

Assoc. Prof. SERHAN TÜRKYILMAZ

Personal Information

Office Phone: [+90 312 210 3196](tel:+903122103196)

Email: serhant@metu.edu.tr

Web: <https://avesis.metu.edu.tr/serhant>

Address: Department of Chemistry Faculty of Arts and Science Middle East Technical University 06800 Çankaya, Ankara

International Researcher IDs

ScholarID: ENRjEroAAAAJ

ORCID: 0000-0002-3561-1659

Publons / Web Of Science ResearcherID: K-7953-2014

ScopusID: 7801644477

Yoksis Researcher ID: 198214

Education Information

Doctorate, University of Pittsburgh, Fen Edebiyat Fakültesi Kimya Bölümü, United States Of America 1996 - 2007

Undergraduate, Middle East Technical University, Faculty of Arts and Sciences, Department of Chemistry, Turkey 1992 - 1996

Dissertations

Doctorate, Oligomeric Ethylene Glycols as Sorting Tags for Combinatorial Synthesis, University Of Pittsburgh, Fen Edebiyat Fakültesi Kimya Bölümü, 2007

Research Areas

Microbiology, Biochemistry, Organic Chemistry

Academic Titles / Tasks

Associate Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Chemistry, 2024 - Continues

Assistant Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Chemistry, 2017 - 2024

Assistant Professor, Istanbul University, Faculty Of Pharmacy , Department Of Professional Pharmaceutical Sciences, 2014 - 2017

Research Assistant, University of Notre Dame, Fen Edebiyat Fakültesi, Kimya Ve Biyokimya Bölümü, 2011 - 2013

Research Assistant, Lehigh University, Fen Edebiyat Fakültesi, Kimya Bölümü, 2007 - 2011

Research Assistant, University of Pittsburgh, Fen Edebiyat Fakültesi, Kimya Bölümü, 1998 - 2007

Research Assistant, Middle East Technical University, Faculty of Arts and Sciences, Department of Chemistry, 1997 - 1997

Research Assistant, Middle East Technical University, Faculty of Arts and Sciences, Department of Chemistry, 1996 - 1996

Research Assistant, University of Pittsburgh, Fen Edebiyat Fakültesi, Kimya Bölümü, 1996 - 1996

Academic and Administrative Experience

İstanbul Üniversitesi, Doğal Kaynaklardan İlaç Geliştirme Uygulama Ve Araştırma Merkezi, 2015 - 2017

Courses

Biochemistry, Undergraduate, 2022 - 2023, 2021 - 2022

ORGANIC CHEMISTRY III, Undergraduate, 2022 - 2023, 2019 - 2020, 2018 - 2019

Research Methods and Ethics in Chemistry , Postgraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019

ORGANIC CHEMISTRY, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020

FUNDAMENTALS of ORGANIC CHEMISTRY, Undergraduate, 2020 - 2021

SEMINAR IN CHEMISTRY IV , Doctorate, 2020 - 2021, 2019 - 2020

SEMINAR IN CHEMISTRY III, Doctorate, 2021 - 2022, 2020 - 2021, 2019 - 2020

INTRODUCTION TO ORGANIC CHEMISTRY, Undergraduate, 2020 - 2021

ORGANIC CHEMISTRY: Reactions&Synthesis, Postgraduate, 2019 - 2020, 2018 - 2019

ORGANIC CHEMISTRY FOR ENGINEERS, Undergraduate, 2019 - 2020, 2018 - 2019

GENERAL CHEMISTRY, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018

Jury Memberships

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Orta Doğu Teknik Üniversitesi, December, 2022

