

CURRICULUM VITAE AND PUBLICATIONS LIST

CURRICULUM VITAE

Name and Surname: Ayşe Zehra AROĞUZ
Academic Title: Professor Dr.
Work Address:
Email: aaroguz@biruni.edu.tr
Foreign Languages Known (Score and Year): English, C1 Advanced, 1986
Certificates Received: pedagoji sertifikası
Area of Expertise: Natural Sciences

Degree	Department/Program	University	Year
Associate Degree	BİLGİSAYAR TEKNOLOJİLERİ BÖLÜMÜ	İstanbul University	1989
Bachelor's Degree	BATI DİLLERİ VE EDEBİYATLARI BÖLÜMÜ	İstanbul University	2009
Doctorate	FİZİKSEL KİMYA (DR)	İstanbul University	1984
Master's Degree	KİMYA MÜHENDİSLİĞİ (YL) (TEZLİ)	Boğaziçi University	1981
Bachelor's Degree	KİMYA MÜHENDİSLİĞİ PR.	Istanbul Technical University	1977

Master's Thesis Title (abstract attached) and Thesis Supervisor(s):

Tez Adı: Pyrolysis of solid waste

Doctoral Thesis/Proficiency Study/Medical Specialization Thesis Title (abstract attached) and Supervisor(s):

Bazı Pestisitlerin Özel olarak Hazırlanmış Cam Tozları Üzerindeki Adsorpsiyon Isı ve adsorbent yüzeyin hesaplanması

Position Title	Workplace	Year
Professor Dr.	İstanbul University	1997-2022
Associate Professor	İstanbul University	1991-1997
Assistant Professor	İstanbul University	1990-1991
Research Assistant	İstanbul University	1982-1990

Supervised Master's Theses:

1. Kombucha bakteriyel selülozundan aerojelin üretimi, karakterizasyonu ve bazı özelliklerinin incelenmesi (2019)
2. Preparation of the mesoporous scaffolds for drug delivery and release systems (2019)
3. Preparation and characterization of novel dental composite containing of Boron nitride (2018)
4. Sıcaklık ve pH duyarlı biyopolimerik malzemelerin hazırlanması ve ilaç taşıyıcı sistem olarak incelenmesi (2018)
5. Alüminyum alaşımlarının korozyona karşı soljel yöntemi ile kaplanması ve NaCl ortamında incelenmesi (2017)
6. İkili boyar madde karışımının manyetik nanopartikül üzerinde adsorpsiyon kinetiği ve termodinamisinin incelenmesi (2016)
7. Litografi teknigi ile polimer tutucuların hazırlanması ve biyoteknolojik uygulamaları (2016)
8. Kontrollü ilaç salım sistemleri için polimer kompozit malzemelerin geliştirilmesi, karakterizasyonu ve uygulaması (2015)
9. Polimer ilaç taşıyıcı sistemlerin hazırlanması, karakterizasyonu ve ilaç salım kinetiğinin incelenmesi (2015)

10. Polimer tutucuların hazırlanması, karakterizasyonu ve doku mühendisliğindeki uygulamaları (2013)
 11. Nanoyapılı iletken polimerlerin hazırlanması ve optik özelliklerinin incelenmesi (2012)
 12. Manyetik alana duyarlı jelatin - hidrojellerin hazırlanması ve ilaç salımı profilinin incelenmesi (2011)
 13. Modifiye edilmiş silika kaplı manyetik nano partiküllerin hazırlanması ve adsorbent olarak kullanılması (2011)
 14. klı Boyar Maddelerin Özel Hazırlanmış Adsorbanlar Üzerinde Adsorpsiyon Kinetiğinin Ve Termodinamiğinin İncelenmesi (2011)
 15. Polimer kaplı manyetik nanopartiküller üzerinde ilaç salımının incelenmesi (2010)
 16. Kitosan ve ikili polimer karışımlarının hazırlanması ve özelliklerinin incelenmesi (2008)
 17. Poli(fenilen oksit)'in fraksiyonlandırılması ve molekül ağırlığı dağılımının incelenmesi (2007)
 18. Poli(metil metakrilat)/bentonit nanokompozitin kütle polimerizasyonu yöntemiyle sentezlenmesi ve karakterizasyonu (2006)
 19. Denizde petrol kirliliğinin adsorpsiyon yöntemi ile giderilmesi (1997)
 20. Fenol ve türevlerinin çeşitli adsorbanlar üzerinde adsorbsiyon kinetiğinin incelenmesi (1997)
 21. Pertisitlerin değişik koşullarda hazırlanmış poliakrilamid üzerindeki adsorbsiyon kinetiğinin incelenmesi (1995)
 22. Poliakrilamidin çeşitli adsorbanlar üzerinde adsorpsiyon kinetiğinin incelenmesi (1994)
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Supervised Doctoral Theses/Proficiency Studies in Arts:

