

Prof. UMUT BULUT

Personal Information

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International Researcher IDs

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Education Information

Doctorate, Rensselaer Polytechnic Institute, Chemistry and Chemical Biology, United States Of America 2004 - 2007

Postgraduate, Middle East Technical University, Fen-Edebiyat Fakültesi, Kimya Bölümü, Turkey 2002 - 2004

Undergraduate, Middle East Technical University, Fen-Edebiyat Fakültesi, Kimya Bölümü, Turkey 1998 - 2002

Dissertations

Doctorate, Reactivity Studies of Oxirane and Oxetane Monomers in Photoinitiated Cationic Polymerization, Rensselaer Polytechnic Institute, 2007

Postgraduate, Synthesis and characterization of conducting copolymers of carboxylic acid multithiophene functionalized monomers, Middle East Technical University, Fen-Edebiyat Fakültesi, Kimya Bölümü, 2004

Research Areas

Sensors, Polymeric Materials

Academic Titles / Tasks

Professor, Acibadem Mehmet Ali Aydınlar University, Graduate School Of Health Sciences, Department Of Management İn Pharmaceutical Industry, 2020 - Continues

Professor, Acibadem Mehmet Ali Aydınlar University, Faculty Of Pharmacy, Basic Pharmaceutical Sciences, 2016 - Continues

Lecturer PhD, University of Texas at Dallas, Kimya, 2012 - 2013

Assistant Professor, Middle East Technical University, Odtü Kuzey Kıbrıs Kampusu (Kktc-Güzelyurt), 2007 - 2011

Academic and Administrative Experience

Rectorate Commissioner, Acibadem Mehmet Ali Aydınlar University, Faculty Of Pharmacy, Basic Pharmaceutical Sciences, 2023 - Continues

Rectorate Commissioner, Acibadem Mehmet Ali Aydınlar University, Faculty Of Pharmacy, Basic Pharmaceutical Sciences, 2023 - Continues

Rectorate Commissioner, Acibadem Mehmet Ali Aydinlar University, Faculty Of Pharmacy, Basic Pharmaceutical Sciences, 2021 - Continues

Faculty Self-Evaluation Commission, Acibadem Mehmet Ali Aydinlar University, Faculty Of Pharmacy, Basic Pharmaceutical Sciences, 2021 - Continues

Rektörlük Stratejik Plan Komisyonu Üyesi, Acibadem Mehmet Ali Aydinlar University, Faculty Of Pharmacy, Basic Pharmaceutical Sciences, 2021 - Continues

Erasmus Program Department Coordinator, Acibadem Mehmet Ali Aydinlar University, Faculty Of Pharmacy, Basic Pharmaceutical Sciences, 2020 - Continues

Head of Department, Acibadem Mehmet Ali Aydinlar University, Faculty Of Pharmacy, Basic Pharmaceutical Sciences, 2019 - Continues

Birim Kalite Komisyonu Başkanı, Acibadem Mehmet Ali Aydinlar University, Faculty Of Pharmacy, Basic Pharmaceutical Sciences, 2019 - Continues

Fakülte Kurulu Üyesi, Acibadem Mehmet Ali Aydinlar University, Faculty Of Pharmacy, Basic Pharmaceutical Sciences, 2018 - Continues

Anabilim Dalı Akademik Kurul Üyesi, Acibadem Mehmet Ali Aydinlar University, Graduate School Of Health Sciences, Department Of Management İn Pharmaceutical Industry, 2018 - Continues

Eğitim ve Müfredat Kurulu üyesi, Acibadem Mehmet Ali Aydinlar University, Faculty Of Pharmacy, Basic Pharmaceutical Sciences, 2017 - Continues

Head of Department, Acibadem Mehmet Ali Aydinlar University, Faculty Of Pharmacy, Basic Pharmaceutical Sciences, 2016 - Continues

Fakülte Yönetim Kurulu Üyesi, Acibadem Mehmet Ali Aydinlar University, Faculty Of Pharmacy, Basic Pharmaceutical Sciences, 2016 - Continues

Vice Dean, Acibadem Mehmet Ali Aydinlar University, Faculty Of Pharmacy, Basic Pharmaceutical Sciences, 2016 - 2024

