

## Lect. PhD Elif Seda KOÇOĞLU

### Personal Information

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### International Researcher IDs

ORCID: 0000-0001-6175-2335

Publons / Web Of Science ResearcherID: GOJ-9371-2022

ScopusID: 57191955419

Yoksis Researcher ID: 265207

### Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Analitik Kimya, Turkey 2016 - 2022

Postgraduate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Kimya Mühendisliği, Turkey 2013 - 2016

Undergraduate, Yildiz Technical University, Fen Edebiyat Fakültesi, Kimya, Turkey 2008 - 2013

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Development of Innovative Preconcentration Methods for Determination of Organic/Inorganic Analytes in Different Matrices and Elemental Distributions in Pole Samples, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, 2022

Postgraduate, Sertralinin GC-MS Sisteminde Düşük Seviyelerde Tayinine Yönelik Analitik Yöntem Geliştirilmesi ve Yapay Mide Ortamındaki Kararlılığının Tespit Edilmesi, Yıldız Teknik Üniversitesi, Graduate School of Natural and Applied Sciences, Kimya Mühendisliği, 2016

### Research Areas

Chemistry, Analytical Chemistry, Atomic Mass Spectrometry, Atomic and Molecular Spectroscopy, Chromatographic Analysis, Mass Spectroscopy, Molecular Mass Spectroscopy, Spectroscopical Methods, Natural Sciences

### Academic Titles / Tasks

Lecturer PhD, Yildiz Technical University, Rectorate, -, 2022 - Continues

Lecturer, Yildiz Technical University, Rectorate, -, 2017 - 2022

- I. **Implementation of simple and effective fine droplet formation-based spray-assisted liquid phase microextraction for the simultaneous determination of twenty-nine endocrine disruptor compounds and pesticides in rock, soil, water, moss, and feces samples from antarctica using gas chromatography-mass spectrometry**  
Zaman B. T., Bozyiğit G., Şaylan M., Koçoğlu E. S., Kartoğlu B., Aydın E. S., Girgin A., Borahan T., Oflu S., Kılınç Y., et al.  
Environmental Science and Pollution Research, vol.31, no.7, pp.10920-10933, 2024 (SCI-Expanded)
- II. **The experimental design approach to removal of endocrine disrupting compounds from domestic wastewater by electrooxidation process**  
Sözüdoğru O., Koçoğlu E. S., Yılmaz A. E., Bakirdere S., Komesli O. T.  
JOURNAL OF APPLIED ELECTROCHEMISTRY, vol.53, pp.1971-1990, 2023 (SCI-Expanded)
- III. **Distribution of elements in rock/soil and seaweed/moss samples from the West Antarctic region**  
KOÇOĞLU E. S., Gösterişli T., Tekin Z., Borahan T., ÖZ E., BAKIRDERE S.  
International Journal of Environmental Science and Technology, vol.20, no.7, pp.7533-7542, 2023 (SCI-Expanded)
- IV. **Trace nickel determination in seawater matrix using combination of dispersive liquid-liquid microextraction and triethylamine-assisted Mg(OH)<sub>2</sub> method**  
Kublay İ. Z., KOÇOĞLU E. S., Oflu S., ARVAS B., YOLAÇAN Ç., BAKIRDERE S.  
Environmental Monitoring and Assessment, vol.195, no.7, 2023 (SCI-Expanded)
- V. **Determination of trace cadmium in seawater using combination of polystyrene coated magnetic nanoparticles based DSPE and triethylamine assisted Mg(OH)<sub>2</sub> method**  
Seda Koçoğlu E. S., Zehra Kublay İ., UNUTKAN GÖSTERİŞLİ T., BAKIRDERE S.  
MICROCHEMICAL JOURNAL, vol.179, 2022 (SCI-Expanded)
- VI. **Accurate and Sensitive Determination of Concentrations of Twenty-Two Elements in the Surface Water from West Antarctica**  
UNUTKAN GÖSTERİŞLİ T., KOÇOĞLU E. S., ÖZTÜRK ER E., BAKIRDERE S.  
WATER AIR AND SOIL POLLUTION, vol.233, no.7, 2022 (SCI-Expanded)
- VII. **Development of a metal sieve-linked double syringe liquid phase microextraction method for the determination of copper in olive leaf extract samples by flame atomic absorption spectrometry**  
Gösterişli T., Kublay İ. Z., Oflu S., Kılınç Y., Koçoğlu E. S., Zaman B. T., Keyf S., Bakirdere S.  
Food Chemistry, vol.377, 2022 (SCI-Expanded)
- VIII. **Development and validation of dispersive liquid-liquid microextraction method for the determination of 15 polycyclic aromatic hydrocarbons in 200 Antarctica samples by gas chromatography mass spectrometry**  
Ercan M. S. F., Ayyıldız M. F., Yazıcı E., Metin B., Chormey D. S., Koçoğlu E. S., Bakirdere S.  
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.194, no.5, 2022 (SCI-Expanded)
- IX. **Performance Evaluation of A/O Membrane Bioreactor System in the Effective Removal of Endocrine-Disrupting Chemicals: the Effect of SRT and Flux Rate**  
Sözüdoğru O., Koçoğlu E. S., Yılmaz A. E., Bakirdere S., Komesli O. T.  
Water Air And Soil Pollution, vol.233, pp.119-135, 2022 (SCI-Expanded)
- X. **Dispersive solid phase extraction based on reduced graphene oxide modified Fe<sub>3</sub>O<sub>4</sub> nanocomposite for trace determination of parabens in rock, soil, moss, seaweed, feces, and water samples from Horseshoe and Faure Islands**  
Tekin Z., Karlıdağ N. E., Özdoğan N., KOÇOĞLU E. S., BAKIRDERE S.  
Journal of Hazardous Materials, vol.426, 2022 (SCI-Expanded)
- XI. **Quantification of palladium in wastewater samples by matrix-matching calibration strategy assisted deep eutectic solvent based microextraction**  
Koçoğlu E. S., Yılmaz Ö., Bakirdere E. G., Bakirdere S.  
Environmental Monitoring and Assessment, vol.193, no.6, 2021 (SCI-Expanded)
- XII. **Zirconium nanoparticles based dispersive solid phase extraction prior to slotted quartz tube-flame atomic absorption spectrophotometry for the determination of selenium in green tea samples**  
Ebrar K., Seda K., Toprak M., Yılmaz O., Bakirdere S.  
FOOD CHEMISTRY, vol.329, 2020 (SCI-Expanded)