Post Graduate, Post Graduate, Middle East Technical University, July, 2021

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Bis(dipicolylamine) derivatized cellulose microspheres for the sequestration of negatively charged biomembrane bearing species**
Demirel K., YILMAZ O., AKBULUT D., TÜRKYILMAZ S.
Cellulose, vol.30, no.7, pp.4543-4560, 2023 (SCI-Expanded)
- II. **Asymmetric solution-phase mixture aldol reaction using oligomeric ethylene glycol tagged chiral oxazolidinones**
Turkyilmaz S., Wilcox C. S.
TETRAHEDRON LETTERS, vol.58, no.21, pp.2031-2033, 2017 (SCI-Expanded)
- III. **Evaluation of [In-111]-Labeled Zinc-Dipicolylamine Tracers for SPECT Imaging of Bacterial Infection**
Rice D. R., Plaunt A. J., Turkyilmaz S., Smith M., Wang Y., Rusckowski M., Smith B. D.
MOLECULAR IMAGING AND BIOLOGY, vol.17, no.2, pp.204-213, 2015 (SCI-Expanded)
- IV. **Selective recognition of anionic cell membranes using targeted liposomes coated with zinc(II)-bis(dipicolylamine) affinity units**
Turkyilmaz S., Rice D. R., Palumbo R., Smith B. D.
ORGANIC & BIOMOLECULAR CHEMISTRY, vol.12, no.30, pp.5645-5655, 2014 (SCI-Expanded)
- V. **Surface Occupancy Plays a Major Role in Cholesterol's Condensing Effect**
Krause M. R., Turkyilmaz S., Regen S. L.
LANGMUIR, vol.29, no.33, pp.10303-10306, 2013 (SCI-Expanded)
- VI. **Convenient synthesis of multivalent zinc(II)-dipicolylamine complexes for molecular recognition**
Xiao S., Turkyilmaz S., Smith B. D.
TETRAHEDRON LETTERS, vol.54, no.8, pp.861-864, 2013 (SCI-Expanded)

- VII. **Multivalent Dendritic Molecules as Broad Spectrum Bacteria Agglutination Agents**
Xiao S., Abu-Esba L., Turkyilmaz S., White A. G., Smith B. D.
THERANOSTICS, vol.3, no.9, pp.658-666, 2013 (SCI-Expanded)
- VIII. **Targeted liposomes for cell death imaging and amplified drug delivery**
Rice D. R., Turkyilmaz S., Palumbo R. O., Harmatys K. M., Smith B. D.
JOURNAL OF NUCLEAR MEDICINE, vol.54, pp.22, 2013 (SCI-Expanded)
- IX. **Effects of Isoflurane, Halothane, and Chloroform on the Interactions and Lateral Organization of Lipids in the Liquid-Ordered Phase**
Turkyilmaz S., Almeida P. F., Regen S. L.
LANGMUIR, vol.27, no.23, pp.14380-14385, 2011 (SCI-Expanded)
- X. **Phospholipid Complexation of General Anesthetics: A Wake-Up Call**
Regen S. L., Turkyilmaz S.
BIOPHYSICAL JOURNAL, vol.100, no.3, pp.4, 2011 (SCI-Expanded)
- XI. **Phospholipid Complexation of General Anesthetics in Fluid Bilayers**
Turkyilmaz S., Mitomo H., Chen W., Regen S. L.
LANGMUIR, vol.26, no.8, pp.5309-5311, 2010 (SCI-Expanded)
- XII. **An Upside Down View of Cholesterol's Condensing Effect: Does Surface Occupancy Play a Role?**
Janout V., Turkyilmaz S., Wang M., Wang Y., Manaka Y., Regen S. L.
LANGMUIR, vol.26, no.8, pp.5316-5318, 2010 (SCI-Expanded)
- XIII. **Loosening and Reorganization of Fluid Phospholipid Bilayers by Chloroform**
Turkyilmaz S., Chen W., Mitomo H., Regen S. L.
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, vol.131, no.14, pp.5068-5071, 2009 (SCI-Expanded)
- XIV. **Oligomeric ethylene glycols as sorting tags for parallel and combinatorial mixture synthesis**
Wilcox C., Turkyilmaz S.
TETRAHEDRON LETTERS, vol.46, no.11, pp.1827-1829, 2005 (SCI-Expanded)
- XV. **Solution-phase mixture synthesis with double-separation tagging: Double demixing of a single mixture provides a stereoisomer library of 16 individual murisolins**
WILCOX C. S., Gudipati V., Lu H., Turkyilmaz S., Curran D.
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION, vol.44, no.42, pp.6938-6940, 2005 (SCI-Expanded)
- XVI. **A squaraine-based near IR fluorescent chemosensor for calcium**
Akkaya E. U., TÜRKYILMAZ S.
Tetrahedron Letters, vol.38, no.25, pp.4513-4516, 1997 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **Solüsyon-Fazı Karışım Sentezleri için Oligomerik Etilen Glikol Temelli Kromatografik Tasnif Etiketleri**
TÜRKYILMAZ S.
29. Ulusal Kimya Kongresi, Ankara, Turkey, 10 - 14 September 2017, pp.308
- II. **Bakteriyel Hücrelere Hedeflenebilir Çinko(II)-Bisdipikolilamin Kompleksleri Taşıyan Teranostik Ajanlara Yönelik Çalışmalar**
TÜRKYILMAZ S.
5. İlaç Kimyası: İlaç Etkin Maddesi Tasarımı, Sentezi, Üretimi ve Standardizasyonu Kongresi, Antalya, Turkey, 30 March - 02 April 2017, pp.21
- III. **Synthetic Studies Towards Zn II Bisdipicolylamine Zn2BDPA Complex Bearing Porphyrin Derivatives as Targeted Antibacterial Photodynamic Therapy PDT Agents**
ÇİMİR S., TÜRKYILMAZ S.
6th EuCheMS Chemistry Congress, Sevilla, Spain, 11 - 15 September 2016
- IV. **Bakteriyel Hücrelere Hedeflenebilir Porfirin Türevlerine Yönelik Çalışmalar**
ÇİMİR S., TÜRKYILMAZ S.
III. Ulusal Organik Kimya Kongresi, Trabzon, Turkey, 5 - 08 September 2016

