

## Prof. SUZAN ABDURRAHMANOĞLU

### Personal Information

**Email:** [suzana@marmara.edu.tr](mailto:suzana@marmara.edu.tr)

**Web:** <https://avesis.marmara.edu.tr/suzana>

### International Researcher IDs

ORCID: 0000-0002-9107-0738

Yoksis Researcher ID: 191570



### Education Information

Doctorate, Marmara University, Faculty of Arts and Sciences, Chemistry, Turkey 1999 - 2005

Postgraduate, Marmara University, Faculty of Arts and Sciences, Chemistry, Turkey 1997 - 1999

Undergraduate, Istanbul Technical University, Kimya-Metalurji Fakültesi, Kimya Mühendisliği Bölümü, Turkey 1989 - 1993

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Selüloz ve Dekstranın Akrilatlarla Kopolimerizasyonu, Marmara University, Institute for Graduate Studies in Pure and Applied Sciences, Department of Chemistry, 2005

Postgraduate, "Bazı Vinil ve Akril Monomerlerle Selülozun ve Nişastanın Graft Kopolimerizasyonu", Marmara University, Institute for Graduate Studies in Pure and Applied Sciences, Department of Chemistry, 1999

### Research Areas

Chemistry, Physical Chemistry, Computational Chemistry, Quantum Mechanics, Characterization of Polymers, Polymeric Materials, Cellulose and its Derivatives

### Academic Titles / Tasks

Professor, Marmara University, Faculty of Arts and Sciences, Chemistry, 2020 - Continues

Associate Professor, Marmara University, Faculty of Arts and Sciences, Chemistry, 2015 - 2020

Research Assistant, Marmara University, Faculty of Arts and Sciences, Chemistry, 1997 - 2015

### Academic and Administrative Experience

Assistant Coordinator, Marmara University, Faculty of Arts and Sciences, Chemistry, 2011 - Continues

Erasmus Coordinator, Marmara University, Institute for Graduate Studies in Pure and Applied Sciences, Department of Chemistry, 2011 - Continues

Marmara University, Faculty of Arts and Sciences, Chemistry, 2015 - 2018

## Courses

Research Project, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018

Physical Chemistry II, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016

Physical Chemistry Lab I, Undergraduate, 2018 - 2019, 2016 - 2017, 2015 - 2016

Chemical Kinetics, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014

GENERAL CHEMISTRY I, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015

Theoretical Chemistry, Undergraduate, 2018 - 2019

Chemical Kinetics, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016

Physical Chem Lab I, Undergraduate, 2018 - 2019

Polymeric gels and networks, Postgraduate, 2018 - 2019, 2017 - 2018

Physical Chemistry of Polymers, Postgraduate, 2017 - 2018

Polimerlerin Fizikokimyası I, Postgraduate, 2015 - 2016

General Chemistry I, Undergraduate, 2015 - 2016, 2014 - 2015

Basic Chemistry, Undergraduate, 2015 - 2016

General Chemistry Lab I, Undergraduate, 2015 - 2016, 2014 - 2015

Research project, Undergraduate, 2015 - 2016

Fizikokimya Laboratuvarı II, Undergraduate, 2014 - 2015

Kimyasal Kinetik, Undergraduate, 2014 - 2015, 2013 - 2014

Kataliz ve Adsorpsiyon, Undergraduate, 2013 - 2014

Nuclear Chemistry, Undergraduate, 2011 - 2012

## Advising Theses

ABDURRAHMANOĞLU S., Farklı zincir uzunluklarına sahip alkilleyici ajanlarla poli (4-vinilpiridin-co-n-vinilpiridin) kopolimerinin kuarternizasyonu ve antibakteriyel uygulamaları, Postgraduate, D.Gökkaya(Student), 2019

ABDURRAHMANOĞLU S., KARATAŞ S., Biyo-esash polimer nanokompozit malzemelerin sentezi ve kaplama uygulamaları, Postgraduate, Y.EREN(Student), 2018

