

Assoc. Prof. Mehmet Murat ÖZMEN

Personal Information

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Education Information

Post Doctorate, The University of Melbourne, Melbourne School of Engineering, Department of Chemical and Biomolecular Engineering, Australia 2014 - 2015

Doctorate, İstanbul Teknik Üniversitesi, İtü Fen Bilimleri Enstitüsü, Polimer Bilimi Ve Teknolojisi, Turkey 2002 - 2009

Post Graduate, İstanbul Teknik Üniversitesi, İtü Fen Bilimleri Enstitüsü, Polimer Bilimi Ve Teknolojisi, Turkey 2000 - 2002

Under Graduate, Kocaeli Üniversitesi, Fen-Edebiyat Fak., Kimya, Turkey 1996 - 2000

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Synthesis of macroporous hydrogels from frozen monomer solutions and their characterization, İstanbul Teknik Üniversitesi, İtü Fen Bilimleri Enstitüsü, Polimer Bilimi Ve Teknolojisi, 2009

Post Graduate, Swelling properties and elastic behavior of temperature sensitive ionic poly(N-Tbutylacrylamide-co-acrylamide) hydrogels, İstanbul Teknik Üniversitesi, İtü Fen Bilimleri Enstitüsü, Polimer Bilimi Ve Teknolojisi, 2002

Research Areas

Polymeric Materials

Academic Titles / Tasks

Associate Professor, Yıldız Teknik Üniversitesi, Kimya-Metalurji Fakültesi, Biyomühendislik Bölümü, Biyomühendislik, 2018 - Continues

Assistant Professor, Yıldız Teknik Üniversitesi, Kimya-Metalurji Fakültesi, Biyomühendislik Bölümü, Biyomühendislik, 2012 - 2018

Courses

Polymer Science and Technology, Under Graduate, 2018 - 2019

Advising Theses

Özmen M. M. , Abdurrahmanoğlu S., FARKLI ZİNCİR UZUNLUKLARINA SAHİP KİLLEYİCİ AJANLARLA POLİ(4-VİNİL PİRİDİN-CO-N-VİNİL PİROLİDON) KOPOLİMERİNİN KUARTERNİZASYONU VE ANTİBAKTERİYEL UYGULAMALARI, Post Graduate, D.GÖKKAYA(Student), 2019

Özmen M. M. , SICAK ERİYİK EKSTRÜZYON TEKNOLOJİSİ İLE POSAKONAZOL ETKEN MADDESİNİN ÇÖZÜNÜRLÜĞÜNÜ ARTIRMAK İÇİN HİDROFİLİK POLİMERLERİN KULLANIMI, Post Graduate, A.AKINCIOĞLU(Student), 2019

Özmen M. M. , CONTRA PREPARATION APPROACHES TO OBTAIN ALGINATE HYDROGELS AS ADSORBENTS, Post Graduate, S.Hafizoğlu(Student), 2019

ÖZMEN M. M. , BİYOPOLİOL BAZLI POLİÜRETAN YARI SERT KÖPÜKLERİN ÜRETİMİ VE KARAKTERİZASYONU, Post Graduate, G.Balamut(Student), 2018

ÖZMEN M. M. , Core-Crosslinked Amphiphilic Block Copolymer Micelles For Antibacterial Applications, Post Graduate, M.Şeyma(Student), 2018

ÖZMEN M. M. , Gaz Köpüklendirme Yöntemi Kullanılarak Polietilen Glikol Bazlı Doku İskelelerinin Sentezi, Post Graduate, B.Aytuğrul(Student), 2016

ÖZMEN M. M. , Hiyerarşik Gözenekli İskelelerin Doğal Polimerler Kullanılarak Doku Mühendisliği Uygulamaları İçin Hazırlanması, Post Graduate, T.Şen(Student), 2016

ÖZMEN M. M. , Doku İskeleleri Olarak Protein Bazlı Biyokompozit Kriyojeller, Post Graduate, K.Burcu(Student), 2016

