktok Application In Islamic Economics And Business</i>
<i>Nur Kholisah Nia Amellia Sukma Purbaningrum Ria Anisatus Sholihah Muhammad Taufiq Abadi</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>Good Corporate Governance As A Role Of The Sharia Supervisory Board And The National Sharia Board In Sharia Banking</i>
<i>Dr. Mohammad Jafar Chamankar Sakine Babaei</i>	<i>Urmia University, Iran</i>	<i>The Democratic Sect Of Azerbaijan (Iran) And The Causes Of Its Failure And Collapse In 1946</i>
<i>Dr. Mohammad Jafar Chamankar Sakine Babaei</i>	<i>Urmia University, Iran</i>	<i>Economic Developments Of Azerbaijan (Iran) In 1945- 1946</i>
<i>Syintia Amanda Rhetha Yenita Karisha Nurriss Kiyani Tri Noviantika Zain Muhammad Taufiq Abadi Anisatus Sholihah</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>The Value Of Sharia Mutual Funds In The Perspective Of Maqashid Shariah</i>
<i>Dwi Mei Ayu Larasati Hendri Hermawan Adinugraha</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>The Potential Of Traditional Markets In Improving The Community Economy According To An Islamic Economic Perspective</i>
<i>Rofiyana Mohammad Robbi Maulana Agung Hendri Hermawan</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>Implementatton Of Islamic Science Or Science</i>



24.12.2023  
TURKEY Local Time: 11:00-13:00

**HEAD OF SESSION: Yassine Mouniane**

**SESSION-1 HALL-3**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Celal Alagöz</i>	<i>Kırıkkale University</i>	<i>Hierarchical Generation in Multi-Class Classification: Unraveling the Impact of Class Centroid Strategies on Hierarchy Quality and Classifier Performance</i>
<i>Smouni Fatima-Ezzahrae Hamı Hinde Jennan Sanae</i>	<i>Ibn Tofail University (Ut),</i>	<i>Identification Of Polyphenols In Stems Of Calicotome Villosa Link Using Various Extraction Methods</i>
<i>Chaimaa Elkahlaoui Chaimaa</i>	<i>Universityain Chok,</i>	<i>L'évolution De La Qualité Nutritionnelle D'un Biscuit</i>
<i>Hajlaoui Wafa Mılı Samı Missaoui Hechemi</i>	<i>National Agronomic Institute Of Tunisia,</i>	<i>Some Biological Parameters Of Mugil Cephalus (Linnaeus, 1758) In The Sidi Saad Dam (Central Tunisia)</i>
<i>Fatima Zohra Houari 1 , Derriche Ibtissem 2 , Hakima Houari 3 ,Yahia Khelaf 4 , Sena Bakir 5 , Esra Capanoglu 5 , Ramazen Erlener</i>	<i>University Of Mascara.,</i>	<i>Lc-Est-MS/MS Analysis, Toxicity And Anti-Anaemic Activity Of Rubia Tinctorum L. Aqueous Extract</i>
<i>Yassine Mouniane Abdelaati Soufiani Fousseiyini Makadji Ali Haggar Abakar Mohamed Haitam Zoubir Driss Hmouni</i>	<i>University Ibn Tofail, Faculty Of Sciences,</i>	<i>Analysis Of The Antioxidant And Antibacterial Potential Of Carob Tree (Ceratonia Siliqua L.) Extracts From Ouazzane Region</i>
<i>Arous Ali 1 , , Mehdeb Djamila 2 , Bouزيد Assia 3 , Zémour Kamel 4 , Chouhaim Kadda Mohammed Aminie 4 , Lazali Mohammed</i>	<i>University Djilali Bounaama,</i>	<i>Treatment By Essential Oils Of Thyme (Thymus Vulgaris) On The Varroa Destructor Agent Of The Varroasis Of Bees</i>
<i>Nadia Bechelaghem</i>	<i>University Of Abdelhamid Ibn Badis,</i>	<i>Hygiene Habits May Have Detrimental Effects On Vaginal Microbiota.</i>
<i>Nadia Bechelaghem</i>	<i>University Of Abdelhamid Ibn Badis</i>	<i>The Role Of Vaginal Microbiota In Preventing Infertility In Dairy Cows.</i>
<i>Arous Ali 1 , Hammouda Rachid 1 , Mehdeb Djamila 2 , Bouزيد Assia 3 , Zémour Kamel 4 , Chouhaim Kadda Mohammed Aminie 4 , Lazali Mohammed</i>	<i>University Djilali Bounaama,</i>	<i>Impact Of Farming Systems And Practices On The Cultivation Of Durum Wheat (Triticum Durum Desf) Under Semi-Arid Conditions In Algeria</i>



24.12.2023

TURKEY Local Time: 11:00-13:00

**HEAD OF SESSION: Hendri Hermawan Adinugraha**

**SESSION-1 HALL-4**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
Laila Fitria Nur Rahma Hendri Hermawan Adinugraha	Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia	<i>The Influence Of The Role Of Sharia Financial Institutions And Fintech Innovation In Poverty Alleviation: Qualitative Analysis In Low-Income Communities In The Context Of The Digital Sharia Economy</i>
Farkhan Huzein Muthia Husna Qolby Arifal Anugerahana Putra Hendri Hermawan Adinugraha	Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia	<i>Muslim Women Are Required To Cover Their Private Parts: A Literature Review</i>
Nailis Surooya Khulaelatudil Azzah Muhammad Hadziq Ulil Abshor Muhammad Satrio Julyanto Hendri Hermawan Adinugraha	Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia	<i>Understanding The Humanization Of Science</i>
Erni Widya Ningrum Elysia Anindya Indriani Kiki Arsi Wijayanti Hendri Hermawan Adinugraha	Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia	<i>The Role Of Millennial Generation In Overcoming Inflation Through Digital Economy</i>
Hilda Safitri Rina Tri Astuti Anggi Permatasari Triana Dani Maulana Hendri Hermawan Adinugraha	Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia	<i>Inflation On Indonesian Economic Growth</i>
Ridwan Abu Djibran Hendri Hermawan Adinugraha	Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia	<i>The Dangers Of Methanol And Alcohol Consumption</i>
Dwi Wulandari	Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia	<i>Effect Of Investment, Inflation, Number Of Labor, Export Value And The Number Of Internet Users On Subsector Income Creative Application And Game Developer Industry In Indonesia, 2011-2015</i>
Arziyah Windri Windasari 1, Hendri Hermawan Adinugraha	Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia	<i>Addressing Sustainable Consumption: An Economic Perspective Islam In Buying And Buying Transactions Through Used Clothing Social Media</i>
Khamidah Zahro Hendri Hermawan Adinugraha	Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia	<i>The Role Of Instagram Social Media In Increasing Interfaith Tolerance</i>
Dwi Mukti Rosalita Hendri Hermawan Adinugraha	Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia	<i>Analysis Of The Application Of Islamic Business Ethics In The Nobby Hijab Lumpung Shop</i>
Ayu Mila Sari Hendri Hermawan Adinugraha	Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia	<i>Implementation Of Sharia Economic Concepts In Waste Management To Improve Sustainability And Community Welfare In North Pekalongan Indonesia</i>



24.12.2023

TURKEY Local Time: 11:00-13:00

**HEAD OF SESSION: Dr. Aliksandr Susha**

**SESSION-1 HALL-5**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Phd.Cnad. Milot Krasniqi</i>	<i>University Of Prizren</i>	<i>The Importance Of Subject And Territorial Competence In An Administrative Procedure Before The Court</i>
<i>Phd. Cand. Argona Kuçi</i>	<i>University Of Prizren</i>	<i>Alternative Procedures According To Law In Kosovo</i>
<i>Phd.Cnad. Milot Krasniqi</i>	<i>University Of Prizren</i>	<i>The Development Of The Administrative Procedure According To The Law In Kosovo</i>
<i>Dr.Ortenca Kotherja</i>	<i>Aleksandër Xhuvani– Elbasan, Albania</i>	<i>Internal Motivation And Organizational Commitment At Educational Institution Employess</i>
<i>Dr.Halil Bajrami 1 Dr.Venet Shala 2 Dr.Fadil Lekaj 3 Msc.Blerona Bajrami</i>	<i>University Of Mitrovica Kosovo</i>	<i>The Role Of Motivation Theories In Increasing Employee Performance</i>
<i>Dr. Aliksandr Susha,</i>	<i>University Of Law And Social-Information Technologies, Belarus,</i>	<i>The Turau Gospel As The Oldest Belarusian Book Artifact: The History Of Discovery</i>
<i>Phd (C) Erjonilda Hasrama</i>	<i>University “Aleksander Moisiu” Durres</i>	<i>Impact Of Social Media Marketing Activities On Shaping Customer Intentions</i>
<i>Irina-Ana Drobot</i>	<i>Technical University Of Civil Engineering Bucharest,</i>	<i>Analyzing A Haiku Poem Based On Associations</i>
<i>Irina-Ana Drobot</i>	<i>Technical University Of Civil Engineering Bucharest,</i>	<i>The Appeal Of Surrealism And Absurdism Today</i>
<i>Irina-Ana Drobot</i>	<i>Technical University Of Civil Engineering Bucharest,</i>	<i>The Need To Be A Creative Teacher</i>
<i>Ephraim Augustine Mina, Nem Alexis Nem Epiha Clark</i>	<i>University Of Nigeria,</i>	<i>Evaluation Of Organizational Change And Its Impact On Employee Productivity In Rivers State Ministry Of Works</i>



24.12.2023

TURKEY Local Time: 11:00-13:00

**HEAD OF SESSION: Doç. Dr. Necati Sümer**

**SESSION-1 HALL-6**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Natasya Mutiara Agus Virma Arifatul Anni Syarifatul 'Amalyah Hendri Hermawan Adinugraha</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan,  Indonesia</i>	<i>Anti-Bullying Character Education For Santri Tpq Al-Ittihad Sumurjomblangbogo Pekalongan Village</i>
<i>Fathul Arifin Hendri Hermawan Adinugraha</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan,  Indonesia</i>	<i>The Role Of Financial Technology (Fintech) Towards Micro, Small And Medium Enterprises In Pekalongan</i>
<i>Khabibah Dzulkamil Hendri Hermawan Adinugraha</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan,  Indonesia</i>	<i>Income Inequality In East Java, Indonesia: An Analysis Of The Effects Of Economic Growth, Grdp Per Capita, And Hdi</i>
<i>Yusuf Agung Saputra Hendri Hermawan Adinugraha</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan,  Indonesia</i>	<i>Analysis Of The Application Of Islamic Political Economy In Improving The Economy In Indonesia</i>
<i>Triana Dani Maulana Hilda Safitri Anggi Permatasari Rina Tri Astuti Hendri Hermawan Adinugraha</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>Risks Of Having Sex During Menstruation</i>
<i>Abdillah Dwi Prasetyo Hendri Hermawan Adinugraha</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan</i>	<i>Empowering Halal Msmes Through The Pekalongan Special Economic Zone (Kek): Achieving Global Competitiveness Through Innovation And Collaboration</i>
<i>Khulaelatudil Azzah Nailis Surooya Muhammad Satrio Julyanto Muhammad Hadziq Ulil Abshor Hendri Hermawan Adinugraha</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan,  Indonesia</i>	<i>The Effect Of Inflation On Indonesia's Economic Growth</i>
<i>Dyah Syahira Tara Dewi Aulia Rahma Diniya Putri Hendri Hermawan Adinugraha</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan,  Indonesia</i>	<i>Creative Technology Opens Up Job Opportunities For Millennials In Indonesia</i>



24.12.2023

TURKEY Local Time: 11:00-13:00

**HEAD OF SESSION: Mamoona Mushtaq**

**SESSION-1 HALL-7**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Dr.Denaida Trungu</i>	<i>Aleksandër Moisiu University</i>	<i>Pbl As A Promoter Of Soft Skills Development Among Student Teachers.</i>
<i>Drita Avdyli</i>	<i>Mediterranian University Of Albania</i>	<i>The Justice Between The Alternative Resolution, As A Social Justice, Today</i>
<i>Assoc. Prof. Dr. Emilda Roseni</i>	<i>Aleksandër Moisiu University – Durrës, Albania</i>	<i>Perspectives On Teachers’ Expectations Of Disciplinary Literacies: Insights From Albania</i>
<i>Lecturer, Kıymet Soyata PhD, Aysel Ateş</i>	<i>Istanbul Aydın University,</i>	<i>What Do Administrators In Higher Education Think About Professional Development Programs?</i>
<i>Doç. Dr. Burcu GEZER ŞEN</i>	<i>Fırat University</i>	<i>Effective Interventions In Early Childhood Education</i>
<i>Doç. Dr. Burcu GEZER ŞEN</i>	<i>Fırat University</i>	<i>Universal Design In Education: Principles And Practices</i>
<i>Moses Adeolu Agot Ismail Olaniyi Murana</i>	<i>Lagos State University Of Education,</i>	<i>Fog Computing: An Innovative Work Platform For Data Analytics</i>
<i>Mamoona Mushtaq (Presenter) Maqbool Ghaffar Muhammad Moeen Butt</i>	<i>Graduate College Township, Lahore</i>	<i>Parental Acceptance-Rejection, Executive Functioning Skills And Well-Being In Adolescents</i>
<i>Mamoona Mushtaq (Presenter) Kalsoom Yasin</i>	<i>Graduate College Township, Lahore</i>	<i>Burnout, Job Satisfaction, And Life Satisfaction Among Teachers Working In Special Education, And General Education School System</i>
<i>Hassan Aliyu Corrienna Abdul Talib Mustapha Aliyu</i>	<i>Sokoto State University, Nigeria</i>	<i>Virtual Chemistry Laboratory For Effective Training Of Science Process Skills Learned Through Experimental Activities: A Review Of Efficiency And Effectiveness</i>
<i>Assoc. Prof. Aida Gjinali Cand. Phd Tiziana Leka</i>	<i>University Of Tirana,</i>	<i>Impact Of Remote Work On Foreign Language Teaching</i>
<i>Dr. Jonida Tirana</i>	<i>University Of Tirana, Tirane, Albania</i>	<i>Use Of L1 In L2 Classrooms</i>
<i>Nwaokolo Blessing</i>	<i>Air Force İnstitute Of Technology Kaduna State</i>	<i>Effect Of Video Instructional Package On Secondary School Students’ Achievement And Retention In Biology In Makurdi Metropolis, Benue State</i>



24.12.2023

TURKEY Local Time: 11:00-13:00

HEAD OF SESSION: Gita Oktavia Rosita

SESSION-1 HALL-8

AUTHORS	AFFILIATION	TOPIC TITLE
<i>Hasna Huwaidah Lilis Arviani Umi Fikriyah Muhammad Syahrul Arifi</i>	<i>Universitas Islam Negeri K.H. Abdurrahman Wahid Pekalongan,</i>	<i>Development And Role Of Sharia Bank In Looking Forward To The Future Of Islamic Finance In Indonesia</i>
<i>Jihan Kamelia</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan,  Indonesia</i>	<i>A Bibliometric Analysis: Analysis Of The Influence Of Fintech Technology In Sharia Finance</i>
<i>Lukky Aulia Rahmawati Riska Riskiani Safitri Putriani Khalimi Shubhu Hendri Hermawan Adinugraha</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>Quality Traditional Market Empowerment: Efforts To Increase Hygiene Awareness In Comal Traditional Market, Pematang</i>
<i>Dyah Purbaningrum Khotibul Umam Iklim Matunasia Acı Hendri Hermawan Adinugraha</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan,  Indonesia</i>	<i>Gender Equality Socialization Strategy: A Concrete Effort To Increase The Role Of Women In Organizational Leadership</i>
<i>Saniyah Putriningsih Hendri Hermawan Adinugraha Muhammad Shulthoni</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan,  Indonesia</i>	<i>The Importance Of The Tedak Siten Tradition In Maintaining Local Urf In The Village Of Desnasri Wetan Batang</i>
<i>Alfiana Nanda Waraswati Hendri Hermawan Adinugraha</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>Maximizing Village Funds For Village Economic Development</i>
<i>Lutfi Ayu Fadhilah Utami</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>The Application Of The Weighing System In The Buying And Buying Of Powdered Chicken In The Ampelgading Pematang Market As Viewed From The Islamic Economic Aspect</i>
<i>Nur Nabila Firda Nadyarahma Muh Fatkhurrozi Gita Oktavia Rosita</i>	<i>Uin Kh. Abdurrahman Wahid  Pekalongan, Indonesia</i>	<i>Fuel Price Hikes Cause Inflation In Indonesia</i>
<i>Natasya Stfani Naila Abidah</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>Empowering Generation Z Through Education On Halal Cosmetics As A Lifestyle In The Digital Era</i>
<i>Ira Linda Lestari</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>Islamic Economic Review Of The Chocolate Fried Banana Business In Increasing Family Income (Study Of The Chocolate Cheese Fried Banana Business In Petarukan District, Pematang City)</i>



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**HEAD OF SESSION: Muhammad Faisal**

**SESSION-1 HALL-9**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Nasir Rasool*, Labiqa Aman, Fatima Aman, Muhammad Bilal, Adeel Mubarik</i>	<i>Government College University Faisalabad,</i>	<i>Synthesis Of Functionalized Esters Via Suzuki-Miyaura Cross-Coupling Reactions</i>
<i>Dr. Messaouda Belouadah Pro. Zine El Abidine Rahmouni Sami Salhi</i>	<i>M'sila University, M'sila, Algeria.</i>	<i>Properties Of Self-Placing Mortar Based On Different Types Of Sand</i>
<i>Dr. Vikram Singh Chouhan</i>	<i>Jaypee University</i>	<i>Study Of Entrepreneurial Behavior In India</i>
<i>Azzouz Benzekri</i>	<i>University M'hamed Bougara Boumerdès</i>	<i>Fpga Based Svpwm Signal Pattern Generator For Three Phase Voltage Source Inverter</i>
<i>Muhammad Faisal</i>	<i>Allama Iqbal Open University</i>	<i>Dr Faisal Make New Computer-Based Intelligence Dbms Apparatus For Ai Hrims Information Examination</i>
<i>Driss Azdem 1 *, Jamal Mabrouki 1 , Ahmed Moufti 2 , Souad El Hajjaji 1 , Abdelilah Fatni</i>	<i>Mohammed V University In Rabat,</i>	<i>Evaluation Of Heavy Metal Contaminants In Agadir Coastline Morocco.</i>
<i>Dr. Otele Ama* 1 , Dr. Ayibawari Obiene Egai 2 And Woyengitonye Abadani</i>	<i>Niger Delta University,</i>	<i>Morphometric Parameters And Characteristics Of The Lower Orashi River</i>
<i>Dr. Hadj Mohamed Ounis, Pr. Abdelhafid Ounis</i>	<i>Mohamed Khider University,</i>	<i>Validation Of Algerian Earthquake Regulations In Accordance With Multiple International Codes For Seismic Base Isolation Techniques In Buildings.</i>



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TURKEY Local Time: 11:00-13:00

HEAD OF SESSION: Major Gheorghe Giurgiu

SESSION-1 HALL-10

AUTHORS	AFFILIATION	TOPIC TITLE
Chaima Mouffouk, Soumia Mouffouk, Sara Mouffouk And Hamada Haba	University Of Batna	Biological Activities Of The Species Suaeda Monodiana Maire
Academimician Dr Ivan Pavlovic Dr Aleksandra Tasic	Scientific Institute Of Veterinary Medicine Of Serbia,	Biosecurity Measures In The Control Of Helminth Infections Of Sheep In Pasture
Major Gheorghe Giurgiu Prof Dr Manole Cojocar Psychologist Daniela Boboc	Deniplant-Aide Sante Medical Center, Biomedicine, Bucharest, Romania	Neuropeptides And The Microbiota-Gut-Brain Axis In Autism
Msc Ivanka Hadzic Avcademimician Dr Ivan Pavlovic	Belgrade City Administration, Belgrade, Serbia	The Importance Of Laminitis In Cattle Pathology
Major Gheorghe Giurgiu , Prof. Dr. Manole Cojocar	Deniplant-Aide Sante Medical Center, Biomedicine, Bucharest, Romania	The Gut-Brain-Skin Axis In Acne: Impact Of Polenoderm
Kenza Hazine , Chaima Mouffouk, Soumia Mouffouk , Hamada Haba	(Lcce),	Chemical Study Of The Species Hedysarum Pallidum
Djohaina Makhlof Soumia Mouffouk , Chaima Mouffouk Hamada Haba	(Lcce),	Chemical Composition Of Crude Extracts Prepared From The Species Moltkia Ciliata
Abdelbasset Tamersit 1 , Soumia Mouffouk 1 , Chaima Mouffouk 1,2 , Hamada Haba	(Lcce),	Phytochemical Investigation Of The Species Halogeton Satvus
Youssef Rachid 1* , Jamila El Gaayda 1 , Idriss Bakas 1 , Rachid Ait Akbour	Ibn Zohr University Agadir, Morocco	Environmental Applications Of Layered Double Hydroxides: Coprecipitation Synthesis For Effective Adsorption Of Water Pollutants
K.R.Padma K.R.Don	(Women's) University,	An Alternative Sustainable Source For Bioplastic Made From Seaweed Polysaccharides And Its Applications
K.R.Padma K.R.Don	(Women's) University,	Electricity Generation Modelling Through Living Plants



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TURKEY Local Time: 11:00-13:00

**HEAD OF SESSION: Dr. Ghanshyam Barman**

**SESSION-1 HALL-11**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Miladia Nur Kamila</i>	<i>Ün K.H. Abdurrahman Wahid Pekalongan,</i>	<i>Finansal İnovasyon Ve Dijital Çağda Finansal Erişimi Artırmada Teknolojinin Rolü</i>
<i>Ganang Meidi Putrandito Hendri Hermawan Adinugraha</i>		<i>Shopee Paylater Law In The Context Of Sharia Economics</i>
<i>Isepputri Nurul Karimah Riska Dwi Amalia Annisa Shofiana Muhammad Taufiq Abadi</i>	<i>State Islamic University K.H. Abdurrahman Wahid Pekalongan Indonesia</i>	<i>Management Strategy For The Development Of Sharia Pension Funds In Indonesia</i>
<i>Prasetyo Rejo Hartono</i>	<i>Uin K.H. Abdurrahman Wahid,</i>	<i>The Effect Of Company Image, Relationship Marketing, And Location On Purchasing Decisions At W.Clothing Lumpung, Batang</i>
<i>Rofiatur Rızqiyah Hendri Hermawan Adinugraha</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>A Bibliometric Analysis: Evaluation Of The Distribution Of Social Assistance Funds In Alleviting Poverty In Pekalongan District, Indonesia</i>
<i>Mohammad Robbi Maulana Agung Rofiyana Hendri Hermawan</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>Effect Of Inflation On The Economy In Indonesia</i>
<i>Dwi Sintia Rahmawanti Rossidah Rihadatul Aisi Dwi Ayu Sepityani Miko Ibnu Ibrahim Hendri Hermawan Adinugraha</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>Islam's Contribution To The Development Of 'Aqlıyyah Science</i>
<i>Nur Khiba Sania Minkhatul Maula Ardiansyah Ilham Hendri Hermawan Adinugraha</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>Science Explanation Of The Prohibition Of Blowing On Food And Drinks When They Are Hot</i>



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TURKEY Local Time: 11:00-13:00

**HEAD OF SESSION: Sándor Földvári, Dr.**

**SESSION-1 HALL-12**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Dr. Mohammad Jafar Chamankar Mojtaba Mohammadi</i>	<i>Urmia University , Iran,</i>	<i>Commercial Economy Of The Persian Gulf From The First Half Of The Safavid Era To The End Of Shah Abbas Safavid Era (1501-1628 Ad)</i>
<i>Mohammad Jafar Chamankar Galia Haghparast</i>	<i>Orumieh University, Orumieh, Iran.</i>	<i>Continuity And Evolution Of Mourning In Safavid-Qajar Persia</i>
<i>Venelin Terziev</i>	<i>Russian Academy Of Natural History, Bulgaria</i>	<i>Determining The So-Called “Good Practices” By The Academic Ethics Committee</i>
<i>Dr. Mohammad Jafar Chamankar Seyed Aref Qadri</i>	<i>Urmia University</i>	<i>Investigating Qalaichi Hill Or Izirto, The Possible Center Of The Ancient Civilization Of Mana</i>
<i>Sándor Földvári, Dr.</i>	<i>Debrecen University,</i>	<i>The ‘Supras’ Liturgicon-Book In Hungary: A Case Of The Book Trade From The Grand Duchy Of Lithuania To The Hungarian Kingdom</i>
<i>Dr. Naseem Akhter</i>	<i>Shaheed Benazir Bhutto Women University,</i>	<i>Agroecology And Climate Resilience (From Islamic Perspective)</i>
<i>Dr. Naseem Akhter</i>	<i>Shaheed Benazir Bhutto Women University,</i>	<i>Entrepreneurial Skills Are Necessary To Empowering Women (From Islamic Perspective)</i>
<i>Levente Imre Dobák</i>	<i>Budapest University Of Technology And Economics</i>	<i>Malware Analysis Using Image Classification Across Multiple Datasets</i>



24.12.2023

TURKEY Local Time: 11:00-13:00

**HEAD OF SESSION: Dr. Ghanshyam Barman**

**SESSION-1 HALL-13**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Mohamed El Ouaarabi</i>	<i>Hassan Ii University,</i>	<i>Existence Of Three Solutions To A P(X)-Laplacian-Like Robin Problem</i>
<i>Reza Jalilian</i>	<i>Razi University,</i>	<i>Spline Method For Approximation Solution Of Fredholm Integro-Differential Equation</i>
<i>Matej Babič,</i>	<i>Faculty Of Information Studies, Novo Mesto, Slovenia</i>	<i>Using Neural Network For Modelling Topographical Properties Of 3d Printing Metal Material</i>
<i>Nwaokolo Martin Afam And Nwaokolo Blessing</i>	<i>Federal University, Wukari,</i>	<i>Modelling The Impact Of Relapse And Weaning Off Immunity On Hepatitis B Virus Transmission Dynamics</i>
<i>Ali Farajzadeh Mahtab Delfani</i>	<i>Razi University,</i>	<i>A New Verston Of Minimax Inequality</i>
<i>Гамидов Эльшад Гамид Оглы</i>	<i>Азербайджанский Государственный Педагогический Университет</i>	<i>Boundary Value Problems For Second-Order Operator-Differential Equations In Hilbert Space.</i>
<i>I Okorie Charity Ebelechukwu, Nwaokolo Martin Afam, Auta Jonathan Timothy</i>	<i>Federal University, Wukari</i>	<i>Investigating Maternalmortality Cases In Wukari, Taraba State, Nigeria</i>
<i>Dr. Ghanshyam Barman</i>	<i>Ukatarsadia University, India</i>	<i>Knetic Models For Non-Elementary Reactions: Unravelng Complex Chemical Dynamics</i>



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TURKEY Local Time: 11:00-13:00

**HEAD OF SESSION: Dr. İlyas ERPAY**

**SESSION-1 HALL-14**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Uswatun Khasanah Hendri Hermawan Adinugraha</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan,  Indonesia</i>	<i>The Impact Of Globalisation On International Monetary And Financial Policy : A Literatur Review</i>
<i>Intan Bungo Islami Hendri Hermawan Adinugraha</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan,  Indonesia</i>	<i>The Influence Of The Marketing Mix On Consumer Buying Interest Decisions On Refillable Drinking Water Products</i>
<i>Fira Aulia Hendri Hermawan Adinugraha</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>The Validiy Of The Sale And Purchase Agreement With Shopee Paylater As Financial Technology In Islamic Law</i>
<i>Salsabila Natasya Wibowo Hendri Hermawan Adinugraha</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>Paylater System Analysis On Impulse Buying Behavior Of Students In The Digital Era From An Islamic Perspective : Case Study Of Students Uin K.H. Abdurrahman Wahid Pekalongan</i>
<i>Riema Ainun Nissa Ridwan Abu Djibran Rafi Alkaf Asy Syafi Rizkafaiza Hendri Hermawan Adinugraha</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>Inflation In The Food And Fuel Oil Sectors In Indonesia</i>
<i>Arifal anugerahana putra Muthia husna qolby Farkhan huzein Hendri Hermawan ADINUGRAHA</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>Reconciliazation Of Islamic Science, Islamization Of Science</i>
<i>Rafi PRASOJO Hendri Hermawan ADINUGRAHA</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>The Effect Of Rice Prices As A Trigger For Inflation In Indonesia</i>
<i>Muh Fatkhurrozi</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>The Benefits Of Prayer</i>
<i>Fikri Novrial AZHAR Muhammad Farhan AHNAF Elda PURWANTI Hendri Hermawan ADINUGRAHA</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>ISLAMIC SCIENTIFIC PARADIGM</i>
<i>Ibrahim Abdu SALAM Rafifi Ali Hannan SANTOSA Uswatun KHASANAH Muhammad Miefitha ISMAIL Hendri Hermawan ADINUGRAHA</i>	<i>Uin K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>The meaning of Wudhu : a Literature review</i>



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TURKEY Local Time: 11:00-13:00

HEAD OF SESSION: Dr. Bahar ALTUNOK

SESSION-1 HALL-15

AUTHORS	AFFILIATION	Topic Title
<i>Kholimah</i>	<i>UIN K.H. Abdurrahman Wahid Pekalongan, Indonesia</i>	<i>Monetary Policy's Impact On The Economy</i>
<i>Dr. Bahar ALTUNOK</i>	<i>Independent Researcher</i>	<i>Systematic Review Of Studies Conducted On Professional Burnout And Work-Life Balance In Working Life In Turkey</i>
<i>Muhammad Hadziq Ulil ABSHOR Khulaelatudil AZZAH Nailis SUROOYA Muhammad Satrio JULIANTO Hendri Hermawan ADINUGRAHA</i>	<i>UIN K.H. Abdurrahman Wahid Pekalongan,</i>	<i>The Concept Of Humanization Of Planning Science That Is Humanistic In Nature: A Literatur Review</i>
<i>Angga Candra WINATA Rafi PRASOJO Rafid Nouval AQIL Lutfiyanti Hendri Hermawan ADINUGRAHA</i>	<i>UIN K.H. Abdurrahman Wahid Pekalongan,</i>	<i>The Position Of Science In The Islamic</i>
<i>Muhammad Satrio JULIYANTO Khulaelatudil AZZAH Muhammad Hadziq Ulil ABSHOR Nailis SUROOYA Hendri Hermawan ADINUGRAHA</i>	<i>UIN K.H. Abdurrahman Wahid Pekalongan,</i>	<i>Understanding Dog Saliva</i>
<i>M. Ariel Ramadhani Muhammad Usman Ariffianto Kholimah Hendri Hermawan ADINUGRAHA</i>	<i>UIN K.H. Abdurrahman Wahid Pekalongan,</i>	<i>The Concept Of Integration Of Science And Religion: Literature Review</i>
<i>Rossidah Rihadatul Aisi Dwi Sintia Rahmawanti Dwi Ayu Sepityani Miko Ibnu Ibrahim Hendri Hermawan ADINUGRAHA</i>	<i>UIN K.H. Abdurrahman Wahid Pekalongan,</i>	<i>Eating And Drinking While Standing In Scientific Perspective, Is It Allowed?</i>
<i>Elda Purwanti Muhammad Farhan Ahnaf Fikri Novrial Azhar Hendri Hermawan ADINUGRAHA</i>	<i>UIN K.H. Abdurrahman Wahid Pekalongan,</i>	<i>Islamic Scientific Paradigm: Literature Review</i>
<i>Muhammad Usman Ariffianto M. Ariel Ramadhani, Kholimah Hendri Hermawan ADINUGRAHA</i>	<i>UIN K.H. Abdurrahman Wahid Pekalongan,</i>	<i>Implementation Of Interconnection Integration: Literature Review</i>
<i>Firda Nadyarahma, Nur Nabila Hendri Hermawan Adinugraha</i>	<i>UIN K.H. Abdurrahman Wahid Pekalongan,</i>	<i>The Increase In Fuel Prices Causes Inflation In Indonesia</i>
<i>Lutfiyanti Rafi Prasadjo Angga Candra Winata, Rafid Naufal Aqil, Hendri Hermawan Adinugraha</i>	<i>UIN K.H. Abdurrahman Wahid Pekalongan,</i>	<i>Scientific Classification Of Pork Is Haram</i>



24.12.2023

TURKEY Local Time: 13:00-15:00

**HEAD OF SESSION: Dr. Ali Recai Celik**

**SESSION-2 HALL-1**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Esra KARAKAYA, Doç. Dr. Sertaç GÖRGÜLÜ</i>	<i>Burdur Mehmet Akif Ersoy Üniversitesi,</i>	<i>Elektrikli Araçlar İçin Yeni Bir Yerleşik Şarj Birimi Tasarımı</i>
<i>Ferhat Aygün Doç. Dr. Bülent Bolat</i>	<i>Yıldız Teknik Üniversitesi,</i>	<i>Makine Öğrenmesi İle Seste Sinirlilik Analizi</i>
<i>Veysel Karani CETINKAYA Suleyman UZUN</i>	<i>Sakarya University of Applied Sciences,</i>	<i>Automatic Detection Of Drones Posing A Security Threat In Residential Areas With Yolov8</i>
<i>Aybars YILMAZ Gürkan USTA</i>	<i>Ar-Ge Departmanı, Martur Fompak International, Bursa, Türkiye</i>	<i>Otomotiv Sektörü İçin Tasarlanmış Faz Esaslı Proje Yönetim Sistematiği Ve Veritabanı</i>
<i>Fevzi DURMUŞ Prof. Dr. Yalçın Şevki YILDIZ</i>	<i>Erciyes Üniversitesi,</i>	<i>Düşük Maliyetli Elektrotlar Kullanılarak Klor Esaslı Dezenfektan Üretimi</i>
<i>Dr. Ali Recai Celik</i>	<i>Dicle University,</i>	<i>The Sar Value Investigation Of An Implantable Antenna For Mics Band Biotelemetry System</i>



24.12.2023

TURKEY Local Time: 13:00-15:00

**HEAD OF SESSION: Doç. Dr. Mehmet Ali ÖZÇELİK**

**SESSION-2 HALL-2**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Doç. Dr. Mehmet Ali ÖZÇELİK Dr. Öğr. Üyesi Zülfikar ASLAN</i>	<i>Gaziantep Üniversitesi,</i>	<i>Elektrik Güç Şebekesine Bağlı Pv Santralde Parafudr Etkisinin İncelenmesi</i>
<i>Dr. Öğr. Üyesi Zülfikar ASLAN Doç. Dr. Mehmet Ali ÖZÇELİK</i>	<i>Gaziantep Üniversitesi,</i>	<i>Topluluk Sınıflandırma Algoritmalarının Kötü Amaçlı Yazılımların Sınıflandırılmasındaki Performans Analizi</i>
<i>Muhammed Tarık BAYRAM Doç. Dr. Nihat PAMUK</i>	<i>Zonguldak Bülent Ecevit Üniversitesi,</i>	<i>Yüksek Gerilim Enerji İletim Hatlarındaki Arıza Yerinin Tespitinde Yürüyen Dalga Tabanlı Yöntemlerin İncelenmesi</i>
<i>Berkem Vural Asst. Prof. Claudia F. Yasar</i>	<i>Yildiz Technical University,</i>	<i>Pathophysiology Correction With A P<sub>i</sub> Controller And A Q-Learning-Based Reinforcement Learning Algorithm For Improved Lung Ventilation</i>
<i>Berkem Vural</i>	<i>Yildiz Technical University,</i>	<i>Investigation Of Automatic Machines Created By Al-Jazari And Ctesibus Who Are Leaders In The History Of Control Engineering Applications</i>



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**HEAD OF SESSION: Prof. Dr. Burak ÇAMURDAN**

**SESSION-2 HALL-3**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Prof.Dr.Utku ALTUNÖZ</i>		<i>Kredi Piyasasında Nash Dengesi İle Asimetrik Bilgi Sorununun Tespiti: Türk Bankacılık Örneği</i>
<i>Doç. Dr. Hakan Tahiri Mutlu Doç. Dr. İsmail Durak</i>	<i>Bolu Abant İzzet Baysal Üniversitesi,</i>	<i>Ölçek Kullanılan Anket Çalışmalarında Güvenilirliği Ölçme Yöntemleri</i>
<i>Doç. Dr. İsmail Durak Doç. Dr. Hakan Tahiri Mutlu</i>	<i>Bolu Abant İzzet Baysal Üniversitesi,</i>	<i>Kişilik Özelliklerinin Öz Anlayışa Etkisinin Ve Sosyo-Demografik Değişkenlerle İlişkisinin İncelenmesi</i>
<i>Doktor Öğretim Üyesi, Ali Birvural</i>	<i>İskenderun Teknik Üniversitesi,</i>	<i>Hatay Devleti Dış Ticaret İşlemleri Tarihi</i>
<i>Doktor Öğretim Üyesi, Ali Birvural</i>	<i>İskenderun Teknik Üniversitesi,</i>	<i>Kuzey Kıbrıs Türk Cumhuriyeti Dış Ticaret İşlemleri Tarihi</i>
<i>Büşra Nur GÖNÇ</i>	<i>Sabahattin Zaim Üniversitesi,</i>	<i>Avrupa'dan Filistin'e Gelen Yahudi Göçlerinin İsrail Devleti Kurulmasındaki Rolü</i>
<i>Prof. Dr. Burak ÇAMURDAN</i>	<i>Siirt Üniversitesi,</i>	<i>Kronik Ve Yüksek Seviyeli Bir Enflasyon Sonucu Hedeflenen Oran Üzerinden Ücretlendirme Ne Kadar Doğru Ve Adil Olabilir?</i>
<i>Prof. Dr. Burak ÇAMURDAN</i>	<i>Siirt Üniversitesi,</i>	<i>Türkiye'de Cari Açık Sorunu Ve Nedenleri Üzerine Bir Güncelleme</i>



24.12.2023  
TURKEY Local Time: 13:00-15:00

**HEAD OF SESSION: Doç. Dr. Fuat LEBE**

**SESSION-2 HALL-4**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Dr. Süleyman ŞAHİN</i>	<i>Bolu Abant İzzet Baysal Üniversitesi</i>	<i>Yalın Üretim: Bir Uygulama Örneği</i>
<i>Dr. Süleyman ŞAHİN</i>	<i>Bolu Abant İzzet Baysal Üniversitesi</i>	<i>İneklerde Süt Üretimi İle Bunu Etkileyen Bazı Faktörlerin İlişkisi: Regresyon Ve Korelasyon Analizi</i>
<i>Doç. Dr. Melahat BATU AĞIRKAYA Doç. Dr. Hikmet AKYOL</i>	<i>Iğdır Üniversitesi, Gümüşhane Üniversitesi,</i>	<i>Diş Yardımlar, Finansal Ve Ekonomik Gelişim İlişkisinin Gözden Geçirilmesi</i>
<i>Doç. Dr. Fuat LEBE</i>	<i>Osmaniye Korkut Ata Üniversitesi,</i>	<i>Türkiye'nin İnovasyon Performansının Analizi</i>
<i>Doç. Dr. Fuat LEBE</i>	<i>Osmaniye Korkut Ata Üniversitesi,</i>	<i>Borsa İstanbul'da Gayrimenkul Yatırım Ortaklığı Şirketlerinin Performansı</i>
<i>Dr. Muhammet Yasin ELİTOK</i>	<i>Atatürk Üniversitesi,</i>	<i>Dijital Yerliler Ve Dijital Göçmenler Arasında Karşılaştırılmalt Bir Analiz</i>
<i>Dr. Muhammet Yasin ELİTOK</i>	<i>Atatürk Üniversitesi,</i>	<i>Halkla İlişkiler Biliminin Kökenleri Ve Tarihsel Gelişimi</i>



24.12.2023  
TURKEY Local Time: 13:00-15:00

**HEAD OF SESSION: Doç. Dr. Rasim ÖZDEMİR**

**SESSION-2 HALL-5**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Asst. Prof. Dr. Songül Karakuş, Asst. Prof. Dr. Fırat Artuğer</i>	<i>Bitlis Eren University, Munzur University,</i>	<i>Use Of Image Processing In Different Fields</i>
<i>Asst. Prof. Dr. Fırat Artuğer, Asst. Prof. Dr. Songül Karakuş</i>	<i>Munzur University, Bitlis Eren University,</i>	<i>New Pseudo Random Number Generator Based On Sine Map</i>
<i>Dr.Öğr.Üye.,Nazım KUNDURACI</i>	<i>Zonguldak Bülent Ecevit Üniversitesi,</i>	<i>Pomza İlaveli Köpük Beton Ürünlerinde Pomza İlavesinin Mekaniksel Özelliklere Etkisinin Araştırılması</i>
<i>Assoc. Prof. Dr., Mehmed Rafet ÖZDEMİR</i>	<i>Marmara University,</i>	<i>Development Of 1-D Heat Exchanger Model In Aircrafts</i>
<i>Arş. Gör. Abdulkadir ORAK Doç. Dr. Muhammet Hüseyin ÇETİN Doç. Dr. Ali KALYON</i>	<i>Yalova Üniversitesi, Konya Teknik Üniversitesi,</i>	<i>Eklemeli İmalat İle Üretimde Dikkate Alınan Deney Tasarımı Ve Optimizasyon Modelleri</i>
<i>Dr. Öğr. Üyesi Sena KABAVE KILINÇARSLAN Doç. Dr. Muhammet Hüseyin ÇETİN Prof. Dr. Refik POLAT</i>	<i>Karabük Üniversitesi, Konya Teknik Üniversitesi, Selçuk Üniversitesi,</i>	<i>Partikül Takviyeli, Termoplastik Polimer Matrisli Kompozit Malzemelerin Üretimi Esnasında Karşılaşılan Problemler Ve Çözüm Önerileri</i>
<i>Doç. Dr. Rasim ÖZDEMİR</i>	<i>Kilis 7 Aralık Üniversitesi,</i>	<i>Elektro Kimyasal Depolamayla Üretilen Coni Alaşım İnce Filmlerin Manyetik Momentlerinin Yapay Sinir Ağları İle Tahmin Edilmesi</i>



24.12.2023

TURKEY Local Time: 13:00-15:00

**HEAD OF SESSION: Dr. Erdem AYYILDIZ**

**SESSION-2 HALL-6**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Öğr. Gör. Dr. Kadir AKPINAR</i>	<i>Karamanoğlu Mehmetbey Üniversitesi</i>	<i>Spor Bilimleri Fakültesi Öğrencilerinin Spora Bakış Açısı Üzerine Karşılaştırmalı Bir Çalışma</i>
<i>Öğr. Gör. Dr. Kadir AKPINAR</i>	<i>Karamanoğlu Mehmetbey Üniversitesi</i>	<i>Şehir İmajı Ekseninde İstanbul Deneyiminin İstanbul Algısına Etkisi</i>
<i>Dr. Erdem AYYILDIZ</i>	<i>Tekirdağ Namık Kemal Üniversitesi,</i>	<i>Bilişim Teknolojileri Kullanım Düzeyinin İncelenmesi: Egzersiz Yapan Bireyler Üzerine Bir Çalışma</i>
<i>Dr. Erdem AYYILDIZ</i>	<i>Tekirdağ Namık Kemal Üniversitesi</i>	<i>Beden Eğitimi Öğretmeni Adaylarının Sosyal Girişimcilik Düzeylerinin İncelenmesi</i>
<i>Bilgin ATAŞ Doç. Dr. İbrahim CAN Doç. Dr. Halil İbrahim CEYLAN</i>	<i>Gödeklİ Ortaokulu, Aralık, Iğdır Iğdır Üniversitesi, Atatürk Üniversitesi,</i>	<i>Futbolcularda Beden Kompozisyonu, Sürat, Çeviklik Ve Aerobik Kapasite Arasındaki İlişkinin Değerlendirilmesi</i>
<i>Bilgin ATAŞ Doç. Dr. İbrahim CAN Doç. Dr. Halil İbrahim CEYLAN</i>	<i>Gödeklİ Ortaokulu, Aralık, Iğdır Iğdır Üniversitesi, Atatürk Üniversitesi</i>	<i>Yüksek İrtifanın Organizma Üzerindeki Fizyolojik Etkilerine Yönelik Genel Bir Araştırma</i>
<i>Prof. Dr. Elif AKTAŞ</i>	<i>Alanya Alaaddin Keykubat Üniversitesi,</i>	<i>Türkçe Ders Kitaplarında Yaratıcı Drama Yönteminin Kullanımına İlişkin Betimsel Bir Araştırma</i>
<i>Prof. Dr. Elif AKTAŞ</i>	<i>Alanya Alaaddin Keykubat Üniversitesi,</i>	<i>Türkçe Öğretmeni Adaylarının Öğrenme-Öğretme Sürecinde Yaratıcı Dramanın Kullanımına İlişkin Görüşleri</i>
<i>Sude KAPLAN Melike BAKAR Melek Nur KÖSE İrfan MARANGOZ</i>	<i>Kırşehir Ahi Evran Üniversitesi,</i>	<i>Türkiye’de Spor Menajerliği</i>



24.12.2023

TURKEY Local Time: 13:00-15:30

**HEAD OF SESSION: Prof. Dr. Vatan KAVAK**

**SESSION-2 HALL-7**

AUTHORS	AFFILIATION	TOPIC TITLE
<i>Öğr. Gör. Ali SERT Doç.Dr. Mümin POLAT</i>	<i>Burdur Mehmet Akif Ersoy Üniversitesi,</i>	<i>Kimyasal Ajanlardan Sinir Ajantı Olan Sarin Gazının Etki Mekanizması Ve Önemi</i>
<i>Öğr. Gör. Ali SERT Doç.Dr. Mümin POLAT</i>	<i>Burdur Mehmet Akif Ersoy Üniversitesi,</i>	<i>KBRN Ajanlarının Tespitinde De Kullanılan Bir Yöntem: Kütle Spektroskopisi</i>
<i>Arş. Gör. Ayşenur KAHRAMAN Prof. Dr. Özgür ALPARSLAN</i>	<i>Tokat Gaziosmanpaşa Üniversitesi</i>	<i>Postpartum Döneme Uyum Ve Ebelerin Rollerini</i>
<i>Arş. Gör. Ayşenur KAHRAMAN Prof. Dr. Özgür ALPARSLAN</i>	<i>Tokat Gaziosmanpaşa Üniversitesi</i>	<i>Postpartum Kanamanın Yönetiminde Güncel Ebelik Yaklaşımları</i>
<i>Dr. Öğr. Üyesi, GÜL BÜLBÜL MARAŞ</i>	<i>İzmir Demokrasi Üniversitesi,</i>	<i>Hemşirelerin Mesleki Ve Boş Zaman Fizik Aktivite Düzeyleri</i>
<i>Öğr. Gör. Ali SERT Doç.Dr. Mümin POLAT</i>	<i>Burdur Mehmet Akif Ersoy Üniversitesi,</i>	<i>Tarımsal Biyoterörizme Kbrn Tehlikeleri Üzerinden Yapılan Bir Değerlendirme</i>
<i>Öğr. Gör. Ali SERT Doç.Dr. Mümin POLAT</i>	<i>Burdur Mehmet Akif Ersoy Üniversitesi,</i>	<i>Radyasyonun İnsan Sağlığına Zararlı Etkileri</i>
<i>Prof. Dr. Vatan KAVAK</i>	<i>University of Dicle</i>	<i>Effects Of Low Protein Diet And Estrogen On Testicular Tissue In Male Rats</i>
<i>Prof. Dr. Vatan KAVAK</i>	<i>University of Dicle</i>	<i>Growth Of The Craniofacial Skeleton</i>



24.12.2023  
TURKEY Local Time: 13:00-15:00

**HEAD OF SESSION: Dr. Öğr. Üyesi Zehra BATU**

**SESSION-2 HALL-8**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Dr. Öğr. Üyesi Zehra BATU</i>	<i>İzmir Demokrasi üniversitesi,</i>	<i>Yaşlılarda Akdeniz Diyetinin Bilişsel Fonksiyon Üzerine Etkisi</i>
<i>Dr. Öğr. Üyesi Zehra BATU</i>	<i>İzmir Demokrasi üniversitesi,</i>	<i>Yaşlılıkta Probiyotik Kullanımının Konstipasyon Üzerine Etkileri</i>
<i>Arş. Gör. Dr. Emine KURTBEYOĞLU</i>	<i>Gümüşhane Üniversitesi,</i>	<i>Propolisin Sağlık Üzerine Etkileri</i>
<i>Arş. Gör. Dr. Emine KURTBEYOĞLU</i>	<i>Gümüşhane Üniversitesi,</i>	<i>Fermente Besinlerin Mikrobiyota Üzerine Etkileri</i>
<i>Dr. Öğr. Üyesi Abdulaziz ERTAŞ Fatma KILINÇASLAN</i>	<i>Afyonkarahisar Sağlık Bilimleri Üniversitesi,</i>	<i>Hastanelerde Esas Üretim Gider Yerlerine Göre Stok Kontrol Yöntemleri:Abc Ve Ved Analizi</i>
<i>Arş. Gör. Dr. Seda ŞAHAN, Arş. Gör. Dr. Elif Deniz KAÇMAZ</i>	<i>İzmir Bakırçay Üniversitesi, Bakırçay Üniversitesi,</i>	<i>Öğrenci Hemşirelerin Manevi Bakım Yetkinliklerinin Geliştirilmesi</i>
<i>Arş. Gör. Dr. Elif Deniz KAÇMAZ</i>	<i>İzmir Bakırçay Üniversitesi, Bakırçay Üniversitesi</i>	<i>Üniversite Öğrencilerinde İntihar Davranışını Önlenme Çalışmaları</i>
<i>Dr. Öğr. Üyesi Abdulaziz ERTAŞ Hatice Nur KARABACAK,</i>	<i>Afyonkarahisar Sağlık Bilimleri Üniversitesi</i>	<i>Sağlık Kurumlarında Dış Kaynak Kullanımı: Sistemik Bir Analiz</i>



24.12.2023  
TURKEY Local Time: 13:00-15:00

**HEAD OF SESSION: Doç. Dr. Bahattin DEMİRTAŞ**

**SESSION-2 HALL-9**

<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
<i>Dr. Öğr. Üyesi Ahmet Batuhan OYAL</i>	<i>Türk-Alman Üniversitesi</i>	<i>Karayoluyla Yapılan Eşya Taşımalarında Fiilî Taşıyıcı Kavramı Ve Asıl Taşıyıcının Sorumluluğunu Genişleten Sözleşmelerin Fiilî Taşıyıcıya Karşı İleri Sürülmesi</i>
<i>Doç. Dr. Bahattin DEMİRTAŞ</i>	<i>Ankara Hacı Bayram Veli Üniversitesi,</i>	<i>Soğuk Savaş-Üç Blok Ve Bir Devlet Başkanı: Mareşal Josip Broz Tito Ve Onun 1976 Türkiye Ziyareti</i>
<i>Doç. Dr. Bahattin DEMİRTAŞ</i>	<i>Ankara Hacı Bayram Veli Üniversitesi,</i>	<i>Demokrat Parti Döneminde Başbakan Adnan Menderes'in Uzakdoğu Gezisi</i>
<i>Doç. Dr. Nabi AZEROĞLU</i>	<i>Erciyes Üniversitesi,</i>	<i>İran Merkez Türklerinin Bilgesi İnanlı Derviş Ali Behrevan Ve Yaver Baba Eseri</i>
<i>Doç. Dr. Nabi AZEROĞLU</i>	<i>Erciyes Üniversitesi,</i>	<i>Güney Azerbaycan Türklerinin Milli Uyanışında Babek Kalesi Kurultayları Ve Milli Mücadele Bayrağının Kaldırılması</i>
<i>DOÇ. DR. ŞÜKRÜ ÖZÜDOĞRU</i>	<i>Burdur Mehmet Akif Ersoy Üniversitesi,</i>	<i>Kıbyra Antik Kenti (Burdur /Göhlisar) Hellenistik Dönem Sikke Basımları</i>
<i>Doç. Dr. Bahattin DEMİRTAŞ</i>	<i>Ankara Hacı Bayram Veli Üniversitesi,</i>	<i>Demokrat Parti Döneminde Başbakan Adnan Menderes'in Yugoslavya Gezisi</i>



# 1. BİLSEL INTERNATIONAL TURABDİN SCIENTIFIC RESEARCHES AND INNOVATION, 23-24 DECEMBER, MARDİN/TÜRKİYE

## PHOTOS FROM OUR CONGRESS

The image shows a Zoom meeting interface. The top part displays a presentation slide titled "1. BİLSEL ULUSLARARASI TURABDİN BİLİMSEL ARAŞTIRMALAR VE İNOVASYON KONGRESİ 23-24 ARILIK 2023, 'Ud Resitali'" featuring a photo of Doç. Dr. Hakan Emre ZİYAGİL playing a stringed instrument. The slide also includes the text "Hicaz (Uzzal) Taksim".

The bottom part of the image shows a grid of participants in a Zoom meeting. The participants are arranged in a 5x5 grid. The names of the participants are visible below their video thumbnails. The names include: Bilgi Seli Dr. İlyas ERPAV, Bilgi Seli Koordinatör, S1-H7, Doç. Dr. Mehmet KAPLAN, Sess-1, Hall-5, Abdullah Özka..., h2 Merve Yavuz, Irina Ana Drobot, h3 Yonca ALTINDAL, h5 halisilymaz, SESSION-1 HALL-10 Mikail BA..., h8 Doç. Dr. Hakan Emre ZİYAGİL, h7 Ersin KIRAL, S1- H8 Doruk Okuyucu, iPhone (2), h9 Havva AKPINAR, Session-1, Hall-3, Ertugrul ER..., Esra Çiçek, hall 11 MUSTAFA MAHER, S-1 Hall-9 Asilhan Öztürk Çetin, h5 Tuba, h9 Mehmet CAN, h8 Sevinc Erdağı, h6 Yusuf Oksar, h3 Fahriye Engil, Session-1, Hall-7, Çilem GÜNER, and Session-1 Hall-10 Betül Aymın.

The Zoom interface includes a top bar with "Kayıt" (Recording) and "h8 Doç. Dr. Hakan Emre ZİYAGİL ekranını görüntüyorsunuz" (Viewing screen of h8 Doç. Dr. Hakan Emre ZİYAGİL). The bottom bar shows various controls like "Sesi aç" (Unmute), "Videoyu Başlat" (Start Video), "Güvenlik" (Security), "Katılımcılar" (Participants), "Sohbet" (Chat), "Ekranı paylaş" (Share Screen), "Özet" (Summary), "AI Companion", "Reaksiyonlar" (Reactions), "Uygulamalar" (Apps), "Beyaz Tahtalar" (Whiteboards), "Notlar" (Notes), and "Daha fazla" (More). A red "Sonlandır" (End) button is visible in the bottom right corner.



# 1. BİLSEL INTERNATIONAL TURABDİN SCIENTIFIC RESEARCHES AND INNOVATION, 23-24 DECEMBER, MARDİN/TÜRKİYE

Sesimi (Alt+A) ile açın veya sesi geçici olarak açmak için BOŞLUK tuşunu basılı tutun.

Giriş yapın Görüntüle

Hall-4 Dwi Mukti R bekleme odasına girdi Kabul et Görüntüle x

H-7, Moses Adeolu AGOI Bilgi Seli HALL-12 Moderator Sándor Föld... S1 H10 Tamersit Abdelbasset Woyengitonye Abadani

Session 1\_Hall 2\_Syntia Aman... H10 Gheorghe Giurgiu H11 & 13 S1 Head of session... Sümer Necati Yassine MOUNI...

H-7, Moses Adeolu AGOI Bilgi Seli Dr. Ilyas ERPAY belouadah messaouda S1 H9 GY-IVY LORRAINE LURINSIUS Sesi Açmayı İste...

Session 1\_Hall 7\_Kyimet Soya... Session-1 Hall-1 Diana Vigh Session-1, Hall-7, Aysel ATEŞ session 1 - hall 2 Tri Noviantik... Session-1 Hall-8 UMI FIKRIYAH

R Session 1\_Hall 8... Bilgi Seli azdem driss S1-H10 CHAIM...

session-1 hall-4 Ridwan Djibran Session 1\_Hall 8\_Hasna Huwa... Bilgi Seli azdem driss S1-H10 33 atanmamış katılımcı

Sesi aç Videoyu Başlat Güvenlik Katılımcılar 36 Sohbet Ekranı paylaş Özet AI Companion Reaksiyonlar Uygulamalar Beyaz Tahtalar Notlar Daha fazla Ayır

Sümer Necati konuşuyor...

Giriş yapın Görüntüle

H-7, Moses Adeolu AGOI Bilgi Seli Dr. Ilyas ERPAY belouadah messaouda S1 H9 GY-IVY LORRAINE LURINSIUS Aliaksandr.Susha - SESSİON-1...

Session-1 Hall-1 Diana Vigh Session-1, Hall-7, Aysel ATEŞ session 1 - hall 2 Tri Noviantik... Session 1, Hall 7, Kyimet Soya... Session-1 Hall-8 UMI FIKRIYAH

R Session 1\_Hall 8... Bilgi Seli azdem driss S1-H10 CHAIM...

session-1 hall-4 Ridwan Djibran Session 1\_Hall 8\_Hasna Huwa... Bilgi Seli azdem driss S1-H10 CHAIMA MOUFFOUK

Hall 1-Sirhajwa... A Dwi Sintia Rah... M session 1 Hall 8\_Lilis arviani

Session 1\_Hall 2\_Yenita Karish... Labıqa aman Kişisinden Herkese kindly tell me how can i join hall-9 aref ghadery H-1\_nurris kiyani Hall-4 32 atanmamış katılımcı

Sesi aç Videoyu Başlat Güvenlik Katılımcılar 34 Sohbet Ekranı paylaş Özet AI Companion Reaksiyonlar Uygulamalar Beyaz Tahtalar Notlar Daha fazla Ayır



# 1. BİLSEL INTERNATIONAL TURABDİN SCIENTIFIC RESEARCHES AND INNOVATION, 23-24 DECEMBER, MARDİN/TÜRKİYE

Session-1 Hall-1 DİANA VİGH ekranını görüntüleyorsunuz Seçenekleri Görüntüle Giriş yapın Görüntüle

SHOW TASKBAR DISPLAY SETTINGS END SLIDE SHOW

00:09 9:24 Next slide

## THE IMPACT OF DIFFERENCES AT WORK

- Workplace expectations**  
Where people work is an issue that is widely debated among different age groups
- Technology**  
It is difficult to keep up with the constantly evolving technology
- Communication**  
Communication between generations can be difficult due to the use of slang

CONCLUSION

technology for each generation is not seen, every person rather than online. Globalization and technological advances have made it easier for people to connect with others around the world. As a result, a common language of slang and expressions has emerged among the younger generations. However, this has created a communication gap between the generations, leading to difficulties both at home and at work. In companies with a hierarchical structure, it is important for employees to be able to communicate effectively with one another. To achieve this, a common language related to their work should be established, using professional argon that is easy to understand.

Slide 6 of 8

3 atanmamış katılımcı

Sessize al Videoyu Başlat Katılımcılar Sohbet Ekranı paylaş Kaydet Alt Yazıları Göster Ara Odalar Reaksiyonlar Uygulamalar Beyaz Tahtalar Odadan Çık

Kayıt Bilgi Seli Dr. İlyas ERPAY konuşuyor... Giriş yapın Görüntüle

2/3

Tam ekran modundan çıkmak için ESC tuşuna basın veya çift tıklayın

TOSHIBA

h4 Gumrah Uysal S1 Hall-7 Yasin... h8 peteksancakli h3 Ercan Geçgin

h5 Deniz Rüzgar Session-1, Hall-4, Serap Erçel Session-1, Hall-1, Mehmet Aki... Hall-11 Bojan Kitanoviç S1-H...

50 atanmamış katılımcı

Sesi aç Videoyu Başlat Güvenlik Katılımcılar Sohbet Ekranı paylaş Özet AI Companion Reaksiyonlar Uygulamalar Beyaz Tahtalar Notlar Daha fazla Sonlandır



# 1. BİLSEL INTERNATIONAL TURABDİN SCIENTIFIC RESEARCHES AND INNOVATION, 23-24 DECEMBER, MARDİN/TÜRKİYE

# 1. BİLSEL INTERNATIONAL TURABDİN SCIENTIFIC RESEARCHES AND INNOVATION, 23-24 DECEMBER, MARDİN/TÜRKİYE

Kayıt H2 Esra Çiçek ekranını görüntülüyorsunuz Seçenekleri Görüntüle Giriş yapın Görüntüle



h2 Merve Yavuz Bilgi Seli Koordinatör

S1-H2-İşıl Bozkurt H2 Esra Çiçek

Session-1 Hall-2 Merve Keleş

1 atanmamış katılımcı

Sesi aç Videoyu Başlat Katılımcılar 5 Sohbet Ekranı paylaş Kaydet Alt Yazıları Göster Ara Odalar 1 Reaksiyonlar Uygulamalar Beyaz Tahtalar Odadan Çık

Giriş yapın Görüntüle



h3 Yonca ALTINDAL Bilgi Seli Koordinatör Session-1 Hall-3 Ertuğrul ERVÜCEL

h3 Fahriye Emgili Session-1 Hall-3 Meral MIZRAK h3 Ercan Geçgin

MESUT ŞÖHRET

MESUT ŞÖHRET

Sesi aç Videoyu Başlat Katılımcılar 7 Sohbet Ekranı paylaş Kaydet Alt Yazıları Göster Ara Odalar 2 Reaksiyonlar Uygulamalar Beyaz Tahtalar Odadan Çık

# 1. BİLSEL INTERNATIONAL TURABDİN SCIENTIFIC RESEARCHES AND INNOVATION, 23-24 DECEMBER, MARDİN/TÜRKİYE

h4 Elif ekranını görüntüleyorsunuz Seçenekleri Görüntüle Giriş yapın Görüntüle

QWY Metodu ile Sürdürülebilirlik Performansını Ölçümler - PowerPoint Çizim (Bilgiyi Bana Göster)

Kurumsal Sürdürülebilirlik Nedir? Nasıl Ölçülür?

- İşletmeler toplumun ihtiyaçlarını karşılayabilmek için geçmişten günümüze miras kalan ve bizim de gelecek kuşakları düşünerek hareket etmemizi gerektirecek toplumun doğal kaynaklarını kullanan ekonomik birimlerdir.
- Kurumsal sürdürülebilirlik yönetim sistemi, yeni pazarlara nüfus etmek isteyen, uzun vadeli sürdürülebilir kalkınmayı amaçlayan işletmeler için katma değerli çözümler ve sürdürülebilirliğe entegre yaklaşımlarla itibarını ve rekabet gücünün artırılması ve geliştirilmesi açısından sayısız fırsatlar sunabilmektedir.

h4 Elif

Bilgi Seli Koordinatör

h4 Gumrah Uysal

h4 Gumrah Uysal

Sension-1, Hall-4, Veli ÇELİK

Session-1, Hall-4...

Session-1, Hall-4, Eyyüp YALÇIN

Session-1, Hall-4, Serap Erçel

SESSION-1, HAL...

Yasemin Turaç

Yasemin Turaç

2 atanmamış katılımcı

Sesi aç Videoyu Başlat Katılımcılar 8 Sohbet Ekranı paylaş Kaydet Alt Yazıları Göster Ara Odalar Reaksiyonlar Uygulamalar Beyaz Tahtalar Odadan Çık

Kayıt h5 Tuba ekranını görüntüleyorsunuz Seçenekleri Görüntüle Giriş yapın Görüntüle

Tablo 2. Kavram Haritaları ile Belirlenen Kavrama Yanılgıların Yüzde Dağılımları (n=30)

Kavramlar	Kavram Yanılgıları	%
Protein sentezi	Protein sentez rRNA'ın ribozoma bağlanmasıyla başlar.	3,33
	Protein sentezi DNA için gereklidir.	3,33
	Protein sentezinde DNA kromatin açılır.	3,33
DNA	DNA'daki üçüncü baz "kodon" denir.	16,67
	DNA'dan mRNA oluşu transkripsiyondur.	6,67
	DNA protein sentezinden sorumludur.	10,00
RNA Polimeraz	DNA'nın okunmasına "transkripsiyon" denir.	3,33
	RNA Polimeraz, RNA zincirini açar.	3,33
	RNA Polimeraz, RNA'nın yapısında bulunmaktadır.	3,33
RNA	RNA Polimeraz, RNA'yı parçalar.	3,33
	RNA, rRNA'dan oluşur.	6,67
	RNA, RNA Polimeraz sentezler.	3,33
mRNA	mRNA, Ribozoma aminoasit bağlar.	3,33
	mRNA, üzerindeki üçlü aminoasit dizisine "kodon" denir.	3,33
	rRNA, aminoasitleri birbirine bağlar.	3,33
tRNA	rRNA, RNA'dan aldığı bilgileri genetik yerlere götürür.	3,33
	rRNA, proteinleri taşıyan RNA'dır.	3,33
	rRNA, üzerindeki üçlü aminoasit dizisine "antikodon" denir.	3,33
Kodon	rRNA ribozoma bilgi getirir.	3,33
	Antikodonda buluşarak aminoasitleri oluşturmaz.	3,33
	Antikodon aminoasit taşıyıcıdır.	3,33
Transkripsiyon	Antikodon rRNA, üzerindeki üçlü genetik şifredir.	3,33
	Transkripsiyon rRNA'da aminoasit sentezidir.	3,33
	Ribozomda RNA bulunur.	6,67
Ribozom	Ribozomda aminoasit sentezlenir.	3,33
	Ribozomda rRNA sentezlenir.	3,33
	Ribozomda tRNA sentezlenir.	6,67
Protein	Ribozomda yapımına olur.	3,33
	Protein DNA'da sentezlenir.	3,33
	Protein rRNA'nın yapısına katkı.	3,33

h5 Deniz Rüzgar

Bilgi Seli Koordinatör

h5 Sevinc Erdagı

h5 Tuba

Session-1, Hall-5, Abdullah Ozkartal

h5 halisylmaz

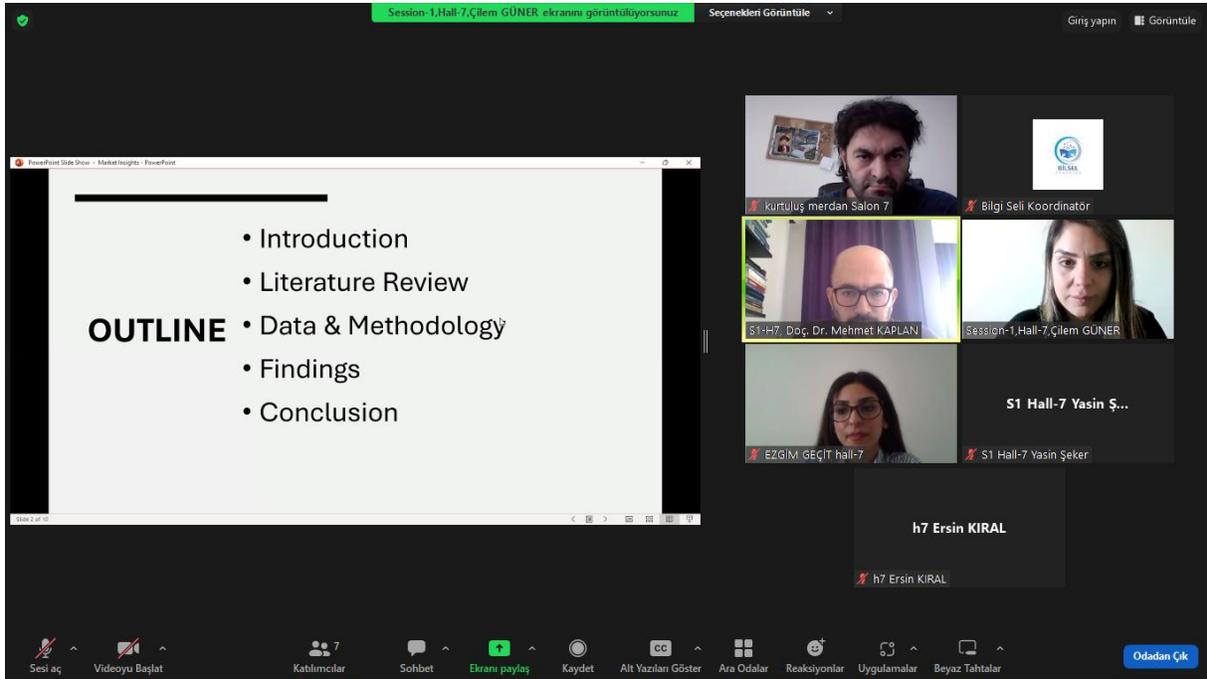
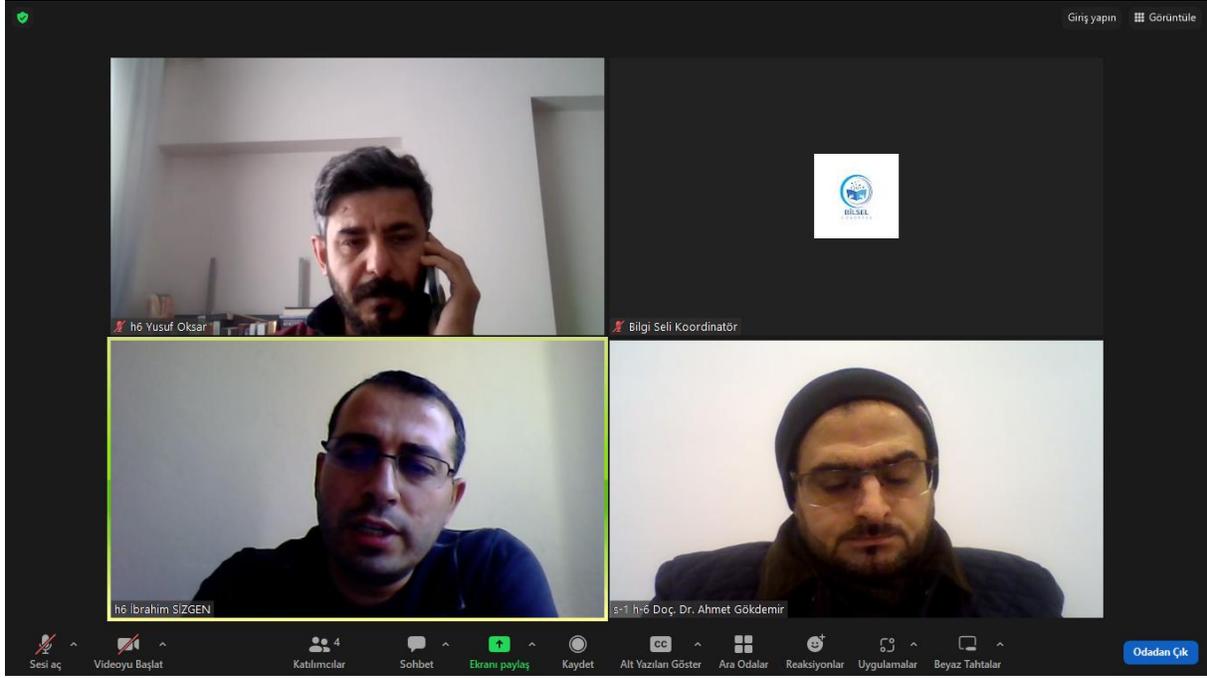
S1-Hall-5 seyran...

S1-Hall-5 seyran esen

1 atanmamış katılımcı

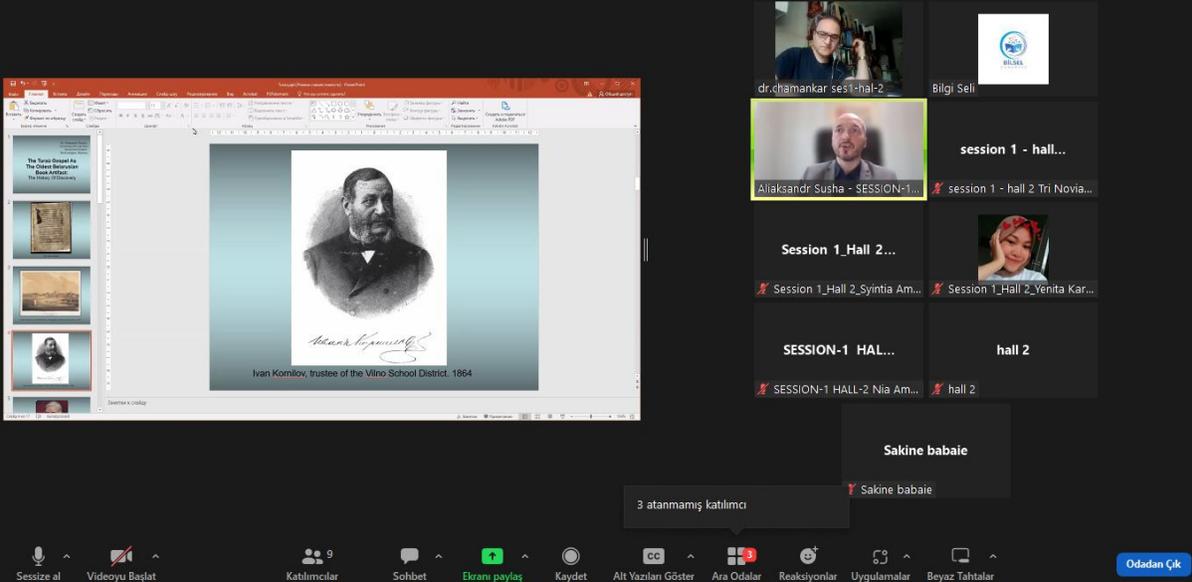
Sesi aç Videoyu Başlat Katılımcılar 7 Sohbet Ekranı paylaş Kaydet Alt Yazıları Göster Ara Odalar Reaksiyonlar Uygulamalar Beyaz Tahtalar Odadan Çık

# 1. BİLSEL INTERNATIONAL TURABDİN SCIENTIFIC RESEARCHES AND INNOVATION, 23-24 DECEMBER, MARDİN/TÜRKİYE



# 1. BİLSEL INTERNATIONAL TURABDİN SCIENTIFIC RESEARCHES AND INNOVATION, 23-24 DECEMBER, MARDİN/TÜRKİYE

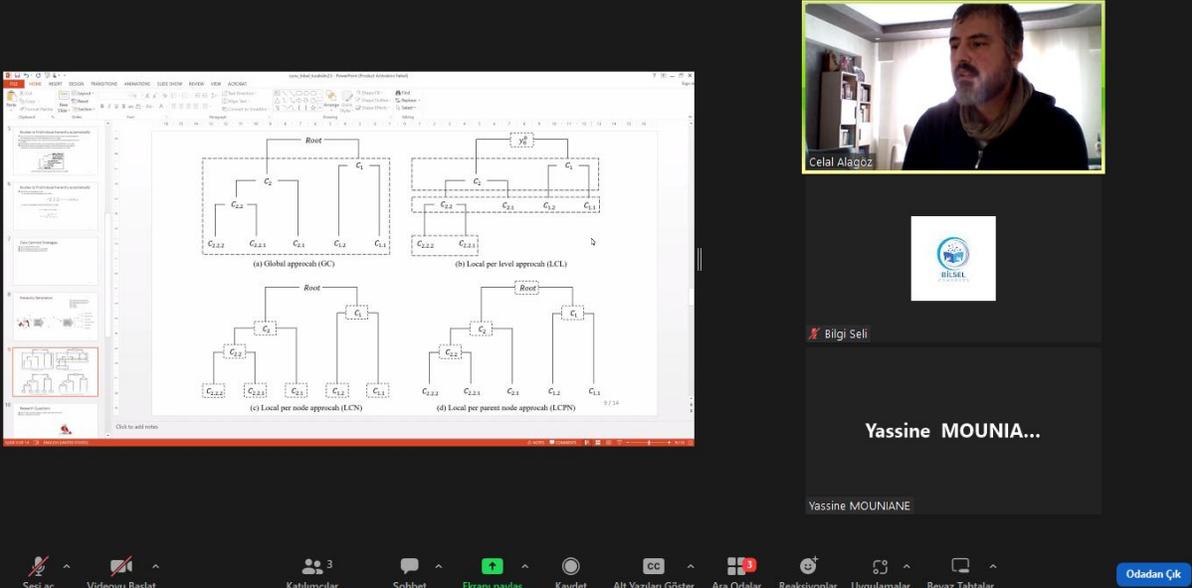
Aliaksandr Susha - SESSION-1 H... ekranını görüntüyorsunuz Seçenekleri Görüntüle Giriş yapın Görüntüle



The screenshot shows a Zoom meeting interface. On the left, a presentation slide is displayed with a portrait of Ivan Komolov and the text "Ivan Komolov, trustee of the Vltovo School District. 1864". On the right, a grid of participants is visible, including "dr.chamankar ses1-hal-2", "Bilgi Seli", "session 1 - hall...", "Aliaksandr Susha - SESSION-1...", "Session 1\_Hall 2...", "Session 1\_Hall 2\_Syntia Am...", "Session 1\_Hall 2\_Yenita Kar...", "SESSION-1 HAL...", "hall 2", and "SESSION-1 HALL-2 Nia Am...". At the bottom, there are controls for audio, video, chat, and other meeting functions.