ABDURRAHMANOĞLU S., KAYAMAN APOHAN N., Organik-inorganik hibrit hidrojenlerin hazırlanması ve karakterizasyonu, Postgraduate, Ö.DOĞRU(Student), 2014

## Jury Memberships

Post Graduate, Post Graduate, Yıldız Teknik Üniversitesi, April, 2018

Post Graduate, Post Graduate, Marmara Üniversitesi, December, 2017

Post Graduate, Post Graduate, Yıldız Teknik Üniversitesi, September, 2017

Post Graduate, Post Graduate, Yıldız Teknik Üniversitesi, July, 2017

Post Graduate, Post Graduate, Marmara Üniversitesi, June, 2017

Post Graduate, Post Graduate, Yıldız Teknik Üniversitesi, May, 2017

Post Graduate, Post Graduate, İstanbul Teknik Üniversitesi, December, 2016

Post Graduate, Post Graduate, Yıldız Teknik Üniversitesi, July, 2016

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Marmara Üniversitesi, June, 2016

Doctorate, Doctorate, İstanbul Teknik Üniversitesi, February, 2016

Post Graduate, Post Graduate, İstanbul Teknik Üniversitesi, December, 2015

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

- I. **Synergetic effect of the crosslinker size and polysaccharide type on the acrylamide networks**  
Keten S., Gönülkirmaz F., Karacan P., CEYLAN D., ABDURRAHMANOĞLU S.  
Journal of Applied Polymer Science, vol.141, no.35, 2024 (SCI-Expanded)
- II. **POSS-vinyl-urethane acrylate-based nanohybrid coating materials**  
Eren Y., Şen F., ABDURRAHMANOĞLU S., KARATAŞ S.  
Journal of Coatings Technology and Research, vol.21, no.2, pp.575-587, 2024 (SCI-Expanded)
- III. **Influence of Chirality of Benzimidazole Amine Hybrids on Inhibition of Human Erythrocytes Carbonic Anhydrase I, II and Acetylcholinesterase**  
Tunç T., ABDURRAHMANOĞLU S., Günel A., Alm Z., Demirel N.  
Chemistry and Biodiversity, vol.20, no.6, 2023 (SCI-Expanded)
- IV. **Antibacterial properties of cationic copolymers as a function of pendant alkyl chain length and degree of quaternization**  
Gokkaya D., Topuzoğulları M., Arasoğlu T., Trabzonlu K., Özmen M. M., Abdurrahmanoğlu S.  
POLYMER INTERNATIONAL, vol.70, no.6, pp.829-836, 2021 (SCI-Expanded)
- V. **Synthesis and Antibacterial Activity of New Chiral Aminoalcohol and Benzimidazole Hybrids**  
Cicek I., TUNÇ T., Ogutcu H., ABDURRAHMANOĞLU S., GÜNEL A., DEMİREL N.  
CHEMISTRYSELECT, vol.5, no.15, pp.4650-4654, 2020 (SCI-Expanded)
- VI. **Rheological characterization of starch gels: A biomass based sorbent for removal of polycyclic aromatic hydrocarbons (PAHs)**  
TUNCABOYLU D. C., ABDURRAHMANOĞLU S., GAZİOĞLU I.  
JOURNAL OF HAZARDOUS MATERIALS, vol.371, pp.406-414, 2019 (SCI-Expanded)
- VII. **Preparation and characterization of modified nanosilica/PNIPAm hybrid cryogels**  
Dogru O., ABDURRAHMANOĞLU S., KAYAMAN APOHAN N.  
POLYMER BULLETIN, vol.72, no.5, pp.993-1005, 2015 (SCI-Expanded)
- VIII. **Self-healing hydrogels formed in cationic surfactant solutions**  
Akay G., Hassan-Raeisi A., Tuncaboylu D. C., Orakdöğen N., ABDURRAHMANOĞLU S., Oppermann W., Okay O.  
SOFT MATTER, vol.9, no.7, pp.2254-2261, 2013 (SCI-Expanded)
- IX. **Dodecyl methacrylate as a crosslinker in the preparation of tough polyacrylamide hydrogels**  
ABDURRAHMANOĞLU S., Cilingir M., Okay O.  
POLYMER, vol.52, no.3, pp.694-699, 2011 (SCI-Expanded)
- X. **Rheological Behavior of Polymer-Clay Nanocomposite Hydrogels: Effect of Nanoscale Interactions**  
ABDURRAHMANOĞLU S., Okay O.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.116, no.4, pp.2328-2335, 2010 (SCI-Expanded)
- XI. **Design of high-toughness polyacrylamide hydrogels by hydrophobic modification**  
ABDURRAHMANOĞLU S., can v., OKAY O.  
POLYMER, vol.50, no.23, pp.5449-5455, 2009 (SCI-Expanded)
- XII. **Homogeneous Poly(acrylamide) Hydrogels Made by Large Size, Flexible Dimethacrylate Cross-Linkers**  
ABDURRAHMANOĞLU S., Okay O.  
MACROMOLECULES, vol.41, no.20, pp.7759-7761, 2008 (SCI-Expanded)
- XIII. **Equilibrium swelling behavior and elastic properties of polymer-clay nanocomposite hydrogels**  
ABDURRAHMANOĞLU S., Can V., Okay O.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.109, no.6, pp.3714-3724, 2008 (SCI-Expanded)
- XIV. **Preparation of homogeneous hydrogels by controlling the crosslinker reactivity and availability**  
ABDURRAHMANOĞLU S., Okay O.  
JOURNAL OF MACROMOLECULAR SCIENCE PART A-PURE AND APPLIED CHEMISTRY, vol.45, no.9, pp.769-775, 2008 (SCI-Expanded)
- XV. **Synthesis and characterization of new dextran-acrylamide gels**  
Abdurrahmanoglu S., Firat Y.

