



# SÜREYYA OĞUZ TÜMAY

## ASSOC. PROF.

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### Learning Knowledge

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Doctorate 2014 - 2020	Gebze Technical University, Fen Bilimleri Enstitüsü, Kimya , Turkey
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Postgraduate 2012 - 2014	Karadeniz Technical University, Fen Bilimleri Enstitüsü, Kimya, Turkey
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Undergraduate 2008 - 2012	Karadeniz Technical University, Fen Fakültesi, Kimya, Turkey
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### Foreign Languages

English, C1 Advanced

### Certificates, Courses and Trainings

Vocational Training, Potansiyostat Galvanostat Eğitimi, Metrohm, 2019

Vocational Training, HPLC Cihazı Teorik ve Pratik Eğitimi, Türk Standartları Enstitüsü, 2016

Vocational Training, ICP-OES Cihazı Teorik ve Pratik Eğitimi, Türk Standartları Enstitüsü, 2016

Vocational Training, GC-MS Cihazı Teorik ve Pratik Eğitimi, Türk Standartları Enstitüsü, 2016

Vocational Training, AAS Cihazı Teorik ve Pratik Eğitimi, Türk Standartları Enstitüsü, 2016

Vocational Training, ICP-MS Cihazı Teorik ve Pratik Eğitimi, Türk Standartları Enstitüsü, 2016

Vocational Training, Kromatografi ve Spektroskopi Sistemleri Eğitimi, Gebze Teknik Üniversitesi, 2015

Vocational Training, TS EN ISO/IEC 17025: 2005 Deney ve Kalibrasyon Laboratuvarlarının Yeterliliği İçin Genel Şartlar, Karadeniz Teknik Üniversitesi, 2011

Vocational Training, ISO 22000: 2005 Gıda Güvenliği Yönetim Sistemi Sertifikası, Karadeniz Teknik Üniversitesi, 2011

## Dissertations

Doctorate, Floresans özellik gösteren fosfazen çekirdekli bileşiklerin sentezi ve sensör özelliklerinin incelenmesi, Gebze Technical University, Fen Bilimleri Enstitüsü, Kimya, 2020

Postgraduate, Cu(II), ni(II) ve pb(II)'nin triazol türevi toplayıcılar kullanarak birlikte çöktürme yöntemiyle zenginleştirilmesi, su ve gıda örneklerinde faas ile tayinleri, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Kimya, 2014