Celal Alagoz ekranını görüntüyorsunuz Seçenekleri Görüntüle Giriş yapın Görüntüle

Sesimi (Alt+A) ile açın veya sesi geçici olarak açmak için BOŞLUK tuşunu basılı tutun.



The screenshot shows a Zoom meeting interface. On the left, a presentation slide displays four tree diagrams labeled (a) Global approach (GC), (b) Local per level approach (LCL), (c) Local per node approach (LCN), and (d) Local per parent node approach (LCPN). On the right, a video feed shows Celal Alagoz. Below the video feed, there is a name tag for "Yassine MOUNIA..." and a name "Yassine MOUNIANE". At the bottom, there are controls for audio, video, chat, and other meeting functions.



# 1. BİLSEL INTERNATIONAL TURABDİN SCIENTIFIC RESEARCHES AND INNOVATION, 23-24 DECEMBER, MARDİN/TÜRKİYE

H-7, Moses Adeolu AGOİ ekranını görüntüleyorsunuz Seçenekleri Görüntüle

JASMINE bekleme odasına girdi Ana Oturuma Kabul Et Görüntüle x

Giriş yapın Görüntüle

4 atanmamış katılımcı

Sesi aç Videoyu Başlat Katılımcılar Sohbet Ekranı paylaş Kaydet Alt Yazıları Göster Ara Odalar Reaksiyonlar Uygulamalar Beyaz Tahtalar Odadan Çık

Dr Faisal Moderator H9 ekranını görüntüleyorsunuz Seçenekleri Görüntüle

Paylaşılan içerik ekranınıza sığdırdı. Orijinal boyutu görmek için menüde "Orijinal boyut"a tıklayın.

Woyengitonye Abadani Hall 9 Bilgi Seli

beloudah mess... beloudah messacouda S1 H9 Dr Faisal Moderator H9

labıqa aman Hall 9 azdem driss

4 atanmamış katılımcı

Sesi aç Videoyu Başlat Katılımcılar Sohbet Ekranı paylaş Kaydet Alt Yazıları Göster Ara Odalar Reaksiyonlar Uygulamalar Beyaz Tahtalar Odadan Çık



# 1. BİLSEL INTERNATIONAL TURABDİN SCIENTIFIC RESEARCHES AND INNOVATION, 23-24 DECEMBER, MARDİN/TÜRKİYE

S1 H10 Tamersit Abdelbasset ekranını görüntüleyorsunuz Seçenekleri Görüntüle Giriş yapın Görüntüle

Paylaşılan içerik ekranınıza sığdırdı. Orijinal boyutu görmek için menüde "Orijinal boyut" a tıklayın.

Tamersit - PowerPoint

Fichier Accueil Insertion Dessin Conception Transitions Animations Diaporama Enregistre Réviser Affichage Aide Rechercher des outils adaptés

1 2 3 4 5 6 7

**1. BİLSEL INTERNATIONAL HARPUT SCIENTIFIC RESEARCHES CONGRESS**  
**23-24 DECEMBER, MARDİN/TÜRKİYE**

**PHYTOCHEMICAL INVESTIGATION OF THE SPECIES**  
**HALOGETON SATIVUS**

Abdelbasset Tamersit<sup>1</sup>, Soumia Mouffouk<sup>1</sup>, Chaima Mouffouk<sup>1,2</sup>, Hamada Haba<sup>1</sup>

1 Laboratory of Chemistry and Environmental Chemistry (LCCE), Department of Chemistry, Faculty of Matter Sciences, Batna-1 University, 05000 Batna, Algeria.  
2 Department of Pharmacy, Faculty of Medicine, University of Batna 2 Mustapha Benboulaïd, 05000 Batna, Algeria.

CCE Laboratoire

Dispositif 1 de 14 Anguon (Etsa-Usa) Accessibilité : consultez nos recommandations Notes Commentaires 81%

H10 Gheorghie Giurgiu Bilgi Seli

S1 -HALL 10 -Yo... S1-H10 CHAIM...

S1 -HALL 10 -Youssef Rachid S1-H10 CHAIMA MOUFFOUK

djoughaina makh... Hazine kenza se...

djoughaina makhlouf SESSION-... Hazine kenza session 1 Hall 10

Mouffouk Soumia S1 H10 Tamersit...

Mouffouk Soumia S1 H10 Tamersit Abdelbasset

8 atanmamış katılımcı

Sesi aç Videoyu Başlat Katılımcılar 8 Sohbet Ekranı paylaş Kaydet Alt Yazıları Göster Ara Odalar Reaksiyonlar Uygulamalar Beyaz Tahtalar Odadan Çık

Giriş yapın Görüntüle

HALL-12 Moderator: Sándor Földvári Bilgi Seli

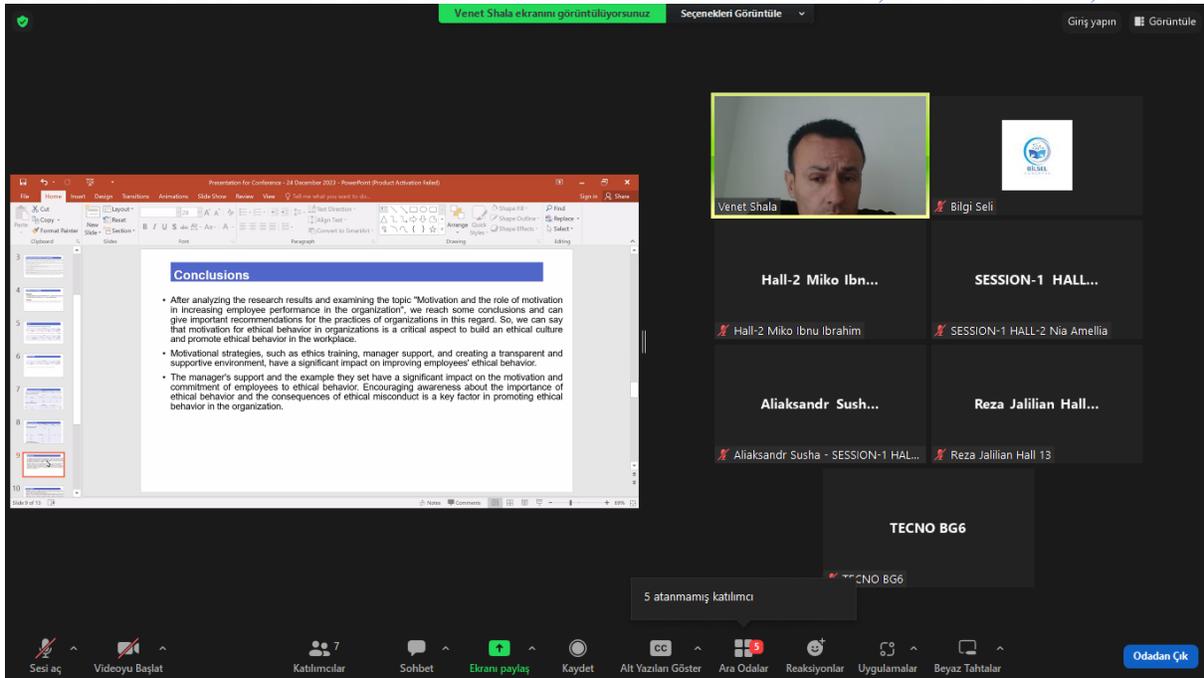
S-1 H-12 Levent... aref ghadery ha...

S-1 H-12 Levente DOBAK 8 atanmamış katılımcı

Sesi aç Videoyu Başlat Katılımcılar 4 Sohbet Ekranı paylaş Kaydet Alt Yazıları Göster Ara Odalar Reaksiyonlar Uygulamalar Beyaz Tahtalar Odadan Çık



Venet Shala ekranını görüntülüyorsunuz Seçenekleri Görüntüle Giriş yapın Görüntüle



The screenshot shows a Zoom meeting interface. On the left, a presentation slide titled "Conclusions" is displayed. The slide content includes:

- After analyzing the research results and examining the topic "Motivation and the role of motivation in increasing employee performance in the organization", we reach some conclusions and can give important recommendations for the practices of organizations in this regard. So, we can say that motivation for ethical behavior in organizations is a critical aspect to build an ethical culture and promote ethical behavior in the workplace.
- Motivational strategies, such as ethics training, manager support, and creating a transparent and supportive environment, have a significant impact on improving employees' ethical behavior.
- The manager's support and the example they set have a significant impact on the motivation and commitment of employees to ethical behavior. Encouraging awareness about the importance of ethical behavior and the consequences of ethical misconduct is a key factor in promoting ethical behavior in the organization.

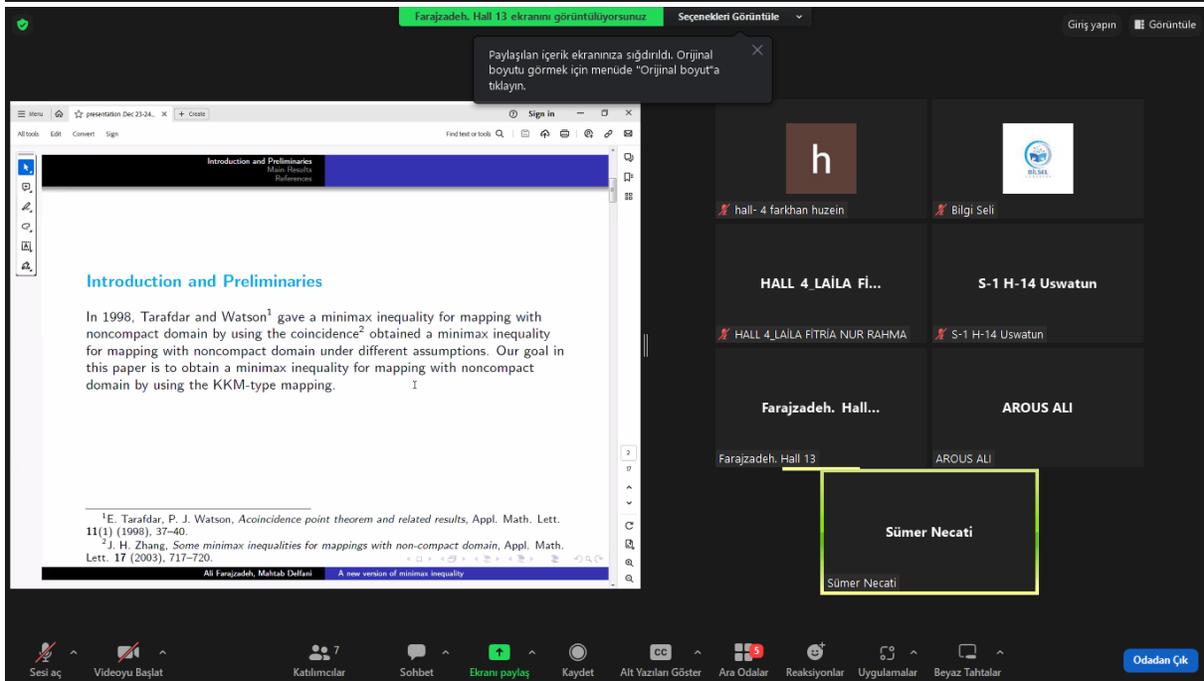
On the right, a grid of participants is visible. The participants listed are:

- Venet Shala
- Bilgi Seli
- Hall-2 Miko Ibn...
- SESSION-1 HALL...
- Hall-2 Miko Ibnu Ibrahim
- SESSION-1 HALL-2 Nia Amelia
- Aliaksandr Sush...
- Reza Jalilian Hall...
- Aliaksandr Susha - SESSION-1 HAL...
- Reza Jalilian Hall 13
- TECNO BG6
- TECNO BG6

At the bottom, there is a notification: "5 atanmamış katılımcı". The Zoom control bar at the bottom includes options for "Sesi aç", "Videoyu Başlat", "Katılımcılar", "Sohbet", "Ekranı paylaş", "Kaydet", "Alt Yazıları Göster", "Ara Odalar", "Reaksiyonlar", "Uygulamalar", "Beyaz Tahtalar", and "Odadan Çık".

Farajzadeh, Hall 13 ekranını görüntülüyorsunuz Seçenekleri Görüntüle Giriş yapın Görüntüle

Paylaşılan içerik ekranınıza sığdırdı. Orijinal boyutu görmek için menüde "Orijinal boyut" a tıklayın.



The screenshot shows a Zoom meeting interface. On the left, a presentation slide titled "Introduction and Preliminaries" is displayed. The slide content includes:

**Introduction and Preliminaries**

In 1998, Tarafdar and Watson<sup>1</sup> gave a minimax inequality for mapping with noncompact domain by using the coincidence<sup>2</sup> obtained a minimax inequality for mapping with noncompact domain under different assumptions. Our goal in this paper is to obtain a minimax inequality for mapping with noncompact domain by using the KKM-type mapping.

<sup>1</sup>E. Tarafdar, P. J. Watson, *Coincidence point theorem and related results*, Appl. Math. Lett. 11(1) (1998), 37-40.  
<sup>2</sup>J. H. Zhang, *Some minimax inequalities for mappings with non-compact domain*, Appl. Math. Lett. 17 (2003), 717-720.

Ali Farajzadeh, *Maktab Daffani* A new version of minimax inequality.

On the right, a grid of participants is visible. The participants listed are:

- hall- 4 farkhan huzein
- Bilgi Seli
- HALL 4 LAİLA Fİ...
- S-1 H-14 Uswatun
- HALL 4 LAİLA FITRIA NUR RAHMA
- S-1 H-14 Uswatun
- Farajzadeh, Hall...
- AROUS ALI
- Farajzadeh, Hall 13
- AROUS ALI
- Sümer Necati
- Sümer Necati

At the bottom, there is a notification: "Paylaşılan içerik ekranınıza sığdırdı. Orijinal boyutu görmek için menüde 'Orijinal boyut' a tıklayın." The Zoom control bar at the bottom includes options for "Sesi aç", "Videoyu Başlat", "Katılımcılar", "Sohbet", "Ekranı paylaş", "Kaydet", "Alt Yazıları Göster", "Ara Odalar", "Reaksiyonlar", "Uygulamalar", "Beyaz Tahtalar", and "Odadan Çık".



# 1. BİLSEL INTERNATIONAL TURABDİN SCIENTIFIC RESEARCHES AND INNOVATION, 23-24 DECEMBER, MARDİN/TÜRKİYE

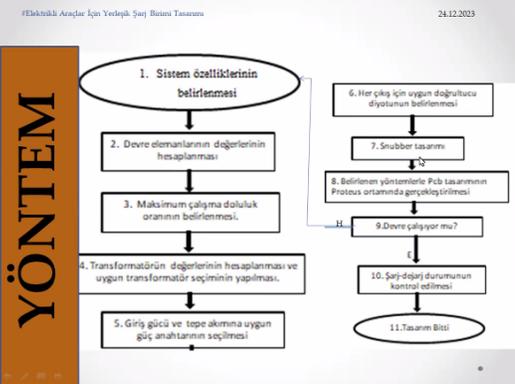
Zoom meeting interface showing a grid of 20 participants. The top bar includes "Giriş yapın" and "Görüntüle". The bottom bar shows "Sesi aç", "Videoyu Başlat", "Güvenlik", "Katılımcılar" (40), "Sohbet", "Ekranı paylaş", "Özet", "AI Companion", "Reaksiyonlar", "Uygulamalar", "Beyaz Tahtalar", "Notlar", "Daha fazla", and "Ayrı (Alt+Q)".

h7 Vatan Kavak	Bilgi Seli	Bilgi Seli Dr. İlyas ERPAY	Session 2 Hall1, AYBARS YILM...	Session-2, Hall-3, Büğra Nur...
h5 Mehmed Rafet Özdemir	Sümer Necati	Hall-4, Doç.Dr. Fuat LEBE...	S2-H5-Fırat Artuğer	h8 PhD. Zehra Batu
h3 İtktu	SESSION-2, HALL-6, Kadir Ak...	h5 Doç. Dr. Rasim ÖZDEMİR	Erdem Ayyıldız (H-6)	ALI_RECAL_ÇELİK_S1_H2
Session 2, Hall 7, Gül BÜLBÜL ...	h8 HATICE NUR KARABACAK	h5 Nazım KUNDURACI-ZBEU	h6 Elif Aktaş	h8 Elif Deniz Kaçmaz
SESSION-2 HALL-8 Emine Kur...	S-2, Hall-9-Dr. Bahattin DEMİ...	SESSION-2 HALL-9, Ahmet Bat...	h6 Doç. Dr. İrfan MARANGOZ	h2 Mehm... 35 atanmamış katılımcı

Zoom meeting interface showing a grid of 20 participants. The top bar includes "Bilgi Seli Dr. İlyas ERPAY konuşuyor..." and "Giriş yapın" and "Görüntüle". The bottom bar shows "Sesi aç", "Videoyu Başlat", "Güvenlik", "Katılımcılar" (40), "Sohbet", "Ekranı paylaş", "Özet", "AI Companion", "Reaksiyonlar", "Uygulamalar", "Beyaz Tahtalar", "Notlar", "Daha fazla", and "Ayrı".

Session 2, Hall 7, Gül BÜLBÜL ...	h8 HATICE NUR KARABACAK	h5 Nazım KUNDURACI-ZBEU	h6 Elif Aktaş	h8 Elif Deniz Kaçmaz
SESSION-2 HALL-8 Emine Kur...	S-2, Hall-9-Dr. Bahattin DEMİ...	SESSION-2 HALL-9, Ahmet Bat...	h6 Doç. Dr. İrfan MARANGOZ	h2 Mehmet Ali Özçelik
HALL-1 Veysel Karani ÇETINK...	h8 Fatma Kılınçaslan	h7 Ali SERT	Hall 3 Ali Birvural	hall2 Berkem Vural
h2 Zülfikar ASLAN	Bilgi Seli	h1 Esra KARAKAYA	TECNO BG6	Hall-2 Miko İbn...
h7 Ayşenur KAH...	SESSION-2 HAL...	h6 Kadir	h1 Yalçın Şevki...	Gürkan Usta
h7 Ayşenur KAHRAMAN	SESSION-2 HALL-5, Songül K...	h6 Kadir	h1 Yalçın Şevki Yıldız	Sese bağ... 35 atanmamış katılımcı

h1 Esra KARAKAYA ekranını görüntüyorsunuz Seçenekleri Görüntüle Giriş yapın Görüntüle



24.12.2023

h1 Yalçın Şevki... h1 Esra KARAKA...  
h1 Yalçın Şevki Yıldız h1 Esra KARAKAYA

HALL-1 Veysel K... Session 2, Hall1...  
HALL-1 Veysel Karani ÇETI... Session 2, Hall1 AYBARS VI...

S2-H1 Gürkan U... Hall-1, Fevzi DU...  
S2-H1 Gürkan Usta Hall-1, Fevzi DURMUŞ

Ferhat Aygün  
Ferhat Aygün

2 atanmamış katılımcı

Sesi aç Videoyu Başlat Katılımcılar 9 Sohbet Ekranı paylaş Kaydet Alt Yazıları Göster Ara Odalar 2 Reaksiyonlar Uygulamalar Beyaz Tahtalar Odadan Çık

Session 1\_Hall 8\_Hasna Huwaidah... ekranını görüntüyorsunuz Seçenekleri Görüntüle Giriş yapın Görüntüle

10 kişi bekleme odasına girdi Görüntüle x



Research Background

The development of the times has made many changes, one of which is in the field banking. Many banks in Indonesia and even the world have done this various kinds of innovations, ranging from improving quality, facilities, technological sophistication, and provide the best service. One of the developments is that banks based on sharia principles, thus making Muslims who previously, I didn't use banks because I was afraid of getting usury from their interest deposit, now many Muslims use sharia banks as a place saving money because it uses a profit sharing system

Session-1 Hall-8\_UMİFKIRINAH Bilgi Seli  
Bilgi Seli session 1\_Hall 8\_Lilis arviani  
Session 1\_Hall 8\_...  
Session 1\_Hall 8\_Hasna Huwaidah Hall-8\_khotbul UMAM

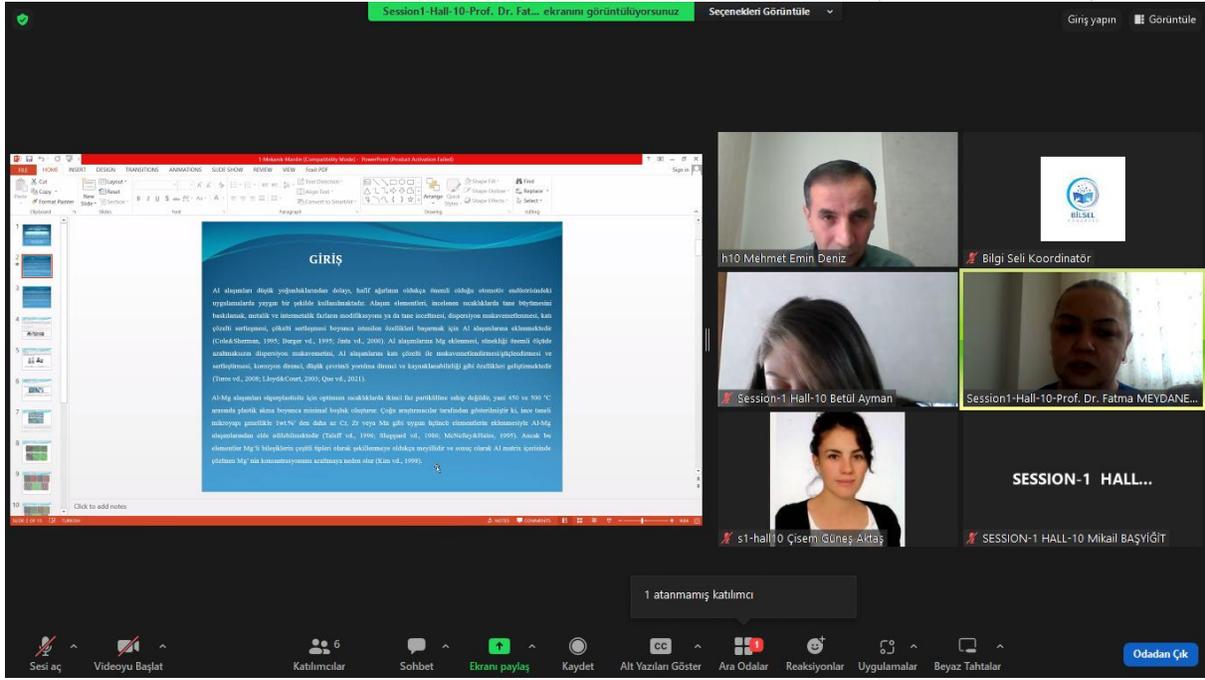
1 atanmamış katılımcı

Sesi aç Videoyu Başlat Katılımcılar 6 Sohbet Ekranı paylaş Kaydet Alt Yazıları Göster Ara Odalar 1 Reaksiyonlar Uygulamalar Beyaz Tahtalar Odadan Çık



# 1. BİLSEL INTERNATIONAL TURABDİN SCIENTIFIC RESEARCHES AND INNOVATION, 23-24 DECEMBER, MARDİN/TÜRKİYE

Session1-Hall-10-Prof. Dr. Fatma... ekranını görüntüleyorsunuz Seçenekleri Görüntüle Giriş yapın Görüntüle



**GİRİŞ**

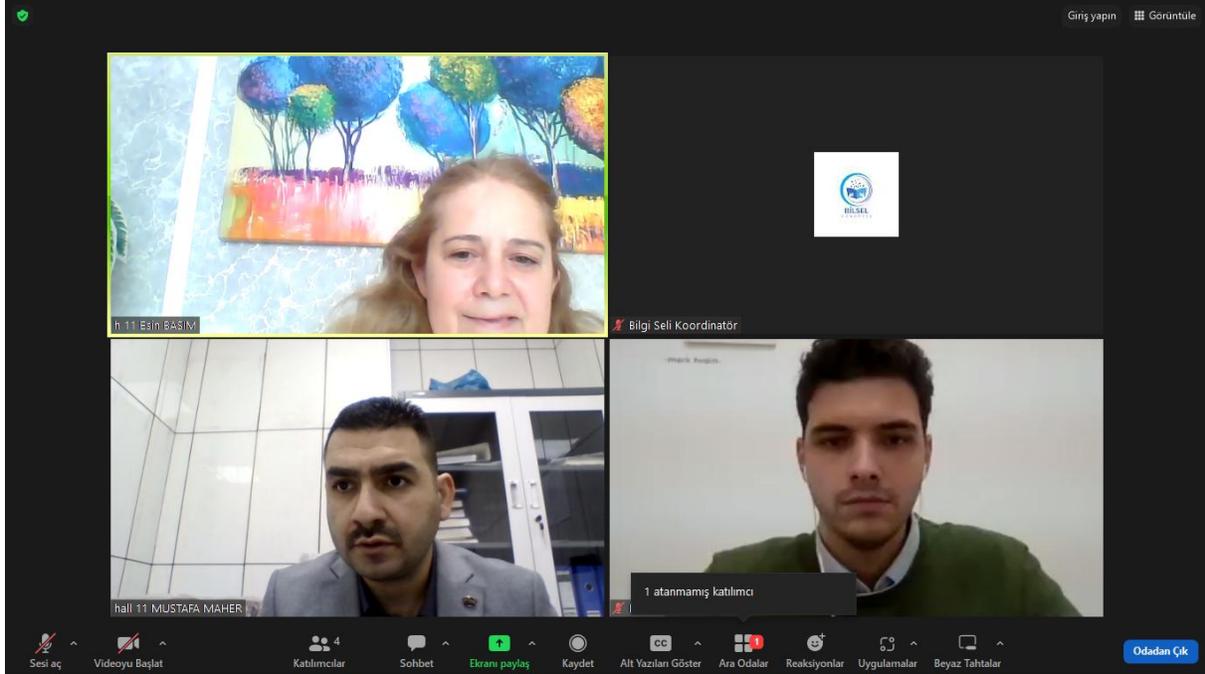
AI disiplinleri farklı disiplinlerle birleştiğinde farklı disiplinler arasında etkileşim ve işbirliği sağlanarak, farklı disiplinlerin birleşimiyle yeni alanlar açılmaktadır. AI disiplinleri farklı disiplinlerle birleştiğinde, farklı disiplinlerin birleşimiyle yeni alanlar açılmaktadır. AI disiplinleri farklı disiplinlerle birleştiğinde, farklı disiplinlerin birleşimiyle yeni alanlar açılmaktadır.

AI-Mg alanları, özellikle yapılar için önemli rol oynamaktadır. AI-Mg alanları, özellikle yapılar için önemli rol oynamaktadır. AI-Mg alanları, özellikle yapılar için önemli rol oynamaktadır.

1 atanmamış katılımcı

Sesi aç Videoyu Başlat Katılımcılar Sohbet Ekranı paylaş Kaydet Alt Yazıları Göster Ara Odalar Reaksiyonlar Uygulamalar Beyaz Tahtalar Odadan Çık

Giriş yapın Görüntüle



h11 Bin BASIM Bilgi Seli Koordinatör

hall 11 MUSTAFA MAHER 1 atanmamış katılımcı

Sesi aç Videoyu Başlat Katılımcılar Sohbet Ekranı paylaş Kaydet Alt Yazıları Göster Ara Odalar Reaksiyonlar Uygulamalar Beyaz Tahtalar Odadan Çık



# 1. BİLSEL INTERNATIONAL TURABDİN SCIENTIFIC RESEARCHES AND INNOVATION, 23-24 DECEMBER, MARDİN/TÜRKİYE

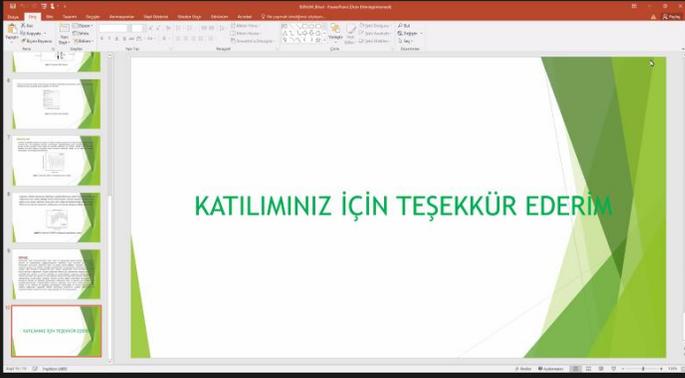
A screenshot of a Zoom meeting. On the left, a man with a beard and mustache is speaking, with his hand near his face. He is identified as 'Bilgi Seli'. On the right, there is a small video feed of the same man, identified as 'Bilgi Seli Koordinatör'. In the center, a large black slide with the word 'izzettin' in white text is displayed. The Zoom interface at the bottom shows various controls like 'Sessize al', 'Videoyu Başlat', 'Güvenlik', 'Katılımcılar', 'Sohbet', 'Ekranı paylaş', 'Özet', 'AI Companion', 'Reaksiyonlar', 'Uygulamalar', 'Beyaz Tahtalar', 'Notlar', 'Daha fazla', and a 'Sonlandır' button.

A screenshot of a Zoom meeting. On the left, a man with a beard and mustache is speaking, with his hand near his face. He is identified as 'Bilgi Seli'. On the right, there is a small video feed of the same man, identified as 'Bilgi Seli Koordinatör'. In the center, a large black slide with the word 'izzettin' in white text is displayed. The Zoom interface at the bottom shows various controls like 'Sessize al', 'Videoyu Başlat', 'Güvenlik', 'Katılımcılar', 'Sohbet', 'Ekranı paylaş', 'Özet', 'AI Companion', 'Reaksiyonlar', 'Uygulamalar', 'Beyaz Tahtalar', 'Notlar', 'Daha fazla', and a 'Sonlandır' button.

A screenshot of a Microsoft Word document. The document title is '1. BİLSEL ULUSLARARASI TURABDİN BİLİMSEL ARAŞTIRMALAR VE İNOVASYON KONGRESİ'. The subtitle is 'ÜNİVERSİTE ÖĞRENCİLERİNDE TOPLUMSAL CİNSİYET ALGI DÜZEYİNİN DEĞERLENDİRİLMESİ'. The author information is 'YAZAR: İZZETTİN KAHRAMAN, DOÇ. DR. RABİA SOHBET'. The document is displayed in a window titled '1. BİLSEL ULUSLARARASI TURABDİN BİLİMSEL ARAŞTIRMALAR VE İNOVASYON KONGRESİ'.

# 1. BİLSEL INTERNATIONAL TURABDİN SCIENTIFIC RESEARCHES AND INNOVATION, 23-24 DECEMBER, MARDİN/TÜRKİYE

h2 Mehmet Ali Özçelik ekranını görüntüyorsunuz Seçenekleri Görüntüle Giriş yapın Görüntüle



KATILIMINIZ İÇİN TEŞEKKÜR EDERİM

h2 Mehmet Ali Özçelik Bilgi Seli

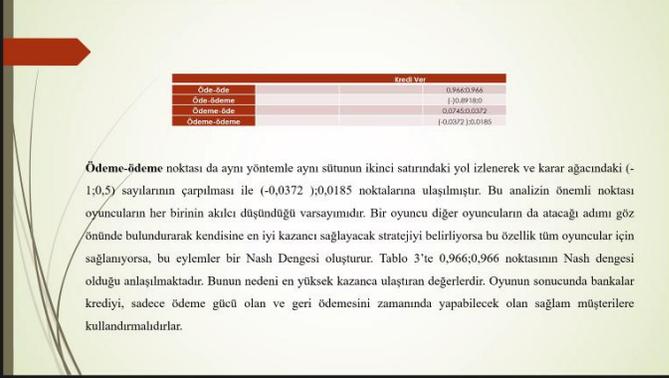
Session-2, Hall-2, Nihat PAMUK h2 Zülfikar ASLAN

hall2 Berkem Vu... hall2 Berkem Vural

2 atanmamış katılımcı

Sesi aç Videoyu Başlat Katılımcılar Sohbet Ekranı paylaş Kaydet Alt Yazıları Göster Ara Odalar Reaksiyonlar Uygulamalar Beyaz Tahtalar Odadan Çık

h3 utku ekranını görüntüyorsunuz Seçenekleri Görüntüle Giriş yapın Görüntüle



	Kredi Var
Ödeme-Ödeme	0,966;0,966
Ödeme-Ödeme	1,018;1,018
Ödeme-Ödeme	0,0372;0,0372
Ödeme-Ödeme	1,00272;1,00185

Ödeme-ödeme noktası da aynı yöntemle aynı sütunun ikinci satırındaki yi izlenerek ve karar ağacındaki (-1;0,5) sayılarının çarpılması ile (-0,0372 ;)0,0185 noktalarına ulaşılmıştır. Bu analizin önemli noktası oyuncuların her birinin aklıca düşündüğü varsayımıdır. Bir oyuncu diğer oyuncuların da atacağı adımı göz önünde bulundurarak kendisine en iyi kazancı sağlayacak stratejiyi belirliyorsa bu özellik tüm oyuncular için sağlanıyorsa, bu eylemler bir Nash Dengesi oluşturur. Tablo 3'te 0,966;0,966 noktasının Nash dengesi olduğu anlaşılmaktadır. Bunun nedeni en yüksek kazanca ulaşırın değerlerdir. Oyunun sonucunda bankalar krediyi, sadece ödeme gücü olan ve geri ödemesini zamanında yapabilecek olan sağlam müşterilere kullanılmamalıdır.

h3 utku Bilgi Seli

H3 Asst. Prof. Dr. Burak ÇAMURDAN Hall 3 Ali Binural

Session-2, Hall-3... S2-H3 Hakan Ta...

Session-2, Hall-3, Büşra Nur Göğç S2-H3 Hakan Tahiri MUTLU

ismail durak ismail durak

1 atanmamış katılımcı

Sesi aç Videoyu Başlat Katılımcılar Sohbet Ekranı paylaş Kaydet Alt Yazıları Göster Ara Odalar Reaksiyonlar Uygulamalar Beyaz Tahtalar Odadan Çık

# 1. BİLSEL INTERNATIONAL TURABDİN SCIENTIFIC RESEARCHES AND INNOVATION, 23-24 DECEMBER, MARDİN/TÜRKİYE

SESSION-2 HALL-5, Songül KARAKUŞ... ekranını görüntüyorsunuz

Seçenekleri Görüntüle

Giriş yapın Görüntüle

**Tarım ve Gıda Alanında Görüntü İşleme Uygulamaları**

- Gönenç ve Öner zeytin tanelerinin türünü belirlemek için görüntü işleme yöntemleri ile birlikte kümeleme yöntemlerini kullandıkları bir çalışma gerçekleştirmişlerdir. Bunun için öncelikle Ege bölgesi Diğli-Ayvalık arasında yer alan Kıratlı köyünde bulunan zeytin ağaçlarından hasadın ilk zamanlarında zeytin taneleri temin edilmiştir. Tür olarak Domat, yeşil Ayvalık, yeşil Gemlik ve siyah Gemlik olmak üzere dört tür belirlenmiştir. Her türü ait 10 adet zeytin alınarak yani toplamda 40 adet zeytin kullanılarak fotoğraflama yapılmıştır. Türleri bilinen zeytin tanelerine ait olan görüntüler görüntü işleme teknikleri kullanılarak görüntü içerisindeki zeytin tanelerine ait boyut ve renk bilgileri sayısal bilgiler olarak piksel cinsinden elde edilmiştir. Sonrasında ise elde edilen bu sayısal veriler kullanılarak K-Ortalama yöntemi ve Bulanık C-Ortalama algoritmaları ile tür tespiti yapılmıştır.

h5 Doç. Dr. Rasim ÖZDEMİR

Bilgi Seli

h5 Mehmed Raf...

h5 Nazım KUND...

h5 Mehmed Rafet Özdemir

h5 Nazım KUNDURACI-ZBEU

S2-H5-Fırat Artu...

SESSION-2 HALL...

SESSION-2 HALL-5, Songül KARAKUŞ

Kadir

Kadir

Session-2- Hall-5-Sena Kabave Kili...

Sesi aç Videoyu Başlat Katılımcılar Sohbet Ekranı paylaş Kaydet Alt Yazıları Göster Ara Odalar Reaksiyonlar Uygulamalar Beyaz Tahtalar Odadan Çık

Kayıt

Hikmet Akyol-Session2-Hall4 ekranını görüntüyorsunuz

Seçenekleri Görüntüle

Giriş yapın Görüntüle

Özet

İstatistik	Değer
net_ulaş_giriş	-6998345
invenst_giriş	-2084414
ogrenciler_giriş	-8079161
giriş_ulaş	2854372
çıkış	6.538747
net_ulaş_giriş	-7064997
invenst_giriş	-8473861
ogrenciler_giriş	3268422
giriş_ulaş	-1628424
çıkış	1.789812
net_ulaş_giriş	5.823436
invenst_giriş	2.224994
ogrenciler_giriş	-1644485
giriş_ulaş	-4842939
çıkış	48.48139
net_ulaş_giriş	-7873886
invenst_giriş	-1224241
ogrenciler_giriş	-1338077
giriş_ulaş	-1407625
çıkış	1.145145
net_ulaş_giriş	-4292444
invenst_giriş	-1268139
ogrenciler_giriş	-892731
giriş_ulaş	-892731
çıkış	-13.49154

Command

Hall-4, Doç.Dr. Fuat LEBE

Bilgi Seli

Hikmet Akyol-Session2-Hall4

Dr. Muhammet Yasin ELTOK

Sesi Açmayı İste

1 atanmamış katılımcı

Sesi aç Videoyu Başlat Katılımcılar Sohbet Ekranı paylaş Kaydet Alt Yazıları Göster Ara Odalar Reaksiyonlar Uygulamalar Beyaz Tahtalar Odadan Çık

SESSION-2, HALL-6, Kadir Akpınar... ekranını görüntüyorsunuz Seçenekleri Görüntüle Giriş yapın Görüntüle

## Araştırma Soruları:

1. Bütün öğrencilerin İstanbul hakkında fikri var mıdır?
2. İstanbul'a giden öğrencilerin gitmeyenlere oranı nedir?
3. İstanbul'da bulunma süresi İstanbul algısını etkilemekte midir?
4. İstanbul şehir imajını oluşturan etmenler nelerdir?
5. Bireylerin cinsiyetlerinin İstanbul algıları üzerinde etkisi var mıdır?

h6 Doç. Dr. İrfan MARANGOZ Bilgi Seli

h6 Elif Aktaş Erdem Ayyıldız (H-6)

SESSION-2, HALL-6, Kadir Akpınar BİLGİN ATAS

1 atanmamış katılımcı

Sesi aç Videoyu Başlat Katılımcılar 6 Sohbet Ekranı paylaş Kaydet Alt Yazıları Göster Ara Odalar Reaksiyonlar Uygulamalar Beyaz Tahtalar Odadan Çık

h7 Ali SERT ekranını görüntüyorsunuz Seçenekleri Görüntüle Giriş yapın Görüntüle

Kütle spektroskopisi (MS); organik moleküllerin parçalanması sonucu üretilen gaz fazındaki iyonların kütle/yük (m/e) oranlarının belirlenmesi esasına dayanan bir analiz tekniğidir.

Diğer bir tanımda, özel bir düzenek yardımıyla organik bileşiklerden pozitif yüklü parçacıkların oluşturulması ve bunların kütle/yük oranına göre ayrılarak teşhis edilmeleri için kullanılan yöntemlere **Kütle Spektroskopisi** adı verilir.

h7 Ali SERT Bilgi Seli

h7 Ayşenur KAHRAMAN h7 Vatan Kavak

Session 2, Hall 7,...

Session 2, Hall 7, Gül BÜLBÜL MARAŞ

2 atanmamış katılımcı

Sesi aç Videoyu Başlat Katılımcılar 5 Sohbet Ekranı paylaş Kaydet Alt Yazıları Göster Ara Odalar Reaksiyonlar Uygulamalar Beyaz Tahtalar Odadan Çık

# 1. BİLSEL INTERNATIONAL TURABDİN SCIENTIFIC RESEARCHES AND INNOVATION, 23-24 DECEMBER, MARDİN/TÜRKİYE

Kayıt h8 PhD. Zehra Batu ekranını görüntüleyorsunuz Seçenekleri Görüntüle Giriş yapın Görüntüle

**Yaş**

- Pitkala ve ark. (2007) ise *Bifidobacterium longum* ve *B. lactis* uygulanmalarının laksatif kullanımında kontrol grubuna göre anlamlı bir azaltma etkisinin olmadığını bildirmişlerdir.
- Çalışmada *Bifidobacterium longum*'un dışkılamada %27'lik bir artış sağladığı, *B. lactis* ile tedavinin ise ilimli iyileşmeler sağladığı gösterilmiştir.
- Ayrıca, hem *B. longum* hem de *B. Lactis* alanların hiçbir probiyotik almayan plasebo grubunda bildirilen etkiye kıyasla sindirim geçişinde sırasıyla %43 ve %35 oranında iyileşmeler sağladığı da rapor edilmiştir.

h8 Fatma Kılınçaslan Bilgi Seli

h8 HATİCE NUR KARABACAK SESSION-2 HALL-8 Emine Kurtbeyoğlu

h8 PhD. Zehra Batu h8 Elif Deniz Kaçmaz

2 atanmamış katılımcı

Sesi aç Videoyu Başlat Katılımcılar 6 Sohbet Ekranı paylaş Kaydet Alt Yazıları Göster Ara Odalar 2 Reaksiyonlar Uygulamalar Beyaz Tahtalar Odadan Çık

Giriş yapın Görüntüle

S-2, Hall-9-Dr. Bahattin DEMİRTAŞ Bilgi Seli

SESSION-2 HALL-9, Ahmet Batuhan Oyal 1 atanmamış katılımcı

Sesi aç Videoyu Başlat Katılımcılar 4 Sohbet Ekranı paylaş Kaydet Alt Yazıları Göster Ara Odalar 1 Reaksiyonlar Uygulamalar Beyaz Tahtalar Odadan Çık

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## EFFECTIVE WAYS OF STRESS MANAGEMENT IN THE FAMILY

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### ABSTRACT

This study aimed to analyze effective stress management methods in families and identify differences in demographic data. The method employed was quantitative in nature, involving 100 participants. The instrument used focused on effective stress management methods in the family context. The approach of this study was quantitative, analyzing quantitative data from 100 participants. The instrument used for data collection was oriented towards effective stress management methods in families. The study findings indicate significant differences in effective stress management methods in families: There are significant differences between males and females in effective stress management methods in families. Sensible differences exist between the age group of  $\geq 30$  years and the age group of  $< 30$  years in effective stress management methods in families. There are no significant differences in effective stress management methods in families based on rural or urban residential locations. There is a statistically significant difference between education levels concerning effective stress management methods in families. The discussion of the findings emphasizes the identified differences and their importance in the context of stress management in families. It includes recommendations for improving stress management programs, taking into account gender, age, and education level differences. The practical significance of these findings underscores the need for personalized and tailored strategies for addressing stress in families.

**Keywords:** Effective ways, management, stress, family, demographic data

## ANALYSIS OF USER OPINIONS ON MON E-ID MAROC: BETWEEN TECHNICAL ADVANTAGES AND CHALLENGES

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### Abstract.

The "Mon e-ID" application developed by Morocco's Direction Générale de la Sûreté Nationale (DGSN) aims to simplify access to online services using the electronic national identity card. However, user feedback shows a diversity of experiences, with positive feedback and frustrations linked to technical problems. The results of user reviews are mixed. Some praise the application's initiative and ease of use, emphasizing its usefulness for online administrative procedures. On the other hand, many users encounter technical obstacles, such as frequent errors in facial recognition, difficulties with the ID card scanner, and error messages, resulting in an unsatisfactory user experience. In conclusion, the "My e-ID" application presents a mixed bag of opinions among users. While some have benefited from its use, the many technical problems reported suggest the need for substantial improvements. It is recommended that developers take user feedback into account to resolve existing problems, optimize facial recognition, and ensure a smoother user experience. This would optimize the application's efficiency and meet user expectations.

**Keywords :** Mon e-ID, DGSN Morocco, electronic national identity card.

## CONFLICTS IN THE WORKPLACE CAUSED BY THE GENERATION GAP

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### **Abstract**

There are currently three active generations in the labour market (X, Y, Z), which poses a major challenge for organisations. Whereas in the past the different generations were hierarchically separated, today the three generations are on the same level, which can lead to tensions in the definition of values and priorities due to different views of the world.

Conflicts of interest can lead to different expectations of work. For the older generation, going to the office is a habit and they quickly returned to this work pattern after the outbreak. For the new generation, however, working from home may be more attractive. They did not have the opportunity to go to the office during the pandemic, which makes it more difficult for them to get used to the constant commute. This can create challenges in working together. New employees are more likely to ask questions and seek help in person than online, so face-to-face teamwork is particularly important during the induction period.

**Keywords:** economic, generation gap, workplace conflicts

## EXAMINATION OF THE NEXUS BETWEEN OUTBOUND TOURISM AND THE PERCEIVED RISKS: SURVEY BASED IN ALGERIA

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### Abstract

The present study aims to examine the correlation between outbound tourism and the perceived risks of tourism. The research is based on an online survey that was done between June 24 and October 23, 2023, among 51 participants from Algeria.

Moreover, the study was based on the Pearson's correlation test in SPSS version 26. It has been found through the Pearson's correlation test that the p-value is inferior to the significant level (p value:  $.000 < 0.05$ ), which means that the correlation is ensured with a coefficient of 22.6%.

**Keywords:** Tourism; Tourists; Algeria; Pearson's correlation; SPSS; Perceived risks; Outbound tourism.

## MEASURING THE IMPACT OF EDUCATIONAL LEVEL ON ONLINE SHOPPING IN ALGERIA

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### Abstract

The present research aims to check the impact of educational level on Algerian e-shoppers. The research is based on an online survey that was conducted between July 20 and August 17, 2023, among 31 Algerian e-consumers. Thus, the study was based on two independent sample t-test's using SPSS version 26.

As a result, it has been found that there is no significant difference between educational levels in terms of e-satisfaction (p value:  $0.638 > 0.05$ ), e-trust (p value:  $0.366 > 0.05$ ), and e-loyalty (p value:  $0.319 > 0.05$ ).

**Keywords:** Online shopping; Algeria; e-consumer; e-satisfaction; e-loyalty; e-trust; two independent samples t-test's; SPSS.

## DUMPLING WITH FILLING MADE OF MUSHROOM

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### Abstract

Dumpling is a dish that is gaining popularity among Malaysians. Hence, this project intends to create a new variant of this dumpling by creating a filling that is made of a mushroom which grows in several localities in the state. The rationale is to offer a wide range of selection for people who love to eat dumplings especially among the Muslim community who can only consume halal food.

Keywords: Dumpling, mushroom, halal

## A BAKİNG WORKSHOP TO HELP COMMUNITY BOOST SALES

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### **Abstract**

This workshop intended to help a group of people from a community centre who sells buns on daily basis to financially sustain the community centre which also serves as their home. It was found that they were only able to make a limited range of buns and bread. Hence, this course was conducted to teach them on how to create more types of buns and cakes that they could practice in their business which may likely increase their sales and subsequently profit.

**Keywords:** workshop, sales, profit, community centre

## ECONOMIC CRISES AND THE DEVELOPMENT OF ELECTRONIC TRADE

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### Summary

In recent years, many people are increasingly shopping for various goods online, attracted by the speed, lower prices and convenience, which was also influenced by the COVID crisis and the restrictions after 2020. Already, merchants and manufacturers are convinced of the possibilities of the web and the various platforms to reach end users easily and without much cost. E-commerce in the world before the onset of the pandemic reached a turnover of more than 400 billion euros per year, with more than 500 million users. The indicated figures have grown many times as a result of the development of e-commerce, due to the restrictions imposed by the Covid infection. Regarding the remote sale of goods and services /through an electronic store or otherwise/ within the EU, there are already special provisions in the European VAT Directive creating obligations for registration and charging of VAT in the country of consumption. The tax administrations of the member countries are also looking for new and more effective methods to control digital business, to reduce non-taxation and to increase tax collection. The proposal of the OECD/G-20 before the EC was also in this direction, regarding the narrowing of the tax base and the transfer of profits for the progress achieved under the so-called two pillars of the negotiations: - redistribution of profit to digitized enterprises - pillar 1 -general reform of international corporate taxation -pillar 2, unfortunately under pressure from the US, a decision on the first pillar was postponed indefinitely. In Bulgaria, e-commerce is also the focus of the control authorities' attention, as in 2013, the first team to control it was formed in the NRA, and two years later, a Pilot Project was developed and implemented under the program to reduce the levels of risk for identified problems and gaps in e-commerce. Later, a specialized department "Electronic Audit" was created and functions within the Directorate "Control" in the Central Office of the NRA. For the prevention of online trafficking in the EU and in our country, from 01.07.21 an electronic portal (one-stop shop/OSS) was developed, in which companies making online orders must register for the purposes of VAT electronically in one Member State for all their intra-Community distance sales of goods and supplies of services to end customers.

**Keywords:** trade, control, internet, crisis, platform

## A BIBLIOMETRIC ANALYSIS: ANALYSIS OF THE ROLE OF RELIGIOUS MODERATION TO BUILD HARMONY INTERRELIGIOUS RELATIONS IN INDONESIA

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### Abstract

This research intends to explain in depth the role of religious moderation in fostering harmonious interfaith relations through cultural accommodation in Indonesia. This research is library research with a qualitative approach. The data sources used in this research come from various literature journal articles that are relevant to the research topic. The data analysis method used is content analysis of the literature sources used in the research. Religious moderation is a religious perspective, attitude and behavior that is adhered to and practiced by the majority of the population of this country, from the past until now. Cultural accommodation is a process or effort to adjust or integrate between different cultures or cultural values. The aim is to create harmony and understanding between groups with different cultural backgrounds. The encounter between Islam and tradition in the archipelago confirms the idea that Islam and local culture can exist together by respecting each other's values, namely religious values and traditional values that have directly influenced each other. Indonesia has ethnic, tribal, cultural and religious diversity which can cause conflict, but also has the potential to overcome social and religious conflict. Factors that trigger religious conflict include a lack of understanding of ethnic, ethnic and religious diversity in Indonesia, attitudes of exclusivism, fanaticism towards religious teachings, ethnic and religious primordialism, and the role of religious figures. Cultural accommodation by utilizing local wisdom can be used to resolve conflicts in society, with the culture of each region as a guide for conflict resolution. The importance of education, active participation, and social support in encouraging acceptance of religious traditions is also highlighted. By understanding and practicing religious moderation, we can continue to promote harmony and harmony in a multicultural society.

**Keywords:** moderation, tolerance, religion

## DEFINITION OF FASTING

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## Abstract

The aim of this research is to describe definition of fasting. The writing method uses a library research approach sourced from authoritative journals and books regarding the definition of fasting. The definition of fasting can be divided according to language and terms. Fasting according to language means refraining from things that cancel. This departs from the Arabic "shaum" or "shiyam" which means restraint or curb. In the Qur'an the word shaum denotes a more general meaning than shaum which is often used to denote the more specific meaning of fasting by refraining from eating and drinking. In book "Fathul Qarib" that fasting is refraining from everything that invalidates the fast with a specific intention on all or every day that can be made fasting by healthy Muslims, and pure from menstruation and postpartum bleeding. Fasting, according to the term, is worshiping Allah by refraining from eating, drinking, and other things that break the fast, from dawn to sunset. According to the Big Indonesian Dictionary (KBBI) Online, fasting means (1) deliberately abstaining from eating, drinking, and so on (especially in connection with religion), or (2) one of the pillars of Islam in the form of abstinence or abstinence from eating, drinking, and everything that invalidates it from dawn to sunset; saum (fasting).

**Keywords:** definition, fasting, and healthy

## REASON FOR FASTING IN SCIENCE

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### Abstract

The aim of this research is to describe the reason for fasting in science from a literature review perspective. The writing method uses a library research approach sourced from authoritative journals and books regarding Reasons for Fasting in science. The results of the research conclude In this case, Reasons for Fasting in Science The medical world has recognized the scientific facts about fasting. , an American health expert, stated that every human being needs to fast if they are not sick, because food toxins gather in the body to cause people to get sick. These toxins burden the human body and reduce its enthusiasm for activities. If the body is fasted then the burden will be reduced and the poison will melt by itself and exhausted completely. As well as fasting is also able to restore and renew body cells so that the body's power is restored and active as before. Meanwhile, the Nobel prize winner in the field of medicine, in book entitled "Mysterious Man", Really the abundance of abundant food causes the paralysis of one important function that plays a major role for the survival of various species of life on the surface of this earth. The function in question is the ability to adapt to limited food. Therefore, mankind should always fast at all times.

**Keywords:** reasons, fasting and science

## OVEREATING

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### **Abstract**

Eating while standing causes the stomach to empty more quickly. This allows the stomach to accommodate more food when eating. Additionally, eating while standing tends to make you rush and enjoy your food less, which causes you to chew and swallow your food more quickly. When you eat faster than usual, the hormones that work send satiety signals to the brain so they don't have time to work. Generally, when the signal finally appears, you have already eaten too much. The purpose of writing this article is to find out perspectives or points of view both religiously and scientifically regarding the practice of eating and drinking while standing, as well as how to do it wisely. The writing method uses library research or literature reviews sourced from journals and e-books regarding the harmonization of science and religion. The results of this study conclude that from a religious perspective it is stated that eating and drinking while standing is considered inappropriate and should be avoided. This is related to ethics and politeness in the eating and drinking practices that we usually do every day. On the other hand, the activity of eating and drinking while standing from a scientific perspective is more focused on bodily health.

**Keywords:** eating, drinking, health

## TRANSFORMATION OF THE RELIGIOUS BEHAVIOR OF ISLAMIC TEENAGERS THROUGH THE USE OF THE TIKTOK APPLICATION IN ISLAMIC ECONOMICS AND BUSINESS

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### Abstract

This research aims to investigate the transformation of Islamic youth behavior in Taman Village, Pematang Rejang Regency, which is influenced by the use of the TikTok application, with a focus on the context of Islamic Economics and Business. Involving a qualitative approach, this research explores changes in adolescents' religious values, social norms and Islamic identity. Research methods include in-depth interviews and observations of Islamic teenagers who actively use the TikTok application. Data analysis was carried out by identifying patterns of religious behavior that emerged through interaction with the application. The research results show a significant transformation in the way Muslim teenagers in Taman Village understand and apply religious values through the use of the TikTok application. The implications of this change in behavior are then examined within the framework of Islamic Economics and Business to understand how this can influence economic and business aspects in society. This research contributes to our understanding of the dynamics of religious transformation in the digital era, especially in rural contexts, and provides a basis for further thinking in Islamic Economics and Business regarding the social impact of the latest social media applications.

**Keywords:** *Religious behavior, Islamic teenagers, TikTok application*

## GOOD CORPORATE GOVERNANCE AS A ROLE OF THE SHARIA SUPERVISORY BOARD AND THE NATIONAL SHARIA BOARD IN SHARIA BANKING

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### Abstract.

The development of Islamic financial institutions in Indonesia requires the alertness of DSN-MUI in solving the problems that occur, especially related to product innovation needed by the community. Therefore, DSN-MUI has affiliated parties that will provide their services to Sharia banks or Sharia Business Units (UUS) in ensuring the implementation of Sharia principles in Islamic banking activities in Indonesia, namely the Sharia Supervisory Board (DPS) and the National Sharia Council (DSN). The research method used in this research is a library research method with a qualitative descriptive approach. With the use of the literature study data collection method or library research, the author does not need to go directly to the field for data collection, but only by taking various supporting reference sources, be it online references or books to support the writing of this article. The result of this research is that the author and readers can find out how the implementation of the Sharia Supervisory Board (DPS) and the Sharia National Board (DSN) in realizing Good Corporate Governance (GCG) in Islamic banking in Indonesia.

**Keywords:** National Sharia Council, Sharia, Sharia Supervisory Board

## ECONOMIC DEVELOPMENTS OF AZERBAIJAN (IRAN) IN 1945-1946

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### **Abstract**

One of the most important political events of the 20th century in Iran was the emergence of the democratic sect in Azerbaijan, which emerged between December 1945 and December 12, 1946 following the events of World War II and the power vacuum caused by the collapse of Reza Shah's government. Using the lack of power of the central government and with the support and encouragement of the Soviet government headed by Seyyed Jafar Pishhori, the democratic sect declared autonomy and took over the affairs of Azerbaijan by severing relations with the central government for a year. The formation of the autonomous government of Azerbaijan was considered as an important phenomenon and a turning point in the history of Azerbaijan, which has influenced all political, social and economic aspects of that region.

Examining the democratic sect of Azerbaijan and its regional economic effects is the main goal of this research and it intends to examine its one-year performance in terms of economy.

### **Key word:**

Iran, Mohammad Reza Shah Pahlavi, Azerbaijan, the democratic sect of Azerbaijan, economic effects

### **Introduction:**

Azerbaijan has always had an important and influential position throughout the modern history of Iran, and due to its special geographical location, it has been the source of important developments. The people of Azerbaijan played a decisive role in all the political activities of Iran's constitutional revolution and were considered the defenders of Iran's territorial integrity and independence. But at a certain point in history, they themselves became the cause of chaos and for some time they involved the central government of Tehran in suppressing the rebellion.

Tabriz, which was considered one of the major trade and economic centers of Iran, and was also important from an industrial point of view, with the emergence of Reza Shah and the implementation of his centralization policy and the termination of its trade relations with the Soviet Union, it lost its commercial and economic superiority, as whose industries remained stagnant for a long time, factories went bankrupt, and the financial situation became chaotic and shaky, and their economy faced disorder. These conditions became the

background for the emergence of the crisis in Azerbaijan and the emergence of the democratic sect in Azerbaijan. With the intervention of the Soviet military forces, which had not left the territory of Iran despite the tripartite agreement of 1944, they created the basis for the crisis. The secret documents that have been revealed from the Soviet government, consider the formation of this government as a result of Stalin's direct order. In order to obtain oil concessions in the north of Iran and to secure their own interests, the Soviet forces instigated and supported and directed Iran's internal crises and used them as a pressure tool to put pressure on the central government to obtain concessions, and the basis for the establishment of party rule. They provided the democrats of Azerbaijan in Tabriz. With the support of the Soviet forces, the Azerbaijan Democratic Party overcame the central army of Tehran on December 12, 1945, and were able to conquer Tabriz, and within a year, established their own government under the leadership of Pishhevvari. Although the democratic sect was a tool of the Soviets, their presence has had effects and consequences on Azerbaijan and its citizens. Experts and historians had different opinions about this. A group of them consider Ramnessa as the source of important services they had in this one year, another group considers them separatists and separatists who only oppressed the people during this period. Of course, none of these opinions can be definitively Rejected or approved.

### **Economic effects**

After the formation of the autonomous government of Azerbaijan, the issue of economy was the most serious issue facing the autonomous government of Azerbaijan. The economy of Azerbaijan, which was faced with extreme stagnation due to the outbreak of World War II and the termination of trade relations with the Soviet Union on the one hand, and the adoption of Reza Shah's policies on the other hand, with the formation of the democratic sect and the departure of some Azerbaijani businessmen, capitalists and owners From Tabriz and their migration to Tehran, they faced an unfavorable situation. As the central government of Tehran cut ties with Tabriz and did not trade with them, and transferred the existence of Tabriz banks to Tehran, the government of Azerbaijan faced severe economic problems. In order to get out of this crisis that they were facing, the democratic leaders tried to end the economic crisis in any way and apply any necessary assistance to give prosperity and new life to the economy of their government. For this purpose, they prioritized attention to the economy, industries and trade in their program. Through well-considered measures, including allocating financial aid to that group of factories, which were bankrupt or closed due to lack of funds or lack of proper management, they organized and restarted them. In the field of banking affairs, in order to improve the financial crisis caused by the transfer of funds to the central government of Tehran, by allocating sums of money to banks, they provided the basis for their presence and activity in the economic arena.

Below we mention the measures taken by the democrats to boost the economy of Azerbaijan.

### **A) Banking reforms**

The most important and biggest challenge that the autonomous government of Azerbaijan faced after the organization was the economic problem caused by the transfer of the bank. After the formation of the Democratic Party, some banks in Tabriz were forced to transfer their balances to Tehran due to the decrease in trade and the collection of money by Shahi Bank of Tehran. This action made the government of Azerbaijan face a severe financial problem. Therefore, in order to secure their financial needs, the democrats announced the seizure of the National Bank of Tabriz and established 19 branches of the National Bank in Azerbaijan and monopolized all the operations of the banks.

Seyyed Jafar Pishevari, the Prime Minister of the Democratic Party of Azerbaijan, believed that by establishing banks, the problems and obstacles of their commercial and industrial institutions would be removed. For this purpose, he allocated an amount of 50,000,000 rials from the treasury of his autonomous government to establish the National Bank of Tabriz. (Azarbaijan Newspaper, 30/3/1325, p. 1) This was the largest amount given to a bank. The establishment of this bank was the biggest step to increase wealth and meet people's needs, and it played a key role in the success of the market, trade, economy and agriculture.

Pishevari ordered the government of Azerbaijan to lend the money it had in the amount of several million to banks such as Sepeh and Falahat, so that there would be no obstacles in the operation of the banks. In a meeting he held with the heads of banks (Tijarat, Melli, Falahat and Sepeh), he issued orders to start the work of the banks, that firstly, the banks should pay attention to the development of industries and machinery, and secondly, to the industry of Azerbaijan and The sale of agricultural products in foreign markets deserves special attention. But as time passed, these financial solutions did not become practical, and the government of Azerbaijan faced many problems due to the reduction of trade and the interruption of economic equations with other cities, the departure of some businessmen and owners, and the lack of capital, and could not plan ahead. to realize his vision, and gradually he found a chaotic financial and economic situation, so that the balance of the Bank of Azerbaijan was not enough to pay the employees of various departments and institutions daily. They were also forced to print banknotes to escape from the economic threat. The whole country and a part of the bank notes printed by the Democrats should be given. Elhami named the issued bonds treasury bonds and issued them in four types in February 1945: ten tomans, five tomans, one toman and five qorani. In the middle of the banknotes, this phrase was printed in Turkish: "Azerbaijan National Government of the Treasury of the National Government of Azerbaijan". Busandin Daghri, the opponent of the public, the government, the man,

the property, of Satin Alnir. The Treasury of the National Government of Azerbaijan is the guarantor of this document. 2. In exchange for the value of this document, sex will be purchased from all government shops.

The issuance of treasury bonds saved the government of Azerbaijan from the financial distress to some extent, but all these measures were not enough in one year and it needed time and stability of the government so that the financial policies become effective and become part of the economic life and make Azerbaijan to lead to progress and prosperity.

### **b) Establishing a factory**

Another internal program of the autonomous government of Azerbaijan was the restructuring of the industry and the restarting of bankrupt factories. The Prime Minister of Azerbaijan, Pishevari, mentioned the attention to the economy, industries and trade in his program and promised to use all his financial resources to help start the factories. He stated in his statement, In the first stage, we give importance to the industries and set up the factories, and in the second stage, we prepare and supply the industries needed to set up the factories. (Azerbaijan Newspaper, 22/9/1324, p. 1) Also, by completing the existing factories, we provide the means to eliminate unemployment and the increase of handicrafts and machines.

With all seriousness, the democrats redoubled their efforts to set up new factories, and restarted the factories that were bankrupt or closed down due to lack of proper management, lack of capital, and lack of support from the central government of Tehran. . The first factory that started working within a month was a pashmina or blanket factory. It started working anew by allocating one million rials in advance for fabric orders to the factory. P. 1) This factory exported the product in the shade of the attention of the authorities to meet its industrial needs. The products of this factory were used domestically for blankets, wool, and rugs, and externally for the carpet industry and other uses. (Azarbaijan Newspaper, 23/10/1324, p. 2) The democratic leaders hoped to export products in the shadow of the government's attention to meet the industrial needs of not only the pashmina factory but also other institutions and factories.

Among the other plans of the Azerbaijan government to restart the factories was the start of the Tabriz spinning factory. This factory started working as a result of the help of others. In order to promote the affairs of this factory, the democratic officials took the orders themselves. And the factory was also tasked to prepare and deliver uniforms for police officers and other officers within a year. The affairs of this factory were such that, in order to deliver all the clothes, it would not accept any more orders for at least a year. With this action of the government, the factory did not have any worries about ordering a year later. (Azerbaijan newspaper, 23/10/1324, p. 1)

The efforts of the heads of government in the field of industry reconstruction and the start of factories were not limited to the mentioned cases. They made extra efforts to restart Zafar weaving factory. This factory was considered to be the largest factory not only in Azerbaijan but also throughout Iran, and it had experienced and skilled teachers and more than 500 people worked in it. This factory replaced Shayan factory. The Shayan factory, which was famous in all parts of Iran, faced problems due to the deterioration of the fabrics and the losses caused to the factory. According to the agreement between the two factories, all the machines of the Shayan factory were sold to Zafar. Zafar, under the shadow of experts of Shayan factory, completed the deficiencies and put the unemployed back to work, and by using new machines, he stepped on the path of development of the weaving industry and worked hard to improve his production. (Azerbaijan newspaper, 19/7/1324, p. 1)

It is worth mentioning that some factories were also established with the financial support of the Prime Minister of the Democrats. including the national knitting factory of Azerbaijan. The national weaving factory of Azerbaijan was built with a capital of 1 million and 10 thousand tomans, and in a period of three months under the supervision of engineers and specialists. In order to raise the quality and quantity of the products, the authorities equipped the factory with all the machines and electrical devices to meet the needs of men, women and children at the highest levels, and produce products such as socks and clothes at the highest level. do (Azerbaijan newspaper, 27/3/1325, p. 1)

In addition to the factories that were operated by the private sector, there were also a series of factories that belonged to the government of Azerbaijan and the government took over its administration, such as the leather factory that operates under the name of Khosravi. did In order to sell their products, the government of Azerbaijan ordered to refrain from importing industrial products similar to them produced in Azerbaijan. Of course, with the exception of those essential imports that the Ministry of Commerce and Economy of Azerbaijan had determined the list of.

The government of Azerbaijan was able to revive the industries of Tabriz and even after the collapse of the democratic sect, the activities of the factories did not lose color and they were able to keep the industries of Tabriz standing continuously.

### **c) Adoption of taxes**

The issue of taxation is a vital issue that governments have included in their financial and economic policies at every historical point. Governments have a special need to adopt taxes for economic prosperity and to pay attention to the construction and settlement of their region. The government of Azerbaijan was not exempted

from this law. After forming their government, they decided to collect taxes and passed laws about taxes and carried out a series of activities in this field.

The government of Azerbaijan, which did not have a favorable financial situation after breaking the relationship with Tehran and other cities, had to adopt taxes to meet the needs of the people and reforms in unemployment, health, security, and civil and urban development of the region. They were required to spend some of the taxes from the government's own treasury for reforms and advancement of the government; For this purpose, they continued the financial policies that were used by Millspo, the American consultant in the central government of Tehran, as income tax, and instead of levying indirect taxes on food and necessities of life, on commercial profits, the wealth obtained from Land and property interest, income of special business owners and luxury goods were taxed. (Foran, 2016: 412)

The heads of the government put an end to the injustice in the economic and tax structure and approved a fair law regarding the adoption of taxes. They removed the low-income groups from income tax, and according to the income tax law, they forced all the people of Azerbaijan to pay certain taxes, except for the low-income group. Rented properties also had to pay 25% of the tax to the government. The amount of tax for merchants and companies was calculated according to the goods, and if a company or merchant refused to pay the tax, the existing goods were confiscated and sentenced to three years in prison. (ibid.)

#### **d) Land reforms**

When the Democratic Party came to power, it embarked on a series of reforms that it had already promised in its initial programs. The most important promise that the democrats made in the seventh article of their statement was land reforms, which can be called the first land reforms in Iran. Dividing the lands and properties of the fugitive owners and approving the law to divide the land produce was one of the most important actions that the autonomous government took to improve the economic situation of the people and peasants. Qawam al-Sultaneh, the prime minister of Iran at that time, later took his land reform program from it.

The unfavorable situation of the farmers and the unfair ownership of the agricultural land was one of the main factors that the democratic leaders claimed that land should be divided in order to fix this situation and gain the support of the peasants. The democrats believed that the economic power and wealth production power of the country is in the capable hands of the farmers and they claimed that they cannot ignore the class of peasants and farmers. Therefore, they will try to take basic steps to meet their needs and prevent them from receiving illegal taxes. They gave the peasants unconditionally the lands and properties of those who fled from Azerbaijan to Tehran. According to the estimate made by the autonomous government of Azerbaijan until

December 1946 regarding the agricultural lands of Azerbaijan, 80% of the land belonged to the major owners, 12% belonged to the state properties and the remaining 8% belonged to the small owners. (Atabaki, 1376: 160) Major landowners owned 100 villages, but rarely visited their properties and left their administration to corrupt stewards and gendarmes. Therefore, the government of Azerbaijan set its most important goal to end these economic inequalities and address the situation of farmers and improve their conditions. This action of the government was accompanied by the support of the people, as the British consul in Tabriz wrote in his report that the land reform has gained a lot of support. (Moradi Maragheh, 1382: 428)

As mentioned, the autonomous government of Azerbaijan started land reforms by confiscating property and distributing it to peasants and established laws for it. According to the first law, the properties of the group of owners who were against the government of Azerbaijan, or were among the opponents who had activities against the government, and had left Azerbaijan for Tehran, were confiscated, and they were distributed among the landless farmers. The second law was the division of government lands. According to it, all the land and its rights (rivers, springs, kariz) which belonged to the government, were divided between peasants and farmers who lived on that land. In this way, those who did not own land became land owners by dividing government properties. Another important law that was passed regarding land reform was the reform of the old way of dividing the product based on the unit of the factor of production. The division of the product between the farmer and the owner was based on the five production factors of land, water, labor, grain and cattle. As in the past, land, water, grain and sometimes cattle belonged to the owner and he took a larger share of agriculture, but with the new law, this traditional system was changed and instead of the five-share system, a seven-share system was established. Water was no longer considered a factor, but labor was equal to three shares, cattle were counted as two shares, and grain and land were counted as one share each. The approval of these laws increased agricultural products from 20% to 43%. (Mianali, 2014: 122)

The agrarian reform program, although it was a good program to eliminate the distance between lords and serfs and the feudal system and had the support of the people and was able to improve the conditions of farmers and peasants, but on the one hand, this program required time and stability of the government. In order for the above-mentioned reforms to become effective and to eliminate the class system and to make peasants land-owning, on the other hand, the economic problems that the government of Azerbaijan faced became the reason why the above-mentioned reforms could not be effective. In this way, the land reforms did not last long, and the following year, due to the failure and collapse of the democratic government, it remained incomplete, and the landlords also took back their lands.

## r) Commercial relations

Azerbaijan, which was the center of Iran's trade before the 20-year reign of Reza Shah and was responsible for 160 percent of Iran's trade with its northern neighbor, as a result of the Second World War and Reza Shahi's 20-year tenure, its trade declined tremendously and its trade relations It remained stagnant with the Soviet Union. After that, there was no nearby market to sell exports, and no cheap, high-quality goods from the Soviet Union were imported into the country, and finally, Azerbaijan's economy faced a severe financial and commercial crisis.