XVI. **Unusual swelling behavior of polymer-clay nanocomposite hydrogels**

Can V., Abdurrahmanoglu S., Okay O.

POLYMER, vol.48, no.17, pp.5016-5023, 2007 (SCI-Expanded)

### Refereed Congress / Symposium Publications in Proceedings

- I. **SYNERGETIC EFFECT OF THE CROSSLINKER SIZE AND POLYSACCHARIDE TYPE ON THE ACRYLAMIDE NETWORKS**  
ABDURRAHMANOĞLU S., Keten S., Gönülkırılmaz F., Karacan P., CEYLAN TUNCABOYLU D.  
Polymer Networks Group PNG-2022, Roma, Italy, 12 - 16 June 2022
- II. **An InSilico Study of Chirality of Benzimidazole Amine Hybrids on The Inhibition Effects on Human Carbonic Anhydrase Isoenzymes and Acetylcholine Esterases**  
TUNÇ T., ABDURRAHMANOĞLU S., GÜNEL A., DEMİREL N., ALIM Z.  
2. Computer Aided Drug Design Symposium and Workshop Linking Design , Biology, Chemistry and Medicine, İstanbul, Turkey, 12 May 2022
- III. **Farklı zincir uzunluklarına sahip alkilleyici ajanlarla Poli(4-Vinilpiridin-ko-N-Vinil Prolidon) kopolimerlerinin kuarternizasyonu ve antibakteriyel uygulamaları**  
Abdurrahmanoğlu S., Özmen M. M., Topuzoğulları M., Arasoğlu T.  
2nd International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2019), İstanbul, Turkey, 28 - 29 June 2019, pp.112
- IV. **Yeni Ftalosyanin Bileşikler ile Pseudomonas aeruginosa'ya Karşı Quorum Sensing İnhibisyonu**  
ABDURRAHMANOĞLU S., ABDURRAHMANOĞLU Ş., GOKALSIN B., SESAL N. C.  
30. ULUSAL KİMYA KONGRESİ, Turkey, 5 - 08 November 2018
- V. **Synthesis of Bio-Based Polymer Nanocomposite Materials and Their Coating Applications**  
Abdurrahmanoğlu S., Karataş S.  
Paintistanbul and Turkcoat 2018, İstanbul, Turkey, 20 - 21 March 2018, pp.16
- VI. **QUORUM SENSING INHIBITION EFFECTS OF NOVEL PHYTALOCYANINE COMPOUNDS AGAINST Pseudomonasaeruginosa**  
ABDURRAHMANOĞLU S., ABDURRAHMANOĞLU Ş., SESAL N. C.  
5th International Bahçeşehir University (BAU) Drug Design Congress, 19 - 21 October 2017
- VII. **In Silico Analysis of Inhibition Effect of protoporphyrin IX derivatives on Quorum Sensing System of pseudomonas aeruginosa**  
ABDURRAHMANOĞLU S., SESAL N. C.  
International Symposium on Synthesis and Catalysis 2017, 5 - 08 September 2017
- VIII. **Theoretical Modelling of Copolymerization reaction of cellulose units with methyl acrylate**  
ABDURRAHMANOĞLU S., ERDEM S.  
International Congress on Chemical Biological and Environmental Sciences ICCBES2015, 7 - 09 May 2015, pp.584-585
- IX. **A DFT Study on the Structure and Stabilities of Tetrahydropyran Derivatives**  
ABDURRAHMANOĞLU S., fırat y., çınar z.  
10th International Conference on the Applications of DFT in Chemsitry and Physics, 7 - 12 September 2003
- X. **A DFT Study of Modelling Cellulose**  
ABDURRAHMANOĞLU S., ERDEM S.  
27th Molecular Modeling Workshop, 25 - 27 February 2013
- XI. **Homogeneous Polyacrylamide Hydrogels Made By Large Size Flexible Dimethacrylate Crosslinker**  
ABDURRAHMANOĞLU S., OKAY O.  
8th International Conference on Advanced Polymers via Macromolecular Engineering, 4 - 07 October 2009
- XII. **Synthesis and Characterization of New Dextran Gels**  
ABDURRAHMANOĞLU S., Fırat Y.