## Academic Titles / Tasks

Assistant Professor  
2024 - Continues

Ataturk University, Fen Fakültesi, Kimya

Lecturer  
2019 - 2024

Gebze Technical University, Temel Bilimler Fakültesi, Kimya Bölümü

Research Assistant  
2014 - 2019

Gebze Technical University, Temel Bilimler Fakültesi, Kimya

## Supported Projects

1. TÜMAY S. O., KHATAEE A., SARI E., ŞENOCAK A., DUYAR H., Project Supported by Higher Education Institutions, Yeni FluorenSchiff Bazı Temelli Floresans Sensörlerin Sentezi Fotofiziksel ve Sensör Özelliklerinin İncelenerek Gerçek Örneklerde Hg<sub>2</sub> İyonunun Tayini ve Analiz Kiti Geliştirilmesinde Kullanımı, 2024 - Continues
2. Tümay S. O., Yeşilot S., Kılıç N., Uslu A., Project Supported by Higher Education Institutions, Amino Asitlerin Kiral Tanınmasında Kullanılabilecek Yeni Tip İnorganik Sensörlerin Sentezlenmesi ve İlaç Sektöründe Kullanılabilirliğinin İncelenmesi, 2023 - 2025
3. Tümay S. O., Öztürk D., Khataee A. R., Demirbaş Ü., Kılıç Z., Şenocak A., Şanko V., Project Supported by Higher Education Institutions, Yeni Hibrid Biyokütle Temelli Floresans Karbon Nano-Noktaların Hazırlanarak Nitroanilin Türevi Herbisitlerin Toprak Örneklerinin Tayininde Kullanılması ve Analiz Kitlerinin Geliştirilmesi, 2023 - 2025
4. Tümay S. O., Tic. Ve Serv. Hiz. A.Ş M. T. Ö. A., Çakıroğlu B., Demirbaş Ü., Şenocak A., Project Supported by Higher Education Institutions, Yumurtalık Kanserinin Erken Teşhisi için Elektrospon ile Desteklenmiş Ferrit Molibden Sülfür Malzemelerinin Hazırlanması ve Elektrokimyasal Sensör Uygulamalarında Kullanımı, 2023 - 2025
5. Tümay S. O., Şenocak A., Demirbaş Ü., Project Supported by Higher Education Institutions, Protein Bazlı Biyobelirteçlerin Tayini İçin Bir Kimyasal Sensör ve Bu Sensöre Ait Analitiksel Ölçüm Metodunun Geliştirilmesi, 2023 - 2025
6. Tümay S. O., Şenocak A., Akçay H. T., Kantekin H., Demirbaş Ü., Project Supported by Higher Education Institutions, Çevre Dostu Yeni Hibrid Nanosensörlerle Sulardaki Ağır Metal İyonlarının Tayini ve Giderimi, 2022 - 2025
7. Tümay S. O., Noji H., Tokgöz K. K., Tulum I., Project Supported by Higher Education Institutions, Solunum yolu patojenlerinin tespiti için damlacık tabanlı dijital tanı kiti geliştirilmesi, 2022 - 2025
8. Tümay S. O., Yeşilot S., Yıldırım Sarıkaya S., Project Supported by Higher Education Institutions, Yakın Infrared Bölgede Emisyona Sahip, Enerji/Elektron Transferi Yapabilen Hg<sub>2</sub>+ Seçici Floresans Sensörünün Sentezi ve Fotofiziksel Özelliklerinin İncelenmesi, 2022 - 2025
9. Tümay S. O., Şenocak A., Ömeroğlu İ., TUBITAK Project, Modifiye Edilmiş Yeni Nanokristalin Selüloz Temelli Floresans Hibrid Materyallerin Hazırlanması ve Biyotiyollerin Spektroflorimetrik Analizinde Kullanılması, 2023 - 2024
10. Tümay S. O., Demirbaş E., Şenocak A., Şanko V., TUBITAK Project, Yeni Enzimatik Elektrokimyasal Üre Biyosensörü Tasarlanması Ve Biyopolimer Etkisinin İncelenmesi, 2022 - 2023
11. Tümay S. O., Şenocak A., TUBITAK Project, İletken polimer ile Desteklenmiş Metal Nanoparçacıklar-GQD-Metal

- Organik Kafes Nano Kompozitlerin Hazırlanması ve Üre Biyosensörü Olarak Kullanılması, 2022 - 2023
12. Tümay S. O., Şanko V., Şenocak A., Project Supported by Higher Education Institutions, Nitroaromatik Bileşiklerin Tayini için Yeni Floresans Halosit Nanotüp (HNT) Sensörlerin Geliştirilmesi ve Elektro-eğirme Yöntemiyle Nanofiber Temelli Analiz Kitlerinin Üretilmesi, 2022 - 2023
  13. Tümay S. O., Şanko V., Şenocak A., Project Supported by Higher Education Institutions, Manyetik Fe<sub>3</sub>O<sub>4</sub>@Mof Yapısı İle Modifiye Edilmiş İletken Polimerlerin Adenin Ve Guanin Sensörü Olarak Geliştirilmesi Ve Özelliklerinin İncelenmesi, 2020 - 2021
  14. Tümay S. O., Şanko V., Şenocak A., Project Supported by Higher Education Institutions, Yeni Floresans Özellikli Demir Oksit Nanopartiküllerin Hazırlanması ve Hg<sup>2+</sup> İyonunun Gerçek Su Örneklerinde Tayini İçin Spektroflorimetrik Analiz Yöntemlerinin Geliştirilmesinde Kullanımı, 2020 - 2021
  15. Tümay S. O., Gür E., Öztürk Doğan H., Polat M. F., Yetim A. F., Öznülür Özer T., Demir Ü., TUBITAK Project, Kuantum Parçacık Duyarlı Güneş Hücreleri için Yeni Nesil Nanokompozit Elektrotlar, 2017 - 2020
  16. Tümay S. O., Yeşilot S., Project Supported by Higher Education Institutions, Floresans Özellik Gösteren Fosfazen Çekirdekli Bileşiğin Sentezi ve Sensör Özelliklerinin İncelenmesi, 2017 - 2018
  17. Kılıç A., Durmuş M., Yeşilot S., TUBITAK Project, Fosfazen Çekirdekli Cıva II İyon Seçici Floresans Sensörlerinin Sentezi ve Özelliklerinin İncelenmesi, 2015 - 2017
  18. Tümay S. O., Ardıç Alıdağı H., Özcan E., Çoşut B., Project Supported by Higher Education Institutions, Fosfazen Çekirdekli Alüminyum III İyon Seçici Floresans Sensörlerinin Sentezi ve Özelliklerinin İncelenmesi, 2015 - 2016
  19. Tümay S. O., Duran C., Project Supported by Higher Education Institutions, Yeni sentezlenmiş Organik Bileşikler Kullanılarak Bazı Ağır Metallerin Birlikte Çöktürme Yöntemiyle Zenginleştirilmesi ve Çevresel Örneklerde Tayini, 2014 - 2015