When the government of Azerbaijan came to power, the democratic leaders tried to free the economy of Azerbaijan from stagnation and give it a new prosperity. Therefore, they were trying to conclude agreements with foreign countries, but from the very beginning of their establishment, due to hidden political problems with the central government of Tehran and the disconnection with it, they were not able to establish relations with Tehran and other foreign countries, and no Other than the Soviet Union, the government did not show any desire for a relationship. In the meantime, the Soviet government was trying to fix the economic situation of Azerbaijan by concluding trade and commercial agreements, and in this way, it did not give up any efforts.

The democratic leaders considered the development of trade as one of the serious and necessary issues that due to the closure of trade routes, most of the farmers and gardeners have lost their existence. Therefore, to prevent the continuation of this situation and to find a market and provide transit routes for Azerbaijan's export goods, he intended to take serious action. Therefore, he developed relations with the Soviet Union. In the meantime, the presence of the Soviet Union became so extensive that it can be considered the biggest supporter of the government, which always supported it financially and commercially.

The government of Azerbaijan considered the need to pay special attention to trade as one of the necessities, and in its plan, it paid attention to trade relations. The famous businessmen of Azerbaijan who stayed in Tabriz, in a statement they sent to the democratic leaders, wanted trade with foreign countries and demanded that their government export wool, leather, carpets and dry goods to other countries, and from there vehicles, metals. Import machinery, oil products, glass, fabric and sugar. (Azerbaijan Newspaper, 23/10/1324, p. 3)

On the basis of the Constitution of Azerbaijan, which was created by them, the democratic leaders ordered the right of independent foreign trade and considered an article about it in the Constitution of Azerbaijan. In this way, the government of Azerbaijan issued laws about foreign trade. The Council of the Soviet Union also issued laws about sending drilling machines to Tabriz to solve the problem of water supply to this city, and "Azanft" sold drilling machines worth 430,000 manats to the Democrats with the approval of Baibakov, the

commissar of oil industries of the Soviet Union. The government of Azerbaijan also promised to pay the money for these machines within three months either in cash or in kind. (Hasanli, 1383: 118-117)

In order to improve the economic situation of Azerbaijan, Mir Jafar Bagheraov, the general secretary of the Communist Party of Soviet Azerbaijan, proposed to sign a commercial agreement, during which the amount of goods purchased from Iran's Azerbaijan would be increased, and he would pay the National Bank on condition of repayment. Goods should be loaned 50-60 million Rials. (Ibid.) The government of Azerbaijan expanded the trade with the Soviet Union by establishing a large trading company. This company was responsible for the export and import of goods and had the role of intermediary and helps the transactions of Azerbaijan both inside and outside. With a capital of 20,000,000 rials, this company did the biggest transactions and bought goods such as dry fruits and agricultural products of Azerbaijan at a reasonable price and exported them to the Soviet Union through new routes. ) In the field of industry, the government of Azerbaijan also set up 20 coal mines, 6 large factories, including a paper factory and other industrial institutions in the region of Azerbaijan with the help of the Soviet Union. They hoped that by implementing these measures, they would have an important and deep impact on the condition of farmers and peasants.

The commercial contracts of the Azerbaijani government with the Soviet government went beyond this and transactions were carried out on a wide scale in the field of aircraft, automobile and machinery industries. The Russians pledged to do all the necessary assistance in this regard and by setting up factories and by creating agricultural and educational facilities for farmers, they will double the productivity of Azerbaijan's products. (Azarbaijan newspaper, 21/3/1325, p. 2) The Soviet government also thought of measures to help the oil industries of Soviet Azerbaijan and to eliminate unemployment in Iranian Azerbaijan. For example, Baghraov, the secretary of the Communist Party of the Soviet Union, in a report sent to Moscow, suggested that measures should be taken to strengthen the relations between Azerbaijan and Iran. In this report, it is stated that the development of the oil industry of Soviet Azerbaijan requires a workforce of 25-30 thousand people; Baghraov suggested that these workers, which were needed by Soviet Azerbaijan, and Iran's Azerbaijan were also plagued by unemployment, with these measures, unemployment in Iran's Azerbaijan can be reduced and the workforce of Soviet Azerbaijan can be provided. (Hasanli, 1383: 118-119). In order to strengthen relations with the Soviet Union and because of Stalin's goodwill, the government of Azerbaijan Iran defined and explained arrangements for the Soviet employees, including political advisers, experts and Russian workers, determined their work law and considered a place for them to rest. . (Azerbaijan Newspaper, 19/4/1325, p. 2)

## Conclusion

The establishment of the Democratic Party of Azerbaijan, which occurred after the end of the Second World War and the collapse of the Reza Shahi regime, was the result of the dissatisfaction of the first Pahlavi period, which manifested itself during the reign of Mohammad Reza Shah. This movement was formed as a result of political, social and economic contradictions caused by the injustice of Reza Shah's government. With the advent of Reza Shah and his centralist policies and discriminatory behavior, Azerbaijanis were suppressed and their rights were ignored. As a result of these policies of Reza Shah, Azerbaijanis became prone to any kind of riots, uprisings and separatist movements.

After the exile and fall of Reza Shah's monarchy, a relatively open political atmosphere was formed and various parties emerged from it. One of these parties was the Democratic Party of Azerbaijan, which succeeded in forming the autonomous government of Azerbaijan centered in Tabriz. Although the government of Azerbaijan could not survive for more than one year, during its one-year rule, in order to win the public's opinion and get out of the financial and monetary difficulties caused by the severance of relations with Tehran, it was able to make achievements for the people of Azerbaijan and provide important services to be them So that he carried out extensive economic reforms in the field of land reform and trade affairs, banking, establishment of factories and industries.

Of course, it is difficult to judge the performance of a one-year sect, because judgment is tainted with love and hatred, and there are many discussions and reviews among experts and historians on this matter. Here, relying on the evidence and works, we find out that the sect during its one-year rule, despite the disconnection with the central government and other regions of Iran, and despite the economic problems it was facing internally, was able to carry out extensive economic reforms. people to present, so that these activities continued even after the collapse of the sect

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Journals Azerbaijan newspaper

## THE DEMOCRATIC SECT OF AZERBAIJAN (IRAN) AND THE CAUSES OF ITS FAILURE AND COLLAPSE IN THE PERIOD OF 1945-1946

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### **Abstract:**

The emergence of the democratic sect of Azerbaijan between September 1945 and the end of December 1946 is considered one of the most important events in Iran in the 20th century. The importance and uniqueness of these events is due to the fact that during the occupation of the northwest of Iran by the Soviet army following the establishment of the Democratic sect, the territorial integrity of Iran was exposed to a serious threat and challenge; The Democratic Sect, which was formed following the developments of the Second World War and dissatisfaction with the policies of Reza Shah, took advantage of the lack of power after Reza Shah, and with the support and assistance of the Soviet Union, declared autonomy and cut ties with the central government. Within a year, he took over the affairs of Azerbaijan himself. During this period, the sect was faced with many difficulties and shortcomings, and finally, these problems and disturbances caused them to face failure and collapse.

Based on this, this article has been organized with the aim of investigating how the democratic sect failed, and it intends to pay attention to the internal and external factors effective in its collapse.

### **Keywords:**

Iran, Azerbaijan, Mohammad Reza Shah Pahlavi, Democratic Sect, Soviet Union, failure and collapse

### **Introduction:**

Azerbaijan, which has been the source of important developments due to its special geographical location, found a chaotic situation with the establishment of the Pahlavi regime and the implementation of Reza Shah's centralization policies. This resulted in the dissatisfaction of the people of Azerbaijan, so that they became prone to any chaos and separatist movement. The exile of Reza Shah and the fall of his monarchy became the basis for the emergence of these discontents, the Azerbaijanis also seized this opportunity, with the help of the Soviet military forces, which had not left Iran after World War II, despite the tripartite agreement of the Allies. They created a crisis. In this regard, the Soviets, who instigated and supported internal crises in order to secure

their interests and the concession of northern oil, also used the Azerbaijan movement as a pressure tool to put pressure on the central government to obtain concessions.

### **How the Autonomous Government of Azerbaijan came into existence:**

The formation of the autonomous government of Azerbaijan has internal and external roots, the internal roots can be considered a reflection of a kind of popular factor that was the neglect of the Tehran government towards this region. In order to centralize the power of the central government of Tehran and implement modernization in Iran, Reza Shah adopted policies, the implementation of these policies affected the superiority of Tabriz in terms of commerce and economy, but with the exile of Reza Shah and the fall of his monarchy and the form of Having a relatively depoliticized atmosphere, Azerbaijanis seized this opportunity and due to factors such as the readiness of social conditions and contexts, they were able to provide grounds for protests.

The foreign origins of the formation of the autonomous government of Azerbaijan can also be explained in the Soviet intervention in the rebellion. The Soviets, like the United Kingdom and the United States, were trying to obtain the concession of oil in the north of Iran and wanted to dominate it, in addition to having an economic resource, to create a balance of influence with the British government, which had the concession of oil in the south of Iran. They found that Iran has no desire to give up the North's oil privilege. Therefore, they tried to put all kinds of pressure on Iran by any means. To achieve this, they tried to incite internal disputes and support separatist movements, and they saw Tabriz as suitable for the growth and expansion of their influence, and ration-eating agents came from all over the country. They called themselves to Azerbaijan and by encouraging political groups educated in the Soviet Union or pro-Soviet, they created the conditions for the division of Azerbaijan and its neighboring regions (Authors Group, 1371: 64) with these mentioned backgrounds, finally the democratic sect of Azerbaijan On December 12, 1945, with the help of the Soviet army, he defeated the central army of Iran and was able to conquer Tabriz, and established his own local government for one year under the chairmanship of Peshwari. In the discussion and analysis of the weakness and decay of the democratic sect of Azerbaijan, the question arises why, despite the unwavering support of the Soviet Union and the popularity among the people following the land reforms, the movement of Azerbaijan could not survive for more than one year. To answer this question, one should pay attention to the role of internal and external factors effective in the collapse of the sect.

### **The internal causes of the failure of the democratic sect of Azerbaijan**

In examining the causes of the collapse of the democratic sect of Azerbaijan, it is necessary to point out the role of internal factors that ruled the spirit and atmosphere of the Azerbaijani society, although these factors have

less importance and position compared to external factors, but they were not without influence in its failure and collapse. which is mentioned below

### **A) economic crisis**

From the very beginning of its emergence, the Democratic Party of Azerbaijan has implemented policies such as dividing the land, confiscating the land of the owners,

The confiscation of the warehouses of the lords and their distribution among the villagers and the disarmament of the security forces, which used to extort money from the people under various titles, became more popular among the people and the workers. The empowerment of the villagers, farmers and workers and inflicted a heavy blow on their economy, which was manifested over time, if the land reforms scared the merchants and industrial owners and caused the capital to flee, because they were afraid that after the land reforms, it would be the turn of capital confiscation. (Foran, 1386, 412) and caused the migration of many owners and rich people from Azerbaijan; This migration and the avoidance of rich people from Azerbaijan due to the fear of confiscating their wealth made the economic organizations of the democrats face a chaotic financial situation.

The cut off of the economic relationship and the lack of trade with other parts of Iran was one of the other important economic reasons that faced the party with a severe financial crisis, if the merchants could not freely establish business relationships with other cities. In order to reduce these economic difficulties, the democrats sought to conclude economic contracts with foreign countries, but no country, except the Soviet Union, showed a desire for trade, and the sect was forced to print banknotes to get out of the economic and financial stagnation (Azerbaijan Newspaper). 30/3/1325, p. 1) but the issuance of banknotes did not have much credibility and support and could not improve the stagnant economy of Azerbaijan.

The efforts of the Democratic Party of Azerbaijan to get out of the financial crisis were not limited to these cases, in order to increase revenues and reduce expenses, they reduced the salaries of the military and all important industries and imposed new taxes on fuel and slaughterhouses. (Abrahamian) 507, 1377) despite the efforts made to resolve the economic recession, the democrats were still unable to improve the financial situation and were forced to double taxes, as they were taxing 70% from landowners and 20% from peasants. (Ibid., 507) When the peasants saw the government of the sect like Z

### **b) Inconsistency and unity in sect leaders**

Another reason for the failure of the Azerbaijan movement was the lack of unity among the leaders of the democrats. The unity and harmony that the sect leaders had in the beginning of their approach and based on it,

they established their local government, gradually lost its color and with the passage of time, a kind of division and disagreement occurred between them. These divisions became more apparent during the central army's attack on Tabriz, when the army troops were advancing towards Tabriz, Seyyed Jafar Peshevari, the head of the party's central committee, officially declared a state of war and requested everyone to resist. , but the reaction of the Democrats to the statement of professionalism was not the same at all. Against the attack of Tehran's central army, they were divided into two groups and adopted two types of policies; On the one hand, the leadership of the Democratic Party and the officers of the local armed forces, especially the devotees, such as Pishevari, Gardgan, and Jahanshahlou, believed in the non-surrender and wanted to fight and a long-term and partisan war against the central army of Tehran, on the other hand, the members of the state association and persons who There were local officials such as Mohammad Biriya, Salamullah Javid and Mirza Ali Shabestri who were in favor of a peaceful solution and non-resistance against the government forces.

Finally, the members of the state association and pro-peace leaders, headed by Shabestri and Mohammad Beyria, invited the people to welcome the forces of Tehran with their fiery speeches. The Russian authorities, who had sacrificed the democratic sect for the oil concession, supported the second group, so that Colonel Gholioff reminded General Ata Kishioff to leave Iran. With the statements of this group of democrats and their unexpected decision not to resist, their alliance collapsed and they could not make a decisive decision against the army.

### **c) The political role of Qavam al-Sultaneh (then Prime Minister of Iran) in the downfall of the democratic sect of Azerbaijan**

Qavam al-Sultaneh, the prime minister of Iran, had the most chancellorships during his political life and was the only government whose government life was not shaken earlier. With his tact and intelligence, he was able to solve the problems of the day, which had an international aspect. As a trained and skilled diplomat, he knew that in order to solve internal problems, he had to get the agreement of foreigners, for this purpose, he took skillful action in solving the international problem, which forced the Soviet Union to abandon the democrats. In fact, what took the Soviet Union to give up the support of the Democrats was to adopt a calculated and skillful and effective strategy of consistency in its foreign policy. The way of the United States and the United Nations to withdraw its forces from Iran 3-Implementation of "rough" and "soft" policies against the Azerbaijan Democratic Party. Following this policy, during his trip to Moscow, he gave the oil concession to the Soviet Union under the condition of parliament's approval, even in a letter he sent to Stalin, he expressed his hope that he would soon give the northern oil concession to Russia. It caused the Soviet leaders to be reassured and

caused the Soviets to evacuate their forces from Iran and Azerbaijan and promised that they would not interfere in the affairs of Azerbaijan in the slightest (Mahdunia, 2016, 350; Pournazmi Sisi, 2012, 236), but what is certain is the skillful policy. There was consistency in the withdrawal of the Soviet forces because the Northern oil concession was never approved by the parliament and never implemented.

After obtaining assurance from the Soviet side, Qavam solved the internal problems and in order to advance another part of his strategy, he tried to use a similar and effective tactic against the sect, such that on June 23, 1946, he announced the formation of the Democratic Party of Iran. issued, (Information Newspaper, 10/4/1325, p. 1) by creating this party, he wanted to agree with the Democratic Party of Azerbaijan, so that he could attract a large part of public opinion. 1380, 173(

By implementing such policies, Qavam al-Sultaneh made a compromise with the autonomous government of Azerbaijan and based on the agreement between the parties, it was decided that the central government of Tehran would replace the government of the sect instead of the state council of Azerbaijan, the assembly of Azerbaijan instead of the state association, and the leaders who were the cause of the rebellion. instead of the local security forces, it was also decided that 75% of Azerbaijan's tax revenues should be used in the province itself, Turkish language should be used in primary schools and both languages in courts and government offices. (Information newspaper, 7/8/1325, p. 1)

But this policy did not last long when he felt that the conditions had changed, he completely changed his position towards the Democratic Party, dismissed the governors and ministers supporting the Democratic Party of Azerbaijan and even arrested their members and banned their publication. (Foran, 1386, 419; Abrahamian, 1377, 282) Khameei, one of the prominent members of the Tudeh party, who was one of the main supporters of the Democratic Party, claims that Qavam had created a private intelligence organization whose operatives were all over Iran, especially Azerbaijan. He would provide confidential news to him, and with the evidence he has, he proves that some of the leaders of the sect had a strong relationship and most likely they have spies and informers inside Azerbaijan with the help of money.(Khamei, 2013, This new environment reduced the consistency of its relations with Tabriz and finally allowed the army to attack Azerbaijan in Azar 1325 AH.

### **External reasons for the failure of the Azerbaijan Democratic Sect:**

Irrespective of the internal foundations and factors that are effective in the weakness of the democratic sect of Azerbaijan, the role of external factors that had a decisive and essential role in its collapse cannot be ignored, as these factors were of special importance compared to internal factors, and any discussion and investigation about the causes of the collapse It requires a careful evaluation of external factors.

## A) The role of England and America

With the end of World War II and the occupation of Iran by the three major allied powers (England, America, Russia), the Iranian government demanded the withdrawal of the allies from Iran in order to improve the unfavorable situation resulting from the war. Of course, the expectation and imagination of the Iranian nation against the evacuation of Iran from foreign forces was completely appropriate and normal, but the course of the situation proved that the problems of the Allies after the end of the war in Europe, also in terms of dividing the lands and spoils from the war, were to such an extent that They did not pay attention to the just desires of their war partner and did not pay attention to it either.

The allied countries raised Iran's complaint during a conference held in Moscow from December 16 to December 27, 1945. US Secretary of State James Burns considered the objection of the Iranian government and tried to get the agreement of the Soviet Foreign Minister to handle Iran's complaint, but he did not get any results from his efforts. Britain also suggested that the leaders of the three major countries, England, America, and the Soviet Union, hold a conference in Potsdam, Germany, and raise the issue of Iran's evacuation of foreign forces. After the Potsdam Conference, it was decided that the British and Soviet troops should immediately evacuate Tehran, but the immediate evacuation of Tehran, as agreed in the Potsdam Conference, was not implemented in any way. The United States and the British evacuated the city of Tehran on time, but the Soviets did not agree to it under the pretext that the war with Japan had not ended, and they delayed doing this to such an extent that the people of Iran raised their voices and complained about them. Malek Yazdi, 2013, 32; Avari, 2018, 4) Despite the increasing pressure from the United States and England, the Soviets refused to evacuate all their forces and tried to show their goodwill to the Iranian nation by implementing this law. and acquit themselves completely about creating problems and obstacles in the way of evacuating Iran's soil.

After various consultations of American and British representatives and their strong political pressures, the Soviet government withdrew its forces only from Khorasan, Gilan, Gorgan and Mazandaran provinces and wasted time in Azerbaijan and refused to completely evacuate Iran. By delaying the complete evacuation of Iran, the Soviets proved that they intend to keep their forces in Iran. In the meantime, the American government, being aware of all the intentions of the Soviet Union, demanded the withdrawal of the Soviet troops from Iran more than the British, and put more pressure on the evacuation of the troops, and with several notes to the Soviet Union, requested them to sign the tripartite agreement to but the Soviets refused to evacuate the entire territory of Iran under the pretext of northern oil and stationed their forces in Azerbaijan and provided all the necessary assistance to their puppet government, the autonomous government of Azerbaijan. Some

commentators consider America's positive diplomacy as the only factor that was effective in the withdrawal of Soviet forces from Iran. American President Truman sent an ultimatum to Stalin about the evacuation of Iran from the Soviet Red Army and announced that the Soviet Army would withdraw its entire army from Iran within a week, and if it does not do so, the American Army will be ordered to return to Iran. did The American government, as the only country possessing atomic bombs, was in a position to remove them from Iran, so the ultimatum became effective, and on March 24, 1946, the Moscow radio published the official announcement of the Soviet government that the complete evacuation Iran will be rid of the Red Army within five or six weeks and the Soviet forces will leave Iran. It was the policy of the American government, which declared a negative position regarding the non-evacuation of Iran by the Soviets and put the Russians under pressure and the evacuation of the Soviet forces was done right after the American ultimatum.

## **B) Soviet**

Experts and commentators presented different theories about the causes of the collapse of the democratic sect of Azerbaijan. As mentioned, some believe that the American ultimatum forced the Soviets to evacuate Iran; Another group, on the contrary, considered consistency policy to be the most important factor in this promise. It is true that these two factors are effective in the evacuation of Soviet forces from Iran, but both of these theories are less important compared to the policy of the Soviet government. In fact, it was the Soviet government and its rotation policy that caused the complete evacuation of Soviet forces from Iran and subsequently led to the defeat of the democrats; In fact, the autonomous government of Azerbaijan collapsed when the Soviet government, and specifically, Stalin himself, cut off his support for his puppet government due to a change in his policy.

The Soviet government, which wanted an oil concession in the north of Iran, because of the "negative balance policy of Mossadegh" (former prime minister of Iran), saw its plan rejected by the Iranian government, and the Soviet Union faced failure in obtaining it. The Soviets also refused to evacuate Iran's soil under the pretext of that. However, when Qavam al-Sultaneh, the Prime Minister of Iran at the time, took office and was aware of the criticality of the issue from the very beginning and demanded a peaceful solution with the Soviets, the conditions suddenly changed in favor of the Soviets. Qavam requested to travel to Moscow for talks. He believed that even if the northern oil concession was handed over to the Russians, he should prevent the formation of an autonomous government in Iran's Azerbaijan, and he considered the evacuation of Soviet forces from Iran as the first step in this direction. (Information newspaper, 22 8/1324, p.1) for this purpose, he prioritized his policy in negotiating with the Soviet Union, and was of the opinion that the Soviet government

has the duty to withdraw its forces from Iran like the Allies after the conclusion of the tripartite agreements after the end of World War II. take out But due to the lack of complete evacuation of the Soviet forces, the situation was brought to the international authorities through the Iranian government. Hossein Alaa, the head of Iran's delegation to the United Nations, wrote a letter to the Secretary General of the United Nations and requested the Security Council to address the issue of Iran and, according to Article 35 of the United Nations Charter, requested the evacuation of all Iranian territory (Information Newspaper, 2/31 1325, p.1). After hearing the statements of the representatives of Iran and the Soviet Union, the Security Council issued a resolution on January 30, 1945, advising Iran and the Soviet Union to start direct negotiations with each other to resolve the differences and to inform them of the result. to the Security Council. After the Iranian government referred to the Security Council, the Russians did not sit idly by and attacked Iran's action with various means. Iran also decided to put pressure on Russia through diplomacy and by re-introducing the issue of Iran in the United Nations Security Council. Finally, according to the proposal of the representative of the Netherlands in the Security Council, the proposal of Iran's case in the Security Council was approved by a majority of nine votes against the two votes of Poland and the Soviet Union, so that Iran's complaint will remain in the Security Council. Finally, after many negotiations between the Prime Minister of Iran and Stalin, and pressure from the United Nations, Stalin was sure that the Soviet company in Iran would extract oil from the north of Iran, in this case, he no longer considered it necessary to keep the Soviet army in Iran. He ordered the withdrawal of his forces from Iran, and this shows that Stalin wanted oil, not a free and democratic Iran.

After reconciling with Iran, the Soviets also signed an agreement with each other, the most important provisions of which were: 1- The Red Army forces must evacuate Iran within a month and a half from 1946 AD 2- The contract for the establishment of a mixed oil company Iran and the Soviet Union under the condition of the approval of the 15th Parliament of Iran 3- Regarding Azerbaijan, since the issue is an internal matter, the implementation of the reforms should be carried out according to the existing laws of the Iranian government. 476-477; Makki, 1362, 490-491)(

Following the conclusion of the Iran-Soviet agreement, the Soviet forces withdrew from Iran on April 22, 1946, and by May of that year, they withdrew all their forces from Iran. After the agreement between the Iranian and Soviet governments, Hossein Alaa, Iran's representative in the United Nations, withdrew Iran's complaint from the Security Council.

The Soviets considered it necessary to obtain concessions for the oil of the north and simply changed their policy and stopped supporting the sect. The Soviets, who initially used the democrats to obtain desired

concessions from the Iranian government, gradually put pressure on them. to stop their harsh words against the central government. The Soviets went further and in a letter that Stalin wrote in response to Seyyed Jafar Pishevari, the head of the autonomous government of Azerbaijan, who was his puppet, that you do not evaluate the current situation correctly and it is not possible to preserve the achievements of your revolution with the current situation. Currently, we cannot keep our forces in the soil of Iran (Nashi, 1384, 234-235) at the time of leaving Iran, he advised the leaders of the sect to refrain from war and resistance and to tolerate the government and the military. come out Even during the attack of the Shah of Iran's army on Azerbaijan, a group of professionals were forced to consent to the entry of the Shah's army into Azerbaijan. (Party supporting Azerbaijan Democratic Party) who were serving the democrats, when the Soviets evacuated Iran, they took back all the cannons and heavy equipment they had given to the sect, and in the hands of the party forces, rifles and several machine guns. Davia had three old cannons left that they had obtained when they captured the Tabriz barracks. (Khamei, 25, 2013) Soviets with hope

## Result

The emergence of the Democratic Party of Azerbaijan was one of the most important separatist movements that took place after the end of World War II and the collapse of the Rezashahi regime. Reza Shah, by carrying out his centralist policies and applying his discriminatory behavior, caused the dissatisfaction of the Azerbaijanis and provided the platform for rebellion in Azerbaijan, in such a way that with the fall of Reza Shah and the formation of a political open space, the grounds for discontent in Azerbaijan were created. and Azerbaijan moved towards establishing an autonomous government. In the meantime, the Soviets, who had seen their demand for oil concessions in the north of Iran rejected a few years ago, took full advantage of the discontent in Azerbaijan and started some separatist movements. One of these separatists was the Democratic Party of Azerbaijan, which declared autonomy with the support of the Soviet Union and took control of Azerbaijan's affairs, but it could not continue its political life and within a year, it went towards weakness and destruction. Documentary studies show that a set of internal and external factors were involved in the weakness and collapse of the democratic sect of Azerbaijan, which by retrieving the available documents in this regard, it can be said that factors such as the disconnection with the central government of Tehran and the economic problems caused by it and some difficulties It caused the decline and collapse of the democratic sect. Finally, during its negotiations with Tehran, the Soviet Union stopped supporting the sect with the promise of oil concessions in the north of Iran. In this way, the democratic sect, which was created by the strict orders of the Soviet Union, collapsed after being sacrificed to the promise of northern oil, and this issue became the main and effective factor in the sect's collapse.

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## THE VALUE OF SHARIA MUTUAL FUNDS IN THE PERSPECTIVE OF

### Maqashid Shariah

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### Abstract

The relationship between Maqasid Syariah and Maslahah is very close, because the purpose of Maqasid Syariah itself is to achieve the benefit of the people. This study aims to describe the values of maslahah contained in the investment activities of Islamic mutual funds. This study uses qualitative methods through the study of literature. Data collection techniques are carried out by searching for relevant library materials, then studying them and analyzing them in depth so that they can support the statements that have been presented. The development of the Islamic capital market, which shows a positive trend in its growth, certainly provides new hope for a more stable Indonesian economy. The benefits of Sharia mutual funds in the perspective of Maqashid Syariah include mutual funds as halal investment instruments and mutual funds as the realization of the ta'awun principle. The challenge of Sharia mutual fund development in Indonesia is the low literacy of the community towards Sharia-based investment products. But when viewed from its growth, Islamic finance has a great opportunity to grow in Indonesia.

**Keywords: Maslahah, Sharia Mutual Funds, Maqashid Syariah**

## THE POTENTIAL OF TRADITIONAL MARKETS IN IMPROVING THE COMMUNITY ECONOMY ACCORDING TO AN ISLAMIC ECONOMIC PERSPECTIVE

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### Abstract

This research intends to explain in depth about company spirituality and company performance. the aim of this research is explained to find out the role of the community in improving the economy in the Bojong market. To find out the impact experienced by Bojong market traders on improving their economy. Types and Research Approaches According to Moleong, defines qualitative research as research that is intended to understand phenomena about what is experienced by research subjects, for example perpetrators, perceptions, motivations, actions and other people holistically and in a descriptive way in the form of words and language in a special natural contexts and by utilizing various scientific methods. The results this research state that business field creators also exist in the market. Markets have become an inherent part of people's lives. Most people even depend on their daily work from the market. Therefore, the existence of markets is very important for society and the economy. In daily activities, the market can be interpreted as a meeting place for buyers and sellers. However, in economics, the market is not defined as a place. However, it prioritizes buying and selling activities. Not only that, markets are also a support for increasing regional income budgets, so that the existence of markets in the community is very much needed, both traditional markets and modern markets. A traditional market is a meeting place for sellers and buyers and is characterized by direct transactions between sellers and buyers and a bargaining process. The building usually consists of stalls or outlets, stalls and an open floor opened by the seller or a market manager. Most sell daily necessities such as food ingredients in the form of fish, vegetables, fruit, eggs, meat, cloth, clothing, services and so on. Apart from that, there are also those who sell cakes and other items.

**Keywords:** *Traditional markets, Community economy, Islamic Economic Perspective*

## IMPLEMENTATION OF ISLAMIC SCIENCE OR SCIENCE

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### Abstract

The aim of this research is to describe the implementation of Islamic education/science from a literature review perspective. The writing method uses a library research approach sourced from authoritative journals and books regarding the implementation of Islamic education/science. The results of the research conclude that Scientific Research between Religion and Science as Models, Patterns and Paradigms If we talk about core concepts in the Islamic religion, it is easy to say that the issue of basic beliefs is the basis of mother of science in the Islamic religion. In general, the core concept of the Islamic religion is based on inspiration regarding Allah SWT, nature and humans, physically and metaphysically. This means something related to the essence based on these three things, of course it is indirectly attached to the study of the mother of science in Islam. As the most fundamental foundation based on knowledge in the Islamic religion, it certainly conveys the most fundamental viewpoint in the Islamic religion.

**KEYWORDS :implementation,science and Islamic science**

## ÇOKLU SINIFLANDIRMADA HİYERARŞİ OLUŞTURMA: SINIF MERKEZİ STRATEJİLERİNİN HİYERARŞİ KALİTESİ VE SINIFLANDIRICI PERFORMANSI ÜZERİNDEKİ ETKİLERİN AÇIĞA ÇIKARILMASI

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### Öz

Bu çalışma, çoklu sınıflandırma alanında hiyerarşi oluşturmanın uygulanmasına odaklanarak, özellikle önceden tanımlanmış hiyerarşilere sahip olmayan veri kümelerinden hiyerarşi çıkarma ve bu hiyerarşiyi sınıflandırma amaçları için kullanma üzerine iki temel aşamaya vurgu yapmaktadır. Sınıfların temsili, sınıf koşullu ortalamaların (CCM), ortalamaya en yakın örneğin (CEM) ve sınıf koşullu medoidin (CMD) uygulanmasıyla gerçekleştirilmektedir. Hiyerarşi oluşturma, yukarıdan aşağıya bir yaklaşımı benimseyerek Hierarchical Divisive Clustering ile desteklenmekte, sınıfları ayırmak için K-medoid kümeleme kullanılmaktadır.

Hiyerarşi kullanımı, hem Global Classification (GC) hem de Local Classifier per Parent Node (LCPN) şemalarının keşfini içermektedir. Tanınmış sınıflandırıcılar, örneğin eXtreme Gradient Boosting (XGB), Random Forest (RF), Linear Discriminant Analysis (LDA) ve Gaussian Naive Bayes (GNB), 53 gerçek dünya çoklu sınıflı veri kümesinde değerlendirilirken, 10 katlı Monte Carlo doğrulama yaklaşımı kullanılmaktadır. F1 skoru ve kritik fark diyagramlarına dayalı değerlendirme, CCM'nin tutarlı bir şekilde CCE ve CEM'yi geride bıraktığını göstermektedir. Ayrıca, LCPN'nin GC'ye göre genelde üstünlük sağladığı, GNB durumunda ise istisnai bir durum olduğu gözlemlenmektedir.

Bu çalışma çeşitli senaryo ve sınıflandırıcılarda sınıflandırma performansının detaylı bir anlayışını sunarak, sınıf merkezi stratejisinin hiyerarşi kalitesi üzerindeki derin etkilerini aydınlatmaktadır. Bu kapsamlı keşif, çoklu sınıflandırma görevleri bağlamında sınıf merkezi seçimi, hiyerarşi oluşturma ve sınıflandırıcı performansı arasındaki karmaşık etkileşimin nüanslı bir anlayışını sunmaktadır. Burada sunulan bulgular, çeşitli veri kümelerinde hiyerarşik yapıların etkili bir şekilde yönetilmesine yönelik optimal stratejilere değerli bir katkı sağlamaktadır.

**Anahtar Kelimeler:** Makine Öğrenme, Otomatik Hiyerarşi Üretme, Hiyerarşik Sınıflandırma, Çok Sınıflı Sınıflandırma, Hiyerarşik Bölücü Gruplandırma.

## **HIERARCHICAL GENERATION IN MULTI-CLASS CLASSIFICATION: UNRAVELING THE IMPACT OF CLASS CENTROID STRATEGIES ON HIERARCHY QUALITY AND CLASSIFIER PERFORMANCE**

### **Abstract**

This study delves into the implementation of hierarchy generation in the realm of multi-class classification, with a specific emphasis on two fundamental phases: the extraction of hierarchy from datasets devoid of predefined hierarchies and the utilization of the hierarchy for classification purposes. The representation of classes is accomplished through the application of class conditional means (CCM), the instance closest to the mean (CEM), and class conditional medoid (CMD). The construction of hierarchy employs a top-down approach, facilitated by Hierarchical Divisive Clustering, utilizing K-medoid clustering to partition classes.

The exploitation of hierarchy involves the exploration of both Global Classification (GC) and Local Classifier per Parent Node (LCPN) schemes. Esteemed classifiers such as eXtreme Gradient Boosting (XGB), Random Forest (RF), Linear Discriminant Analysis (LDA), and Gaussian Naive Bayes (GNB) undergo assessment on 53 real-world multi-class datasets, employing a 10-fold Monte Carlo validation approach. Evaluation based on the F1 score and critical difference diagrams reveals that, across diverse scenarios, CCM consistently outperforms CCE and CEM. Furthermore, LCPN demonstrates superiority over GC, with the exception observed in the case of GNB.

This study offer nuanced insights into the classification performance across various scenarios and classifiers, illuminating the profound impact of the class centroid strategy on the quality of the hierarchy. This comprehensive exploration contributes a nuanced understanding of the intricate interplay between class centroid selection, hierarchy construction, and classifier performance in the context of multi-class classification tasks. The findings presented herein extend valuable insights into the optimal strategies for handling hierarchical structures in diverse datasets.

**Keywords:** Machine Learning, Automatic Hierarchy Generation, Hierarchical Classification, Multi-class Classification, Hierarchical Divisive Clustering.

## IDENTIFICATION OF POLYPHENOLS IN STEMS OF CALICOTOME VILLOSA LINK USING VARIOUS EXTRACTION METHODS

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### **Abstract**

The objective of this study is to contribute to the development of the natural heritage of the Sefrou region, mainly medicinal and aromatic plants. The plant *Calicotome villosa* from the Fabaceae family was chosen for this study because of its abundance in the region and the lack of work carried out on the chemical and biological aspects of this species.

The aim of the present work was to compare three extraction techniques by evaluating the dosage of polyphenols from flower extracts of the *Calicotome Villosa* plant from the province of Sefrou. Yields were determined for the three extraction techniques: maceration, sonication (20°C, 45 min) and soxhlet.

In a first part, the comparative study showed that the highest yield was obtained by the soxhlet extraction technique, followed by sonication and finally maceration.

The results obtained are expressed in mg gallic acid equivalent/g of plant material extract (mg EGA/g of extract), using the linear regression equation of the calibration curve plotted for gallic acid:  $Y = 1.5998X - 0.0168$  and  $R^2 = 0.9841$ .

The results show that the highest total phenolic content was detected in the flower sonication extraction fractions with a content of approximately 0.455 mg/EGA/g of extract, followed by soxhlet and at the end of maceration. The polyphenol content varies qualitatively and quantitatively from one plant to another, this can be attributed to several factors:

- climatic and environmental factors: geographical area, drought, soils, attacks and diseases, etc.
- the genetic heritage, the harvest period and the stage of development of the plant.

**Keywords: *Calicotome villosa* Link; extracts; yield; extraction techniques; polyphenols.**

## L'ÉVOLUTION DE LA QUALITÉ NUTRITIONNELLE D'UN BISCUIT

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### **Abstract.**

Notre étude met en évidence, pour la première fois, l'utilisation potentielle des extraits de feuilles d'olivier (OLE) comme additifs naturels pour prolonger la durée de conservation des biscuits et pour formuler un biscuit sain. Les résultats des travaux attestent que l'OLE, à la concentration de 500 µg GAE/g de pâte, peut être efficacement utilisé à cette fin, aussi bien sous forme libre qu'encapsulée. Une activité de piégeage des radicaux et une stabilité oxydative plus élevées ont été détectées pour les biscuits enrichis par rapport aux témoins, étant ceux enrichis en polyphénols encapsulés encore plus stables. D'autre part, la présence d'alginate et de pectine comme matériaux de paroi des microsphères a influencé les phénomènes d'absorption d'eau, entraînant un durcissement de la texture des biscuits. Les résultats ont été confirmés dans les deux conditions de stockage accéléré testées (55°C ; HR 50%), en présence de lumière UV ou en stockant les biscuits dans un sac OPP (abréviation de polypropylène orienté) dans l'obscurité. D'autres études en conditions réelles de stockage seront menées afin de confirmer ces résultats prometteurs.

**Keywords :** Les extraits de feuilles d'olivier (OLE), L'alginate et La pectine, polyphénols, La lignine de blé, disaccharides, huile de colza

## SOME BIOLOGICAL PARAMETERS OF *MUGIL CEPHALUS* (LINNAEUS, 1758) IN THE SIDI SAAD DAM (CENTRAL TUNISIA)

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### Abstract

Mugilidae were the most important catch species in Tunisian fish farming. This study aims to determine the biological parameters of *Mugil cephalus* (Linnaeus, 1758) in Sidi Saad Reservoir in Tunisia. Sampling was carried out from January to December 2016. A total of 204 specimens ranged from 20 to 67 cm in total length, were caught during the study period.

The results indicated that the sex ratio was not significant differences between the proportions of males and females. Size at first maturity (Lm50) was found to be 34.13 and 33.29 cm TL for females and males.

The Gonado Somatic Index indicated that the spawning season extends from August through October. The ages of *M. cephalus* were determined from measurements of scales. The growth model of Von Bertalanffy was determined using the age-length key. The total length weight (W) relationship was estimated at  $W = 0.0081 \times TL^{3.07}$ . A total of 10 age classes are observed. The parameters of Von Bertalanffy growth were estimated :  $L_{\infty} = 77.87$  cm,  $K = 0.1147$  a<sup>-1</sup>,  $t_0 = -2.41$ .

**Keywords :** *Mugil cephalus*, reproduction, age, growth, reservoir, Tunisia,

## LC-ESI-MS/MS ANALYSIS, TOXICITY AND ANTI-ANAEMIC ACTIVITY OF RUBIA TINCTORUM L. AQUEOUS EXTRACT

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### Abstract

The present study investigated the chemical profile, toxicity, and anti-anaemic activity of Rubia tinctorum root aqueous extract against phenylhydrazine induced hemolytic anaemia. Phenolic compounds were analyzed by LC-ESI-MS/MS; acute toxicity test was evaluated by administering a single dose of 2,000 mg.kg<sup>-1</sup> of the extract; anaemia was induced by administration of 40 mg phenylhydrazine by intraperitoneal injection for 2 days. Moreover, the anti-anaemic activity was evaluated by measuring the haematological parameters of rats treated with iron and aqueous extract for 15 days. The LC-ESI-MS/MS analysis results revealed the presence of 31 phytochemical compounds, among them, citric acid was found as the most abundant. No signs of toxicity or death were recorded, indicating that the LD<sub>50</sub> of R. tinctorum root extract is higher than 2,000 mg.kg<sup>-1</sup>. Furthermore, the aqueous extract increased red blood cell levels by 69.82 and 71.67 % in the groups treated with 200 and 400 mg.kg<sup>-1</sup> of the extract, respectively. Besides, a significant increase in hemoglobin from 12.05 ± 0.15 to 12.9 ± 0.52 g.dL<sup>-1</sup> was noted in rats treated with 400 mg.kg<sup>-1</sup> of extract. Thus, the data indicate that the root extract could be considered a natural source for the treatment of anaemia.



## ANALYSIS OF THE ANTIOXIDANT AND ANTIBACTERIAL POTENTIAL OF CAROB TREE (*CERATONIA SILIQUA L.*) EXTRACTS FROM OUAZZANE REGION

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### Abstract.

This study aimed to assess the antioxidant and antibacterial activity of carob tree (*Ceratonia siliqua L.*) extracts from the Ouazzane region. Leaf and pod samples were collected, extracted, and bioactive compounds (polyphenols, flavonoids, tannins) were quantified. Results revealed variable concentrations depending on plant parts, with strong antioxidant activity. The extracts also exhibited antibacterial activity against certain strains. These findings suggest that the carob tree could be a promising source of health-beneficial compounds and valuable in combating bacterial infections.

**Keywords :** Carob tree (*Ceratonia siliqua L.*), Antioxidant activity, Antibacterial activity.

## TREATMENT BY ESSENTIAL OILS OF THYME (*THYMUS VULGARIS*) ON THE VARROA DESTRUCTOR AGENT OF THE VARROASIS OF BEES

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### Abstract

In order to make the most of the Algerian flora, our study is part of the search for a simple and economical biological method to treat Varroa mites in bees. We are interested in the Lamiaceae family, more specifically the genus *Thymus*. The aim of this work is to demonstrate the bioacaricidal activity of thyme (*Thymus vulgaris*) by fumigation, in order to develop a control method against Varroa destructor, with no major drawbacks for the bee, the hive or the bioclimate. To study the impact of thyme collected from Oued Chorfa on the dynamics of Varroa mites and their host bees, two batches were collected from a private apiary in Ain Defla. The first was fumigated with thyme, while the second was left untreated. The results showed that, for batch I, between 125 and 135 varroa mites died during the treatment period (i.e. 30 days). On the other hand, for the untreated Batch II, the number of naturally dead mites ranged from 26 to 32 over the same period. However, it should be pointed out that smoke does not affect the egg stage, and that the effectiveness of the treatment varies from one period to another and from one cell to another, given that during periods of extreme heat, the mites become more vulnerable. The weak effectiveness of the treatment is due to the presence of capped broods, which "protect" the varroa mites inside the cells, thus preventing smoke penetration. Varroa mites attached to the lower part of the larva's body escape the effects of the treatment. Clearly, the thyme treatment reduced the final infestation rate. The weak effectiveness of the treatment is due to the presence of capped broods, which "protect" the varroa mites inside the cells and thus prevent smoke penetration.

**Key words:** Varroa destructor; *Apis mellifica intermissa*; *Thymus vulgaris*; Treatment; Fumigation.

## **HYGIENE HABITS MAY HAVE DETRIMENTAL EFFECTS ON VAGINAL MICROBIOTA.**

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### **ABSTRACT**

The importance of a healthy vaginal microflora is indisputable. Therefore, intravaginal practices, such as vaginal douching (VD), may inhibit or lower the colonisation of beneficial Lactobacilli strains. Although the results of disrupted vaginal microbiota have been widely reported in the literature, direct microbicidal effects of products used for VD have been rarely studied. Moreover, there are certain studies advocating the beneficial effects of VD. This *in vitro* study was designed to provide more evidence to help health care givers in disseminating the knowledge that VD might have detrimental effects on vaginal microbiota. Three commercially available VD products (A, B and C) were examined for their minimal inhibiting concentrations (MICs) against Lactobacilli strains. Although the MICs of product A (ranging from 0.19% to 0.09%,  $p < .05$ ) were proven to be lower than the other two, all the products were potentially able to inhibit the growth of Lactobacilli strains effectively, and hence should be used with caution.

**KEYWORDS :** Vaginal microbiota; vaginal douching; Lactobacilli; MICs, *in vitro* culture.

## THE ROLE OF VAGINAL MICROBIOTA IN PREVENTING INFERTILITY IN DAIRY COWS.

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### **Abstract**

Veterinarians and breeders face a challenging task in treating reproductive disorders in cattle. Postpartum uterine diseases are widespread among dairy cows and are a major concern for the dairy industry because they are associated with various undesirable outcomes, including decreased fertility, reduced milk production, and adverse effects on the host's health.

Antibiotics are commonly used in veterinary medicine to treat infections of the reproductive system. However, their use can lead to bacterial resistance. Additionally, the increasing volume of drug residues has become a problem that endangers human health.

Probiotics and prebiotics could be used as biological control agents in animal production to reduce the use of antibiotics. Due to the slower development of resistance in biological control agents, probiotics are more environmentally friendly and sustainable. It is now widely accepted that the vaginal microbiome plays an important role in the fertility of cows.

These bacteria are necessary for maintaining the structural integrity of the vaginal mucosal barrier, immunomodulation, and protection against pathogens. Additionally, the vaginal microbiota plays a role in Male-Female semiochemical communication. To improve female genital health, an ideal balance between the abundance and variety of the microbiome is necessary. Dysbiosis, genital infections, and fertility disorders are all symptoms of this imbalance.

Therefore, the use of antibiotics in animals must be reduced as part of the global plan 'One World, One Health'. This field of study has the potential to enhance our understanding of the relationship between the endometrial microbiome and fertility, as well as to be probiotic in different species.

**Keywords:** Dairy Cows, Vaginal Microbiota, Pathogenic Agents, Genital Infections, Antibiotic Resistance, Infertility, Probiotics and Prebiotics.

## IMPACT OF FARMING SYSTEMS AND PRACTICES ON THE CULTIVATION OF DURUM WHEAT (*TRITICUM DURUM* DESF) UNDER SEMI-ARID CONDITIONS IN ALGERIA

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### Abstract

In arid sowing conditions, and its various effects, notably on the agricultural sector, it is necessary to adopt agro-ecological practices and introduce new crops and technologies to maintain agricultural production and thus improve food security. The cereals that provide bread, the staple food in the Algerian diet, are suffering from insufficient production, mainly due to drought. The aim of this work is to study the effect of water deficit on the behavior of a few durum wheat genotypes in order to select those with good adaptation to semi-arid conditions. The genotypes tested were subjected to different water regimes. The overall results clearly show that the genotypes studied exhibit phenotypic and physiological variation for all the traits studied, particularly those related to phenology and histological components and characteristics. Values for the majority of traits studied were highest in the Oued Zenati and Mexicali75 genotypes, while the lowest values were recorded in the Waha and Langlois genotypes. Based on the results obtained, the Oued Zenati genotype performed best under water-deficit conditions. This genotype could be useful for improving Algerian durum wheat production in the face of drought.

**Key words:** Agricultural practices, Food security, Water deficit, Durum wheat, Histological, Semi-arid.

## THE INFLUENCE OF THE ROLE OF SHARIA FINANCIAL INSTITUTIONS AND FINTECH INNOVATION IN POVERTY ALLEVIATION: QUALITATIVE ANALYSIS IN LOW-INCOME COMMUNITIES IN THE CONTEXT OF THE DIGITAL SHARIA ECONOMY

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### Abstract

This research was initiated by the desire to analyze in depth how Sharia Financial Institutions and FinTech innovation can collaborate as one of the efforts to eradicate poverty, especially in low-income communities. The results of this research can be a source of information for LKS, FinTech service providers, government and society in joint efforts to achieve greater financial inclusion and more effective poverty alleviation. This research is library research with a qualitative approach. The data sources used in this research come from various literature journal articles that are relevant to the research topic. The data analysis method used is content analysis of the literature sources used in the research. Poverty is a serious problem being faced by various countries in the world, including developed and developing countries. Poverty alleviation through Sharia Financial Institutions (LKS) and FinTech innovation in the context of the sharia digital economy are efforts that can provide great benefits, especially for low income communities. This can include access to financing, financial education, empowerment of MSMEs, digital payment services, zakat technology, appropriate regulations, strategic partnerships, and social performance measurement. Through this effort, LKS and FinTech can help reduce poverty. As with access to funding, LKS and FinTech can collaborate to develop sharia financial products that are more accessible and affordable. This will help low-income people get the capital they need for their businesses. Apart from that, the use of technology for zakat and sadaqah can simplify the process of providing and receiving assistance for low income people.

**Keywords:** Islamic Financial Institutions, Fintech, and Poverty.

## MUSLIM WOMEN ARE REQUIRED TO COVER THEIR PRIVATE PARTS: A LITERATURE REVIEW

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### Abstract

The purpose of this article is to find out the definition of the Muslim women are required to cover their parts. The method used. This research is library research with a qualitative approach. The data sources used in this research come from various literature journal articles that are relevant to the research topic. The data analysis method used is content analysis of the literature sources used in the research. is an effort to integrate Islamic values into science. The hijab appears to be a creative force without bounds that cuts across practically all media genres. Muslim fashion bloggers and famous women who use blogs to communicate stylish hijab tips have tremendous impact on the public. For bloggers, hijab fashion has improved the use of the head covering, which was previously thought to be outmoded and ugly. The emergence of Muslim fashion bloggers can be attributed to three factors. First, the appreciation reason, as blogs are an easy, practical, and efficient mode of communication, making them a place where information may be widely disseminated. Second, the inspiration is intended to dispel the myth that Muslim women's attire is outmoded and unsightly, and that it is inappropriate for young people to wear. Thirdly, this hijab is worn to demonstrate that Muslim women of different ages and socioeconomic statuses can do so while showcasing their sense of style. In summary First, the motivation for appreciation recognizes that blogs are an easy, practical, and efficient method of communication, making them a venue for extensively disseminating information about the hijab.

**Keyword:** Model muslim, hijab, fashion

## UNDERSTANDING THE HUMANIZATION OF SCIENCE

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### **Abstract**

The aim of this research is to describe the meaning of humanization of science. This research is library research with a qualitative approach. The data sources used in this research come from various literature journal articles that are relevant to the research topic. The data analysis method used is content analysis of the literature sources used in the research. This literature research found that the humanization of science places humans as a whole, so that humans are able to examine their own attitudes and behavior towards the symptoms that occur around them. Humanization itself is the growth of a sense of humanity: a humanitarian process that must be developed since a child is in lower education. Here humans are required to participate in finding and developing life values and cultural norms. So what is meant by humanization is constructing Islamic sciences so that they touch more and provide solutions to real problems in real human life. Humanization teaches to humanize humans, eliminate material things, dependency, violence, and hatred from humans, by fighting three things, namely dehumanization (technological, economic, cultural or state objectification), aggressiveness (collective aggressiveness and criminalization), loneliness (privatization, individuation). The strategy for the humanization of Islamic sciences includes all efforts to combine universal Islamic values with modern science in order to improve the quality of life and human civilization. Meanwhile, humanization of science itself is an approach to the development of science that emphasizes values, ethics and human aspects in research, application and



learning of science. The main goal is to make science more relevant, useful and have a positive impact on humans and society.

**Keywords:** Humanization of science, islam, and humans.

## THE ROLE OF MILLENNIAL GENERATION IN OVERCOMING INFLATION THROUGH DIGITAL ECONOMY

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### Abstract

Economic growth is the development of activities in the economy which causes the goods produced in society to increase. A high inflation rate will have a negative impact on economic growth, a high inflation rate will reduce economic growth. This research intends to explain the role of the millennial generation in overcoming inflation through the digital economy. The aim of this research is to determine the role of the millennial generation in overcoming inflation through the digital economy so that it is hoped that it can help the government in determining policies related to inflation and economic growth. This research method uses a qualitative approach, because the data sources and research results are in library research, inductive data analysis, grounded theory (towards the direction of formulating theories based on data). The role of the millennial generation in overcoming inflation through the digital economy is very important for the country's economic progress. In the era of society 5.0, the high-quality millennial generation will have an important role in Indonesia's economic growth. Facing inflation through the digital economy, the millennial generation can utilize their mastery of technology, creativity, collaboration, education and economic awareness to create new, effective solutions in dealing with inflation. Through the digital economy, they can optimize the use of resources, reduce production costs, increase efficiency and better deal with inflation. Therefore, the government needs to continue to encourage the development of digital talent through various programs such as the National Digital Literacy Movement, Digital Talent. In facing future economic challenges, the participation of the millennial generation in the digital era is very important to answer future economic challenges.

**Keywords: Inflation, Economy, Digital economy**

## INFLATION ON INDONESIAN ECONOMIC GROWTH

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### Abstract

Economic problems in developing countries usually include high inflation rates and sluggish economic growth. A moderate and stable inflation growth rate is always desirable to prevent macroeconomic ills that could exacerbate economic instability. Inflation is an important economic indicator. The economy is affected by inflation, both positively and negatively. The purpose of this material is to understand the development of inflation and control inflation in Indonesia. This writing method uses library research sourced from published articles. In developing countries in general, inflation is still one of the many macroeconomic "diseases" that are worrying for the government and society. The annual inflation rate may, in fact, be reduced to single digits by the end of the New Order (before the financial crisis), but overall there is still uncertainty due to the large number of poor people experiencing inflation. There are several main factors that cause inflation in Indonesia, namely: Money supply, Government Budget Deficit, Factors in Aggregate and Foreign Supply. In terms of controlling inflation, the Indonesian Government prefers to use monetary tools such as mandatory reserves and open market mechanisms. However, it should be remembered that the monetary method is most suitable for countries with mature economies compared to developing countries that still have unresolved structural obstacles, because this method is mainly used to combat inflation in the short term.

**Keywords:** Inflation, Economic, Growth

## THE DANGERS OF METHANOL AND ALCOHOL CONSUMPTION

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### Abstract

Methyl alcohol, often known as methanol, is an extremely dangerous substance that can be lethal if ingested recklessly and is present in the popular oplosan liquor used in Indonesia. In industrial, methanol is frequently used as a solvent, paint remover, and cleanser. Methanol is also present in thinner and acetone. The body converts methanol into formaldehyde, often known as formalin, which is harmful to health. In general, drinking alcohol is highly harmful to one's health. Abuse of alcohol can lead to behavioral issues as well as intellectual impairment. Overindulgence may result in seizures, unconsciousness, and even death. Alcohol consumption can also result in serious side effects from psychiatric illnesses, liver damage, and stomach ulcers. Some Indonesians drink oplosan, an mixed beverage containing methanol or methyl alcohol. Alcohol has a sedative and hypnotic impact on the central nervous system when ingested in excess. Among the bodily organs that alcohol can harm include the brain, gastrointestinal tract, liver, pancreas, muscles, bones, and reproductive system. Drinking too much alcohol too soon might result in alcohol poisoning, which can be deadly. When someone drinks more alcohol than their body can handle, it can cause alcohol poisoning, which can result in physical and mental impairments like intoxication, unconsciousness, disorientation, and forgetfulness. Addiction to alcohol can also lead to increased daily consumption or its intoxicating effects. As a result, it's crucial to abstain from drinking oplosan liquor that has high methanol and alcohol.

**Keywords:** oplosan liquor, methyl alcohol, methanol

**EFFECT OF INVESTMENT, INFLATION, NUMBER OF LABOR, EXPORT VALUE AND THE NUMBER OF INTERNET USERS ON SUBSECTOR INCOME CREATIVE APPLICATION AND GAME DEVELOPER INDUSTRY IN INDONESIA, 2011-2015**

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**Abstrak**

This research aims to analyze the influence of investment, inflation, number of workers, export value, and number of internet users on the income of the creative application and game developer industry subsector in Indonesia. The data population used in this research is the creative industry subsector of applications and game developers in Indonesia from 2011-2015. The analytical method used is the multiple regression analysis method with the EViews 8 program. The research results show that investment, number of workers, export value and number of internet users have a significant influence on the income of the creative application and game developer industry subsector in Indonesia, while inflation has no effect. Significant influence on the income of the creative application and game developer industry subsector in Indonesia.

## ADDRESSING SUSTAINABLE CONSUMPTION: AN ECONOMIC PERSPECTIVE ISLAM IN BUYING AND BUYING TRANSACTIONS THROUGH USED CLOTHING SOCIAL MEDIA

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### **Abstract**

This research discusses the Islamic economic perspective in buying and selling used clothing transactions via social media. This research is a qualitative research model. Qualitative research is a research procedure that produces descriptive data in the form of written or spoken words from people and observed behavior. The type of research method used is the library research method, namely research whose data sources are obtained from written sources, including books, theses, journals, the internet and other written works collected by citing and analyzing the literature. which has relevance to the problem being discussed. The results of this research are that buying and selling used clothing transactions via social media according to an Islamic economic perspective is permitted because it is in accordance with the pillars and conditions of buying and selling, as well as the principles of willingness, openness and honesty on the part of both parties carrying out the transaction. Even though the practice of buying and selling used clothes is in accordance with Islamic law, it would be better for users and fans of used clothes to buy or use new clothes because it is clear that the clothes are good and have good quality.

**Key words: Islamic Economic, Buy and Sell, Social Media.**

## THE ROLE OF INSTAGRAM SOCIAL MEDIA IN INCREASING INTERFAITH TOLERANCE

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### **Abstract**

Indonesian people adhere to various religions and beliefs such as Islam, Christianity, Catholicism, Hinduism, Buddhism and Confucianism. In living side by side, there is quite a bit of friction between people regarding religious issues. Religious conflict is the focus of a problem that cannot be underestimated so it needs to be paid attention to and resolved so that this nation is not divided just because of the differences in religion held by the people. Religious moderation is the middle way that must be had when facing religious differences. The concept of religious moderation is fundamental for Indonesian society to encourage a balanced religious attitude between practicing one's own religion and respecting the religion and religious traditions of others. This research is qualitative research using an exploratory descriptive approach. The data is used by collecting information from various documents, books, articles, journals and other scientific papers. The research results showed that social media was used as a tool to spread attitudes of religious moderation such as tolerance. The role of social media is very high, and its relationship to religious diversity in Indonesia, so we can apply and spread attitudes of justice, wisdom and tolerance in religion through social media.

**Keywords:** Religious moderation, social media, tolerance.

## ANALYSIS OF THE APPLICATION OF ISLAMIC BUSINESS ETHICS IN THE NOBBY HIJAB LIMPUNG SHOP

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### Abstract

In the Islamic view, some rules or ethics must be possessed by every person who wants to do business, especially if he is a believer. Islamic economics has explained the ethics that must be implemented by traders in carrying out buying and selling activities. This ethic is expected to be a guideline for traders, not only to gain worldly profits but also to gain profits in the afterlife. This research aims to analyze the implementation of Islamic business ethics in Nobby Hijab Limpung. This research is library research with a qualitative approach. The data sources used in this research come from various literature journal articles that are relevant to the research topic. The data analysis method used is content analysis of the literature sources used in the research. The research results show that Nobby Hijab Limpung has implemented Islamic business ethics in running its business. The principles of business ethics that have been fulfilled are the principle of monotheism, the principle of justice, the principle of free will, the principle of responsibility, and the principle of truth. The principles of Islamic business ethics in marketing activities are realized by Nobby Hijab Limpung as a business person with the intention of worship and seeking blessings in the world and the hereafter, being honest, not discriminating between consumers, being productive and responsible, as well as being friendly and polite to consumers.

**Keywords:** *Islamic Business Ethics, Nobby Hijab Limpung, Principles.*

## **IMPLEMENTATION OF SHARIA ECONOMIC CONCEPTS IN WASTE MANAGEMENT TO IMPROVE SUSTAINABILITY AND COMMUNITY WELFARE IN NORTH PEKALONGAN INDONESIA**

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### **Abstract**

This research intends to explain in depth the concept of sharia economics related to waste management to improve sustainability and community welfare in East Pekalongan, Indonesia. This research is library research with a qualitative approach. The data sources used in this research come from various literature journal articles that are relevant to the research topic. The data analysis method used is content analysis of the literature sources used in the research. Currently, the waste problem is getting worse in many countries, including Indonesia. Waste management that is not yet effective and efficient results in negative impacts on the environment and the quality of life of the community. On the other hand, the sharia economic concept offers principles that can be applied in waste management to achieve sustainability and prosperity. The condition of the Degayu TPA, which is located in the North Pekalongan sub-district, is improving from year to year, until now in 2023 the pile of rubbish will have reached approximately 20 meters high. Every day the waste sent to the Degayu TPA reaches 120 tons. To realize this, the sharia economic concept in waste management is the Waste Bank concept and the Waste Alms concept. These two concepts of waste management are of course also in line with what we know as "Maqashid Syari'ah", namely the aim of the Shari'a in protecting the five benefits, namely protecting religion (hifdh al-diin), protecting property (hifdh al-maal) and protecting the soul ( hifdzh al-nafs), guarding offspring (hifdh al-nasl) and guarding aqal (hifdh al-aql). The second compatibility in professional waste management can be found in waste management with the Waste Bank concept which is in line with the maqashid of Sharia in the aspect of protecting assets (hifdh al-maal). This suitability is because in the Waste Bank concept, it can provide several financial benefits, including providing employment opportunities for the community, and for the community it can also be an additional source of financial income.



**Keywords:** Economic Concepts, Waste Management, Sustainability, Welfare

## THE DEVELOPMENT OF THE ADMINISTRATIVE PROCEDURE ACCORDING TO THE LAW IN KOSOVO

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The administrative procedure begins to take place in the court in the event that the interested parties themselves present the legal remedy to set the court in motion. As in other procedures and administrative procedures, the party that is against the decisions of the administration can initiate the case in court to start the procedure or to open the administrative conflict in court. Thus, based on the lawsuit sent by the parties, the procedure begins in the administrative department in which the procedure of interrogating the parties takes place, then the declaration of evidence until the judge certifies that there is sufficient evidence to make the administrative decision. According to the law in Kosovo, the administrative procedure takes place in the basic court in the administrative department, which is located only in the basic court in Pristina, and in which the parties can start this procedure by presenting the legal remedy and in the end, until they receive a decision from the court, it is not considered that the administrative matter ends. I will speak more broadly about the development of the administrative procedure during the presentation of this paper.

**Key words:** procedure, administration, court, administrative conflict, law.

## THE IMPORTANCE OF SUBJECT AND TERRITORIAL COMPETENCE IN AN ADMINISTRATIVE PROCEDURE BEFORE THE COURT

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As in other procedures developed before the Court, in the administrative procedure some rules are defined which the parties must take into account. These rules are the respect of land and subject competence. So even in the administrative procedure the competences are important based on the fact that on their basis the place of holding court sessions is determined as well as the development of the procedure by the judge of the case.

Thus, the competence in the administrative procedure determines the right and obligation of the state body or the organization authorized to exercise public powers, to issue a decision in any administrative matter, which means that the competence is the right and obligation of the certain administrative body to decide on a specific issue and in a specific territory. So, taken in general, the respect of competences is of particular importance for the development of the administrative procedure before the court.

When it comes to subject matter competence, we can say that it is the right and duty of a state body to decide on specific administrative issues from a certain administrative field or matter. As for land or territorial competence, the Law on Administrative Procedure defines and authorizes the state body for territorial competence to carry out its subject competences in a certain territory. Thus, in order to start an administrative procedure before the court, the competences in question must first be looked at, because in the opposite case, the lawsuit is dismissed as not allowed on the grounds that the competences were violated. Thus, based on the topic in question, I will speak more broadly during the presentation of this paper.

**Key words:** procedure, administration, competence, court, land, subject matter.

## ALTERNATIVE PROCEDURES ACCORDING TO LAW IN KOSOVO

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### **Abstract**

During the development of civil procedures and not only, the main parties may request that the legal issue be presented in an alternative procedure, either to create a judicial agreement between them, to present the case in a mediation procedure, or to present the case in an arbitration procedure.

In recent years, alternative procedures have become more and more sought after by the parties, either by the court, the plaintiff or the defendant. When we are talking about the alternative procedure, in which procedure the agreement of the main parties must be created so that their case starts developing in one of the alternative procedures. In the event that the plaintiff and the defendant do not create an agreement, either to create a court settlement, to continue the mediation procedure or to continue the case in the arbitration procedure, then the alternative procedure, whatever it may be, cannot start or develop without the agreement of the main parties. When we are talking about the arbitration procedure and the mediation procedure can start from the moment when the dispute procedure starts in court, but they can start even before the court procedure starts.

While when it comes to the judicial agreement, then this is always created at the beginning of the development of the civil procedure, during its development until the decision is taken. We will talk more broadly about alternative procedures for resolving disputes during the presentation of this paper.

**Keywords:** procedures, court, alternative, negotiation, mediation, arbitration.

## INTERNAL MOTIVATION AND ORGANIZATIONAL COMMITMENT AT EDUCATIONAL INSTITUTION EMPLOYEES

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### ***Abstract***

Nowadays, it is known that motivation contributes on the general culture of work in an organization, and the findings also have shown that organizational commitment affects organizational effectiveness through motivation. The teacher is the subject that gives credibility to an institution this is why he plays a main role in forming the human capital, and every aspect that affects in increasing their motivation and satisfaction at work is very important. Thanks to great changes that our country has gone through the past few years, changes that have also affected the educational system, teachers have faced new methods and contemporary means that need professionalism and cost. Organizational commitment predicts many positive behaviors in the workplace, such as increased performance, productivity and efficiency. Due to this fact there is a growing interest to understand the relationship between motivation and commitment. Despite many researches on motivation and organizational commitment, the relations between different forms of motivation and organizational commitment in Albania have been studied very little. The main reason of this article is the lack of sufficient research to study the relationship between these two variables in our country and the impact they have on human resources within organizations / institutions in Albania. In this research is used the quantitative scientific research method. For data collection were used two questionnaires “*Work Motivation Questionnaire*” and the “*Organizational Commitment Questionnaire*”. The study was conducted in 4 schools in Elbasan. The participants’ selection was conducted randomly being of different genders, ages and schools making the sample as much representative as possible. Schools participating in the study were in the urban area, 180 questionnaires were applied. Population of this study are full-time teachers in public school system including elementary school teachers (1-6), teachers of lower secondary education, classes 6-9, and teachers of upper secondary education, classes 10-12, in the city of Elbasan. The study revealed that motivation and motivational factors influence the organizational commitment of teachers at work.

**Key words:** organizational commitment, work motivation

## THE ROLE OF MOTIVATION THEORIES IN INCREASING EMPLOYEE PERFORMANCE

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### **Abstract:**

The organization and management of human resources has been and continues to be an important factor for the tasks that must be performed inside and outside the company. The behaviors of employees in a company should be constantly researched, this is due to the fact that knowing the attitudes that employees express at work is very important and critical for the success of the company itself. The permanent challenges that managers and leaders of different companies face have always been related to the motivation of their employees, to do their best for the realization of certain jobs. *The understanding of this concept, motivation and what constitutes human motivation has been a mystery for centuries and was also addressed by Aristotle, while today science gives us some new and different knowledge about it.* When Frederick Herzberg researched the sources of employee motivation, he found that "the things that make people happy and motivated at work are different than the things that make them unhappy." So, to understand what these factors are that motivate employees and drive them towards success, in the continuation of this paper, an analysis of motivation as a concept, its connection with human resource management, theories of motivation and the importance of motivation in raising employee performance will be made.

Regarding the theoretical aspect, motivation is considered the way in which managers promote productivity in their employees. Too often people confuse the idea of "happy" employees with "motivated" employees. Although these two concepts may be intertwined, motivation actually describes the level of desire employees feel to perform a job, regardless of the level of happiness they feel.

The main purpose of this paper is to highlight the role of motivation theories in the performance of staff in the company. The effect of applying these basic concepts for design and development lies in the possibility that through the use of human resource motivation strategies, their efficiency will increase, so that this will then serve managers who can more easily run their own companies.

**.Key words:** human resources management, motivation, employee performance, motivational factors.

**ROLI I TEORIVE TË MOTIVIMIT NË RRITJEN E PËRFORMANCËS SË PUNONJËSËVE****Dr.Halil Bajrami**<sup>1</sup>**Dr.Venet Shala**<sup>2</sup>**Dr.Fadil Lekaj**<sup>3</sup>**Msc.Blerona Bajrami**<sup>4</sup><sup>1</sup>Faculty of Law, University of Mitrovica "Isa Boletini", Mitrovica, Kosovo<sup>2</sup>Corresponding author, Faculty of Economics, University of Prizren "Ukshin Hoti", Prizren, Kosovo<sup>3</sup>Faculty of Tourism Management, "Pjeter Budi College", Prishtina, Kosovo<sup>4</sup>Faculty of Economics, University of Prishtina "Hasan Prishtina" Prishtina, Kosovo**Abstrakti:**

Organizimi dhe menaxhimi i burimeve njerëzore ka qenë dhe vazhdon të jetë një faktor i rëndësishëm për detyrat të cilat duhet të kryhen brenda dhe jashtë kompanisë. Sjelljet e punonjësve në një kompani duhet të hulumtohen vazhdimisht, kjo për faktin se njohja e qëndrimeve të cilat punonjësit i shprehin në punë është shumë e rëndësishme dhe kritike për suksesin e vetë ndërmarrjes. Sfidat e përhershme me të cilat përballen menaxherët dhe drejtues të ndryshëm të kompanive kanë qenë gjithnjë të lidhura me motivimin e punonjësve të tyre, për të bërë më të mirën e tyre për realizimin e punëve të caktuara. *Kuptimi i këtij koncepti, motivimit dhe asaj se çka e përbën motivimin e njeriut ka qenë një mister ndër shekuj dhe është trajtuar edhe nga Aristoteli kurse sot shkenca na jep disa njohuri të reja dhe më ndryshe për të.* Kur Frederick Herzberg hulumtoj burimet për motivimin e punonjësve, zbuloi se "gjërat, të cilat i bëjnë njerëzit të kënaqen dhe të motivohen në punë janë të ndryshme në krahasim me gjërat që i bëjnë ata të pakënaqur." Andaj, për të kuptuar se cilët janë këta faktorë që i motivojnë puntorët dhe i nxisin ata drejt suksesit, në vazhdim të këtij punimi do të bëhet një analizë e motivimit si koncept, lidhshmëris me menaxhimin e burimeve njerëzore, teoritë e motivimit dhe rëndësinë që ka motivimi në ngritjen e performancës së punonjësve. *Sa i përket aspektit teorik motivimi konsiderohet mënyra me të cilat menaxherët nxisin produktivitetin tek punonjësit e tyre. Shumë shpesh njerëzit ngatrollojnë iden e punonjësve "të lumtur," me punonjësit "e motivuar."* Ndonëse këto dy koncepte mund të jenë të ndëridhura me njëra tjetrën, motivimi në të vërtetë përshkruan nivelin e dëshirës që punonjësit ndjejnë për të kryer një punë, pavarësisht nga nivei i lumturisë që ndjejnë.

Qëllimi kryesor i këtij punimi është që të nxjerrë në pah se çfarë roli kanë teoritë e motivimit në performancën e stafit në kompani. Efekti i aplikimit të këtyre koncepteve bazë për hartim dhe zhvillim, qëndron në mundësinë që



përmes përdorimit të strategjive të motivimit të resurseve humane tek të rritet efienca e tyre, në mënyrë që kjo më pas të ju shërbejë menaxherëve që më lehtë të drejtojnë kompanitë e tyre.

**Fjalët kyçe:** menaxhimi i resurseve humane, motivimi, performanca e punonjësve, faktorët motivues.

## THE TURAŪ GOSPEL AS THE OLDEST BELARUSIAN BOOK ARTIFACT: THE HISTORY OF DISCOVERY

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### ABSTRACT

The exclusive role of books in the development of the Belarusian society has been fixed by the centuries-old tradition of book culture. Books have been re-written from ancient times – since the 11<sup>th</sup>–12<sup>th</sup> centuries. And the world does not know any earlier Cyrillic books rather than the books from the 11th century. The Turaŭ Gospel of the 11<sup>th</sup> century is considered the most ancient book that was kept on the lands of modern Belarus and which survived until our times. The history of discovery. The very fact of discovering the Turaŭ Gospel is very interesting. It was found in 1865 during the archeological expedition organized by the order of the Vilno School District. It should be noted that Russian authorities initiated a big program of scientific research of the Belarusian past after the Rebellion of 1863–1864. They were especially interested in the period of the 10<sup>th</sup>–13<sup>th</sup> centuries when Belarusian lands were in close cooperation with Kiev and Novgorod, and had relations with Byzantium. One of the most striking waifs was found in 1865 in the ancient Turaŭ (Turov) by N. Sokolov, supernumerary teacher from the Vilno School District, and V. Gryaznov, drawing teacher from the Vilno Gymnasium. They found ten sheets of parchment later referred to as the Turaŭ Gospel in one of the shrines in Turaŭ (in a coal box allegedly).

**Keywords:** Medieval manuscripts, Turaŭ Gospel, cultural heritage, Turaŭ, Turov, Belarus

Belarus is not only the country of castles and the land of perfectly preserved authentic song and dance traditions, but also the land where the knight's, town and monastery cultures had their heyday. Belarus is also the country of the book.

No wonder, the vast majority of the known cultural figures of ancient Belarus were in one way or another related to the book. So, Euphrosyne of Polack, educator, founder of the ancient monasteries in ancient

Polack, one of the first East Slavic Saints, was personally involved in rewriting books. Cyril of Turaŭ, considered to be one of the brightest writers of ancient Ruś, became known to the posterity through his rich creative heritage presented by the pages of many manuscripts and printed books. The most famous Belarusian representative of the Renaissance is, of course, Francysk Skaryna, Belarusian and East Slavic pioneer who made the printed word available to the whole society. Finally, actually all the representatives of the “New Belarusian Renaissance” in early 20<sup>th</sup> century – Janka Kupala, Jakub Kolas, Maksim Bahdanovič, Maksim Harecki, brothers Ivan and Anton Luckevič, Vaclaŭ Lastoŭski, Ciška Hartny, Aleś Harun and many others – are invariably associated with the book.

The exclusive role of books in the development of the Belarusian society has been fixed by the centuries-old tradition of book culture. Books have been re-written from ancient times – since the 11<sup>th</sup>–12<sup>th</sup> centuries – at monastery scriptoriums in Belarus. And the world does not know any earlier Cyrillic books rather than the books from the 11<sup>th</sup> century.

The Turaŭ Gospel of the 11<sup>th</sup> century is considered the most ancient book that was kept on the lands of modern Belarus and which survived until our times.

The very fact of discovering the Turaŭ Gospel is very interesting. It was found in 1865 during the archeological expedition organized by the order of the Vilno School District.

