

## Asst. Prof. HÜSEYİN GÜMÜŞ

### Personal Information

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### International Researcher IDs

ORCID: 0000-0002-2029-7978

Publons / Web Of Science ResearcherID: A-5197-2017

ScopusID: 36138629200

Yoksis Researcher ID: 44526

### Education Information

Doctorate, Kütahya Dumlupınar University, Fen Bilimleri Enstitüsü, Turkey 2010 - 2015

Postgraduate, Kütahya Dumlupınar University, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), Turkey 2008 - 2010

Undergraduate, Kütahya Dumlupınar University, Fen-Edebiyat Fakültesi, Kimya Bölümü, Turkey 2004 - 2008

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, PVDF-METALOKSİT KOMPOZİT MEMBRANLARIN FİLTASYON ÖZELLİKLERİNİN VE BENZİL ALKOL YÜKSELTGENME REAKSİYONLARINDA KATALİTİK PERFORMANSLARININ İNCELENMESİ, Kütahya Dumlupınar University, Fen Bilimleri Enstitüsü, 2015

Postgraduate, Ham ve ön-işlem görmüş sepiyolit numunelerinin Cu(II) ve Pb(II) alkoyma davranışlarının XRD, XRF, FTIR, termik analiz (TG-DTA), atomik absorpsiyon teknikleriyle incelenmesi, Kütahya Dumlupınar University, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), 2010

### Research Areas

Chemistry, Natural Sciences

### Academic Titles / Tasks

Assistant Professor, Bilecik Seyh Edebali University, Osmaneli Meslek Yüksekokulu, Mülkiyet Koruma Ve Güvenlik, 2016 - Continues

Research Assistant, Bilecik Seyh Edebali University, Fen Fakültesi, Kimya, 2010 - 2015

## Academic and Administrative Experience

Bilecik Seyh Edebali University, 2021 - Continues

Bilecik Seyh Edebali University, 2018 - Continues

Bilecik Seyh Edebali University, 2018 - Continues

Bilecik Seyh Edebali University, 2018 - 2021

## Courses

ÖLÇME TEKNİĞİ VE İŞ GÜVENLİĞİ, Associate Degree, 2021 - 2022

KİMYASALLAR VE TEHLİKELERİ, Associate Degree, 2021 - 2022

İş Hijyeni, Associate Degree, 2021 - 2022

İŞ SAĞLIĞI VE GÜVENLİĞİ YÖNETİM SİSTEMLERİ, Associate Degree, 2021 - 2022

GENEL KİMYA, Undergraduate, 2015 - 2016

FİZİKOKİMYA LABORATUVARI II, Undergraduate, 2015 - 2016

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **A facile preparation of biochar-anchored magnetic photocatalytic PVDF composite for water remediation**  
GÜMÜŞ H., Büyükkıdan B.  
Colloid and Polymer Science, vol.302, no.1, pp.103-115, 2024 (SCI-Expanded)
- II. **PHYSICOCHEMICAL PROPERTIES AND ADSORPTION PERFORMANCES OF TEXTILE WASTE BASED HYDROLYZED CELLULOSE-PVDF COMPOSITES**  
GÜMÜŞ H., Büyükkıdan B.  
Revue Roumaine de Chimie, vol.67, no.3, pp.197-205, 2022 (SCI-Expanded)
- III. **Performance investigation of Fe<sub>3</sub>O<sub>4</sub> blended poly (vinylidene fluoride) membrane on filtration and benzyl alcohol oxidation: Evaluation of sufficiency for catalytic reactors**  
GÜMÜŞ H.  
Chinese Journal of Chemical Engineering, vol.27, no.2, pp.314-321, 2019 (SCI-Expanded)
- IV. **Determination of progress in acrylic acid modification on polyvinylidene fluoride membrane by infrared spectroscopy**  
GÜMÜŞ H.  
Journal of Molecular Structure, vol.1174, pp.122-126, 2018 (SCI-Expanded)
- V. **Copper doped K-birnessite as an efficient catalyst for the synthesis of 2-aryl benzimidazoles**  
EREN B., GÜMÜŞ H.  
Reaction Kinetics, Mechanisms and Catalysis, vol.114, no.2, pp.571-582, 2015 (SCI-Expanded)
- VI. **Preparation, characterization and performance enhancement of polysulfone ultrafiltration membrane using PBI as hydrophilic modifier**  
EREN E., SARIHAN A., EREN B., GÜMÜŞ H., Kocak F.  
Journal of Membrane Science, vol.475, pp.1-8, 2015 (SCI-Expanded)
- VII. **Performance of birnessite-type manganese oxide in the thermal-catalytic degradation of polyamide 6**  
EREN E., GÜNEY M., EREN B., GÜMÜŞ H.  
Journal of Thermal Analysis and Calorimetry, vol.115, no.1, pp.567-572, 2014 (SCI-Expanded)
- VIII. **Performance of layered birnessite-type manganese oxide in the thermal-catalytic degradation of polyamide 6**  
EREN E., GÜNEY M., EREN B., GÜMÜŞ H.  
Applied Catalysis B: Environmental, vol.132-133, pp.370-378, 2013 (SCI-Expanded)
- IX. **Surface acidity of H-birnessite: Infrared spectroscopic study of formic acid decomposition**  
EREN E., GÜMÜŞ H., EREN B., SARIHAN A.  
Spectroscopy Letters, vol.46, no.1, pp.60-66, 2013 (SCI-Expanded)

