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Education Information

Doctorate, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Kimya (Dr), Turkey 2003 - 2009

Postgraduate, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), Turkey 2000 - 2003

Undergraduate, Ondokuz Mayıs University, Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, Turkey 1996 - 2000

Dissertations

Doctorate, Bazı sübstitüe benzimidazol ve bisbenzimidazol türevlerinin mikrodalga yardımıyla sentezi, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Kimya (Dr), 2009

Postgraduate, Disülfonitlerin asit katalizli hidroliz reaksiyon mekanizması, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), 2003

Academic and Administrative Experience

Bilecik Seyh Edebali University, 2021 - Continues

Bilecik Seyh Edebali University, 2021 - Continues

Courses

Endüstriyel Kimya Laboratuvarı, Undergraduate, 2013 - 2014

Organik Kimya Laboratuvarı II, Undergraduate, 2013 - 2014, 2011 - 2012, 2010 - 2011

Seminer, Postgraduate, 2013 - 2014, 2011 - 2012

Organik Kimya I, Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012

Genel Kimya Laboratuvarı I, Undergraduate, 2013 - 2014, 2011 - 2012

Laboratıvar Tekniği ve İş Güvenliği, Undergraduate, 2013 - 2014

Organik Kimya II, Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012

Analitik kimya Laboratuvarı II, Undergraduate, 2013 - 2014

Genel Kimya I, Undergraduate, 2013 - 2014, 2012 - 2013

Uzmanlık Alan Dersi, Postgraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012

Bitirme Ödevi II, Undergraduate, 2013 - 2014
İleri Organik Kimya, Postgraduate, 2013 - 2014, 2011 - 2012
Organik Kimyada Mekanistik İncelemeler I, Postgraduate, 2013 - 2014
Yüksek Lisans Tez Çalışması, Postgraduate, 2013 - 2014, 2012 - 2013
Anorganik Kimya Labotratuvarı, Undergraduate, 2013 - 2014
Moleküler Simetri ve Spektroskopi, Postgraduate, 2013 - 2014
Organik Kimya Laboratuvarı I, Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012
Bitirme Ödevi I, Undergraduate, 2013 - 2014, 2012 - 2013
Bilim Tarihi, Undergraduate, 2013 - 2014
Fizikokimya Laboratuvarı II, Undergraduate, 2012 - 2013
Genel Kimya II, Undergraduate, 2012 - 2013, 2010 - 2011
Fiziksel Organik Kimya, Postgraduate, 2012 - 2013
Fizikokimya Laboratuvarı I, Undergraduate, 2012 - 2013
Mikrodalga Organik Sentez, Postgraduate, 2012 - 2013
Aletli Analiz Laboratuvarı, Undergraduate, 2012 - 2013
Yüksek Lisans Tez Çalışması, Postgraduate, 2011 - 2012
Genel Kimya Laboratuvarı, Undergraduate, 2011 - 2012
Genel Kimya Laboratuvarı II, Undergraduate, 2010 - 2011

Advising Theses

EREN B., Tiyo-en klik reaksiyonları ile UV ışınlarıyla kürlenebilen dallanmış poliüretan akrilatların sentezi ve karakterizasyonu, Postgraduate, S.TAŞPINAR(Student), 2023
EREN B., UV ile kürlenebilen lineer ve dallanmış üretan akrilat reçinelerin sentezi ve karakterizasyonu, Postgraduate, E.DEMİR(Student), 2023
EREN B., 2-Hidroksietil metakrilat (HEMA) modifiye edilmiş stiren-bütıl akrilat-akrilik asit emülsiyon polimerlerinin sentezi ve karakterizasyonu, Postgraduate, H.ÇINAR(Student), 2022
EREN B., Stiren-bütıl akrilat-akrilik asit latekslerinin emülsiyon polimerizasyonu ile hazırlanması için proses değişkenlerinin optimizasyonu ve fizikokimyasal özellikleri üzerine divinilbenzen etkisinin incelenmesi, Postgraduate, Y.SOLMAZ(Student), 2019
EREN B., 1,3-Dialkil-2-arilbenzimidazolyum tuzlarının mikrodalga ve klasik ısıtma yöntemleri kullanılarak sentezi ve özelliklerinin incelenmesi, Postgraduate, Ö.YILMAZ(Student), 2015
EREN B., Benzimidazol halkası içeren polimerlerin sentezi ve özelliklerinin incelenmesi, Postgraduate, G.ERDOĞAN(Student), 2014