## Awards

1. Tümay S. O., Kimyagerler Derneği 3. Araştırma Teşvik Ödülü 2019, Kimyagerler Derneği, March 2019
2. Tümay S. O., BÖLÜM İKİNCİLİĞİ, Karadeniz Teknik Üniversitesi, June 2012

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

1. **The fabrication of a hybrid fluorescent nanosensing system and its practical applications via film kits for the selective determination of mercury ions**  
Şanko V., Şenocak A., Yeşilot S., TÜMAY S. O.  
Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, vol.320, 2024 (SCI-Expanded)
2. **The preparation of a fluorescent dual-modality nanosensor for the discrimination and determination of biothiols in real samples and its practical detection kit.**  
Ömeroğlu Ayyıldız İ., Şanko V., Şenocak A., Tümay S. O.  
Analytical methods : advancing methods and applications, vol.16, no.42, pp.7210-7223, 2024 (SCI-Expanded)
3. **Sulfonated-Polypyrene aniline/Polyaniline Composite Fortified with Cu-GQD@ZIF8 as the Electrochemical Enzymatic Urea Biosensor**  
Çamurcu T., Şanko V., Ömeroğlu İ., Tümay S. O., Şenocak A.  
ANALYTICAL METHODS, vol.16, no.39, pp.6696-6707, 2024 (SCI-Expanded)
4. **Two-Emission Channel Hybrid Nanosensors Based on BODIPYAppended Nanocrystalline Cellulose for Determination of Biothiols**  
Ömeroğlu İ., Şanko V., Şenocak A., Tümay S. O.  
ACS APPLIED NANO MATERIALS, vol.7, no.18, pp.21420-21435, 2024 (SCI-Expanded)
5. **Designing inorganic-organic hybrid molecules based on carbazole/indole-appended cyclotriphosphazenes and the investigation of their photophysical properties**  
Palabiyik D., Balci C. M., Tümay S. O., Besli S.  
NEW JOURNAL OF CHEMISTRY, vol.47, no.29, pp.13866-13879, 2023 (SCI-Expanded)