- XIII. **Sensitive Determination of Selected Drug Active Compounds in Wastewater Matrices by LC-QTOF-MS/MS after Vortex Assisted Binary Solvents Dispersive Liquid-Liquid Microextraction**  
Seda Koçođlu E. S., SÖZÜDOĐRU O., KOMESLİ O. T., YILMAZ A. B., Er E., BAKIRDERE S.  
CHEMISTRY LETTERS, vol.49, no.5, pp.546-549, 2020 (SCI-Expanded)
- XIV. **Accurate and Precise Determination of Gold in Plating Bath Solution: Deep Eutectic Solvent Based Liquid Phase Microextraction–Slotted Quartz Tube–Flame Atomic Absorption Spectrometry**  
Yılmaz Ö., Durak B. Y., Tekin Z., Koçođlu E. S., Bakırdere S.  
Analytical Letters, vol.53, no.2, pp.165-173, 2020 (SCI-Expanded)
- XV. **Simultaneous determination of drug active compound, hormones, pesticides, and endocrine disruptor compounds in wastewater samples by GC-MS with direct calibration and matrix matching strategies after preconcentration with dispersive liquid-liquid microextraction**  
Koçođlu E. S., Sözüdođru O., Komesli O. T., Yılmaz A. E., Bakırdere S.  
Environmental Monitoring and Assessment, vol.191, no.11, 2019 (SCI-Expanded)
- XVI. **A Novel Liquid–Liquid Extraction for the Determination of Sertraline in Tap Water and Waste Water at Trace Levels by GC–MS**  
Koçođlu E. S., Bakırdere S., Keyf S.  
Bulletin of Environmental Contamination and Toxicology, vol.99, pp.354-359, 2017 (SCI-Expanded)
- XVII. **Sensitive Determination of Sertraline in Commercial Drugs and Its Stability Check in Simulated Gastric Juice**  
Koçođlu E. S., Bakırdere S., Keyf S.  
JOURNAL OF AOAC INTERNATIONAL, vol.99, pp.1527-1532, 2016 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Internet-Based learning from the perspective of employees: A study on analysis of awareness, use case and effectiveness**  
KOÇOĐLU F. Ö., GÜLSEÇEN S., EROL Ç., KOÇOĐLU E. S.  
World Journal on Educational Technology, vol.8, 2016 (Scopus)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Kadmiyumun Yenilikçi Analitik Yaklaşımlarla Tayini**  
Koçođlu E. S.  
VI. Eser Analiz Kongresi, Manisa, Turkey, 5 - 08 September 2024
- II. **Endokrin Bozucu Bileşenlerin Gaz Kromatografisi ile Tayinlerinde Kullanılan Yenilikçi Mikroekstraksiyon Yöntemleri**  
Koçođlu E. S.  
17. Ulusal Spektroskopi Kongresi, Zonguldak, Turkey, 30 May - 01 June 2024, pp.49
- III. **Trace Level Determination of Nickel in Seawater Matrix Using the Combination of Microextraction and Coprecipitation Methods**  
Kublay İ. Z., Koçođlu E. S., Oflu S., Arvas B., Bakırdere S.  
19th Asian Chemical Congress, İstanbul, Turkey, 9 - 14 July 2023
- IV. **Trace Determination of Parabens in Different Matrices Using Reduced Graphene Oxide Modified Fe3O4 Nanocomposite Based Dispersive Solid Phase Extraction**  
Tekin Z., Karlıdağ N. E., Özdoğan N., Koçođlu E. S., Bakırdere S.  
19th Asian Chemical Congress, İstanbul, Turkey, 9 - 14 July 2023
- V. **Deep eutectic solvent based microextraction method for the preconcentration/extraction of palladium from wastewater samples prior to slotted quartz tube – flame atomic absorption spectrometry measurement**