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Core-crosslinking as a pathway to develop inherently antibacterial polymeric micelles**
Kadayıfci M. S. , Gokkaya D., Topuzoğulları M., Isoglu S. D. , Atabey , Arasoğlu T., Özmen M. M.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.137, no.1, 2019 (Journal Indexed in SCI)
- II. **Tough and hierarchical porous cryogel scaffolds preparation using n-butanol as a non-solvent**
Sen T., Ozcelik B., Özmen M. M.
INTERNATIONAL JOURNAL OF POLYMERIC MATERIALS AND POLYMERIC BIOMATERIALS, vol.68, pp.411-416, 2019 (Journal Indexed in SCI)
- III. **Sulfur Chemistry in Polymer and Materials Science**
Mutlu H., Ceper E. B. , Li X., Yang J., Dong W., ÖZMEN M. M. , Theato P.
MACROMOLECULAR RAPID COMMUNICATIONS, vol.40, 2019 (Journal Indexed in SCI)
- IV. **Hierarchical porous hybrid chitosan scaffolds with tailorable mechanical properties**
Sen T., Ozcelik B., Qiao G. G. , Özmen M. M.
MATERIALS LETTERS, vol.209, pp.528-531, 2017 (Journal Indexed in SCI)
- V. **Polypeptide-Based Macroporous Cryogels with Inherent Antimicrobial Properties: The Importance of a Macroporous Structure**
Shirbin S. J. , Lam S. J. , Chan N. J. , Ozmen M. M. , Fu Q., O'Brien-Simpson N., Reynolds E. C. , Qiao G. G.
ACS MACRO LETTERS, vol.5, pp.552-557, 2016 (Journal Indexed in SCI)
- VI. **A rapid and facile preparation of novel macroporous silicone-based cryogels via photo-induced thiol-ene click chemistry**
Ozmen M. M. , Fu Q., Kim J., Qiao G. G.
CHEMICAL COMMUNICATIONS, vol.51, pp.17479-17482, 2015 (Journal Indexed in SCI)
- VII. **Highly Efficient Method Towards In Situ Immobilization of Invertase Using Cryogelation**
Olcer Z., ÖZMEN M. M. , Sahin Z. M. , Yilmaz F., Tanriseven A.
APPLIED BIOCHEMISTRY AND BIOTECHNOLOGY, vol.171, pp.2142-2152, 2013 (Journal Indexed in SCI)
- VIII. **Formation of macroporous poly(acrylamide) hydrogels in DMSO/water mixture: Transition from cryogelation to phase separation copolymerization**
Ozmen M. M. , Okay O.
REACTIVE & FUNCTIONAL POLYMERS, vol.68, pp.1467-1475, 2008 (Journal Indexed in SCI)
- IX. **Preparation of macroporous poly(acrylamide) hydrogels in DMSO/water mixture at subzero temperatures**
Ozmen M. M. , Dinu M. V. , Okay O.

POLYMER BULLETIN, vol.60, pp.169-180, 2008 (Journal Indexed in SCI)

- X. **Preparation of macroporous acrylamide-based hydrogels: Cryogelation under isothermal conditions**
Ozmen M. M. , Dinu M. V. , Dragan E. S. , OKAY O.
JOURNAL OF MACROMOLECULAR SCIENCE PART A-PURE AND APPLIED CHEMISTRY, vol.44, pp.1195-1202, 2007
(Journal Indexed in SCI)
- XI. **Freezing as a path to build macroporous structures: Superfast responsive polyacrylamide hydrogels**
Dinu M. V. , Ozmen M. M. , Dragan E. S. , OKAY O.
POLYMER, vol.48, pp.195-204, 2007 (Journal Indexed in SCI)
- XII. **Superfast responsive ionic hydrogels: Effect of the monomer concentration**
Ozmen M. M. , OKAY O.
JOURNAL OF MACROMOLECULAR SCIENCE PART A-PURE AND APPLIED CHEMISTRY, vol.43, pp.1215-1225, 2006
(Journal Indexed in SCI)
- XIII. **Swelling deswelling kinetics of ionic poly acrylamide hydrogels and cryogels**
CEYLAN TUNCABOYLU D., ÖZMEN M. M. , Okay O.
Journal Of Applied Polymer Science, vol.99, pp.319-325, 2006 (Journal Indexed in SCI)
- XIV. **Superfast responsive ionic hydrogels with controllable pore size**
Ozmen M. M. , OKAY O.
POLYMER, vol.46, pp.8119-8127, 2005 (Journal Indexed in SCI)
- XV. **Non-Gaussian elasticity of poly(2-acrylamido-2-methylpropane sulfonic acid) gels**
ÖZMEN M. M. , OKAY O.
POLYMER BULLETIN, vol.52, pp.83-90, 2004 (Journal Indexed in SCI Expanded)
- XVI. **Swelling behavior of strong polyelectrolyte poly(N - t-butylacrylamide-co-acrylamide) hydrogels**
Ozmen M. M. , Okay O.
European Polymer Journal, vol.39, pp.877-886, 2003 (Journal Indexed in SCI)