6. **A water-soluble small molecular fluorescent sensor based on phosphazene platform for selective detection of nitroaromatic compounds**  
Tumay S. O., Senocak A., cosut B., Alidagi H. A., Yesilot S.  
PHOTOCHEMICAL & PHOTOBIOLOGICAL SCIENCES, vol.22, no.6, pp.1429-1444, 2023 (SCI-Expanded)
7. **Direct and selective determination of p-coumaric acid in food samples via layered Nb<sub>4</sub>AlC<sub>3</sub>-MAX phase**  
Tumay S. O., Sanko V., Senocak A., Orooji Y., Demirbas E., Yoon Y., Khataee A.  
FOOD CHEMISTRY, vol.403, 2023 (SCI-Expanded)
8. **A novel comparative study for electrochemical urea biosensor design: Effect of different ferrite nanoparticles (MFe<sub>2</sub>O<sub>4</sub>, M: Cu, Co, Ni, Zn) in urease immobilized composite system**  
Sanko V., Senocak A., Tumay S. O., Demirbas E.  
BIOELECTROCHEMISTRY, vol.149, 2023 (SCI-Expanded)
9. **Synthesis, characterization, and photophysical and fluorescence sensor behaviors of a new water-soluble double-bridged naphthalene diimide appended cyclotriphosphazene**  
Tumay S. O., Yesilot S.  
TURKISH JOURNAL OF CHEMISTRY, vol.47, no.5, pp.1296-1306, 2023 (SCI-Expanded)
10. **Fluorescent materials based on phosphazene derivatives and their applications: Sensors and optoelectronic devices**  
Uslu A., Tumay S. O., Yesilot S.  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY C-PHOTOCHEMISTRY REVIEWS, vol.53, 2022 (SCI-Expanded)
11. **Hexa-BODIPY-cyclotriphosphazene based nanoparticle for NIR fluorescence/photoacoustic dual-modal imaging and photothermal cancer therapy**  
Kwon N., Kim K. H., Park S., Cho Y., Park E., Lim J., Cetindere S., Tumay S. O., Kim W. J., Li X., et al.  
BIOSENSORS & BIOELECTRONICS, vol.216, 2022 (SCI-Expanded)
12. **An electrochemical sensor for detection of trace-level endocrine disruptor bisphenol A using Mo<sub>2</sub>Ti<sub>2</sub>AlC<sub>3</sub> MAX phase/MWCNT composite modified electrode**  
Sanko V., Senocak A., Tumay S. O., Orooji Y., Demirbas E., Khataee A.  
ENVIRONMENTAL RESEARCH, vol.212, 2022 (SCI-Expanded)
13. **New design of cyclotriphosphazene derivatives bearing carbazole units: The syntheses, characterization, and photophysical properties**  
Palabiyik D., Balci C. M., Tumay S. O., Sengul I. F., Besli S.  
INORGANICA CHIMICA ACTA, vol.539, 2022 (SCI-Expanded)
14. **Ultrasensitive electrochemical sensor for detection of rutin antioxidant by layered Ti<sub>3</sub>Al<sub>0.5</sub>Cu<sub>0.5</sub>C<sub>2</sub> MAX phase**  
Senocak A., Sanko V., Tumay S. O., Orooji Y., Demirbas E., Yoon Y., Khataee A.  
FOOD AND CHEMICAL TOXICOLOGY, vol.164, 2022 (SCI-Expanded)
15. **Core-shell Hierarchical Enzymatic Biosensor Based on Hyaluronic Acid Capped Copper Ferrite Nanoparticles for Determination of Endocrine-disrupting Bisphenol A**  
Sanko V., Senocak A., Tumay S. O., Camurcu T., Demirbas E.  
ELECTROANALYSIS, vol.34, no.3, pp.561-572, 2022 (SCI-Expanded)
16. **Crosslinker polycarbazole supported magnetite MOF@CNT hybrid material for synergetic and selective voltammetric determination of adenine and guanine**  
Senocak A., Tumay S. O., Omeroglu I., Sanko V.  
JOURNAL OF ELECTROANALYTICAL CHEMISTRY, vol.905, 2022 (SCI-Expanded)
17. **Development of dipodal fluorescence sensor of iron for real samples based on pyrene modified anthracene**  
Tumay S. O., Irani-nezhad M. H., Khataee A.  
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.261, 2021 (SCI-Expanded)