It should be noted that Russian authorities initiated a big program of scientific research of the Belarusian past after the Rebellion of 1863–1864. They were especially interested in the period of the 10<sup>th</sup>–13<sup>th</sup> centuries when Belarusian lands were in close cooperation with Kiev and Novgorod, and had relations with Byzantium. More detailed studies of the era were supposed to prove the ancient roots of the Russian Orthodox culture in Belarus, and its long-standing relationship with the Slavic world and Russia in particular (Миловидов, 1910, с. 15–16). As a result, the management of the Vilno School District forwarded special archeological expeditions to different parts of Belarus, and their objective was to search for ancient artifacts of the Russian Orthodox literature.

One of the most striking waifs was found in 1865 in the ancient Turaŭ by N. Sokolov, supernumerary teacher from the Vilno School District, and V. Gryaznov, drawing teacher from the Vilno Gymnasium (Археографический сборник, 1867, с. 1). They found ten sheets of parchment later referred to as the Turaŭ Gospel in one of the shrines in Turaŭ (in a coal box allegedly).

Soon after, the finding was studied by I. Sreznevski and A. Bychkov, famous Russian academicians, who analyzed the material, the language and nature of writing, and the artistic decorations of the manuscript, and age-dated it as the 11<sup>th</sup> century (Срезневский, 1868. С. 168).

In 1867, I. Sreznevski included a brief review the Turaŭ Gospel and small fragments of its text into his study on the little-known and unknown (at the time) ancient written artifacts (Срезневский, 1867. С. 30).

In early 1867, I. Kornilov, trustee of the Vilno School District, reported to E.T. Baranov, Chief of the North-Western Land, that the Vilno Public Library as well as the churches and monasteries in the Belarusian land had many ancient manuscripts and texts that were important for the history of the North-Western provinces and had not been subjects to the publications of the Vilno Archeographic Commission. Considering the circumstances, the trustee sought permission to spend a very large amount of money equal to 25 thousand Russian Empire rubles to publish such materials. And the Governor-General approved the initiative (Миловидов, 1910, с. 18–19). Already in the same 1867, the first four volumes of the “Archeographic collection of documents relating to the history of North-Western Ruś” were published. The last volume included the publication of the intercalated records of Konstanty Ostrogski from the Turaŭ Gospel, which can be considered as one of the first publications of this artifact.

The coloured lithographic edition of the Turaŭ Gospel was published in St. Petersburg (Russia) at the expense of the Vilno School District in 1868 (lithography is a method of printing from a stone (lithographic limestone) or a metal plate with a smooth surface, engraving on stone). In fact, the first facsimile reproduction of the ancient artifact was made; and the print quality was the highest achievable at the time. That is why researchers use it so far. Even the relatively recent edition titled “Turaŭ. The Turaŭ Gospel” had the images of all pages of the famous book artifact. However, the copies have been made from the lithographic edition of the 19th century, not the original copy.

On the other hand, the very first publication created some confusion for all interested in the ancient literature artifact later. The fact of the matter is that the pages of the lithographic edition of the manuscript were mixed: sheets 6–10 would go first followed by sheets 1–5.

The text of the Turaŭ Gospel with the comments by P. Giltebrandt was published in Vilno in 1869 (Туровское евангелие, 1869). The work also included “The summary of the Turaŭ Gospel” and the comparison of the text of the Turaŭ manuscripts with the new Russian editions of the Gospel and the ancient Ostromir Gospel. I. Sreznevski re-issued the text of the artifact in St. Petersburg (Russia) in 1876.

Various researchers – primarily philologists – have been continuously interested in the artifact for the last century. So, A.I. Sobolevski found the traits of the Kiev dialect in the language of the Gospel.

Tellingly, the studies of the Turaŭ Gospel were organized not only in Belarus, Lithuania, and Russia, but in other countries, too. For example, Hungarian Slavists published the fragments of the Turaŭ Gospel in 1977. At that, the Turaŭ Gospel has not been fully studied yet. We still do not have answers to many questions.

Today it is almost not possible to return the original of the Turaŭ Gospel to Belarus (for example, to Turaŭ). One can only hope for the favorable circumstances and the good will of the current owners. In this regard, one interesting case should be mentioned. There was an attempt to bring the Turaŭ Gospel back home to Belarus in the first half of 1990's. The Ministry of Foreign Affairs of the Republic of Belarus addressed the Wroblewski Library of the Lithuanian Academy of Sciences. Naturally, there was no hope for returning the original book. Nevertheless, the Lithuanian colleagues started the dialogue and donated the colored copy of the Turaŭ Gospel to the National Library of Belarus through the Belarusian Embassy in Lithuania; the copy was bound in a beautiful embossed leather cover. However, the copy was surprisingly made not from the original manuscript, but again from the lithographic edition of 1868.

We believe that in this situation it is a high time to make a really high quality facsimile reprint of this artifact that would be able to portray all the details of the original copy. The National Library of Belarus started developing the issue in 2010 (Турאַскае Евангелле, 2014). The facsimile reprint became the result of the carried out work.

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## IMPACT OF SOCIAL MEDIA MARKETING ACTIVITIES ON SHAPING CUSTOMER INTENTIONS

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### ***Abstract***

The purpose of this study is to delve into the realm of social media marketing activities and their influence on consumer intentions, specifically in terms of continuance, participation, and purchasing behaviors. Additionally, our research scrutinizes the mediating roles of social identification and satisfaction within this context. The study focuses on adept users of two prominent social media platforms, Facebook and Instagram, within the Albanian landscape. Utilizing a self-administered questionnaire, we collected data from participants by reaching out through an online community, inviting Facebook and Instagram users to engage with our questionnaire within the designated online survey system. The dataset comprises responses from 173 participants, and the analysis was conducted using structural equation modeling (SEM). The findings underscore the substantial impact of social media marketing activities on user intentions. Moreover, our results indicate that social identification plays a mediating role in the relationship between social media activities and user satisfaction, while satisfaction, in turn, mediates the connection between social media activities and user intentions. These insights offer valuable guidance to marketers aiming to effectively engage and cultivate consumer intentions. This study marks a pioneering effort, being the first of its kind to leverage social media marketing activities to explore user intentions, with a specific focus on the mediating influences of social identification and satisfaction, within the unique context of Albania.

**Keywords:** Social Media Marketing Activities, User Intentions, Engagement.

**JEL codes:** M31, L82, D83, O33.

## THE NEED TO BE A CREATIVE TEACHER

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### Abstract

The purpose of this paper is to understand why teaching is more and more frequently correlated with creative activities. In Romania, teachers feel the pressure to become part of the trend of devising creative activities for their students, at all teaching levels. Even at university, creative activities are appreciated, which often come together with interactive courses and seminars, with allowing students do work together or individually on projects and various presentations, and with devising extracurricular activities. In the school levels before university, with young children, this is explainable, as students need to be attracted to do school work, and some lessons can be devised with lots of imagination. As an example, in a recent conference for teachers in Romania, held online, on December 7, 2023, there was an example of activity for Mathematics class, where the activity consisted of doing Maths work based on a detective story, which would have been very appealing given the age of the students, who would likely be interested in police and detective stories and enjoy solving mysteries. Otherwise, for them, school could be considered boring. Motivation and creativity become the keywords related to Romanian schools and universities today, together with interactive activities and active participation on the part of the students. We can relate creative techniques used in schools to the various creative projects promoted at the level of the European Union, and with various practical skills students needs to acquire, such as team work.

**Keywords:** Psychology, Motivation, Active Participation, Skill-Based Learning, Project-Based Learning

### Introduction

Creativity has become a practice appreciated in school and university classes. Teachers try to motivate their students by devising creative and attractive activities. These activities are also meant to help students interact and also take an active position when learning, not just passively listening to the teacher.

Our digital world is offering more and more possibilities for interaction, and school and university activities sometimes make use of teaching with technology. Other times, the interactivity is created just through activities done in person in class. Active participation helps students remember more and focus more on the information they are given in class (Pratton & Hales, 1986).

EduMagic is a company that has, recently, on December 7, 2023, held an online conference for teachers in Romania where plenty of creative activities for various subjects have been presented. The entire structure of the conference itself was festive and based on lots of creative activities to prompt teachers listening to and watching the conference online live on Youtube to interact. The interaction occurred through allowing teacher to comment using text format. The best comments were placed on the screen of the video.

During this conference, teachers were taught various creative techniques. Teachers from Romania and abroad presented their achievements, some related to getting European projects financing and equipping the classroom with technology. One of the teachers presented a creative way of teaching a Mathematics lesson by devising a worksheet where students could find solutions doing a Maths-related exercise by using the framework of a detective story. Everyone agreed that Maths lessons would certainly become very interesting in that way. The detective story is a pretext of students to become interested in the topic and to see the beauty of Maths, as well as how they can put to practical use their knowledge of Maths, which at some points can be seen as too abstract and too far removed from everyday life needs.

When presented a lesson publicly, during an examination, teachers try to think of creative ideas to hold their classes, just as they do during usual classes, when no supervisors are present. The conference EduMagic has presented teachers with worksheets that could be downloaded from specialized sites, presented by teachers from abroad.

The EduMagic conference from December 7 has also presented registered participants with an ebook based on creative activities which teachers who wanted to participate in the creation of this ebook sent for evaluation.

Creative activities have their merit, as it can become tedious to just use the textbook. Sometimes, we feel that something is missing, as teachers, and we wish to do something more so as to adapt to the needs of the students we are currently teaching. Each class can be seen as representing a unique group of students, whom we need to better understand in order to teach them in an efficient way.

Allowing students to work together in teams can be a means to improve their skills of finding creative solutions to solve their assignments. Brainstorming activities can become source of creativity, when students work together with the teacher or together with other students and decide on a certain solution. In the meantime, they can find other solutions which they have not thought of.

For all these activities, motivation appears to be the keyword, and it should be on both sides, teachers' and students'. It is a well-known fact that students may feel bored during school activities and listening to the

teacher explain the lesson if there are no attractive means to stimulate them, such as visual materials or invitations to active learning and participation. Looking at a disinterested class can be demotivating for the teachers as well, since they may also lose all interest in their work.

### **Materials and Methods**

Devising creative activities should be done based on good knowledge of what students want and what their other interests are, function of their age. As an example, the students in the Maths class taught by the foreign teacher presented during the EduMagic (2023) conference on December 7, 2023 were of the age when they would be interested in detective stories, as they were young teenagers.

Teachers need to have sympathy for their students and create activities that should be relevant to them, and not simply part of a textbook, which they may find as boring, since they can open and read it any time, not just when asked in class by the teacher. However, something that is done differently a bit from the textbook or something which completes the textbook can be seen as motivating.

Students nowadays are used to various technology media, and to various interactive programs and applications. This is why some teachers resort to gamification, or even to teaching based on games, in order to gain the students' interest. Once students find themselves in a familiar environment, such as the digital one, they can feel more relaxed and find it more comfortable to pay attention to the classes and even find in them genuine interest.

In Romania, where the author of the present paper lives, the issue of school not being adapted to the needs of the current students and not gaining their interest has frequently been discussed. Some students were presented during conferences such as the annual conference organized by Enformation.ro (2023), a site providing researchers with a platform for research using international databases in various domains, such as Philology, Engineering, and others, having special interests which were not part of the mainstream curricula. In the meantime, some very passionate teachers have created clubs for robotics and various activities, in which certain students were very much interested. Extracurricular activities such as these ones can be examples of creativity and of doing something else than what is part of the mainstream curricula. Creative activities are, thus, seen as means of improving the mainstream curricula which may not be practical, adapted to the current needs of students and skills required by employees, and not attractive enough.

Both teachers and students in Romania are part of a larger tendency at international level of rising individualism (Santos et al, 2017). Individualist societies focus on the interest of the individual, not on the interest of the entire group (Baciu, 2013). The individual can be free towards self-achievement. Encouraging creativity and personal

expression are features of an individualist society (Baciu, 2013). Thus, the school in Romania needs to adapt to this feature of the society we are all part of. Teachers and students find themselves part of the trend of creativity in the field of education. We have seen this dimension especially in English as a foreign language classes before other subjects in Romanian schools, in project based learning, where students could study a topic such as an episode in history by doing research online and using books, individual or in groups, solve exercises asking them to argue for or against an issue, to continue a story, to imagine they are writing a diary entry if they lived during the plague in London, to work in groups, write the scenario of a play and act it in class, to write a poem based on a topic, etc. The English language included, at high school level, American culture, which, through soft power (Nye, 2017), promoted the individualist mindset. Indeed, American culture promoted values such as freedom, the self-made man or the from rags to riches myth. American culture encouraged individuals to work their way to become anything they wanted. Innovation was also encouraged and supported financially in America, which is why many European inventors would make their dream real on American territory. Innovations and scientific discoveries are also part of creative skills, and are features of individualist societies.

Supranational organizations such as the European Union also encourage creativity, be it artistic or in the field of research and scientific innovation. The European Union has policies on creativity, which include opportunities for artists to present their work in exhibitions, for authors to publish their books, for researchers to pursue their scientific experiments in order to carry out their research successfully. Young artists and researchers benefit from policies specially dedicated to them.

Educational policies include information on skills required and creativity is one of them. However, collaborative and cooperation skills are also present, as working in projects asks for working in teams. Creativity can be achieved, thus, both individually and in teams.

One way in which creativity applied at teaching level has been presented in workshops by coach Frank Basinski and also in online courses offered by the educational platform for teachers EduMagic. The materials and ideas in this category are related to integrating the practice of mindfulness in the teaching profession, which is used by teachers all over the world (Emerson et al, 2017). The topic has been under discussion also in the EduMagic online conference on December 7, where a school psychologist offered teachers an example of breathing exercise to relax and to be calm and understanding with the students before entering class and before having a talk with one of the students' parent. From the conference we find out that some teachers even use a few minutes in their class to make a collective meditation session of mindfulness based on breathing exercises with their students in class, a technique which is used at international level (Wilson & Dixon, 2010). The workshops

by Frank Basinski (2023) are simplified psychoanalytic techniques, using psychological knowledge in an easy and practical way to let teachers understand their needs and emotions, as well as their saboteurs, which can be perfectionism tendencies, or over achievement tendencies. Knowing themselves and becoming aware of their motivation and role as teachers, through formulating a mission statement such as wishing to inspire their students, can become helpful in their job. They can become more motivated, they are can better relate to their students, as they become aware of their own and of their students' needs and roles. Such workshops become an occasion for teachers to meet as a group and to share their impressions and ideal on the way they are practising their activity and how they could improve themselves by taking a more insightful approach to their teaching process.

Part of the creative teaching practice we can consider the use of visual materials that are introduced to lessons in various classes. Students may be presented with visual schemas on handouts or projected as a PowerPoint presentation. Some lessons may benefit from a visual approach, as examples can be more efficiently presented in this medium, and also abstract ideas are presented in such a way so that students can reach a better understanding. Teaching with films can also be considered in the same creative and visual learning category. Films can present a screening of a book, or an episode in history. Even if the episode in history is presented with fictional characters, students could witness a simulation of how some people could have lived back then and how they reacted to the historical contexts' consequences. How historical events affect individual lives can be seen in films but also in novels. Some novels whose stories take place in historical backgrounds, such as *Gone with the Wind*, during the American Secession War, and films such as *Titanic*, about the sinking of the largest cruise ship in the world, are such examples.

Teaching methods such as teaching with video, including films and documentaries, teaching with technology in general, with virtual reality if the schools and universities have virtual reality glasses for simulating various real life situations such as medicine students doing surgery, teaching foreign languages with drama, which allows students to become aware of the way in which language is used in realistic communication contexts, and inversely, can be understood as part of the larger frame of creative teaching and learning.

## Results

Creative teaching and learning includes the following components:

- motivation for both teachers and students;
- a better understanding of the topic through concrete examples and practical applications;

- better visualisation of an abstract topic or concept;
- a simulation of everyday lives during an episode in history;
- using technological possibilities to make classes more adapted to the needs of the students;
- prompting students to participate actively and to interact during classes among themselves and with the teacher;
- it offers a means of adaptation to the way the world is today, to our current mindset based on individualism, creativity, innovation, and self-expression, as well as to the requirements of employers.

Additionally, it provides an umbrella term for skill-based learning (Kraiger et al, 1993), active participation (Oros, 2007), as well as methods such as teaching with technology (Hooper & Rieber, 1995), with visual props, as well as project-based learning (Kokotsaki et al, 2016).

### **Discussion and Conclusion**

The necessity to teach and learn creatively comes from the way the world is structured today, based on the policies of supranational organizations such as the European Union, as well as by the mindset promoted by countries with high soft power such as the United States. At the same time, in the particular case of the Romanian schools and universities, it provides motivation for the students, as well as for the teachers, to be able to enjoy the teaching activities and the time spent in class. We live in an age of change, when society is constantly changing and schools and universities, as well as the education system itself, should adapt efficiently to these changes. One solution, for the time being, is creative teaching and learning. In this way, teachers and students can leave behind the old textbooks. It can take some time before new textbooks appear, completely adapted to the new requirements. However, nowadays there are, in Romania, alternative textbooks and each school can choose one of them or each teacher. Yet, even so, changes may occur too fast for teachers to be able to keep up the pace. Additionally, at the national examinations, issues regarding which textbook students have studied from can appear, in that some students may not have studied certain literary works.

Mindfulness meditation techniques for both teachers and students which can be incorporated in the classroom can be seen as creative solutions to coping with stress and burnout syndrome (Flook et al, 2013). Better relationships between teachers, students, and parents of students can be, thus, ensured.

Mindfulness and creative teaching and learning all help bring about a fresh perspective on the teaching and learning process. The image of the teacher as inspiring and of the teaching process as enjoyable is again brought

to the fore. In the past, teachers were considered inspiring, and true role models, as generations of students would remember how they advised them and taught them values they have held on to in their personal life. A word of encouragement, and offering emotional support, or a simple piece of advice can mean to a student just as much or even more than the knowledge of the subject the teacher offers in class.

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## THE APPEAL OF SURREALISM AND ABSURDISM TODAY

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### Abstract

The purpose of this paper is to understand how Surrealism and Absurdism could be made appealing today for students, as well as how they actually are appealing due to the current popularity of fantasy fiction. Students, but also the general public, are interested in fantasy fiction, which is the lighter version of the science fiction genre of the past. In Romania, we have the Helion Science Fiction group, which reunites writers that have started using the fantasy genre lately, in order to appeal to the general public, as well as to the younger public. This is the case of science fiction writer Sergiu Somesan. Additionally, if we look at Surrealism, represented by Salvador Dali's painting and by Gellu Naum's poems and prose, as well as at Absurdism, represented by Kafka's short stories, we notice how they can be so familiar to us. This is due to our mindset, where fantasy fiction is all around. It is around under the form of anime, as well as films and books written by young authors included. Recently, in December 2023, in Bucharest, Romania, where the author of the present paper lives, the Salvador Dali exhibition held at Gabroveni Inn has been a great success. It is an exhibition meant to educate the general public regarding Dali's symbols in his work, and also showing his paintings, sculptures, as well as jewelry items. Nowadays, we can see the trend of popularising mainstream arts, in order for the general public to become familiar with these works, especially in the big cities, where such events are organized. In Bucharest, Art Safari is considered to be another such type of event, where various works of art are brought and presented with modern means.

**Keywords:** Psychology, Fantasy, Mindset, Values, Art

### Introduction

The context today's popularity of fantasy fiction, which is the lighter version of science fiction, can provide an opening of the public of all ages towards trends which were mainstream in the past, namely Surrealism and Absurdism. While these trends belong to the past, they can still be regarded as forming, nowadays, the basis of our background cultural knowledge. Further on, Magical Realism can be understood as having started from the European Surrealism. Magical Realism in literature is still popular nowadays, with many readers being passionate about Borges' works. Magic Realism started in the 1920s in Germany (Zemora & Faris, 1995).

Surrealism started in 1924, in Paris, France, once André Breton published the *Manifesto of Surrealism* (Hugnet & Scolari, 1936). It ended in 1966. Absurdism began with the works of Albert Camus in France, in 1942 (Cardullo, 2015). It was also believed to have begun in the 19th century, once Kierkegaard published his existentialist philosophy and defined it (Darrow, 2005). Absurdism's popularity in the European countries ended around 1989.

If we look back at representative personalities of these trends from the past from the perspective we have nowadays from reading fantasy literature, watching fantasy films and anime, then we can see how familiar all these fictional universes can look to us.

For fantasy fiction fans, we could claim that we may find it easy, if we are their teachers and they are our students, and we want to teach them about general culture, to draw them close to Surrealism, Absurdism and Magical Realism. While all of these movements and trends deal with fantasy worlds, we can see how Surrealism focuses on the interior experience, on the unconscious with which Psychoanalysis works (Freud, 1922), and how Magic Realism focuses on the external experience and on the way it can become so strange. Magic Realists show how everyday life can be strange and mysterious. However, the effect is similar to the one found in fantasy worlds from fantasy fiction. Nowadays, we tend to group such movements into experiences having to do with imaginary, or fantastic worlds. All these movements create connections between fantasy and reality, in the sense that they do contain, at least up to some point, elements which can belong to the real world, yet they are then combined with fantasy elements from an imaginary world. The realistic elements provide for us elements of familiarity, while the fantasy elements introduce us into imaginary worlds and realms. The contrast between these two types of worlds can be what surprises us to certain degree, at some point the two worlds being combined in shocking ways or in ways which create special and surprising effects.

Another genre to which fantasy can be related is, at least in Romanian fiction, the fantastic genre, with representative personalities such as Mircea Eliade and Vasile Voiculescu. For students of Romanian literature, these works could be read with great interest, given the popularity of the fantasy genre among them, starting with works such as the *Harry Potter* series, the *Twilight* series, the *Game of Thrones* series, or the *Hunger Games* series.

## Materials and Methods

We can see how Salvador Dali and his work, one of a representative personality of Surrealism, has been popularized in Bucharest, Romania, through an exhibition called *The Universe of Savador Dali*. The exhibition started on December 13, 2023 and will last until May 12, 2024 (ARCUB, 2023). This exhibition starts with

panels with information regarding his life and context of his work, as well as symbols he often used, such as the melted clocks, the butterflies, the crutches, the elephants, the eggs, the ants, the drawers, the angels, and the snails. Such panels are occasions to educate the general public and to prepare them to enter the “universe” of Salvador Dali, which is, as we expect right from the start, a fantasy one, where imagination is strongly at work. Melting, or soft clocks point to the idea of time passing and of youth fading, but also to a clock that is disfunctional and which shows that time is relative, and working according to the individual’s perception. The butterflies represent beauty, but also the soul and spiritual awareness, as well as the idea of transformation. The crutches are a symbol of emotional and physical support, as well as of gained self-confidence. The crutches were also considered by Dali a symbol of reality. The elephants represent strength and are also considered a symbol of the future, as they are depicted by Dali with very long legs and carrying something on their backs. The body is very heavy and the legs are very thin in Dali’s representation of the elephants, which creates a contrast between weight and weightlessness. The eggs are symbols of intrauterine life and, thus, of hope and of love. The ants represent decay, death, and mortality of the human being, symbols which are coming from Dali’s childhood when he saw an insect eaten away by ants. The drawers are symbols of memory and of the unconscious, and they are frequently part of a human body. The angels are symbols of protection and of the experience of enlightenment. The snails recall, for Dali, seeing a snake when he met Sigmund Freud, the founding father of Psychoanalysis. The snake was climbing on a bike parked outside Freud’s home. Dali believed the snake looked like Freud’s head. Afterwards, the visitors of the exhibition are guided through rooms where they can identify these symbols in his exposed sculptures, paintings, and sketches. Visitors can also find a first symbol, which is not mentioned on the panels, but which is present through Dali’s work: the eyes. We can see them right away, visually, in an animation on the wall at one of the entrances to a room of his exhibits. What is special about the eyes in paintings is that, in pathological paintings of psychiatric patients, they are frequently present in the art of schizophrenics (Arieti, 1973). Yet, as Arieti (1973), the eyes have also become present in modern art. It was never proven that Dali had even had schizoid personality traits. There is also a room with golden jewelry, arranged in various shapes, with coins: a turtle with coins over it, a flower made of gold, a mirror made of coins, crosses made of coins, a Dali and Gala pendant, etc. Visitors may be surprised since the stereotypical image about Dali was that of a painter, of whom the melting clock painting was the most widely known, and almost a staple painting. We have encountered it in various school textbooks. We can be surprised to see that the melting clock is also part of a sculpture, individually, as well as part of other sculptures and paintings.

We can see how, once we, as part of the general public, enter the exhibition dedicated to Dali, we truly enter into a fantasy world, that belonging to Dali. We even have available a short animation film which we can see using virtual reality glasses. Therefore, we can say that the fantasy world has been adapted to all media we have had in the past and to all media we have today. We could claim that the exhibition has been adapted, to some extent, to the mindset of a general public familiar with the fantasy fiction genre. The entire exhibition is structured like an adventure, through which we discover various unknown sides of Dali.

The fantasy genre could, thus, be associated with the experiences of adventure and of excitement. This could be what had been felt as missing in school textbooks, as in the case of Dali, or in mainstream information about him and his work.

With respect to other literary works which could be understood by applying the adventure and excitement mindset associated with the fantasy fiction genre, we could claim that we could use these in order to introduce students to mainstream works of Romanian literature and of French literature.

Romanian literature classes in Romanian highschools are not considered very attractive, or, at least, not by all students. They may either enjoy certain works and movements, or not even consider them relevant to themselves and to the times they live in, to the point where they may not be able to relate to them at all.

The short stories by Mircea Eliade, such as *La tiganci (At the Gipsies)* and *Domnisoara Cristina (Miss Christina)*, and, in the case of Vasile Voiculescu, *Lostrita*, include both elements of reality and fantasy, mixed to create fabulous worlds, where the border between reality and fantasy become blurred to the point where readers become shocked and they feel as if they have lost all control of reality. Eliade's short story *At the Gipsies* is about a piano teacher who gets lost in time, both literally and figuratively, through his memories, as well as through the streets of Bucharest which become unrecognizable to him, as he has left the world he has known. *Miss Christina* shows us a world of old beliefs and superstitions, as well as witchcraft, and Romanian folk beliefs about getting rid of a creature that haunts the living, and behaves similarly to a vampire. Voiculescu's *Lostrita* is about a story of seduction of a young man by a creature from outside this world, which proves to be very dangerous to him. Once again, we deal with folk beliefs about magic and witchcraft.

While students may not find themselves part of these old rural communities where such beliefs were part of their everyday lives, they may, by analogy with their fantasy works of fiction with which they are familiar, start enjoying these literary works and eventually find them like fantasy adventures.

Gellu Naum is a poet and prose writer belonging to Romanian Surrealism. He can also be promoted and young readers can connect to him based on their fantasy fiction background. His work can become attractive while we apply the fantasy fiction mindset to his works. In this way, young generations could also be made to appreciate poetry. Naum has a novel called *Zenobia* which is about a love story full of fantasy elements, such as two lovers getting to live during winter in a hollow tree. Such a story can sound appealing to the young generations, since love is a common experience, lived intensely, during this age.

Absurdist authors such as Franz Kafka can also be appreciated, even if they are mainstream. Short stories such as *Metamorphosis*, where the main character becomes a giant bug and can no longer go to work or come out of his room, being afraid of his family's reaction, can become attractive viewed from a fantasy fiction mindset.

In the meantime, we can see how Helion, a Science Fiction Club from Romania, physically based in Timisoara, yet also having Internet activity through Google Meet, publishes a magazine and allows authors to read short stories belonging to both hard science fiction, and light science fiction, or fantasy, genres. Author Sergiu Somesan, a hard science fiction veteran Romanian writer has also started on the fantasy genre path, willing to attract young readers in their teenage years.

## Results

Young people may not find mainstream literary works and art attractive, which is why we may believe that subculture fiction such as fantasy fiction was created for them. Some fiction books even have the label “young adult,” which indicates that such books are for teenagers and for the young public.

These books belonging to the fantasy genre can help create a mindset for the young teenagers to be able to relate to other similar works of fiction. When they read mainstream fiction belonging to Surrealism, Absurdism, the Fantastic, Magical Realism, they may draw analogies by witnessing similarities with their fantasy books and films. The same analogies can be drawn with works of art, such as in the case of Dali's works.

The psychology of teenagers shows them as having a rebellious attitude and rejecting everything that is mainstream, or everything that they cannot resonate with. Fantasy literature and fantasy films can create a bridge between mainstream and subculture fiction, art, and mindset, as well as values, and allow them to relate to works of fiction and art belonging to the previously mentioned trends and to find them relevant.

## Discussion

The fantasy genre unites two realities, that of the imagination and that of the real world, which at some point can become blurred. No fictional world, realistic or fantastic, is without reference to everyday life's realities.

Besides, we always, even if we live in the real world, from a physical point of view, always have our fantasies and our moments when we become preoccupied with our workings of the imagination. Our inner reality sometimes takes over our external reality and we create a world of our own.

We can draw references with fairy-tales, or with tales such as Lewis Carroll's *Alice in Wonderland*, which have had a strong impact at international level. Carroll's story can be understood through the fantasy genre mindset, and be interpreted as a story showing how children, in their teenage years, live half in a fantasy world and half in the real world, which results in the strange world depicted as Wonderland. Teenage years are years of passage from one age to another, from childhood to adulthood, and then the fictional, or fantasy element, is often present. Teenagers wonder how their lives as adults could be, to the point where they begin to fantasize, or they simply see the world in a certain way, which is closer to fantasy than to reality.

### **Conclusion**

The popularity of the fantasy genre, especially with teenagers, could be due to the fact that they live in a fantasy world, which can be that offered by a subculture they decide to belong to. As children, they have enjoyed the world of fairy tales and, as young adults, they would enjoy fantasy stories, such as the *Harry Potter* or the *Twilight* series. The heroes live in a combination of reality and fantasy in these stories as well. Harry learns he is a wizard, while Bella finds out she has fallen in love with a vampire. They both discover a new world, in a way which is similar to the way in which teenagers discover different groups to which they want to belong to, and which may be related to various subcultures.

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## ANALYZING A HAIKU POEM BASED ON ASSOCIATIONS

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### Abstract

The purpose of this paper is to look at the way in which readers' minds work when reading a haiku poem, based on associations. The haiku poem analyzed will be the following: "raking/ simply to find poems/ in fallen leaves," written by Teiichi Suzuki from Osaka, Japan, and published by the Mainichi Journal on December 16, 2023, selected by Dhugal J. Lindsay. The poem will be analyzed as being interpreted by readers based on associations between fallen leaves and other objects, emotions, and experiences, and reasons for these associations. Firstly, these associations are drawn in, psychologically, based on our own emotions and perceptions, in a similar way in which what Sigmund Freud called free associations in his psychoanalytic therapy method. His patients would start from a certain element and then bring their own associations to them, without keeping in mind to organize them and to relate them in a logical way. Second, these associations can be based on previous knowledge of other poems they have read and heard, or on stories they have read, on films they have watched, and even on songs they have listened to. These associations will be integrated within the reader response approach. The author of the poem invites readers to consider a different association with the autumn leaves, namely poems. We feel that the implication is that haiku poems are so short that they can be placed on leaves. Suzuki breaks down the usual pattern of our perception, offering us a surprising new association.

**Keywords:** Psychology, Fantasy, Free Associations, Lyricism, Reader Response Criticism

### Introduction

The present paper will start from the following haiku poem, selected and published by Dhugal J. Lindsay in The Mainichi Japan, on December 16, 2023: "raking/ simply to find poems/ in fallen leaves," written by Teiichi Suzuki from Osaka, Japan.

The poem is a haiku written in the English language, which is a traditional Japanese poem, taken over and adapted to other parts of the world and other languages. This time, the author is from Japan, writing in English. The 5-7-5 syllable pattern (Hameed & Al-Rashid, 2023) is shortened, as is customary for haiku in the English language nowadays. The three lines are respected. Otherwise, other haiku poems have been subject to

adaptation and experimentalism. In fact, this has led to a variety of types of the haiku poem, which has made it just as complex as the Western poems we are familiar with. It has become just as difficult to define and to give an exemplary image of the poem in the case of haiku just as in the case of poems specific to Western cultures. The poem has been a medium for allowing creativity, adaptation, and experimentalism. While we may all have a stereotypical image of poetry in mind, function of whether we are talking about poems in Western cultures or about haiku poems, we cannot pinpoint just one type of poem.

However, the stereotypical perception of haiku poems is that they are about nature, and the stereotypical image of the Western poem is that it contains figurative language. Usually, Western haiku poets are tempted to bring in specific figures of speech such as personification and metaphor to their haiku poems, and they are constantly made aware that the language of the haiku poem is simple, and every scene they mention in their poem should be realistic. The nature in the haiku poem should be exactly as it is, which is why the general recommendation is to go on walks and then, based on these experiences, to write haiku poems. Otherwise, we, as Western culture members, can be tempted to invent fantasy settings, or to place elements of nature which do not go together in reality, as they may belong to different seasons. These observations belong to the author of the present paper through participatory observation with netnographic research (Kozinets, 2017), as she has been a member of Romanian online Facebook workshop groups and has seen authors give in to the temptation to write haiku using Western poetry figures of speech.

The present moment is found in the poem, which is signalled by the present continuous, “raking,” showing how the poem catches a glimpses exactly during the action, and by “fallen leaves,” which give us readers a clue regarding the season. The season alluded to in this poem is autumn, as readers put together the images of raking and that of the fallen leaves. We, as readers, picture a scene happening right before our eyes, where the poetic persona sweeps with the rake the fallen autumn leaves in his garden or in the park, a usual activity during this season, and find poems in these leaves that have fallen on the ground. It is usual for the haiku poem, traditionally, to refer to the present moment and to make us live right here and now. This is because it is influenced by the Buddhist religion and philosophy, which tells us that we should focus on the present moment in our meditation practice (Analayo, 2019), and not let our thoughts go towards the past or towards the future. Bringing about an element that is specific to the season, a small one, such as the fallen leaves and the action of raking, suggesting that there are not only a few fallen leaves but quite many which need to be gathered, grounds us readers even more in the present moment, together with the poetic persona. The poetic persona in the haiku poem has the role of bringing in front of the readers’ eyes a scene in nature which has prompted him/ her to meditate. The moment of meditation is shared by the poetic persona with the reader.

The poetic persona shares not only a simple description of nature in the haiku poem, but also implies a level beyond the literal one, which needs to be interpreted. If the haiku poem contains no figures of speech, how can we Western culture members reading such a poem can grasp the way we could interpret the other level, beyond the literal one? We could try making analogies with other means of interpretation that we know based on our cultural background. The following section will present a means of analyzing and interpreting the specific case of the haiku poem by Teiichi Suzuki.

## **Materials and Methods**

We can notice, from the poem, that the poetic persona suggests us a key of interpretation which can send us from literal to figurative level of understanding the poem. The poetic persona mentions the poems that we can find in the fallen leaves while we are raking. Here, readers are suggested to make a connection between the fallen leaves and the poems. The fallen leaves are said to contain poems, a detail which prompts reader to wonder why and how this could happen. If we consider the context of the haiku poem itself, as we are part of the haiku writers' and readers' community (Lobo, 2013), then we can have a similar, shared background and interpret this as follows: the leaves are small, while so is the format of the haiku poem itself. These are poems that are short and concise, which could be why they have such a powerful effect on us. We can feel very strong emotions and we can imagine entire scenes, and we can also develop long philosophical reflections based on apparently small and not easily noticed details that are present in haiku poems. Haiku poems need a very careful choice of words, so that these few words can, by their strong power of suggestion, prompt readers to feel and to further develop the meaning of the poem.

We could talk about the weight of the fallen leaves, regarding its strong power of suggestion. The fallen leaves are by no means lost within a larger landscape, even if we know that they are so small. They can be, at some points, an insignificant detail as we go about our worries and activities in our everyday lives. However, even as Western culture members, and even if we are unfamiliar yet with haiku poems, we do have our moments when we stop and reflect, once we become aware of a change of season or as we just have some moments when we are waiting for something or for someone. If, as Western culture members, we start writing haiku poems, we become increasingly aware not only of our surroundings, but of the small details which can either signal a change in season or in the strong and length of chain of associations which can be done with apparently insignificant details such as the fallen leaves. Apparently routine actions such as raking, or cleaning the garden or alleys in the park or the street bring up various emotional states to the viewer. The haiku persona in the case of the poem under analysis in the present paper makes us aware of the strong emotional impact of the fallen

leaves and, by extension, of the arrival of the autumn season, or of its being already here without our noticing it, until now.

Why do we “find poems/ in fallen leaves”? This is a first questions readers could ask themselves, after their first moment of surprise of the association between poems and fallen leaves. The poetic persona seems to make use of the method of free associations (Gabbard, 2004; Jones, 2018) used in Psychoanalysis, as theorized and practised by Sigmund Freud. In a therapy session, the patient would be asked to speak freely, whatever comes to his/ her mind, without worrying about organizing these thoughts or about the correctness and appropriateness of these thoughts. One feature of free associations can be that of assigning a certain meaning to a certain element, such as the poetic persona does in the case of this poem, by giving, apparently, an identification of the symbol of the fallen leaves, as poems. The fallen leaves are defined as being poems, in a symbolic, or free, association. This association is a personal one, as it is not a universally recognized symbol and not even a cultural specific symbol. Poetry, in general, can lead to the creation of such associations which are natural in this medium. Poetry makes use of creativity and imagination, and provides for the poetic persona a relaxed medium to express him or herself, in a way which is similar to the therapeutic setting where the patients can present their free associations in the present of the psychoanalyst, who does not judge and has an understanding, sympathetic attitude towards the patients. Free associations can be used as a method, however, not only in the presence of the psychoanalyst, but also in the case where someone decides to do self-analysis. Up to a point, if a person is insightful enough, he/ she can analyse him or herself, by writing down, in the manner of a diary, what thoughts come to their mind, spontaneously, right on the spot. Afterwards, they can go over these thoughts as they read them, and find elements that repeat themselves. There should be something common to these elements, which can point out further to a complex of ideas and emotions, and which may, in some cases, require the attention of a professional, or of someone from outside, who can offer a clear judgement, as someone from the outside can have a more objective and detached perspective, noticing details that can escape from the person doing self-analysis, as well as from those persons that are very close to him/ her.

Readers are presented, through the free associations of the poetic persona, with a new perspective on the fallen leaves, namely as poems. Yet, this is not all. They are invited, by this haiku poem in particular, to a dialogue with the poetic persona. The poetic persona places clues in the poem and leaves readers to go on further with understanding the meaning.

The fallen leaves are, thus, associated with poems, and then readers may go on further and wonder why, think about the context of the haiku poem, and then, further on, they may think about how poems are associated with

emotions. The result of this interpretation could be that the arrival of autumn can bring us various emotions, which we can associate, as we have become used by reading various Western culture poems, and as we have listened to various song lyrics, with sadness and nostalgia, as we see one season go and another one come, but also since, to some extent, autumn means that nature is dying. The leaves are falling and lying on the ground. Yet, we can also think about the beauty of the fallen and falling leaves, which often takes the form of a variety of colours, ranging from bright yellow, like gold, to green and to the specific red colours of Japanese maple trees which we all know from Japanese paintings and photographs posted on social media pages dedicated to Japanese culture. The association with Japanese culture and places comes for us readers as a result of the haiku poem originating in Japan and of the author of this poem being from Japan.

Autumn is, thus, associated with fallen and falling leaves, with the end of a phase in our lives, just as of a phase in the seasons' cycle, yet, in nature, the rebirth is not far away. We can picture nature as going to sleep, and then regenerating during springtime. Any change can bring us to face the difficulty of adapting to it, and, thus, of still hanging on, at least emotionally, to the past. In time, we can move on further, and accept the change. It could be associated with what Zen Buddhism teaches us. We need to accept that we are going to lose everything in this life, since everything is ephemeral (Steed, 2022). Seasons are also ephemeral, and in a continuous state of change. The haiku poem by Suzuki (2023) suggests us that we could accept this state of affairs by finding “poems/ in fallen leaves,” meaning that we could find the beauty of each and every season. Poems are associated with a universal value of beauty. They are an occasion to express our fantasies and to experience the beauty of lyricism. Poetical language is often associated with beauty, and with fantasy, since a poem is considered to be the careful work of imagination and of an artist's skill. We could argue that some poems can move away from this pattern and that they can challenge our perception, as poems may present us with stories, such as in the case of old epic poems, *The Illiad* and *The Odyssey*, which have been attributed to Homer, or to modern innovations where poems use colloquial language or where poems urge to various actions of protests. However, we all have a set, standardized image of the poem in our minds, which is culturally related, and from which we can find various deviations.

In Suzuki's (2023) haiku, Western culture readers can bring their associations with a lyrical experience, of seeing autumn as being as beautiful as a poem. A nice autumn landscape can give rise to artistic inspiration.

We can see, from the interpretation given to the haiku poem, how we have relied on the free association method from Freudian Psychoanalysis, reader-response criticism (Iser & Tompkins, 1984), in the sense that we are aware that we deal here with a community of readers, based on the common experience of reading and writing

haiku, from various cultures, and the dialogical experience which is part of every literary work, which can be understood as a dialogue between author and reader. In the case of the haiku poem, meaning is obviously made in a process of communication between poet and readers.

## Results

From the research carried out in the present paper, we can see how the specific case of the haiku poem written by Suzuki (2023) can be interpreted, from the point of view of a member of the Western culture and a haiku writer and reader, represented by the author of the present paper.

First of all, the associations and parallels with Western culture poetry are not absent. We can still find familiar elements in a Japanese type of poem, which, belonging to a different culture and offering, at least to some extent, a different experience, we can expect to be completely outside our realm of experience. However, this is not the case. This can be since we can find universal elements in all culture, which can be provided by the emotions related to various seasons and to the very experience of the change of seasons, which is frequently associated with changes in our lives, from one age to another, and from one status to another.

Second, we can see how the free associations method can function to carry the literal meaning of the poem, of a scene taking place right before our eyes, further by means of dialogue with the poetic persona and by means of the shared meaning within the community of readers to which we belong.

Third, the free associations method can be used, function of our personal associations with the autumn seasons and emotional experiences, which can be part of a larger, universal experience, shared culturally through other poems about the autumn season, and through works of art in various media related to representing the autumn season and its various aspects. The free associations can help Western culture readers to make the connection between the literal level and the figurative level of the haiku poem, which does not simply describe a beautiful image or scene, but tries to make, indirectly, a point about what is presented in the poem.

## Discussion

The haiku poem, originating in Japanese culture, could be interpreted as an example of indirect communication. Japanese culture is an indirect communication culture (Ciubancan, 2015), in the sense that communication works if both speaker and interlocutor are aware of background knowledge, or contextual knowledge, to which we can only have access if we are members within the same culture and community, and not if we are outsiders. A famous example is the one claiming that a Japanese businessman can say “yes” when meaning “no” when negotiating with a Western culture business partner. This could be since the Japanese businessman believes that

they could very well collaborate, and would like to maintain the business relationship, yet improvements to the final product should be made. The Japanese businessman shows an example of how his behaviour can be interpreted, such as showing what he really means through hesitations and moments of silence in the conversation. If the Western culture businessman is familiar with indirect communication, then he can interpret contextually the meaning of “yes.”

While the haiku poem is, apparently, a simple poem, without the ornaments of Western culture figures of speech, and, thus, without adornments, as we perceive it, it is not simplistic. It goes well beyond the figurative meaning through what we can call the distinctive Japanese indirect communication style, as well as through the movement from literal level, from what we have just before our eyes, in a carefully selected and meaningful scene, towards the figurative meaning. A few images lead us, in the haiku poem, towards developing an entire story and entire pages of philosophical reflections.

The topic of this paper is relevant in the context where more and more Western culture members become interested in the Japanese philosophy of a simple life. Additionally, there is plenty of interest for life lived by being aware of each and every experience and, consequently, of the present moment (Peters, 2021). Elements of Japanese philosophy are well embodied in the haiku poem.

## **Conclusion**

The free associations method applied to the analysis of the haiku poem works to show how the haiku poem is an example of dialogism in the literary experience. The free association is done in this poem by the author, Suzuki (2023), yet the author does not invite the reader to stop at associating fallen leaves with poems. The author allows the reader to make further associations with the fallen leaves and the poems, until we reach the level of interpretation showing us that autumn will always be associated by us with various emotions, from nostalgia, given the fallen leaves, and thus the end of a stage, as well as with beauty, since the many beautiful colours of autumn leaves come to mind and the experience can only be aesthetically pleasing.

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## EVALUATION OF ORGANIZATIONAL CHANGE AND ITS IMPACT ON EMPLOYEE PRODUCTIVITY IN RIVERS STATE MINISTRY OF WORKS

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### Abstract

This research work focused on the evaluation of organizational change and its impact on staff productivity using Rivers State Ministry of Works as a case study. To accomplish the research objectives, the study adopted the survey research design while convenience sampling technique was used to select fifty (50) respondents as sample size. The instrument of the study was self-developed questionnaire and the forms were personally administered. Hypotheses were formulated to guide the study and data were analysed using chi-square ( $\chi^2$ ) statistical tool and frequency tables. Findings from the study revealed that influencing staff attitude positively to align with organizational change, improving management/leadership style of organization are the roles of organization in enhancing staff productivity. It also revealed that poor communication of change, resistance behavior of staff to change when they are not certain about the benefits are the factors that affect organizational change for improved staff productivity. Finally, the solution to the need for organizational change for improved staff productivity are the introduction of new technology, global competition and downsizing. However, it was recommended that organizations should influence staff attitude positively to align with organizational change, restructure the organization processes to meet goals, organization should improve management and leadership style.

**Keywords:** Productivity, Employee productivity, organizational change, evaluation, Rivers state

## Introduction

Change is unavoidable in organizations today and is of paramount importance to study how change factors affect staff productivity. Change is what presses us out of our comfort zone and it is inevitable (Sidikova, 2011). Kitur (2015) is of the view that change comes in an organization in many forms: merger, acquisition, joint venture, new leadership, technology implementation, organizational restructuring, and change in products or regulatory compliance. The change may be planned years in advance or may be forced upon an organization because of a shift in the environment. Organizational change can be radical and alter the way an organization operates, or it may be incremental and slowly change the way things are done. Change management can be defined as a style of management that aims at encouraging organizations and individuals to deal effectively with the changes taking place in their work. (Green, 2007). For change management to be successful and its impact positive, managers or supervisors in the organizations need to understand what motivates their team and enroll employee participation. In fact separating managers from leadership in terms of style is difficult because every manager needs to have leadership skills to get activities done and every leader should have managerial skills to induce workers to change directions. This is especially important in organizations or institutions which are going through change since constant motivation and guidelines are needed for effectiveness of employee performance (McLagan, 2002). In the global market economy, technology introductions, aging boomer population, and less than honest world competition have all had an impact of change management. With the sudden financial shock in late 2008, many employers rushed to downsize their organizations to capture possible profits. In today's business environment, it's becoming obvious that nothing remains still (Olubayo 2014). He emphasizes that the rate of change which business organizations face have continued to increase more and more in the last five decades. This is as a result of advances in information and communication technology increasing democratization of economies and liberalization of economies across the globe.

In order to compete globally, organizations have embraced change management factors such as culture, technology, leadership and structure which affects both employee and organizational performance. In other to remain competitive universities have adopted cultural systems known to every employee which are add value to their performance, for instance we value quality education. Leadership changes may influence employee performance. The leader as a person in charge or as a change agent can manage an organization or the process of organizational change more effectively and successfully if he/she is capable and competent. (Asghar, 2010). He noted that rapid technological advancements, high expectations of customers, and ever changing market situations have compelled organizations to incessantly reassess and re-evaluate how they work and to understand, adopt and implement changes in their business model in response of changing trends.

Organizational change is a demand of the day, and needed for them to survive. On the other hand organizational structure changes are thought to influence employees' performance. A structure is an arrangement of task or activities being performed in an organization.

Staff productivity is important for an organization to achieve its objectives and goals. Employees are an important asset to an organization that may affect it either positively or negatively. Due to unavoidable environmental changes, organizations today have been challenged to advocate for changes that influence employees' productivity. Therefore the top management has to ensure that factors that influence staff productivity are taken into consideration. Management can be defined as a creative and systematic flow of knowledge that can be applied to achieve quality results by using human as well as other resources in an effective way (Drucker, 2003). The importance of management in organizations today has increased multi-fold. Strategic outcomes depend on ways of management in organization, therefore key management functions that include learning to delegate, planning, organizing, communicating clearly, motivating employees, adapting to change and constantly generating innovative ideas are crucial.

### **Statement of the Problem**

Organizations are continually faced with challenges in order to compete effectively with the global environments; so changes in the structure, processes and individuals within the workplace are planned, strategized and implemented to successfully meet up with the global demands. Some of these change programs succeed while others do not because some employees' resist organizational change due to fear of losing their jobs, distress and anger when it is not properly managed. The success of any organization therefore, lies in fostering an effective method in which employees' can be prepared to accept change as they are the central implementers of the change programs and which in turn bring about productivity of staff in the organization. Most staff exhibit low levels of commitment to their duties and researchers believe that when management is aware of employee attitudes towards organizational tasks and place priority on effective mechanisms to prepare staff for organizational change, staff will have high level of commitment to their duties and enhance productivity of the organization.

### **Objectives of the Study**

1. To examine the roles of organizational change on staff productivity in an organization.
2. To examine the organizational change strategies that impact on staff productivity.
3. To reveal the roles of organizational change on staff development for improved staff productivity.
4. To ascertain the factors that affect organizational change for improved staff productivity.

## Statement of the Hypotheses

As a guide to achieve the objectives of the study, the following hypotheses were formulated:

a. **H<sub>0</sub>**: Influencing staff attitude positively to align with organizational change, re-structuring the organization processes to meet goals and improving management/leadership style of the organization are not the roles of organizational change in enhancing staff productivity.

**H<sub>a</sub>**: Influencing staff attitude positively to align with organizational change, re-structuring the organization processes to meet goals and improving management/leadership style of the organization are the roles of organizational change in enhancing staff productivity.

b. **H<sub>0</sub>**: Structural changes, Technological changes, organizational culture change, are not the organizational change strategies that can improve staff productivity.

**H<sub>a</sub>**: Structural changes, Technological changes, organizational culture change, are the organizational change strategies that can improve staff productivity.

c. **H<sub>0</sub>**: Enabling staff to acquire more skills through trainings, aiding effectiveness of staff in organizational credibility and work procedure, boosting performance of staff are not the roles of organizational change on staff development for improved staff productivity.

**H<sub>a</sub>**: Enabling staff to acquire more skills through trainings, aiding effectiveness of staff in organizational credibility and work procedure, boosting performance of staff are the roles of organizational change on staff development for improved staff productivity.

d. **H<sub>0</sub>**: Poor communication of change, resistance behavior of staff to change when they are not certain about the benefits, and staff commitment to change are not the factors that affect organizational change for improved staff productivity.

**H<sub>a</sub>**: Poor communication of change, resistance behavior of staff to change when they are not certain about the benefits, and staff commitment to change are the factors that affect organizational change for improved staff productivity.

## Review of Literature

### Conceptual Framework

Change is inescapable for any lively and successful organization. The terminology ‘change’ is often referred to as a system of secluded periodic changes that occur in one or more organizational domains like individuals, structure, and technology (Romanelli & Tushman, 1994). Organizational change is defined as the adoption of a new idea or behavior by an organization (Daft, 2005). It can also be defined as the procedure of constantly

reintroducing the organizations direction, structure and capabilities to serve the ever - changing needs of internal and external customers (Mora & Brightman, 2001). These types of changes occurring in the organization have a tendency to be formal, planned, and goal directed in nature. The change in organizations is activated by inner and outside factors of all shapes, forms and sizes (Balogun & Hope-Hailey, 2004; Carnall, 2003). The external pressures that initiate change include market place, production and process, labor markets, government laws and regulations, technology, social events, political and also the internationalization of business (Pfeffer, 1994). Various factors, from within the organization can also generate change, and this may include administrative processes, employment policies, people problems and business policies (Lunenburg, 2010). Nevertheless, according to Lane & Klenke (2004) it is equally important for managers to have the ability and acquire essential skills required to oversee the fluctuating degree of instability and balance effect the necessary changes within the organization.

The concept of the organizational change comes from the nature and environment of the organizations. Change basically means series of events which supports the process of development in organizations. (Kassim, Tahajuddin, Shahzad, Isa, & Mat, 2010). Organizational change generally means rightsizing, new development and change in technologies, rescheduling operations and major partnerships. (McNamara, 2011). Organizational change includes Mission changes, Strategic changes, Operational changes (including structural change), Technological changes, Changing the attitudes and behaviors of personnel's, Counter resistance from different employees of companies and align them to strategic directions of the organization. In today's dynamic environment organizational change is indispensable for every organization to proceed and prosper in ever changing business environment. A survey conducted by McKinsey on a five year data, 1536 companies were taken for this survey which generally meant for organizational change, the result of the survey shows that 38% organizations were succeeded in achieving high employee performance. (Isern & Pung, 2007). Internal and external factors must be considered in the process of organizational change in order to alter their way of business for organizational growth. The goals of organizational change are multi-faceted however the major one's are improving the organization mergence, crisis intervention and to overcome day to day hauling competition. (Isern & Pung, 2007).

Today, due to the intense competitive environment rapid changes occur in the organizations which increased the competition for gaining revenues and growth. Concept of organizational change concerns mainly with the organizational wide transformation that mainly include the changes in term of mission of the organization, operations of the organization, mergers, major partnerships and others. There are research sayings that organizational change means organization transformation. (Kotter & Schlesinger, Choosing strategies for

change, 2008). In order to practice quality standard, value is the most important which sets the real beliefs in order to attain the performance in teams and to deliver the superior customer service to the clients. When change starts to appear then leaders have the chances to lead their workforce in better perspectives. Though employee's obligation is necessary in order to move the organization towards growth and progress. (Pierce, 2003).

### **The Roles of Organizational Change on Productivity**

Shukla and Oduor (2015) are of the view that organizations today have increasingly become aware and value the importance of change management practices. They further elaborated that real life experiences substantiate the assumption that no matter how sophisticated and modern the business activities of the organization may become, it will be extremely difficult to sustain its growth and effectiveness unless there are strategies that complement its operations. It is therefore fitting for universities like any other organization operating in such an environment to investigate the effect of change factors on its performance. Khosa, Rehman, Asad, Bilal & Hussain (2015) retaliated that employees have the feelings of stress, nervousness and lack of confidence when the organization changes like restructuring, downsizing and as well as merging. Although it is a fact that change is a process and it is essential to go in its direction, yet employees are reluctant to accept it willingly. To achieve high productivity of employees using organizational change, there are various organizational change strategies that can be adopted and they are:

#### **Organizational Change Strategies Framework**

##### ***Organization Structure Change***

Organizational structure enables an organization to have common views and mission. Well-functioning organizational structure is important for an organization going through change, because if there are flaws in the structure it will affect communication flow. With unclear roles conflicts and misunderstandings occur that lowers motivation and work morale. It can also drift different departments apart from common organizational goal, where decision making processes becomes slow and employee effectiveness disappears. According to McLagan (2002), there are three types of changes in the organization structure. They are transactional, transitional and transformational. Transactional changes only need minor interventions, for example, training or changing the incentive system, switching software. Transitional change is more complex and require change in roles/responsibilities, power bases and systems. Example of this kind of change could be opening a new plant in another location, where more detailed planning and expertise is needed. Transformational change requires

redesigning the entire organization, especially the fundamental beliefs and norms, in order to adapt to global business demand.

According to Duggan (2016) organizational structure can inhibit or promote performance, and this may depend on how effectively the supervisory relationships and workflow influence productivity. He further elaborates that organizational structure affects how performance is measured and managed in an organization. A study by Csaszar (2008) developed and tested a model of how organizational structure influence organizational performance. Organizational structure was conceptualized as the decision-making structure among a group of individuals. The empirical setting was over 150,000 stock-picking decisions made by 609 mutual funds. The findings suggested that organizational structure has relevant and predictable effects on a wide range of organization performance.

### ***Technological Change***

Organizations have undergone a revolution in the adoption and application of complex information technology. In the hope of extracting the greatest value from innovations, organizations have adjusted their management structures, work processes and culture (Orlikowski 2000). Yet, swift technology enhancement unintentionally reduces the presumed lifespan of many Information Technology (IT) systems. Organizations build and rebuild their existing IT systems in response market changes. The results of these initiatives are often rather disappointing. The world has more technology than ever before with technological changes increasing at an accelerating pace. The amalgamation of data processing, communications and the advances of software allows firms to gain a competitive advantage, improve performance and develop new businesses from various areas. Use of information technology is now shifting from a supportive role to a more strategically oriented role in organizations (Lucas & Turner, 2002). The 2000s were marked by major breakthroughs in computing in organizations as organizations had undergone a revolution in the adoption and application of complex information technology. Nevertheless, swift technology enhancement unintentionally reduces the presumed lifespan of many IT systems. Organizations build and rebuild their existing IT systems in response to needs and market changes.

### ***Organizational Leadership Change:***

Employees are the most important assets in organizations, which without, the goals and objectives may not be attained (Bello, 2012). Leadership is one of the key driving forces for improving firm performance. Leaders, as the key decision-makers, determine the acquisition, development, and deployment of organizational resources, the conversion of these resources into valuable products and services, and the delivery of value to

organizational stakeholders. Thus, they are potent sources of managerial rents and hence sustained competitive advantage (Adler, 2001). Hurduzeu (2015) is of the view in his paper that effective leadership involves motivation, management, inspiration, remuneration and analytical skills. When all these are present, he emphasizes that organizations record increased employee satisfaction that positively influences the productivity and profitability.

### **Need for Organizational Change**

One of the needs for organizational change is employee development. The process of employee development plays a vital role in developing or let losing their employees through training and organizational development with the purpose of increasing their performance. The basic purpose of employee's development is to achieve those units which are human made with the intention of achieving human potential with the purpose of attaining organizational objectives and those skilled personnel's are advocated of groups, organizational credibility and work procedure.(Hassan, 2007). Employee development is necessary for every organization, when these activities are performed it indicates that organization wants to improve the performance of their employees. Now a day's organizations are investing much on employee development programs, the employees utilize their full skills, work hard and want to achieve organizational goals. This indicates that employee development programs indicate those employees who are willing to learn and when they show willingness to learn they show interest in the development activities, as a result they are satisfied with their job which will ultimately lead to increase employee performance. (Elena, 2000).

When organizations invest on employee development sessions this will improve employee's skills, they have better career growth and in this way cultural, economical growth will be enhanced on the society level. (Champathes, 2006).

Elias (2009) distinguished between the organization's external and internal environments in which the forces of change can take place. The internal environment involves aspects such as people, structure, process, strategy, internal business policies and life cycle stages and external environment involves technological, political/legislative, economic and socio-cultural environments. All these factors serve as catalyst for organizational change (Lunenburg, 2010). Change within the organization is necessary to meet up with the demands of adoption of technology as this enhances production and avoids wastage of time. Technology represents changes that allow organizations to learn more, more quickly, than ever before (Agboola, 2014). Apart from adoption of technology, another major reason why organizations need to introduce changes is to meet up with consumer needs. In view of the current trend globally, organizations must strive to meet

consumers' need by making new interest for new sorts of products thereby creating new avenues for organizations to address these needs. These factors make changes within the organization necessary. How management communicates these factors to the employees will determine how they respond which either could be by exhibiting strong positive attitude (excitement, readiness) to strong negative attitude (anger, resistance) to work. Pederit (2000) posits that change in an organization can be positively or negatively received by employees, which may lead employees to lending support to the stability of change or opposing change in the organization. According to Hettiararchchi and Jayarathna (2014) employee attitudes are a reflection of their broad values and beliefs which lead to the improvement of individual assessments and preferences, and contributing emphatically to how they make decisions in their daily work routine and this can have a ripple effects on the overall productivity of the organization. Also, Visagie (2010) defined employee attitudes toward organizational change as certain uniformities of an individual's sentiments, views and inclinations to act towards some aspects of his or her environment. It then becomes very important for management to put under consideration employees' attitude and response to change if it must achieve its organizational goals and objectives.

### **Factors that affect Communication of Organizational Change**

One major approach to a successful implementation of change is through the establishment of good communication process and information strategies within the organization; as communication is well recognized as influential to organizational growth and survival (Bordia, Hobman, Jones, Gallois, & Callan, 2004). Institutions today are encumbered with the requirement for change. A noteworthy challenge for institutions is to create both a society and an environment equipped with the administration techniques that permit them to adapt to organizational difficulties. An administrative technique such as cutting back on costs, smoothing structures, local/global competition, and the introduction of new innovation was identified (Waddell et al., 2011). Establishment of good organizational communication process has been identified as a major way to ensure effective execution of change process. This has served as a main thrust in the measurement of how organizations communicate the change process they desire within the organization (Downs, DeWine, and Greenbaum, 1994).

Garvin (2000); Pardo and Martinez (2003) and Waddell *et al.*, (2011) have revealed that employees stand up to change when they are not certain about its outcomes. This could be as a result of the absence of structured communication process within the organization and lack of proper information, leading to the development of tension and anxiety connected with the change process. Structured communication process with the

organization about the progressions and outcomes of change process could decrease the nervousness associated with change (Argyris and Schön, 1996). This emphasizes the importance of structured organizational communication process and the need for the development of information strategies as part of overseeing the change process. The involvement of employees in communicating and implementing the change process within the organization was identified an effective strategy in ensuring proper communication strategy of the change process (Waddell et al., 2011). This could ensure that employees' anxiety, tensions and concerns regarding the outcome of implementing organizational change are represented and in this way expand the inspiration to actualize the change process.

### ***Resistance Behavior to Change:***

According to Palmer (2004) employees should be seen as major players of any form of organizational change. However, resistance by employees is one of the biggest problems to deal with; therefore, scholars determined several different variables as the main forerunners of the change response. Lewin (1945) clarifies in a coherent manner associated with the laws of physics that a change does not occur if the factors of a force that produces change are met with similar oncoming factors of a force that generates resistance to change. Psychologist Conner (1998) justify that human resistance to change is a completely regular procedure; as it is human instinct to practice hostility to a procedure loaded with ambiguities and fears that make inconvenience and questions. Employees' resistance to change has been widely studied by researchers over the years. Employees' objections to organizational change can be (are assumed to be) more or less based on their emotions; and is an important aspect because by referring to objections as emotional, it becomes easier for managers to legitimized and ignore them (Bringselius, 2014). Employees' resistance to change has led to different conceptualization change based on the notion that employees would naturally prevent the implementation of organizational change (Piderit, 2000). Contrary to previous conceptualization of resistance to change as restraining forces in human behavior preventing the implementation of change process, recently resistance to change has received a more positive point of view, been viewed as a natural characteristic of human behavior that can be useful for an organization as it relates to change implementation (Piderit, 2000; Giangreco, 2002). This implies that employees' resistance might provide more insights such as feedback and outcomes on the implementation of an organizations change process. Also it has been identified that resistance does not consequently happen when a change is occurring, but it presents outcomes of other issues' (Giangreco, 2002; Rousseau, 2003).

Resistance to change is no more seen as simply behavioral as identified by Rousseau (2003), but it reveals the significance of cognitive and the emotional aspects of employees' reactions implementing the change process.

As an after effect of change, employees' assesses the outcome of the change process be it advantageous for them or not. Such cognitive and emotional feelings are imperative determinants of organizations related results, which could be reflected as work fulfillment, employee turnover and retention with the organization as identified (Oreg , 2006). According to Piderit (2000) resistance to change has been conceptualized into three dimensions such as affective, behavioral and cognitive components which involves an integrative process of providing a comprehensive human reactions organization change as employees thought, emotional feelings and behavior towards change are inconsistent and are not as much in accordance with each other. Affective dimension deals with the positive or negative sentiments of employees' when faced with change. These include temperaments such as anger, emotional feelings like displeasure, tension and anxiety. The more negative these emotions are, the higher the emotional resistance to change. Behavioral dimension includes all actions or activities taken in response to change. This could be either positive or negative such as grumbling to the implementation process of change or persuading other that the outcome of the change might be favorable or unfavorable which are all forms of behavioral resistance to change (Oreg, 2006).

#### ***Employee commitment during change:***

Due to the growing interest in understanding how employees' reacts to change reflects the belief among researchers and practitioners that individuals' psychological experience can dramatically affect successful implementation of change initiatives (Herold, Fedor and Caldwell 2007). The concerns about change are highly conducive to affective, normative and continuance commitment to change; as it has significantly interacted with innovative behavior in predicting affective commitment to change, such that employees' engagement in innovative courses of actions could buffer the negative effects of concerns. These outcomes suggest that endorsing and reassuring innovation in the workplace represents a valuable means for coping with intense change- related demands, thereby enhancing individual and organizational involvement in the change initiatives. Employees can experience diverse stages and formulae of anxieties throughout the change process; various levels and forms of concerns can differ, contingent on both personal and situational effects; and concerns can affect the efficiency of change efforts by aggravating negative results on a number of change-related activities and outcomes (i. e. commitment to change), at both the individual and the organizational levels. When change is underway, employees with a high level of psychological resilience are likely to experience more positive emotions than will employees with a low level of psychological resilience. These emotions then help them view the change processes and outcomes more optimistically and, thus, respond to organizational change more favorably (Shin, Taylor, & Seo, 2012). Any change in an organization can lead to an unforeseen decline in performance especially when it is perceived by employees that such changes will affect

work styles (Ye, Marinova, & Singh, 2007); furthermore, even when performance will improve in the future, it may sometimes decline.

### **The Contribution of Organizational Change to the Growth of an Organization**

Today, organizational change is one of the most important concepts in management that brings about their growth. In order to achieve a more favorable performance, organizations should adopt themselves with organizational changes. Organizational change empowers organizations to confront with the problems and demands of external and internal environment. Change is a stimulus engine of the world successful companies and change management assist organizations to attain favorable success and performance (Arabi, et.al, 2010). In fact, organizational change aims to adopt with the environment and performance improvement (Pardo del Val & Martínez Fuentes, 2003). Today's world and organizations of the third millennium enjoy certain features including rapid changes, excessive movement in power, increasing competition, and fast scientific and technological progress. Performance-based economy depends more on focusing on the environment and its changes than the value of physical resources and its tangible and objective assets and capital. Today, given changing external environment, all organizations should transform their performance for survival and progress in order to adopt or contrast against changes. An organization with superior performance is one that to achieve better results than its similar ones in long run via ability to adopt appropriately with changes, rapid reaction to these changes, create a coherent and targeted management structure, improve key capabilities continuously, and behave suitably with employees, as main asset (BakhshChenari et.al, 2015). In this regard, change leaders forecast resistance against change and they take timely steps in order to minimize its unfavorable results (Hathaway, 2009). Organizational performance has a crucial role in economy and it is counted as a useful tool to attain economic growth and organization's benefits. In the most of the world organizations, organizational managers and leaders try to promote and improve organizational growth by promoting organizational change (Talebi & Bahamir, 2012). Different studies have indicated that several factors influenced on organizational performance. Zeynalipoor & Mirkamali (2008) argued that there was a direct relationship between leadership, culture, organizational atmosphere, and organizational performance. Zheng (2010) indicated that organizational culture, structure, and strategy affected organizational performance significantly. Steyrer (2008) believed that leadership change for instance had significant relationship with employees' organizational commitment and it had positive relationship with organizational growth.

### **Methodology**

### **Research Design**

The research design chosen to carry out the study is the survey research design in which the opinions of Respondents Rivers State Ministry of Works were sought on the evaluation of organizational change and its impact on staff productivity. It provides useful information when data is abstracted from individual responses.

### Population of the Study

The population of the study was made up of 100 staff of Rivers State Ministry of Works

### Sample Size

Convenience sampling technique was used in selecting a sample size of fifty (50) respondents for the purpose of obtaining information through questionnaire administration.

### Sampling Technique

This sampling technique was chosen because it saves time and it is less expensive. It also enables the researcher to reach out to available respondents.

**Table 1:** Sample size selection

S/No	Unit	Number of respondents	Percentage of respondents (%)
1	Monitoring Department	15	30
2	Accounting Department	18	36
3	Administration Department	17	34
<b>Total</b>		50	100%

Source: Field Survey (2023)

The data analysis technique used in the hypotheses testing was chi-square statistical analysis tool. Chi-square ( $\chi^2$ ) may be defined as the sum of ratio differences between the observed and expected frequencies. Mathematically, the chi-square is given by the formula:

$$\chi^2 = \sum \frac{(F_o - F_e)^2}{F_e}$$

Where

$\chi^2$  = Chi-square

F<sub>o</sub> = Observed frequency

F<sub>e</sub> = expected Frequency

It is worthy to note that the calculation of the expected frequency precedes the calculation of Chi-square itself.

### **Decision Rule**

If the  $\chi^2$  calculated is greater than the critical value of  $\chi^2$  at 5% level of significance for appropriate (df) degree of freedom, the null hypothesis (H<sub>o</sub>) is rejected. The rejection of the null hypothesis (H<sub>o</sub>) gives automatic signal for the acceptance of the alternative hypothesis (H<sub>a</sub>).

### **Data Presentation and Analysis**

The analysis will be done in one phase namely: using simple percentages, frequency tables and test of hypothesis using chi-square ( $\chi^2$ ) statistics.

### **Test of Hypotheses one**

**H<sub>o</sub>:** Influencing staff attitude positively to align with organizational change, re-structuring the organization processes to meet goals and improving management/leadership style of the organization are not the roles of organizational change in bringing about staff productivity.

**H<sub>a</sub>:** Influencing staff attitude positively to align with organizational change, re-structuring the organization processes to meet goals and improving management/leadership style of the organization are the roles of organizational change in bringing about staff productivity.

**Table 1 A: Observed frequency table for hypothesis one**

Variables	Monitoring Department	Accounting Department	Administration Department	Total
Agreed	5	0	0	5
Disagreed	15	15	15	45
Grand total	20	15	15	50

Source: Field Survey (2023)

**Table 1 B: Expected Frequency table for hypothesis one**

Variables	Monitoring Department	Accounting Department	Administration Department	Total
Agreed	2	1.5	1.5	5
Disagreed	18	13.5	13.5	45
Grand total	20	15	15	50

$$\text{Chi-square } (\chi^2) \text{ computation} = \sum \frac{(F_o - F_e)^2}{F_e}$$

**Table 1C: Comparison of observed and expected frequencies for hypothesis one**

F <sub>o</sub>	F <sub>e</sub>	F <sub>o</sub> - F <sub>e</sub>	(F <sub>o</sub> - F <sub>e</sub> ) <sup>2</sup>	$\frac{(F_o - F_e)^2}{F_e}$
5	2	3	9	4.5
0	1.5	-1.5	2.25	1.5
0	1.5	-1.5	2.25	1.5
15	18	-3	9	0.5
15	13.5	1.5	2.25	0.17
15	13.5	1.5	2.25	0.17
Calculated chi-square ( $\chi^2$ ) =			8.340	

Degree of freedom (df) = (r-1)(c-1)

$$= (2-1)(3-1)$$

= 2 degree of freedom (df)

The critical value of  $\chi^2$  from 2df at 5% level of significance = 5.991

**Decision Rule:** If  $\chi^2$  calculated is greater than the critical value of  $\chi^2$  for 2df at 5% level of significance, reject the null hypothesis, otherwise uphold the null hypothesis.

**Conclusion:** Since  $\chi^2$  calculated = 8.340, which is greater than the critical value of  $\chi^2$  for 2(df) at 5% level of significance = 5.991, the null hypothesis (Ho) is rejected while alternate hypothesis is accepted.

It can be concluded that: Influencing staff attitude positively to align with organizational change, re-structuring the organization processes to meet goals and improving management/leadership style of the organization are the roles of organizational change in bringing about staff productivity.

### Test of Hypothesis Two

**H<sub>0</sub>:** Structural changes, Technological changes, organizational culture change, are not the organizational change strategies that can improve staff productivity.

**H<sub>a</sub>:** Structural changes, Technological changes, organizational culture change, are the organizational change strategies that can improve staff productivity.

**Table 2 A: Observed frequency table for hypothesis two (2)**

Variables	Monitoring Department	Accounting Department	Administration Department	Total
Agreed	7	0	1	8
Disagreed	13	15	14	42
<b>Grand total</b>	15	18	17	50

Source: Field Survey (2023)

**Table 2 B: Expected frequency table for hypothesis two**

Variables	Monitoring Department	Accounting Department	Administration Department	Total
Agreed	3.2	2.4	2.4	8
Disagreed	16.8	12.6	12.6	42
Grand total	20	15	15	50

Source: Field Survey (2023)

$$\text{Chi-square computation} = \chi^2 = \sum \frac{(F_o - F_e)^2}{F_e}$$

**Table 2C: Comparison of observed and expected frequency for hypothesis two**

<b>F<sub>o</sub></b>	<b>F<sub>e</sub></b>	<b>F<sub>o</sub>-F<sub>e</sub></b>	<b>(F<sub>o</sub> - F<sub>e</sub>)<sup>2</sup></b>	<b><math>\frac{(F_o - F_e)^2}{F_e}</math></b>
7	3.2	3.8	14.44	4.51
0	2.4	-2.4	5.76	2.4
1	2.4	-1.4	1.96	0.82
13	16.8	-3.8	14.44	0.96
15	12.6	2.4	5.76	0.46
14	12.6	1.4	1.96	0.16
Calculated chi-square ( $\chi^2$ ) =		9.310		

Degree of freedom (df) = (r-1)(c-1)

= (2-1)(3-1)

= 1 x 2 = 2 degree of freedom (df)

The critical value of  $\chi^2$  for 2 degrees of freedom at 5% level of significance = 5.991

**Decision Rule:** If  $\chi^2$  calculated is greater than the critical value of  $\chi^2$  for 2df at 5% level of significance, reject the null hypothesis, otherwise uphold the null hypothesis.

**Conclusion:** Since the chi-square ( $\chi^2$ ) calculated = 9.310, which is greater than the critical value of  $\chi^2$  for 2df at 5% level of significance = 5.991, the null hypothesis (H<sub>o</sub>) is rejected while alternate hypothesis is accepted.

It can be concluded that Structural changes, Technological changes, organizational culture change, are the organizational change strategies that can improve staff productivity

### Test of Hypothesis Three

**H<sub>o</sub>:** Enabling staff to acquire more skills through trainings, aiding effectiveness of staff in organizational credibility and work procedure, boosting performance of staff are not the roles of organizational change on staff development for improved staff productivity.