Head of Student Transfer Commission, Acibadem Mehmet Ali Aydinlar University, Faculty Of Pharmacy, Basic Pharmaceutical Sciences, 2019 - 2022

Member of Evaluation Commission, Acibadem Mehmet Ali Aydinlar University, Faculty Of Pharmacy, Basic Pharmaceutical Sciences, 2019 - 2022

Head of Core Education Program Commission, Acibadem Mehmet Ali Aydinlar University, Faculty Of Pharmacy, Basic Pharmaceutical Sciences, 2017 - 2022

Courses

Graduation Project II, Undergraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022

Organic Chemistry I, Undergraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023

Analytical Methods for Pharmaceutical Analysis, Undergraduate, 2024 - 2025, 2021 - 2022

Graduation Project I, Undergraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022

Organic Chemistry II, Undergraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023

Organic Chemistry 1, Undergraduate, 2021 - 2022, 2020 - 2021

Organic Chemistry 2, Undergraduate, 2022 - 2023, 2021 - 2022, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009

Analytical Chemistry II, Undergraduate, 2018 - 2019, 2017 - 2018

General Chemistry, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008

Analytical Chemistry I, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017

Genel Kimya Lab, Undergraduate, 2012 - 2013

Supervised Theses

Bulut U., Development of a Conjugated Polymer Based Electrochemical Sensor for Serotonin Analysis, Postgraduate,

S.ENES(Student), Continues

Bulut U., Substituted quinoxaline and benzimidazole containing monomers as long wavelength photosensitizers for diaryliodonium salt initiators in photopolymerization, Postgraduate, B.ÇORAKÇI(Student), 2013

Bulut U., Long wavelength photosensitizers with benzotriazole and benzimidazole skeletons for cationic polymerization, Postgraduate, S.YILMAZ(Student), 2011

Bulut U., Dibenzophenazine and quinoxaline derivatives as novel visible photosensitizers for diaryliodonium salts, Postgraduate, M.KOLAY(Student), 2011

Jury Memberships

Doctorate, Doctorate, İzmir Yüksek Teknoloji Enstitüsü, November, 2022

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Innovative Fluorescent Polymers in Niosomal Carriers: A Novel Approach to Enhancing Cancer Therapy and Imaging**
Tornaci S., Erginer M., BULUT U., Sener B., Persilioglu E., Kalaycilar I. B., Celik E. G., Yardibi H., Siyah P., Karakurt O., et al.
MACROMOLECULAR BIOSCIENCE, vol.24, no.10, 2024 (SCI-Expanded)
- II. **Facile preparation of a conjugated polymer-based biosensor for glucose monitoring**
BULUT U., Cevher S. C., Sayin V. O., Ozbek S., Altin N., ÇIRPAN A., Soylemez S.
ELECTROANALYSIS, vol.36, no.7, 2024 (SCI-Expanded)
- III. **A flexible carbon nanofiber and conjugated polymer-based electrode for glucose sensing**
Bulut U., Oyku Sayin V., Altin Y., Can Cevher S., Çirpan A., Celik Bedeloglu A., Soylemez S.
Microchemical Journal, vol.184, 2023 (SCI-Expanded)
- IV. **Benzodithiophene bearing conjugated polymer-based surface anchoring for sensitive electrochemical glucose detection**
Bulut U., Sayin V. Ö., Cevher S. C., Çirpan A., Soylemez S.
Express Polymer Letters, vol.16, no.10, pp.1012-1021, 2022 (SCI-Expanded)
- V. **Synthetic antibodies for methamphetamine analysis: Design of high affinity aptamers and their use in electrochemical biosensors**
Bor G., Bulut U., Man E., Balaban Hanoglu S., Evran S., Timur S.
Journal of Electroanalytical Chemistry, vol.921, 2022 (SCI-Expanded)
- VI. **A biosensor platform based on amine functionalized conjugated benzenediamine-benzodithiophene polymer for testosterone analysis**
Bulut U., Şanlı S., Cevher S. C., Çirpan A., Donmez S., Timur S.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.137, no.43, 2020 (SCI-Expanded)
- VII. **Long wavelength photosensitizers in photoinitiated cationic polymerization: The effect of quinoxaline derivatives on photopolymerization**
Corakci B., Hacioglu S. O., Toppare L., Bulut U.
POLYMER, vol.54, no.13, pp.3182-3187, 2013 (SCI-Expanded)
- VIII. **Quinoxaline derivatives as long wavelength photosensitizers in photoinitiated cationic polymerization of diaryliodonium salts**
Bulut U., Kolay M., Tarkuc S., UDUM Y., TOPPARE L. K.
PROGRESS IN ORGANIC COATINGS, vol.73, no.2-3, pp.215-218, 2012 (SCI-Expanded)
- IX. **Long Wavelength Photosensitizers for Diaryliodonium Salts Based on the 2-Benzyl-2H-benzo[d][1,2,3]triazole Skeleton**
Bulut U., Yilmaz S., Yigitsoy B., TOPPARE L. K.
JOURNAL OF MACROMOLECULAR SCIENCE PART A-PURE AND APPLIED CHEMISTRY, vol.49, no.5, pp.445-449,