18. **A "turn-on" small molecule fluorescent sensor for the determination of Al<sup>3+</sup> ion in real samples: theoretical calculations, and photophysical and electrochemical properties**  
Tumay S. O., Senocak A., Mermer A.  
NEW JOURNAL OF CHEMISTRY, vol.45, no.39, pp.18400-18411, 2021 (SCI-Expanded)
19. **A Novel Selective "Turn-On" Fluorescent Chemosensor Based on Thiophene Appended Cyclotriphosphazene Schiff Base for Detection of Ag<sup>+</sup> Ions**  
Tumay S. O.  
CHEMISTRYSELECT, vol.6, no.39, pp.10561-10572, 2021 (SCI-Expanded)
20. **A new perspective for electrochemical determination of parathion and chlorantraniliprole pesticides via carbon nanotube-based thiophene-ferrocene appended hybrid nanosensor**  
Tumay S. O., Senocak A., Sari E., Sanko V., DURMUŞ M., Demirbas E.  
SENSORS AND ACTUATORS B-CHEMICAL, vol.345, 2021 (SCI-Expanded)
21. **Small molecule based water-soluble fluorescence material for highly selective and ultra-sensitive detection of TNT: Design and spectrofluorimetric determination in real samples**  
Tumay S. O., Yesilot S.  
SENSORS AND ACTUATORS B-CHEMICAL, vol.343, 2021 (SCI-Expanded)
22. **A hybrid nanosensor based on novel fluorescent iron oxide nanoparticles for highly selective determination of Hg<sup>2+</sup> ions in environmental samples**  
Tumay S. O., Sanko V., Senocak A., Demirbas E.  
NEW JOURNAL OF CHEMISTRY, vol.45, no.32, pp.14495-14507, 2021 (SCI-Expanded)
23. **The Simultaneously Voltammetric Determination of Spinosad and Chlorantraniliprole Pesticides by Carbazole-Ferrocene Functionalized Carbon Nanotube Architecture**  
Senocak A., Tumay S. O., Sari E., Sanko V., DURMUŞ M., Demirbas E.  
JOURNAL OF THE ELECTROCHEMICAL SOCIETY, vol.168, no.8, 2021 (SCI-Expanded)
24. **ESIPT on/off switching and crystallization-enhanced emission properties of new design phenol-pyrazole modified cyclotriphosphazenes**  
Balc C. M., Tumay S. O., Besli S.  
NEW JOURNAL OF CHEMISTRY, vol.45, no.19, pp.8492-8505, 2021 (SCI-Expanded)
25. **A highly sensitive "ON-OFF-ON" dual optical sensor for the detection of Cu(II) ion and triazole pesticides based on novel BODIPY-substituted cavitand**  
Omeroglu I., Tumay S. O., Makhseed S., Husain A., DURMUŞ M.  
DALTON TRANSACTIONS, vol.50, no.19, pp.6437-6443, 2021 (SCI-Expanded)
26. **Multi-anthracene containing fluorescent probe for spectrofluorimetric iron determination in environmental water samples**  
Tumay S. O., Irani-Nezhad M. H., Khataee A.  
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.248, 2021 (SCI-Expanded)
27. **Tripodal structured blue-green emissive fluorescent sensors for highly selective bifunctional detection: Their logic gate operations and real sample applications**  
Tumay S. O.  
JOURNAL OF LUMINESCENCE, vol.231, 2021 (SCI-Expanded)
28. **A synergetic and sensitive physostigmine pesticide sensor using copper complex of 3D zinc (II) phthalocyanine-SWCNT hybrid material**  
Senocak A., Tumay S. O., Makhseed S., Demirbas E., DURMUŞ M.  
BIOSENSORS & BIOELECTRONICS, vol.174, 2021 (SCI-Expanded)
29. **Highly selective "turn-on" fluorescence determination of mercury ion in food and environmental samples through novel anthracene and pyrene appended Schiff bases**  
Tumay S. O., Yesilot S.  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, vol.407, 2021 (SCI-Expanded)
30. **Synthesis, characterization, and photophysical properties of cyclotriphosphazenes containing quinoline-4-aldehyde-p-oxyanil moieties**

Ibisoglu H., Un S. S., ERDEMİR TAVUKÇU E., Tumay S. O.

PHOSPHORUS SULFUR AND SILICON AND THE RELATED ELEMENTS, vol.196, no.8, pp.760-768, 2021 (SCI-Expanded)

