

Prof. ALİ BOZTUĞ

Personal Information

Email: aboztug@cumhuriyet.edu.tr

Web: <https://avesis.cumhuriyet.edu.tr/aboztug>

Education Information

Doctorate, Sivas Cumhuriyet University, Fen Fakültesi, Kimya Bölümü, Turkey 1995 - 1999

Postgraduate, Sivas Cumhuriyet University, Fen Fakültesi, Kimya Bölümü, Turkey 1993 - 1995

Undergraduate, Sivas Cumhuriyet University, Fen-Edebiyat Fakültesi, Kimya Pr., Turkey 1987 - 1992

Dissertations

Doctorate, Bazı maleik anhidrid terpolimerlerinin ester türevlerinde bileşimin ısal ve termomekanik özelliklere etkisi, Sivas Cumhuriyet Üniversitesi, Fen Fakültesi, Kimya Bölümü, 1999

Postgraduate, Bazı maleik anhidrit terpolimerlerinin sentezi ve karakterizasyonu, Sivas Cumhuriyet Üniversitesi, Fen Fakültesi, Kimya Bölümü, 1995

Research Areas

Physical Chemistry, Functional Polymers, Characterization of Polymers, Polymeric Materials

Academic Titles / Tasks

Professor, Sivas Cumhuriyet University, Fen Fakültesi, Kimya Bölümü, 2012 - Continues

Associate Professor, Sivas Cumhuriyet University, Fen Fakültesi, Kimya Bölümü, 2006 - 2012

Assistant Professor, Sivas Cumhuriyet University, Fen Fakültesi, Kimya Bölümü, 2000 - 2006

Research Assistant, Sivas Cumhuriyet University, Fen Fakültesi, Kimya Bölümü, 1993 - 1999

Academic and Administrative Experience

Sivas Cumhuriyet Üniversitesi, Fen Fakültesi, Kimya Bölümü, 2018 - Continues

Sivas Cumhuriyet Üniversitesi, Fen Fakültesi, Kimya Bölümü, 2015 - 2018

Tunceli Üniversitesi, Mühendislik Fakültesi, 2012 - 2015

Tunceli Üniversitesi, Tunceli Meslek Yüksekokulu, 2009 - 2012

Sivas Cumhuriyet Üniversitesi, Fen Bilimleri Enstitüsü, 2007 - 2008

Courses

Genel Kimya II, Undergraduate, 2018 - 2019

Fonksiyonel Polimerler, Postgraduate, 2019 - 2020

Genel Kimya I, Undergraduate, 2019 - 2020
Polimer Karışımlarının Hazırlanması, Postgraduate, 2019 - 2020
Fonksiyonel Polimerler, Postgraduate, 2017 - 2018
Uzmanlık Alan Dersi, Postgraduate, 2018 - 2019
Genel Kimya Lab., Undergraduate, 2017 - 2018
Biyokimya Lab, Undergraduate, 2017 - 2018
Tez Çalışması, Postgraduate, 2018 - 2019
Genel Kimya II, Undergraduate, 2017 - 2018
Genel Kimya, Undergraduate, 2017 - 2018
Polimer Karışımının Hazırlanması, Postgraduate, 2017 - 2018
Bitirme Ödevi/Tezi, Undergraduate, 2018 - 2019
Genel Kimya Lab.I, Undergraduate, 2017 - 2018
Genel Kimya I, Undergraduate, 2017 - 2018
Genel Kimya Lab.I, Undergraduate, 2016 - 2017
Seminer Dersi, Postgraduate, 2015 - 2016
Biyokimya Lab, Undergraduate, 2015 - 2016
Fizikokimya Lab, Undergraduate, 2008 - 2009
Kımyasal Hesaplamalar, Undergraduate, 2008 - 2009
Bilim Tarihi, Undergraduate, 2008 - 2009
Genel Kimya II, Undergraduate, 2008 - 2009
Bilim Tarihi, Undergraduate, 2008 - 2009
Genel Kimya Laboratuvarı II, Undergraduate, 2007 - 2008
Kımyasal Hesaplamalar, Undergraduate, 2008 - 2009
Genel Kimya - I, Undergraduate, 2008 - 2009
Temel Bilgisayar Bilimleri, Undergraduate, 2006 - 2007
Genel Kimya - I, Undergraduate, 2007 - 2008
Temel Bilgisayar Bilimleri, Undergraduate, 2006 - 2007
Genel Kimya Laboratuvarı I, Undergraduate, 2006 - 2007
Temel Bilgisayar Teknolojileri Kullanımı, Undergraduate, 2006 - 2007
Polimer Kimyası-I, Undergraduate, 2006 - 2007
Temel Bilgisayar Teknolojileri Kullanımı, Undergraduate, 2006 - 2007
Genel Kimya II, Undergraduate, 2005 - 2006
Genel Kimya I, Undergraduate, 2005 - 2006
Genel Kimya, Undergraduate, 2005 - 2006
Genel Kimya Laboratuvarı I, Undergraduate, 2004 - 2005
Genel Kimya Laboratuvarı, Undergraduate, 2003 - 2004
Genel Kimya I, Undergraduate, 2003 - 2004