Koçođlu E. S., Yılmaz Ö., Bakırdere E. G., Bakırdere S.

PBA 2023 33rd International Symposium on Pharmaceutical and Biomedical Analysis, Ankara, Turkey, 2 - 06 July 2023

- VI. **Simultaneous Determination of 29 Endocrine Disruptor Compounds-Pesticides in Rock, Soil, Water, Moss and Feces Samples from Antarctica Using Simple and Effective Fine Droplet Formation Based Spray Assisted Liquid Phase Microextraction Prior to Gas Chromatography-Mass Spectrometry**  
Zaman B. T., Dalgıç Bozyiđit G., Koçođlu E. S., Kartođlu B., Aydın E. S., Girgin A., Borahan T., Oflu S., Kılınç Y., Bakırdere S.  
4th International Environmental Chemistry (EnviroChem) Congress, Antalya, Turkey, 30 October - 02 November 2022, pp.7
- VII. **KAPLAMA BANYOSU ÇÖZELTİSİNDE BULUNAN ALTIN ELEMENTİNİN DERİN ÖTEKTİK SOLVENT ESASLI SIVI FAZ MİKROEKSTRAKSİYON YÖNTEMİ SONRASI YKT-AAAS İLE YÜKSEK DOĐRULUK VE DUYARLILIKTA TAYİNİ**  
Yılmaz Ö., Yılmaz Durak B., Tekin Z., Koçođlu E. S., Bakırdere S.  
10. Ulusal Analitik Kimya Kongresi, Muđla, Turkey, 8 - 11 September 2022, pp.70
- VIII. **Batı Antarktika yüzey deniz sularında bulunan 22 elementin tayinine yönelik analitik tayin yöntemi geliştirilmesi**  
Unutkan Gösterişli T., Koçođlu E. S., Öztürk Er E., Bakırdere S.  
10. Ulusal Analitik Kimya Kongresi, Muđla, Turkey, 7 - 11 September 2022, pp.111
- IX. **Accurate and Sensitive Determination of Trace Cadmium in Seawater Using the Combination of Polystyrene Coated Magnetic Nanoparticles Based Solid Phase Microextraction and Triethylamine Assisted Mg(OH)<sub>2</sub> Co-Precipitation Method by Slotted Quartz Tube-Flame Atomic Absorption Spectrometry**  
Koçođlu E. S., Kublay İ. Z., Unutkan Gösterişli T., Bakırdere S.  
5. Ulusal Kutup Bilimleri Çalıştayı, Kocaeli, Turkey, 30 November 2021
- X. **A Sensitive and Accurate Analytical Strategy: Zirconium Nanoparticles based Dispersive Solid Phase Extraction Prior to Slotted Quartz Tube Flame Atomic Absorption Spectrophotometry for the Determination of Selenium in Green Tea Samples**  
Karlıdađ N. E., Koçođlu E. S., Toprak M., Yılmaz Ö., Bakırdere S.  
2nd International Congress on Analytical and Bioanalytical Chemistry (2nd ICABC 2020), Antalya, Turkey, 11 - 14 March 2020, pp.137
- XI. **Simultaneous Determination of Selected Drug Active Compounds in Wastewater Matrix by Binary Solvent Dispersive Liquid-Liquid Microextraction-LC-QTOF-MS/MS System**  
Koçođlu E. S., Sözüdođru O., Komesli O. T., Yılmaz A. E., Öztürk Er E., Bakırdere S.  
1st INTERNATIONAL CONGRESS on ANALYTICAL and BIOANALYTICAL CHEMISTRY, Antalya, Turkey, 27 March 2019, pp.223
- XII. **Development of a Sensitive and Accurate Dispersive Liquid - Liquid Microextraction Method for the Determination of Hydroxymethylfurfural in Honey Samples by HPLC after the Optimization by BoxBehnken Design**  
YILMAZ Ö., KOÇOĐLU E. S., BAKIRDERE S.  
11th Aegean Analytical Chemistry Days (AACD2018), Girit, Greece, 25 September 2018
- XIII. **Accurate and sensitive simultaneous determination of drug active compound, pesticides, hormones and endocrine disruptor compounds in wastewater samples using GC-MS after dispersive liquid-liquid microextraction**  
Koçođlu E. S., Sözüdođru O., Komesli O. T., Yılmaz A. E., Bakırdere S.  
11th Aegean Analytical Chemistry Days (AACD2018), Hania, Greece, 25 September 2018
- XIV. **A Novel Liquid-Liquid Extraction for the Determination of Sertraline in Tap Water and Waste Water Samples at Trace Levels by GC-MS**  
KOÇOĐLU E. S., BAKIRDERE S., KEYF S.  
7th International IUPAC Conference on Green Chemistry, 2 - 05 October 2017
- XV. **Development of an Analytical Method for the Determination of Amoxicillin in Commercial Drugs and**