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Effect of PEG molecular mass and HEMA capping on the thermal, morphological, and hydrophilic properties of isocyanate-terminated polyurethane acrylate films**
EREN B., Demir Karaçoban E., Erdoğan B., Eren E.
Journal of Thermal Analysis and Calorimetry, vol.148, no.21, pp.11683-11694, 2023 (SCI-Expanded)
- II. **Effect of 2-hydroxyethyl methacrylate content on the emulsion polymerization process of styrene-butyl acrylate-acrylic acid: Chemical, thermal and film properties of polymer latex**
EREN B., Çınar H., Erdoğan B.
Journal of Thermal Analysis and Calorimetry, vol.147, no.23, pp.13289-13299, 2022 (SCI-Expanded)
- III. **Preparation and properties of negatively charged styrene acrylic latex particles cross-linked with divinylbenzene**
EREN B., Solmaz Y.
Journal of Thermal Analysis and Calorimetry, vol.141, no.4, pp.1331-1339, 2020 (SCI-Expanded)

- IV. **Positron annihilation lifetime spectroscopy study of polyvinylpyrrolidone-added polyvinylidene fluoride membranes: Investigation of free volume and permeation relationships**
EREN B., EREN E., GÜNEY M., Jean Y., Van Horn J. D.
Journal of Polymer Science, vol.58, no.4, pp.589-598, 2020 (SCI-Expanded)
- V. **Synthesis, characterization and antimicrobial activity evaluation of the polybenzimidazole derivatives with different dicarboxylic acid moieties**
EREN B., Koçak F., Erdoğan G.
Letters in Organic Chemistry, vol.17, no.7, pp.539-547, 2020 (SCI-Expanded)
- VI. **Flux-enhanced polysulfone membranes blended with ABPBI as a novel additive**
SARIHAN A., EREN E., EREN B., Erdoğan Y.
Materials Today Communications, vol.20, 2019 (SCI-Expanded)
- VII. **Combined experimental and theoretical studies on the chemical and spectroscopic properties of an antimicrobial N-(Phenyl)dimethyldisulfonimide**
EREN B., ÜNAL A., ÖZDEMİR KOÇAK F.
Journal of Molecular Structure, vol.1175, pp.542-550, 2019 (SCI-Expanded)
- VIII. **Structural, Spectroscopic, Antimicrobial Activity and DFT Studies on 4-Methyl-N-(4-methylphenylsulfonyl)-N-phenylbenzenesulfonamide**
EREN B., Koçak F., Özdemir N.
Optics and Spectroscopy (English translation of Optika i Spektroskopiya), vol.125, no.1, pp.14-21, 2018 (SCI-Expanded)
- IX. **Microwave assisted synthesis and potent antimicrobial activity of some novel 1,3-dialkyl-2-arylbenzimidazolium salts**
EREN B., Yilmaz Ö., Çetin G., DARCAN C.
Letters in Drug Design and Discovery, vol.15, no.6, pp.621-633, 2018 (SCI-Expanded)
- X. **Positron annihilation lifetime analysis of left- and right-handed alanine single crystals**
EREN B., Wu F., EREN E., Jean Y., Van Horn J.
Acta Physica Polonica A, vol.132, no.5, pp.1456-1460, 2017 (SCI-Expanded)
- XI. **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)
- XII. **(1-Methyl-2-(thiophen-2-yl)-1H-benzo[d]imidazole) and its three copper complexes: Synthesis, characterization and fluorescence properties**
Demir S., EREN B., Hołyńska M.
Journal of Molecular Structure, vol.1081, pp.304-310, 2015 (SCI-Expanded)
- XIII. **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)
- XIV. **Morphology and thermal characterization of montmorillonite/ polybenzimidazole nanocomposite**
EREN B., Aydın R., EREN E.
Journal of Thermal Analysis and Calorimetry, vol.115, no.2, pp.1525-1531, 2014 (SCI-Expanded)
- XV. **Simple, mild, and highly efficient synthesis of 2-substituted benzimidazoles and bisbenzimidazoles**
EREN B., Bekdemir Y.
Quimica Nova, vol.37, no.4, pp.643-647, 2014 (SCI-Expanded)
- XVI. **Catalysis and reaction mechanisms of N-formylation of amines using Fe(III)-exchanged sepiolite**
EREN B., Aydın R., EREN E.
Chemical Papers, vol.68, no.5, pp.584-590, 2014 (SCI-Expanded)
- XVII. **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)
- XVIII. **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)