Advising Theses

BOZTUĞ A., Fumaronitril içeren kuaterpolimerlerin sentezi ve karakterizasyonu, Doctorate, E.YILMAZ(Student), 2013
BOZTUĞ A., Birbirleriyle karışmayan polimerlere reaktif monomer içeren kopolimerin etkilerinin viskozimetrik ve termomekanik incelenmesi, Postgraduate, E.YILMAZ(Student), 2007

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Synthesis, characterization and application of cross-linked functional terpolymer through epoxy group as sorbent for extraction of cadmium from waters and foods: Multivariate optimization**
Yılmaz E., BOZTUĞ A., Ul Haq H., Boczkaj G., ALTUNAY N.

- Food Chemistry, vol.435, 2024 (SCI-Expanded)
- II. **Applied and computational investigation of plasticizing effects of dibutyl maleate on polymethyl methacrylate acrylic resin material**
TUĞUT F., BOLAYIR G., GÜLNAHAR E., BATIR G. G., BOZTUĞ A., Maslov M. M.
Journal of Molecular Structure, vol.1296, 2024 (SCI-Expanded)
- III. **Effect of Hemp Fiber Addition on Mechanical Properties of Acrylic Resin: Coupled Experimental and Theoretical Study**
BOLAYIR G., SOYGUN K., KILIÇ AVŞAR M., BOZTUĞ A., KAYA S., Katin K. P.
FIBERS AND POLYMERS, vol.23, no.8, pp.2271-2278, 2022 (SCI-Expanded)
- IV. **Synthesis and modification of amine-terminated maleic anhydride-butyl acrylate copolymer and investigation of adsorption properties for cadmium (II) ions (Cd²⁺)**
Yilmaz E., Erenler F. M., BOZTUĞ A.
JOURNAL OF MOLECULAR STRUCTURE, vol.1222, 2020 (SCI-Expanded)
- V. **Investigation of flexural strength and cytotoxicity of acrylic resin copolymers by using different polymerization methods**
ŞAHİN O., ÖZDEMİR A. K., Turgut M., Boztug A., SÜMER Z.
JOURNAL OF ADVANCED PROSTHODONTICS, vol.7, no.2, pp.98-107, 2015 (SCI-Expanded)
- VI. **Amine-modified maleic anhydride containing terpolymers for the adsorption of uranyl ion in aqueous solutions**
ŞİMŞEK S., YILMAZ E., Boztug A.
JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY, vol.298, no.2, pp.923-930, 2013 (SCI-Expanded)
- VII. **Effects of the Different Methacrylate Monomers on Bond Strength Between Soft Liner and Acrylic Resin**
BOLAYIR G., SOYGUN K., ŞİMŞEK S., YILMAZ E., DOĞAN A., Boztug A., DOĞAN O. M.
ASIAN JOURNAL OF CHEMISTRY, vol.25, no.14, pp.8079-8081, 2013 (SCI-Expanded)
- VIII. **Mechanical and thermal properties of polyamide versus reinforced PMMA denture base materials**
SOYGUN K., BOLAYIR G., Boztug A.
JOURNAL OF ADVANCED PROSTHODONTICS, vol.5, no.2, pp.153-160, 2013 (SCI-Expanded)
- IX. **Effects of different high alkyl methacrylate monomers on tensile bond strength between resilient liner and acrylic resin**
Bolayir G., Demir H., Dogan A., Boztug A., Dogan O. M., Soygun K.
MATERIALS RESEARCH INNOVATIONS, vol.13, no.4, pp.431-435, 2009 (SCI-Expanded)
- X. **Viscometric investigation of compatibilization of the poly(vinyl chloride)/poly(ethylene-co-vinyl acetate) blends by terpolymer of maleic anhydride-styrene-vinyl acetate**
İMREN KOÇ D., BOZTUĞ A., YILMAZ E., Zengin H.
JOURNAL OF MOLECULAR STRUCTURE, vol.891, pp.329-332, 2008 (SCI-Expanded)
- XI. **Chemical modification and thermal characterisation of poly(allylpropionate-alt-maleic anhydride) copolymer modified by hexamethylenediamine**
Zengin H., Boztug A., Yilmaz E.
MATERIALS RESEARCH INNOVATIONS, vol.12, no.2, pp.90-93, 2008 (SCI-Expanded)
- XII. **Investigation of effects of reactive copolymer containing maleic anhydride on thermomechanical properties of ternary blends of poly(methyl metacrylate) (PMMA)**
Zengin H., Boztug A., Bolayir G.
MATERIALS RESEARCH INNOVATIONS, vol.11, no.4, pp.193-196, 2007 (SCI-Expanded)
- XIII. **Modification and characterisation of terpolymer maleic anhydride-styrene-vinyl acetate by poly(ethylene adipate) copolymer**
Boztug A.
MATERIALS RESEARCH INNOVATIONS, vol.11, no.4, pp.169-172, 2007 (SCI-Expanded)
- XIV. **Effects of reactive terpolymer containing maleic anhydride on thermomechanical properties of poly(vinyl chloride) based multicomponent blends**
Boztug A., Yilmaz E.