2012 (SCI-Expanded)

- X. **Dibenzophenazine Derivatives as Visible Photosensitizers for Diaryliodonium Salts**
Bulut U., Kolay M., Tarkuc S., Toppare L.
JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.49, no.15, pp.3299-3303, 2011 (SCI-Expanded)
- XI. **Benzotriazole Derivatives as Long Wavelength Photosensitizers for Diaryliodonium Salt Initiators**
Bulut U., Balan A., Caliskan C.
JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.49, no.3, pp.729-733, 2011 (SCI-Expanded)
- XII. **A Quinoxaline Derivative as a Long Wavelength Photosensitizer for Diaryliodonium Salts**
Bulut U., Gunbas G. E., Toppare L.
JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.48, no.1, pp.209-213, 2010 (SCI-Expanded)
- XIII. **Dual photo- and thermally initiated cationic polymerization of epoxy monomers**
Crivello J. V., Bulut L.
JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.44, no.23, pp.6750-6764, 2006 (SCI-Expanded)
- XIV. **Indian turmeric and its use in cationic photopolymerizations**
Crivello J. V., Bulut U.
MACROMOLECULAR SYMPOSIA, vol.240, pp.1-11, 2006 (SCI-Expanded)
- XV. **Curcumin: A naturally occurring long-wavelength photosensitizer for diaryliodonium salts**
Crivello J., Bulut U.
JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.43, no.21, pp.5217-5231, 2005 (SCI-Expanded)
- XVI. **Reactivity of oxetane monomers in photoinitiated cationic polymerization**
Bulut U., Crivello J.
JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.43, no.15, pp.3205-3220, 2005 (SCI-Expanded)
- XVII. **Investigation of the reactivity of epoxide monomers in photoinitiated cationic polymerization**
Bulut U., Crivello J.
MACROMOLECULES, vol.38, no.9, pp.3584-3595, 2005 (SCI-Expanded)
- XVIII. **Dual-type electrochromic devices based on conducting copolymers of thiophene-functionalized monomers**
BULUT U., ÇIRPAN A.
SYNTHETIC METALS, vol.148, no.1, pp.65-69, 2005 (SCI-Expanded)
- XIX. **Photoactivated cationic ring-opening frontal polymerizations of oxetanes**
Crivello J., Bulut U.
DESIGNED MONOMERS AND POLYMERS, vol.8, no.6, pp.517-531, 2005 (SCI-Expanded)
- XX. **Synthesis, characterization and electrochromic properties of conducting copolymers of 2,3-bis-[(3-thienylcarbonyl)oxy]propyl 3-thiophene carboxylate with thiophene and pyrrole**
BULUT U., Toppare L., Yilmaz F., Yagci Y.
EUROPEAN POLYMER JOURNAL, vol.40, no.11, pp.2421-2426, 2004 (SCI-Expanded)
- XXI. **Synthesis, characterization, and electrochromic properties of conducting copolymers of 2-[(3-thienylcarbonyl)oxy]ethyl 3-thiophene carboxylate with thiophene and pyrrole**
BULUT U., Alkan S., Yilmaz F., Yagci Y., Toppare L.
JOURNAL OF MACROMOLECULAR SCIENCE-PURE AND APPLIED CHEMISTRY, vol.A41, no.8, pp.937-947, 2004 (SCI-Expanded)
- XXII. **Synthesis, characterization and electrochromic properties of conducting copolymers of 3-[(3-thienylcarbonyl)oxy]-2,2-bis{[(3-thienylcarbonyl)oxy]}propyl 3-thiophene carboxylate with thiophene and pyrrole**
BULUT U., Yilmaz F., Yagci Y., Toppare L.
REACTIVE & FUNCTIONAL POLYMERS, vol.61, no.1, pp.63-70, 2004 (SCI-Expanded)