### **Wastewater Samples, and Assessing its Stability in Simulated Gastric Digestion**

Unutkan T., Koçođlu E. S., Bakırdere S., Keyf S.

10th Aegean Analytical Chemistry Days, Çanakkale, Turkey, 29 September - 02 October 2016, pp.21

### **XVI. SERTRALİNİN GC-MS SİSTEMİNDE DÜŞÜK SEVİYELERDE TAYİNİNE YÖNELİK ANALİTİK YÖNTEM GELİŞTİRİLMESİ VE YAPAY MİDE ORTAMINDAKİ KARARLILIĞININ TESPİT EDİLMESİ**

Koçođlu E. S., Bakırdere S., Keyf S.

EsAn-2016, IV. ESER ANALİZ KONGRESİ, Sakarya, Turkey, 19 - 22 May 2016, pp.65

### **XVII. Internet Based Learning from the Perspective of Employees: Study on Analysis of Awareness, Use Case and Effectiveness**

Koçođlu F. Ö., Gülseçen S., Erol Ç., Koçođlu E. S.

6th World Conference on Learning Teaching and Educational Leadership, Paris, France, 29 - 31 October 2015, pp.1

## **Supported Projects**

Bakırdere S., Öz E., Özdoğan N., Öztürk Er E., TÜBİTAK Project, Horseshoe Adasındaki Çevresel Örneklerde Organik/İnorganik Kirleticilerin, Değerli Metallerin ve Radyoaktif Elementlerin Önderiştirme Yöntemleri ile Birleştirilmiş Kromatografik ve Spektroskopik Yöntemler Kullanılarak Yüksek Doğruluk ve Duyarlılıkta Tayinleri, 2020 - 2023  
Komesli O. T., Bakırdere S., TÜBİTAK Project, Endokrin Bozucu Maddelerin Membran Biyoreaktöre Entegre Edilmiş İleri Elektrokoksidasyon Sistemleri ile Arıtımının Araştırılması, 2016 - 2018

## **Mobility Activity**

Other, Scientific Research, Antarctic Turkish Scientific Research Camp (TAE IV), Antarctica, 2020 - 2020

## **Metrics**

Publication: 35

Citation (WoS): 90

Citation (Scopus): 100

H-Index (WoS): 5

H-Index (Scopus): 6

## **Congress and Symposium Activities**

VI. Eser Analiz Kongresi, Attendee, Manisa, Turkey, 2024

17. Ulusal Spektroskopi Kongresi, Attendee, Zonguldak, Turkey, 2024

33rd International Symposium on Pharmaceutical and Biomedical Analysis, Attendee, Ankara, Turkey, 2023

10. Ulusal Analitik Kimya Kongresi, Attendee, Muğla, Turkey, 2022

5. Ulusal Kutup Bilimleri Çalıştayı, Attendee, Kocaeli, Turkey, 2021

2nd International Congress on Analytical and Bioanalytical Chemistry, Attendee, Antalya, Turkey, 2020

1st International Congress on Analytical and Bioanalytical Chemistry, Attendee, Antalya, Turkey, 2019

11th Aegean Analytical Chemistry Days, Attendee, Hania, Greece, 2018

11th Aegean Analytical Chemistry Days, Session Moderator, Hania, Greece, 2018

7th International IUPAC Conference on Green Chemistry, Attendee, Moscow, Russia, 2017

AACD 2016, 10th Aegean Analytical Chemistry Days, Attendee, Çanakkale, Turkey, 2016

ESAN 2016, IV. Eser Analiz Kongresi, Attendee, Sakarya, Turkey, 2016

## **Awards**

Koçođlu E. S., Bakırdere S., Keyf S., En İy Poster İkincilik Ödülü, Sertralinin GC-MS Sisteminde Düşük Seviyelerde Tayinine Yönelik Analitik Yöntem Geliştirilmesi ve Yapay Mide Ortamındaki Kararlılığının Tespit Edilmesi, Iv. Eser Analiz Kongresi, Esan 2016, May 2016

## **Non Academic Experience**

Antarktika Türk Bilimsel Araştırma Kampı