- MATERIALS RESEARCH INNOVATIONS, vol.11, no.3, pp.158-160, 2007 (SCI-Expanded)
- XV. The effects of maleic anhydride terpolymer and its ester derivatives on tensile bond strength between the acrylic resin and resilient lining material
Dogan O. M., Bolayir G., Boztug A., Turgut M., Zengin H.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.104, no.2, pp.1338-1341, 2007 (SCI-Expanded)
- XVI. The modification and characterization of maleic anhydride-styrene-methyl metacrylate terpolymer by poly(ethylene adipate)
Boztug A., Basan S.
JOURNAL OF MOLECULAR STRUCTURE, vol.830, pp.126-130, 2007 (SCI-Expanded)
- XVII. The effect of Esthetic fibers on impact resistance of a conventional heat-cured denture base resin
Dogan O. M., Bolayir G., Keskin S., Dogan A., Bek B., Boztug A.
DENTAL MATERIALS JOURNAL, vol.26, no.2, pp.232-239, 2007 (SCI-Expanded)
- XVIII. Thermal characterization of n-alkyl maleate-styrene-allyl propionate terpolymers
Boztug A., Basan S.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.103, no.1, pp.600-604, 2007 (SCI-Expanded)
- XIX. Bond strength of a silicone soft lining material to poly(methyl methacrylate) resin treated with maleic anhydride and its terpolymers
Turgut M., Bolayir G., Dogan O. M., Keskin S., Dogan A., Boztug A.
JOURNAL OF ADHESION, vol.83, no.11, pp.927-938, 2007 (SCI-Expanded)
- XX. The effects of some methacrylate monomers used as liquid component on tensile and flexural strengths of a poly (methyl methacrylate) denture base resin
Do'an O. M., Bolayir G., Keskin S., Boztug A., Do'an A., Bek B.
MATERIALS RESEARCH INNOVATIONS, vol.10, no.4, pp.122-123, 2006 (SCI-Expanded)
- XXI. Synthesis and comparative study of thermal stabilities of the imidization of some maleic anhydride copolymers
Zengin H., Boztug A., Basan S.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.101, no.4, pp.2250-2254, 2006 (SCI-Expanded)
- XXII. Preparation of compatible blends of poly(methyl methacrylate) used in dentistry with a reactive terpolymer containing maleic anhydride and their thermomechanical characterization
Boztug A., Coskun A., Bolayir G., Zengin H., Ozdemir A.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.100, no.1, pp.363-367, 2006 (SCI-Expanded)
- XXIII. Modification and characterization of maleic anhydride-styrene-methyl metacrylate terpolymer using various alcohols
Boztug A., Basan S.
DESIGNED MONOMERS AND POLYMERS, vol.9, no.6, pp.617-626, 2006 (SCI-Expanded)
- XXIV. Investigation of miscibility of poly(vinyl chloride) with poly(ethylene-co-vinyl acetate) by viscosimetric method
Imren D., Boztug A., Basan S.
Materials Research Innovations, vol.10, no.2, pp.47-48, 2006 (SCI-Expanded)
- XXV. Poly(hepten-1-alt-maleic anhydride)-hexamethylenediamine conjugate: synthesis and characterization of the thermal behaviour
Zengin H., Boztug A., Basan S.
JOURNAL OF MATERIALS SCIENCE, vol.40, no.17, pp.4691-4693, 2005 (SCI-Expanded)
- XXVI. Determination of gelation temperature of poly(vinyl chloride) by thermomechanical and thermogravimetric parameters
Boztug A., Zengin H., Basan S.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.96, no.5, pp.1635-1640, 2005 (SCI-Expanded)
- XXVII. Characterization and synthesis of maleic anhydride-styrene-vinyl acetate terpolymer ester derivatives
Boztug A., Basan S.
JOURNAL OF MATERIALS SCIENCE, vol.39, no.22, pp.6843-6846, 2004 (SCI-Expanded)