**Ha:** Enabling staff to acquire more skills through trainings, aiding effectiveness of staff in organizational credibility and work procedure, boosting performance of staff are the roles of organizational change on staff development for improved staff productivity.

**Table 3 A: Observed frequency table for hypothesis three**

Variables	Monitoring Department	Accounting Department	Administration Department	Total
Agreed	8	0	0	8
Disagreed	12	15	15	42
<b>Grand total</b>	20	15	17	50

Source: Field Survey (2023)

**Table 3 B: Expected frequency table for hypothesis three**

Variables	Monitoring Department	Accounting Department	Administration Department	Total
Agreed	3.2	2.4	2.4	8
Disagreed	16.8	12.6	12.6	42
<b>Grand total</b>	20	15	15	50

Source: Field survey (2018)

$$\text{Chi-square computation} = \chi^2 = \sum \frac{(F_o - F_e)^2}{F_e}$$

**Table 3C : Comparison of observed with expected frequency for hypothesis three**

F <sub>o</sub>	F <sub>e</sub>	F <sub>o</sub> -F <sub>e</sub>	(F <sub>o</sub> - F <sub>e</sub> ) <sup>2</sup>	$\frac{(F_o - F_e)^2}{F_e}$
8	3.2	4.8	23.04	7.20
0	2.4	-2.4	5.76	2.40
0	2.4	-2.4	5.76	2.40
12	16.8	-4.8	23.04	1.37
15	12.6	2.4	5.76	0.46
15	12.6	2.4	5.76	0.46
Calculated chi-square ( $\chi^2$ ) = 14.29				

Degree of freedom (df) =  $(r-1)(c-1)$

=  $(2-1)(3-1)$

=  $1 \times 2 = 2$  degree of freedom (df)

The critical value of  $\chi^2$  for 2 degrees of freedom at 5% level of significance = 5.991

**Decision Rule:** IF  $\chi^2$  calculated is greater than the critical value of  $\chi^2$  for 2df at 5% level of significance, reject the null hypothesis, otherwise uphold the null hypothesis.

**Conclusion:** Since the chi-square ( $\chi^2$ ) calculated = 9.310, which is greater than the critical value of  $\chi^2$  for 2df at 5% level of significance = 5.991, the null hypothesis ( $H_0$ ) is rejected while alternate hypothesis is accepted.

It can be concluded that enabling staff to acquire more skills through trainings, aiding effectiveness of staff in organizational credibility and work procedure, boosting performance of staff are the roles of organizational change on staff development for improved staff productivity.

#### **Test of Hypothesis Four**

**H<sub>0</sub>:** Poor communication of change, resistance behavior of staff to change when they are not certain about the benefits, and staff commitment to change are not the factors that affect organizational change for improved staff productivity.

**H<sub>a</sub>:** Poor communication of change, resistance behavior of staff to change when they are not certain about the benefits, and staff commitment to change are the factors that affect organizational change for improved staff productivity.

**Table 4 A: Observed frequency table for hypothesis four (4)**

<b>Variables</b>	<b>Monitoring Department</b>	<b>Accounting Department</b>	<b>Administration Department</b>	<b>Total</b>
Agreed	6	0	0	6
Disagreed	14	15	15	44
<b>Grand total</b>	20	15	15	50

Source: Field Survey (2023)

**Table 4 B: Expected frequency table for hypothesis four**

<b>Variables</b>	<b>Monitoring Department</b>	<b>Accounting Department</b>	<b>Administration Department</b>	<b>Total</b>
Agreed	2.4	1.8	1.8	6
Disagreed	17.6	13.2	13.2	44
<b>Grand total</b>	20	15	15	50

Source: Field Survey (2023)

$$\text{Chi-square computation} = \chi^2 = \sum \frac{(F_o - F_e)^2}{F_e}$$

**Table 4 C: Comparison of observed with expected frequency for hypothesis three**

<b>F<sub>o</sub></b>	<b>F<sub>e</sub></b>	<b>F<sub>o</sub>-F<sub>e</sub></b>	<b>(F<sub>o</sub> - F<sub>e</sub>)<sup>2</sup></b>	<b><math>\frac{(F_o - F_e)^2}{F_e}</math></b>
6	2.4	3.6	12.96	5.40
0	1.8	-1.8	3.24	1.80
0	1.8	-1.8	3.24	1.80
14	17.6	-3.6	12.96	0,74
15	13.2	1.8	3.24	0.25
15	13.2	1.8	3.24	0.25
Calculated chi-square ( $\chi^2$ ) = 10.24				

Degree of freedom (df) = (r-1)(c-1)

= (2-1)(3-1)

= 1 x 2 = 2 degree of freedom (df)

The critical value of  $\chi^2$  for 2 degrees of freedom at 5% level of significance = 5.991

**Decision Rule:** IF  $\chi^2$  calculated is greater than the critical value of  $\chi^2$  for 2df at 5% level of significance, reject the null hypothesis, otherwise uphold the null hypothesis.

**Conclusion:** Since the chi-square ( $\chi^2$ ) calculated = 9.310, which is greater than the critical value of  $\chi^2$  for 2df at 5% level of significance = 5.991, the null hypothesis (Ho) is rejected while alternate hypothesis is accepted.

It can be concluded poor communication of change, resistance behavior of staff to change when they are not certain about the benefits, and staff commitment to change are the factors that affect organizational change for improved staff productivity.

### Discussion of Findings

The aim of this paper is to examine an evaluation of organizational change and its impact on staff productivity.

In testing hypothesis one, the calculated chi-square  $\chi^2$  8.340 which is greater than the critical value for 2(df) and at 5% level of significance = 5.991, the null hypothesis was rejected and hence concluded that influencing staff attitude positively to align with organizational change, re-structuring the organization processes to meet goals and improving management/leadership style of the organization are the roles of organizational change in bringing about staff productivity.

In testing hypothesis two, the calculated chi-square  $\chi^2$  9, which is greater than the critical value for 2(df) and at 5% level of significance = 5.991, the null hypothesis was rejected and hence concluded that structural changes, technological changes, organizational culture change, are the organizational change strategies that can improve staff productivity. To support this view Saszar (2008) developed and tested a model of how organizational structure was conceptualized as the decision making structure among a group of individuals.

In testing hypothesis three, the calculated chi-square  $\chi^2$  14.29, which is greater than the critical value for 2(df) and at 5% level of significance = 5.991, the null hypothesis was rejected and hence concluded that enabling staff to acquire more skills through trainings, aiding effectiveness of staff in organizational credibility and work procedure, boosting performance of staff are the roles of organizational change on staff development for improved staff productivity. To support this view (Hassan, 2007) employee development is necessary for every

organization when these activities are performed it indicates that organization wants to improve the performance of their employees.

In testing hypothesis four, the calculated chi-square  $\chi^2$  10.24, which is greater than the critical value for 2(df) and at 5% level of significance = 5.991, the null hypothesis was rejected and hence concluded that poor communication of change, resistance behavior of staff to change when they are not certain about the benefits, and staff commitment to change are the factors that affect organizational change for improved staff productivity. This is in agreement with Ye, Marinova & Singh (2007) who stated that change in an organization can lead to an unforeseen decline in performance, especially when it is perceived by employees that such changes will affect work styles.

### **Conclusion**

The paper concluded that an evaluation of organizational change is very important as it contributes to influencing staff attitude positively to align with organizational change, restructuring the organization processes to meet goals and improved management/leadership style of the organization.

Structural changes, technological changes, organizational changes were very poor and output was below expectation. The introduction of new technology, global competition, downsizing brings improvement in staff productivity. It is therefore important for organizations to improve in poor communication, resistance behavior of staff to change when they are not certain about the benefits.

### **Recommendations**

The following recommendations were made based on the findings of the study:

- A. Organization should influence staff attitude positively to align with organizational change, restructure the organization processes to meet goals.
- B. Organization should improve management/leadership style.
- C. Organization should make available structural changes, technological changes that would improve staff productivity.
- D. Introduction of new technology, global competition, downsizing should be improved for staff productivity.
- E. Organization should adopt appropriate factors that affect organizational change for improved staff productivity.

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## ANTI-BULLYING CHARACTER EDUCATION FOR SANTRI TPQ AL-ITTIHAD SUMURJOMBLANGBOGO PEKALONGAN VILLAGE

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### Abstract

This research aims to educate children about bullying. This research uses a qualitative approach with descriptive methods and data obtained from interviews. Bullying behavior is a social phenomenon that occurs in children, bullying is considered a common thing, so that behavior continues to increase. Even though if bullying continues, it will have a psychological impact on the victims who will experience it. Prevention is needed so that bullying behavior at school can be reduced. One solution to prevent bullying is to empower students through peer groups. So that they can become school police who become preventers and whisperers for other students regarding bullying information.

**Keywords:** Empowerment, Bullying

## THE ROLE OF FINANCIAL TECHNOLOGY (FINTECH) TOWARDS MICRO, SMALL AND MEDIUM ENTERPRISES IN PEKALONGAN

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### Abstract

The aim of this research is to help micro, small and medium enterprises to gain convenience and efficiency in the financial area. Fintech provides many financial solutions, especially for small and medium businesses that want to grow. The development of Fintech is expected to be more inclusive. This type of research is a type of literature research or literature review and uses a qualitative approach. Data from primary sources were collected through interviews and secondary sources obtained from various literature relevant to the study. The literature in question is in the form of books, scientific journals, mass media news, and the internet that are considered credible and standardized both nationally and internationally. The literature in question is in the form of books, scientific journals, mass media news, and the internet that are considered credible and standardized both nationally and internationally. There is a role for fintech in financial inclusion in Pekalongan MSMEs. Fintech has enabled businesses to change their business models more quickly and easily than bank institutions and savings and loan cooperatives. In addition, Fintech has contributed significantly to local economic growth and the advancement of micro, small and medium enterprises in understanding finance. The role of fintech in financial literacy in micro, small and medium enterprises in Pekalongan.

**Keywords:** Fintech; UMKM; Pekalongan

## INCOME INEQUALITY IN EAST JAVA, INDONESIA: AN ANALYSIS OF THE EFFECTS OF ECONOMIC GROWTH, GRDP PER CAPITA, AND HDI

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### Abstract

This study aims to identify and examine the effect of economic growth, GRDP per capita, and HDI on income distribution inequality in East Java Province in 2022. The method used in this research is quantitative approach. The independent variables in this study are Economic Growth (X1), GRDP per capita (X2), and Human Development Index (X3). While the dependent variable in this study is Income Distribution Inequality (Y). This study uses secondary data obtained from the Central Bureau of Statistics (BPS). Data processing techniques are carried out using Eviews12. The analysis of this research includes Classical Assumption Test and Multiple Linear Regression Analysis, testit, f test, and R2 test. The results show that economic growth and GRDP per capita have no significant effect on income distribution inequality in the cities/districts of East Java Province in 2022. However, on the contrary, the Human Development Index (HDI) has a significant effect on income distribution inequality in the cities/districts of East Java Province in 2022.

**Keywords:** Economic Growth, HDI, Income Distribution

## ANALYSIS OF THE APPLICATION OF ISLAMIC POLITICAL ECONOMY IN IMPROVING THE ECONOMY IN INDONESIA

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### Abstract

This research intends to explain the study of the Analysis of the application of Islamic political economy in improving the economy in Indonesia. This research is library research with a qualitative approach. The data sources used in this research come from various literature journal articles that are relevant to the research topic. The data analysis method used is content analysis of the literature sources used in the research. This research concludes that Islamic political economics can improve the economy in Indonesia because in this system the head of state will manage baitulmall assets, both movable and immovable, to meet all the needs of his people. This system also strictly prohibits the privatization of natural resources by private companies because in Islam natural resources as a people's right are haram or should not be controlled by some people who can harm the state. Because of this, Islam regulates that the management of natural resources is in the hands of the state and all profits are returned to the people in the form of guarantees for basic needs such as education, health and security which can be obtained free of charge. Other fields can also be accessed by the people at low prices, such as transportation, electricity, gas and fuel because the government cannot make a single profit from people's ownership

**Keywords:** Islamic political economy, improvement and economy.

## RISKS OF HAVING SEX DURING MENSTRUATION

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### Abstract

The relationship between sex and menstruation is still debated. There is a possibility of health problems. In addition, because there is still the belief that women should not have sex with their husbands during menstruation, many women are hesitant and afraid to do so. From a medical point of view, sex during pregnancy is actually allowed, although there are significant dangers, especially if the procedure is inappropriate. From a medical point of view, sex during menstruation is neither prohibited nor recommended. This is due to the possibility of infection through menstrual flow if contact occurs. In fact, there are a number of risks associated with sex during your period, including health problems. Women can face a variety of health problems including: Endometriosis, Vaginal yeast infections, Sexually transmitted diseases, Sudden death, Vaginal dryness. Other risks of having sex with a menstruating woman include: Penis penetration of the vagina, infection, infection spreading to the urinary tract.

**Keywords:** Sex, Menstruation, and medical.

## EMPOWERING HALAL MSMEs THROUGH THE PEKALONGAN SPECIAL ECONOMIC ZONE (KEK): ACHIEVING GLOBAL COMPETITIVENESS THROUGH INNOVATION AND COLLABORATION

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### Abstract

Halal MSMEs in Pekalongan need to adopt a more progressive approach to remain relevant and competitive. Innovation is not just a concept, but also an urgent need to improve products, production processes and marketing strategies. Halal MSMEs in Pekalongan need to see innovation as the key to increasing their competitiveness at the global level. Empowering Halal MSMEs through the Pekalongan Halal SEZ must be the main focus in strategic plans and regional economic development. This research uses descriptive qualitative research with an exploratory approach. This research is also a type of library research. The results of this literature review illustrate the importance of empowering Halal MSMEs in achieving global competitiveness through innovation and collaboration. In the context of empowerment, crucial aspects include capital, education, training and financial support, which are needed to enable MSMEs to develop their production and innovation capacity. Furthermore, the Halal SEZ in Pekalongan plays a significant role as a facilitator of growth in the halal economic sector. SEZs provide incentives, infrastructure and strict regulations, which encourage transparency and global market access for halal products.

**Keyword:** *MSMEs, Special Economic Zones, & Pekalongan..*

## THE EFFECT OF INFLATION ON INDONESIA'S ECONOMIC GROWTH

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### **Abstract**

The aim of this research is to describe the Effect Of Inflation On Indonesia's Economic Growth. This research is library research with a qualitative approach. The data sources used in this research come from various literature journal articles that are relevant to the research topic. The data analysis method used is content analysis of the literature sources used in the research. This literature research found that the Economic growth is one of the goals that must be achieved by a country every year. One measure of a country's success is its economic growth rate. Inflation has a significant and negative effect on Indonesia's growth in 2016-2022. This is due to unexpected economic problems that occur in Indonesia, especially for example the inflation that occurred in 2022, namely inflation that increased compared to 2021, namely inflation that increased due to the post-Covid 19 pandemic so that the impact was disrupted supply and prices were not ready so as to spur price increases such as scarcity of cooking oil, rising fuel and basic food prices, according to public buying interest and the increasing number of unemployment in Indonesia. The higher the inflation rate in Indonesia, the more it will affect the economic growth rate.

**Keywords:** Inflation, Growth, and Economy.

## CREATIVE TECHNOLOGY OPENS UP JOB OPPORTUNITIES FOR MILLENNIALS IN INDONESIA

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### Abstract

This research intends to explain the study of CREATIVE TECHNOLOGY OPENS UP JOB OPPORTUNITIES FOR MILLENNIALS IN INDONESIA. The research method uses a type of qualitative research with a library research approach. Nowadays, work is becoming more and more rapid, technological sophistication and information have dominated various areas of human life. Has entered the creative and innovative industry. More and more creative technology industries are opening up job opportunities for millennial children who still have very broad thoughts and creativity. The creative industry that has become a world-scale business and is very popular in Indonesia is Youtube.com. There are many Indonesian Creators there who always compete all the time to attract the attention of Youtube.com visitors every day. YouTube is a media sharing site, namely a type of social media that facilitates users to share media, starting from video, audio and images. YouTube is a social media that started to gain popularity 5 years ago. Reporting from the official YouTube website, currently YouTube has more than one billion users, which is almost a third of all internet users. Nowadays Youtube is not just a site, because with YouTube, one can make money. With its rapid development, more and more people are creating YouTube accounts to use as a business as a source of income. The presence of YouTube is a forum for creating works of art. Provides the opportunity for everyone to share any video, for example music, films, video clips, tutorials or anything in the form of audio and video. They view success as being famous on YouTube as a bright dream.

**Keywords:** Youtube Content, Millennial Children, Indonesia

## THE DEVELOPMENT AND ROLE OF SHARIA BANK IN LOOKING FORWARD TO THE FUTURE OF ISLAMIC FINANCE IN INDONESIA

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### ***Abstract.***

The aim of this research is to explain the development and role of financial institutions that use sharia principles, one of which is sharia banks in welcoming the future of Islamic finance in Indonesia. This research method uses a qualitative method with a type of library research with two types of secondary data, namely published papers in the form of books, reputable scientific articles, journal reviews, and reports from official organizations. The results of this research conclude that Sharia Banks in Indonesia are one of the financial institutions that have the main task of providing credit and services in the field of payments and money circulation accompanied by sharia principles. The development of sharia banks in Indonesia has become a benchmark for the implementation of sharia economics and its existence in Indonesia. The slowdown in the growth of Islamic banks related to the economic symptoms that are occurring can be overcome by consolidation from internal parties. Islamic banks in Indonesia play an important role in the future of sharia finance. The existence of an increase in the quality of sharia banks in national sharia banking does not rule out the possibility of increasing the competitiveness of sharia banks at the global level. Sharia banks *have achieved quite rapid achievements considering that the majority of Indonesian people are Muslim*

***Keywords:*** *Sharia Bank, Financial Institution, Sharia Principles, Muslim*

## A BIBLIOMETRIC ANALYSIS: ANALYSIS OF THE INFLUENCE OF FINTECH TECHNOLOGY IN SHARIA FINANCE

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### **Abstract**

This research intends to explain in depth about fintech technology in Islamic finance. This research is library research with a qualitative approach. The data sources used in this research come from various literature journal articles that are relevant to the research topic. The data analysis method used is content analysis of the literature sources used in the research. FinTech has changed the payment system in Indonesian society and helped startups reduce initial investment and high operational costs. Accelerating financial inclusion is the provision of safe, comfortable and affordable financial services for all parties without exception. Of course, including those who have not been touched by formal financial institutions, such as those with low incomes or those who live in remote areas with internet and communication technology, people do not have to come to the bank and fill out various documents to get financial services. The ease of accessing financial services means that Indonesian people can take advantage of automatic and instant payment systems, making it easier for people to get access to capital for business startups. Apart from that, payment system support also makes it easier for businesses to develop markets throughout Indonesia. Security also poses quite a big obstacle for consumers to use applications from financial services, because often the obstacles encountered are quite risky in their use, for example, there are irresponsible hacker accounts that will drain the balance on their account, as well as Consumers also often do not trust the security of the data stored to activate their accounts.

**Keywords:** Fintech, Finance, and Indonesian society

## QUALITY TRADITIONAL MARKET EMPOWERMENT: EFFORTS TO INCREASE HYGIENE AWARENESS IN COMAL TRADITIONAL MARKET, PEMALANG

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### Abstract

The habit of littering is almost universal among the general public; it is not limited to the poor, even the highly educated. This is hampered by the lack of knowledge about the strength and durability of garbage. This garbage bubble is getting less and less due to the lack of cleanliness facilities that can be easily perceived by the general public in an area. The purpose of empowering a quality traditional market is to make traders in Comal Market, Pemalang Regency, aware of the need to maintain the cleanliness of their environment so as to be able to make a quality traditional market and be known as a market that is guaranteed to have a clean environment. The methods used in this research are Direct Observation and Structured Interviewing methods. Direct Observation is direct observation of objects, events, processes, and public relations using images or photographs as evidence. By empowering cleaning in the market environment, it can create a clean, healthy, and sustainable environment. This empowerment not only includes the physical act of cleaning up trash, but also education and promotion of sustainable lifestyles to realize positive changes in the future in maintaining market cleanliness.

**Keywords:** Empowerment, Cleanliness, Waste

## GENDER EQUALITY SOCIALIZATION STRATEGY: A CONCRETE EFFORT TO INCREASE THE ROLE OF WOMEN IN ORGANIZATIONAL LEADERSHIP

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### **Abstract**

This study aims to improve gender equality and leadership among female students at SMK Muhammadiyah Kajen. This research used an observational approach before implementing gender sensitivity through Socialization. Activities consisted of lectures on gender equality, question and answer sessions, and prize distribution for active participants. The study highlights the importance of gender equality in education and organizations, and the positive impact it has on community development. It also emphasized the need for collective efforts from all departments and awareness of gender issues to create an inclusive and equitable work environment. Gender equality is not just a moral issue but also a strategic approach to achieve maximum performance and long-term sustainability in organizations.

**Keywords:** gender equality; leadership; women; SMK Muhammadiyah Kajen.

## THE IMPORTANCE OF THE TEDAK SITEN TRADITION IN MAINTAINING LOCAL URF IN THE VILLAGE OF DESNASRI WETAN BATANG

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### Abstract

This research aims to analyze the tedak siten tradition in maintaining local urf, explore the cultural values contained in it, and identify preservation efforts that can be made. This research is a literature research with a qualitative approach. The data sources used in this research come from various journal articles relevant to the research topic. The data analysis method used is content analysis of literature sources used in the research. This research discusses the importance of the tedak siten tradition in maintaining local urf. Tedak siten is one of the traditional Javanese ceremonies that celebrates an important moment in a child's life. Usually, tedak siten is held when a child can first crawl or walk. The results show that the tedak siten tradition is not only a ritual event, but also a symbol of togetherness, learning, and local wisdom that strengthens community identity. In conclusion, preservation efforts and a deeper understanding of this tradition are needed to preserve a valuable cultural heritage for future generations.

**Keywords:** Tedak Siten, Tradition, Culture

## MAXIMIZING VILLAGE FUNDS FOR VILLAGE ECONOMIC DEVELOPMENT

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### Abstract

This research aims to explain the role of village funds in the development of the village economy in Indonesia. This research is a library research with a qualitative approach. The data sources used in this research come from various literature journal articles that are relevant to the research topic. The data analysis method used is content analysis of the literature sources used in the research. The results of this study are that the planning and budgeting of village funds must be based on the potential and needs of the village. In addition, the planning and budgeting of village funds must be conducted in a transparent and accountable manner. Village communities must also have the capacity to manage village funds effectively and efficiently. Village governments should provide training and assistance to village communities in managing village funds. Village funds can be used to develop the economic potential of the village, such as agriculture, plantations, fisheries, and tourism. Village governments can also cooperate with various parties, such as local governments and non-governmental organizations, to develop the village economy with village funds.

## THE APPLICATION OF THE WEIGHING SYSTEM IN THE BUYING AND BUYING OF POWDERED CHICKEN IN THE AMPELGADING PEMALANG MARKET AS VIEWED FROM THE ISLAMIC ECONOMIC ASPECT

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### Özet

The aim of this research is to explore and understand the awareness of broiler chicken sellers in using scales correctly and honestly based on aspects of Islamic economics.

This research is library research with a qualitative approach. The data sources used in this research come from various literature journal articles that are relevant to the research topic. The data analysis method used is content analysis of the literature sources used in the research.

Research shows that many sellers now prioritize individual profits without being guided by the provisions of Islamic law. They only seek worldly profits without expecting blessings from what they have done. Moreover, there are many traders who cheat on the scales, for example, when selling broiler chickens, traders exaggerate the weight of the scales so that the chicken weighs more than it actually does. However, in buying and selling, honesty and truth are the most important values. Islam forbids fraud in all human activities, including in business and buying and selling activities, giving false explanations and information, mixing good things with bad things, showing examples of good things and hiding bad ones.

**Anahtar Kelimeler:** Scales, buy and sell, economy, islamic.

## FUEL PRICE HIKES CAUSE INFLATION IN INDONESIA

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### Abstract

The aim of this research is to describe fuel price hikes cause inflation in Indonesia. This research is a library research with a qualitative approach. The data sources used in this research come from various journal literature relevant to the research topic. The data analysis method used is content analysis of the literature sources used in the research. In fact, the Indonesian government's decision to raise fuel prices is nothing new. The economy will undoubtedly be significantly affected by the fuel price hike. This is possible because the rising prices of products and services will inevitably follow the increase in fuel prices. Inflation is a general term for the constant rise in the prices of goods. There is no doubt that rising inflation will have an impact on the economy. The increase in fuel costs will have a significant impact on supply and demand. The amount of goods offered by producers will fluctuate along with consumer demand. Consumers are those who will buy goods or use services. The increase in fuel prices can have an impact on inflation in Indonesia. Fuel subsidies, money supply, economic growth, and fuel price increases can affect the inflation rate in Indonesia. An increase in fuel prices can increase the burden on people's lives, especially those at the bottom and also entrepreneurs. Therefore, the government needs to consider the impact of fuel price increases on inflation and society in setting fuel price policies.

**Keywords:** Fuel, hikes, inflation

## EMPOWERING GENERATION Z THROUGH EDUCATION ON HALAL COSMETICS AS A LIFESTYLE IN THE DIGITAL ERA

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### Abstrac

This research aims to explain in depth about the empowerment of generation z through halal cosmetics education as a lifestyle in the digital era. This research is a literature research with a qualitative approach. The data sources used in this research come from various literature journal articles that are relevant to the research topic. The data analysis method used is content analysis of the literature sources used in the research. Education about halal products is usually disseminated by encouraging people to expand their knowledge, one of which is by using current technology. Halal lifestyle becomes a person's habit in his daily life to consume, utilize and use goods or services that do not conflict with Islamic values and principles. The world of beauty is currently growing. This can be seen from the current condition of the cosmetics sector and the proliferation of various kinds of beauty care facilities. As Muslims, we must prioritize halal when choosing food and other products to be used. Halal cosmetics are products used to maintain appearance provided that the cosmetic ingredients do not contain unclean and harmless, and are produced in the right way. As a student of Islamic economics, awareness of halal is important.

Keywords: Halal, Cosmetics, Lifestyle

## ISLAMIC ECONOMIC REVIEW OF THE CHOCOLATE CHOCOLATE FRIED BANANA BUSINESS IN INCREASING FAMILY INCOME

(Study of the Chocolate Cheese Fried Banana Business in Petarukan District, Pemalang City)

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### Özet

The economic crisis which we are still feeling the impact of makes us have to really pay attention as it is serious to find a bright spot in order to get out of this economic crisis. So some people have the initiative to make small businesses which rely on creativity to meet the economic needs of the family. One of the small businesses in Petarukan District is Pisang Goreng Chocolate Cheese. The method used in data collection is using, observation, questionnaires and documentation. In this study using qualitative descriptive data analysis, is after all complete data is collected, then explain it in detail and systematically so that it can be drawn as a whole and conclusions can be understood. Based on the results of research that has been conducted by researchers at the scene of the sale of cheese chocolate fried bananas around Petarukan District, it is well realized that improving the family economy through entrepreneurship in the small and medium sector has proven to be able to help the community economy in the family economy. This is evidenced by the statement of one of the research sources, namely Mrs. Lilis. This type of business is included in micro and small enterprises (MSMEs) which are managed individually and the production is still with human assistance. From an Islamic perspective, the chocolate and cheese fried banana business in Petarukan District is in accordance with the principles of Islamic trade law, namely pr.

**Anahtar Kelimeler: : Islamic Economics, Chocolate Cheese Fried Banana Business, Family Income**



## SYNTHESIS OF FUNCTIONALIZED ESTERS VIA SUZUKI-MIYAUURA CROSS COUPLING REACTIONS

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### Abstract

Esters are significant motifs as they are utilized in making perfumes, plastics, solvents and medicines. Arylated carbamothioates show antiseizure activity while arylated thiophene carboxylates show antibacterial activities. Suzuki-Miyaura cross-coupling reaction is a suitable and efficient method for the formation of C-C bond, as it can tolerate various types of functional groups as well as give high reaction yields. We reported the synthesis of biologically active arylated carbamothioates and arylated thiophene carboxylates by using Suzuki-Miyaura cross coupling reaction.

**Key Words: Esters, Cross-Coupling, Catalytic, Bioactive**

## PROPERTIES OF SELF-PLACING MORTAR BASED ON DIFFERENT TYPES OF SAND

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### ABSTRACT

Paste and self-placing mortar (MAP), an essential compound in making concrete, is also the most important bond in construction. It is made from valley sand, but it has a negative impact on the environment on the one hand, and on the other hand, it affects significant material costs, in addition to the fear of the lack of Alluvial sand(SA). All of these data encourage us to use river sand and dune sand, and to mix the two different types. In our research, we are studying the effect of including dune sand (SD)and river sand(SR) to replace valley sand in improving and creating the best rheological properties: The mini slump flow, V-funnel flow time and the viscosity measurement, They must to have better mechanical performance.

The results indicated that all MAP mixtures containing river sands including SA (control) had acceptable rheological properties considering. While the mixtures containing river sands(SR) showed higher mechanical properties than the control (SA).

**Keywords:** Self-compacting mortar, river sand, Dune sand, Fluidity, Compressive strength, rheology

## STUDY OF ENTREPRENEURIAL BEHAVIOR IN INDIA

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### Abstract

This research determines the pro-entrepreneurial attitudes, pro-entrepreneurial subjective norms, perceived behavioral controls, risk-taking tendencies, and competitiveness to forecast entrepreneurial intent of business students in India, a developing economy. A sample of 481 business management students from Indian universities and colleges was used to observe the influence of behavioral factors along with contextual factors on students' entrepreneurship intent. This results show that that behavioral factors, like outlook toward entrepreneurship, perceived behavioral control, and subjective norms toward entrepreneurship appreciably impact the entrepreneurial intent of management students. The study validates that intention is a significant factor in the decision to create a novel enterprise. Findings also highlight that positive image of entrepreneurs and access to finance has an influence on entrepreneurial intention. The results recommend that if management students in India are deficient in their self-belief to create new company, then training/ education should be imparted to develop their entrepreneurial skills.

**Keywords:** Entrepreneurship, Entrepreneurial intent, Pro-entrepreneurial attitudes, Subjective norms, Theory of planned behavior

## FPGA BASED SVPWM SIGNAL PATTERN GENERATOR FOR THREE PHASE VOLTAGE SOURCE INVERTER

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### **Abstract**

This paper presents the design, simulation and implementation of a system-on-programmable-chip to control a three-phase voltage source inverter. The digital controller which includes the implementation of space-vector pulse width modulation (SVPWM) switching patterns is developed using a single field programmable gate array (FPGA).

The Qsys-Builder platform is used to generate the memory-mapped digital controller. The system-on-programmable-chip, built around the 32-bit RISC soft-core processor (the Nios-II), is embedded in the EP4CE115 low cost FPGA from the Cyclone IV family of Intel-FPGA (former Altera) Corporation. The software program is developed using the Nios II software Build Tools for Eclipse and Modelsim-Altera. Tools that allow the designer to compile, simulate, run and debug a C program for the Nios-II processor.

This new technique allows embedding a digital controller in a single chip, thus reducing chip count, cost and power consumption. Other advantages of the proposed technique are: design flexibility, guarding against processor obsolescence, short time-to-market and a higher processing speed compared to classical microcontroller or DSP-based systems. The Nios® II based system as well as the VHDL custom components are developed using Quartus® II software suite tools.

Keywords – FPGA, SVPWM, NIOS-II, Qsys-Builder, Three-Phase VSI

## DR FAISAL MAKE NEW COMPUTER-BASED INTELLIGENCE DBMS APPARATUS FOR AI HRIMS INFORMATION EXAMINATION

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### ABSTRACT

Dr Faisal proposed Making a computer-based intelligence data set device includes a mix of abilities in data set administration, programming, and man-made brainpower for AI-HRIMS. Obviously frame the targets of your artificial intelligence information base device. Distinguish the necessities, for example, the kind of information it will deal with, the degree of robotization required, and the UI details. Select a reasonable DBMS in light of your undertaking necessities. Normal decisions incorporate MySQL, PostgreSQL, MongoDB, or others relying upon the idea of your information. Make a distinct data set pattern that addresses the design of your information. Recognize the tables, connections, and information types expected to effectively store and recover data. Utilize a programming language (like Python, Java, or others) to lay out network between your simulated intelligence application and the picked DBMS. Libraries like SQLAlchemy (for Python) or JDBC (for Java) can be useful. Distinguish the simulated intelligence functionalities you need to integrate, for example, AI calculations, normal language handling, or PC vision. Carry out artificial intelligence models or calculations utilizing structures like TensorFlow, PyTorch, or scikit-learn (for AI) and NLTK or spaCy (for normal language handling). Plan an easy to use interface for connecting with the information base instrument. This could be a web application, work area application, or an order line interface, contingent upon your objective clients. Assuming your man-made intelligence data set device includes computerization, execute the important scripts or cycles to deal with errands like information cleaning, preprocessing, or prescient examination. Execute safety efforts to safeguard delicate information. This incorporates encryption, client validation, and approval instruments. Direct intensive testing of your artificial intelligence information base device to distinguish and fix any bugs or issues. Perform both unit testing and framework testing to guarantee unwavering quality. Convey your artificial intelligence data set device in the ideal climate. This could be on-premises servers or a cloud stage. Lay out an upkeep intend to address updates, enhancements, and any issues that might emerge from now on. Record your code, data set diagram, and any important data for future reference. This is essential for keeping up with and scaling your simulated intelligence information base apparatus. Assemble criticism from

clients to distinguish areas of progress and carry out refreshes appropriately. Simulated intelligence data set device is a complicated errand that might require skill in data set administration, programming, and artificial intelligence. Working together with a group with different abilities can be useful, and utilizing existing structures and libraries can facilitate the improvement interaction.

**Keywords:** robotization, functionalities, unwavering, criticism appropriately.

## EVALUATION OF HEAVY METAL CONTAMINANTS IN AGADIR COASTLINE MOROCCO.

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### **Abstract**

This project comprises two key components. First, an examination of the physicochemical properties of Agadir's coastal seawater, including parameters such as pH, salinity, conductivity, temperature, and sulfates. Second, an evaluation of trace metal pollution levels, specifically focusing on Cadmium (Cd), Lead (Pb), and Mercury (Hg). The analysis employed Inductively Coupled Plasma Mass Spectroscopy (ICP-MS) to determine the concentrations of these elements. Samples were collected from the surface seawater at six distinct locations along the Agadir coastline, chosen based on the influence of human activities and industrial development in each zone.

The results indicate significant variations in metal concentrations among the sampled areas, with the highest concentration observed at sampling site 5 (Anza Beach). Furthermore, the data analysis involved exploring correlations between various parameters, leading to the categorization of study areas based on the degree of heavy metal contamination.

**Keywords:** Agadir coastal; surface seawaters; Trace metals; Physicochemical parameters; Anthropogenic

## MORPHOMETRIC PARAMETERS AND CHARACTERISTICS OF THE LOWER ORASHI RIVER

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### ABSTRACT

This study was carried out to examine the morphometric parameters and characteristics of the lower Orashi river. In watershed hydrology, the morphometric features of a river basin are vital to examine its morphological and hydrological aspects, as well as its flood potential, based on their morphometric characteristics using remotely sensed SRTM data that was analyzed with ArcGIS software. The areal, linear, and relief aspects of the Orashi River basin were examined as morphometric parameters. The lower Orashi river basin, according to the findings, has a total size of 625.61 km<sup>2</sup> and a perimeter of 307.98 km, with a 5th order river network based on Strahler categorization and a dendritic drainage pattern. Because of low drainage density, the drainage texture is very fine, the relief is low, and the slope is very low. Bifurcation ratio, circularity ratio, drainage density aspect ratio, form factor, and stream frequency values indicate that the basin is less elongated and would produce surface run-off for a longer period, while topographic changes show that the river is decreasing with depth in the land area at about the same elevation as a result of sand deposition due to lack of maintenance by dredging, which implies that the basin is morphometrically elevated and sensitive to erosion and flooding. To understand the geo-hydrological features and to plan and manage watersheds, morphometric analysis based on geographic information systems and remote sensing techniques is beneficial.

**Keywords:** Morphometric parameters, lower Orashi river, morphometric analysis

### Introduction

Itemized morphometric investigation of a basin is incredible assistance in understanding the impact of drainage morphometric networks on landforms and their qualities. Geology, relief, and climate are the essential determinants of running water biological systems working at the basin scale (Hualou *et al.*, 2008). Drainage attributes of numerous River basins and sub basins in different parts of the globe have been studied using conventional methods (Horton, 1945; Gangalakunta, 2004). The work is prompted by lack of good data for

extraction of morphometric characteristics in the upper Lower Orashi River through conventional methods and is time consuming also understanding the morphometric behaviour of the upper Lower Orashi River. It becomes imperative to conduct a morphometric analysis in upper Lower Orashi River, which should, in turn, be related to the hydrology of a basin. It is a well-known fact that researching to derive information of major basin features from conventional methods carried out through map measurements is laborious and time consuming. Apart from few measurable parameters that can be extracted from maps like elevation and relief, measurement of more complex parameters such as stream length, drainage density, mean basin elevation, and channel gradient for streams of different orders is hindered by lengthy time spent to get this information from the maps which results to error in result. For this reason, digital elevation model is used to extract morphometric characteristics parameters with higher precision and much more effectiveness. In the last few decades, a number of authors have acknowledged the greater relevance attained by geospatial techniques (Aher *et al.*, 2014; Masoud 2016; Romshoo *et al.*, 2012).

(i) Objectives of the study

The main aim of this study was to determine the morphometric parameter of the lower Orashi river using GIS application. The specific objectives include the following:

(ii) To extract the morphometric parameters from the digital elevation model using GIS technique.

(iii) To determine the type of drainage system in the study area.

(iv) Research Methodology

(v) *Description of Study area*

The lower Orashi River, which flows through Ahoada West LGA in Rivers State, Nigeria, is subjected to investigation, and the area is fast becoming one of the increasing urban centers in Nigeria's South-South geopolitical region. Communities surrounding the area are Jorkarima 1,2,3,4, Akinima, Mbiama, Ushie, Akiogbologbo, Okarki, Ikodi, Ogbogoro in Ahoada West Local Government Area, Rivers State. In addition, the area is accessible by roads and the river and lies between longitude 0060 20'0 and 0060 40'0 "East and latitude 040 50'0" and 050 10'10" North in the Niger Delta. (Figure 1), with altitude below sea level on the region 39 m further inland (Eteh *et al.*, 2019). The average rainfall and temperature of the area are 2,899mm and 26.7°C (Eteh and Okechukwu 2021). Several settlements in the area are close to hydrocarbon flow stations owned by the SPDC and NAOC. The study area which falls within the South-Western flank of the Niger Delta Region of

Nigeria has been geologically described by Reyment (2018). The vegetation along the Lower Orashi River is composed of four ecological logical zones which supports luxuriant fast-growing swamp forest.

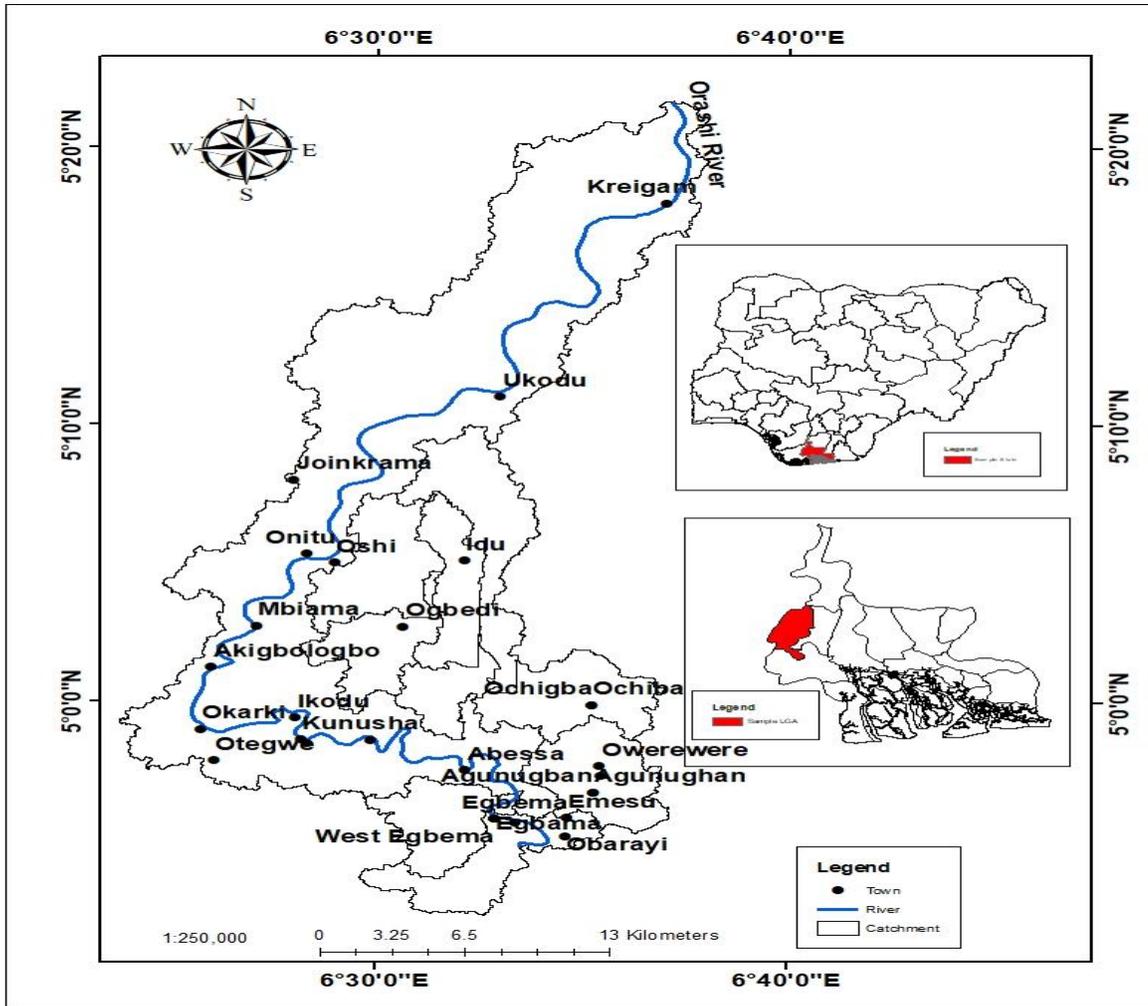


Figure 1.1: Map of the study area

The region is characterized by low lands with topography of the area is low-lying with a maximum of 36 m elevation. The areas are drained mainly by the nature of creeks example talyor and Epie and tend to slope gently into Lower Orashi River which in turn drains into the Atlantic Ocean in Figure 1.2. Due to the poor drainage of the area, it tends to flood during the rainy season.

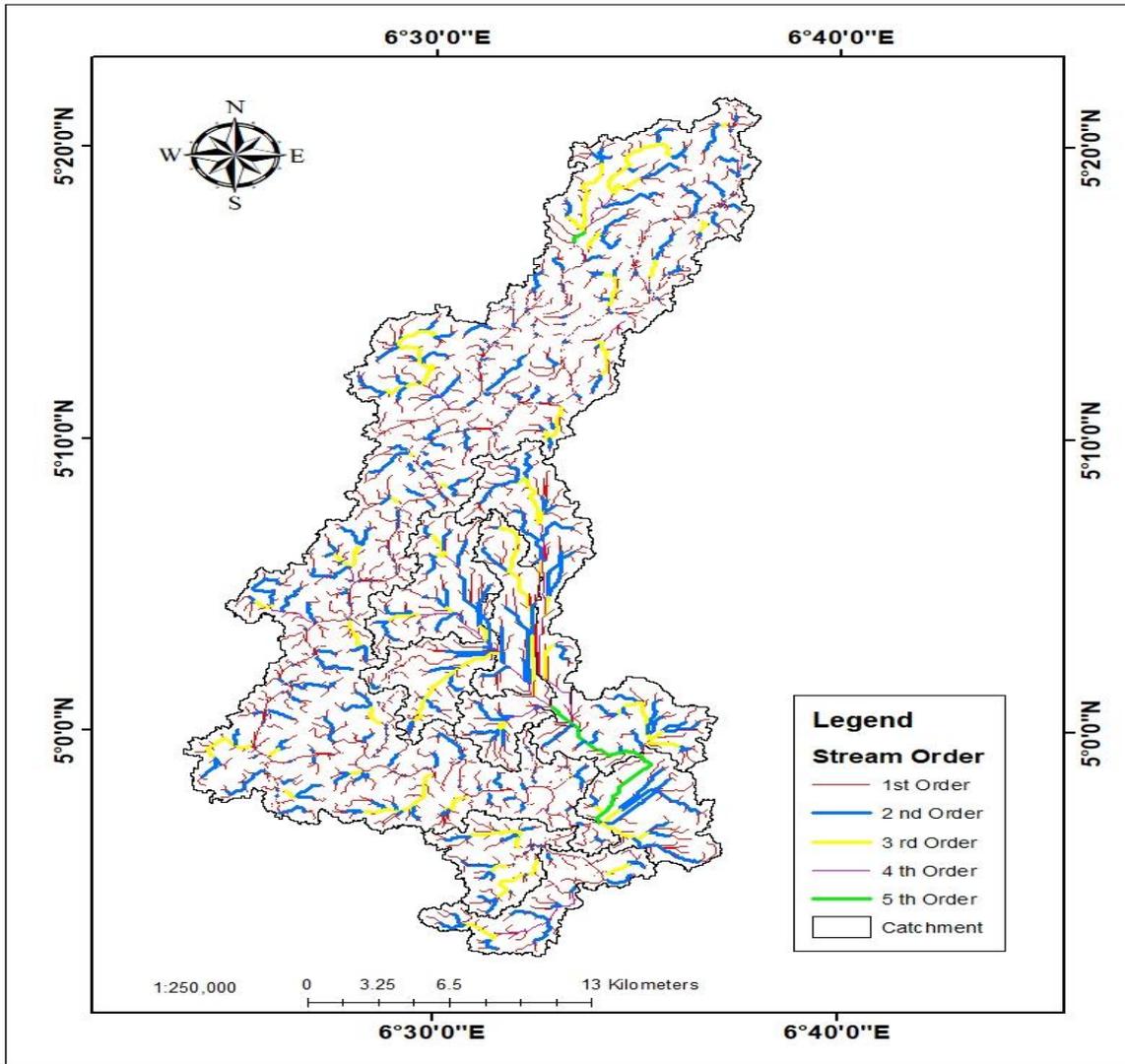


Figure 1.2: Drainage Map of the Study area showing stream order.

### *Sources of data*

Integration of remote sensing and geographic information system (GIS) technology was adopted in this study using primary data such as GPS coordinate sample location and secondary data such as Shuttle Radar Topographic Mission Digital Elevation Model (SRTM DEM) download from <https://dwtkns.com/srtm30m> of the All these datasets were brought into the same coordinate system of the Universal Transverse Mercator (UTM) projection 32N in the ArcGIS 10.6 geographical information system software. The Digital Elevation

Model image shows the distribution and spatial variation of elevation values at every geographic point/location within the area.

### ***Data Processing***

The data were analysis using Arc GIS 10.6 software (ESRI, Inc) including Arc Hdro tools was used to process the Shuttle Radar Topographic Mission (SRTM) data gotten from the open data source to generate the Digital Elevation Model. This enables the processing and delineation of drainage basin parameters which are deduced from the elevation values. Drainage basin morphometric parameters and stream order characteristics of the area were extracted from the digitized data using the Strahler's method of stream ordering Strahler 1956. Stream order determines the hierarchical position of a stream within a drainage basin in Orashi drainage basins Horton's contribution of quantitatively assessing the drainage basins was adopted for this research rather than the qualitative descriptions. This is most often carried out by defining the morphometric parameters of a basin such as basin length, basin area, stream order, stream length, mean stream length, bifurcation ratio, mean bifurcation ratio, relief ratio, drainage density, stream frequency, drainage texture, form factor, etc.

(vi)

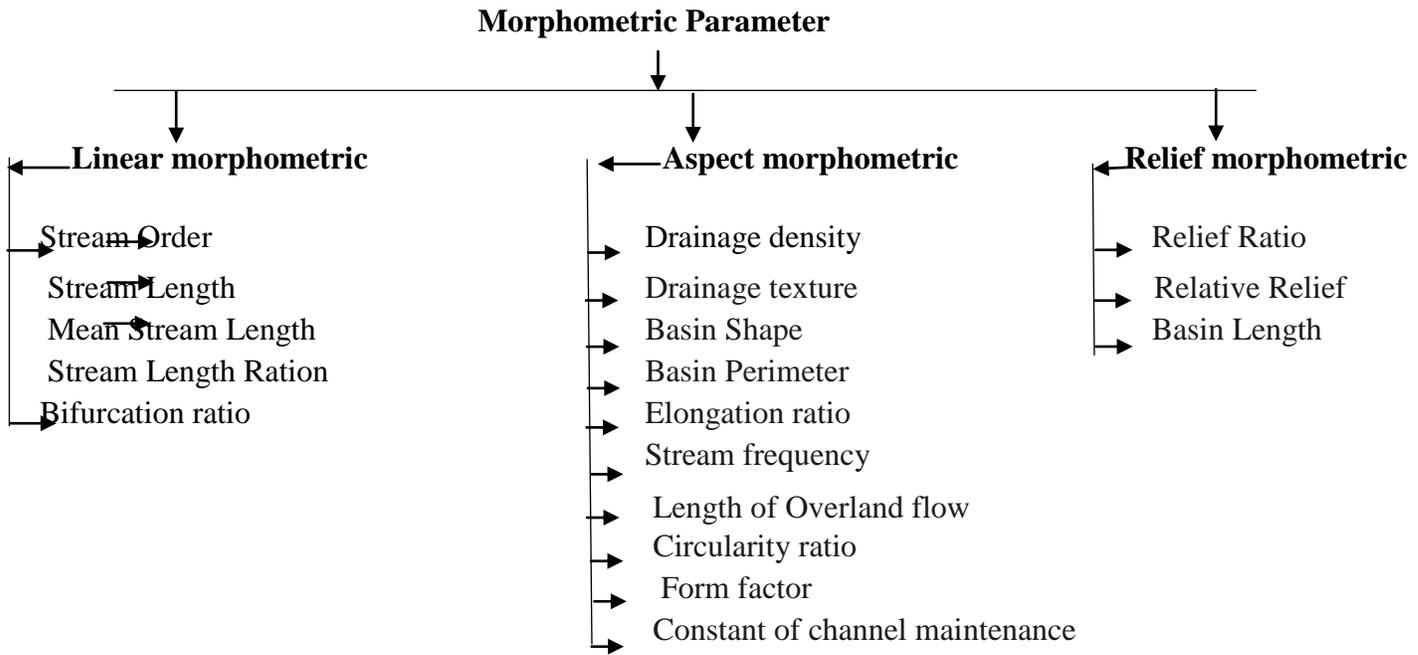


Figure 3.1.: Research design will be adopted for this study

## RESULTS AND DISCUSSION

The Evaluation Parameter for Morphometric according to Clarke (1966), is the measurement and mathematical analysis of the earth's surface configuration, including the shape and dimensions of its landforms. Measurements of the basin linear, areal, and relief aspects, as well as slope contribution, are used in the morphometric analysis.

The Linear Morphometric means that the drainage network's channel patterns follow the stream segments' morphological characteristics, and the analysis is based on the stream network open linkages such as Stream Order, Stream Number, Stream Length, Bifurcation Ratio

Stream order (U) analysis has been established as a measure of a stream's location in the hierarchy of tributaries (Leopold et al.,1964). The lowest fingertip tributaries are categorized as first stream order, according to Strahler (Strahler 1964). A second stream order is generated when two first stream orders meet; a third-stream order is formed when two second stream orders meet, and so on. The Orash River has up to 5th order tributaries, according to Table 1, with 1st, 2nd, 3rd, 4th, and 5th streams depicted in Figure 1.2 and Table 1.

Table 1. Morphometric Characteristics for catchment area (Linear)

Stream Order	Stream No (Nu)	Stream Length (Lu)	Mean Stream Length (MLu)
1st Order	5432	810.73	0.15
2nd Order	742	273.82	0.37
3rd Order	232	113.31	0.49
4th Order	87	43.37	0.50
5th Order	28	12.63	0.45
$\sum Nu =$ 6521		$\sum LU = 1253.86$	

The total number of streams evaluated in the assessment of stream number is 6,521, with dendritic drainage present in the area. Horton (1932) observed that when a basin has a large number of stream segments of progressively decreasing orders, the number of segments tends to form a geometric series, beginning with the single highest-order segment and rising in proportion to the constant ratio. When the relationship is plotted on the logarithmic and arithmetic scales on the Y-axis and X-axis, it creates a negative linear pattern on the Y-axis (Figure 1).

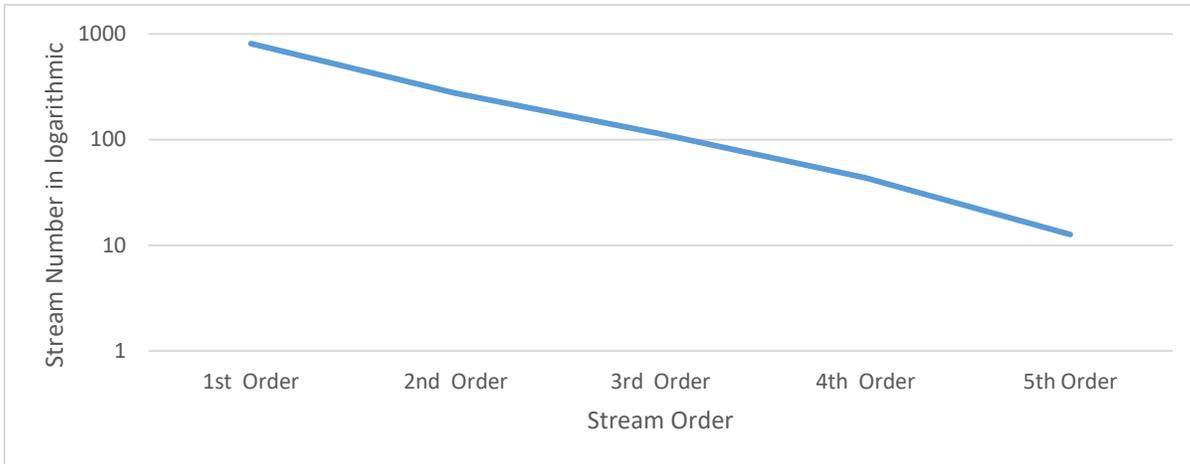


Figure 1. Stream number against Stream order.

Table 2: Morphometric Characteristics of lower Orashi River Catchment (Areal Aspects and Relief)

S/N	NAMES	VALUES
1	Area (A)	625.61 km <sup>2</sup>
2	Perimeter (P)	307.98 km
3	Stream Order	5
4	Mean Stream Length	0.19 km
5	Mean Stream Length Ratio	1.4
6	Mean Bifurcation Ratio	4.03
7	Drainage Density (Dd)	2.00 km/km <sup>2</sup>
8	Stream Frequency (Fs)	10.44
9	Drainage Texture (T)	20.84 km/km
10	Basin Length (Lb)	50.84 km
11	Circulatory Ratio (Rc)	0.08
12	Elongation	0.15
13	Form Factor (Ff)	0.24 km/km
14	Constant channel maintenance(C)	0.5 km
15	Length of overland flow (Lg)	1.0km/km
16	Basin relief (Bh)	31.00 m
17	Relative relief (R)	0.07 km
18	Relief ratio (Rr)	0.0014
19	Ruggedness number (Rn)	0.14

#### 4.1.2 Stream Length (Lu):

The length of a stream is one of the most important hydrological properties of a basin since it indicates the characteristics of surface runoff. Streams with shorter lengths are more common in locations with steeper slopes

and finer textures. Longer streams typically have smoother surfaces with lower slopes. The total length of stream segments is usually greatest in the first stream orders and gradually reduces as the stream order increases. When plotted against the corresponding order, the logarithms of the number of stream segments of different orders generally lie on a straight line (Horton, 1945). In a first-order stream, the overall length of stream segments is greatest, and it decreases as stream order increases. The 1st and 2nd order streams in the study region are longer than the 3rd, 4th, and 5th order streams, respectively (Table 1). The stream length evaluation in Table 1 reveals that stream length reduced as stream order increased.

$$R_b = N_u / N_{u+1}$$

Eq. 3 (Schumm ,1956)

$N_u$  = Total no. of stream ,  $u$  is the segments of order

$N_{u+1}$  = No. of segments of the next higher order

$$R_b = 5432 / 742 = 7.32$$

$$R_b = 742 / 232 = 3.20$$

$$R_b = 232 / 87 = 2.67$$

$$R_b = 82 / 28 = 2.93$$

$$\text{Mean Bifurcation ratio} = 16.12 / 4 = 4.03$$

Table 2 shows the Areal morphometric parameters and characteristics of lower Orashi River Catchment (Areal Aspects and Relief). The length of a basin outline, which can be plotted and approximated using GIS software, is known as its perimeter. The basin area and characteristics were determined to be 625.61 km<sup>2</sup> and 307.98 km, respectively.

A low drainage density ( $D_d$ ) implies porous subsurface strata and is a defining property of coarse drainage, which often exhibits values less than 5.0. (Strahler ,1964) observed that when basin relief is low, low drainage density is preferred, and vice versa. The lower Orashi River basin has a  $D_d$  of 2.00 km/km<sup>2</sup>, indicating that the studied region has a porous or permeable underlying material with moderate drainage and low relief.

The result shows the drainage density ( $T_x$ ) in the studied area as 20.84 km/km<sup>2</sup>, which indicates very fine texture. Climate, lithology, vegetation, rainfall, soil type etc. all influence drainage texture, which is a measure of relative channel spacing in a fluvial-dissected landscape (Horton ,1932).

The frequency of streams ( $F_s$ ) in the watershed has a positive connection with drainage density, meaning that as drainage density rises, stream population rises as well. Climate, vegetation covering, rock, run off intensity,

rainfall, infiltration topography and soil types, and slope all influence drainage frequency and density. The  $F_s$  of the basin is 10.44 (Table 2) indicate surface runoff leading to flooding.

The form factor ( $R_f$ ) is always smaller than 0.754. (This number indicates a completely circular watershed.) A lower form factor results in a longer basin, while a higher value results in a circular basin. Larger peak flows with a shorter duration occur in basin with high form factors, while in extended watersheds with low form factors, flatter peak flows with a longer duration occur. The  $R_f$  value for the study region is 0.24, which is more in line with the basin circular form than with its elongated shape.

The ratio of the diameter of a circle of the same size as the drainage basin to the greatest length of the basin is known as the elongation ratio ( $R_e$ ) (Schumm 1956). The elongation ratio is found in a wide range of climatic and geologic types, with values ranging from 0.6 to 1.0. (0.9-0.10), oval (0.8-0.9), less elongated (0.7-0.8), elongated (0.5-0.7), and more elongated (0.5-0.7). (0.5-0.7). A circular basin discharges runoff more efficiently than an elongated basin (Smith ,1950). The value varies from 0.6 to 0.8 for high relief areas, and values near to 1.0 indicate areas with very little relief and a circular form (Strahler ,1964). Table 2 shows that the research area  $R_e$  is 0.15, indicate very low sloped, little relief and Circular shape.

The Circulatory Ratio ( $R_c$ ) is the relationship between the area of a basin and the area of a circle having the same diameter as the basin perimeter (Miller ,1953). The  $R_c$  value of the basin is 0.08 (Table 2), indicating an elongated shape, low runoff flow, and high subsoil permeability.

In this study, the length of overland flow ( $L_g$ ) is 1.00 km (Table 2), indicating decreased distance runoff in the study area. Infiltration (exfiltration) and percolation through the soil, both of which fluctuate in time and area, have a substantial impact on  $L_g$  (Schmid ,1997).The high  $L_g$  value suggests that precipitation had to travel a considerable distance before concentrating in stream channels (Chitra et al., 2011).

The longest dimension of a basin to its main drainage channel is called basin length ( $L_b$ ). When compared to a more compact basin, the greater the length of the basin, the lesser the likelihood of flooding.  $L_b$  is the longest length in the basin, measuring 50.84 kilometers from the catchment to the point of confluence.

The constant channel maintenance ( $C$ ) indicated as 0.5 km long basin channel illustrates that structural factors have negligible impact on infiltration rates, surface runoff, less discharges, and watersheds.

Relief morphometric parameters deals with the characteristics like as relief, relief ratio, ruggedness number, and so on. Relief Aspects is a subfield of geology.

Basin relief (Bh) or relief of a basin is determined by subtracting the height of the basin mouth from the elevation of the basin's highest point, and then multiplying the result by 100. Strahler (1957) in order to understand the geomorphic qualities of the basin, as well as the development of landforms and drainage systems, the flow of surface and sub-surface water, the permeability of the terrain, and the erosional properties of the terrain, it is necessary to first understand the basin geomorphic qualities (Strahler, 1964) In the research, the value of Bh is assessed to be 31.00 meter (Table 2). Because of this, the low relief value of the basin indicates that infiltration is strong and runoff is little.

Relief ratio (Rh) indicates a ratio with no dimensions. Rh ratios above a certain threshold indicate a steep slope and high relief, and vice versa. In steeper basins, run-off is often faster, resulting in more peaked basin discharges and increased erosive power (Palaka and Sankar, 2014). The Rh values is 0.0014 (Table 2), suggesting very low relief and a very low slope, implying that it is less susceptible to sudden erosion.

As a consequence of relative relief being an essential morphometric measure employed in the overall evaluation of the morphological features of terrain in the research area, the result is 0.007 (Table 2) in the study region indicating low runoff

In terms of the ruggedness number (Rn), which results when the maximum basin relief (Bh) and drainage density (Dd) of a unit are multiplied together. It is a measure of the irregularity of the surface. Whenever the size of both variables and the slope are both big, the roughness number reaches an exceptionally high level of value (Strahler, 1957). In the current basin, the roughness number is 0.14 (Table 2), indicating that it has a very low slope and is less prone to severe erosion.

### **Conclusion and Recommendations**

The property of drainage basins contains the size, shape, geology are vital indices for predicting environmental hazards especially Flood and erosion. These indices are crucial for predicting environmental threats, particularly erosion and flooding. They reveal the rate at which rain reaches a major river, as well as the frequency and severity of flooding. This research demonstrates how drainage basin configuration has a major impact on the occurrence of environmental hazards in a given area. The narrow outlets of Orashi River elongated basins restrict runoff velocity and cause long-lasting flood peaks, yet their near circular form promotes rapid runoff circulation and the drainage system is dendric type with higher bifurcation ratio and low relief in lower Orashi River possess a great threat for erosion and flooding due to the topography has a poor drainage system resulting from low altitude in river and land area as a result of sand deposited due to a lack of maintenance in low Orash River

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## VALIDATION OF ALGERIAN EARTHQUAKE REGULATIONS IN ACCORDANCE WITH MULTIPLE INTERNATIONAL CODES FOR SEISMIC BASE ISOLATION TECHNIQUES IN BUILDINGS.

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### **Abstract:**

Base isolation is a cutting-edge seismic design tool that shields buildings from powerful winds and earthquakes. By moving the fundamental period of the structure away from the dominant periods of ground motions, this technique aims to decouple the superstructure from the catastrophic effects of strong ground motions. As a result, chapters on the base isolation technique have been added to several global codes. This technique has to be incorporated into the Algerian earthquake code after further information on building codes from Japan, China, IBC2009, Italy, Taiwan, and our country's cyclic seismic events has been gathered. In accordance with the Algerian seismic regulation, the objectives of this paper propose a new design approach for LRB type isolators (Lead Rubber Bearing). This approach is based on the equivalent static method and uses an iterative process to determine the displacement design of the isolator based on the mechanical and geometric properties of the building. In order to achieve this, a nonlinear dynamic analysis was carried out for the different international building codes, excited by various types of accelerograms. The validation of this novel approach was conducted through numerical modeling, involving a comparative analysis with multiple global regulations. The results demonstrated highly satisfactory design displacement and shear force base alignment with the various regulations.

**Keywords:** Base isolation, Lead Rubber Bearing, Algerian seismic code, Hysteresis behaviour

**BIOLOGICAL ACTIVITIES OF THE SPECIES *SUAEDA MONODIANA* MAÏRE**

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**Abstract:**

The efficient cutaneous wound healing process constitutes a critical challenge for clinical and fundamental research. Indeed, agents that prevent bacterial infections, the excessive production of free radicals, and inflammation may enhance wound healing. In this context, the biological activities of the methanolic extract prepared from the species *Suaeda monodiana* Maire were assessed. The antioxidant activity was tested by five different methods, and the sun protection factor was measured. The hemostatic activity was evaluated by determining plasma re-calcification time, and the anti-inflammatory effect was carried out by heat-inducing hemolysis and albumin denaturation tests. The antimicrobial activity was evaluated by the agar disk diffusion assay against seven strains. As a result, the tested extract has a rich chemical composition and possesses interesting photoprotective (SPF at  $46.49 \pm 0.05$ ) and antioxidant activities. This extract showed the ability to inhibit protein denaturation (IC<sub>50</sub> at  $1.22 \pm 0.8$  mg/mL) and to protect the erythrocytes membrane (IC<sub>50</sub> at  $2.39 \pm 0.3$  mg/mL). Moreover, the Methanol extract significantly shortens the clotting time and inhibits the growth of all the tested strains with minimum inhibitory concentrations ranging between 31.25 to 250 µg/mL. Furthermore, the species *S. monodiana* could be used in pharmaceutical and cosmetics formulations to treat many skin affections due to its strong hemostatic, photoprotective, antimicrobial, anti-inflammatory and antioxidant properties.

**Keywords:** Anti-inflammatory, Antimicrobial, Antioxidant, Hemostatic, Photoprotective, *Suaeda monodiana*

## BIOSECURITY MEASURES IN THE CONTROL OF HELMINTH INFECTIONS OF SHEEP IN PASTURE

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Based on research in the world diseases of parasitic etiology dominate in sheep in terms of prevalence and incidence, accompanied by significant morbidity and moderate mortality. The grazing diet enables sheep to have constant contact with transitional hosts (oribatids, molluscs, etc.) and eggs and larval forms of parasites, so that there is no sheep that is not infected with at least one parasite species. Biosecurity, welfare, good production practice and risk analysis at critical control points in pastures are very important elements for intensive sheep production. The population pressure on the pasture (number of animals per unit area) and the method of grazing - whether it is forced or stationary also affect the load on the pasture and the degree of its infection. That's why one of the solutions that is successfully used in the form of grazing - it can be persecution, mixed, and also limit the number of individuals in the pasture. Parasitological control of pastures is carried out by examining grass and soil samples from pastures that are harvested in the period March - September. The material for the review is taken based on the indicators of the bioclimatic conditions prevailing on the investigated pasture. The cultivation of pastures directly depends on the geological and pedological composition of the soil, hydrological conditions (standing and running water) and microclimatic conditions. The main goal of cultivation is to obtain a pasture that contains a minimum of infectious agents in the soil, which is maximally free from vectors and transitional hosts of certain diseases, infectious forms of parasites and other infectious agents that can be found on the grass. Parasitological examinations and targeted therapy are the basic measure of successful suppression of parasitic infections in pastures

Anahtar Kelimeler: sheep, helminths, pasture, biosecurity measure

## NEUROPEPTIDES AND THE MICROBIOTA-GUT-BRAIN AXIS IN AUTISM

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**Background** The term “gut-brain axis” refers to the bidirectional communication between the gut and the brain. Neuropeptides comprise a class of evolutionarily well conserved molecules that, by definition, operate as transmitters in the enteric, peripheral and central nervous systems

**Objective** The gut microbiota also influences the profile of metabolites (including peptides) present in the brain. To arrive at these observations, the authors set out to study the role of Imuniplant in the management of disfunctional responses and whether Neuropolen can be a potential treatment for autism.

**Materials and methods** Neuropeptides such as substance P, calcitonin gene-related peptide and neuropeptide Y (NPY), vasoactive intestinal polypeptide, somatostatin and corticotropin-releasing factor are also likely to play a role in the bidirectional gut-brain communication. These effects are not only relevant to neurodegeneration and repair but may also be involved in the manifestation of psychiatric disorders, like autism.

**Results** Thus, the gut microbiota communicate not only with gastrointestinal epithelial, immune and nerve cells in their immediate neighbourhood but also generate and release molecules that can signal to distant organs. Neuropeptides are important mediators both within the nervous system and between neurons and other cell types, they operate often via the same receptors and cellular transduction systems.

**Conclusion** Thus, neurons as well as endocrine, immune, interstitial, muscle, epithelial and microbial cells can respond to these signalling molecules by expressing the appropriate peptide receptors. Taken all findings together, it would appear, therefore, that the roles of the symbiotic gut microbiota extend to brain function.

**Keywords:** neuropeptides, microbiota-gut-brain axis, Neuropolen, autism

## THE IMPORTANCE OF LAMINITIS IN CATTLE PATHOLOGY

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Laminitis (pododermatitis aseptica diffusa) is a disorder of the microcirculation of the corium, where there is irregular growth of the cornea as well as its poor quality. Laminitis is based on disturbances in the microcirculation of the vascular network of the corium and in most cases appears in several places at the same time. The consequences and complications of this disease can vary among affected individuals. Laminitis appears in three forms: acute lameness, subacute lameness and chronic lameness. Acute lameness rarely occurs, has clearly expressed symptoms and is a problem of the affected individual. It is manifested by the sudden onset of high degree of lameness with severe pain, the animal moves with difficulty and mostly lies down. There are no visible changes on the hooves, there is swelling of the coronary (crown) edge, strong pulsation of blood vessels in the lower parts of the legs with increased temper. When touching a sore spot, the animal reacts defensively. Subacute lameness often appears and is economically very significant. The external appearance of the cornea is unchanged, while a change in the color of the white line is clearly visible during the functional processing of the paws. (linea alba) from yellowish to reddish and presents a clear indication of laminitis accompanied by a brittle, brittle and porous plantar horn. Animals walk stiffly, rarely show pronounced lameness, and generally lie down with no obvious signs of disease. Chronic lameness represents a very significant disease of the hooves in economic sense, since it is a problem of the whole herd and appears frequently. It is characterized by a marked change in the outer wall of the hooves in the form of deep furrows between the horn rings, and an expansion of the hooves in the area of the white line (linea alba). Chronic lameness is an introduction to some complex diseases of the hooves, such as: Rusterholtz's ulcer, dermatitis interdigitalis, dermatitis digitalis and various disorders of leg posture in cattle. Treatment of the mentioned diseases significantly increases production inputs.

**Anahtar Kelimeler:** hoof diseases, laminitis, hoof trimming

## THE GUT-BRAIN-SKIN AXIS IN ACNE: IMPACT OF POLENODERM

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**Background** It is increasingly believed that the interaction between skin microbes and host immunity plays an important role in acne. Acne also has close connections with the gastrointestinal tract, and many argue that the gut microbiota could be involved in the pathogenic process of acne. The emotions of stress, have been hypothesized to aggravate acne by altering the gut microbiota. The presence of a gut-brain-skin axis that connects gut microbes, oral probiotics, and diet, currently an area of intense scrutiny, to acne severity. This study concentrates on the skin and gut microbes in acne, the role that the gut-brain-skin axis plays in the immunobiology of acne, and newly emerging microbiome-based therapies that can be applied to treat acne.

**Objective** The purpose of this study was to compare the diversity of the skin microbiota in acne patients before and after taking Polenoderm.

**Materials and methods** A longitudinal cohort study was performed on 20 participants with moderate to severe facial acne with no recent use of oral and topical antibiotics/retinoids.

**Results** Hence, it is crucial to understand Polenoderm impact on the acne skin microbiota which is thought to be perturbed, our study provides insight into the skin microbiota in acne and how it is modulated by Polenoderm and diet.

**Conclusion** Acne also has close connections with the gastrointestinal tract, and many argue that the gut microbiota could be involved in the pathogenic process of acne. As understanding of the microbiome in healthy skin and the pathophysiology of acne continues to develop, new therapeutic targets are arising.

**Keywords:** acne, gut-brain-skin axis microbiota, Polenoderm, diet

## CHEMICAL COMPOSITION OF CRUDE EXTRACTS PREPARED FROM THE SPECIES *MOLTKIA CILIATA*

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### Abstract

Plants have been known since ancient times as sources of traditional treatments for humans. Indeed, the power of these species lies in the phytochemical components that cause pharmacological effects on the human body. This value is due to the presence of a wide variety of secondary metabolites, including flavonoids, alkaloids, glycosides, tannins, volatile oils and terpenoids. In this context, we are interested in the phytochemical study of the species *Moltkia Ciliata* which belongs to the Lithospermeae tribe and the Boraginaceae family. This species is a small, branched, stiff and thorny shrub with blue-purple flowers, distributed in the Saharo-sindienn from North Africa to Iran. *Moltkia Ciliata* is a food source for some desert animals, especially camels. It has also various traditional uses, including treating abdominal disorders, wounds, and scorpion stings. The present work describes the phytochemical screening of crude extracts (petroleum ether, ethyl acetate and *n*-butanol) prepared from the species *Moltkia Ciliata*, using different protocols and reagents. The results of phytochemical screening indicated the presence of several compounds, including flavonoids, terpenoids, saponins, tannins, quinones, alkaloids, and coumarins. Moreover, TLC chromatography of the obtained extracts showed the appearance of several spots of natural products.

**Keywords:** *Moltkia Ciliata*, Extraction, TLC, Phytochemical screening, terpenoids.

**CHEMICAL STUDY OF THE SPECIES *HEDYSARUM PALLIDUM***

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**Abstract**

*Hedysarum* is a genus of the botanical family Fabaceae, comprised about 200 species of annual or perennial plants. This genus is distributed mainly in Asia, Europe, North Africa and North America. *Hedysarum pallidum* is an endemic plant to North Africa, it plays an essential role in fodder production and grazing, as well as in beekeeping and protection against soil erosion. It is a perennial, bushy, long-stemmed plant, with large pink or white flowers and hispid calyxes. The present work focused on the extraction and chemical estimation of crude extracts (petroleum ether, ethyl acetate and *n*-butanol) obtained from the species *H. pallidum* using different methods. The results of the phytochemical screening revealed the presence of numerous secondary metabolites, namely flavonoids, tannins, saponin, quinones, coumarins and alkaloids. In addition, TLC chromatography of the crude extracts showed the richness of this plant in chemical compounds, which motivates us to investigate their phytochemical study.