Refereed Congress / Symposium Publications in Proceedings

- I. **Dielectric Spectroscopy of Ovalbumin Under Different Temperatures**
Serin M., Yakut Ş., Çalışkan M., Ulutaş H. K. , Bozoğlu Parto D., Ulutaş D., Özmen M. M.
Turkish Physical Society 35th International Physics Congress, Muğla, Turkey, 4 - 08 September 2019, vol.1, no.1,
pp.336
- II. **Farklı zincir uzunluklarına sahip alkilleyici ajanlarla Poli(4-Vinilpiridin-ko-N-Vinil Prolidon) kopolimerlerinin kuarternizasyonu ve antibakteriyel uygulamaları**
Gökkaya D., Topuzoğulları M., ÖZMEN M. M. , Arasoğlu T., Trabzonlu K., Abdurrahmanoğlu S.
2nd International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2019), 28 - 29 June 2019
- III. **Highly effective alginate-based composite cryogels as adsorbents for dye removal**
ÖZMEN M. M. , Hafizoğlu S.
2nd International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2019), 28 - 29 June 2019
- IV. **Solubility and Dissolution Enhancement of Posaconazole with Polymethacrylate Carrier using Hot Melt Extrusion**
Akincioglu A., ÖZMEN M. M.
2nd International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2019), 28 - 29 June 2019
- V. **ESSENTIAL OIL LOADED ANTIMICROBIAL THERMOPLASTIC ELASTOMERS**
Pamukoğulları B., Öner T., ÖZMEN M. M.
35th International Conference of the Polymer Processing Society, 26 - 30 May 2019
- VI. **Post-Crosslinked Alginate/Montmorillonite Composite Hydrogels for Methylene Blue Removal**
Hafizoğlu S., ÖZMEN M. M.

4th International Mediterranean Science and Engineering Congress, 25 - 27 April 2019