31. **Fluorescence determination of trace level of cadmium with pyrene modified nanocrystalline cellulose in food and soil samples**  
Tumay S. O., Sanko V., Demirbas E., Senocak A.  
FOOD AND CHEMICAL TOXICOLOGY, vol.146, 2020 (SCI-Expanded)
32. **Design of novel anthracene-based fluorescence sensor for sensitive and selective determination of iron in real samples**  
Tumay S. O., Irani-nezhad M. H., Khataee A.  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, vol.402, 2020 (SCI-Expanded)
33. **Synthesis, characterization, photophysical and intramolecular energy transfer properties of oxynaphthylchalcone appended cyclotriphosphazene cores**  
Ibisoglu H., Kilic Z., Yuksel F., Tumay S. O.  
JOURNAL OF LUMINESCENCE, vol.222, 2020 (SCI-Expanded)
34. **New cyclotriphosphazene ligand containing imidazole rings and its one-dimensional copper(II) coordination polymer**  
Ibisoglu H., Atilla D., Tumay S. O., Senocak A., Duygulu E., Yuksel F.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1208, 2020 (SCI-Expanded)
35. **Development of a synthetic strategy for Water soluble tripodal receptors: Two novel fluorescent receptors for highly selective and sensitive detections of Fe<sup>3+</sup> and Cu<sup>2+</sup> ions and biological evaluation**  
Uslu A., Ozcan E., Tumay S. O., Kazan H. H., Yesilot S.  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, vol.392, 2020 (SCI-Expanded)
36. **Synthesis of new cyclotriphosphazene derivatives bearing Schiff bases and their thermal and absorbance properties**  
Dogan S., Tumay S. O., Balci C. M., Yesilot S., Besli S.  
TURKISH JOURNAL OF CHEMISTRY, vol.44, no.1, pp.31-47, 2020 (SCI-Expanded)
37. **Synthesis, optical, and structural properties of bisphenol-bridged aromatic cyclic phosphazenes**  
Cosut B., Topaloglu Aksoy B., Tumay S. O., Senocak A., Yesilot S.  
TURKISH JOURNAL OF CHEMISTRY, vol.44, no.1, pp.48-63, 2020 (SCI-Expanded)
38. **The novel anthracene decorated dendrimeric cyclophosphazenes for highly selective sensing of 2,4,6-trinitrotoluene (TNT)**  
Ozcan E., Tumay S. O., Kesan G., Yesilot S., Cosut B.  
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.220, 2019 (SCI-Expanded)
39. **Novel Water-Soluble Cyclotriphosphazene-Bodipy Conjugates: Synthesis, Characterization and Photophysical Properties**  
Cetindere S., Okutan E., Tumay S. O., Yesilot S., Kilic A.  
JOURNAL OF FLUORESCENCE, vol.29, no.5, pp.1143-1152, 2019 (SCI-Expanded)
40. **Novel pyrene-BODIPY dyes based on cyclotriphosphazene scaffolds: Synthesis, photophysical and spectroelectrochemical properties**  
Cetindere S., Tumay S. O., Senocak A., Kilic A., DURMUŞ M., Demirbas E., Yesilot S.  
INORGANICA CHIMICA ACTA, vol.494, pp.132-140, 2019 (SCI-Expanded)
41. **New one-dimensional mercury(II) coordination polymers built up from dispiro-dipyridyloxy-cyclotriphosphazene: Structural, thermal and UV-Vis absorption properties**  
Davarcı D., Tümay S. O., Şenkuytu E., Wörle M., Zorlu Y.  
Polyhedron, vol.161, pp.104-110, 2019 (SCI-Expanded)
42. **Tripodal synthetic receptors based on cyclotriphosphazene scaffold for highly selective and sensitive spectrofluorimetric determination of iron(III) in water samples**  
Tumay S. O., Yesilot S.

- JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, vol.372, pp.156-167, 2019 (SCI-Expanded)
43. **Constitutional isomers of dendrimer-like pyrene substituted cyclotriphosphazenes: synthesis, theoretical calculations, and use as fluorescence receptors for the detection of explosive nitroaromatics**  
Alidagi H. A., Tumay S. O., Senocak A., Ciftbudak O. F., Cosut B., Yesilot S.  
NEW JOURNAL OF CHEMISTRY, vol.43, no.42, pp.16738-16747, 2019 (SCI-Expanded)
  44. **Development of cloud point extraction preconcentration of cadmium and lead in solid samples using flame atomic absorption spectrometry**  
Bahadir Z., YAZAR M., Tumay S. O., Serencam H., Bektas H., DURAN C.  
DESALINATION AND WATER TREATMENT, vol.124, pp.193-201, 2018 (SCI-Expanded)
  45. **Pyrene functionalized cyclotriphosphazene-based dyes: Synthesis, intramolecular excimer formation, and fluorescence receptor for the detection of nitro-aromatic compounds**  
Alidagi H. A., Tumay S. O., Senocak A., Yesilot S.  
DYES AND PIGMENTS, vol.153, pp.172-181, 2018 (SCI-Expanded)
  46. **Novel iron(III) selective fluorescent probe based on synergistic effect of pyrene-triazole units on a cyclotriphosphazene scaffold and its utility in real samples**  
Tumay S. O., Sarikaya S. Y., Yesilot S.  
JOURNAL OF LUMINESCENCE, vol.196, pp.126-135, 2018 (SCI-Expanded)
  47. **Experimental and theoretical studies of carbazole-based Schiff base as a fluorescent Fe<sup>3+</sup> probe**  
Kandemir H., Kocak A., Tumay S. O., Cosut B., Zorlu Y., Sengul I. F.  
TURKISH JOURNAL OF CHEMISTRY, vol.42, no.2, pp.221-236, 2018 (SCI-Expanded)
  48. **A systematic series of fluorescence chemosensors with multiple binding sites for Hg(II) based on pyrenyl-functionalized cyclotriphosphazenes and their application in live cell imaging**  
Tumay S. O., Uslu A., Alidagi H. A., Kazan H. H., Bayraktar C., Yolacan T., DURMUŞ M., Yesilot S.  
NEW JOURNAL OF CHEMISTRY, vol.42, no.17, pp.14219-14228, 2018 (SCI-Expanded)
  49. **Synthesis and physico-chemical properties of cyclotriphosphazene-BODIPY conjugates**  
Cetindere S., Tumay S. O., Kilic A., DURMUŞ M., Yesilot S.  
DYES AND PIGMENTS, vol.139, pp.517-523, 2017 (SCI-Expanded)
  50. **Imidazole/benzimidazole-modified cyclotriphosphazenes as highly selective fluorescent probes for Cu<sup>2+</sup>: synthesis, configurational isomers, and crystal structures**  
Uslu A., Tumay S. O., Senocak A., Yuksel F., Ozcan E., Yesilot S.  
DALTON TRANSACTIONS, vol.46, no.28, pp.9140-9156, 2017 (SCI-Expanded)
  51. **Synthesis and spectral properties of fluorene substituted cyclic and polymeric phosphazenes**  
Alidagi H. A., Hacivelioglu F., Tumay S. O., Cosut B., Yesilot S.  
INORGANICA CHIMICA ACTA, vol.457, pp.95-102, 2017 (SCI-Expanded)
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1. **A novel selective "turn-on" fluorescent sensor for hg<sup>2+</sup> and its utility for spectrofluorimetric analysis of real samples**