Articles Published in Other Journals

- I. **Functionalisation of used tyre rubber by hydrosilylation Funktionalisierung von Altreifengummi durch Hydrosilylierung**
Yagneswaran S., Bulut U., Banda M., Naskar A., Perera K., Moreland C., Hodge T., Wallace K., Beckham H., Smith Jr. D.
Gummi, Fasern, Kunststoffe, vol.66, no.1, pp.30-36, 2013 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

- I. **Electrochemical Immunosensor based on Conductive Nanocomposite for the Detection of Benzodiazepine**
Bulut U.
Workshop on Biosensors and Bioanalytical Microtechniques in Environmental, Food and Clinical Analysis, İzmir, Turkey, 20 - 23 May 2024, pp.59-60
- II. **Carbon Nanofiber and Conjugated Polymer Architecture for Futuristic Flexible Biosensor Applications**
Sayın V. Ö., Bulut U., Söylemez S.
NANOTR-16 (16th Nanoscience & Nanotechnology Conference), Ankara, Turkey, 5 - 08 September 2022
- III. **An Electrochemical Aptasensor for Methamphetamine Analysis**
Bulut U.
4th International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2021), Ankara, Turkey, 24 - 26 November 2021, pp.21
- IV. **Polypeptide-functionalized Polymer Decorated with Gold Nanoparticles as Immobilization and Sensing Platform for Codeine Analysis**
Bulut U., Timur S.
International Eurasian Conference on Biotechnology and Biochemistry (BioTechBioChem 2020), Ankara, Turkey, 16 December 2020, pp.716-724
- V. **A Biosensor Platform Based on Benzenediamine-Benzodithiophene Polymer for Testosterone Analysis**
Bulut U., Şanlı S., Dönmez S., Cevher Ş. C., Çırpan A., Odacı Demirkol D., Timur S.
4th International Congress on Biosensors, Çanakkale, Turkey, 8 - 11 July 2019, pp.150

Supported Projects

- Bulut U., TÜBİTAK - AB COST Project, Development of Point-of-Care Immunosensor Systems for Early Diagnosis and Follow-Up of Chronic Kidney Disease, 2023 - 2026
- Bulut U., Association (NGO), 100. Yıl Köyü, 2023 - 2025
- Barlas F. B., Bulut U., Ministry of Health, In vitro investigation of the potential of niosomes encapsulated with fluorescent polymers for theranostic treatment of cancer, 2023 - 2023
- Bulut U., Onat I., Civil Society Organizations of Other Countries Supported Project, Childhood Cancer Pilot Grant Program, 2021 - 2022
- Bulut U., Bastıyalı A., EU Supported Other Project, Build Together, Smile Together, 2021 - 2022

Patent

- Bulut U., Crivello J. V., Curcumin and curcuminoid compounds, and use thereof as photosensitizers of onium salts, Patent, CHAPTER C Chemistry; Metallurgy, The Invention Registration Number: WO2006138637A1 , Standard Registration, 2006

Metrics

Publication: 30

Citation (WoS): 582

Citation (Scopus): 673

H-Index (WoS): 13

H-Index (Scopus): 13

Congress and Symposium Activities

IUPAC MACRO2024 50th World Polymer Conference, Attendee, Coventry, England, 2024

13th Workshop on Biosensors and BioAnalytical μ -Techniques in Environmental and Clinical Analysis, Attendee, İzmir, Turkey, 2024

NANOTR-16 (16th Nanoscience & Nanotechnology Conference), Attendee, Ankara, Turkey, 2022

Awards

Bulut U., Young Scientist Award, Iupac, July 2011

Bulut U., W. H. Bauer Doctoral Prize, Rensselaer Polytechnic Institute, May 2007

Bulut U., Best M.S. Thesis Award, Odtü Mustafa Parlar Vakfi, June 2004