- VII. **Kuarternize Edilmiş (4-vinilpiridin-ko-N-vinilpirolidon) Kopolimerinin Antimikrobiyal Uygulamaları**
Gökkaya D., Topuzoğulları M., ÖZMEN M. M. , Arasoğlu T., Trabzonlu K., Abdurrahmanoğlu S.
IV. Yaşam Bilimleri Kongresi, Turkey, 22 - 23 February 2019
- VIII. **Core-Crosslinked Block Copolymer Micelles for Antibacterial Applications**
Kadayıfçı M. Ş. , TOPUZOĞULLARI M., Gökkaya D., ATABEY T., ARASOĞLU T., ÖZMEN M. M.
ANCON, 5 - 07 October 2017
- IX. **DIELECTRIC PROPERTIES OF POLYETHYLENE GLYCOL BASED SCAFFOLDS PREPARED VIA GAS FOAMING METHOD**
Serin M., Özmen M. M. , Ulutaş K., Bozoglu D., Caliskan M., Aytugrul B., Değer D.
Türk Fizik Derneği 33. Uluslararası Fizik Kongresi, Muğla, Turkey, 6 - 10 September 2017
- X. **DIELECTRIC CHARACTERIZATION OF NATURAL POLYMER BASED HIERARCHICAL POROUS SCAFFOLDS**
Serin M., Özmen M. M. , Ulutaş K., Bozoglu D., Caliskan M., Sen T., Deger D.
Türk Fizik Derneği 33. Uluslararası Fizik Kongresi, Muğla, Turkey, 6 - 10 September 2017
- XI. **Characterisation of Immobilized Geobacillus Stearothermophilus L-Arabinose Isomerase**
Kizilcaç Z. N. , Holsbeek M. V. , ÖZMEN M. M. , De Voorde I. V.
6th International Congress on Food, Agricultural, Biological and Medical Sciences, İstanbul, Turkey, 17 May 2017, pp.256
- XII. **Polietilen Glikol Bazlı Biyokompozit Süngerlerin Gaz Köpüklendirme Yöntemi ile Üretimi**
Aytugrul B., Ozcelik B., ÖZMEN M. M.
12. Ulusal Kimya Mühendisliği Kongresi, İzmir, Turkey, 23 August 2016
- XIII. **Polyelectrolyte Complexes of poly(4-vinylpyridine)-g-poly(ethyleneglycol) with C-myc Antisense Oligonucleotide as a Potential Non-viral Vector**
Topuzogullari M., Gokkaya D., ÖZMEN M. M.
46th IUPAC World Polymer Congress, İstanbul, Turkey, 17 July 2016, pp.206
- XIV. **Preparation and Antimicrobial Properties of Macroporous Polypeptide-Based Cryogels**
ÖZMEN M. M. , Shirbin S. J. , Lam S. J. , Fu Q., Chan N. J. , O'brien Simpson N., Reynolds E. C. , Qiao G. G.
46th IUPAC World Polymer Congress, İstanbul, Turkey, 17 July 2016, pp.150
- XV. **Hierarchical Porous Ovalbumin-Chitosan Cryogel Scaffolds for Tissue Engineering Applications**
Sen T., Ozcelik B., ÖZMEN M. M.
46th IUPAC World Polymer Congress, İstanbul, Turkey, 17 July 2016, pp.200
- XVI. **Novel Polydimethylsiloxane Based Cryogels via Low Temperature Photoclick Thiol-ene Coupling**
ÖZMEN M. M. , Fu Q., Qiao G. G.
35th Australasian Polymer Symposium, Gold Coast, Australia, 10 July 2015, pp.42
- XVII. **Ovalbumin Biocomposite Cryogels as Tissue Engineering Scaffolds**
Kutuk K. B. , ÖZMEN M. M. , Patterson J.
11th International Symposium on Frontiers in Biomedical Polymers, Trento / Riva Del Garda, Italy, 08 July 2015, pp.12
- XVIII. **Makrogözenekli Poliakrilamid Hidrojellerinin Enzim İmmobilizasyonu Uygulamaları**
ÖZMEN M. M. , Ölçer Z., Şahin Z. M. , Tanrıseven A., Yılmaz F.
4. Polimer Bilim ve Teknoloji Kongresi, Çanakkale, Turkey, 05 September 2012, pp.24
- XIX. **Preparation of macroporous poly acrylamide hydrogels in DMSO water mixture**
ÖZMEN M. M. , OKAY O.
73rd Prague Meeting on Macromolecules, 5 - 09 July 2009
- XX. **Macroporous Ionic Hydrogels: Cryogelation Under Isothermal Conditions**
Dinu M. V. , ÖZMEN M. M. , Dragan E. S. , Okay O.
Romanian International Conference on Chemistry and Chemical Engineering Ricce XV, Sinaia, Romania, 19 September 2007
- XXI. **Strategies Toward The Synthesis of Fast Responsive Gels with Improved Mechanical Properties**
OKAY O., ÖZMEN M. M. , Dinu M. V. , Ceylan D., Can V.