- XIX. **Molecular structure and spectroscopic analysis of 1,4-Bis(1-methyl-2- benzimidazolyl)benzene; XRD, FT-IR, dispersive-Raman, NMR and DFT studies**
EREN B., ÜNAL A.
Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, vol.103, pp.222-231, 2013 (SCI-Expanded)
- XX. **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)
- XXI. **FT-IR, dispersive Raman, NMR, DFT and antimicrobial activity studies on 2-(Thiophen-2-yl)-1H-benzo[d]imidazole**
ÜNAL A., EREN B.
Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, vol.114, pp.129-136, 2013 (SCI-Expanded)
- XXII. **Investigation of the azo-hydrazone tautomeric equilibrium in an azo dye involving the naphthalene moiety by UV-vis spectroscopy and quantum chemistry**
ÜNAL A., EREN B., EREN E.
Journal of Molecular Structure, vol.1049, pp.303-309, 2013 (SCI-Expanded)
- XXIII. **Synthesis, characterization, and performance of a benzimidazole-based membrane in removal of phosphate: First lab-scale experimental results**
EREN B., Aydın R., EREN E.
Journal of Materials Science, vol.48, no.21, pp.7456-7465, 2013 (SCI-Expanded)
- XXIV. **Eco-friendly and efficient synthesis of benzimidazole derivatives using iron oxide modified sepiolite catalyst**
EREN B., Erdogan G.
Reaction Kinetics, Mechanisms and Catalysis, vol.107, no.2, pp.333-344, 2012 (SCI-Expanded)
- XXV. **The synthesis and acid-catalyzed hydrolysis of N-(4-substitutedphenyl)-O- benzenedisulfonimides**
Bekdemir Y., EREN B., Kütük H.
Phosphorus, Sulfur and Silicon and the Related Elements, vol.187, no.6, pp.689-696, 2012 (SCI-Expanded)
- XXVI. **Quantum-chemical, IR, NMR, and X-ray diffraction studies on 2-(4-chlorophenyl)-1-methyl- 1H-benzo[d]imidazole**
Özdemir N., EREN B., Dinçer M., Bekdemir Y.
International Journal of Quantum Chemistry, vol.111, no.12, pp.3112-3124, 2011 (SCI-Expanded)
- XXVII. **Performance of magnesium oxide-coated bentonite in removal process of copper ions from aqueous solution**
EREN E., Tabak A., EREN B.
Desalination, vol.257, no.1-3, pp.163-169, 2010 (SCI-Expanded)
- XXVIII. **Equilibrium and kinetic studies on the removal of basic dye using raw and thermal-activated fatsa bentonite**
EREN E., ÇAĞLAR B., EREN B., Tabak A.
Fresenius Environmental Bulletin, vol.19, no.5, pp.773-782, 2010 (SCI-Expanded)
- XXIX. **Adsorption of basic dye from aqueous solutions by modified sepiolite: Equilibrium, kinetics and thermodynamics study**
EREN E., Cubuk O., Ciftci H., EREN B., ÇAĞLAR B.
Desalination, vol.252, no.1-3, pp.88-96, 2010 (SCI-Expanded)
- XXX. **Experimental and ab initio computational studies on 4-(1H-benzo[d]imidazol- 2-yl)-N,N-dimethylaniline**
Özdemir N., EREN B., Dincer M., Bekdemir Y.
Molecular Physics, vol.108, no.1, pp.13-24, 2010 (SCI-Expanded)

XXXI. Removal of copper ions by modified sepiolite samples

EREN E., EREN B.

Desalination and Water Treatment, vol.20, no.1-3, pp.114-122, 2010 (SCI-Expanded)