1. Biyobozunur polimerden ilaç taşıyıcı sistemlerin hazırlanması, karakterizasyonu ve biyoteknolojik uygulamaları (2020)
 2. Polimer karışımı kullanılarak nanokompozit jellerin hazırlanması, karakterizasyonu ve biomedikal uygulamaları (2015)
 3. Bazı polimer jellerin hazırlanması ve ilaç aktif madde salımında kullanılması (2012)
 4. Kitosan/kil kompozitin hazırlanması ve sulu çözeltilerden pestisit adsorbsiyonu için kullanılması (2011)
 5. Farklı boyar maddelerin özel hazırlanmış adsorbanlar üzerinde adsorbsiyon kinetiğinin ve termodinamiğinin incelenmesi (2011)
 6. Türk Boğazları'nda risk analizi ile güvenli seyir modeli (1999)
 7. Petrol ve kimyasal madde tanker atık alım tesisleri kapasite ve yer seçimi model araştırması (1997)
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Roles in Projects:

- "Nadir Toprak Elementi Katkılı Gallate Tabanlı Oksit Yarıiletkenlerin Polimer Alttaş Üzerine İnce Film Halde Büyüttülmesi ve Karakterizasyonu (2017 - 2020)
- "Multiscale structuring of polymer nanocomposites and functional materials based on different precursors" (iii45022) (2011 - 2019)
- Adsorption of methylene blue from aqueous solution on pyrolyzed petrified sediment (2016 - 2017)
- Halk Elinde Yetişirilen İmroz ve Sakız Koyun Irklarında Diacylglycerol Acyltransferase 1 DGAT1 Gen Polimorfizminin PCR a Dayalı DNA Tipleme Yöntemi ile Belirlenmesi ve Bazı Süt Kaliye Parametrelerine Etkisinin İncelenmesi (2015 - 2016)
- Turuncgil Ekstraktlarının Çiğ Et Marinasyonu ve Bazı Önemli Gıda Kaynaklı Patojenlerin Üremesi Üzerine Etkilerinin İncelenmesi (2014 - 2015)
- POLİMER KAPLI MANYETİK NANOPARTİKÜLLER ÜZERİNDE İLAÇ SALINIMININ İNCELENMESİ (2014 - 2015)
- İç Anadolu Bölgesindeki demografik sosyal değişkenlerinin hayvansal kökenli gıdaların evsel şartlarda muhafasası sırasında bazı önemli gıda patojenlerinin üzerine etkisinin incelenmesi ve ilişki analizlerinin belirlenmesi (2014 - 2015)
- Adsorption characteristics of the methyl blue on modified almond shell as bioadsorbent (2011 - 2012)
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Administrative Duties:

- Head of Main Science/Science Department - İstanbul University (2006 - 2009)
- Deputy Institute Director - İstanbul University (1999 - 2001)
- Deputy Head of Department - İstanbul University (1997 - 1998)
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Undergraduate and graduate level courses taught in the last two years (If offered, summer courses will also be added to the table):

Academic Year	Semester	Course Name	Weekly Hours		Number of Students
			Theoretical	Practical	
2024	Fall	Temel kimya			