- X. **An investigation of the catalytic decomposition of formic acid on raw and manganese oxide coated sepiolite surfaces**  
EREN E., GÜMÜŞ H., SARIHAN A.  
Applied Clay Science, vol.62-63, pp.1-7, 2012 (SCI-Expanded)
- XI. **Synthesis, structural characterization and Pb(II) adsorption behavior of K- and H-birnessite samples**  
EREN E., GÜMÜŞ H., SARIHAN A.  
Desalination, vol.279, no.1-3, pp.75-85, 2011 (SCI-Expanded)
- XII. **Characterization of the structural properties and Pb(II) adsorption behavior of iron oxide coated sepiolite**  
EREN E., GÜMÜŞ H.  
Desalination, vol.273, no.2-3, pp.276-284, 2011 (SCI-Expanded)
- XIII. **Equilibrium and thermodynamic studies of Cu(II) removal by iron oxide modified sepiolite**  
EREN E., GÜMÜŞ H., ÖZBAY N.  
Desalination, vol.262, no.1-3, pp.43-49, 2010 (SCI-Expanded)

## Articles Published in Other Journals

- I. **A Simple and Green Preparation Route of Waste Textile Based Photocatalytic Biochars for Pollution Removal**  
GÜMÜŞ H., BÜYÜKKIDAN B.  
CHEMISTRY AFRICA-A JOURNAL OF THE TUNISIAN CHEMICAL SOCIETY, vol.6, pp.629-642, 2023 (ESCI)
- II. **Pollution Removal Performance of Chemically Functionalized Textile Waste Biochar Anchored Poly(vinylidene fluoride) Adsorbent**  
GÜMÜŞ H., Buyukkidan B.  
Journal of the Turkish Chemical Society, Section A: Chemistry, vol.9, no.3, pp.777-792, 2022 (Scopus)
- III. **The Risk Calculation of Hazardous Zones Created By Flammable And Explosive Chemicals, LPG Tank Example**  
BÜYÜKKIDAN B., GÜMÜŞ H., USLU Ö. A.  
Academic Platform Journal of Natural Hazards and Disaster Management, 2021 (Peer-Reviewed Journal)
- IV. **Emergency Management Example in Cyanide Sourced Chemical Accidents in Gold And Silver Mining**  
BÜYÜKKIDAN B., GUMUS H.  
Afet ve Risk Dergisi, vol.3, no.2, pp.181-194, 2020 (Peer-Reviewed Journal)
- V. **Catalytic performance of polyvinylidene fluoride (Pvdf) supported tio2 additive at microwave conditions**  
GÜMÜŞ H.  
Journal of the Turkish Chemical Society, Section A: Chemistry, vol.7, no.2, pp.361-374, 2020 (Scopus)
- VI. **6331 Sayılı İSG Kanunu Uyarınca Kamu Sektöründe İşveren Yüklükleri, Kütahya Dumlupınar Üniversitesi\2019nde İş Sağlığı ve Güvenliği Uygulamaları**  
GÜMÜŞ H., BÜYÜKKIDAN B.  
Karaelmas İş Sağlığı ve Güvenliği Dergisi, 2020 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **KARBONİZE EDİLMİŞ TEKSTİL ATIĞI KATKILI POLİ(VİNİL FLORÜR) KOMPOZİTLERİN ÜRETİMİ VE KARAKTERİZASYONU**  
GÜMÜŞ H., BÜYÜKKIDAN B.  
in: Matematik ve Fen Alanında Uluslararası Araştırmalar VI, Fatma ERDOĞAN, Editor, Eğitim Yayınevi - Bilimsel Eserler, Konya, pp.119-130, 2022

## Refereed Congress / Symposium Publications in Proceedings

- I. **Effect of Activated Carbon Additive Prepared by Chemical Pretreatment on the Surface Properties of Polymeric Composites**  
GÜMÜŞ H., BÜYÜKKIDAN B., YILDIRIM T.  
III. International Science and Innovation Congress, AFYON, Turkey, 09 June 2022, pp.33-34
- II. **INVESTIGATION OF CRYSTALLINE PROPERTIES OF PVDF-HYDROLYZED CELLULOSE COMPOSITES**  
BÜYÜKKIDAN B., GÜMÜŞ H.  
3. INTERNATIONAL BAKU SCIENTIFIC RESEARCH CONGRESS, Baku, Azerbaijan, 15 October 2021
- III. **TEKSTİL ATIKLARININ KARBONİZASYONU İLE ELDE EDİLEN AKTİF KARBON MİKTARINA KİMYASAL ÖN MUAMELE ETKİSİ**  
BÜYÜKKIDAN B., GÜMÜŞ H.  
Uluslararası Bilimsel Araştırmalar ve Yenilikçi Çalışmalar Sempozyumu, Balıkesir, Turkey, 22 - 25 February 2021, pp.327-329
- IV. **Photocatalytic Activity of TiO<sub>2</sub>-PVDF Composites For Dye Removal**  
GÜMÜŞ H.  
Uluslararası Katılımlı VII. Polimer Bilim ve Teknoloji Kongresi (Polimer 2018), Eskişehir, Turkey, 09 September 2018
- V. **Magnetic Iron Oxide Doped PVDF Catalyst For Benzyl Alcohol Oxidation To Benzaldehyde**  
GÜMÜŞ H.  
International Conference on Engineering and Natural Sciences (ICENS) 2016, Sarajevo, Bosnia And Herzegovina, 24 May 2016