**Keywords:** *Hedysarum pallidum*, Extraction, TLC, Phytochemical screening, flavonoids.

**PHYTOCHEMICAL INVESTIGATION OF THE SPECIES *HALOGETON SATIVUS***Abdelbasset Tamersit<sup>1</sup>,Soumia Mouffouk<sup>1</sup>,Chaima Mouffouk<sup>1,2</sup>,Hamada Haba<sup>1</sup>

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**Abstract**

The genus *Halogeton* belongs to the Salsoleae tribe of the family Chenopodiaceae, comprises about 120 species<sup>1</sup>. This genus is characterized by widespread herbaceous or shrubby plants, especially in brackish soils of temperate and subtropical regions of Europe, Asia, Africa and North America. *Halogeton sativus* is a small plant species, highly-branched halophytic shrub, distributed in saline lake shores, meadows with saline soils. In Algeria *H. sativus* distributed in the pre-Saharan regions namely Beni-ounif, Biskra, Laghouat and Msila.<sup>2</sup> Since the chemical constituents in medicinal plants usually explain their therapeutic effects. The present study is devoted to the extraction and the chemical estimation of crude extracts (petroleum ether, ethyl acetate and *n*-butanol) prepared from the species *H. Sativus*. The results of the phytochemical screening revealed the presence of various bioactive compounds including flavonoids, terpenoids, saponins, tannins, quinones, anthraquinones and coumarins. TLC analysis of crude extracts was also performed and clearly showed the presence of several spots with different colors.

**Keywords:** Medicinal plants, *Halogeton sativus*, Extraction, Phytochemical screening,.

## ENVIRONMENTAL APPLICATIONS OF LAYERED DOUBLE HYDROXIDES: COPRECIPITATION SYNTHESIS FOR EFFECTIVE ADSORPTION OF WATER POLLUTANTS

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The synthesis of lamellar double hydroxides (LDHs) through the coprecipitation method has been extensively studied for their application in environmental remediation, specifically for the adsorption of water pollutants. LDHs possess a layered structure consisting of positively charged metal hydroxide layers with intercalated anions. These materials exhibit a high surface area, adjustable surface charge, and the capability to selectively adsorb various contaminants from water sources. The coprecipitation method allows for the incorporation of different metal cations and anions during synthesis, enabling the design of LDHs with specific properties suitable for pollutant adsorption.

By carefully adjusting the reaction parameters such as pH, temperature, and reaction time during coprecipitation, the morphology, surface area, and interlayer spacing of LDHs can be optimized to enhance their adsorption performance. Furthermore, post-synthesis modifications like ion exchange and intercalation of functional molecules can further improve the adsorption capacity and selectivity of LDHs.

To evaluate the adsorption performance and understand the interaction mechanisms between LDHs and pollutants, characterization techniques such as X-ray diffraction (XRD), scanning electron microscopy (SEM), Fourier-transform infrared spectroscopy (FTIR), These techniques help assess the adsorption capacity and provide insights into the interaction processes.

The successful application of LDHs in environmental remediation is attributed to their high adsorption capacity, stability, and potential for scalable production. The coprecipitation synthesis of LDHs presents a promising approach for the development of efficient adsorbents for the removal of water pollutants.

**Keywords:** Layered Double Hydroxides, Adsorption, synthesis, coprecipitation, Pollutants.

## AN ALTERNATIVE SUSTAINABLE SOURCE FOR BIOPLASTIC MADE FROM SEAWEED POLYSACCHARIDES AND ITS APPLICATIONS

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**Abstract:** In modern times, seaweeds have become widely involved in several biotechnological applications due to the variety of their constituent bioactive compounds. The consumption of seaweeds dates to ancient times; however, we explain the mechanisms of action and the potential of seaweed-derived bioactive compounds, which has led to their involvement in food, cosmetic, pharmaceutical, and nutraceutical industries. Diverse studies demonstrate that seaweed polysaccharides (e.g., alginates and carrageenans) not only provide health benefits but also contribute to the production of biopolymeric film and biodegradable packaging. The dispersion of plastics and microplastics in the oceans provokes serious environmental issues that influence ecosystems and aquatic organisms. Thus, the sustainable use of seaweed-derived biopolymers is crucial to replace plasticizers with biodegradable materials, and thus preserve the environment. The present review aims to provide an overview of the potential of seaweeds in the production of bioplastics which might be involved in food or pharmaceutical packaging.

**Keywords:** seaweed, bioactive compounds, bioplastic, Sustainability, Biodegradable packaging.

## ELECTRICITY GENERATION MODELLING THROUGH LIVING PLANTS

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### **Abstract**

To protect the Earth and our future, renewable energy sources have been thoroughly studied. Transitioning to renewable energy sources for power generation offers advantageous management solutions from an environmental perspective. Wind energy, solar energy, ocean energy, and ambient power collecting, including piezoelectric, are some widely used renewable energy sources. One technique for obtaining electrical energy from living plants is called "plant-based energy generation." Utilizing living plants to generate energy is economical, ecologically benign, and, most significantly, has a plentiful supply locally. Still, alive plants can produce energy through chemical interaction with two distinct metals. Given that it provides a green method of harvesting energy from readily available sources, it has significant potential for usage in sustainable energy generation. Its mechanism of producing energy is attributed to the electrochemistry process, according to earlier research. This work presents a model and illustrates the ions flow behaviour in the electrodes-plant system. The Zn-Cu electrodes of the energy harvesting system were submerged in the aloe vera leaf for this reason, and aloe vera was utilized as the vegetation. It was proposed that when an external load is applied between the two electrodes during the energy harvesting process, zinc atom oxidations take place. Zinc electrode mass loss throughout the 72-hour harvesting operation was 3.2 mg, as opposed to the electrochemistry forecast of 0.0853 mg with a 1M $\Omega$  load. In contrast to the forecast of 4.0452 mg, the measured mass loss of zinc increased to 6.7 mg when a smaller load resistor (1k $\Omega$ ) was used. This indicates that efficiency increases with decreasing load resistances 60.4% for 1k $\Omega$  and 2.67% for 1M $\Omega$  as opposed to the latter. This demonstrates how a load attached to the system affects the electrochemistry process. This discovery enhances our comprehension of the system's energy-generating mechanism.

**Keywords:** Renewable energy, Power generation, Piezoelectric, Electrochemistry, Living plants.

## FINANSAL İNOVASYON VE DİJİTAL ÇAĞDA FINANSAL ERIŞİMİ ARTIRMADA TEKNOLOJİNİN ROLÜ

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### Özet

Bu dergi, finansal inovasyonun etkisini ve dijital çağda finansal erişimi artırmada en son teknolojinin rolünü araştırıyor. Bilgi ve iletişim teknolojisinin hızla gelişmesiyle birlikte finans sektörü, hizmetler ve erişilebilirlik açısından önemli bir dönüşüm yaşıyor. Bu makale, finansal teknoloji (fintech), uygulama tabanlı finansal hizmetler ve dijital finansal platformlar dahil olmak üzere çeşitli finansal yenilikleri ve bunların, insanları mali durumlarını yönetme konusunda güçlendirme üzerindeki etkilerini araştırıyor. Bu dergi, analitik yaklaşımları ve ampirik çalışmaları birleştirerek, finansal inovasyonun, özellikle daha önce ulaşılması zor olan topluluklarda finansal katılımı artırmada nasıl bir katalizör olabileceğine dair derinlemesine bir anlayış sağlamayı amaçlamaktadır. Bu değişimden kaynaklanabilecek politika sonuçları ve zorluklar da, bu dijital çağda sürdürülebilir finansal katılımın sağlanmasında finansal inovasyon dinamiklerine ilişkin bütünsel bir bakış sağlamak amacıyla ayrıntılı olarak anlatılmaktadır.

**Anahtar Kelimeler:** Finansal İnovasyon, Fintech, Finansal Erişim, Dijital Çağ.

## SHOPEE PAYLATER LAW IN THE CONTEXT OF SHARIA ECONOMICS

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### Abstract

One of the e-commerce platforms that is very popular and used by various groups, including teenagers and adults, is the Shopee application which has an online loan feature. The Shopee PayLater feature is a form of lending money through electronic methods, which is adapted to the demands of modern times, to meet the needs of its users, Shopee PayLater is an instant loan solution that offers customers buy now, pay later. The Shopee PayLater payment and billing system is similar to credit card payments. After completing a transaction with ShopeePayLater, the user must pay the bill according to the predetermined amount and due date. The purpose of this research is to find out how the law of Shopee PayLater in Islamic economics. This research uses a qualitative descriptive method where the data obtained comes from literature studies in the form of journals, books, and Al-Quran. The results of this study consider the use of Shopee PayLater to be invalid because there are additional fees charged for installments and transactions, as well as fines if payments are late. Therefore, Shopee PayLater transactions are allowed in Islam if they comply with the principles of Islamic sharia.

**Keywords:** *Shopee PayLater, Sharia Economic Law*

## MANAGEMENT STRATEGY FOR THE DEVELOPMENT OF SHARIA PENSION FUNDS IN INDONESIA

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### ABSTRACT

Islamic pension funds are Islamic financial institutions that have characteristics to be used in order to maintain the continuity of one's income when one is no longer productively working. The purpose of this research is to find out how the role of Islamic pension funds in improving Islamic finance. This type of research is qualitative research by describing data in the form of words, schemes, images and series of sentences. The research method used is library research, which is a method of collecting data by understanding and studying theories from various literatures related to the research. Data collection uses the method of finding sources and constructing them from various sources, such as books, journals, research, law books, fiqh siyasah books, maqasid sharia books, Islamic law encyclopedias, Islamic law journals, language dictionaries and legal dictionaries, and other literature sources. The result of this research is that the increase in the number of participants in sharia pension funds occurs because Indonesian people are interested in using sharia financial products. The existence of an institution that stands in helping people like DPLK Muamalat in preparing their retirement from an early age is very easy for the people of Indonesia.

**Keywords:** Sharia Pension Fund, Islamic financial institutions, DPLK Muamalat

## THE EFFECT OF COMPANY IMAGE, RELATIONSHIP MARKETING, AND LOCATION ON PURCHASING DECISIONS AT W.CLOTHING LIMPUNG, BATANG

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### Özet

The current global era makes business competition even more intense. Each company uses its own way to achieve its goals. In meeting the needs of its consumers, the company will analyze what influences customers in making decisions to buy company products or services. In the study, researchers chose three factors that influence purchasing decisions, including company image, relationship marketing, and location. in W.Clothing This research uses quantitative methods with a quantitative-associative approach. The research data used is primary data obtained from distributing Google Forms. The research sample was determined using the Chocran formula and obtained a sample of 97 respondents. Data testing uses validity and reliability tests, VIF tests, hypothesis testing, multiple linear regression analysis, and determination coefficient tests. The results showed that company image has a significant effect on purchasing decisions, relationship marketing has a significant effect on purchasing decisions, location has a significant effect on purchasing decisions. Meanwhile, simultaneously, company image, relationship marketing, and location have a significant effect on purchasing decisions in W.Clothing Limpung, Batang.

**Anahtar Kelimeler:** Company Image, Relationship Marketing, Location, Purchase Decision, W.Clothing

## A BIBLIOMETRIC ANALYSIS: EVALUATION OF THE DISTRIBUTION OF SOCIAL ASSISTANCE FUNDS IN ALLEVITING POVERTY IN PEKALONGAN DISTRICT, INDONESIA

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### **Abstract**

This research aims to describe and explain how poverty occurs in Pekalongan Regency, and social assistance is an alternative way to reduce poverty. This research is library research with a qualitative approach. The data sources used in this research come from various literature journal articles that are relevant to the research topic. The data analysis method used is content analysis of the literature sources used in the research. Results of this research Indonesia is a country with abundant natural resources, with abundant natural resources it should be able to be used as a potential for the prosperity of its people. However, in reality, many people are still unable to get out of the shackles of poverty and are still below poverty standards. So, poverty becomes a complicated problem every year. According to the Central Statistics Agency, the percentage of poor people in Pekalongan Regency is 9.67%, this can be categorized as poverty in Pekalongan Regency is still relatively high. Various efforts and endeavors have been made by the government to be able to overcome the problem of poverty, such as programs to reduce poverty levels including the Family Hope Program (PKH), namely conditional assistance given to beneficiary families, the Smart Indonesia Card (KIP) for school children so they can continue higher education, then Non-Cash Food Assistance (BPTN), and the Healthy Indonesia Card (KIS). Social assistance is a policy implemented by the government as an effort to alleviate poverty.

**Keywords:** Evaluation, Poverty, Social, Assistance.

## EFFECT OF INFLATION ON THE ECONOMY IN INDONESIA

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### Abstract

The aim of this research is to describe the EFFECT OF INFLATION ON THE ECONOMY IN INDONESIA from a literature review perspective. The writing method uses a literature study approach sourced from authoritative journals and books regarding THE EFFECT OF INFLATION ON THE ECONOMY IN INDONESIA. The research results conclude that in this case, inflation is the tendency for prices to increase generally and continuously. An increase in just one or two goods is not called inflation, unless the increase is widespread and affects most of the prices of other goods. Inflation is a symptom of increasing commodity prices caused by several factors which ultimately trigger increases in prices of other goods. If inflation experiences fluctuations, economic activity will tend to adjust to the conditions that occur. As is the case in developing countries in general, the inflation phenomenon in Indonesia is still one of various macroeconomic "diseases" that is troubling the government, especially the public. Indeed, towards the end of the New Order government (before the monetary crisis) the annual inflation rate could be reduced to single digits, but in general it still contained vulnerabilities when seen from how large a percentage of poor groups suffered from inflation. Moreover, after the monetary crisis continued, which was then followed by the economic crisis, which was one of the causes of the fall of the New Order government, the inflation rate tended to increase rapidly (reaching more than 75% in 1998), and was exacerbated by the increasing percentage of social groups. poor.

**Keywords:** EFFECT, INFLATION, ECONOMY, INDONESIA

## ISLAM'S CONTRIBUTION TO THE DEVELOPMENT OF 'AQLIYYAH SCIENCE

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### Abstract

The aim of this research is to describe the contribution of Islam to the development of 'Aqliyyah science. This research is library research with a qualitative approach. The data sources used in this research come from various literature journal articles that are relevant to the research topic. The data analysis method used is content analysis of the literature sources used in the research. One important aspect of the glory of Islam is the tendency, activity and high intellectual success in all fields carried out by Muslim scientists. Continuous attention and development has given birth to a number of intellectual figures whose scientific capacities and benefits are universally recognized. The sciences discovered by Muslim scholars include medical science. This science began to gain attention when Caliph Al-Mansur was sick so he summoned Khalid Ibnu Barmak to the palace for treatment. Apart from medical science, mathematics is a very important science because this science cannot be separated from the big role of Islamic scientists, such as Yahya Al-Barmaki and Uma bin Al-Farukhan who were invited directly by Sultan Al-Ma'mun to work at the palace but were not invited there. in the fields of Science, Technology and Social Affairs. From the explanation above, it can be said that the naqliyyah sciences do not ignore the current reality, namely the development of sciences that rely on reason (Aqliyyah sciences) because this is the context of the modern human world. From this, the Aqidah digma, the standard use of sharia and moral ethics and morals can help people to see the quality of science which is not only measured by its instrumental pragmatic value for economic and social welfare, but also from its instrumental pragmatic value for economic and social welfare.

**Keywords:** Aqliyyah, science, islam.



## SCIENCE EXPLANATION OF THE PROHIBITION OF BLOWING ON FOOD AND DRINKS WHEN THEY ARE HOT

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### Abstract

This research method uses a quantitative research method with a bibliometric analysis approach. This bibliometric approach found that food and drink is one of the human needs to run or continue their life in this world. Because food and drink is one of the human needs to carry out life, ideally it must be protected from various kinds of diseases and must provide strength to the human body to carry out its life. However, the reality is that because of the food that enters the human body, it actually gives many diseases to attack the human body, both related to how to process the food, about the patterns and ways of eating food and drinking drinks consumed and one of them is due to blowing hot food. Blowing on hot food and drinks when they are about to be consumed can have adverse effects on the human body. As for some of the adverse effects that occur when blowing on hot food and drinks according to science, first, when we blow on hot food and drinks, we release polluted air that is rich in carbon dioxide which can cause our bodies to develop acidosis which is harmful to our bodies. Secondly, the oral mucosa and underlying digestive tract can be damaged by hot food and drinks. The third is the possibility of helicobacter pylori bacteria, which can cause inflammation of the stomach lining. And finally, blowing on food or drinks is also a medium for spreading viruses, bacteria, and harmful particles.

**Keywords:** Science, Blowing, Hot.

## COMMERCIAL ECONOMY OF THE PERSIAN GULF FROM THE FIRST HALF OF THE SAFAVID ERA TO THE END OF SHAH ABBAS SAFAVID ERA (1501-1628 AD)

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### **Abstract :**

So far, despite the many words that have been said about it, its nature and many important angles have remained in the dark. In the history of Iran, Safavid era can be considered a turning point and also the beginning of the economic and political confrontation between Iran and Europe in the Persian Gulf, which has placed the Persian Gulf in the center of regional and international attention during the early Safavid era. The commercial economy of the Persian Gulf and the benefits derived from it have been the prosperity and prosperity of the economy and trade of the Persian Gulf in the first half of the Safavid era itself was the result of major causes and factors, the most important of which can be found in the stable management, orderly and bureaucratic structure of the rulers of Hormuz, communications wide with the Indian Ocean, China, the Arabian Peninsula, Yemen and Aden, East and North Africa, as well as the discourse governing the economy and trade of the Persian Gulf. international, which was manifested in the form of Portugal's militaristic presence in the Persian Gulf and the Indian Ocean, as well as significant changes in the political centrality of the Safavids, which took place in the form of a religious conflict with the Ottoman Empire, inflicted an irreparable blow on the economic and commercial structure of the Persian Gulf, which resulted It did not lead to the significant presence and activity of European commercial companies as pioneers of colonialism in later periods, although the era of Shah Abbas Kabir can be considered an era in which special attention was paid to the Gulf. Fars, its islands, and its coasts, the revival of the local economy and trade was carried out, but these measures were also limited to the same period due to the lack of long-term structural and managerial stability, as well as the constant ups and downs in the history of our country

**Key words: commercial economy, Persian Gulf, Hormuz, Safavid, commerce, shipping, Iranians, economic discourse**

## CONTINUITY AND EVOLUTION OF MOURNING IN SAFAVID-QAJAR PERSIA

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### **Abstract:**

The mourning ritual of Muharram is one of the most important national religious rituals of the Safavid period in Iran. The officialization of the Shiite religion, the intensification of Iranian national tendencies against the powerful Ottoman neighbor, and the rise of the global role of Iran, became the basis for the transition from the old Muharram mourning traditions to new traditions in the Safavid era. The Safavid kings encouraged the poets to write poems about Imam Hussain (a.s. peace be upon him) and the oppression of Imam Hussain (a.s.) instead of praising them.

The era of Qajar rule in Iran was the era of prosperity and widespread mourning for Imam Hussein. In this era, in addition to the growth and development of mourning and the participation of all strata and groups in mourning ceremonies, new ways of mourning emerged that did not exist in the Safavid era.

In this article, which was done in the form of a library, with the transition from the Safavid era to the Qajar era, we will examine what significant changes the mourning rituals have undergone.

**key words:** Mourning, Imam Hossein, Safavid, Qajar, religious rituals

## DETERMINING THE SO-CALLED “GOOD PRACTICES” BY THE ACADEMIC ETHICS COMMITTEE

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**Abstract:** In Bulgaria, a legal commission on academic ethics has been operating since recently; it is a subsidiary body to the Minister of Education and Science. The regulations of this special body are structured through the Law of Academic Staff Development of the Republic of Bulgaria. Its functions are related to the implementation of certain control of the procedures for obtaining of the educational and scientific Doctor degree and the scientific Doctor of Science degree, as well as for academic positions in Bulgarian universities.

In the past, the most frequently considered cases have been related to incrimination in plagiarism and filing a special report to the Minister of Education and Science.

A priori, the question arises as to how to structure this Academic Ethics Committee, which is determined by order of the Minister of Education and Science. In the practice of forming the membership of such committee, the selection criteria, which must be high enough to be able to guarantee a certain impartiality, are not clear. These are not defined either in the Law for academic staff development of the Republic of Bulgaria and the regulations for its application or in other public normative document. Determining the membership of this kind of national specialized body is of particular importance both for its functioning as well as the competences of its members. Those are currently in active employment relationships with certain universities or research organizations, which predetermines their direct dependence on their managers, who are at the same time their employers. Last but not least, it is worth mentioning the direct connection between the Minister of Education and Science and the heads of higher education institutions in Bulgaria, who have contractual relations of special type of management contracts. These direct and indirect relations create preconditions for dependence of this specialized body - the Academic Ethics Committee.

This study attempts to provide a legal and ethical response to the actions of the Academic Ethics Committee at the Bulgarian Ministry of Education and Science.

**Keywords:** Academic ethics committee, functioning, legal framework..

## Introduction

Academic ethics is a concept that describes the behaviour of a scientist or researcher not only in the academic community but in the society in general. Academic norms are not defined in quite a specific way and bear the marks of moral behaviour in all aspects of this concept. To what extent and how these norms can be determined in an indisputable way could be a subject of a separate discussion and a way of determining public relations in this direction.

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Most generally, plagiarism is defined as follows: Plagiarism is a claim to authorship of a work that has been actually created by someone else. Although it may not always be related to copyright infringement, plagiarism is generally considered reprehensible. From Latin, the term “plagiarism” means the authorship claim to articles, works, books, etc., which, in fact, have been already created by another author. Thus, plagiarism publishes someone else's work or part of it under one's own name. Thus, the plagiarist starts to gain undeserved

benefits. In most countries, plagiarism is punishable by law. The current Penal Code of Bulgaria (Art. 173, para. 1) (2023a) declares plagiarism a crime, defining it as follows: publishing or using under own name or pseudonym somebody else's work of science, literature and art or a significant part of such work.

This specialized body in Bulgaria considers such cases and it is this committee's task to appoint three experts, who in the internal organizational documents are called arbitrators. The procedure for the selection of these arbitrators is not public and raises certain doubts about their selection and expertise. Generally, they should be from the same professional field and not only; they should also have proven high competencies related to the examination of the specific dissertation or the respective procedure for holding an academic position.

The lack of any rules calls into question the actions or inactions of the selection of arbitrators, drafting of quality opinions and the possibility for them to be objectified enough (Terziev, 2023b).

### **Since when has “good practice” been mandatory in Bulgarian legislation?**

I allow myself to summarize in one question the many statements of the members of the Bulgarian Academic Ethics Committee, because, in practice, they are based on "good practice" and cover allegations of inaccuracies in citations and plagiarism of authorial and co-authored works.

We must specify that the citations in the scientific papers are firstly made, according to the established requirements of the respective higher schools, and secondly - according to the current standard for citation, namely: BDS 17377: 1996. When published in various scientific journals, their editorial policy determines the method of citation, as well as other technical requirements.

Arbitrators' opinions often show ignorance of rules and norms, including the use of indirect citation as “presentation of multiple publications and authors whose cited publications do not address the cited thesis.” Indirect citation or the so-called paraphrasing, allows retelling a quote or presenting information in your own words. This type of citation summarizes information with reference to several sources and is used to summarize a voluminous theoretical concept, procedure or research results, voluminous citations not applicable to the entire text, as well as foreign language source citations when the author is not fully convinced of his own translation - activities typical of any dissertation research paper. Paraphrasing helps the author to present in detail the sources used and to indirectly convey the scientific theses developed. According to Brenda Spatt (See Brenda Spatt, Writing From Sources, 8th ed. Bedford / St. Martin's, 2011 <https://archive.org/details/writingfromsourc0000spat/page/n579/mode/2up>) (Spatt, 2011), there are two main

reasons for using paraphrasing, namely: to present indirect information or evidence when there is no specific reason to use direct citation or to present to the audience an accurate and comprehensive account of ideas taken from sources that the author explains, interprets or disagrees with and disputes. Scanning your and other scholarly publications, especially in social sciences, I find that indirect citation is a common practice and is not considered plagiarism.

The indirect citation is also explained in an article published on the website of the Institute for Economic Research at the Bulgarian Academy of Sciences, as can be seen from the following two links: links: <https://www.iki.bas.bg/>, (2023b); <https://www.iki.bas.bg/files/Nauchnoto%20citirane.pdf>, (2023c).

As to connect the statement with the above question - here the good practice is rejected by the members of the Bulgarian Academic Ethics Committee as irrelevant. I would be far more inclined to accept this statement if this same committee wouldn't not make it mandatory in the next indictment to draw up division protocols, although the legislation does not require them as per the relevant procedures.

Various reports from the Academic Ethics Committee state that: "The provision of division protocols in such cases is a traditional academic practice imposed long before the latest amendments to the Law on the Academic Staff Development in the Republic of Bulgaria". "Good practice" does not have binding nature and is not a reason for subsequent restrictive and punitive measures against anyone, even when it is not available in a specific procedure. Only laws and rules explicitly written and approved by the respective administrative order may be obligatory. In general - the application of the current legal framework to past actions I would equate to the Revival process in Bulgaria (then - the People's Republic of Bulgaria) and the time when the names of deceased people were forcibly changed. An act deeply unethical and immoral. And again I will allow myself to give an example with a publication of the current Minister of Education and Science Nikolai Denkov. It is about "Dynamics of Particles on Interfaces and in Thin Liquid Films", published in "Encyclopaedia of Surface and Colloid Science" - something that according to the current Regulations for the implementation of the Law on Academic Staff Development in the Republic of Bulgaria is unacceptable. If we follow the logic of the members of the Committee, what does it matter when it is been published - in relation to the current legislation, this is a violation.

Have the members of the Bulgarian Academic Ethics Committee wondered what would be the result of an alleged check for the availability of division protocols of all dissertations submitted in Bulgaria? Therefore, an interesting example in this direction would be the publications of Nikolay Denkov

(<https://ras.nacid.bg/dissertation-preview/3765>) (2023d) and, in this case, what exactly the division protocols will look like:

– “Direct Measurement of Lateral Capillary Forces” by: Orlin D. Velev, Nikolai D. Denkov, Vesselin N. Paunov, Peter A. Kralchevsky, and Kuniaki Nagayamaj (<https://pubs.acs.org/doi/10.1021/la00036a056>);

– “Formation of Two-dimensional Structures from Colloidal Particles on Fluorinated Oil Substrate” with authors: Genady S. Lazarov, Nikolai D. Denkov, Orlin D. Velev and Peter A. Kralchevsky (<https://pubs.rsc.org/en/content/articlelanding/1994/ft/ft9949002077>);

– “Charging of Oil-Water Interfaces Due to Spontaneous Adsorption of Hydroxyl Ions” by K. G. Marinova, R. G. Alargova, N. D. Denkov, O. D. Velev, D. N. Petsev, I. B. Ivanov, and R. P. Borwankar (<https://pubs.acs.org/doi/10.1021/la950928i>).

Can a division protocol be provided for each of the joint publications and what is the percentage of the scientific contribution of each of the authors? Who exactly is the author of a table, graph or specific conclusion, so that the next time it is used it could be cited - all these are entities for which there is no way to create division protocols? Or should we, by analogy, question the authorship of one of the co-authors in these publications and accuse him of plagiarism? And what is the contribution of a certain co-author in a particular publication, when it is in last place. Or, if I may borrow an expression from the Bulgarian Academic Ethics Committee – “good practice” is considered to single out as leading author the one whose contribution is the biggest and, accordingly, his name comes first. This statement may not always be objective, but in most cases the lead author is the first author in a particular scientific publication.

I personally defend the thesis that your work in a team not only gives better results but also allow for more successful dissemination. However, the question remains open - if there is no division protocol, how is it determined whether author A copied from B or vice versa? Relevant conclusions are observed in the opinions of a number of arbitrators, namely - in general publications the specific authorship cannot be traced and set. What these conclusions are based on is something one cannot find stipulated in writing and there is no way to be done so.

One more thing - accusing someone of plagiarism, does that mean that their Bulgarian and foreign co-authors plagiarized as well?.

## Conclusion

Collaboration with colleagues in research and dissemination of results in publications should not be considered a vicious practice, but encouraged instead.

The Bulgarian Academic Ethics Committee bases its opinions on good practice yet, is it possible to provide a list of good practices that are mandatory, those that are recommended and others that are prohibited? All this summed up gives reasonable assumptions for bias and compromising the work of this specialized body under the Minister of Education and Science.

As plagiarism, the Committee points out to definitions which are in fact approximately or completely identical in different sources. Scientific definitions and terminology in most cases cannot be assigned to one author, which leads to the impossibility of naming one. The same applies to appendixes, figures and tables created within the framework of the research conducted by any scientist - it turns out it is necessary to explicitly state that these were created by the author himself. Every scientist uses their own developments and applications many times, without mentioning oneself as the author, which certainly does not make the latter a plagiarist.

An interesting fact from the present analysis shows that the same arbitrator has prepared more than one standpoint on the procedures of the same scientist, which makes the procedure flawed and biased - at least because he has already formed an opinion in one of those standpoints.

The lack of consistency in the standpoints prepared, the selective presentation of evidence based on good practices on one hand and their non-acceptance on the other hand, inevitably leads to the following questions, which concern the objectivity of the procedure.

The lack of clear rules and criteria for the selection of arbitrators raises difficult questions related to the assessment's objectivity of both the arbitrators and the entire committee.

Thus, in determining what plagiarism is, can you answer the question - were the arbitrators reviewers and how well do they know the whole process? Do they have, and if so - how many, publications in the reference systems of Web of Science and Scopus? The same question, with no less intensity, applies to the authors of the standpoints - what their publishing activity is, if any. And this puts on the agenda the question of how the standpoints were taken - by competence or under someone's pressure.

It is the publication of articles referenced to in world scientific databases as Web of Science, Scopus, Springer, etc., that is an objective proof of the lack of plagiarism in the works of their authors. Therefore, my

last question is: if, based on the conclusions and decisions made by the Academic Ethics Committee, it is claimed that the scientific community can thus be deceived, who will dare, not in theory but in practice and with the respective legal responsibility and consequences, to question the qualities of the examiners in these referenced publications?

Scientific articles, independently written or in co-authorship with scientists from different countries, reflect, analyse or study social processes. Forgive my question but how can the division of a social process description in a scientific article, report or study be defined? Not only is this practically impossible, but it cannot even assess the intellectual contribution of the scientist concerned, which can amount to only 5% of the text and still give high scientific value (Terziev, 2022a; 2022b).

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## INVESTIGATING QALAICHI HILL OR IZIRTO, THE POSSIBLE CENTER OF THE ANCIENT CIVILIZATION OF MANA

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### Abstract:

Before the unification of the tribes of northwestern Iran and the formation of the Median Kingdom, there were many small and local kingdoms in this region, including the Mana Kingdom, which had states and repeatedly resisted the attacks of the enemies of its time (Assyria and Urartu). It was never defeated by them. This flourishing civilization had special cultural and artistic elements, which has a special place among the governments of its time. One of the important centers of this government is Qalaichi hill, which is located 5 kilometers north of Bukan city in West Azarbaijan province. Many works, including glazed bricks and an inscription in ancient Aramaic script, have been obtained from this hill during several seasons of excavation. Evidences and correspondences And the existing archeological information informs about Izirtu or the capital of Mana rule in Qalaichi Hill. Because the height of excellence of Mana art and culture in this hill is known to us by glazed bricks. In this article, an attempt has been made to determine the real location of the ancient Izertu by matching the information of the sources obtained from that period (for example, the first and second categories) and whether Qalaichi can be the same as the ancient Izertu.

Key words: Mana civilization, Qalaichi historical hill, Izirtu, West Azerbaijan, Iran.

### Introduction

Before the formation of the Median kingdom, small and large local governments had been formed in the northwest and west of Iran, among which Mana had more authority, size, culture, and history.

The Kingdom of Mana is the most important and at the same time the most unknown state that was formed in the 1st millennium BC before the formation of the Median kingdom in the northwest of Iran and has been in political and cultural life for more than 300 years (that is, from the beginning of the 9th century BC to the end of the 7th century BC). has continued

The name of Mana appears for the first time in the Assyrian reports in 843 BC, but certainly the presence of Mana in the region dates back to years before this date. The territory of the Mana kingdom in some parts of its history was from the north to the Tabriz region, from the south to the region Bijar stretches from the west to the border mountain ranges of Iran and Iraq and from the east to the Talash region and the western areas of Zanjan.

In 593 BC, a Hebrew source mentions Mana for the last time as a Median subject along with the Scythians and Urartu as small kingdoms.

History of the kings of Assyria, the kings of Mana

829BC Shalmaneser III Avalki/Odeki 1

737BC Tiglet Pilser III Eranzo 2

719BC Sargon II Iranzo 3

716BC Sargen II of (Irenzo's son) 4

715BC Sargen II Ulu Sono (Berard Az) 5

714-713BC Sargen II Olusuno 6

690-680BC Esrahdon Bel Khabu 7

690-680BC Esrahdon Akhshari 8

622BC Ashurbani Pal Akhshari 9

663-662B.C. Ashurbani Pal Avali (Pasrakashri) 10

\_\_\_ \_\_\_ Erisini? (Boy) 11

### **Our sources of information**

Mana sources can be divided into two categories: historical data and archaeological data. Historical data includes Assyrian, Urartian, Babylonian and Hebrew sources. Unfortunately, no inscriptions or writings containing historical information have been obtained from Mana itself. However, the texts and sources of neighboring and contemporary governments contain a lot of information based on which the political history and historical geography of this kingdom can be reconstructed. Among these sources, Assyrian texts have a very prominent place, and the reconstructions are mostly based on this group of sources. The kings of Mana and their contemporaneous kings in Assyria

In the first centuries of the 1st millennium BC, the kings of Assyria were directly involved in the issues of the northwestern regions of Iran and left information in the form of government archives, calendars, military reports and propaganda texts, which today open the way to the knowledge of political history and historical, human geography. and the economy of this region.

### **Our governmental divisions**

The territory of Mana was divided into states, some of which had a semi-independent status. In Assyrian sources, these states are named as "royal cities". The capital of Mana was called "Izerto."

Below are the states of Mana with brief explanations:

#### **Messi**

The southernmost region of Mana was called "Copper". In his eighth campaign, Sargon advanced from Persua to Mesi. In the third campaign of Ashurnasirpal II to Zamwa (Zamwa), he mentions a place called Meso located in the eastern mountains of Shahrez-Zor, near a lake. In Levin's opinion, due to the proximity of Mesi to Persava and the location of Persava and Nimri in the mountains south of Zor city, the area of Zaribar lake and Marivan city is a suitable area for locating Mesi.

#### **Suriksh**

In the north of Mesi, there was a region called Sorikesh, which is apparently only mentioned in the report of the eighth campaign of Sargon II. The mentioned state is located in Baneh region.

#### **Oish-dish**

Another Manai region, Uyishdish, was located next to the border of Urartu. The fact that Uyishdish borders Urartu is partly indicative of its location, and the location of this state depends on determining the southern border of Urartu. Since the available evidence places this place on the southern shore of Lake Urmia. Deh, Oyishdish was probably located in the southern valley and near the sources of Zarineh River. Another suggested place is from Persova to Mesi according to Sargen II's route, and they suggest it in the east of Lake Urmia and around the current city of Maragheh.

#### **Zikrto**

In the survey of the eighth campaign of Sargen II, Zikrto is located somewhere between the south of Mana and Uishdish. "Levin" while emphasizing the few evidences, suggests an area in the south of Oyishdish and located in one of the valleys that lead to Lake Urmia, such as Zarina River.

Another possible area for Zikrto is the area between the Hamadan Jalga and the southeast area of Lake Urmia and around Bijar, Takab, and the upper part of Zarinee River.

### Andy

Determining the location of Andia is not unrelated to the location of Zikreto." Ebling believes that Andia was located in the eastern lands of Lake Urmia.

"Dandamayev" locates Andia in the south or east of Lake Urmia (Dandamayev 1985: 25-26) "Diakonov" suggests the lower part of Sepidrud and the shore of the Caspian Sea (Diakonov 1985: 65). Makshufeh likes Amelesh and Marlik more and considers it strengthened (1373:17 Melkzadeh)

### Subi

The only source of information about this state is the 8th report of Sargon II's campaign during the conquest of Ushkaya fortress, in which Sobi is mentioned.

### Albree

There are few geographical signs to determine the location of Alberia. Alberia can be seen in only two places: once in the sixth campaign of Shalmanaserum and again in the eighth campaign of Sargon II.

According to Levin (1974), Albriyeh was a region between Sorikesh and Persava. Oderbian says in his opinion: "In trying to determine the location of this region, we must find a place that is accessible from Baneh (Sorikesh) and Mahidasht (Persava) and probably next to the lake. Zaribar is placed. The only region that meets these conditions is the Sanandaj Valley, which can tentatively be considered as the location of Albariya. In general, the area between the cities of Saqqez in the north, Marivan in the west, and Sanandaj in the south can be considered the territory of Albriya.

### Government structure

According to the Assyrian texts, Mana had a kingly government system, in which the sons succeeded the father. In this system, the king did not rule the country alone, but benefited from the consultation and cooperation of the local nobles and rulers. Along with the local rulers and elders, there were nobles and nobles who probably

came from the main tribes that formed the government and had a special position in the political structure of Mana.

### **Social structure and economic structure**

In his writings, "Milikishvili" comes to the conclusion that the process of class stratification of Mana people, as confirmed in Urartu and Assyrian sources at that time, has deepened and the slaves of the main mass have been under exploitation. "Diakonov" assumes that the mentioned land was in the advanced stage of the development of class society and government in the 9th to 7th century BC. He considers the Mana society to be a type of first slave society that did not go beyond the limits of white beard society and domestic slavery.

Due to having suitable water and soil resources and rich and extensive pastures, the territory of Mana had very good conditions for the growth and expansion of agriculture, animal husbandry and horse breeding, and these conditions caused a relatively rich society to form in this area, which is evidenced by archaeological data and historical texts. The skills of the Manai people in horse breeding and the high demand for horses in this period at the regional level and beyond, provided another important source of income for the Manai people. Valuable treasures obtained from Ziviyeh and Hasanlu and evidences and documents discovered from Qalaichi and other areas attributed to Mana show that It shows that the Manai had a superior economic position compared to other ethnic groups in the region. In addition to agriculture and animal husbandry, the Manai were skilled artists and craftsmen, and they had very high skills in metalworking, pottery, working on ivory, making glazed bricks, and probably part of their products went to the regions. Another one has been issued.

### **Artistic structure and language**

Since Mana was not mentioned as a strong political power (compared to Assyria and Urartu) and they generally secured their position with political relations and signing solidarity agreements, their cultural and artistic boundaries are not clearly known, perhaps due to these constraints and political considerations in the inscription alone. Revealed from this culture, the Qalaichi Bukan inscription mentions two different gods, "Khaldi" (god of war in Urartu religion) and "Addad" (god of storm, thunder and lightning).

Sometimes, during various campaigns and conquests, in addition to the spoils of war, artists also came to the service of the conquerors, and therefore, a clear and bold border cannot be drawn between the art of Urartu, Assyria, Media, and Mana.

The impact and influence of the neighboring arts of Burmana is such that sometimes the works of this culture have been wrongly introduced as examples of Urartu, Assyrian or Median art. However, it should not be

overlooked that in addition to the influence of the art of the neighbors, the local art has also been influential, which is Some of Manai's works can be traced, especially in the glazed bricks of Qalaichi Bukan.

The analysis of place names and personal names does not allow us to definitively determine the linguistic affiliation of the people of Mana land. Part of the research on nomenclature considers these people to be Hori-speaking. They find the origin of this name in examples of the Hori language The Hurrians were scattered in a vast land in Near Asia (from Syria and Mesopotamia to Lake Urmia), which the ancient authors called "Matiana". It is clear from the information of Herodotus that the Hurrians settled in a part of the land of Mana. The Mateans were the same Hurrians who They were able to settle on the western and northern shores of Lake Urmia. But Diakonov doubts the existence of the Hurrian language and the existence of the Hurrians in the east of the Zagros Mountains.

Boomer considers the people of Mana to be Hori. And the analysis of the names and people related to the Mana government in the Assyrian and Urartu sources leads to the conclusion that the majority of them are Hori, some are Kasi, and a small number belong to Iranian speakers.

According to Grantofsky, according to the Assyrian inscriptions related to the Mana and Hasanlu civilizations, it is proven that the people of Hasanlu did not speak Iranian until the 9th century BC. The spread of the Hurrians in the east of Lake Urmia confirms that Mana was related to the Hurrians, as well that the visual art means commonalities with the visual art of Hor has

The purpose of writing this article is to prove Qalaichi as "Ancient Isyrto" according to the ancient sources and evidences at the same time as Mana rule (Assyria and Urartu) and the works obtained during the excavations in this area. Since 1360, most of the archaeological activities in West Azerbaijan were created in a regional manner, and its focus was the identification of early villages up to the Iron Age, with a special emphasis on the Iron Age 3. The former joint of Hasanlu has been planned. These researches, which are concentrated in Qalaichi hill in the southern basin of Lake Urmia, are part of the researches in this area, which were carried out with the aim of obtaining more information about Mana civilization and culture. done, in the south of Lake Urmia according to Izirtu, they have considered the Mana center near Bukan. Finally, in the same year, a delegation from the General Directorate of Archeology headed by Ismail Yaghmai was sent to the site. During a life-saving exploration season, this delegation succeeded in obtaining a large number of glazed bricks and an inscription in Aramaic script. The discovery of the Aramaic inscription was a turning point in the history of Mana until It means that the speculations of Qalaichi's being Izerto can be accepted to a large extent.

Dr. Rasool Bashash Kanzeq was the first person to read this inscription and pointed out the word "Zaatar" or Izirto in its meaning. After him, Andre Lomer also reread it and confirmed the existence of this word in the text of the inscription, and thus the correspondence between Qalaichi and Izirto. It was proved to some extent and the way was opened to get more information about it.

Of course, other people, such as Boomer, identified Izerto in the area between Bukan and Takab, while Fox suggested Izerto in the Saqqez region, a proposal that was also welcomed by Julian Did. Varajamaz has Izerto in the Zarine River valley, just north of Bukan on the map, and Godar also He considers the place of the ancient Izerto in Kaplanto hill in the south of Saqqez.

The discovery of this 13-line ancient Aramaic inscription led to the continuation and flourishing of the ongoing discussion of the location of the ancient Izertu. Discussions and various opinions about this inscription finally ended in the fact that due to the lack of the inscription, it is not possible to give a definite opinion about whether it is Izertu or not Qalaichi. A definitive conclusion in this case was postponed to the results of archaeological excavations in this area.

The publication of the plan of Qalaichi by Bahman Kargar raised the hypothesis that the small size of Qalaichi does not make this area a suitable option for Izertu. Remains of this area, in clarifying the importance of this key Manai area, we have tried to invite researchers to the important issue that Qalaichi, even if it is not ancient Izertu, is more important than to leave aside the discussion and debate about it.

After matching the ancient site of Ziviyeh with Izbiyeh (of the important Mana states), researchers tried to identify the location of Izertu, after Dyson's (1961) assignment of the fourth layer of Hasanlu to the Mana period raised hopes of finding Izertu at this site. , which after a while, its general manainess also faded.

The discovery of this inscription opened a new chapter for a series of linguistic discussions about the location of Izirtu. The translation of Rasul Bashash Kanzeq from this inscription was accompanied by the suggestion that Qalaichi is the temple of the god Khaldi in "Zaatar" (Izirtu). After some time, there were different interpretations and readings of this inscription, the first of which was Lomer (1998) who believed that "the phrase HLDYZY BZCTR indicates that Qalaichi Hill is the place of Khaldi God, Izirtu....." Aramaic petroglyph of the hill Qalaichi is installed in the great temple of God Khaldi in the center of Mana government. After we are faced with two simultaneous and somewhat different readings from Texidor "MTTR=Mosasir" and Lumer "ZCTR=Izerto". Of course, the studies of researchers such as Efeal Vesukolov and then Texidor's revision and Fils's comparative study about this inscription also show its different dimensions. It clarifies more for us (researches that were accompanied by more caution than Lumer's definite opinion).

Efeal, who has studied the historical position of the inscription, points out that the incomplete text of the Bukan inscription does not allow us to make a definite opinion about whether or not Qalaichi is Izirtu. This statement is challenged by Philes and finally from making a definite opinion. runs away. Sokolov, who has examined the inscription textologically, confirms that the original language of the Aramaic stele writers was certainly a non-Aramaic language. It is possible that the text of the inscription has been placed in its correct historical position.

But the first report published by the explorer Qalaichi (Bahman Kargar) was not very promising, because with all the importance of the discussion of whether or not Qalaichi is Ezerto and despite the fact that linguists like Sokolov have been waiting for the results of the research, Bahman Kargarz All these debates ended with a single sentence: "... and we declare Qalaichi in Bukan as the center of the first kingdom before Medes in Iran". He was reluctant to accept this hypothesis.

If we go back to the question "Is Qalaichi the ancient Izirtu?" and consider the challenges and debates in this inscription once again, and consider the statistics of 500 workers working on the construction of the Qalaichi building during 401 working days. We see that Sokolov was not unnecessarily hopeful about Buchan's future explorations.

Although definitely not possible Ezerto proved that Qalaichi was, and the discovery of the main part of the inscription in future excavations will clarify this issue completely, but considering what happened, we realize that Qalaichi is a place in the Mana period, and any discussion and opinion in it should be carefully considered and documented. More to come.

Assuming that even if we accept that Qalaichi was not the ancient Izirtu, Versul Bashash Kanzeq and Volumer made a mistake in adapting Zaatar to the ancient Izirtu, but this is not the end of the story and there are many other questions that must be answered:

-What is the significance and place of this temple of Manai in this culture that all the energy and resources were spent on its construction?

-This temple was definitely not an isolated and remote building, so it was built in connection with which city or Manai settlement?

-What is the importance of Qalaichi place in the historical geography of Mana that was chosen for such a collection?

-The zaatar mentioned in the Qalaichi inscription indicates which mana establishment?

-Its glazed bricks with their famous and unique designs are made by which group of artists and where?

### Research findings

Although proving Qalaichi as the first center of the pre-Med kingdom is a difficult task and requires more archaeological explorations in this region. However, according to the documents and evidences that have been obtained so far, Qalaichi is the capital to some extent according to the findings. which are cited below proved:

-During the interview that took place with Mr. Yusuf Hassanzadeh, an archeology expert, Mana expert and one of the Qalaichi excavation team members, it became clear to us that Qalaichi was not a military fortress and it can be said that it was a religious and artistic cultural place in the Mana civilization. This is such a place. Importantly, there was certainly a need to provide security from other forts around us. And according to the evidence, we believe that these military and protective forts are the same military forts as Zivyeh in Saqqez and Armait Fort in the current location of Sahab village. And Sargen II during his campaign to Uishdish state attacks Zikreto and captures Armait and Ziviye forts, which are located near Izerto, and it seems that these two forts protect the entrance to Izerto. According to the picture of the regions researched by R. Dyson, Zibiya is not the name of a city or a residential area, but the name of a camp. It was a military that was located on the road leading to important settlements that could be Izerto.

-During several seasons of digging that took place in Qalaichi Hill, many glazed bricks were discovered. These bricks are considered an artistic masterpiece considering the conditions and possibilities of that time. These glazed bricks reflect the religious beliefs of the people living in Mana. The level of artistic excellence used in these bricks can be said that Qalaichi was the capital or a very important religious place during the reign of the Mana government.

-As mentioned before, the discovery of a 13-line inscription in Qalaichi hill raised the question of Qalaichi being Izirtu with more certainty. However, there are two different opinions regarding the reading of the inscription. The majority opinion is that Qalaichi is the same as Izertu and not Mosasir, because during the excavations conducted in recent years, Mosasir, which was an Urartian religious place and temple, was located between Lake Van and Lake Urmia. Therefore, according to the correspondence of the original text of the inscription According to the opinions presented by metaphysicians, it can be said that Qalaichi is the ancient Izertu, the center of the first kingdom before the Medes in the northwest of Iran

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## THE ‘SUPRASL LITURGICON-BOOK IN HUNGARY: A CASE OF THE BOOK TRADE FROM THE GRAND DUCHY OF LITHUANIA TO THE HUNGARIAN KINGDOM

MACARİSTAN'DAKİ 'SUPRASL AYİNİ-KITABI  
LİTVANYA BÜYÜK DÜKALIĞI'NDAN KİTAP TİCARETİ ÖRNEĞİ MACAR KRALLIĞINA

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### Özet

Macaristan topraklarında şu anda Kilise ve Devlet koleksiyonlarında “Belarus” kökenli bu kadar eski dört basılı Kiril türü kitap bulunmaktadır, Litvanya Büyük Dükalığı'ndaki Kiril türleri tarafından basılmış olanlar, ayrıca: GDL). Bunlar hakkında genel olarak sunumlar yaptık, 16 Eylül İstanbul'daki Bilsel Kongresi'nde ve 14 Ekim İzmir'deki Bissell Efes Kongresi'nde de. Ancak tam metni vermedik, çünkü konu bir makale için çok geniş. Böylece, tam metin şimdi bu daha dar konuya verilecektir. Şimdi bu geniş konudan, 1696'da Polonya-Belarus sınırındaki ilk Suprasl Tipografi kitabı olarak basılan Suprasl ayin kitabının hikayesini çıkarıyoruz Suprasl Liturgikon 1695'in iki örneği Macaristan topraklarında (Halenchenka, № 175). Bu sunumun ve makalenin beklenen sonuçları: – 18. yüzyılda Doğu Avrupa'nın mali-ekonomik tarihi olarak kitap ticaretine katkı; – Polonya-Litvanya Topluluğu'nun Vasilya tipografileri arasında en büyük öneme sahip olan Suprasl Vasilya Tipografisinin kültürel tarihine katkı; – Polonya-Litvanya Topluluğu ile Macaristan Krallığı arasındaki kültürel ve ticari temaslara katkı. — Yazar, Bilsel ve İKSAD konferanslarında zaten benzer konular sunmuştu, ancak tam metin gönderilmedi. Şimdi yazar araştırmasının sentezini veriyor ve tam test burada veriliyor.

**Anahtar Kelimeler:** Kitap\_ticareti, Kitap\_tarihi, Macar\_Krallığı, Polonya-Litvanya\_Birliği, Litvanya\_Büyük\_Dükalığı, Belarus

### Abstract

Belarusian and Hungarian territories are located far from each other; thus, it is a rare case that in the 17/18th centuries, liturgical books were put for such a far distance. In the recent territory of Hungary, there are four old-printed books of Cyrillic types held in Church and State collections, which are of “Belarusian” origin (that is, printed by Cyrillic types in the Grand Duchy of Lithuania, furthermore: GDL), in chronological order: an “Apostle” printed by Spiridon Sobol in Kutein, 1632 (Halenchenka, № 117); then a very rare book, the “Four

Gospel and Psalter” printed by the Basilian Order in Vilna (now Vilnius), 1641, of which no copy is nowadays held in the territory of recent Belarus, therefore the bibliographer of all Belarusian printings, Hrihory Ya. Halenchenka notices the “Debrecen University and National Library” (East Hungary) among the prominent holders of copies of this book, as well (Halenchenka, № 137); then two examples of the Supraśl’ Liturgicon 1695 (Halenchenka, № 175); then a Psalter, printed by the Orthodox Confraternity in Mogiliov, 1738 (Halenchenka, № 216).

We have made presentations about these in general, at the Bilsel Congress in İstanbul, on September 16, and at the Bilsel Efes Congress in İzmir, on October 14, too. However, we did not give the full text, because *the topic is too broad for a single article*. — Now we extract from this broad topic the story of the Suprasl Liturgicon, printed in 1696 as the first book of the Suprasl Typography at the Polish-Belarusian border. It has a special significance in the cultural history, and, on the other hand, its way to the Hungarian Kingdom is well-documented.

Expected results of this presentation and the paper: – contribution to the trade of books, as the financial-economic history of East Europe in the 18<sup>th</sup> century; – contribution to the cultural history of the Suprasl Basilian Typography, which was of the greatest significance among Basilian typographies of the Polish-Lithuanian Commonwealth; – contribution to the cultural and trade contacts between the Polish-Lithuanian Commonwealth and the Hungarian Kingdom. Thus, the full-text will now be given to this narrower topic.

The author had already presented similar topics at the Bilsel and İKSAD conferences, but the full text was not sent. Now the author gives the synthesis of his research, and the full text will be given here.

**Keywords:** Book\_migration, Book\_trade, Hungarian\_Kingdom, Polish-Lithuanian\_Commonwealth, Grand\_Duchy\_of\_Lithuania, Belarus.

## AGROECOLOGY AND CLIMATE RESILIENCE (From Islamic Perspective)

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### ABSTRACT

This research elucidates the resilience or connection between agriculture and climate with the framework of Islamic teachings. It describes the approaches of trying to increase agricultural productivity, which is necessary for human life. This research focuses on mitigation strategies that reduce the risk of environmental damage, including agronomy, protecting agricultural products from environmental damage, adopting sustainable farming methods, and integrating ecological systems. Additionally, his research effort aims to provide an explanation of how agricultural practices have changed to promote climate resilience in light of Islamic teachings.

Environmental stewardship emphasises that managing natural resources sustainably is our responsibility. The research study explains a number of important Islamic teachings i.e., environmental protection, animal welfare, moderation, and preservation. Islamic ideas are integrated with agricultural techniques to provide a holistic plan for agriculture and climate change.

Effective strategies to mitigate climate-related hazards in agriculture are described in this research study. In order to advance agricultural methods, it also prioritises education, information sharing, and community engagement.

In last, this study adds the climate resilience and sustainable agriculture by offering a comprehensive strategy. That incorporates the Islamic views regarding the promotion of the peaceful coexistence of environmental and human populations in the face of climate change.

**Keywords:** Agroecology, Climate Resilience, Islamic Teachings

## ENTREPRENEURIAL SKILLS ARE NECESSARY TO EMPOWERING WOMEN

(From Islamic Perspective)

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### ABSTRACT

This research study explains that if a woman wants to start a business, she can do business because Islam also advises to live under self-help, so any woman who wants to start a business, she can do this but according to Islamic principles. Providing training, financial support and guidance is very important for starting a business. So that she can understand the nuances of business. Therefore, awareness of the role of networking, financial literacy and education is essential in promoting women's entrepreneurship, along with the need for equitable access to capital and technology. Furthermore, this study highlights the need for continued collaborative efforts by Islamic communities, governments, and organizations to advance gender equality, diversity, and inclusion so that women can advance in the business arena as well as men. She be able to support herself and her family.

The ultimate objectives of women's empowerment via entrepreneurship with Islamic influences are to enhance economic independence and preserve moral values derived from Islamic teachings. Because of its specialised sector, this study project may provide new academics and researchers with relevant material.

**Keywords:** Empower Women, Entrepreneurial Skills, Islamic teachings

## MALWARE ANALYSIS USING IMAGE CLASSIFICATION ACROSS MULTIPLE DATASETS

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### **Abstract**

The emphasis on cybersecurity is currently growing. A significant part of this is malicious software, commonly known as malware. The term is not frequently encountered until one is significantly inconvenienced by this type of software. Cybercriminals are continuously enhancing their methods and the quality of the malware they create, making it increasingly challenging to defend against, and causing the average user to become a victim with ease.

Therefore, it is essential to find appropriate and effective solutions to detect and prevent malware. Maximum protection is unattainable, so new techniques are constantly needed to prevent attacks. This paper presents an efficient artificial intelligence-based malware analyzer that uses several freely available malware databases. The already widely used image classification method is applied. The presentation is related to a former presentation of mine.

**Keywords:** artificial intelligence, neural network, malware, cybersecurity, classification

## EXISTENCE OF THREE SOLUTIONS TO A $P(X)$ -LAPLACIAN-LIKE ROBIN PROBLEM

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### Abstract.

This paper focuses on establishing the existence of three solutions for a Robin bound ary problem that involves the  $p(x)$ -Laplacian-Like operator. By employing Ricceri's variational principle, we show the existence of at least three non-trivial solutions for the given problem in the context of a generalized weighed Sobolev space.

**Keywords:** Robin problem, Weighted variable exponent,  $p(x)$ -Laplacian-Like operator, Ricceri's variational methods.

**2020 Mathematics Subject Classification:** 35J92, 35J30, 47H11.

## SPLINE METHOD FOR APPROXIMATION SOLUTION OF FREDHOLM INTEGRO-DIFFERENTIAL EQUATION

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In this paper, a numerical method for approximate the solution of special linear Fredholm integro-differential equations of the second kind by using cubic spline function obtained. The proposed method reduces to the system of algebraic equations. The basic ideas are developed to establish an algorithm that can be easily implemented. This method approximates the solution of the special linear Fredholm integro-differential equations without additional conditions and at a lower cost than other methods. The main advantage of our algorithm is that it can be used directly without using assumption or transformation formulae. The convergence analysis of the proposed method is discussed. The numerical examples are presented to illustrate the applications of the method and to compare the computed results with the other method.

**Keyword:** Spline Function; Fredholm integro-differential equation; Interpolation;

Tridigonal Matrix; Convergence analysis.

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## USİNG NEURAL NETWORK FOR MODELLİNG TOPOGRAPHİCAL PROPERTİES OF 3D PRINTİNG METAL MATERIAL

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### **Abstract**

3D structures can be produced by a variety of manufacturing techniques, with a laser source serving as a key component in the construction procedure. Stereolithography and laser 3D printing are general terminology for this process. The procedures that are used to produce solid material are referred to by terms like selective laser melting and selective laser sintering. The ability to build objects with complicated geometries flexibly without the need for specialized fabrication tools beforehand is one of the key draws of 3D printing. A 3D printer is a very flexible fabrication device that produces tangible items directly from software structures. These types of printing techniques have been created for a variety of materials, such as polymers, metals, and ceramics. I use method of intelligent system, namely neural network for modelling topographical properties of 3D printing metal material.

## MODELLING THE IMPACT OF RELAPSE AND WEANING OFF IMMUNITY ON HEPATITIS B VIRUS TRANSMISSION DYNAMICS

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### ABSTRACT:

In this study, we present a numerical simulation of the impact of relapse in patients with chronic HBV infection and weaning off immunity on vaccinated individuals within the transmission dynamics of Hepatitis B. The sensitivity analysis result establishes that relapse rate and weaning off immunity increases the value of the effective reproduction number when it is increased. Similarly, the result of the numerical simulation reveals that the combine effect of relapse and weaning off immunity increases the number of infected persons and thus, increase the spread of the Hepatitis B Virus. Also, relapse delays the quick response to the treatment regimen which consequently slows down the potential of recovery from the infection, whereas, weaning off immunity reduces the number of vaccinated individuals .

**Keywords:** Hepatitis B Virus, treatment, relapse.

### CHAPTER ONE

#### 1.0 INTRODUCTION

#### 1.1 BACKGROUND OF THE STUDY

In recent years, the study of infectious diseases has gained considerable attention due to their widespread impact on global health. Among these diseases, Hepatitis B remains a significant public health concern, affecting millions of individuals worldwide (Visvanathan *et al.*, 2016; Yi *et al.*, 2016). A nuanced understanding of its transmission dynamics is crucial for designing effective control strategies. This project aims to delve into two key aspects of Hepatitis B dynamics: the impact of relapse in patients with chronic HBV infection and the phenomenon of weaning off immunity in vaccinated individuals.

Chronic carriers of HBV represent a unique subset of the population whose viral loads fluctuate over time, sometimes leading to relapses in disease activity. Relapse could result from the exposure to suboptimal

treatment regimens (types of immunosuppression), an elevation in viral load (virologic factors), and modifications in immune function (patient factors) (Tseng et al., 2012). These often lead to a pronounced exacerbation of the disease, which can culminate in liver failure (Hoofnagle et al., 2009) and contributing to a relatively high incidence of HBV infections (Moore and Chang, 2010). The implication of such relapses on the spread of the virus and long-term health outcomes remains underexplored. This thesis seeks to bridge this knowledge gap by employing numerical simulations to explore the influence of relapse on disease transmission within populations with varying levels of immunity and vaccination coverage.

Additionally, the success of vaccination campaigns in mitigating Hepatitis B has been substantial, resulting in the establishment of immunity in a significant proportion of the population. However, immunity developed through vaccination can be influenced by factors such as timing of administration, level of immunity conferred and the existing prevalence of the virus within the population which may potentially render individuals susceptible to infection once again. The phenomenon of weaning off immunity poses challenges to maintaining control over the disease and requires careful analysis to assess its contribution to transmission dynamics. This thesis aims to provide insights into the potential consequences of weaning off immunity, taking into account factors such as age, duration since vaccination, and population-wide immunity levels. By employing advanced numerical simulation techniques, this research seeks to provide a more comprehensive understanding of how relapse in chronic carriers and the weaning off immunity in vaccinated individuals collectively shape the transmission dynamics of Hepatitis B. The findings of this study will contribute to refining strategies for disease control and vaccination efforts, ultimately assisting in the formulation of more effective public health policies aimed at reducing the burden of Hepatitis B on a global scale.

In order to improve understanding on the dynamics of HBV infection, several mathematical models have been formulated (Zou *et al.*, 2009; Pang *et al.*, 2010; Kimbir *et al.*, 2014; Khan *et al.*, 2016). This study is motivated by the work of Khan *et al.* (2016) which is centered on the transmission model of Hepatitis B virus with the migration effect. Against this background, the present study intends to extend their work by incorporating treatment and its relapse rate, which was not considered in their model, in other to study the impact of relapse and weaning off immunity on the transmission dynamics.

## 1.2 Statement of the problem

Hepatitis B is a potentially life-threatening liver disease with high mortality rate (0.5-1.2 million deaths per year). Because vaccination does not eliminate infectivity nor block the route of transplacental (vertical) transmission, the need for vaccination in conjunction with treatment becomes necessary. Beside, not all treated

individuals' recovers, some relapse if drug resistant mutants are present, which has posed a global health threat for many. This thesis aim to investigate the intricate transmission dynamics of Hepatitis B by numerically simulating the influence of relapse in patients with chronic HBV infection and Weaning off Immunity on vaccinated individuals, thus addressing the complex interplay between viral resurgence and loss of vaccine-induced protection in the context of Hepatitis B transmission. To this end, the work by Khan *et al.* (2016) is extended to include the relapse rate on the treated individual as a robust way to get more understanding on HBV transmission with infective migrants.

### 1.3 Aim of the Study

The aim of this study is to model the impact of relapse in patients with chronic HBV infection and the weaning off immunity on HBV transmission dynamics.

### 1.4 Objective of the study

The objectives are:

- i. extend the model of Khan *et al.* (2016) by incorporating treatment class and its relapse effect.
- ii. compute the effective reproduction number  $R_e$  for the modified model using next generation method.
- iii. carry out sensitivity analysis on the effective reproduction number in order to determine the parameters of the model that are most sensitive .
- iv. carry out numerical simulation of the extended model.
- v. interpret results in (i)-(iv) .

### 1.5 Scope of the Study

This study extends the model of Khan *et al.* (2016) by including treated class, its relapse effect. Next, the effective reproduction number is computed using the next generation method. Sensitivity analysis is applied to some key parameters of the extended model; in addition, numerical simulation of the model is carried out using the fourth order Runge-kutta method embedded in MATLAB to study the impact of relapse in patients with chronic HBV infection and the weaning off immunity on HBV transmission dynamics.

### 1.6 Significance of the study

This study holds significant implications for both Hepatitis B control strategies and broader infectious disease modeling. By elucidating the effects of Relapse and Weaning off Immunity through numerical simulation, the

research contributes to a deeper understanding of transmission dynamics. The findings could inform tailored interventions for chronic carriers and enhance vaccination policies, potentially leading to more effective disease management and reduced public health burden. Additionally, the study's methodology can serve as a model for investigating similar phenomena in other infectious diseases, advancing the field of epidemiological research.

## 1.7 DEFINITION OF TERMS

**Numerical Simulation:** Numerical simulation is a computational technique used to model and analyze real-world processes or systems using mathematical equations and algorithms.

**Relapse:** Relapse pertains to the resurgence of infection due to the development of drug resistance.

**Weaning Off Immunity on Vaccinated Individual:** Weaning off immunity in a vaccinated individual refers to the gradual reduction of the protective immune response generated by a vaccine over time.

**Hepatitis B:** Hepatitis B is a viral infection that primarily affects the liver. It is caused by the hepatitis B virus (HBV).

## CHAPTER TWO

### 2.0 LITERATURE REVIEW

#### 2.1 INTRODUCTION

"The term 'relapse' pertains to the resurgence of infection due to the development of drug resistance. Primarily, drug resistance entails a decrease in the efficacy of medication for treating diseases such as Hepatitis B (HBV) (Zoulim, 2009). Relapse presents a particularly formidable challenge within the realm of antiviral therapy and can result from prior exposure to suboptimal treatment regimens (types of immunosuppression), an elevation in viral load (virologic factors), and modifications in immune function (patient factors) (Tseng et al., 2012). This often leads to a pronounced exacerbation of the disease, which can culminate in liver failure (Hoofnagle et al., 2009).

The prevalence of relapse in patients with Hepatitis B is influenced by factors including drug-resistant strains, co-infection with HIV, re-infection, cultural factors, and disruptions in public health programs (Athena et al., 2012; Charan and Paramita, 2016). This global escalation is primarily attributed to inadequate patient adherence to healthcare services. Risk stratification categorizes incidence rates as low when they are less than 1%, moderate when falling between 1% and 10%, and high when surpassing 10% (Wu et al., 2019).

The challenge of relapse in patients is a substantial concern within antiviral therapy. When patients undergo immunosuppressive treatment, the reactivation of HBV becomes a distinct possibility, potentially leading to acute hepatic failure (Karajibani et al., 2018; Tseng et al., 2012). Presently, the predictive factors for relapse following discontinuation of nucleotide analogs remain unclear (Yao et al., 2017). Relapse can emerge either intrinsically within liver cells or be acquired due to drug exposure, chemical misuse, cellular stress, or other triggering conditions that awaken dormant HBV.

Additionally, specific drugs (such as anti-CD20 monoclonal antibodies, rituximab, ibrutinib, glucocorticoids, cisplatin, and imatinib) can directly induce relapse, provoking B-cell depletion and a robust immune-mediated response (Buti, 2014). These factors can render standard therapies ineffective, leading to treatment delays and contributing to a relatively high incidence of HBV infections (Moore and Chang, 2010). However, the intricacy lies in identifying individuals necessitating antiviral therapy and determining the optimal timing, dosage, and duration of treatment. Hence, a comprehensive understanding of the impact of relapse is imperative to prevent harm."

**Also**, carriers may also experience a reactivation (10%-40%) of disease following HBeAg seroconversion, progressing into HBeAg-negative chronic hepatitis B (Guo, *et al.*, 2018; Tseng, *et al.*, 2012). This is marked by a reappearance of HBV DNA replication and ALT levels in serum and is associated with progression of disease and necro-inflammation on histology (Fattovich, 2003; Pan, *et al.*, 2013 ). Reactivation can happen directly from the immune active state in a small proportion (1-5%) of patients, after which it occurs at a rate of 3% annually, such that up to 30% of inactive carriers will subsequently experience reactivated infection (Shepherd *et al.*, 2006; Chu and Liaw, 2009). The reactivated state is a later and more advanced stage in disease progression, occurs in patients of older age, and occurs more frequently in males (Fattovich, 2003). About 0.5% of chronically infected persons will spontaneously resolve their illness annually (by loss of hepatitis B surface antigen and development of antibodies to HBsAg), which has a benign prognosis unless cirrhosis has already developed (Weinbaum *et al.*, 2008; Fattovich, 2003). All of these stages tend to be clinically asymptomatic and have minimal impact on quality of life (Shepherd *et al.*, 2006).

## 2.2 Hepatitis B Virus Reactivation/ Relapse

Recent advances in HBV reactivation (relapse) research shows that it generally occurs in occult HBV infection patients who suffered chemotherapy or immunosuppressive therapy have a higher risk of HBV reactivation (Guo *et al.*, 2018; Tseng *et al.*, 2012) which range from 10%-40%. This is because HBV in a resting (inactive)

state or low replicative state (cured) is likely to be activated or increased which would lead to severe liver function damage or even liver failure (Liu *et al.*2013; Masarone *et al.*2014; Ho *et al.*2015).

At present, there are no absolute unified diagnostic criteria for HBV relapse: it is usually based on clinical experience (EASL 2017; Perrillo *et al.*,2015; Yao *et al.*,2017 ). Clinical and virological relapse occurs when ALT > 2 times the upper limit of normal and HBVDNA >2,000IU/ml after stopping nucleosides analogue for 3-6 months ( Liaw *et al.*,2013;Jeng *et al.*,2013;Pan *et al.*,2013; Seto *et al.*,2013;Chang *et al.*,2015). However, when HBVDNA increases at least 10 times relative to baseline level; and ALT increases at least 3 times normal it is known as HBV reactivation.

HBV relapse could occur spontaneously, clinically and virologically (HBVDNA > 10<sup>3</sup>copies/ml) according to the state of the body or mostly after immunosuppressive therapy which could lead to acute hepatitis or acute liver failure. However, a large number of HBV reactivation occur in subclinical cases, such as occult infections due to sexual, family contact, drug induce or alcoholic hepatitis. HBV reactivation can occur in some patient with autoimmune diseases, organ transplants and most serious case are often with bone marrow or liver transplant (Evens *et al.*,2011; Lok *et al.*,2012; Hsu *et al.*,2015)

## CHAPTER THREE

### METHODOLOGY

#### 3.1 The Existing Model

Khan *et al.* (2016) presented a transmission model of Hepatitis B virus with migration effect. We state the assumptions, parameters and the equations of their model below.

##### 3.1.1 Assumptions of the model by Khan *et al.* (2016)

The following are the assumptions of the existing model by Khan *et al.* (2016):

- i. The population is compartmentalized into six groups namely: Susceptible individuals, S(t), Exposed individuals E(t), Acutely infected individuals, A(t), Chronic carriers, C(t), Immunised individuals, V(t), and Migrated individuals, M(t), all at time t.
- ii. The population is mixed homogeneously, that is, all people are equally likely to be infected by the infectious individuals in case of contact.
- iii. The newborns to carrier mothers infected at birth are latently infected individual.

- iv. A proportion of susceptibles is vaccinated per unit time and the vaccinated individuals do not acquire permanent immunity.
- v. By vaccination coverage we assumed the complete three dose of HBV vaccine.
- vi. Migrants are adults hence; the natural birth rate of the migrated class is neglected.
- vii. There is a transmission rate from exposed to migrated class and vice-versa.
- viii. There is a transmission rate from migrated class to susceptible class and migrated class to acutely infected class.
- ix. There is a stable population with equal percapita birth and death rate  $\delta$  (as disease- induced death rate is not considered in the system).

### 3.1.2 Variables and parameters of the existing model.

The existing model has the following variables and parameters as given in Table 1.

