

## Personal Information

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## International Researcher IDs

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## Education Information

Doctorate, Istanbul University, Faculty Of Science, Department of Chemistry, Turkey 2021 - Continues

Postgraduate, Gebze Technical University, Faculty Of Basic Sciences, Department Of Chemistry, Turkey 2019 - 2021

Undergraduate Minor, İstanbul University-Cerrahpaşa, Faculty Of Engineering, Department Of Environmental Engineering, Turkey 2015 - 2018

Undergraduate, İstanbul University-Cerrahpaşa, Faculty Of Engineering, Department Of Chemistry, Turkey 2011 - 2017

## Research Areas

Chemistry

## Academic Titles / Tasks

Research Assistant, Istanbul University, Faculty of Science, Department of Chemistry, 2020 - Continues

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

- I. **Dual-mode iodine sensing: Colorimetric and electrochemical detection methods using functionalized gold nanoparticles**  
Erdemir E., Suna G., Liv L., Eglence-Bakir S., ŞAHİN M., Karakus E.  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, vol.458, 2025 (SCI-Expanded)
- II. **A novel thienothiophene-based "dual-responsive" probe for rapid, selective and sensitive detection of hypochlorite**  
Suna G., Erdemir E., Liv L., Karakus A. C., Gunturkun D., Öztürk T., Karakuş E.  
TALANTA, vol.270, 2024 (SCI-Expanded)
- III. **Dioxomolybdenum(VI) complexes of 2-hydroxy-4-benzyloxybenzaldehyde thiosemicarbazones alkylated via N or S atoms. Synthesis, characterization, antioxidant and xanthine oxidase inhibition performance**  
Eğlence Bakır S., Şahin M., Erdemir Tavukçu E., Özyürek M., Ülküseven B.  
JOURNAL OF MOLECULAR STRUCTURE, pp.136604, 2023 (SCI-Expanded)
- IV. **Monitoring of Hypochlorite Level in Fruits, Vegetables, and Dairy Products: A BODIPY-Based Fluorescent Probe for the Rapid and Highly Selective Detection of Hypochlorite**  
Suna G., ERDEMİR TAVUKÇU E., Gunduz S., Öztürk T., Karakus E.  
ACS OMEGA, vol.8, no.25, pp.22984-22991, 2023 (SCI-Expanded)

- V. **Smartphone-assisted dual-channel discriminative detection of Hg(II) and Cu(II) ions with a simple, unique, readily available probe**  
ERDEMİR TAVUKÇU E., Suna G., Liv L., Eglence-Bakir S., ŞAHİN M., Karakus E.  
SENSORS AND ACTUATORS B-CHEMICAL, vol.382, 2023 (SCI-Expanded)
- VI. **Tetraphenylethylene-thiosemicarbazone based ultrafast, highly sensitive detection of hypochlorite in aqueous environments and dairy products**  
Erdemir E., Suna G., Gunduz S., Şahin M., Eglence-Bakir S., Karakus E.  
ANALYTICA CHIMICA ACTA, vol.1218, 2022 (SCI-Expanded)
- VII. **Multi-channel detection of Au(III) ions by a novel rhodamine based probe**  
Suna G., Erdemir E., Liv L., Gunduz S., Öztürk T., Karakuş E.  
SENSORS AND ACTUATORS B-CHEMICAL, vol.360, 2022 (SCI-Expanded)
- VIII. **Rapid, ultrasensitive, highly selective detection of toxic Hg(II) ions in seabass, swordfish and water samples**  
Erdemir E., Suna G., Gunduz S., Şahin M., Eglence-Bakir S., Karakus E.  
FOOD CHEMISTRY, vol.371, 2022 (SCI-Expanded)
- IX. **Fluorescein Based Three-channel Probe for the Selective and Sensitive Detection of CO<sub>3</sub><sup>2-</sup> Ions in an Aqueous Environment and Real Water Samples**  
Karakus E., Erdemir E., Suna G., Liv L., Gunduz S., Can S. A.  
JOURNAL OF FLUORESCENCE, no.6, pp.1617-1625, 2021 (SCI-Expanded)
- X. **Colorimetric and electrochemical detection of SARS-CoV-2 spike antigen with a gold nanoparticle-based biosensor**  
Karakus E., Erdemir E., Demirbilek N., Liv L.  
ANALYTICA CHIMICA ACTA, vol.1182, 2021 (SCI-Expanded)
- XI. **Synthesis, characterization, and photophysical properties of cyclotriphosphazenes containing quinoline-4-aldehyde-p-oxyanil moieties**  
Ibisoglu H., Un S. S., Erdemir E., Tumay S. O.  
PHOSPHORUS SULFUR AND SILICON AND THE RELATED ELEMENTS, vol.196, no.8, pp.760-768, 2021 (SCI-Expanded)
- XII. **Synthesis, characterization and antimicrobial properties of cyclotriphosphazenes bearing benzimidazolyl rings**  
Ibisoglu H., Erdemir E., Atilla D., Un S. S., Topcu S., Seker M. G.  
INORGANICA CHIMICA ACTA, vol.509, 2020 (SCI-Expanded)
- XIII. **Nucleophilic substitution reactions of monofunctional nucleophilic reagents with cyclotriphosphazenes containing 2,2-dioxybiphenyl units**  
TANRIVERDİ EÇİK E., Ibisoglu H., Yenilmez Ciftci G., Demir G., Erdemir E., Yuksel F.  
TURKISH JOURNAL OF CHEMISTRY, vol.44, no.1, pp.87-109, 2020 (SCI-Expanded)
- XIV. **Synthesis, characterization and photophysical properties of cyclotriphosphazenes including heterocyclic rings**  
Ibisoglu H., Erdemir E., Atilla D., Zorlu Y., ŞENKUYTU E.  
INORGANICA CHIMICA ACTA, vol.498, 2019 (SCI-Expanded)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Karbazol Tiyofen-N-Metil Tiyosemikarbazon Bileşiğinin Civa(II) İyonuna Karşı Optik Sensör Olarak İncelenmesi**  
Erdemir Tavukçu E.  
35. Ulusal Kimya Kongresi , Diyarbakır, Turkey, 9 - 12 September 2024, pp.10-20
- II. **Karbazol ve İndanedion Kullanarak Hipoklorit Tespiti için Yüksek Hassasiyetli Floresan Sensörünün Sentezi ve Sulu Çözeltilerde Uygulaması”**  
Erdemir Tavukçu E.