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## Books & Book Chapters

1. **Ferrite Nanomaterials: Preparation, Properties And Applications In Electrochemical And Optical Sensor Technologies**

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## Refereed Congress / Symposium Publications in Proceedings

1. **Piren Dekore Hibrid Biyokütle Temelli Floresans Karbon Nano-Nokta Sensörlerin Hazırlanması ve Nitroanilin Türevi Herbisitlerin Tayininde Kullanımı**  
TÜMAY S. O., ÖZTÜRK D., ŞENOCAK A., ŞANKO V., DEMİRBAŞ Ü., KHATAEE A. R., YEŞİLOT S., DURMUŞ M., DEMİRBAŞ E., KILIÇ Z.  
35. Ulusal Kimya Kongresi, Diyarbakır, Turkey, 09 September 2024
2. **Floresans NBD-BODIPY Öncü Bileşiklerinin Sentezi, Saflaştırılması, Karakterizasyonu ve Hibrid Nanokristalin Selüloz Sensör Sistemlerinin Hazırlanmasında Kullanımı**  
TÜMAY S. O., ÖMEROĞLU AYYILDIZ İ., ŞENOCAK A., ŞANKO V.  
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3. **Monitoring a tumor-targeting BODIPY-based theranostic nanomaterial with photoacoustic imaging**  
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4. **New Approaches to Increase Lifetime in Enzymatic Urea Biosensor**  
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6. **The use of novel fluorescent nano-sized tubular clay mineral in electrospun membrane and its application as a detection platform**