- XXVIII. Preparation and thermomechanical characterization of poly(vinyl chloride) blends compatible with terpolymer-containing maleic anhydride
Boztug A.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.94, no.4, pp.1586-1589, 2004 (SCI-Expanded)
- XXIX. Thermomechanical and thermogravimetric analysis of blends of poly (vinyl chloride) (PVC) with maleic anhydride-allyl propionate copolymer
Boztug A., Zengin H., Basan S.
JOURNAL OF MOLECULAR STRUCTURE, vol.697, pp.61-64, 2004 (SCI-Expanded)
- XXX. Characterization and synthesis of some alternating terpolymers of maleic anhydride
Boztug A., Basan S., Ekberov O.
MATERIALS RESEARCH INNOVATIONS, vol.8, no.2, pp.89-92, 2004 (SCI-Expanded)
- XXXI. Syntheses and characterization of maleic anhydride-styrene-allyl propionate terpolymer ester derivatives
Boztug A., Basan S.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.89, no.2, pp.296-299, 2003 (SCI-Expanded)

Articles Published in Other Journals

- I. Preparation and Characterization of pH-Sensitive Hydrogels Based on Crosslinked Maleic Anhydride-Styrene-Methyl Methacrylate Terpolymer
İMREN KOÇ D., BOLSU S. E., DURMAZUÇAR H. H., BOZTUĞ A.
Cumhuriyet Science Journal, vol.39, pp.779-790, 2018 (Peer-Reviewed Journal)

Books & Book Chapters

- I. Organik Kimyada Biyotransformasyonlar
YENİDÜNYA A. F., BOZTUĞ A., ÇETİN KAYA S., ÖZKAYNAK Ö.
Eğitim Yayınevi, Konya, 2020