**Table 1: The Variables and Parameters of the Existing Model by Khan *et al.* (2016).**

Parameters	Description
$S(t)$	Number of Susceptible individuals at time $t$
$E(t)$	Number of Exposed individuals at time $t$
$A(t)$	Number of Acute infectives at time $t$
$C(t)$	Number of Chronic carriers at time $t$
$V(t)$	Number of Immunized individuals at time $t$
$M(t)$	Number of Migrated individuals at time $t$
$\delta$	Equal per capita birth and death rate (as disease-induced death rate is not considered in the system)
$\pi$	The Proportion without immunization
$\gamma_1$	Rate at which exposed individuals become infectious and move to the Acute infected class
$\gamma_2$	Rate at which acutely infected individuals move to the chronic carrier class
$\gamma_3$	Rate at which chronic carriers acquire immunity and move to the immunized class
$\beta$	The transmission coefficient
$\kappa$	The infectiousness of carriers relative to acute infections
$q$	Proportion of acute infected individuals that become carriers
$1 - q$	Proportion of acute infected individuals that move to the immunity class.
$\delta_0$	The loss of immunity from the immunized class to susceptible class
$\rho$	Proportion of vaccinated susceptible per unit time
$\xi$	The rate of flow from exposed to migrated class.
$\alpha$	The flow from migrated to susceptible class.
$\mu_1$	The transmission rate from migrated class to exposed class.
$\mu_2$	The transmission rate from migrated class to acute infected class

$\eta$	Proportion of the unimmunized children born to carrier mothers
$\delta(1 - \pi)$	The newborns that are successfully immunized
$\delta\pi(1 - \eta C(t))$	Births flux into the susceptible class

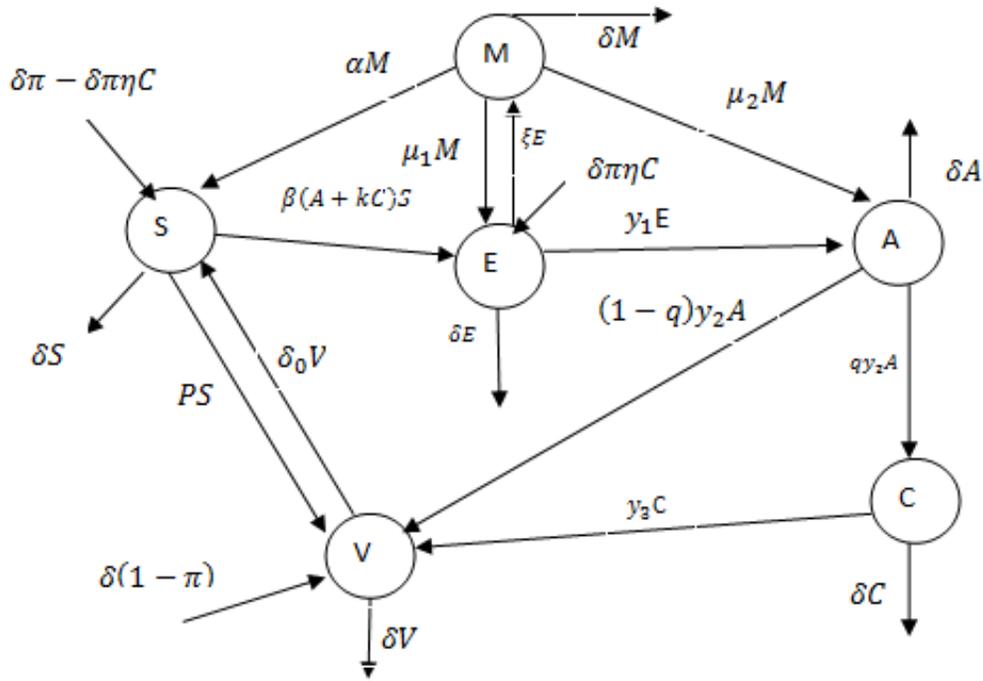


Figure 1: Flow Diagram of HBV transmission Dynamics for the Existing Model

### 3.1.3 The existing model equations

With the above assumptions, parameters and flow diagram in Khan *et al.* (2016), the following existing model equations were derived.

$$\frac{dS}{dt} = \delta\pi(1 - \eta C) - \delta S - \beta(A + kC)S + \delta_0 V - pS + \alpha M, \quad (3.1)$$

$$\frac{dE}{dt} = \beta(A + KC)S - \delta E + \delta\pi\eta C - \gamma_1 E + \mu_1 M - \xi E, \quad (3.2)$$

$$\frac{dA}{dt} = \gamma_1 E - (\delta + \gamma_2)A + \mu_2 M, \quad (3.3)$$

$$\frac{dC}{dt} = q\gamma_2 A - \delta C - \gamma_3 C, \quad (3.4)$$

$$\frac{dV}{dt} = \gamma_3 C + (1 - q)\gamma_2 A - \delta_0 V - \delta V + \delta(1 - \pi) + pS, \quad (3.5)$$

$$\frac{dM}{dt} = \xi E - (\mu_1 + \mu_2)M - \delta M - \alpha M. \quad (3.6)$$

## 3.2 The Extended Model

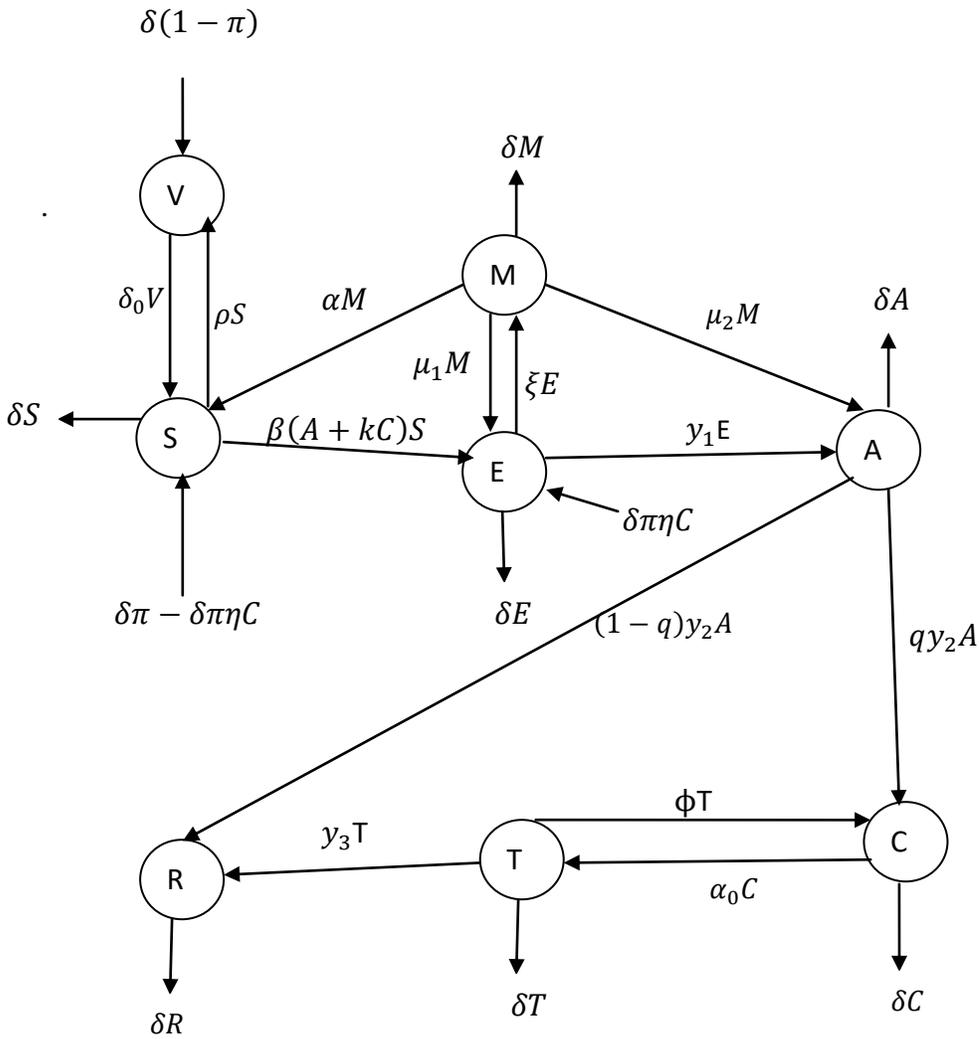
In addition to the assumptions of the existing model we present the new assumptions, parameters and the model flow diagram thereafter.

### 3.1.2 Assumptions of the extended model

We assume that the chronic carriers do not acquire immunity except they are treated (O'Leary *et al.*, 2008) and recruited into the treated class. Whereas, not all treated individuals recover and progress to the recovery class, some relapse to chronic if drug resistant mutants are present (Zhang *et al.*, 2012, Kosinska *et al.*, 2013). In addition, we change the notation of the immune class to vaccinated and recovery classes and redefined the parameters of the extended model in table 2.

**Table 2: Parameters of the Extended Model.**

Parameters	Description
$T(t)$	Number of treated individuals at time $t$
$R(t)$	Number of recovered individuals at time $t$
$\delta_0$	The loss of immunity from the vaccinated class to susceptible class
$\alpha_0$	Proportion of chronic carriers that are treated per unit time.
$\gamma_3$	Rate of recovery of the treated individuals
$\varphi$	Rate at which treated individual relapse and proceed to the chronic class
$1 - q$	Proportion of acute infected individual that move to the recovered class



**Figure 2: Flow Diagram of HBV transmission Dynamics for the Extended Model**

### 3.2.2 The equations of the extended model.

The extended model equations are derived based on the above assumptions, parameters and flow diagram:

$$\frac{dS}{dt} = \delta\pi(1 - \eta C) - \delta S - \beta(A + kC) - pS + \delta_0 V + \alpha M \quad (3.7)$$

$$\frac{dE}{dt} = \beta(A + kC)S - (\delta + \xi + \gamma_1)E + \delta\pi\eta C + \mu_1 M \quad (3.8)$$

$$\frac{dA}{dt} = \gamma_1 E - (\delta + \gamma_2)A + \mu_2 M \quad (3.9)$$

$$\frac{dC}{dt} = q\gamma_2 A + \varphi T - (\delta + \alpha_0)C \quad (3.10)$$

$$\frac{dT}{dt} = \alpha_0 C - (\delta + \varphi + \gamma_3)T \quad (3.11)$$

$$\frac{dR}{dt} = (1 - q)\gamma_2 A + \gamma_3 T - \delta R \quad (3.12)$$

$$\frac{dM}{dt} = \xi E - (\mu_1 + \mu_2 + \delta + \alpha)M \quad (3.13)$$

$$\frac{dV}{dt} = \delta(1 - \pi) + pS - (\delta + \delta_0)V, \quad (3.14)$$

$$S(0) > 0, E(0) \geq 0, A(0) \geq 0, C(0) \geq 0, T(0) \geq 0, R(0) \geq 0, M(0) \geq 0, V(0) \geq 0$$

The total population  $N(t)$ , is defined by

Where,

$$R = 1 - S - E - A - C - T - M - V \quad (3.15)$$

### 3.4.3 The effective reproduction number, $R_{r,c}$

The effective reproduction number is defined as the average number of new infection generated by a typical infectious individual in the presence of a control (Gumel *et al.*, 2004). Effective reproduction number is the useful threshold for predicting outbreaks and evaluating control strategies that would reduce the spread of the disease in the population. If  $R_{r,c} < 1$ , the disease can be eliminated, however, when  $R_{r,c} > 1$  it will persist or become endemic in the population.

The effective reproduction number for the model (3.17) – (3.23) is calculated using the next generation operator approach as described by Driessche and Watmough (2002) .

Applying this approach, we rearrange our model in equation (3.17) – (3.23) in order of infected compartments followed by uninfected compartment. This gives

$$\frac{dE}{dt} = \beta(A + kC)S - \delta E + \delta\pi\eta C - \gamma_1 E - \xi E + \mu_1 M, \quad (3.17)$$

$$\frac{dA}{dt} = \gamma_1 E - (\delta + \gamma_2)A + \mu_2 M, \quad (3.18)$$

$$\frac{dC}{dt} = q\gamma_2 A + \varphi T - (\delta + \alpha_0)C, \quad (3.19)$$

$$\frac{dM}{dt} = \xi E - (\mu_1 + \mu_2 + \delta + \alpha)M. \quad (3.20)$$

$$\frac{dT}{dt} = \alpha_0 C - (\delta + \varphi + \gamma_3)T \quad (3.21)$$

$$\frac{dS}{dt} = \delta\pi(1 - \eta C) - \delta S - \beta(A + kC)S + \delta_0 V - pS + \alpha M, \quad (3.22)$$

$$\frac{dV}{dt} = \delta(1 - \pi) + pS - (\delta + \delta_0)V, \quad (3.23)$$

From equation (3.17) – (3.21), we have the new infective and transfer terms from one compartment to another given as

$$f = \begin{pmatrix} \beta(A + KC)S \\ 0 \\ 0 \\ 0 \\ 0 \end{pmatrix} \quad (3.24)$$

and

$$v = \begin{pmatrix} (\delta + \xi + \gamma_1)E - \delta\pi\eta C - \mu_1 M \\ (\delta + \gamma_2)A - \mu_2 M - \gamma_1 E \\ (\delta + \alpha_0)C - q\gamma_2 A - \varphi T \\ (\delta + \varphi + \gamma_3)T - \alpha_0 C \\ (\mu_1 + \mu_2 + \alpha + \delta)M - \xi E \end{pmatrix} \quad (3.25)$$

Therefore, taking the partial derivatives of (3.24) with respect to  $(E, A, C, T, M)$  at disease free equilibrium  $\varepsilon_0 = S^0$ , we obtain

$$F = Df(\varepsilon_0) = \begin{pmatrix} 0 & \beta S^0 & \beta K S^0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \end{pmatrix} \quad (3.26)$$

Similarly, the partial derivatives of (3.25) with respect to  $(E, A, C, T, M)$  at disease free equilibrium  $\varepsilon_0$  gives

$$V = \begin{pmatrix} m_1 & 0 & -m_2 & 0 & -\mu_1 \\ -\gamma_1 & m_3 & 0 & 0 & -\mu_2 \\ 0 & -m_4 & m_5 & -\varphi & 0 \\ 0 & 0 & -\alpha_0 & m_6 & 0 \\ -\xi & 0 & 0 & 0 & m_7 \end{pmatrix} \quad (3.27)$$

where ,  $m_1 = (\delta + \xi + \gamma_1)$ ,  $m_2 = \delta\pi\eta$ ,  $m_3 = (\delta + \gamma_2)$ ,  $m_4 = q\gamma_2$ ,  $m_5 = (\delta + \alpha_0)$ ,

$$m_6 = (\delta + \varphi + \gamma_3), m_7 = (\alpha + \delta + \mu_1 + \mu_2)$$

Therefore, by taking the transpose of the matrix of co factors and dividing by its

determinant,

We have,

$$V^{-1} = \begin{pmatrix} B_1 & B_2 & B_3 & B_4 & B_5 \\ C_1 & C_2 & C_3 & C_4 & C_5 \\ D_1 & D_2 & D_3 & D_4 & D_5 \\ E_1 & E_2 & E_3 & E_4 & E_5 \\ F_1 & F_2 & F_3 & F_4 & F_5 \end{pmatrix} \quad (3.28)$$

such that

$$FV^{-1} = (N_1 \quad N_2), \quad (3.29)$$

where

$$N_1 = \begin{pmatrix} (\beta S^0 C_1 + \beta K S^0 D_1) & (\beta S^0 C_2 + \beta K S^0 D_2) & (\beta S^0 C_3 + \beta K S^0 D_3) \\ 0 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \end{pmatrix} \quad (3.30)$$

$$N_2 = \begin{pmatrix} (\beta S^0 C_4 + \beta K S^0 D_4) & (\beta S^0 C_5 + \beta K S^0 D_5) \\ 0 & 0 \\ 0 & 0 \\ 0 & 0 \\ 0 & 0 \end{pmatrix} \quad (3.31)$$

From which we obtain

$$R_{rc} = \rho(FV^{-1}) = \beta S^0 C_1 + \beta K S^0 D_1, \quad (3.32)$$

where

$$D_1 = \left( \frac{m_4 m_6 (\gamma_1 m_7 + \xi \mu_2)}{\theta} \right)$$

$$C_1 = \left( \frac{(m_5 m_6 - \varphi \alpha_0)(\gamma_1 m_7 + \xi \mu_2)}{\theta} \right)$$

and

$$\theta = \varphi \alpha_0 m_3 (m_1 m_7 + \xi \mu_1) - \xi m_6 (m_2 m_4 \mu_2 + m_3 m_5 \mu_1) - m_6 m_7 (m_2 m_4 \gamma_1 - m_1 m_3 m_5)$$

Thus, the effective reproduction number with relapse in (3.32) can be rewritten as

$$R_{rc} = \frac{[\beta S^0 (c + Kq\gamma_2(\delta + \varphi + \gamma_3)) + e(\delta + \varphi + \gamma_3)](\mu_2 \xi + \gamma_1 a) + \xi \mu_1 bc}{dbca} \quad (3.33)$$

### Numerical Simulation

Numerical Simulations is used to illustrate some of the analytical results and verify theoretical predictions of the model (1)-(7) using a set of parameter values (Table 2). These parameter values are gotten from the epidemiology of HBV and the demographic profile of the population which is obtained from the literature (Khan *et al.*, 2016; Pan *et al.*, (2013)).

In this section, we indeed demonstrate numerically using the fourth-order Runge-Kutta method coded by the aid of MATLAB program in Appendix A to simulate the model (1)-(7).

**Table 2: Parameters Values used in Numerical Simulation**

<i>Parameters</i>	<i>Range</i>	<i>Value</i>	<i>Source</i>
$\beta$		0.8	Khan <i>et al.</i> (2016)
$\delta$		0.0143	Khan <i>et al.</i> (2016)
$\delta_0$	0.03-0.06	0.03	Khan <i>et al.</i> (2016)
$\gamma_1$		6 per year	Khan <i>et al.</i> (2016)
$\gamma_2$		4 per year	Khan <i>et al.</i> (2016)
$\gamma_3$		0.34	Khan <i>et al.</i> (2016)
$k$		0.1	Khan <i>et al.</i> (2016)
$\pi$		0.8	Khan <i>et al.</i> (2016)
$\eta$		0.7	Khan <i>et al.</i> (2016)
$\mu_1$		0.1	Khan <i>et al.</i> (2016)
$\mu_2$		0.1	Khan <i>et al.</i> (2016)
$\alpha$	0-1	0.1	Khan <i>et al.</i> (2016)
$\xi$	0-1	0.1	Khan <i>et al.</i> (2016)
$q$	0.05-0.9	0.05	WHO (2002)
$\varphi$		0.393	Pan <i>et al.</i> (2013)
$S_0$		0.493	Medley <i>et al.</i> (2001)
$E_0$		0.0035	Medley <i>et al.</i> (2001)
$A_0$		0.0035	Medley <i>et al.</i> (2001)
$C_0$		0.25	Assumed
$M_0$		0.003	Assumed
$P$		0.8	Assumed
$\alpha_o$		0.8	Assumed

The results of the numerical experiments are meant to study the following cases (a)-(d).

- a) The behaviour of chronic carriers in the absence of relapse. This is shown in Figure 2.
- b) The impact of different relapse rates on the chronic carriers. This is shown in Figure 3.
- c) The impact of different relapse rates on Acute infection. This is shown in Figure 4.
- d) The impact of reproduction number against relapse. This is shown in Figure 5.

### Sensitivity Analysis

We perform sensitivity analysis to determine the relative importance of model parameters responsible for disease transmission. The analysis will enable us to find out parameters that have a high impact on the effective reproduction number and which should be targeted by intervention strategies. We perform sensitivity analysis by calculating the sensitivity indices of the effective reproduction number with relapse  $R_r^c$  to determine whether HBV can be eradicated in the population or not. These indices tell us how vital each parameter is to hepatitis B transmission and prevalence.

Sensitivity analysis is commonly used to determine the robustness of model predictions to parameter values because there are usually errors in data collection and presumed parameter values (Chitnis *et al.*, 2008). To investigate which parameters in the model system have a high impact on the  $R_r^c$  and should be targeted by intervention strategies, we apply the approach presented by Chitnis *et al.* (2008). The normalized forward sensitivity index of a variable to a parameter is a ratio of the relative change in the parameter. When a variable is a differentiable function of the parameter, the sensitivity index may be alternatively defined using partial derivatives as follows.

**Definition 1:** The normalized forward sensitivity index of a variable,  $\tau$  that depends differentiable on the index of a parameter  $p$  is defined as

$$r_{\tau}^{\rho} = \frac{\partial \rho}{\partial \tau} \times \frac{\tau}{\rho} \quad (3.34)$$

From the formula of effective reproduction,  $R_r^c$  in equation (3.34), we derive an analytical expression for the sensitivity of  $R_r^c$  as

$$r_{\tau}^{R_r^c} = \frac{\partial R_r^c}{\partial \tau} \times \frac{\tau}{R_r^c} \quad (3.35)$$

where  $\tau$  denotes the parameter. We compute the sensitive indices of the model system for some parameters involved in  $R_r^c$ . For example the sensitivity index of  $R_r^c$  with respect to  $\beta$  is given by

$$r_{\beta}^{R_r^c} = \frac{\partial R_r^c}{\partial \beta} \times \frac{\beta}{R_r^c} \quad (3.36)$$

Also, the sensitivity index of  $R_r^c$  with respect to  $\alpha_0$  is given by

$$r_{\alpha_0}^{R_r^c} = \frac{\partial R_r^c}{\partial \alpha_0} \times \frac{\alpha_0}{R_r^c} \quad (3.37)$$

Furthermore, the sensitivity index of  $R_r^c$  with respect to  $\varphi$  is given by

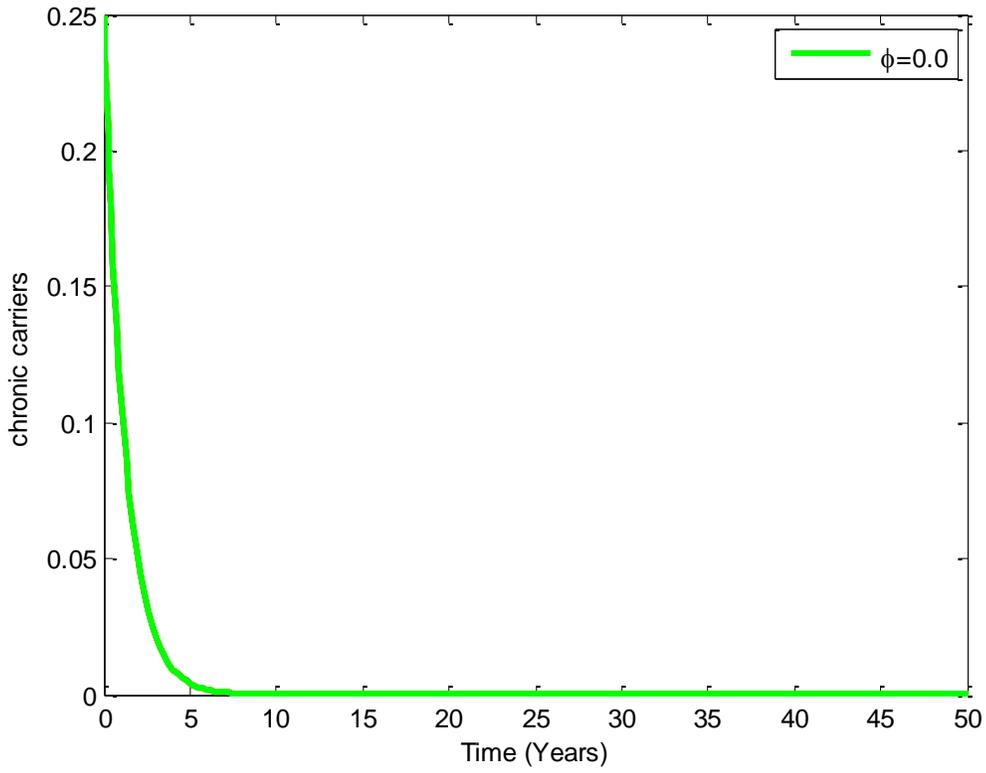
$$r_{\varphi}^{R_r^c} = \frac{\partial R_r^c}{\partial \varphi} \times \frac{\varphi}{R_r^c} \quad (3.38)$$

## RESULTS AND DISCUSSION

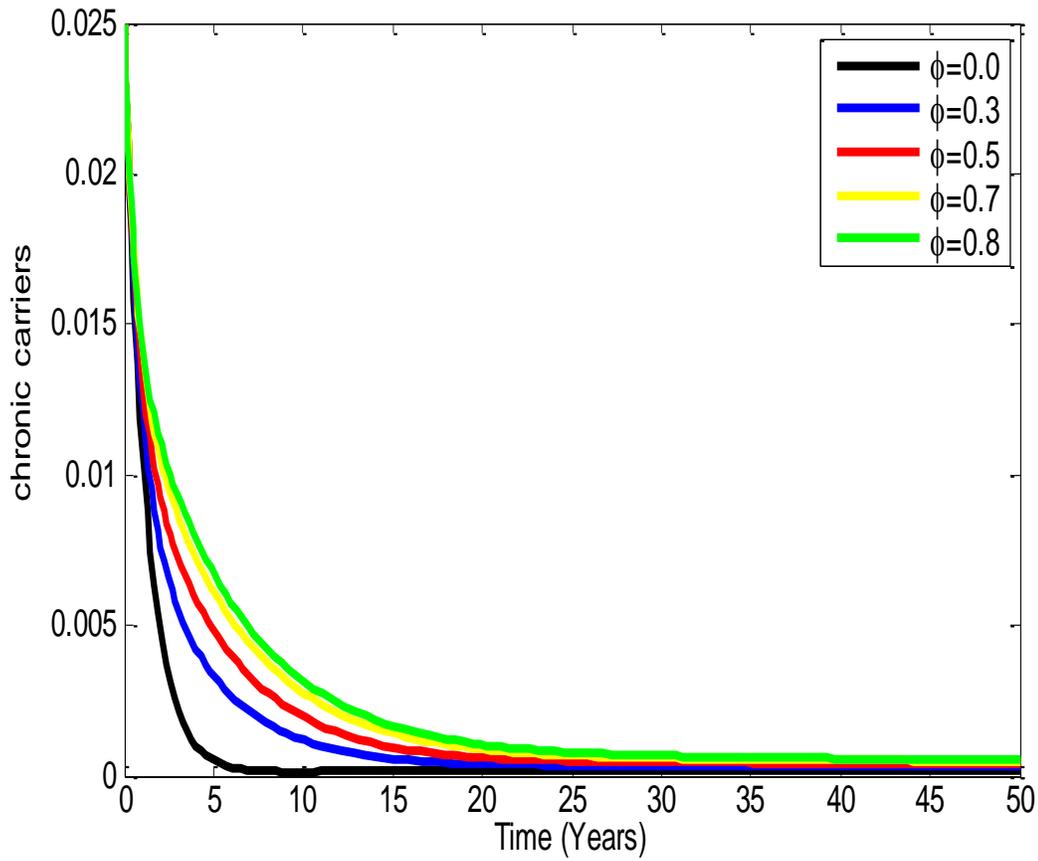
In this section, we present the main findings of the study under the following sub-headings.

### Numerical Results

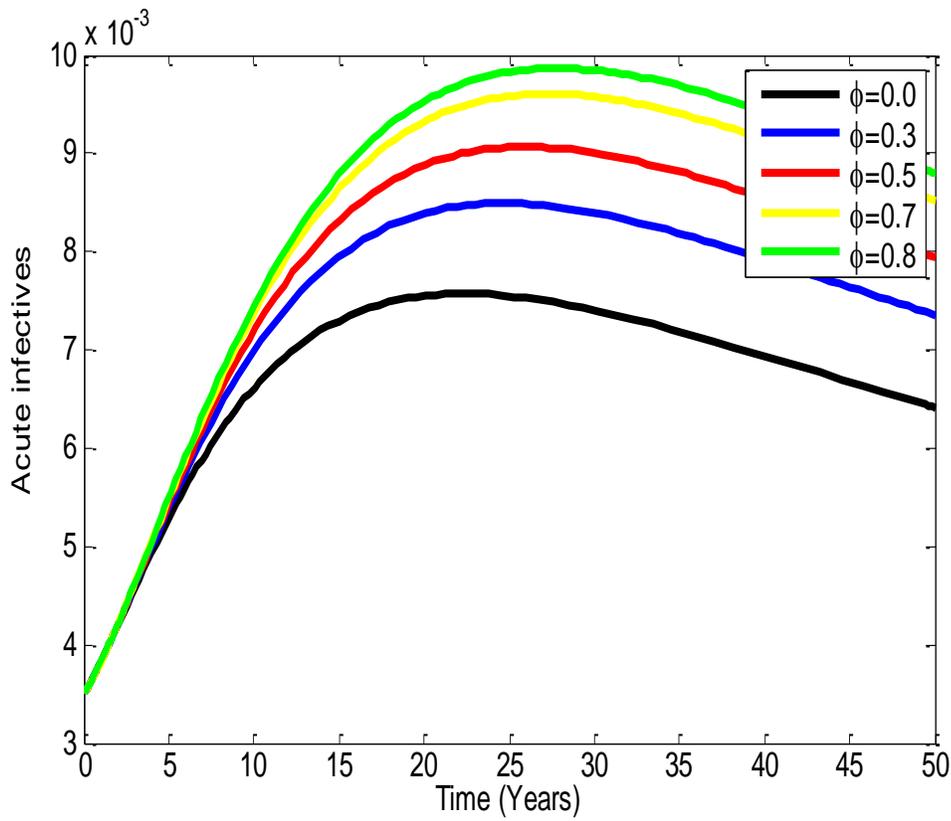
We begin this sub-section by presenting the numerical results of the above experiments (a-d).



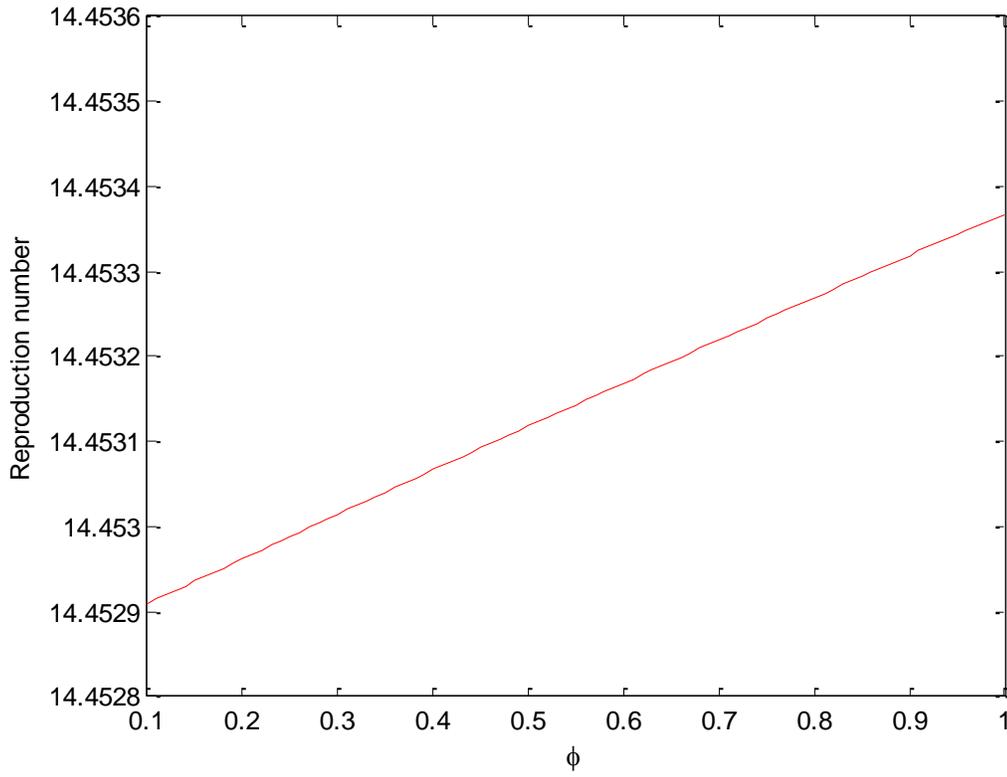
**Figure 2: A situation where there is no relapse on Chronic Carriers( $\varphi = 0, 0$ )**



**Figure 3:** Impact of increasing Relapse Rate on Chronic Carriers( $\varphi = 0, 0.3, 0.5, 0.7, 0.8$ )



**Figure 4:** Impact of Relapse Rates on Acute Infectives ( $\varphi = 0, 0.3, 0.5, 0.7, 0.8$ ).



**Figure 5: Impact of reproduction number against relapse rate**

## Sensitivity Results

We use the parameter values displayed in Table 1 to obtain the numerical value, therefore, the sensitivity index of  $R_r^c$  with respect to  $\beta$  is given by

$$r_{\beta}^{R_r^c} = 1$$

the sensitivity index of  $R_r^c$  with respect to  $\alpha_0$  is given by

$$r_{\alpha_0}^{R_r^c} = -0.0000342508$$

Furthermore, the sensitivity index of  $R_r^c$  with respect to  $\varphi$  is given by

$$r_{\varphi}^{R_r^c} = 0.00001801218$$

The sensitivity indices results of  $R_r^c$  are given in Table 3 and are arranged from the highest sensitivity value to the lowest value. The indices with positive signs show that the value of  $R_r^c$  increases when the corresponding parameters are increased and those having negative signs indicate that the value of  $R_r^c$  decreases when the parameters are increased.

**Table 3: Sensitivity Indices of  $R_r^c$  with respect to some Parameters**

S/N	Parameter	Sensitivity Index	Sign
1	$\beta$	1.000000000	+
2	$p$	0.9475304984	-
3	$\delta_0$	0.6884058306	+
4	$\gamma_2$	0.434756444	-
5	$\mu_2$	0.3475541027	+
6	$\alpha$	0.3123292643	-
7	$\pi$	0.2760833440	+
8	$\gamma_1$	0.1742824945	+
9	$\xi$	0.0296644089	-
10	$\mu_1$	0.0094382464	+
11	$q$	0.00003554198	+
12	$\alpha_0$	0.00003425081	-
13	$\eta$	0.00002156809	+
14	$\varphi$	0.00001801218	+
15	$k$	0.0000139739	+
16	$\gamma_3$	0.000001728521	-

## Numerical Simulation Results

The behaviour of the model is shown in Figure 2 - 6 where we plot the prevalence of the population with time.

The parameter values used in the numerical experiment are in Table 2.

Figure 2 shows clearly that when there is no relapse rate, the chronic carriers' declines over a short period. The medical implication is that the result in Figure 1 agrees with the report of Weinbaum *et al.* (2008) that HBeAg will clear in a short time, which leads to a marked reduction in disease activity, viral load, and histological improvement in the population. This agrees with the requirement for the global elimination of hepatitis B (WHO, 2015; Nayagam *et al.*, 2016).

Figure 3 demonstrates clearly that when the relapse rate is increased (0%, 30%, 50%, 70%, 80%), it takes a longer time for the infection (chronic carrier) to be curtailed. That is relapse slows down the potential of recovery from the infection. On the other hand, when the relapse rate is reduced by adhering to treatment it takes a short time for the infection to be curtailed as seen in figure 3. Therefore, for the infection to be put under control relapse in patients, need to be checked.

Figure 4 demonstrates clearly that when the relapse rate is increased, the number of acute infective increases.

Figure 5 shows clearly that  $R_r^c$  increases in the presence of relapse (treatment failure). Therefore,  $\varphi$  increases the spread of the disease in the population. Hence, it will be profitable if the impact of treatment failure is checked.

## Sensitivity Analysis Result

In interpreting the sensitivity indices, we keep all other factors constant. Table 3 shows that parameters  $\beta, \delta_0, \pi, q, \gamma_1, \varphi$  and  $\eta$  increase the value of  $R_r^c$  when they are increased. This implies that the HBV infection will grow up in the population when these parameters are increased. On the contrary,  $\gamma_2, p, \alpha_0$  and  $\gamma_3$  decrease the value of  $R_r^c$  when they are increased. This implies that the disease cannot grow in the population when these parameters are increasing.

The most, sensitive parameter is the transmission coefficient  $\beta$ . Increasing or decreasing the value of  $\beta$  leads to the increase or decrease of the value of  $R_r^c$  with the same proportion since the sensitivity index is equal to one. Therefore, as  $\beta$  increases, many persons become infected, so HBV transmission increases in the population. Treatment rate  $\alpha_0$  is also sensitive, showing that as  $\alpha_0$  increases  $R_r^c$  decreases. This implies that treatment as a control strategy helps to reduce viral loads in most treated persons.

Furthermore, when relapse rate,  $\varphi$  increases then  $R_r^c$  increases, this implies that many treated individuals move to the chronic carrier-class after undergoing relapse. Therefore, to minimize HBV transmission in a population, this study recommends that relapse should be curtailed because it increases the livelihood of reoccurrences of the infection.

## CONCLUSION AND RECOMMENDATION

### Conclusion

In this study, we simulate a deterministic compartmental model on the impact of relapse on HBV transmission dynamics. The sensitivity analysis is carried out to show some important parameters that may cause an increase in the effective reproduction number, which could be checked by way of reoccurrences of the infection. The result of the numerical simulation reveals that relapse (reoccurrences of the infection) delays the quick response to a treatment regimen which consequently slows down the potential of recovery from the infection. Also, it increases the number of infected persons in the population and hence increases the spread of HBV.

### Recommendations

Based on the findings of this research, to reduce the development of relapse as much as possible and to increase recovery, the study recommends that new drugs with low resistance should be provided, which will help to minimize the risk of relapse in controlling the spread of HBV.

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## A NEW VERSION OF MINIMAX INEQUALITY

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**Abstract.** A minimax inequality of Ky Fan for mapping with non-compact domain is given. Moreover, some minimax inequalities are obtained.

**Key words and phrases.** KKM property, transfer upper semicontinuous, transfer lower semicontinuous, minimax theorem.

**2020 Mathematics Subject Classification.** Primary 46A03; Secondary 46A22.

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**КРАЕВЫХ ЗАДАЧ ДЛЯ ОПЕРАТОРНО – ДИФФЕРЕНЦИАЛЬНЫХ УРАВНЕНИЙ ВТОРОГО ПОРЯДКА В ГИЛЬБЕРТОВО ПРОСТРАНСТВЕ.****Гамидов Эльшад Гамид оглы.***доктор философии по математике, доцент**Азербайджанский Государственный Педагогический Университет*

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В сепарабельном гильбертовом пространстве  $H$  рассмотрим параболическое операторно-дифференциальное уравнение

$$u''(t) + (pA + A_1)u'(t) + A^2u(t) = f(t), t \in R_+ = (0, \infty) \quad (1)$$

$$u(0) = 0, \quad u''(0) = 0 \quad (2)$$

где  $f(t)$ ,  $u(t)$  – вектор – функции со значениями в  $H$ , а коэффициенты уравнения (1) удовлетворяют условиям:

- 1)  $p > 0$ ,
- 2)  $A$  – положительно определённый самосопряженный оператор
- 3)  $A_1 \in L(H_1, H) \cup L(H_2, H_1)$

Здесь производные понимаются в смысле теории распределений [1],  $L(X, Y)$  – пространство линейных ограниченных операторов действующих из пространство  $X$  в  $Y$ . Пусть  $H_\gamma = D(A^\gamma)$  гильбертово пространство с нормой  $\|x\|_\gamma$ ,  $x \in D(A^\gamma)$ ,  $\gamma \geq 0$ ,  $H_0 = H$ .

Определим следующие гильбертовы пространства [1]

$$L_2(R_+; H) = \left\{ g(t) : \|g\|_{L_2(R_+; H)} = \left( \int_0^\infty \|g(t)\|^2 dt \right)^{1/2} < \infty \right\},$$

$$W_2^m(R_+; H) = \left\{ u(t) : u^{(m)}, A^m u \in L_2(R_+; H), \|u\|_{W_2^m(R_+; H)} = \left( \|u^{(m)}\|_{L_2(R_+; H)}^2 + \|A^m u\|_{L_2(R_+; H)}^2 \right)^{1/2} \right\}$$

При  $m = 4$  определим подпространство пространства:  $W_2^4(R_+; H)$ :

$$W_2^{0,4}(R_+; H) = \{u : u \in W_2^4(R_+; H), u(0) = u''(0) = 0\}$$

Аналогично определяется пространство  $W_2^m(R; H)$ , где  $R = (-\infty, \infty)$ . Задача (1), (2) интересна тем, что в граничных условия (2) порядок производной равен порядку уравнения. Задачи такого типа рассмотрены в работах [2-5].

**Определение.** Если при любом  $f(t) \in W_2^2(R_+; H)$  существует вектор – функция  $u(t) \in W_2^4(R_+; H)$ , которая удовлетворяет уравнению (1) тождественно в  $R_+$ , граничные условия (2) в смысле сходимости

$$\lim_{t \rightarrow +0} \|u(t)\|_{5/2} = 0, \quad \lim_{t \rightarrow +0} \|u''(t)\|_{1/2} = 0,$$

и оценку  $\|u\|_{W_2^4(R_+; H)} \leq \text{const} \|f\|_{W_2^2(R_+; H)}$ , то будем говорить что задача (1), (2) корректно разрешима в пространстве  $W_2^4(R_+; H)$ .

В данной работе мы находим условия на коэффициенты уравнения (1), которые обеспечивают корректно разрешимости задачи (1), (2) в пространстве  $W_2^4(R_+; H)$ .

Обозначим через

$$P_0 u = P_0 (d/dt)u = -u'' + p A u' + A^2 u, \quad P_1 u = P_1 (d/dt)u = A_1 u'$$

и

$$P u = P_0 u + P_1 u, \quad u \in W_2^{0,4}(R_+; H)$$

Сперва исследуем корректно разрешимость уравнение  $P_0 u = f$  при  $f \in W_2^2(R_+; H), u \in W_2^4(R_+; H)$ .

**Теорема 1.** Оператор  $P_0$  изоморфно отображает пространство  $W_2^{0,4}(R_+; H)$  на  $W_2^2(R_+; H)$ .

**Лемма 1.** Пусть  $\gamma \in (0, p^2)$ . Тогда при любом  $u \in W_2^{0,4}(R_+; H)$  имеет место равенства

$$\begin{aligned} \|F_1(d/dt; \gamma; A)u\|_{L_2(R_+; H)}^2 + (a_1(\gamma)a_2(\gamma) - a_0(\gamma) - 2p)\|u'(0)\|_{3/2}^2 = \\ = \|P_0u\|^2 - \gamma\|Au'\|_{W_2^2(R_+; H)}^2, \end{aligned} \quad (3)$$

где

$$a_0(\gamma) = q, \quad a_1(\gamma) = \sqrt{p^2 - \gamma} + 1, \quad a_2(\gamma) = 1 + \sqrt{p^2 - \gamma} \quad (4)$$

$$F(\lambda; \beta; A) = \lambda^3 E + \alpha_2(\gamma)\lambda^2 A + a_1(\gamma)\lambda A^2 + a_0(\gamma)A^2 \quad (5)$$

**Замечание.** Легко видеть, что операторный пучок  $F_1(\lambda; \beta; A)$  представляется в виде:

$$F_1(\lambda; \gamma; A) = (\lambda E + A)(\lambda E - \omega_1(\gamma)A)(\lambda E - \omega_2(\gamma)A), \quad \gamma \in (0, p^2),$$

причем  $\operatorname{Re} \omega_1(\gamma) < 0, \operatorname{Re} \omega_2(\gamma) < 0$ , при  $\gamma \in (0, p^2)$ . Из теоремы 1 и из теоремы о промежуточных производных следует, что число

$$N_1 = \sup_{0 \neq u \in W_2^{0,4}(R_+; H)} \|Au'\|_{W_2^2(R_+; H)} \cdot \|P_0u\|_{W_2^2(R_+; H)}^{-1}$$

есть норма в пространстве  $W_2^{0,4}(R_+; H)$  эквивалентной нормой  $\|u\|_{W_2^4(R_+; H)}$ . Теперь найдём точное значения нормы  $N_1$ .

**Лемма 2.** Норма

$$N_1 = \left( p^2 - \frac{1}{2}(\sqrt{1+2p} - 2)^2 \right)^{-1/2} \quad (6)$$

**Теорема 2.** Пусть выполняются условия 1)-3), причем

$$\max \left( \|A_1\|_{H_1 \rightarrow H}, \|A_1\|_{H_2 \rightarrow H_1} \right) < \left( p^2 - \left( \sqrt{1+2p} - 1 \right)^2 \right)^{1/2}$$

Тогда задача (1), (2) корректно разрешима в пространстве  $W_2^4(R_+; H)$ .

**Ключевые слова:** Гилбертово пространство, операторно-дифференциальные уравнения, гладких решений, вектор-функций, самосопряженный оператор.

### Boundary value problems for second-order operator-differential equations in Hilbert space.

In a separable Hilbert space, we consider a parabolic operator-differential equation

$$u''(t) + (pA + A_1)u'(t) + A^2 u(t) = f(t), \quad t \in R_+ = (0, \infty) \quad (1)$$

$$u(0) = 0, \quad u''(0) = 0 \quad (2)$$

Where is  $f(t)$ ,  $u(t)$  – a vector - functions with values в,  $H$ , and the coefficients of equation (1) satisfy the conditions:

- 1)  $p > 0$ ,
- 2)  $A$  - positive definite self-adjoint operator
- 3)  $A_1 \in L(H_1, H) \cap L(H_2, H_1)$

Here derivatives are understood in the sense of the theory of distributions [1],  $L(X, Y)$  is the space of linear bounded operators acting from space to.  $X$  for  $Y$ . Let  $H_\gamma = D(A^\gamma)$  Hilbert space with norm

$$\|x\|_\gamma, \quad x \in D(A^\gamma), \quad \gamma \geq 0, \quad H_0 = H.$$

Define the following Hilbert spaces [1]

$$L_2(R_+; H) = \left\{ g(t) : \|g\|_{L_2(R_+; H)} = \left( \int_0^\infty \|g(t)\|^2 dt \right)^{1/2} < \infty \right\},$$

$$W_2^m(R_+; H) = \left\{ u(t) : u^{(m)}, A^m u \in L_2(R_+; H), \|u\|_{W_2^m(R_+; H)} = \left( \|u^{(m)}\|_{L_2(R_+; H)}^2 + \|A^m u\|_{L_2(R_+; H)}^2 \right)^{1/2} \right\} \text{ When}$$

$m=4$  we define the subspace space:  $W_2^4(R_+; H)$ :

$$W_2^{0,4}(R_+; H) = \{u : u \in W_2^4(R_+; H), u(0) = u''(0) = 0\}$$

The space  $W_2^m(R; H)$ , where is  $R = (-\infty, \infty)$  defined similarly. Problem (1), (2) is interesting because in the boundary conditions (2) the order of the derivative equals the order of the equation. Tasks of this type were considered in [2-5].

**Definition.** If for any there is  $f(t) \in W_2^2(R_+; H)$  a vector - a function  $u(t) \in W_2^4(R_+; H)$ , that satisfies equation (1) is identical in,  $R_+$  then the boundary conditions (2) in the sense of convergence

$$\lim_{t \rightarrow +0} \|u(t)\|_{5/2} = 0, \quad \lim_{t \rightarrow +0} \|u''(t)\|_{1/2} = 0,$$

and estimate  $\|u\|_{W_2^4(R_+; H)} \leq \text{const} \|f\|_{W_2^2(R_1; H)}$ , then we say that problem (1), (2) is correctly solvable in space  $W_2^4(R_+; H)$ .

Denote by

$$P_0 u = P_0 (d/dt)u = -u'' + p A u' + A^2 u, \quad P_1 u = P_1 (d/dt)u = A_1 u'$$

and

$$P u = P_0 u + P_1 u, \quad u \in W_2^{0,4}(R_+; H)$$

First, we investigate correctly  $P_0 u = f$  the solvability of the equation with  $f \in W_2^2(R_+; H), u \in W_2^4(R_+; H)$ .

**Theorem 1.** The operator  $P_0$  maps space isomorphically  $\overset{0}{W}_2^4(R_+; H)$  to  $W_2^2(R_+; H)$ .

**Lemma 1.** Let  $\gamma \in (0, p^2)$ . Then for  $u \in \overset{0}{W}_2^4(R_+; H)$  any equality takes place

$$\begin{aligned} \|F_1(d/dt; \gamma; A)u\|_{L_2(R_+; H)}^2 + (a_1(\gamma)a_2(\gamma) - a_0(\gamma) - 2p)\|u'(0)\|_{3/2}^2 = \\ = \|P_0u\|^2 - \gamma\|Au'\|_{W_2^2(R_+; H)}^2, \end{aligned} \quad (3)$$

when

$$a_0(\gamma) = q, \quad a_1(\gamma) = \sqrt{p^2 - \gamma} + 1, \quad a_2(\gamma) = 1 + \sqrt{p^2 - \gamma} \quad (4)$$

$$F(\lambda; \beta; A) = \lambda^3 E + \alpha_2(\gamma)\lambda^2 A + a_1(\gamma)\lambda A^2 + a_0(\gamma)A^2 \quad (5)$$

**Comment.** It is easy to see that the operator bundle  $F_1(\lambda; \beta; A)$  is represented as:

$$F_1(\lambda; \gamma; A) = (\lambda E + A)(\lambda E - \omega_1(\gamma)A)(\lambda E - \omega_2(\gamma)A), \quad \gamma \in (0, p^2),$$

where  $\text{Re } \omega_1(\gamma) < 0, \text{Re } \omega_2(\gamma) < 0,$  at  $\gamma \in (0, p^2)$ . From Theorem 1 and from the intermediate derivatives theorem it follows that the number

$$N_1 = \sup_{0 \neq u \in \overset{0}{W}_2^4(R_+; H)} \|Au'\|_{W_2^2(R_+; H)} \cdot \|P_0u\|_{W_2^2(R_+; H)}^{-1}$$

is the norm in space  $\overset{0}{W}_2^4(R_+; H)$  equivalent norm  $\|u\|_{W_2^4(R_+; H)}$ . Now we find the exact values of the norm  $N_1$ .

**Lemma 2.** Norm

$$N_1 = \left( p^2 - \frac{1}{2}(\sqrt{1+2p} - 2)^2 \right)^{-1/2} \quad (6)$$

**Theorem 2.** Let conditions 1) –3) be fulfilled, where

$$\max \left( \|A_1\|_{H_1 \rightarrow H}, \|A_1\|_{H_2 \rightarrow H_1} \right) < \left( p^2 - \left( \sqrt{1+2p} - 1 \right)^2 \right)^{1/2}$$

Then the problem (1), (2) is correctly solvable in the space  $W_2^4(R_+; H)$ .

**Key words:** Hilbert space, operator-differential equations, smooth solutions, vector-functional, self-adjoint operator.

## INVESTIGATING MATERNAL MORTALITY CASES IN WUKARI, TARABA STATE, NIGERIA

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### ABSTRACT

Maternal mortality in Nigeria has been one of the major subjects of peculiar interest to public health workers and the government. This concern is as a result of the alarming rate at which women who are pregnant or a few weeks after childbirth die due to one reason or another such as complications resulting from poor medical facilities and personnel etc. The aim of this study is to use statistical tools to analyze the maternal mortality ratio. Data were sourced from General Hospital Wukari spanning a period of 14 years. The methods of finding the maternal mortality rate were used to estimate the Maternal Mortality Rate and Ratio, to describe the trend, and to make the forecast, the method of time series analysis was used. 12,459 cases involving maternity were observed from the records. The results obtained from the analysis showed the estimated MM Ratio to be 0.005 (that is 500) maternal deaths for every 100000 maternal-related cases. Also, the MM Rate was found to be 0.009 (that is 900) maternal deaths for every 100000 maternal births in the population. Also from the forecast, it was found that the trend for maternal mortality is decreasing as found in the trend.

Keywords: Maternal mortality rate; Pregnant; Number of live births; Women of reproductive age; Smoothing parameters

### 1.0 INTRODUCTION

#### 1.1 Background of the Study

The maternal mortality ratio (MMR) is the number of maternal deaths during a given time period per 100,000 live births during the same time period from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes). The MMR includes deaths during pregnancy, childbirth, or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, for a specified year. As defined by Ronsmans-Graham (2006), it is the death of a woman during pregnancy or within 42 days after birth. In recent times, this problem has been found to be on the increase instead. For example, in a study by

Sharma *et al.* (2017), it was observed that in 2013 alone, about 293,000 maternal deaths occurred worldwide, with a whopping 99% of these occurrences to be among countries with meager income. The African continent happened to be the most affected worldwide. For instance, Africa is seen as being close to 17 out of every 20 countries with the alarming rate of maternal mortality index in the world.

Nigeria as one of the African countries is not an exception to alarming rate of maternal mortality as observed in other countries. Studies have shown that Nigeria is one of the six countries, alongside others that contribute to over 50% of the total maternal deaths globally. The reductions in the maternal mortality ratio (MMR) have been conflicting (Sharma *et al.* 2017).

In another report by index mundi (2018), the maternal mortality index of Nigeria is not only the fourth highest globally, but it is estimated to be 814 for every 100,000 which appears to be on the increase when compared with 576 by the Demographic and Health Survey in 2013.

The increasing rate of maternal mortality in Nigeria is alarming and constitutes one of the major problems of public health. In an attempt to address this situation, experts in public health related issues made some recommendations and Nigeria's Federal Ministry of Health in 2013 granted those recommendations, that all maternal health institutions across the country should from time to time conduct a maternal death review, surveillance and response using the technical guidance document as recommended by the World Health Organization, (WHO 2013).

The prevention of maternal mortality and consequent improvement in the maternal health of Nigerian women is an all-encompassing task, which though tedious; is achievable through concerted efforts of health care providers, members of the society and government as a whole. There is an existing inter-relationship between these above-stated factors which is evident in poor government health and socio-economic expenditures required to ensure the health and well-being of a populace whose health-seeking behaviors are poor either as a result of poverty, cultural beliefs etc. (Ogu and Ephraim, 2018).

According to Ogu and Ephraim, (2018), In Nigeria, without regards to the administration of a variety of maternal health service strategies which comprises free antenatal care, training of skilled birth attendants etc.; as well as the availability of resources, the situation of maternal health remains one of the worst in Africa as evidenced by prevailing maternal mortality ratios. Nigeria contributes greater than 10% of maternal deaths globally (Yar'zever 2014). A joint report (Trends in Maternal Mortality: 1990 to 2015 by WHO, UNICEF, World Bank and United Nations Population Fund) estimates that Nigeria has approximately 58,000 maternal deaths, accounting for 19% globally. Put differently, at least 800 women die in every 100,000 live births. Northeast has the highest maternal mortality rate, compared to other regions, with 1,549 deaths per 100,000 live births. To address the high maternal mortality rates, in 2017 the inaugurated of a 34-member Task Force to accelerate reduction of maternal mortality in Nigeria, (WHO, 2018).

## **2.0 METHODOLOGY**

### **2.1 Introduction**

Here, we focus on the methods and procedures employed in carrying out the research. This includes the research design, study population, sample size and data gathering methods, the methods employed for data analysis and of the study, and area in which the research will be carried out.

### **2.2 Measures of Maternal Mortality**

There are two main factors influencing a woman's lifetime risk of maternal death:

(a) The risk of dying during a single pregnancy and (b) how many times a woman faces this risk (i.e., her fertility level). The maternal mortality ratio (MMR) reflects

(a) Only; it is calculated as the number of maternal deaths in a given time period divided by the number of live births during the same period:

$$\text{MMR} = \frac{\text{Number of maternal deaths}}{\text{Number of live births}} \quad (1)$$

The maternal mortality rate (MMR) reflects both (a) and (b). It is defined as the number of maternal deaths divided by person-years lived by women of reproductive age in a population:

$$\text{MMRate} = \frac{\text{Number of maternal deaths}}{\text{Woman - years lived at ages 15 - 49}} \quad (2)$$

The MMR is generally regarded as the preferred measure of maternal mortality because it describes the frequency of maternal death relative to its risk pool, as measured (imperfectly, but not badly) by the number of live births. In practice, however, the MMR is prone to measurement bias because data for the numerator and denominator are often collected through different means. As a result, for estimation purposes it is often better to start with data on the proportion of maternal deaths (PM) among women of reproductive age:

$$\text{PM} = \frac{\text{Number of maternal deaths}}{\text{All female deaths at ages 15 - 49}} \quad (3)$$

Even if a given data source yields an underestimate of the number of maternal deaths (as occurs quite frequently due to under-reporting of events), it is plausible that the reported proportion of maternal deaths is more reliable (Hill *et al.*, 2007).

Given the appropriate data, the MMR and MM Rate can be derived from the PM by reference to the following relationships:

$$\text{MMR} = \text{PM} \times \frac{\text{All female deaths at ages 15 - 49}}{\text{Number of live births}} \quad (4)$$

$$\text{MMRate} = \text{PM} \times \frac{\text{All female deaths at ages 15 - 49}}{\text{Woman - years lived at ages 15 - 49}} \quad (5)$$

The following relationship linking the MMR and MM Rate can be derived easily using equations (1) and (2):

$$\text{MMRate} = \text{MMR} \times \text{GFR} \quad (6)$$

Where the general fertility rate (GFR) equals the number of live births per woman year lived at ages 15-49. Equation (6) illustrates clearly that the MM Rate reflects both the risk of maternal death per live birth (MMR) and the level of fertility (GFR).

In building regression models of these or other indicators of maternal mortality, the above relationship implies that models of the MMR and the MM Rate are closely related. Specifically, when  $\log(\text{GFR})$  is included as an explanatory variable, regression models of  $\log(\text{MMR})$  and  $\log(\text{MM Rate})$  differ only in the coefficient for  $\log(\text{GFR})$ , which changes by exactly one. The same is true, approximately, when using another measure of fertility that is highly correlated with the GFR, such as the total fertility rate (TFR).

### 2.3 Sources of Data and Data we intend to use Secondary Data Collection

Data for this work are gotten from the medical records of General hospital Wukari.

### 2.4 Holt Winters Exponential Smoothing and Forecasting

**Additive Model:** The additive model is:

- $L_t = \alpha (Y_t - S_{t-p}) + (1 - \alpha) [L_{t-1} + T_{t-1}]$
- $T_t = \gamma [L_t - L_{t-1}] + (1 - \gamma) T_{t-1}$  (7)
- $S_t = \delta (Y_t - L_t) + (1 - \delta) S_{t-p}$
- $\hat{Y}_t = L_{t-1} + T_{t-1} + S_{t-p}$

### Notation

**Term**

**Description**

$L_t$	level at time $t$ , $\alpha$ is the weight for the level
$T_t$	trend at time $t$ ,
$\Gamma$	weight for the trend
$S_t$	seasonal component at time $t$
$\Delta$	weight for the seasonal component
$P$	seasonal period
$Y_t$	data value at time $t$
$\hat{Y}_t$	fitted value, or one-period-ahead forecast, at time $t$

## 2.5 Model Fitting

Winters' method employs a level component, a trend component, and a seasonal component at each period. It uses three weights, or smoothing parameters, to update the components at each period. Initial values for the level and trend components are obtained from a linear regression on time. Initial values for the seasonal component are obtained from a dummy-variable regression.

## 2.6 Forecasting

Winters' Method uses the level, trend, and seasonal components to generate forecasts. Winters' Method also uses data up to the forecast origin time to generate the forecasts.

### Formula

The forecast for  $m$  periods ahead from a point at time  $t$  is:

- Additive method:  $L_t + mT_t + S_t + m - p$  (8)

## Notation

### Term Description

$L_t$  Level

$T_t$  trend at time  $t$

### Term Description

$S_t + m - p$  seasonal component for the same period from the previous year

- 

- **2.8 Data Presentation**

**Table 1 Showing the Data**

Year	MM	TNB	TNLB
2004	6	916	910
2005	6	1083	1077
2006	5	1099	1094
2007	6	1088	1082
2008	7	1201	1194
2009	7	912	905

2010	7	1101	1094
2011	2	1024	1022
2012	0	1179	1179
2013	1	735	734
2014	3	364	361
2015	2	440	438
2016	4	751	747
2017	0	566	566
Total	56	12459	12403

Source: General Hospital Wukari

Where; MM = Maternal Mortality,

TNB = Total Number of Birth

MMR = Maternal Mortality Ratio

TNLB = Total Number of Live Birth

### 3.0 ANALYSIS AND THE RESULTS

#### 3.1 Preliminary Tests for the Data set

For the validity of the results obtained through the methodology used in this research, it is essential that data met the preliminary assumptions. These assumptions are; normality and stationery. The table below presents the results of the test for normality using the Shapiro statistic (W) and the p-value.

**Table 2: Showing the Shapiro Test for Normality**

	W	P-value
Maternal death	0.8867	0.07245
Total birth	0.88873	0.07751
Maternal mortality Ratio	0.9049	0.1329

From table 2, 'it is seen that the p-values for the test of normality is 0.07245 for maternal death, 0.07751 for the total birth observed and 0.1329 for the maternal mortality ratio calculated for the collected data. Comparing these values to the alpha value of 0.05, we see that for all the computed values are greater than 0.05. We are sure that the data set is not normally distributed in the case of Maternal death and total birth while for the maternal mortality ratio, we are 13% sure that the data is not normally distributed. To remedy this, we used the logarithmic transformation on the data.

**Table 3: Showing the Results for Stationary Test**

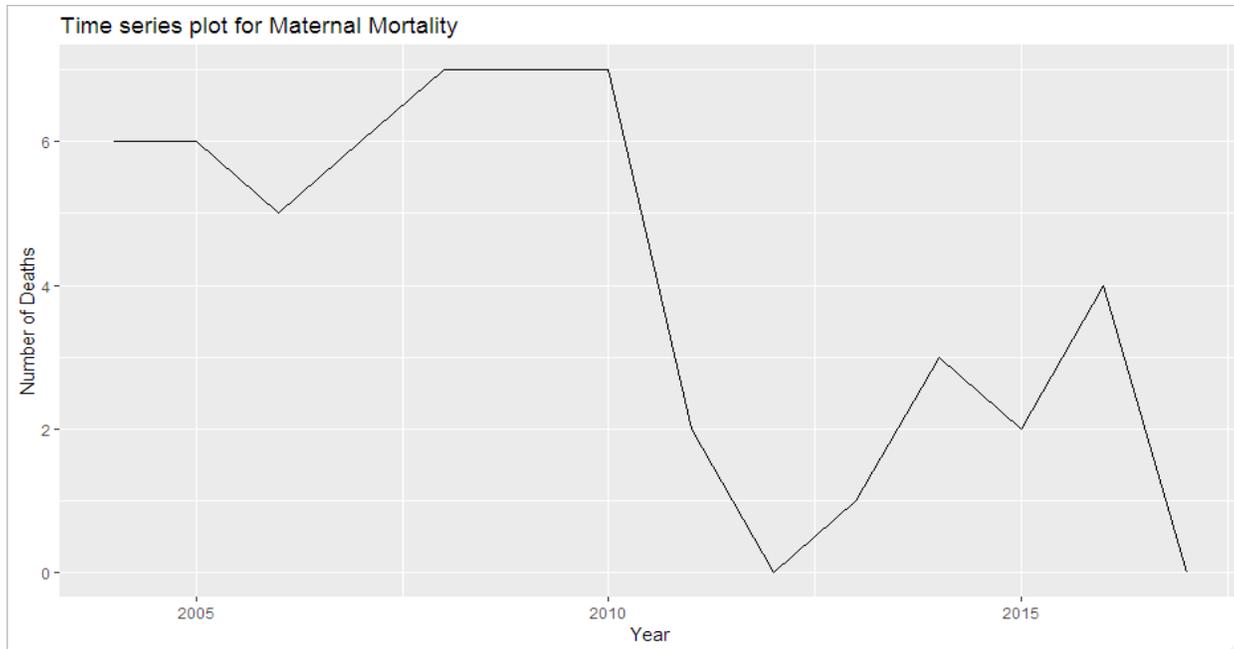
	Dickey-Fuller	p-value
Maternal death	-3.3925	0.07882
Total birth	-2.2057	0.494
Maternal mortality Ratio	-4.4381	0.01

From Table 3, we observed that the value for the Dickey-Fuller statistic is -3.3925 for maternal death, -2.2057 for the total birth and -4.4381 for the maternal mortality ratio. Also, the p-value is observed to have the value of 0.07882 for the maternal death, 0.494 for the total birth and 0.01 for the maternal mortality ratio. This therefore means that the series is not stationary except in the case of the maternal mortality ratio with a p-value of 0.01

which is less than alpha of 0.05. The method of differencing was used to remedy the unit root problem and stationery was attained at first differencing.

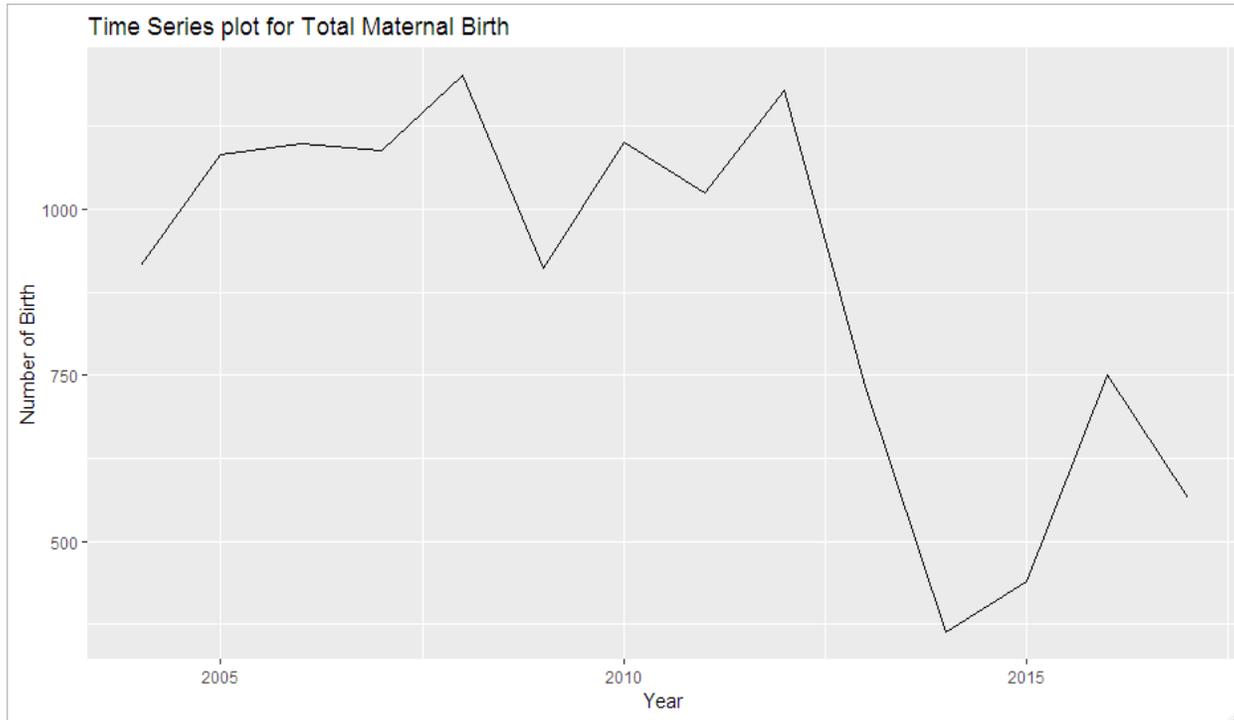
### 3.2 Data Analysis

**Figure 1**



The figure above 1 shows the plot of the maternal mortality. We can observe that from 2004, there was a gradual increase in the maternal mortality with peak values of 7 in 2008, 2009 and 2010. However, there it is also observed that there is a sharp decrease in the trend as we move from 2010 towards 2018. This sharp decrease in maternal mortality might be the result of the reduction in the population of Wukari during those years or possibly as a result of the improvement in the state health and medical care services in Wukari.

**Figure 2**



The number of total annual birth as observed in the medical records of General Hospital Wukari is presented in table 3 above. From table 3, we can observe that there was an increase in the number of births observed in Wukari. Several fluctuations were observed with the passage of time but from 2012 to 2017, we observed a sharp decrease in the number of birth which coincides with a corresponding decrease in the maternal mortality occurrences as seen earlier. Factors responsible to this might be decrease in the population density of Wukari as at those periods.

### 3.3 Estimation of Maternal Mortality Ratio

The maternal mortality ratio is given by the expression;

$$MMR = \frac{NMD}{NLB} \times 100000 \tag{9}$$

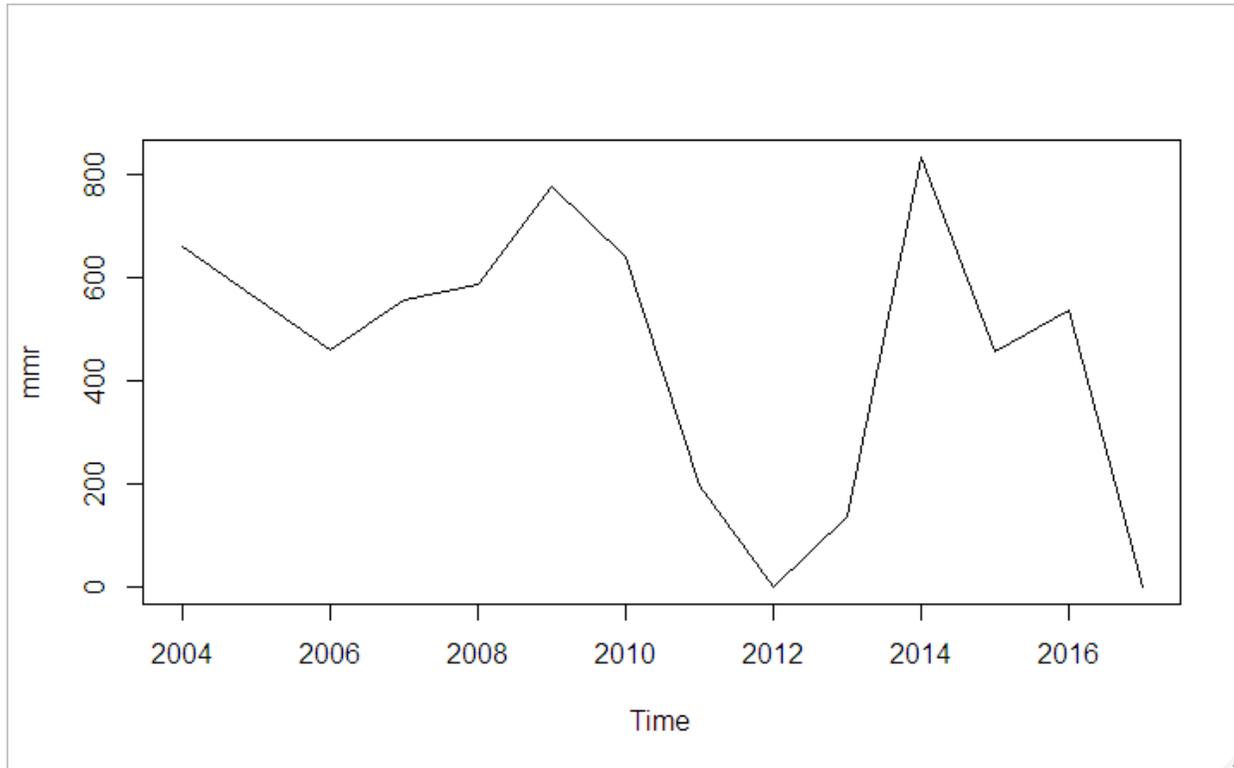
**Table 4. Showing the Calculations for the Maternal Mortality Ratio**

Year	MM	TND	TNLB	MMR
2004	6	916	910	659.3407
2005	6	1083	1077	557.1031
2006	5	1099	1094	457.0384
2007	6	1088	1082	554.5287
2008	7	1201	1194	586.2647
2009	7	912	905	773.4807
2010	7	1101	1094	639.8537
2011	2	1024	1022	195.6947
2012	0	1179	1179	0.0000
2013	1	735	734	136.2398
2014	3	364	361	831.0249
2015	2	440	438	456.6210
2016	4	751	747	535.4752
2017	0	566	566	0
Total	56	12459	12403	6382.666

**3.4 The Average MMR = the total MMR/the number of years**

$$Av.MMR = \frac{6382.666}{14} = 455.9047$$

For every 100,000 births in Wukari, the Average Maternal Mortality ratio is 456.

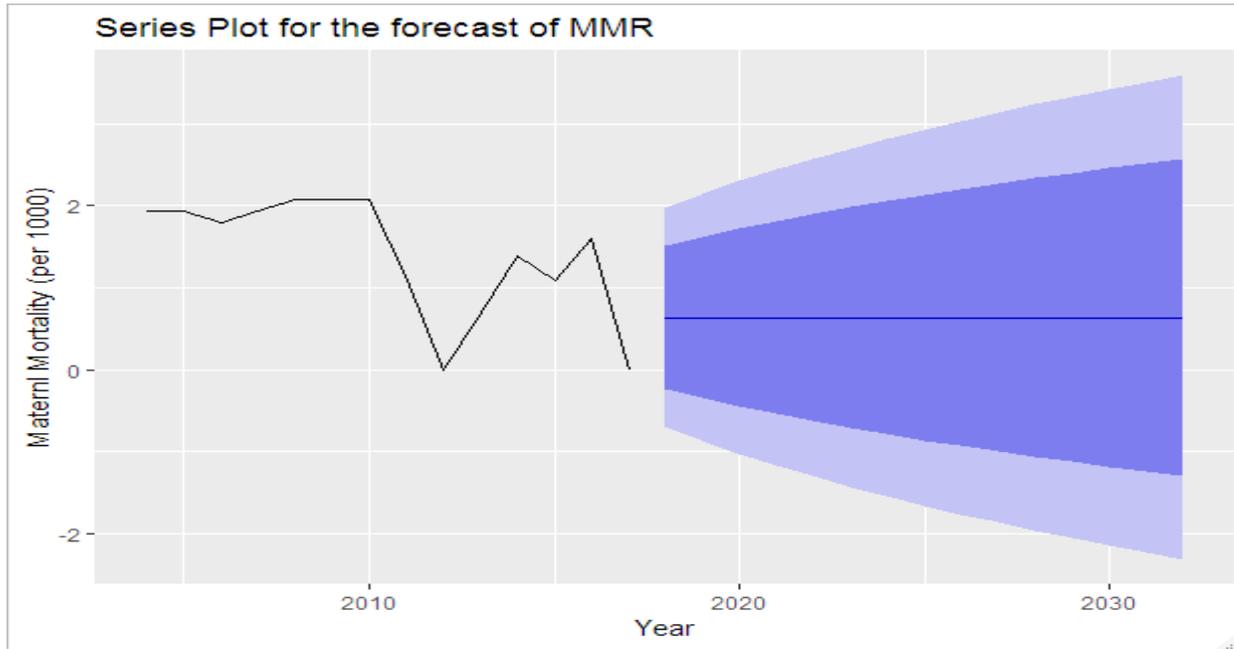
**Figure 3: Series Plot for MMR**

The table above presents the maternal mortality ratio as calculated for the respective years for which data was collected. From table 4.3, we observed that the maternal mortality ratio was lowest in 2012 and 2017 with values of 0.00 and was at its peak in 2014 with a value of about 800 and after that year, there was a sharp decrease in the ratio.

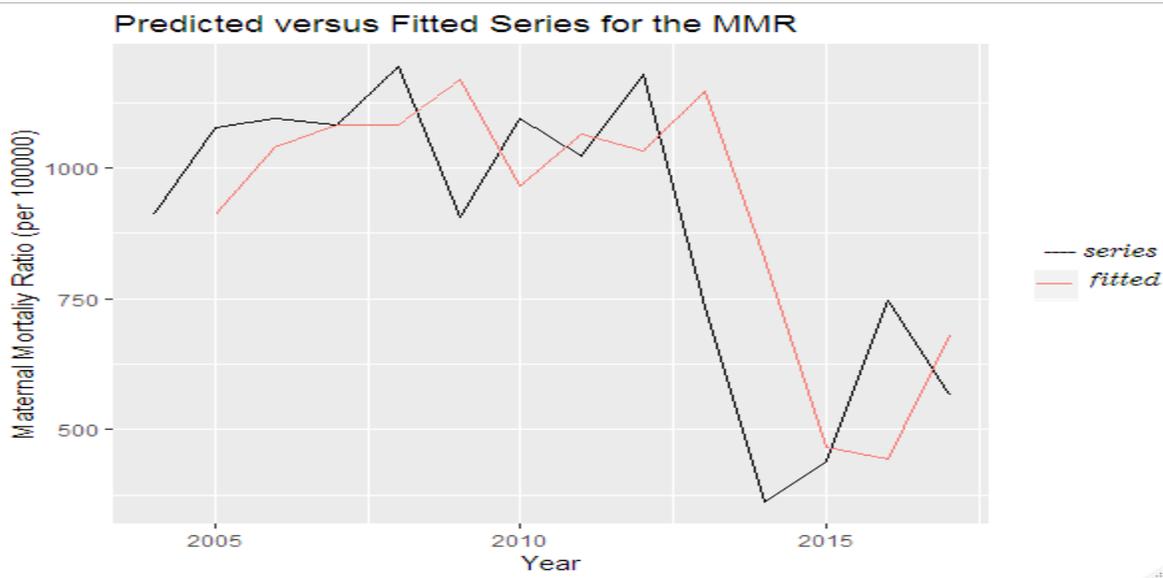
### 3.5 Forecasting

To forecast for the MMR, we first made the series stationary and that was achieved at first differencing. This is to ensure that the prediction made will be as accurate as possible within the limit of experimental error (5%). The method used for the forecast and smoothing of the series is the Holt Winters. The result of the forecasting is presented in figure 4.3

**Figure 4**



A forecast for the maternal mortality ratio for the period of 14 years shows that the MMR continues to reduce in magnitude as indicated in the trend in figure 4. To test for the adequacy of the fitted model and the appropriateness of the forecast made, we plotted the series and the fitted model. This is presented in the figure4.4 below.

