# Prof. SUZAN ABDURRAHMANOĞLU

## **Personal Information**

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#### **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 Selüozun 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 Chemsitry 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 Laboratuarı II, Undergraduate, 2014 - 2015

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

Kataliz ve Adsorpsiyon, Undergraduate, 2013 - 2014

Nuclear Chemsitry, Undergraduate, 2011 - 2012

## **Advising Theses**

 $ABDURRAHMANO \Hat{GLU}~S., Farklı~zincir~uzunluklarına~sahip~alkilleyici~ajanlarla~poli~(4-vinilpiridin-co-n-vinilpiridin)$ 

 $kopolimerinin\ kuarternizasyonu\ ve\ antibakteriyel\ uygulamaları,\ Postgraduate,\ D. G\"{o}kkaya (Student),\ 2019a,\ Student)$ 

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

ABDURRAHMANOĞLU S., KAYAMAN APOHAN N., Organik-inorganik hibrit hidrojellerin 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

 $I. \quad \mbox{Synergetic effect of the crosslinker size and polysaccharide type on the acrylamide networks}$ 

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., Alım 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 catanionic 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)

 $IX. \quad \textbf{Dodecyl methacrylate as a crosslinker in the preparation of tough polyacrylamide } hydrogels$ 

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.

JOURNAL OF APPLIED POLYMER SCIENCE, vol.106, no.6, pp.3565-3570, 2007 (SCI-Expanded)

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., Gönülkırmaz 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 Pirolidon) 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 Ş., 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 Dilmethacrylate 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 Alkyllithiums

Tirişoğlu Demir T., ABDURRAHMANOĞLU S., Çınar Z.

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

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

ABDURRAHMANOĞLU S., Fırat y., çınar z.

Chemical Physics V, 31 October - 01 November 2002

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

ABDURRAHMANOĞLU S., Zekiye Ç.

Chemical Physics IV, 28 - 29 September 2000

## Memberships / Tasks in Scientific Organizations

Türk Kimya Derneği, 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 Colloboration Agreement, Scientific Research, Technische Universitaet Clausthal, Germany, 2011 - 2011

#### **Metrics**

Publication: 31

Citation (WoS): 581 Citation (Scopus): 676 H-Index (WoS): 9 H-Index (Scopus): 10

## **Congress and Symposium Activities**

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

# Non Academic Experience

Marmara Üniversitesi

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