35. Ulusal Kimya Kongresi, Diyarbakır, Turkey, 9 - 12 September 2024, pp.10-20
- III. **Yeni Bir Tiyosemikarbazon Türevi Ve Metal Kompleksinin Spektroskopik Yöntemlerle Karakterizasyonu**  
Erdemir Tavukçu E.  
35. Ulusal Kimya Kongresi, Diyarbakır, Turkey, 9 - 12 September 2024, pp.10-20
- IV. **A smartphone-assisted colorimetric and electrochemical "dual-mode" sensing platform for iodine (I<sub>2</sub>) determination based on mercaptohexanol functionalized gold nanoparticles**  
Erdemir Tavukçu E.  
13th BMEC 2024 Workshop on Biosensors and Bioanalytical Microtechniques in Environmental, Food and Clinical Analysis, İzmir, Turkey, 20 - 23 May 2024, pp.10-20
- V. **Colorimetric and electrochemical detection of SARS-CoV-2 spike antigen with a gold nanoparticle-based biosensor**  
Erdemir Tavukçu E.  
5th International Congress on Biosensors 2022, Poster Bildirisi, Çanakkale, Turkey, 21 - 23 September 2022, pp.10-20
- VI. **Bis(asetilasetonato)dioksomolibden(VI) İle Bazı Tiyosemikarbazon Türevleri Arasındaki Reaksiyonların İncelenmesi**  
Erdemir Tavukçu E.  
34. Ulusal Kimya Kongresi, Yalova, Turkey, 1 - 06 September 2022, pp.10-20
- VII. **Tetrafeniletilen-tiyosemikarbazon ile Süt Ürünlerinde, Dezenfektanda ve Çeşitli Su Örneklerinde Hipoklorit İyonunun Hızlı, Seçici ve Hassas Tayini**  
Erdemir Tavukçu E.  
34. Ulusal Kimya Kongresi, Yalova, Turkey, 1 - 06 September 2022, pp.10-20
- VIII. **Rapid, Ultrasensitive, Highly Selective Detection of Toxic Hg (II) Ions in Seabass and Water**  
Erdemir Tavukçu E.  
5th International Organic Chemistry Congress 2021, 14 - 17 October 2021, pp.10-20
- IX. **Heterosiklik Gruplar İçeren Siklotrifosfazen Bileşiklerini Sentezi, Karakterizasyonu ve Fotofiziksel Özelliklerinin İncelenmesi**  
Erdemir E.  
31. Ulusal Kimya Kongresi, İstanbul, Turkey, 10 - 13 September 2019, pp.1-28

## Supported Projects

TUBİTAK Project, Heterosiklik Gruplar İçeren Siklotrifosfazenlerin Sentezi, Karakterizasyonu ve Anti-mikrobiyal Aktivitelerinin İncelenmesi, 2018 - 2019

## Metrics

Publication: 23

Citation (WoS): 117

Citation (Scopus): 176

H-Index (WoS): 6

H-Index (Scopus): 7

## Non Academic Experience

TÜBİTAK