- The European Polymer Congress 2007, Portoroz, Slovenia, 02 July 2007
- XXII. **Synthesis of Macroporous Hydrogels From Frozen Monomer Solutions Under Various Experimental Conditions**
Dinu M. V. , ÖZMEN M. M. , Dragan E. S. , OKAY O.
The European Polymer Congress 2007, Portoroz, Slovenia, 02 July 2007
- XXIII. **Fast Responsive Macroporous Hydrogels**
Dinu M. V. , ÖZMEN M. M. , Dragan E. S. , Okay O.
Proceedings of the 22th International Symposium on Physicochemical Methods of Separation "ARS SEPARATORIA 2007", Szklarska Poreba, Poland, 10 June 2007, pp.109
- XXIV. **Swelling Deswelling of Ionic Poly acrylamide Hydrogels and Cryogels**
CEYLAN TUNCABOYLU D., ÖZMEN M. M. , OKAY O.
Polymer Networks 2006, Functional and Biological Gels: Theory and Experiment, 3 - 07 September 2006
- XXV. **Effect of preparation temperature on properties of gels based on sodium 2 acrylamido 2 methylpropane 1 sulfonate**
ÖZMEN M. M. , OKAY O.
Polymer Gels and Networks, 44th Microsymposium of P.M.M, 10 - 14 July 2005
- XXVI. **Sıcaklığa Duyarlı İyonik Poli(N-t-Bütüilakrilamid-co-Akrilamid) Hidrojellerinin Şişme Özellikleri ve Şişme Davranışı**
ÖZMEN M. M. , Akay O.
XVII. Ulusal Kimya Kongresi, İstanbul, Turkey, 08 September 2003, pp.700

Supported Projects

- ÖZMEN M. M. , TUBITAK Project, Işıklı Tetiklenen Çok Yüksek Hızlı Diels-Alder Click Reaksiyonlarının Geliştirilmesi ve Fonksiyonel Polimerik Malzemelerin Bu Reaksiyonlarla Hazırlanması, 2018 - Continues
- Özmen M. M. , Abdurrahmanoğlu S., Project Supported by Higher Education Institutions, Farklı Zincir Uzunluklarına Sahip Alkilleyici Ajanlarla Poly(4-vinylpyridine-co-N-vinylpyrrolidone) Kopolimerinin Kuaternizasyonu ve Antibakteriyel Uygulamaları, 2019 - 2019
- ÖZMEN M. M. , Hafızoğlu S., Project Supported by Higher Education Institutions, Adsorbent Olarak Aljinat Hidrojellerinin Eldesi için Kontra Hazırlama Yöntemlerinin Kullanılması, 2018 - 2019
- ÖZMEN M. M. , TUBITAK Project, Yenilenebilir Kaynaklardan Yenilebilir Nanokompozit Su Toplarının Üretimi, 2018 - 2018
- ÖZMEN M. M. , Project Supported by Higher Education Institutions, Biyopolimer Bazlı Kriyojel Doku İskelerinin Tasarımı, 2013 - 2018
- ÖZMEN M. M. , Project Supported by Higher Education Institutions, Protein Bazlı Doğal Polimerlerden Makrogözenekli Doku iskelesi Eldesi, 2014 - 2016
- ÖZMEN M. M. , Project Supported by Higher Education Institutions, Donmuş Monomer Çözeltilerinden Makroporlu Hidrojellerin Sentezi ve Karakterizasyonu, 2007 - 2009
- ÖZMEN M. M. , TUBITAK Project, Jellerde mikro ve nano boyutlarda bölgelerin tasarımı, 2005 - 2008

Scientific Refereeing

- Macromolecular Materials and Engineering, Journal Indexed in ESCI, September 2020
- INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, SCI Journal, July 2020
- TURKISH JOURNAL OF CHEMISTRY, National Scientific Refreed Journal, March 2020
- Macromolecular Research, SCI Journal, June 2019
- Turkish Journal of Chemistry, National Scientific Refreed Journal, April 2018
- Turkish Journal of Chemistry, SCI Journal, January 2018
- Macromolecular Research, SCI Journal, August 2017

Designed Monomers Polymers, SCI Journal, January 2012

Invited Congress and Symposium Activities

World Polymer Congress, (Macro 2016), Session Moderator, İstanbul, Turkey, 2016

Citations

Total Citations (WOS):483

h-index (WOS):12

Scholarships

2219 DOKTORA SONRASI ARAŞTIRMA BURSUNUN, University, 2015 - 2015

Awards

ÖZMEN M. M. , Tübitak Üniversitelerarası Proje Yarışmaları, 2018 İstanbul Bölge Sergisi, 2241 Özel Sektöre Yönelik Lisans Bitirme Tezleri Yarışması, Tübitak, October 2018