Refereed Congress / Symposium Publications in Proceedings

- I. A Comparative Study on Enzymatically and Chemically Synthesized Maleic anhydride-Styrene Copolymer
YILMAZ E., BOZTUĞ A.
ITWCCST, 10 - 13 September 2017
- II. Etilendiamin ile Modifiye Edilmiş Maleik Anhidrit-Stiren-Vinilasetat Terpolimerinin U022 Adsorpsiyonun Araştırılması
Şimşek S., Karasu S., Boztug A., Yilmaz E.
24. Ulusal Kimya Kongresi, Zonguldak, Turkey, 29 June - 02 July 2010
- III. Polivinilklorür (PVC) / Polistiren (PS) Karışımının Maleikanhidrit -Stiren -Vinil Asetat Terpolimerleri İle Uyumlulaştırılması
İmren Koç D., Boztug A., Karasu S., Yilmaz E., Aydoğdu B.
23. Ulusal Kimya Kongresi, Sivas, Turkey, 16 - 20 June 2009
- IV. Akrilik Rezin İle Yumuşak Astar Maddesi Arasındaki Bağlantı Dayanımı Üzerine Farklı Yüksek Alkil Metakrilat Monomerlerinin Etkileri
Bolayır G., Boztug A., Soygun K., Karasu S., Yilmaz E.
23. Ulusal Kimya Kongresi, Sivas, Turkey, 16 - 20 June 2009
- V. Bazı maleik anhidrid kopolimerlerinde thiazin grubu boyarmaddelerin sulu çözeltiden adsorpsyonu

- ZENGİN H., BOZTUĞ A., SARAYDIN D.
XVIII. Ulusal Kimya Kongresi, Kars, Turkey, 5 - 09 July 2004
- VI. **Bazı maleik anhidrid kopolimerlerinde uranil iyonu adsorpsiyonu**
ZENGİN H., BOZTUĞ A., SARAYDIN D.
XVIII. Ulusal Kimya Kongresi, Kars, Turkey, 5 - 09 July 2004
- VII. **Maleik anhidrit ard stiren kopolimerinde uranil iyonu adsorpsiyonu**
ZENGİN H., BOZTUĞ A., ÖZER A., SARAYDIN D.
XVI. Ulusal Kimya Kongresi, Konya, Turkey, 10 - 13 September 2002
- VIII. **Maleik anhidrit stiren metil metakrilat terpolimerinin uranil iyonu ile etkileşimi**
BOZTUĞ A., ZENGİN H., BASAN S., SARAYDIN D.
XVI. Ulusal Kimya Kongresi, Konya, Turkey, 10 - 13 September 2002
- IX. **Maleik anhidrit stiren vinil asetat Terpolimerinin Amidik Asitlerinin hazırlanması ve Karakterizasyonu**
BOZTUĞ A., ZENGİN H., BASAN S.
XIV. Ulusal Kimya Kongresi, Diyarbakır, 2000, Turkey, 10 - 15 September 2000
- X. **Maleik anhidrit allil propiyonat Kopolimerinin Ester Türevlerinin Hazırlanması ve Karakterizasyonu**
279
ZENGİN H., BOZTUĞ A., BASAN S.
XIV. Ulusal Kimya Kongresi, Diyarbakır, 2000, Turkey, 10 - 15 September 2000
- XI. **Maleik anhidrit- allil propiyonat-Kopolimeri ile Poli(vinil klorür) Karışımlarının Termomekanik Analizi**
BOZTUĞ A., BASAN S., ZENGİN H.
7. Malzeme Sempozyumu, Pamukkale Üniversitesi, 11 - 15 May 1997
- XII. **MA AP Kopolimeri ile Poli vinil klorür Karışımlarının ısisal Bozunması**
BASAN S., BOZTUĞ A., ZENGİN H.
Türkçe Konuşulan Ülkeler 4. Polimer Sempozyumu, 18 - 20 September 1996
- XIII. **Farklı Şekilde Polimerize Edilen Kopolimer Akriliklerin Transvers Dirençlerinin İncelenmesi**
ŞAHİN O., ÖZDEMİR A. K., TUĞUT F., BOZTUĞ A.
17. Uluslararası Dışhekimliği Kongresi, Bursa, Turkey, 24 - 26 June 2010

Metrics

Publication: 46
Citation (WoS): 174
Citation (Scopus): 197
H-Index (WoS): 9
H-Index (Scopus): 9

Non Academic Experience

TUNCELİ ÜNİVERSİTESİ
Üniversite