Articles Published in Other Journals

- I. **The Role of Sodium Lauryl Sulfate on the Film Properties of Styrene-Butyl Acrylate-Acrylic Acid Copolymer Latex**
EREN B., SOLMAZ Y.
Sakarya Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.24, no.5, pp.1074-1080, 2020 (Peer-Reviewed Journal)
- II. **The role of polyvinylpyrrolidone as a pore former on microstructure and performance of polysulfone membranes**
EREN B., GÜNEY M.
Bilecik Şeyh Edebali Üniversitesi Fen Bilimleri Dergisi, vol.6, pp.168-176, 2019 (Peer-Reviewed Journal)
- III. **Benzimidazol halkasının antimikrobiyal aktivitesineetki eden yapısal faktörlerin disk difüzyon vemikrodilüsyon metodu ile ayrıntılı incelenmesi**
ÖZDEMİR KOÇAK F., EREN B.
Balıkesir Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.21, no.1, pp.94-105, 2019 (Peer-Reviewed Journal)
- IV. **Organik Sentezlerde ve Biyolojik Sistemlerde Mikrodalga Etki**
EREN B., Solmaz Y.
Bilecik Şeyh Edebali Üniversitesi Fen Bilimleri Dergisi, vol.5, no.1, pp.31-40, 2018 (Peer-Reviewed Journal)
- V. **PBIOH SU SEVER KATKISI KULLANILARAK YÜKSEK PERFORMANS VE KİRLENME DİRENÇLİ POLİSÜLFON MEMBRANLARIN HAZIRLANMASI VE KARAKTERİZASYONU**
SARIHAN A., EREN E., EREN B., ERDOĞAN Y.
Dumlupınar Üniversitesi Fen Bilimleri Enstitüsü Dergisi, 2017 (Peer-Reviewed Journal)
- VI. **4-Methyl-N-(4-methylphenylsulfonyl)-N-phenylbenzenesulfonamide**
EREN B., DEMİR S., DAL H., Hökelek T.
Acta Crystallographica Section E: Structure Reports Online, vol.70, no.3, 2014 (Scopus)
- VII. **Goal setting in education**
MERSİN S., EREN B., ÖKSÜZ E.
THE JOURNAL OF INTERNATIONAL SOCIAL RESEARCH, vol.7, no.29, pp.640-644, 2014 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **PREPARATION AND CHARACTERIZATION OF UV -CURABLE POLYURETHANE ACRYLATE RESINS WITH ACTIVE TERMINAL GROUP**
DEMİR KARAÇOBAN E., ERDOĞAN B., EREN B.
Mediterranean International Conference on Research in Applied Sciences, Antalya, Turkey, 22 April 2022, pp.242-243
- II. **Preparation and Characterization of Methyl Methacrylate-Butyl Acrylate-Acrylic Acid Latex Particles Containing Hydrophilic Hydroxyl Monomer**
EREN B., Solmaz Y., Çınar H.
5th INTERNATIONAL TURKIC WORLD CONFERENCE ON CHEMICAL SCIENCES AND TECHNOLOGIES(ITWCCST 2019), Sakarya, Turkey, 25 - 29 October 2019, pp.85
- III. **Effect of 2-HEMA Functional Monomer on the Properties of Styrene-Butyl Acrylate-Acrylic Acid Latexes**
EREN B., Solmaz Y., Çınar H.
5th INTERNATIONAL TURKIC WORLD CONFERENCE ON CHEMICAL SCIENCES AND TECHNOLOGIES(ITWCCST 2019), Sakarya, Turkey, 25 - 29 October 2019, pp.84