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7. **Effect of Calcination Temperature on Structural and Morphological Properties of Nickel Ferrite Nanoparticles and Biosensor Application**  
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8. **Design and Characterization of Zinc Ferrite Nanoparticles as Enzyme Immobilization Matrix**  
ŞANKO V., ŞENOCAK A., TÜMAY S. O., DEMİRBAŞ E.  
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9. **Enzimatik Elektrokimyasal Biyosensör Tasarımında Biyopolimer Etkisinin İncelenmesi**  
ŞANKO V., ŞENOCAK A., TÜMAY S. O., DEMİRBAŞ E.  
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10. **Synthesis, Optimization and Electrochemical Sensor Application of Copper Ferrite Nanoparticles**  
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11. **MAX-Faz Malzemenin Elektrokimyasal Sensor Çalışmaları Üzerindeki Etkilerinin İncelenmesi**  
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33. Ulusal Kimya Kongresi, Tekirdağ, Turkey, 7 - 09 October 2021
12. **ESİPT Aktif Ve İnaktif Sistemleri İçeren Yeni Tip Siklotrifosfazen Temelli Moleküllerin Dizaynı Ve Fotofiziksel Özelliklerinin İncelenmesi**  
MUTLU BALCI C., TÜMAY S. O., BEŞLİ S.  
VIII. Ulusal Anorganik Kimya Kongresi, Tekirdağ, Turkey, 2 - 05 September 2021
13. **Tiyofen Modifiye Naftalen Temelli Schiff Bazının Sentezi, Karakterizasyonu, Fotofiziksel Ve Floresans Sensör Özelliklerinin İncelenmesi**  
TÜMAY S. O.  
VIII. Ulusal Anorganik Kimya Kongresi, Tekirdağ, Turkey, 2 - 05 September 2021
14. **Schiff Bazı İçeren Yeni Siklotrifosfazen Türevlerinin Sentezi ve Fiziksel Özelliklerinin İncelenmesi**  
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15. **BODIPY Modifiye Ferrosen Bileşiğinin Hazırlanması, Fotofiziksel, Elektrokimyasal Özelliklerinin İncelenmesi ve Floresans Sensör Uygulamaları**  
TÜMAY S. O.  
32. Ulusal Kimya Kongresi, Turkey, 17 - 19 September 2020
16. **Ferrosen-Karbazol ile Modifiye Edilmiş Yeni Karbon Nanotüp Hibrid Malzeme Sentezi ve Pestisit Sensör Uygulamaları**  
ŞENOCAK A., TÜMAY S. O., SARI E., DURMUŞ M., DEMİRBAŞ E.  
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17. **Investigation of Fluorescent Sensor Properties of Coumarin Modified Carbon Nanotube**  
TÜMAY S. O.  
3rd International Conference on Physical Chemistry and Functional Materials (PCFM2020), Malatya, Turkey, 22 - 24 September 2020
18. **Synthesis of Pesticide Sensor from Thiophene-Ferrocene Functionalized Carbon Nanotube**  
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3rd International Conference on Physical Chemistry and Functional Materials (PCFM2020), Malatya, Turkey, 22 - 24 September 2020
19. **Pyrene-BODIPY substituted novel cyclotriphosphazene compounds: synthesis, photophysical and electrochemical properties**  
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21. JCFFrühjahrssymposium, Bremen, Germany, 20 - 23 March 2019
20. **Floresans Özellik Gösteren Halkalı Fosfazen Temelli Bileşiğin Sentezi ve Sensör Özelliklerinin İncelenmesi**

- YEŞİLOT S., TÜMAY S. O.  
30. ULUSAL KİMYA KONGRESİ, Gazimagusa, Cyprus (Kktc), 5 - 08 November 2018
21. **TRIPODAL SYNTHETIC RECEPTORS BASED ON CYCLOTRIPHOSPHAZENE SCAFFOLDS**  
YEŞİLOT S., TÜMAY S. O.  
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24. **Imidazole/Benzimidazole-Modified Cyclotriphosphazenes as Fluorescent Probes for Cu<sup>2+</sup>**  
USLU A., TÜMAY S. O., ÖZCAN E., YEŞİLOT S.  
III.International Turkish Congress on Molecular Spectroscopy, Muğla, Turkey, 26 - 29 August 2017
25. **A highly selective and sensitive fluorescence probe for Iron(III) ions based on a cyclotriphosphazene scaffold**  
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29. **The Synthesis of Selective Mercury II Ion Fluorescence Sensors Based on Phosphazene Core**  
TÜMAY S. O., YOLAÇAN T., ARDIÇ ALİDAĞI H., DURMUŞ M., YEŞİLOT S.  
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## Courses

Anorganik Kimya Laboratuvarı, Undergraduate, 2024 - 2025  
Chemistry, Undergraduate, 2024 - 2025  
General Chemistry Laboratory-I, Undergraduate, 2023 - 2024  
Instrumental Analysis Laboratory, Undergraduate, 2023 - 2024  
General Chemistry-I, Undergraduate, 2023 - 2024  
General Chemistry Laboratory-II, Undergraduate, 2022 - 2023  
General Chemistry-I, Undergraduate, 2022 - 2023  
General Chemistry Laboratory II, Undergraduate, 2021 - 2022  
General Chemistry Laboratory I, Undergraduate, 2022 - 2023  
General Chemistry-II, Undergraduate, 2020 - 2021  
General Chemistry Laboratory I, Undergraduate, 2021 - 2022  
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## Research Areas

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