PUBLICATIONS

A. Articles published in international peer-reviewed journals:

- A1. "Fabrication of a Patterned Scaffold Using Soft Lithography Technique to be Used in Cell Growth Applications", MOLECULAR BIOTECHNOLOGY, 2023.
- A2. "Synthesis, characterization and kinetics of sustained pantoprazole release studies of interpenetrated poly(acrylic acid)-chitosan-bentonite hydrogels for drug delivery systems", Reaction Kinetics, Mechanisms and Catalysis, 2022.
- A3. "FABRICATION OF TEMPERATURE AND pH SENSITIVE BIOPOLYMER/CLAY BIOCOMPOSITE AS DRUG CARRIER FOR RANITIDINE – HCl", STED JOURNAL, Journal of Social and Technological Development, 2021.
- A4. "Kinetic studies on adsorption behavior of methyl orange using modified halloysite, as an eco-friendly adsorbent", SN APPLIED SCIENCES, 2020.
- A5. "The effect of TiO₂ particles on thermal properties of polycarbonate-based polyurethane nanocomposite films", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 2019.
- A6. "Progression towards a challenging, but worthwhile career", PURE AND APPLIED CHEMISTRY, 2019.
- A7. "The synthesis of silica-coated magnetic nanoparticles and using as adsorbent", Polymer Bulletin, 2016.
- A8. "Magnetic field responsive methylcellulose polycaprolactone nanocomposite gels for targeted and controlled release of 5 fluorouracil", International Journal of Polymeric Materials and Polymeric Biomaterials, 2016.
- A9. "Adsorption on kinetics of diazo dye from aqueous solutions by using natural origin low cost biosorbents", Desalination and Water Treatment, 2015.
- A10. "The preparation and thermal properties of chitosan/bentonite composite beads Dobijanje i toplotna svojstva hitozan/bentonit kompozitnih granula", Hemijnska industrija, 2014.
- A11. "Chitosan alginate and alginate gelatin hydrogels Preparation characterization and applications in tissue engineering", ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY, 2012.
- A12. "Adsorption characteristics of the hazardous dye Brilliant Green on Saklikent mud", CHEMICAL ENGINEERING JOURNAL, 2011.
- A13. "Crystallization behavior of poly(ϵ -caprolactone)/layered double hydroxide nanocomposites", Journal of Applied Polymer Science, 2010.
- A14. "Characterization of Poly vinyl chloride Bentonite Nanocomposite Prepared via Melt Blending Method Nanocomposites via Melt Blending", ACS Symposium Series, 2010.
- A15. "Preparation and Characterization of Hydrogels of Several Polysaccharides for Biomaterials Applications Hydrogels for Biomaterials Applications", ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY, 2010.
- A16. "The Effect of Filler Particles on the Properties of Elastomeric Materials Based on Different Network Precursors", ACS Symposium Series, 2010.
- A17. "Morphology and viscoelastic properties of sealing materials based on EPDM rubber", JOURNAL OF MICROSCOPY, 2008.
- A18. "Adsorption of methylene blue from aqueous solution on pyrolyzed petrified sediment", BIORESOURCE TECHNOLOGY, 2008.
- A19. "The assessment of miscibility and morphology of poly epsilon caprolactone and poly para chlorostyrene blends", EUROPEAN POLYMER JOURNAL, 2007.
- A20. "Viscometric study on the miscibility of polystyrene brominated polystyrene blends", EUROPEAN POLYMER JOURNAL, 2007.
- A21. "Kinetics and thermodynamics of adsorption of azinphosmethyl from aqueous solution onto pyrolyzed at 600 degrees C ocean peat moss Sphagnum sp", JOURNAL OF HAZARDOUS MATERIALS, 2006.
- A22. "Miscibility studies on blends of poly phenylene oxide brominated polystyrene by viscometry", EUROPEAN POLYMER JOURNAL, 2006.
- A23. "Thermal characterization and morphological studies of binary and ternary polymeric blends of polycarbonate brominated polystyrene and poly 2 6 dimethyl 1 4 phenylene oxide", ACS SYMPOSIUM SERIES, 2005.
- A24. "Adsorption kinetics of azinphosmethyl from aqueous solution onto pyrolyzed Horseshoe sea crab shell from the Atlantic Ocean", BIORESOURCE TECHNOLOGY, 2005.
- A25. "Phase behavior of blends of poly 2 6 dimethyl 1 4 phenylene oxide polystyrene poly o chlorostyrene co p chlorostyrene copolymer", POLYMER, 2004.

- A26. "Thermal mechanical and morphological characterization studies of poly 2 6 dimethyl 1 4 phenylene oxide blends with polystyrene and brominated polystyrene", JOURNAL OF APPLIED POLYMER SCIENCE, 2000.
- A27. "Removal of Pb II Cd II Cu II and Zn II from Aqueous Solutions by Adsorption on Bentonite", Journal of Colloid and Interface Science, 1997.
- A28. "Fluorescent probes in breast tumor", NATO ADVANCED SCIENCE INSTITUTES SERIES, SERIES A, LIFE SCIENCES, 1995.
- A29. "THE FREE RADICAL POLYMERIZATION OF ACRYLAMIDE INITIATED WITH CERIC SULFATE IN THE PRESENCE OF AMINO ACIDS", ANGEWANDTE MAKROMOLEKULARE CHEMIE, 1993.
- A30. "A SPECTROPHOTOMETRIC METHOD FOR DETERMINATION OF CMC FOR ALKYL PHENOL POLYGLYCOL ETHER AND LAURYL ALCOHOL POLYGLYCOL ETHER", REVUE ROUMAINE DE CHIMIE, 1993.