- IV. **Stiren-bütıl akrilat-akrilik asit latekslerinin fizikokimyasal özellikleri üzerine divinilbenzen etkisinin incelenmesi**
EREN B., Solmaz Y.
Polimer2018- VII. Polimer Bilim Ve Teknoloji Kongresi, Eskişehir, Turkey, 9 - 12 September 2018
- V. **Yarı kesikli proses kullanılarak stiren-bütıl akrilat-akrilik asit latekslerinin hazırlanmasında optimum şartların belirlenmesi**
Solmaz Y., EREN B.
Polimer2018- VII. Polimer Bilim Ve Teknoloji Kongresi, Eskişehir, Turkey, 9 - 12 September 2018
- VI. **Positron analysis of right- and left-handed alanine single crystals**
Van Horn J., EREN B., Wu F., EREN E., Jean Y.
12th International Workshop on Positron and Positronium Chemistry, Lublin, Poland, 28 August - 01 September 2017
- VII. **Positron interactions with left- and right-handed alanine crystals**
EREN B., EREN E., Wu F., Jean Y., Van Horn J.
Midwest Regional American Chemical Society Meeting, Manhattan, KS, United States Of America, 26 - 28 October 2016
- VIII. **Positron annihilation lifetime study of PVP-added PVDF membranes: relationships between microstructure and permeability.**
EREN E., GÜNEY M., EREN B., Jean Y., Van Horn J.
Midwest Regional American Chemical Society Meeting, Manhattan, KS, United States Of America, 26 - 28 October 2016
- IX. **Synthesis and potent antimicrobial activities of 1,3-Dialkyl-2-arylbenzimidazolium salts**
EREN B., Yılmaz Ö., ÇETİN G., DARCAN C.
4th International Bahçeşehir University (BAU) Drug Design Congress, 13 - 15 October 2016
- X. **Synthesis and Antimicrobial activity screening of polymers having benzimidazole moiety on some clinical species**
EREN B., ÖZDEMİR KOÇAK F.
4th International Bahçeşehir University (BAU) Drug Design Congress, 13 - 15 October 2016
- XI. **Polisülfon Ultrafiltrasyon Membranların Performans ve Kirlenme Dirençlerinin ABPBI Katkısı Kullanılarak İyileştirilmesi**
EREN B., SARIHAN A.
2.Ulusal Çevre Kongresi, Turkey, 22 - 25 October 2015
- XII. **PVDF Membranların Filtrasyon Özellikleri ve Performansları Üzerine Su Sever Birnesit Partiküllerin Etkisi**
EREN E., GÜMÜŞ H., EREN B., SARIHAN A., GÜNEY M.
2.Ulusal Çevre Kongresi, Turkey, 22 - 25 October 2015
- XIII. **PBIOH Su Sever Katkısı Kullanılarak Yüksek Performanslı ve Kirlenme Dirençli Polisülfon Membranların Hazırlanması**
SARIHAN A., EREN B., EREN E.
2.Ulusal Çevre Kongresi, Turkey, 22 - 25 October 2015
- XIV. **Benzimidazol halkası içeren polimerlerin sentezi ve karakterizasyonu**
Eren B., Erdoğan G.
I. Ulusal Organik Kimya Kongresi, Sakarya, Turkey, 25 - 29 October 2013, pp.85-86
- XV. **N Fenil N N dimetilsülfonimit Bileşiğinin Sentezi ve Spektroskopik Özelliklerinin Deneysel ve Teorik Olarak İncelenmesi**
Eren B., Ünal A., Bekdemir Y.
I. Ulusal Organik Kimya Kongresi, Sakarya, Turkey, 25 - 29 October 2013, pp.87-88
- XVI. **Removal of phosphate ions from wastewaters using benzimidazole based heterocyclic polymer**
Eren B., Aydın R., Erdoğan G.
The International Conference on Environmental Science and Technology, Nevşehir, Turkey, 18 - 21 June 2013, pp.157-158

- XVII. **Bazı Benzimidazol Türevlerinin Sentezi Antimikrobiyal Etkileri ve Yapı Reaktivite İlişkileri**
EREN B., ÖZDEMİR KOÇAK F.
1. İlaç Kimyası, Üretimi ve Standardizasyonu Kongresi, Antalya, Turkey, 29 - 31 March 2013
- XVIII. **Catalysis and reaction mechanisms of N formylation of amines by Fe III exchanged sepiolite**
Eren B.
III. Fiziksel Kimya Günleri, Balıkesir, Turkey, 12 - 15 July 2012, pp.227
- XIX. **Experimental and Spectroscopic Studies on 2 Thiophen 2 YL 1H Benzimidazole**
EREN B., ÜNAL A., SARIHAN A.
7th Eurasian Meeting on Heterocyclic Chemistry, 17 - 21 June 2012
- XX. **Microwave assisted synthesis of 1 Methyl 2 arylbenzimidazoles A Simple Mild and Efficient Method**
Eren B., Erdoğan G., Aydın R.
7th Eurasian Meeting on Heterocyclic Chemistry, İstanbul, Turkey, 17 - 21 June 2012, pp.49
- XXI. **Formic acid decomposition on iron oxide coated bentonite**
Eren E., Çağlar B., Eren B., Tabak A.
NUCLEAR&RENEWABLE ENERGY RESOURCES CONFERENCE with INTERNATIONAL PARTICIPATION, Ankara, Turkey, 28 - 29 September 2009, pp.464-468
- XXII. **Disülfonamitlerin sentezi ve asit katalizli hidroliz reaksiyon mekanizması**
Eren B., Bekdemir Y.
22. Ulusal Kimya Kongresi, Gazimagusa, Cyprus (Kktc), 6 - 10 October 2008, pp.32
- XXIII. **Bazı Sübstitüe Benzimidazol Türevlerinin Mikrodalga Yardımıyla Sentezi**
Eren B., Bekdemir Y.
22. Ulusal Kimya Kongresi, Gazimagusa, Cyprus (Kktc), 6 - 10 October 2008, pp.31

Supported Projects

EREN B., Project Supported by Higher Education Institutions, 1,3 Dialkil-2-Arilbenzimidazolyum Tuzlarının Sentezi, Yapılarının Aydınlatılması, Biyolojik Aktivitelerinin ve Bazı Reaksiyonlardaki Katalitik Özelliklerinin İncelenmesi, 2013 - 2015