- V. **Studies Towards Multivalent Zn II Bisdipicolylamine Systems for Theranostic Applications**
TÜRKYILMAZ S., RICE D. R., ÇİMİR S., PALUMBO R., SMITH B. D.
Trans Mediterranean Colloquium on Heterocyclic Chemistry TRAMECH VIII, Antalya, Turkey, 11 - 15 November 2015
- VI. **SPECT Imaging of Bacterial Infection Using 111 Indium Labeled Molecular Probes**
RICE D. R., SMITH M. P., WANG Y., PLAUNT A. J., TÜRKYILMAZ S., RUSCKOWSKI M., SMITH B. D.
Proceedings of the World Molecular Imaging Congress 2013, United States Of America, 18 - 21 September 2013, vol.15, pp.2-1590
- VII. **Targeted liposomes for cell death imaging and amplified drug delivery**
RICE D., TÜRKYILMAZ S., PALUMBO R., HARMATYS K., SMITH B. D.
AACR/SNMMI Conference on State-of-the-Art Molecular Imaging in Cancer Biology and Therapy, 27 February - 02 March 2013, vol.54, pp.3-35
- VIII. **Phospholipid Complexation of General Anesthetics A Wake Up Call**
REGEN S. L., TÜRKYILMAZ S.
55th Annual Meeting of the Biophysical-Society, 5 - 09 March 2011, vol.100, pp.4
- IX. **Atomization by Organic Solvents in Atom Trapping AAS**
TÜRKYILMAZ S., KUMSER S., ERTAŞ N., ATAMAN O. Y.
35. IUPAC Kongresi, İstanbul, Turkey, 14 - 19 August 1995
- X. **Ultra Trace Amounts of Moisture Determination in Gasoline Using Proton Isoconcentration Technique by Standard Additions Method**
KARIM M., TÜRKYILMAZ S., ATAMAN O. Y.
35. IUPAC Kongresi, 14 - 19 August 1995
- XI. **Moisture Determination in Tobacco Using the Proton Isoconcentration Technique**
KARIM M., TÜRKYILMAZ S.
10. Ulusal Kimya Kongresi, Bursa, Turkey, 19 - 21 September 1994

Metrics

Publication: 34
Citation (WoS): 234
Citation (Scopus): 243
H-Index (WoS): 10
H-Index (Scopus): 10

Non Academic Experience

Procter and Gamble GmbH, Schwalbach Teknik Merkezi, Almanya