B. Papers presented at international scientific meetings and published in proceedings:

- B1. "Investigating the Effects of Smectite Clay on Cell Growth in Chitosan/PEG4000 Nanocomposites", 8th International FAPS Polymer Congress 2023, 2024.
- B2. "Structuring and Characterization of Novel Eco-Friendly PolycarbonateBased Polyurethane Nanocomposites", 8th International FAPS Polymer Congress 2023, 2023.
- B3. "WASTEWATER TREATMENT USING HALLOYSITE/BIOPOLYMER NANOCOMPOSITE", International Symposium Water Resources Management: New Perspectives and Innovative Practices, 2021.
- B4. "Laçin, D., Aroğuz, A.Z., Teofilovic, V., Pavlievic, J., Govedarica O., Jankovic, M., Budinski Simendic, J., 2019. The Effects of Modified Clay on Controlled Drug Release Systems", X International conferenceon Social and Technological Development, 2019 BOSNA HERSEK, 2019.
- B5. "Topcuoğlu, O., Laçin, D. ve Aroğuz, A.Z., 2019. HALLOYSİTE-KİTOSAN KULLANILARAK SULU ÇÖZELTİLERİNDEN KRESÖLKIRMİZİSİNİN GİDERİLMESİ: ADSORPSİYON KİNETİĞİ", 2 INTERNATIONAL CONGRESS ON ENGINEERING AND TECHNOLOGY MANAGEMENT, 2019.
- B6. "Laçin, D.,Topcuoğlu, O. ve Aroğuz, A.Z., 2019. DOĞAL MALZEMELEM KULLANILARAK SULU ÇÖZELTİLERİNDEN KREZÖLKIRMİZİSİNİN GİDERİLMESİNE SICAKLIĞIN ETKİSİ: TERMODİNAMİK ÇALIŞMALAR", 2 INTERNATIONAL CONGRESS ON ENGINEERING AND TECHNOLOGY MANAGEMENT, 2019.
- B7. "THE PREPARATION OF NANOCOMPOSITES BASED ON MAGNETITEAND CHITOSAN FOR WASTE WATER PURIFICATION", POLITEHNIKA - 2015, 2015.
- B8. "The Preparation and Characterization of Polymeric Drug Carrier Systems and Investigation of Pantoprazole Release Kinetic", IUPAC-2015 45th World Chemistry Congress, 2015.
- B9. "The Synthesis and Characterization of Magnetoresponsive Methylcellulose Polycaprolactone Hydrogels for Controlled Release of 5 Fluorouracil", IUPAC-2015 45th World Chemistry Congress, 2015.
- B10. "The Preparation and Characterization of Polymeric Hydrogel Beads based on Chitosan g polyacrylic acid clay sodium alginate for Drug Release Applications IUPAC 2015 45th World Chemistry Congress Busan GUNEV KORE 9 14 Ağustos 2015 pp 166 166 Link", IUPAC-2015 45th World Chemistry Congress, 2015.
- B11. "The Preparation Characterization and Swelling of Crosslinked Hydrogel as Sodium alginate gpoly Sodium acrylate Polyvinylpyrrolidone for Controlled Growth of Cells", IUPAC-2015 45 th World Chemistry Congress, 2015.
- B12. "The Use Of Iron Oxide Nanoparticles For Preparation Of Beads For Dye Adsorption From Waste Water", Wastenet 2015, 2015.

C. National/international books written or chapters in books:

C1. National/international books written:

- C1.1. "Fizikokimya", Der, 2013.
- C1.2. "Genel kimya Laboratuvar Deneyleri Kitabı", Alfa, 2012.
- C1.3. "Fen Ve Mühendislik Bölümleri İçin KİMYA", Beta, 2002.
- C1.4. "İleri Fizikokimya", Üniversite, 1991.

D. Articles published in national peer-reviewed journals:

- D1. "REMOVAL of DYE POLLUTION by MODIFIED HALLOYSITE as ECO-FRIENDLY ADSORBENT", The International Journal of Materials and Engineering Technology, 2020.
- D2. "polymeric scaffold", STED Journal, 2019.
- D3. "Preparation of Patterned PolymericScaffolds by Soft Lithographic Method and their Characterization for Tissue Engineering", Global Journal odf Addiction and Global Journal of Addiction and Rehabilitation Medicine, 2019.

D4. "Investigation of the Presence of Different Animal Species within Processed Meat and Meat Products using PCR Procedures and Development of Risk Models based on Consumer Health", Veterinary Science and Veterinary Medicine, 2017.

E. Papers presented at national scientific meetings and published in proceedings:

E1. "SOFT LITHOGRAPHY TEKNIĞİ İLE HÜCRE ÇOĞALMA ÇALIŞMALARI İÇİN POLIMERİK TUTUCULARIN HAZIRLANMASI", 35. Ulusal Kimya Kongresi, 2024.