4th European Symposium on Biopolymers, 02 October 2007 - 04 September 2003

**XIII. DFT and Ab Initio Study of Structures of Alkylolithiums**

Tirişođlu Demir T., ABDURRAHMANOđLU S., ınar Z.

10th International Conference on the Applications of DFT in Chemistry and Physics, 7 - 12 September 2003

**XIV. An Ab Initio Study on the Structure of Tetrahydropyran Derivatives**

ABDURRAHMANOđLU S., Fırat y., ınar z.

Chemical Physics V, 31 October - 01 November 2002

**XV. Selülozun Graft Kopolimerizasyonunda Oluşan Radikallerin PM3 Yöntemi ile Belirlenmesi**

ABDURRAHMANOđLU S., Zekiye .

Chemical Physics IV, 28 - 29 September 2000

## **Memberships / Tasks in Scientific Organizations**

Türk Kimya Derneđi, Member, 2018 - Continues

## **Scientific Refereeing**

POLYMER BULLETIN, SCI Journal, November 2023

JOURNAL OF APPLIED POLYMER SCIENCE, SCI Journal, December 2021

JOURNAL OF POLYMER RESEARCH, Journal Indexed in SCI-E, March 2021

TURKISH JOURNAL OF CHEMISTRY, National Scientific Refreed Journal, February 2021

JOURNAL OF APPLIED POLYMER SCIENCE, SCI Journal, February 2021

TURKISH JOURNAL OF CHEMISTRY, Journal Indexed in SSCI, November 2011

TURKISH JOURNAL OF CHEMISTRY, Journal Indexed in SSCI, March 2011

TURKISH JOURNAL OF CHEMISTRY, Journal Indexed in SSCI, March 2010

## **Mobility Activity**

Bilateral Collaboration Agreement, Scientific Research, Technische Universitaet Clausthal, Germany, 2011 - 2011

## **Metrics**

Publication: 31

Citation (WoS): 581

Citation (Scopus): 703

H-Index (WoS): 9

H-Index (Scopus): 11

## **Congress and Symposium Activities**

27th Molecular Modelling Workshop, Working Group, Erlangen, Germany, 2013

## **Non Academic Experience**

Marmara Üniversitesi

Marmara Üniversitesi