**Figure 5:**

From figure 5, we observed that the fitted model is almost the same as the actual series. This however shows that the forecast shown to be decreasing in terms of trend as observed in figure 5 is statistically adequate.

#### 4.0: CONCLUSION

This study examined maternal mortality in Nigeria that has been one of the major subjects of peculiar interest to public health workers and the government. This concern is as a result of the alarming rate at which women that is pregnant or few weeks after child birth die due to one reason or another, such as complication resulting from poor medical facilities and personnel.

The results obtained from the analysis showed the estimated MM Ratio to be 0.005 (that is 500) maternal death for every 100000 maternal related case. Also, the MM Rate was found to be 0.009 (that is 900) maternal death for every 100000 maternal births in the population. Also, from the forecast made, it was found that the trend for the maternal mortality is decreasing as found in the trend. This could be as a result of improvement in health sectors.

## ACKNOWLEDGEMENT

We are grateful to the management of General Hospital Wukari for making the data used in this research available for us. We also give our gratitude to the Federal University, Wukari for providing a wonderful and enabling environment for us which makes it possible for this work to be a reality.

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## KINETIC MODELS FOR NON-ELEMENTARY REACTIONS: UNRAVELING COMPLEX CHEMICAL DYNAMICS

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### Abstract

Chemical reactions govern a multitude of processes in nature and industry, ranging from combustion to biological transformations. While elementary reactions, characterized by well-defined reaction steps, have been extensively studied, many real-world reactions exhibit complexities that cannot be adequately described by simple, stepwise mechanisms. Non-elementary reactions encompass a broad class of intricate chemical processes involving multiple, interconnected steps, and their understanding requires the development of sophisticated kinetic models.

This abstract provides an overview of the current state of research on kinetic models for non-elementary reactions. Traditional methods, such as the rate equation approach, often fall short in capturing the intricacies of these reactions. Consequently, the scientific community has turned to advanced mathematical and computational techniques to construct models that better represent the dynamic nature of non-elementary reactions.

This review explores various mathematical frameworks employed in kinetic modeling, including differential equations, stochastic models, and computational simulations. Special emphasis is placed on the challenges associated with determining rate constants, unraveling reaction pathways, and discerning the impact of molecular dynamics on overall reaction kinetics.

Furthermore, the abstract delves into the role of experimental techniques, such as spectroscopy and chromatography, in validating and refining kinetic models. The synergy between experimental data and computational predictions is crucial for the development of accurate models that can be applied to diverse chemical systems.

Case studies highlighting the application of kinetic models to specific non-elementary reactions, such as radical reactions in combustion or complex enzymatic processes, will be discussed. These examples illustrate the

versatility of kinetic modeling in elucidating reaction mechanisms and predicting reaction outcomes under varying conditions.

In conclusion, this abstract underscores the significance of kinetic models in deciphering the complexities of non-elementary reactions. As our understanding of these intricate processes advances, the development of reliable and predictive models becomes paramount for guiding experimental design, optimizing reaction conditions, and ultimately advancing fields ranging from environmental science to pharmaceutical development.

**Keywords-** elementary reactions, Chemical reactions, experimental design, optimizing

## THE IMPACT OF GLOBALISATION ON INTERNATIONAL MONETARY AND FINANCIAL POLICY : A LITERATUR REVIEW

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### Abstract

The purpose of writing this article is to describe monetary economics. This research is a literature research with a qualitative approach. The data sources used in this research come from various literature journal articles that are relevant to the research topic. The data analysis method used is content analysis of the literature sources used in the research. Globalisation has brought significant changes in the way countries manage their economies and interact in the international arena. In the era of globalisation, international monetary and financial policies can no longer be viewed in isolation from the global context. Changes in one country can quickly impact other countries through increasingly close linkages in the global financial system. Therefore, it is important to understand how globalisation affects international monetary and financial policy. In the era of globalisation, international monetary and financial policies must be more adaptive and responsive to changes in the global economy. Central banks and governments must work together to manage risks and ensure sustainable economic and financial stability. International financial management is also becoming increasingly important in understanding and managing the risks associated with international financial transactions. With good international cooperation and appropriate policies, countries can maintain economic stability and growth in this era of globalisation. Successfully managing the impacts of globalisation will play an important role in shaping a more inclusive and sustainable future for the global economy.

**Keywords:** Globalisation, Monetary, Policies, International Finance.

## THE INFLUENCE OF THE MARKETING MIX ON CONSUMER BUYING INTEREST DECISIONS ON REFILLABLE DRINKING WATER PRODUCTS

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### Abstract

This research is generally intended to examine the effect of the marketing mix on consumer buying interest decisions on refillable drinking water products. It can be known that water is the main natural resource to meet the needs of life, therefore water is the most important part of life. The need for clean water is a very important basic human need today, especially clean drinking water. Regarding that, currently clean drinking water can be found in several areas or regions that can be found at refilled drinking water depots. Regarding that, currently clean drinking water can be found in several areas or regions that can be found at refillable drinking water depots. The availability of refillable drinking water depots is influenced by the large number of consumer requests for clean water to meet their daily needs. Because the need for drinking water is continuous or repetitive, it creates demand for the market. People or consumers are now more aware of the use of clean water, especially clean drinking water. Therefore, a way to overcome or meet the need for clean drinking water by buying refill drinking water. The type of research used in this research is qualitative research with a survey research approach. In this study, the authors used primary data by collecting data using the results of an online open questionnaire to consumers obtained from the questionnaire results of Rahma's refill drinking water depot consumers. From this primary data, data on the independent variable (Independent) was obtained, namely the marketing mix (Product, Price, Promotion, and Place). While the dependent variable data (Dependent), namely the Consumer Purchase Interest Decision at Rahma Refillable Drinking Water Depot. The data analysis technique used is descriptive analysis. The results showed that this study answered the formulation of the problem that the author examined, based on the results of the study, it was found that the decision to buy consumer interest in Rahma's refill drinking water depot gave a positive assessment. The influence of the marketing mix in the form of product, price, promotion, and place affects the decision of consumer buying interest in a refilled drinking water product.

**Keywords:** Marketing Mix, Purchase Intention Decision, Refillable Drinking Water

## THE VALIDİY OF THE SALE AND PURCHASE AGREEMENT WITH SHOPEE PAYLATER AS FINANCİAL TECHNOLOGY IN İSLAMİC LAW

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### Abstract

The Shopee Paylater feature on the Shopee application is a buy now pay later or installment/credit payment system. This research was conducted with the aim of examining the validity of buying and selling contracts with Shopee PayLater as financial technology in Islamic law. This research uses a normative legal research method with a statutory approach (Statute Approach) and uses primary legal materials, secondary legal materials and tertiary legal materials. This research is included in descriptive research. The research results show that according to DSN-MUI fatwa no. 116/DSN-MUI/IX/2017 concerning sharia electronic money, it can be clearly seen that Shopee Paylater does not meet the criteria set by the DSN-MUI fatwa because it contains elements of ribawi with a minimum interest of 2.95% per month and has a handling fee of 1% of total transactions as well as arrears/late fees worth 5% of total transactions each month. This is of course burdensome and detrimental to buyers.

**Keywords:** PayLater, Financial Technology, Islamic Law

## **PAYLATER SYSTEM ANALYSIS ON IMPULSE BUYING BEHAVIOR OF STUDENTS IN THE DIGITAL ERA FROM AN ISLAMIC PERSPECTIVE**

**: Case Study of Students UIN K.H. Abdurrahman Wahid Pekalongan**

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### **Abstract**

The study's goal is to examine the influence of paylater payment systems on student impulsive purchase behavior in the digital era, with a particular emphasis on the Islamic viewpoint. Increased usage of technology and electronic payment methods, such as paylaters, has sped up online purchasing transactions, which can influence customer behavior, especially impulse purchases. The study collects data from students who utilize the paylater system to perform online retail transactions using qualitative and quantitative research approaches. Furthermore, the study was conducted in accordance with Islamic economic principles, which promote fair, honest, and responsible transactions.

According to the findings of the study, the usage of paylater systems can enhance student impulsive purchase behavior. Transactional simplicity and enticing discount offers might lead to hasty purchase decisions. However, it was discovered that several actions in the paylater system may be inconsistent with Islamic economic ethical standards. This study provides in-depth insight into how paylater payment systems impact student spending behavior and serves as a foundation for developing policy recommendations to encourage the establishment of payment systems based on Islamic principles. In the context of an ever-expanding digital economy, it is critical to encourage responsible consumerism and moral values.

Keyword : PayLater Features, Student Consumptive Behavior, Impulse Buying

## INFLATION IN THE FOOD AND FUEL OIL SECTORS IN INDONESIA

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## ABSTRACT

The condition of greater public demand for goods and services than supply causes an increase in the price of goods and services that occurs continuously within a certain period of time known as inflation. The purpose of this writing is to explain what inflation is, the factors that cause inflation, the impact of inflation, and efforts to overcome inflation. This writing method uses library research sourced from scientific publications and articles and website information about inflation, the causes of inflation, the impact of inflation, and efforts to overcome inflation. The results of this study conclude that Inflation is a continuous increase in the price of goods and services within a certain period of time, inflation is caused by the scarcity and limited supply of food and fuel oil, as well as the impact of weather and people's consumption patterns so that the current price of these commodities has increased and caused inflation. Inflation has an impact on rising food and fuel prices, which causes people's purchasing power to become lower, changes living standards, triggers social unrest, increases transportation costs, and even increases poverty. government policies to control inflation can be used to combat

inflation such as setting monetary policy, fiscal policy, and non-monetary and non-fiscal policies, besides that people can also reduce inflation in the food and fuel oil sector by reducing consumerism, using locally produced goods, making investments, using non-fuel oil transportation, and creating alternative resources.

**Keywords :** Inflation, causes, impacts, and efforts

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**Abstract**

The purpose of this article is to understand the reconciliation of Islamic science, the Islamization of scientific methods. This research is library research with a qualitative approach. The data sources used in this research come from various literature journal articles that are relevant to the research topic. The data analysis method used is content analysis of the literature sources used in the research. Discussions regarding the relationship between science and religion, especially Islam, continue to attract attention among academics and educational practitioners. The close relationship between science and religion, where Islam is considered the source of knowledge, is the subject of deep debate. In Indonesia, in the history of Islamic education, there was a long period of separation between general science and religious science, which resulted in a scientific dichotomy among Muslims. This separation has encouraged the desire to unite general science with religious science, so that there is no longer a sharp separation between the two. The dichotomy between general knowledge and religious knowledge, or between this world and the afterlife, is considered to be the root of the weakness of Muslims. Discussions about how to unite general knowledge and religious knowledge in educational and scientific contexts continue, because this integration is considered important to overcome the dichotomy that hinders the development of Muslims. This article will explore more deeply the efforts to unite science and religion in the context of Islamic education and society.

**Keyword;** reconciliazation of islamic science, islamization of science

## THE EFFECT OF RICE PRICES AS A TRIGGER FOR INFLATION IN INDONESIA

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### Abstract

Because the rice planting cycle is getting ready, rice prices are now rising. This abstract's goal is to clarify how Indonesian inflation is triggered by changes in rice prices. Using a review of the literature on the impact of rice prices as an inflationary catalyst in Indonesia, this writing approach draws information from a number of internet sources. The study's findings indicated that, according to price monitoring conducted by the Strategic Food Price Information Center (PIHPS), rice prices increased on a monthly basis, which reduced rice production relative to the main harvest season. According to BI's estimates, everything is still in line with projections, meaning that the value will remain in the range, even below the midpoint, until the end of the year. The weight of rice in the consumer price index is approximately three percent. Moreover, the National Coordination Meeting on Inflation Control also established the measures' complementary effects on reducing the price of food. Five policy steps will be used to pursue the endeavor. The first policy will use market intervention to optimize the Regional Budget (APBD) with the purpose of controlling inflation. To boost agricultural productivity, the second program is to fortify agricultural infrastructure and amenities. The third is incorporating data on regional food stocks and balances to prepare policies for controlling inflation, with a focus on enhancing interregional cooperation. In order to make it easier to distribute goods and services, the fourth policy aims to fortify supply chains and infrastructure. In order to sustain inflation expectations, the fifth policy is to improve coordination and communication amongst inflation control measures. Prior to this, Governor Perry Warjiyo of Bank Indonesia (BI) stressed that measures to control inflation will be stepped up, particularly in predicting El Nino's effects to bring to a drop in inflation in 2024.

**Keywords:** rice, inflation, cycle, policy

## THE BENEFITS OF PRAYER

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### Abstract

This abstract is written to find out what obligatory prayers are from a scientific perspective. Obligatory prayer is one of the main requirements of Islam that Muslims observe. Prayer can be seen from psychological, social and health aspects. In a health context. Prayer includes physical movements such as bowing, prostrating and standing. These movements can provide physical benefits such as increasing muscle strength and body balance. Prayer also involves deep and regular breathing, which can help reduce anxiety, increase blood circulation, and improve lung function. According to psychology, prayer has the potential to improve a person's mental condition. focusing on physical activity, mental clarity, and spiritual reflection can help reduce stress, increase mental clarity, and provide a sense of well-being. In a social context it can strengthen the Muslim community. When Muslims gather in mosques to perform congregational prayers, this creates feelings of compassion and unity. Prayer is also a good time for social interaction with Muslims, strengthening the ties between them. In the Islamic religion, prayer is one of the main requirements. Prayer is something that is done as an offering to Allah SWT, a sign of respect, and a way to express gratitude. One of the most important aspects in a Muslim's life is prayer. because this allows them to better understand Allah, obtain blessings from society, increase their spiritual awareness.

Keywords: Prayers, health, psychology, social.

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### **Abstract**

This research intends to explain about Islamic scientific paradigm. The Islamic perspective on science based on the source of the Qur'an which is believed to be true. Recently there has been a dichotomy between religious science and general science. Religious science talks about the relationship between humans and God and the relationship between humans and humans, while general science talks a lot about the universe. The relationship between religious knowledge and general science is a topic that is still relevant to study. Because there are still many people who think that religious knowledge and general knowledge conflict with each other. In fact, this relationship can be harmonized by changing the paradigm that religious knowledge is not only a matter of humans and their God or humans and each other but for all aspects of human life. The research method uses a type of qualitative research with a library research approach. This study concludes that the Islamic scientific paradigm is a study that is closely related to the point of view in understanding the problems that occur. The emergence of a paradigm is the result of scientific research carried out in depth until finally something new is discovered and a new paradigm emerges regarding that matter.

**Keywords:** paradigm, science, and knowledge.

## THE MEANING OF WUDHU : A LITERATURE REVIEW

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### **Abstract**

This research is library research with a qualitative approach. The data sources used in this research come from various literature journal articles that are relevant to the research topic. The data analysis method used is content analysis of the literature sources used in the research. One of the procedures that is typically carried out prior to the prayer ceremony is ablution. Many experts actually believe that there are other uses for this cleansing procedure than prayer.

The Big Indonesian Dictionary defines wudhu as washing one's face, hands, head, and feet in order to purify oneself prior to prayer. Wudhu literally translates as cleansing. In the meantime, wudhu, as defined by Shara', is the act of purifying certain body parts, such as washing hands, feet, and face, as well as sweeping the head. According to Wahbah Al-Zuhaili, wudhu uses water to purify and wash different bodily parts. Keeping things clean is one of the guiding principles of wudhu since it helps improve health, which is consistent with the word's literal definition of "clean." Of course, the ablution members cannot become clean if just water flows and is washed; therefore, extensive sweeping and scrubbing are required. It cleans the limbs when sweeping and cleaning, and it also activates acupoints. A person will wash various body areas as part of their ablution five times a day. Wudhu has two intrinsic forms of cleanliness: the physical kind, which is achieved by washing human body parts, and the inner kind, which is achieved by the practice's effect on people, which is the purging of errors and transgressions made by the limbs. Ablution can be thought of as a kind of limb washing or wiping.

It involves the process of letting go of tense or contracted muscles in particular. Alignment and flexibility—two attributes that are highly advantageous to our physical bodies—are provided by the ablution movement. In Islam, the mandate to conduct ablution is coupled with the mandate to pray. Therefore, ablution is a prerequisite for the legitimacy of prayer, according to academics. Eliminating little impurities from the body, such as farting, urinating, and sleeping in an unnatural position, is known as ablution. Prior to offering a prayer, Muslims are required to purify themselves. An essential prelude to praying, the Kaaba circuit, and touching the Qur'an is the rite of ablution for Muslims. A full cleansing is prescribed by all four madhhabs prior to handling the Qur'an. If the skin is frequently dry, it will be very detrimental to the health of the skin, especially since dry skin is more devoid of bacteria. Like all acts of worship, ablution includes prerequisites that must be met; if any of these prerequisites are not met, the ablution is deemed invalid.

**Keywords :** Meaning, Wudhu, And Literature review.

## TÜRKİYE'DE ÇALIŞMA HAYATINDA MESLEKİ TÜKENMİŞLİK VE İŞ-YAŞAM DENGESİ ÜZERİNE YAPILMIŞ ÇALIŞMALARIN SİSTEMATİK DERLEMESİ

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### Özet

Günümüz çalışma hayatında mesleki tükenmişlik ve iş yaşam dengesini sağlayamama problemi, çoğu çalışanın karşılaştığı bir sorundur. Diğer taraftan çalışma hayatında önemli bir güncel sorun olan bu iki olgu, birbirinin yordayıcısı haline de gelmiştir. Çalışanların fiziksel ve ruhsal sağlığını olumsuz etkileyen bu iki sorun; hem bireyin kendisini hem çevresini hem de çalıştığı örgütü ayrıca olumsuz yönde etkileyen bir durumdur. Bu bağlamda bu sorunların hangi durumlarda ve hangi meslek grubunda, çalışanları daha fazla etkilediğini ve bu iki olgunun birbirini nasıl etkilediğini tespit etmek önemli bir konudur, çünkü bu sorunların çözümüne etkili öneriler ve uygulamalar sunabilmek için bunların tespiti önem arz etmektedir.

Bu çalışmada, iş-yaşam dengesi ve mesleki tükenmişlik konusunda Türkiye özelinde yapılmış olan çalışmalar; nitelici (kalitatif) analize tabi tutulmuş ve sistematik derlemenin dahil etme ve dışlama kriterleri ile araştırma kapsamına dahil edilmiştir. Derleme sonucunda önemli bulgular tespit edilmiştir. Ancak, birbiri üzerinde etkili olduğu düşünülen bu iki güncel sorunun, birlikte yer aldığı çalışmaların sınırlı sayıda olduğu görülmüştür.

**Anahtar Kelimeler:** Tükenmişlik, Mesleki Tükenmişlik, İş-Yaşam Dengesi, Sistematik Derleme.

### SYSTEMATIC REVIEW OF STUDIES CONDUCTED ON PROFESSIONAL BURNOUT AND WORK-LIFE BALANCE IN WORKING LIFE IN TURKEY

### Abstract

In today's working life, the problem of professional burnout and inability to balance work-life is a problem faced by most employees. On the other hand, these two phenomena, which are an important current problem in working life, have also become predictors of each other. These two problems that negatively affect the physical and mental health of the employees; It is a situation that negatively affects both the employees themselves, their environment and the workplace. In this context, it is an important issue to determine in which situations and in which professional group these problems affect employees more and how these two situations affect each other.

Because it is important to identify these problems in order to offer effective suggestions and practices to solve them.

In this study, studies conducted specifically in Turkey on work-life balance and professional burnout; subjected to qualitative analysis and these studies were included in the scope of the research with the inclusion and exclusion criteria of the systematic review. As a result of the compilation, important findings were identified. However, it has been observed that there are a limited number of studies in which these two current problems, which are thought to be effective on each other, are included together.

**Key Words:** Burnout, Occupational Burnout, Work-Life Balance, Systematic Review.

## GİRİŞ

Çalışma hayatında özellikle hizmet sektöründe çalışanların işe bağlı ve tutum davranış değişikliği mesleki tükenmişlik ile ifade edilmektedir. Ancak, literatürde mesleki tükenmişlik yerine tükenmişlik kavramının daha sıklıkla kullanıldığı görülmektedir. Bu bağlamda tükenmişlik ise genellikle insan merkezli meslek gruplarında çalışanların; işe karşı ilgilerinin ya da duyarlılıkların azalması ve düşük başarının yanı sıra “fiziksel, duygusal ve zihinsel yorgunluk” yaşama durumlarıdır. Tükenmişlik fiziksel olarak bireyde kendisini “kronik yorgunluk, uyku bozukluğu, kronik ağrılar” ile göstermektedir. Bazen bunlara daha ciddi sağlık sorunları olan nefes darlığı ve ülser gibi hastalıklarda eşlik etmektedir. Duygusal olarak ise birey tükenmişlik yaşadığı zaman “depresyon, mutsuzluk, güvensizlik, çaresizlik, kızgınlık, işe gitmeme isteği, sürekli aile ve iş hayatında çatışmalar” gibi durumlar içinde kendisini bulabilmektedir. Davranışsal olarak ise tükenmişlik bireyde kendisini “kinizm, ani duygusal patlamalar, uyumsuzluk, içe kapanma, iletişim eksikliği, alaycılık” vb. şeklinde göstermektedir. (Saruhan, Yıldız, 2014: 468). Bu durumlar tükenmişliğin kendisini farklı şekillerde gösterdiği anlamına gelmektedir. Dolayısıyla kişiden kişiye değişebilir olmakla birlikte kişinin yaşam tarzı ya da stres düzeyi ile alakalı olabilir.

Tükenmişlik bir sendrom olmakla birlikte aşama aşama ilerlemektedir. Bu durum ise tükenmişliğin boyutlarına dikkat çekmektedir. Tükenmişlik öncelikle duygusal tükenme ile başlayan duyarsızlaşma ile devam eden ve düşük kişisel başarı ile sonlanan bir durumdur. Bu bağlamda tükenmişliğin ilk evresi olan duygusal tükenmişlik, bireyin gücünün enerjisinin bitmesi sonucu “kendisini çaresiz, ümitsiz, ve köşeye sıkışmış hissetmesi” durumudur. Duygusal tükenmenin bir sonraki evresi olan duyarsızlaşma ise kişinin davranışlarında artık bir değişim yaşanmasının söz konusu olmasıdır. Kişi bu evrede işine ilgisiz ve hizmet verdiği kişilere karşı soğuk, donuk davranışlar gösteren, insanlarla ilişki kurmaktan kaçınan biri haline gelmiştir. Duyarsızlaşma tükenmişliğin daha çok ilişkilere yansıyan yönü olarak görülmektedir. Düşük kişisel başarı evresinde ise kişi,

kendisini yetersiz ve niteliksiz olarak görmektedir, çünkü işinden uzaklaştığı gibi karşısındaki kişilerle gerekli iletişim kuramamaya başlamıştır (Karakale, 2017: 16-18).

Gün geçtikçe yoğunlaşan rekabet koşulları ve gelişen teknolojinin çalışma şartları üzerindeki olumsuz etkisi ile daha da belirgin hale gelen tükenmişlik “insanların iş ile kurdukları psikolojik bağlantılarda temel bir kriz” ve “zihinsel zorlamanın uzun vadeli sonucudur”. Çalışma hayatında tükenmişliği “uzun çalışma saatleri, aşırı iş yükü, iş belirsizliği, ücret ve terfi için zayıf beklentiler, belirsiz roller, hata riskini hızlandıran zaman ve bütçe baskısı” gibi faktörler tetiklemektedir. Bu bağlamda tükenmişlik, yaşayan çalışanlar, sadece kendisini ve yaptığı işi etkilemekle kalmayıp; zaman içerisinde iş-yaşam dengesindeki uyumu da kaybederek her iki yaşamını olumsuz yönde etkilemektedir (Özutku, 2019: 166). Bu kaybediş ise çalışma hayatında bir diğer konu olan iş-yaşam dengesinin önemine dikkat çekmeyi gerektirmektedir, çünkü iş-yaşam dengesinin bozulması tükenmişliğin doğurmuş olduğu önemli sorunlardan biridir. İş-yaşam dengesi, “çalışanın iş-yaşam alanlarının dengede olması, her iki alandaki rollerine eşit zaman ve ilgi ayırması” demektir (Erben, Ötgen, 2014: 105). Özellikle teknolojinin gelişmesi ile birlikte çalışanlar, iş yeri dışında da işlerine vakit ayırmaya başlamışlardır. Ancak, özel yaşam; çalışma hayatı dışında çalışanların dinlenebildiği, fiziksel ve ruhsal ihtiyaçlarını giderebildiği alanları olması nedeniyle iş yaşamından ayrı tutulması gerekmektedir. Tutulmadığı takdirde diğer bir deyişle iş yaşamının giderek özel yaşama girmeye başlaması ile birlikte çalışanların performansları ile motivasyonlarının düşmesi söz konusu olmaktadır (Özcan, Bayarçelik, 2020:57). Bunun sonucunda ise iş-yaşam alanları arasında denge sağlanamaması tükenmişliğe, psikolojik problemlere, aile ve arkadaş ilişkilerinin zarar görmesine sebebiyet verebilmektedir (Çetinkaya, Dinçer, 2021: 187). Görüldüğü üzere tükenmişlik iş-yaşam dengesine zarar verirken; iş-yaşam dengesizliği ise tükenmişliğe sebebiyet vermektedir. Dolayısıyla bu iki sorunun birbirinin tetikleyicisi olduğunu söylemek yanlış olmayacaktır.

Modern çalışma hayatında iş-yaşam dengesinin sağlanamaması durumu, tıpkı tükenmişlikte olduğu gibi hem bireyin kendisine hem çevresine hem de işine olumsuz etkiler şeklinde yansımaktadır. Buna göre çalışanın fiziksel ve psikolojik sorunlar yaşaması, kendisini toplumdan soyutlaması, aile ilişkilerine zarar vermesi, iş yeri performans ve motivasyon düşüklüğü yaşaması, işten ayrılma eğiliminde bulunması gibi durumlar söz konusu olmaktadır. Bu doğrultuda bu çalışmada, çalışma hayatına dair bu önemli iki güncel konu; mesleki tükenmişlik ya da tükenmişlik ile iş-yaşam dengesi, Türkiye’de yapılmış çalışmalar özelinde sistematik derleme yöntemi ile incelenmiştir. Sistematik derleme, meslek gruplarına göre iş-yaşam dengesinin ve tükenmişliğin mevcut durumunu gösterecek olması açısından önemlidir. Bu önem doğrultusunda bu çalışmanın öncelikli amacı; “meslek gruplarına göre çalışanların iş-yaşam dengesini sağlayabilme durumu ve tükenmişliği yaşama durumu

farklılık göstermekte midir?” sorusuna cevap aramaktır. Bir diğer amacı ise “bu iki olgunun bir birini nasıl etkilediğini” ortaya koymaktır.

## YÖNTEM

Bu çalışma, Türkiye'deki mesleki tükenmişlik ve iş-yaşam dengesine yönelik çalışmaları analiz ederek; çıkan sonuçları belirleme maksadıyla yapılmış bir sistematik analizdir. Çalışmada literatür taraması yapılmış ve çalışmaların kapsamış olduğu yıllar bakımından herhangi bir kısıtlamaya tabi tutulmamıştır. Araştırmaya konu olan mesleki tükenmişlik ve iş-yaşam dengesine yönelik yapılmış olan çalışmalar “Dergipark Akademi, Research Rabbit, Connected Papers” veri tabanlarından elde edilmiştir. Tarama 10 Mayıs - 30 Haziran 2023 tarihleri aralığında yapılmış ve bunun için beş anahtar sözcük kullanılmıştır. Taramada kullanılan anahtar sözcükler; “mesleki tükenmişlik ve iş-yaşam dengesi”, “tükenmişlik ve iş-yaşam dengesi” “mesleki tükenmişlik”, “iş-yaşam dengesi” ve “tükenmişlik” anahtar sözcükleri kullanılmıştır.

Anahtar sözcükler temelinde DergiPark Akademi’de 1709, Research Rabbit’te 253, Connected Papers’te 910 olmak üzere toplamda 2872 çalışmaya ulaşılmıştır. Elde edilen çalışmalar nitelendirici (kalitatif) analize tabi tutulmuş ve sistematik derlemenin dahil etme ölçütleri olarak çalışmaların “Türkiye’de yapılmış olması ve yapılan çalışmaların ise mesleki tükenmişlik ve iş-yaşam dengesi kavramlarını sadece barındırması” belirlenmiştir. Dışlama kriterleri olarak ise çalışmanın başlığında üçüncü bir değişkenin (iş tatmini, iş stresi, iş yükü, iş doyumu gibi) olmaması şeklinde belirlenmiştir. Dahil etme ve dışlama kriterleri doğrultusunda araştırma konusunun bileşiklerini kapsadığı düşünülen dört çalışma araştırma kapsamına dahil edilmiştir.

**BULGULAR**

Araştırma	Örneklem Özellikleri	Kullanılan Ölçüm Araçları	Elde edilen Sonuçlar
Turan vd.2023	Kesitsel ve Tanımlayıcı N:305	İş-Aile Yaşam Dengesi Ölçeği Maslach Tükenmişlik Envanteri	Kadın sağlık çalışanlarının iş-aile uyumunun iyi düzeyde olduğu buna karşın yüksek düzeyde tükenmişlik yaşadıkları; kadın sağlık çalışanlarının iş-aile yaşam dengeleri bozuldukları tükenmişlik düzeylerinin de arttığını tespit edilmiştir.
Özutku, H. (2019).	Kesitsel ve Tanımlayıcı N:221	Maslach Tükenmişlik Envanteri İş-Yaşam Dengesi Ölçeği	Tükenmişliğin boyutlarından “duygusal tükenme” ve “duyarsızlaşma”nın iş yaşam dengesi üzerinde anlamlı bir etkisinin olduğu saptanmıştır. Duygusal tükenmedeki artış, iş yaşam dengesindeki olumsuzluğu artırmaktadır. Duyarsızlaşmadaki artış ise iş yaşam dengesindeki olumsuzluğu azaltmaktadır.
Batur, Saylık, 2021	İlişkisel Tarama Modeli N:335	İş-Aile Yaşam Dengesi Ölçeği Maslach Tükenmişlik Envanteri	Tükenmişliğin genel ortalamasının ( $\bar{x} = 2.29$ , $ss = .69$ ) düşük düzeyde olduğu tespit edilmiştir. Tükenmişlik düzeyinde bir birimlik artışın iş-yaşam dengesinde 0,67 birimlik azalış göstereceği bulunmuştur.
Öztrak, 2023	İlişkisel Tarama Yöntemi N: 414	İş-Aile Yaşam Dengesi Ölçeği Maslach Tükenmişlik Envanteri	İş yaşam dengesi ve mesleki tükenmişlik ölçeklerinin alt boyutları arasında da negatif yönlü güçlü bir ilişki olduğu sonucuna rastlanmıştır.

**ÖRNEKLEM ÖZELLİKLERİ**

Sistemik derlemeye dahil edilen çalışmalar, 2019-2023 yılları arasında yapılmıştır. Çalışmada örneklemin en fazla 414 katılımcı (Öztrak,2023); en az ise 221 (Özutku, H. 2019). katılımcı ile gerçekleştiği görülmüştür. Yapılan çalışmalarda araştırma modeli olarak kesitsel tanımlayıcı (Turan vd.2023, Özutku, H. 2019) ve ilişkisel tarama yöntemi (Batur, Saylık, 2021, Öztrak, 2023) kullanılmışlardır. Örneklem grubunun seçildiği iller; Afyon (Özutku, H. 2019), Türkiye geneli (Batur, Saylık, 2021), İstanbul (Öztrak, 2023) bir çalışmanın ise belirsizdir (Turan vd.2023). Seçilen örneklemin meslek grubu ise; sağlık çalışanları (Turan vd.2023), banka

çalışanları (Özutku, H. 2019), halk eğitimi merkezi müdürleri (Batur, Saylık, 2021) ve kabin memurlarıdır (Öztırak, 2023).

## KULLANILAN ÖLÇÜM ARAÇLARI

İncelenen çalışmalarda çalışanların mesleki tükenmişlik ve iş-yaşam dengesinin belirlenmesinde benzer ölçüm araçları kullanılmıştır. Buna göre iş-yaşam dengesinin ölçümünde Turan vd, Öztırak ve Batur, Saylık çalışmalarında Apaydın (2011) tarafından geliştirilen “İş-Aile Yaşam Dengesi Ölçeğini” ve Özutku ise Hymann (2005) tarafından geliştirilen “İş-Aile Yaşam Dengesi Ölçeğini” kullanmıştır. Çalışanların tükenmişlik boyutunun ölçümünde ise tüm çalışmalarda Maslach ve Jackson (1981) tarafından geliştirilen “Maslach Tükenmişlik Envanteri” kullanılmıştır.

## ELDE EDİLEN BULGULAR

Turan vd. tarafından kadın sağlık çalışanlarının COVID-19 pandemi sürecinde iş-aile yaşam dengesi ve tükenmişliklerinin incelenmesi amacıyla yapılmış olan bu çalışmada; kadın sağlık çalışanlarının iş-aile yaşam dengelerinin orta düzeyde olduğu ayrıca işin aileye olumsuz etkisinin çok düşük düzeylerde olduğu tespit edilmiştir. Ancak buna karşın kadın sağlık çalışanlarının tükenmişlik düzeylerinin yüksek oranda ölçüldüğü buna paralel olarak da iş-aile yaşam dengelerindeki bir bozulmanın tükenmişlik seviyelerini arttırdığı ortaya koyulmuştur. Yapılan çalışmada bir diğer önemli bulgu ise meslekte geçirilen yıl ile iş-aile yaşam dengesi puan ortalamaları arasında anlamlı bir ilişki bulunmuştur. Buna göre 0-3 yıl aralığında çalışma yılı olanların iş-aile yaşam dengesi puan ortalamaları daha yüksek bulunmuştur (2023: 175-184).

2019 yılında Özutku tarafından banka çalışanlarının tükenmişliğinin iş yaşam dengesi ve çalışan sağlığı üzerindeki etkisi araştırılmıştır. Bu araştırmanın sonucunda banka çalışanlarının “duygusal tükenme ve duyarsızlaşma düzeylerinin yüksek, kişisel başarı düzeyinde düşme hissini ise orta düzeyde olduğu saptanmıştır. Duygusal tükenmenin iş yaşam dengesi üzerinde pozitif yönde anlamlı bir etkisinin olduğu, duyarsızlaşmanın iş yaşam dengesi üzerinde negatif yönde anlamlı bir etkisinin olduğu saptanmıştır”. Yani duygusal tükenmedeki bir artış iş yaşam dengesizliğindeki bir artışa sebebiyet vermektedir. Duyarsızlaşmadaki artış ise iş-yaşam dengesindeki olumsuzluğu azaltmaktadır. Tükenmişliğin bir diğer boyutu olan kişisel başarı hissini düşmesi değişkeninin iş-yaşam dengesi üzerinde anlamlı bir etkiye sahip değildir. Buna göre duygusal tükenme iş-yaşam dengesini etkileyen önemli bir boyuttur (165-182).

Batur ve Saylık tarafından çalışmada ise halk eğitim merkezi müdürlerinin iş-yaşam dengesi ve tükenmişliği incelenmiştir. Bu çalışmanın sonucunda “halk eğitimi merkezi müdürlerinin tükenmişlik düzeyleri ile iş yaşam

dengesi düzeyleri arasında negatif yönde yüksek düzeyde anlamlı ilişki belirlenmiştir. Araştırmada tükenmişliğin genelini iş yaşam dengesi düzeyinin genelini anlamlı düzeyde ve negatif yönde yordadığı” tespit edilmiştir. Daha açık bir ifade ile “tükenmişlik düzeyinde bir birimlik artışın iş-yaşam dengesinde 0,67 birimlik azalış” göstereceği bulunmuştur. Öte yandan genel itibari ile katılımcıların tükenmişlik düzeylerinin normal seviyede olduğu ve yine tükenmişliğin alt boyutlarında da bu düzeyin orta seviyelerde olduğu tespit edilmiştir. Diğer bir bulgu ise katılımcıların genel tükenmişlik düzeyleri; “cinsiyet, medeni durum, öğrenim durumu, mesleki kıdem, kurumundaki görev süresi ve kurumun bulunduğu bölge değişkenleri açısından anlamlı bir farklılık göstermezken; yaş, kurumun bulunduğu yerleşim birimi ve işbirliği yapılan kurum değişkenleri” açısından anlamlı düzeyde farklılık göstermektedir. Buna göre genç yöneticilerin kıdemli yöneticilere göre daha fazla tükenmişlik yaşamaktadır. Ararştırma da genel olarak iş-yaşam dengesinde ve iş-yaşam dengesinin alt boyutları olan “iş yaşam uyumu ile yaşamı ihmal etme” boyutlarında cinsiyet açısından anlamlı farklılık gözlemlenmiştir ve erkek halk eğitim müdürlerinin bu dengeyi daha iyi sağladıkları tespit edilmiştir (2022: 381-395).

Son olarak Öztürk tarafından 2023 yılında yapılan çalışmada kabin memurlarının iş-yaşam dengelerinin mesleki tükenmiş üzerindeki etkisi araştırılmıştır. Buna göre; iş-yaşam dengesi ile negatif yönlü bir ilişki söz konusu olur iş-yaşam dengesindeki azalma duygusal tükenmişliği arttıracaktır. İş-yaşam dengesi ile kişisel başarı arasında ise pozitif bir ilişki söz konudur. İş-yaşam dengesinde uyum sağlandıkça kişisel başarı da artmaktadır. Araştırmada tespit edilen bir diğer bulgu ise kendine zaman ayırmanın duygusal tükenmişliği azalttığı, buna karşın kendine zaman ayırmanın kişisel başarıyı arttırdığı tespit edilmiştir (25-43).

## TARTIŞMA

Yapılan literatür taramasında mesleki tükenmişlik kavramı yerine genel olarak çalışmalarda tükenmişlik kavramı kullanılmıştır. Bu sistematik derleme, çalışma hayatının güncel sorunları olan iş-yaşam dengesizliği ve mesleki tükenmişlik sorunlarını farklı meslek gruplarında inceleme fırsatı sunmuştur. Buna göre;

Çalışma hayatında iş-yaşam dengesini ve mesleki tükenmişliği mesleklere göre incelediğimizde yönetici konumunda olan halk eğitim merkezi müdürlerinin; sağlık sektöründe çalışan kadınlara, bankacılık sektöründe çalışanlara ve kabin memuru olarak çalışanlara göre tükenmişlik seviyelerinin normal düzeyde olduğu tespit edilmiştir. Bunun nedeni olarak ise şunları söylemek mümkündür. Sağlık sektöründe çalışanlar özellikle pandemi döneminde en çok etkilenen; iş stresi ve ağır iş yükü altında çalışan kişiler olmuştur. Diğer tarafından bankacılık sektöründe çalışanlar, günümüzde giderek artan rekabetçi bankacılık piyasasında varlığını sürdürebilmek, kendisine müşteri çekebilmek ya da var olan müşteriyi elinde tutabilmek ve müşteri

memnuniyetini sağlayabilmek için gittikçe artan zaman ve hedef baskıları ile yeni stratejiler geliştirerek baskı altında çalışmaktadırlar (Özutku, 2019: 167). Kabin memurlarının ise düzensiz çalışma saatleri ile yoğun bir iş temposu altında çalışmak zorunda olmaları iş-yaşamı ile kişisel yaşam arasındaki dengenin kurulmasını zorlaştırmaktadır (Öztırak, 2023: 40). Bu bağlamda yoğun iş saatlerinin, düzensiz çalışma saatlerinin, rekabet yarışının, aşırı iş yükünün çalışanlar üzerinde baskıya dolayısıyla mesleki tükenmişliğe yol açtığını söylemek mümkündür.

Yapılan çalışmalarda bir diğer önemli ortak bulgu ise genel anlamda tükenmişlik arttıkça iş-yaşam dengesinin bozulması; iş yaşam dengesi bozuldukça tükenmişliğin artmasıdır. Bu bağlamda çalışma hayatının güncel sorunu olan bu iki durum birbirini tetikleyen değişkenlerdir.

Diğer taraftan dikkat çekici bir diğer sonuç ise tükenmişliğin alt boyutu olan duygusal tükenme, iş-yaşam dengesindeki olumsuzluğu artırırken; duyarsızlaşmanın iş-yaşam dengesindeki olumsuzlukları azaltmasıdır. Duyarsızlaşmanın iş yaşam dengesindeki olumsuzlukları azaltması iyi bir durum gibi gözükse de aslında profesyonel yardım ile iyileştirilmesi gereken bir sorundur çünkü duyarsızlaşma tükenmişlik sendromunun duygusal tükenmişlikten bir sonraki aşamasıdır.

Son olarak bir diğer önemli bulgu ise Öztırak tarafından (2023) yapılan çalışmada gözlemlenmiştir. Bu çalışmada kişinin kendisine vakit ayırabilmesinin kişinin kişisel başarıyı artırması ve duygusal tükenmişliği azaltmasıdır.

## SONUÇ YERİNE

Bu sistematik derleme çalışmasında, çalışma hayatında mesleki tükenmişlik ve iş-yaşam dengesi değişkenlerinin birbirini nasıl etkilediği araştırılmıştır. Bu bağlamda bu araştırmaya cevap verebilecek nitelikte dört çalışma incelenmiştir. Türkiye özelinde ve ulusal düzeyde bu iki değişkenin bir arada yapıldığı makalelerin sayısı görüldüğü üzere çok azdır. Ancak, yinede araştırma sorularımız, cevap bulmuştur. Buna göre;

-Meslek gruplarına göre çalışanların iş-yaşam dengesini sağlayabilme durumu ve tükenmişliği yaşama durumu farklılık göstermektedir. Her meslek grubunda çalışma koşullarının farklı olması; sorumluluklarını, iş yüklerini, stres ve baskı altında olma seviyelerini etkileyebilmekte dolayısıyla iş-yaşam dengesi ve tükenmişlik riski, meslek gruplarına göre değişkenlik göstermektedir. Buna göre düzensiz çalışma saatlerinde çalışanlar, rekabet piyasasının getirmiş olduğu baskı ve stresi altında çalışanlar, fazla iş yükü altında çalışanlar, diğer taraftan çalışma hayatına yeni katılanlar ve yoğun iş temposu altında çalışanlar, daha fazla iş-yaşam dengesini sağlayamama ve tükenmişlik riski altındadır.

-Bir diğerk araştırma sorumuz ise iş-yaşam dengesi ve tükenmişliğin bir biri nasıl etkilediğiydi. Yapılan çalışmalarda ortak bulgu olarak iş yaşam dengesinin bozulması durumunda tükenmişliğinde artacağı; tükenmişlik arttıkça iş-yaşam dengesinin bozulacağı tespit edilmiştir. Bu durumda bu iki kavram birbirinden farklı olmakla beraber birbirinin sebep ve sonucu niteliğindedir.

Sonuç olarak; çalışanların çalışma hayatında iş-yaşam dengesinin desteklenmesi çalışanların tükenmişlik yaşama riskini azaltacaktır. Diğer taraftan çalışma ortamında çalışma koşullarının iyileştirilmesi ile sorunsuz çalışma ortamları sağlanması, çalışanların tükenmişlik yaşamalarını engellenebilir kılacaktır. Bunun sonucunda ise sağlıklı çalışanlar ile iş-yaşam dengesi de sağlanabilir ve korunabilir hale gelecektir.

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## MONETARY POLICY'S IMPACT ON THE ECONOMY

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### **Abstract**

This research aims to examine the the effect of monetary policy on the economy. This research is library research with a qualitative approach. The data sources used in this research come from various literature journal articles that are relevant to the research topic. The data analysis method used is content analysis of the literature sources used in the research. The result of this research is Bank Indonesia implements monetary policy through various tools, including keeping the money supply stable, the inflation rate low, and the rupiah exchange rate stable. Setting monetary targets (such as interest rates or money supply) gives Bank Indonesia the power to implement monetary policy, with the main objective of maintaining the government's inflation rate target. The production of export-oriented goods and services will increase when the exchange rate depreciates or weakens because exporting goods and services will be more profitable as the price of goods and services abroad will be greater than the price at home. Increased exports will result in higher foreign exchange reserves, higher productivity of export-oriented goods and services, and ultimately higher overall economic growth. Typically, year-on-year variations in Gross Domestic Product (GDP) indicate economic growth.

**Keywords:** monetary policy, economic and inflation.

## THE CONCEPT OF HUMANIZATION OF PLANNING SCIENCE THAT IS HUMANISTIC IN NATURE: A LITERATUR REVIEW

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### Abstract

This research aims to determine the concept of humanization of planning science with a humanistic nature. This research is library research with a qualitative approach. The data sources used in this research come from various literature journal articles that are relevant to the research topic. The data analysis method used is content analysis of the literature sources used in the research. This literature research found that the development of civilization from the industrial revolution has given rise to a lot of mechanical power which aims to facilitate human performance. In the world of industrial factories, for example, production of goods is no longer done manually, but production machines are used. Machine power helps workers so that work is more efficient and the production of more goods. However, workers unconsciously have to follow the work of the production machine. Their work is controlled by a system of production machines, and workers must work according to the machine's work, not according to their creativity. The role of technology is no longer serving humans but instead, humans serve technology. humans become alienated or alienated from their own world. Society needs humanist planning, which includes human systems which must be adapted to the norms and values contained in human rights and obligations which must also be optimized. This humanist planning is also related to the role of technological machines which must be used according to their function in the social system of society. Humans must use technology as a tool to achieve their goals, namely by managing or running systems on technology and not vice versa. Thus, technology can help humans to develop optimally without reducing human values.

**Keywords:** Humanization, science, planning.

## THE POSITION OF SCIENCE IN THE ISLAMIC

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### **Abstract**

This research aims to explain the position of science in Islam, The research method uses a type of qualitative research with a library research approach Knowledge has a very important position both in the view of Islam and. The Qur'an and hadith as the basis of Islam talk a lot about the importance of knowledge. The position of knowledge seekers is also considered the same as a mujahid who is fighting in the way of Allah SWT. as well as the role of science in western civilization which has never been separated from efforts to develop science. Islam and the West have different views regarding the nature of knowledge. Islam recognizes that in essence knowledge belongs to Allah SWT. So that all human efforts to reach knowledge depend on the power of Allah Swt, the owner of knowledge. However, even though everything depends on the will of Allah Swt does not necessarily make humans hands off. Humans must still strive to seek knowledge. In contrast to the nature of knowledge in a western perspective, for them western scientists knowledge can be sought through reason and the five senses. When humans are willing to try to use their minds then they will get knowledge. However, if they stop using their minds then that is where humans are considered non-existent. Westerners do not recognize the authority of revelation as a source of knowledge. For them, reason is more dominant than revelation.

**Keywords:** science, Islam, west.

## UNDERSTANDING DOG SALIVA

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### **Abstract**

This research aims to describe the meaning of the implementation of humanization of science. This research is a literature research with a qualitative approach. The data sources used in this research come from various literature journal articles relevant to the research topic. The data analysis method used is content analysis of the literature sources used in the research. This literature research found that the digestive system, commonly referred to as the apparatus digestorius, in dogs includes saliva. The oral cavity, pharynx, digestive tract and accessory glands make up the digestive system. The teeth, tongue, salivary glands, liver, gallbladder, pancreas and anal sac are examples of accessory glands. Salivary glands produce and secrete saliva, which is one of the oral fluids. Saliva is drained into the oral cavity through ducts. Saliva consists of 98% water and the remaining 2% consists of electrolytes, mucus and enzymes. The parotid, mandibular, sublingual and zygomatic glands form the major salivary glands, which are separated into two groups. The minor salivary glands are located in the ventral buccal region. Why dog saliva in Islam is unclean and the Prophet forbids us to keep and interact with dogs because, according to the agricultural quarantine agency (2007), dog saliva also acts as a carrier medium for zoonotic diseases. This includes rabies, also known as mad dog disease, which is caused by the rabies virus that is acute and attacks the central nervous system. The rabies virus is a member of the Lyssavirus Family Rhabdovirus genus.

**Keywords:** Saliva, dog, health

## THE CONCEPT OF INTEGRATION OF SCIENCE AND RELIGION: LITERATURE REVIEW

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### **Abstract**

This research aims to examine the concept of integration of science and religion. The research method uses a qualitative research type with a library research approach. This research concludes that the concept of integration-interconnection is one of the offers in realizing dialogue between normative and historical approaches in Islamic studies. Of course, this is useful for developing a more complete variety of thoughts. Furthermore, this concept sees that the study of qauliyah/hadara al-nass with the study of kauwniyah/hadara al-'ilm as well as with hadarah al-falsafah have an integrated relationship with each other. This paradigm also seeks to provide offers and opportunities for all fields of science to collaborate and be connected into a new perspective in order to complement existing gaps between scientific disciplines. In its journey, the concept of integration-interconnection is often used and applied to provide a point of view and as a reference or benchmark for how urgent a comprehensive point of view is in an approach. This concept aims to create a tolerant atmosphere and raise awareness to focus more on solutions rather than differences in approaches used. This kind of epistemological execution will positively show a truth that is more far-reaching than the reality whose main aim is an exclusive epistemology in Islamic studies, both normative and historical only. The point of view of this concept actually emphasizes that there is a connection between several scientific fields of knowledge, which is often overlooked by Islamic studies, even though if implemented well, the integration between several scientific fields can be collaborated to form a more complete use for understanding Islam.

**Keywords:** Integration, Interconnection, and Literature review

**EATING AND DRINKING WHILE STANDING IN SCIENTIFIC PERSPECTIVE, IS IT ALLOWED?****Rossidah Rihadatul Aisi**

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**Abstract**

Talking about the practice of eating and drinking standing up certainly brings up a variety of scholarly perspectives. Eating and drinking while standing is a common practice in many cultures. It is commonly done when one is traveling or in a situation that allows them not to sit down when eating and drinking. However, it is important to remember that eating and drinking while standing can have an impact on our digestion and health. It is very important to remember that maintaining good manners, politeness, and respect while eating and drinking are among the fundamental concepts of Islam. The purpose of writing this article is to find out the perspectives or viewpoints scientifically related to the practice of eating and drinking while standing, and how to do it wisely. The writing method uses library research or literature review sourced from journals and e-books regarding the harmonization of science and religion. The results of this study conclude that eating and drinking while standing is considered inappropriate and should be avoided. This is related to ethics and politeness in the practice of eating and drinking that we usually do every day. On the contrary, eating and drinking while standing in a scientific perspective is more focused on the health of the body. Where this can interfere with digestion and absorption of nutrients as a result of the upright body position allows the digestive system in the body to not function properly.

**Keywords:** eating while standing, indigestion, dehydration

## ISLAMIC SCIENTIFIC PARADIGM: LITERATURE REVIEW

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### **Abstract**

This research intends to explain the study of the islamic scientific paradigm. The research method uses a type of qualitative research with a library research approach. This study concludes that The meaning of the term paradigm basically comes from Greek which is taken from the word "para" which means next to or next to, and combines with the word "diegma" which means model, exemplary and ideal. Meanwhile, viewed terminologically, a paradigm is understood as a perspective or point of view that is used to assess, see and understand the world and the natural surroundings. Besides that, a paradigm is also a general perspective or description in the form of methods used to describe various kinds of complex real world problems. The concept of scientific integration also departs from the doctrine of the oneness of Allah (tawhid), as God, or faith in the view of Ismail Razi al-Faruqi, is not merely an ethical category. It is a cognitive category that relates knowledge to the truth of its propositions. And because the nature of its propositional content is the same as the nature of the first principles of logic and knowledge, metaphysics, ethics and aesthetics, then naturally in the subject it acts as a light that illuminates everything.

**Keyword:** islamic scientific paradigm, and Literatur review

**IMPLEMENTATION OF INTERCONNECTION INTEGRATION: LITERATURE REVIEW****Muhammad Usman Ariffianto**

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ORCID ID: <https://orcid.org/0009-0003-5488-8252>**Abstract**

This research aims to explain the study of the implementation of interconnection integration. The research method uses qualitative research with a library research approach. This research concludes that in Islamic Religious Education (PAI) learning, for example, meteri-aharah (purification) discusses water. Water in this thaharah chapter is generally divided into Absolute Water, (holy and purifying water), Mustamal Water (water that has been used), Mutanajjis Water (water that is unclean). In the management of learning about water, an educator is required not only to convey normative-literary information about water as in the fiqh sciences, by exploring the Koran and Hadith. However, you must be able to dialogue and relate it to scientific facts about water, the impact and function of water for life. Therefore, educators must have sufficient insight, reading and literature to be able to provide various information about thaharah to students. Another perspective is that education should also be able to relate thaharah material; purify; water with other studies (eg ecology, geology, hydro-chemistry, biology, health etc.); the amount of water on earth does not increase or decrease just by moving from one place to another, the earth consists of 70 percent water (oceans) and 30 percent land, as well as human conditions, 70 percent is water, therefore water will also affect our mood. If we are given a positive response, the water in our bodies will capture this energy, so that we will feel better. Environmental damage, abrasion and water crises are caused by human activities that are not wise in using water.

**Keyword:** Integration, Interconnection, and Literature Review

## THE INCREASE IN FUEL PRICES CAUSES INFLATION IN INDONESIA

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### Abstract

Government policy to increase fuel prices (BBM) actually, this is nothing new in Indonesia. Rise in fuel prices the. Of course, this will drastically affect the economic situation. Matter this could happen because an increase in fuel prices will be followed by increase in prices of goods and services. Continuous increases in prices of goods and generally that is what is called inflation. When the inflation rate increases of course will affect the community's economy. There will be an increase in fuel prices will also have a big influence on demand and supply. Lots of it goods demanded by consumers is the number of goods offered by manufacturers there will also be changes. Consumers are people who buying goods or using services will certainly experience a decline the amount of demand because the prices of goods and services become expensive. Ascension this is because the goods produced by producers require production costs which also increases the price so that producers increase their selling prices this is the effect of the increase in fuel oil (BBM) prices.

**Keywords:** Fuel oil, Inflation, Increase

## SCIENTIFIC CLASSIFICATION OF PORK IS HARAM

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### Abstract

Allah SWT forbids His people from consuming haram food. This writing method uses a literature review approach sourced from various articles and online journals that are relevant to the research topic. According to research findings, pork is dangerous because The meat smells like urine, Pork consumers often complain about the strong smell of pork. Research suggests that the pig's praeputium, which often leaks and allows pig urine to seep into the flesh, is the source of the odor. The animal is very greedy, Pigs eat everything in front of them, right? If he runs out of food and he is satisfied, he will vomit what he has eaten and then consume the vomit again. It eats feces, including its own feces, the feces of other animals, and human and animal feces when it is hungry. This animal apparently likes to urinate carelessly, including urinating on the food it is about to eat, which is even more disgusting. Pigs also like being in a dirty environment and don't like being in a dry environment. Likes to eat dirt, The only mammals that like to eat things on the ground are pigs. If not stopped, he will consume a lot of food for a long time. It makes sense why people who like to eat pork have skin that smells bad. The meat contains dangerous worms, Several dangerous species of worms can be found in pork. Pigs can be infected with worms such as tapeworms (*Taenia solium*), spiral worms (*Trichinella*), and others. Lung worms (*Paragonimus*), hookworms (*Ancylostoma duodenale*), and spinalis. These worms will swallow food essence. Anemia (lack of blood), diarrhea, panic, shock, and other symptoms may occur.

Key words: classification, pork, haram

## İNSAN VE HAYVAN SAĞLIĞINDA ANTİFUNGAL VE ANTİVİRAL AMAÇLI KULLANILAN NANOPARÇACIKLAR

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### Özet

Nanopartiküller benzersiz fiziksel ve kimyasal özelliklerinden dolayı son yıllarda birçok araştırmının konusu olmuştur. Çevre dostu ve biyoyumlu nanopartiküllerin sentezi, geniş bir uygulama yelpazesi olması nedeniyle önem kazanmaktadır. Nanopartiküller floresan biyolojik etiketler, ilaç ve gen iletim sistemlerinin bir parçası, bulaşıcı ajanların biyolojik tespiti, proteomik tespit bileşeni ve DNA'nın yapısının incelenmesi, doku mühendisliği, tümörlerin ısıtma ile yok edilmesi (hipertermi), biyoloji veya tıpta moleküler ve hücresel ayırma ve saflaştırma için kullanılmaktadır. Ayrıca biyotıp, antimikrobiyal ajanlar olarak yüksek verimlilikleri nedeniyle bu nanopartiküllerden büyük ölçüde faydalanmaktadır. Metal, metal oksit, geçiş metali dikalkojenit ve metalik olmayan inorganik nanopartiküller içeren inorganik nanopartikül sistemleri antimikotik potansiyel göstermektedir. Gelecekte daha fazla antifungal aktiviteye ve daha az toksisiteye sahip inorganik nanopartiküller üretilecektir. Virüslere karşı, nanomalzemeleri standart antiviral ilaçlarla birleştirmenin avantajları vardır. Patojenlere karşı hedefe yönelik tedaviler, nanoyapılar, polimerler, dendrimerler, lipozomlar ve biyolojik sistemler arasındaki çok değerlikli bağlanma etkileşimleri sayesinde mümkün olmaktadır. Özellikle gümüş nanopartiküller antiviral etki göstermiştir ve viral enfeksiyonların tedavisinde, önlenmesinde ve başka şekillerde yönetilmesinde faydalı olabilir. Aktif moleküllerin yerel konsantrasyonunu artırarak, geleneksel antiviral ilaçların çok sayıda ligand içeren nanoyapılara entegrasyonu fayda sağlamaktadır. Bu derlemede, nanopartiküllerin insan ve hayvan sağlığındaki antifungal ve antiviral etkileri ele alınmaktadır.

**Anahtar Kelimeler:** Nanopartikül, antiviral, antifungal, farmasötik

## NANOPARTICLES USED FOR ANTIFUNGAL AND ANTIVIRAL PURPOSES IN HUMAN AND ANIMAL HEALTH

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### Abstract

Nanoparticles have attracted a lot of research attention in recent years because of their unique physical and chemical features. Synthesis of eco-friendly and biocompatible nanoparticles are becoming important for a wide range of applications. Nanoparticles are used as fluorescent biological labels, part of drug and gene delivery systems, biodetection of infectious agents, proteomic detection component and for examining the structure of DNA, tissue engineering, destruction of tumors with heating (hyperthermia), molecular and cellular separation and purification in biology or medicine. Also biomedicines benefit greatly from these nanoparticles due to their high efficiency as antimicrobial agents. Inorganic nanoparticle systems containing metal, metal oxide, transition-metal dichalcogenide, and inorganic non-metallic nanoparticles have demonstrated antimycotic potential. In future inorganic nanoparticles with greater antifungal activity and reduced toxicity will be produced. Against viruses, combining nanomaterials with standard antiviral drugs has advantages. Targeted therapies against pathogens are made possible by the multivalent binding interactions between nanostructures, polymers, dendrimers, and liposomes and biological systems. Particularly silver nanoparticles have shown antiviral action and may be useful in treating, preventing, and otherwise managing viral infections. By boosting the local concentration of active molecules, the integration of traditional antiviral medicines onto nanostructures with numerous ligands provides benefits. In this review, antifungal and antiviral effects of nanoparticles in human and animal health are handled.

**Keywords:** Nanoparticle, antiviral, antifungal, Pharmaceutical

## 1. Introduction

Nanoscience is the study, discovery, and knowledge of subjects whose attributes rely on their size and structure. Nanotechnology refers to the body of knowledge that allows us to make, regulate, and transform structures on the nanoscale scale (ISO 2015). Since the 1950s, researchers have been researching the possibilities of this technology in the pharmaceutical and biomedical industries, and the first nanoparticle was developed in the late 1960s for application in vaccinations and drug delivery (Kreuter, 2007). One of the most prevalent kinds of nanomaterials, nanoparticles (NPs) have dimensions on the nanometer scale (1-100 nm) in all three of their outer dimensions. Parameters, composition, morphology, structure, and surface properties are commonly exploited to categorize NPs. These qualities effect the interplay between magnetism, light, electricity, life, and the environment. Size and a high surface area-to-volume ratio are common traits of the three main kinds of NPs (polymeric, lipid-based, and inorganic). However, based on a range of parameters, each has unique traits, strengths, and weaknesses (Blackman 2008). Researchers have been looking into nanoparticles for a broad variety of uses for quite some time. NPs have therapeutic applicability as antibiotics, antifungals, mycotoxin inhibitors, antibiofilm agents, antiparasitic agents, antiviral vectors, and drug delivery systems. These positive elements indicate the tremendous potential and upcoming utilization of NPs in the field of health care.

## 2. Nanoparticles

Nanoparticles may be comprised of a range of components, such as proteins, lipids, and inorganic elements. Due to their biocompatibility and biodegradability, natural or synthetic polymers such as polylactic-co-glycolic acid, polylactic acid, alginate, cyclodextrin, hyaluronic acid, polyglycolic acid, and polycaprolactone are widely utilized to make polymeric nanoparticles (Naito et al, 2018). Utilization of these polymers promotes tissue compatibility and decreases cytotoxicity. Nanoparticles can include functional molecules through encapsulation, adsorption, or conjugation. Due to their small size, nanoparticles are appropriate for intravenous delivery. Similar to liposomes, nanoparticles can be coated with hydrophilic components such as PEG chains to evade immune system detection and clearance. This technique, known as PEGylation, yields what are sometimes called as "stealth nanoparticles" (Pelton, et al, 2013).

### 2.1. Properties of nanoparticles

Nanoparticles, which have shown their value throughout the course of time, make up the fundamental building blocks of nanotechnology. Nanoparticles typically range in size from one to one hundred nanometers (nm), and their composition is predominantly composed of carbon, metals, metal oxides, and organic compounds. Nanoparticles, in contrast to their larger-scale counterparts, feature a variety of characteristics that are unique on

the physical, chemical, and biological levels. This is due to the fact that there is a greater surface area in comparison to volume, which, among other advantages, increases both the mechanical strength and the chemical reactivity (Kailasa et al, 2019).

## 2.2. Applications

Nanoparticles are used as fluorescent biological labels, part of drug and gene delivery systems, biodetection of infectious agents, proteomic detection component and for examining the structure of DNA, tissue engineering, destruction of tumors with heating (hyperthermia), molecular and cellular separation and purification in biology or medicine (Schmid, et al, 2011; Klimov et al, 2017; Dragicevic et al, 2017). The fact that nanoparticles and proteins share the same size domain renders nanomaterials appropriate for use in bio tagging or labeling. When nanoparticles are used as biological markers, however, size is rarely sufficient as a criterion because it is only one of several characteristics that nanoparticles possess. Interaction with biological targets can be made easier by first coating or layering the nanoparticle with a biological or molecular coating or layer that functions as a bioinorganic interface. Antibodies, biopolymers like collagen, and monolayers of minute molecules are some examples of biological coatings (Muñoz-Escobar et al, 2020). These biological coatings make nanoparticles more compatible with biological systems. In addition, given the prevalence of the use of optical detection methods in biological research, nanoparticles should either be able to emit light or change the optical qualities they possess (Chintalacharuvu et al, 2021).

## 2.3. Using in pharmaceutical industry

By altering the production technique, it is conceivable to make nanoparticles. These nanoparticles have proved to be effective as carriers for drug delivery. They have many uses in gene therapy, cancer therapy, AIDS therapy, radiation treatment, and more. Additionally, nanoparticles offer a mechanism to transmit proteins, medicines, and vaccines through the blood-brain barrier. To guarantee precise medication action at the intended location with optimal therapeutic dose and timing, the design of nanoparticle delivery systems focuses on managing particle size, surface properties, drug dispersion, and release of the active pharmaceutical ingredient (API) (De Souza Silveira Valente et al, 2019). Particle size has a critical effect in the efficiency of most pharmacological delivery strategies. Nanoparticles, because to their reduced particle size and higher surface area, display enhanced solubility in water and better bioavailability in the body. Furthermore, their nano-scale size permits them to penetrate the pulmonary system, tumor endothelium, and skin endothelial cell barriers. This improves efficient absorption by diverse cell types and permits selective drug accumulation in the proper areas (McClements, 2014; Jain et al, 2020). Another feature of nanoparticles is their appropriateness for

intravenous delivery, exceeding microparticles in this regard. With capillaries in the human body generally ranging from 5 to 6  $\mu\text{m}$  in diameter, particles circulating in the circulation should be significantly smaller than 5  $\mu\text{m}$  to prevent embolism (Yildirimer et al, 2011). Nanoparticles made with biodegradable natural and synthetic polymers allow targeted pharmaceutical administration, increased bioavailability, and prolonged release behavior from a single dosage at the target location. Moreover, these techniques can preserve the medication against degradation by endogenous enzymes (Ibrahim et al, 2020; Tarazona et al, 2019).

## 2.4. Antifungal Activity

### 2.4.1. Current antifungal drugs

The biological pathways that fungi and mammalian cells share make it difficult to develop antifungal drugs that will specifically target fungi while protecting mammalian cells from the harmful side effects of the drug. Antifungal drugs are far harder to come by than antibiotics, and a significant number of those that are accessible are toxic to eukaryotic host cells (Gómez et al, 2019). Due to the structural and chemical differences between bacteria and fungi, successful ideas and approaches used in the development of antibacterial drugs do not necessarily translate to the development of effective antifungal drugs (Bocate et al, 2019). This is because antibacterial drugs target bacteria, while antifungal drugs target fungi. There are already over 80 antifungal medicines that have been approved for use in humans. They can be classified as polyenes (including amphotericin B), allylamines, azoles (including fluconazole, itraconazole, and posaconazole), pyrimidine analogues, and echinocandins (including caspofungin, micafungin, and anidulafungin) (Khalil et al, 2019). Fungi can be killed by inhibiting the synthesis of ergosterol, attaching to it, or disturbing its function. Ergosterol is required for the formation and function of the fungal plasma membrane, so these actions can be fatal to the fungi. Other typical antifungal drug targets include the cell wall and membrane (drugs that target either the membrane or the cell wall are effective), the biosynthesis of nucleic acids, proteins, chitin, and mannan, and mechanisms involving the production of reactive oxygen species (ROS) or the depletion of ATP (Devipriya et al, 2017). Recent research has pointed to the metabolism of sulfur as a possible new target for antifungal drugs, particularly in the fungus *Aspergillus fumigatus*, where sulfur-related activities play an important part in the physiology of the fungal cell (Flemming and Wingender, 2010; Hu et al, 2019).

### 2.4.2. Antifungal inorganic nanoparticles

Antibacterial medicines of the next generation, such as nanoparticles, offer tremendous promise (Kushwaha et al, 2022). Although their efficiency against bacteria has been well-documented, research on their efficacy against fungi has followed behind (Gowda et al, 2023). Due to their specific properties, nanoparticles present a

viable technique for the generation of effective antifungal medicines. Their flexibility, broad specific surface area, and ability to eliminate microbes via numerous physical and chemical routes make them excellent candidates (Borrego et al, 2016; Halder et al, 2018). It is worthwhile to examine if this method can also hinder the formation of resistance in fungi. Nanoparticles have the power of entering biofilms and blocking their formation, making them suitable tools for preventing and treating fungal biofilm infections (Kim et al, 2020).

Both organic and inorganic nanoparticles with antimycotic qualities have been produced, each with its own advantages and disadvantages. Their increased chemical and thermal stability facilitates storage, transit, and usage in demanding environments. Inorganic nanoparticle systems containing metal (silver, gold, copper), metal oxide (zinc oxide, titanium dioxide, iron oxide, copper oxide), transition-metal dichalcogenide (molybdenum disulphide, molybdenum diselenide), and inorganic non-metallic (carbon, selenium, tellurium) have demonstrated antimycotic potential (Ghaffari et al, 2019). Understanding their toxicological limitations and mode of action offers considerable insight into their possible uses. The work also tackles the chemical reduction and manufacture of antifungal nanoparticles. Future methods involve the production of inorganic nanoparticles with greater antifungal activity and reduced toxicity (Kumar et al, 2019).

Not only have silver nanoparticles (AgNPs) been intensively researched for their antifungal qualities, but also as antibacterial agents in a range of commercial items. They have showed broad-spectrum antibacterial activity. AgNPs have been shown to possess antifungal efficacy against *Aspergillus brasiliensis* as well as drug-resistant fungus. Gold nanoparticles, also known as Au NPs, and silver nanoparticles, also known as AgNPs, with mean diameters of 4.1 nm and 2.22 nm, respectively, were found to effectively inhibit the growth of the pathogenic yeast *Cryptococcus neoformans* over time and at increasing doses of antifungal medication (Reck et al, 2014). In addition, conjugating amphotericin B with gold nanoparticles (AuNPs-Sa-AmB) significantly inhibited the in vitro growth of *Cryptococcus neoformans*, which suggests a possible method for the treatment of cryptococcal disease (Li et al, 2020). Biogenic silver nanoparticles showed antifungal activity against *Pythium insidiosum*, causing the cell wall to be disrupted and the cell to shrink (FAO 2004). Antifungal activity was demonstrated by silver nanoparticles with a diameter of 4.1 nm derived from *Trichoderma*, as well as selenium nanoparticles derived from *Trichoderma*, against *Candida* species and various fungal isolates, respectively (Avinash et al, 2017). When the nanoparticles were present, there was a reduction in the formation of fumonisin B1, tenuazonic acid, alternariol, and deoxynivalenol (Rajakumar et al, 2013).

## 2.5. Antiviral Effects

Due to their potential applications in a variety of biological fields, including the fight against viruses, silver nanoparticles, also known as AgNPs, have garnered a significant amount of attention in the scientific community (Marimuthu et al, 2011). It is possible to generate AgNPs with the size and quality characteristics of one's choosing by modifying process parameters such as dispersants, surfactants, and temperature (Li et al, 2018). Nanomaterials have been utilized for quite some time as antiviral agents and as delivery methods for antiviral medications. This has enabled dispersion stability as well as the potential for antifungal, antibacterial, and antiviral properties (Kirthi et al, 2011). In the struggle against the NL63 human coronavirus, Ciejka et al. generated a biopolymeric material capable of producing nanospheres that could adsorb coronaviruses. Even though nanomaterials have shown antiviral effects against a wide variety of coronaviruses, there is an urgent need for more research to investigate their potential as antiviral nanomedicines targeting SARS-CoV, MERS-CoV, and SARS-CoV-2. Nanoparticles have the potential to interfere with multiple stages of the life cycle of viruses, including attachment, penetration, replication, and budding (McGill et al, 2018). They may be able to exert their effects by inactivating the virus, preventing the virus from attaching itself to host cells, and reducing the amount of viral replication. The nature and shape of the nanoparticles that are used can also have an effect on how effective they are (Hu et al, 2017).

Recent studies have shown that silver nanoparticles (AgNPs) possess antiviral properties that are effective against a diverse range of virus families. The preventive effect of AgNPs is primarily comprised of either direct virucidal activity or a change in the way the virus attaches to the host cell (Spadari, et al, 2019). Several research have been undertaken since then to learn more about the potential antiviral effects of AgNPs. Herpes simplex viruses 1 and 2 (HSV-1) and influenza A virus (IFV) have garnered the most interest. It is known that size, shape, distribution/concentration, surface chemistry, and morphology affect the antibacterial activity of AgNPs (Vaghasiya et al, 2013).

On the basis of available data, a variety of potential applications of AgNPs in virology have been outlined, including those related to the treatment and prevention of viral infections, veterinary applications, water and air purification, and the food and textile industries (Alkie et al, 2018). Epizootic outbreaks may expose humans to the Rift Valley fever virus (RVFV), a virus that causes sickness in ruminants. Since neither a cure nor a vaccination has yet been discovered, scientists are always on the lookout for novel therapeutic methods, such as nanoparticles (Luis et al, 2020). Using commercial AgNPs decreased the final virus production by roughly 50 percent, and dose-dependently decreased viral infectivity. Preincubation with RVFV

at a concentration of 12 g mL<sup>-1</sup> led to a decrease of 98 percent . Moreover, in vivo testing demonstrated that the mice in the pretreatment group survived statistically better than those in the control group (Vera-González et al, 2020).

There is no longer a viable vaccination or treatment for the devastating African swine fever virus (ASFV). The hemadsorbing doses (HAD<sub>50</sub>) for this virus were 103 at a concentration of 0.78 g mL<sup>-1</sup>, and silver nanoparticles were able to completely suppress the virus's activity. The herpes simplex virus, also known as HSV, is an endemic virus that can infect a wide variety of animal and human species (Beshbishy et al, 2019). Unfortunately, there is currently no treatment or prevention method that is either highly effective or designed for the long term (Dhakal et al, 2018). The antiviral effects of highly monodisperse gold nanoparticles (GAuNPs) stabilized with garlic acid were investigated using types 1 and 2 of the herpes simplex virus. Because of this, there was a dose-dependent decrease in the production of viral plaques, and the progression of the infection came to a halt (Dwivedi et al, 2013).

### 3. Conclusions

NPs with variable sizes, morphologies, affinities, oxidative and electric characteristics, agglomeration capabilities, and more may be created using a wide variety of chemicals and synthesis techniques, each of which may result in a distinct mode of action at antiviral and antifungal potential. Future antimicrobial product research and development may be hindered by the absence of a standard for any of the nanoparticles created and exploited in research. Nanoparticles have enormous promise as innovative medicines, vaccines, and pharmaceutical delivery systems, as well as a replacement technique for maintaining food purity and safety, according to research. As these studies are relatively new in the veterinary field, further study is required to comprehend the short- and long-term impacts of NPs on animal, human, and environmental health. Nanoparticles' obvious relevance and potential future use in veterinary pharmacology cannot be denied.

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