

Assoc. Prof. İLKNUR DURUKAN TEMUGE

Personal Information

Office Phone: [+90 312 780 6172](tel:+903127806172)

Office Phone: [+90 312 297 7800](tel:+903122977800) Extension: 125

Email: ilknurt@hacettepe.edu.tr

Web: <https://avesis.hacettepe.edu.tr/ilknurt>

Address: hacettepe üniversitesi çevre mühendisliği bölümü beytepe kampüsü 06800 çankaya ankara

International Researcher IDs

ORCID: 0000-0002-7200-5789

ScopusID: 56407065200

Yoksis Researcher ID: 170342

Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Kimya Bölümü, Turkey 2005 - 2012

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Kimya Bölümü, Turkey 2002 - 2005

Undergraduate, Hacettepe University, Fen Fakültesi, Kimya Bölümü, Turkey 1997 - 2001

Foreign Languages

English, C1 Advanced

German, A1 Beginner

Dissertations

Doctorate, Analysis of atmospheric aerosol samples with spectrometric methods, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Kimya (Dr), 2012

Postgraduate, Preconcentration of lead by on-line solid-phase extraction using a PTFE packed column and flame atomic absorption spectrometry, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), 2005

Research Areas

Environmental Engineering, Environmental Sciences, Environmental Chemistry, Environmental Technology, Air Pollution and Control, Particle Control, Water Pollution and Control, Soil and Groundwater Pollution and Control, Life Sciences, Environmental Biology, Environmental Pollution, Chemistry, Analytical Chemistry, Adsorption Spectroscopy, Atomic Mass Spectrometry, Separation Methods, Emission Spectroscopy, Food Analysis, Infrared Spectroscopy, Microchemical Analysis, Sample preparation, Spectroscopical Methods, Natural Sciences, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Hacettepe University, Mühendislik Fakültesi, Çevre Mühendisliği Bölümü, 2016 - Continues

Assistant Professor, Hacettepe University, Mühendislik Fakültesi, Çevre Mühendisliği Bölümü, 2015 - 2019

Expert, Hacettepe University, Fen Fakültesi, Kimya Bölümü, 2012 - 2015

Research Assistant, Hacettepe University, Fen Fakültesi, Kimya Bölümü, 2006 - 2012

Academic and Administrative Experience

Bölüm Akademik Teşvik Değerlendirme Komisyonu Üyesi, Hacettepe University, Mühendislik Fakültesi, Çevre Mühendisliği Bölümü, 2022 - Continues

Deputy Director of the Center, Hacettepe University, Mühendislik Fakültesi, Çevre Mühendisliği Bölümü, 2021 - Continues

Deputy Director of the Center, Hacettepe University, Mühendislik Fakültesi, Çevre Mühendisliği Bölümü, 2021 - Continues

Deputy Head of Department, Hacettepe University, Mühendislik Fakültesi, Çevre Mühendisliği Bölümü, 2021 - Continues

Staj Koordinatörü, Hacettepe University, Mühendislik Fakültesi, Çevre Mühendisliği Bölümü, 2020 - Continues

Courses

Special Topics, Undergraduate, 2021 - 2022

Instrumental Analysis, Undergraduate, 2017 - 2018

ENVIRONMENTAL CHEMISTRY LABORATORY, Undergraduate, 2017 - 2018, 2016 - 2017

ENVIRONMENTAL CHEMISTRY 2, Undergraduate, 2017 - 2018, 2016 - 2017

BASIC WATER CHEMISTRY, Doctorate, 2017 - 2018, 2016 - 2017

ENVIRONMENTAL CHEMISTRY 1, Undergraduate, 2018 - 2019

CEV210 Environmental Microbiology Laboratory, Undergraduate, 2016 - 2017

Advising Theses

Durukan Temuge İ., CARBON FOOTPRINT CALCULATION OF A LARGE SCALE WASTEWATER TREATMENT PLANT, Postgraduate, K.Özlem(Student), Continues

Durukan Temuge İ., RECOVERY OF GOLD FROM MINING WASTED AND PRECONCENTRATION BY MICRO-EXTRACTION AND THEN DETERMINATION BY ATOMIC ABSORPTION SPECTROMETRY, Doctorate, J.Şakıyan(Student), Continues

DURUKAN TEMUGE İ., BİYOKÜTLENİN POLİMERLERLE KO-PIROLİZİ, Postgraduate, E.AKALIN(Student), 2017

DURUKAN TEMUGE İ., SU ÖRNEKLERİNDE KATILAŞTIRILMIŞ YÜZEN ORGANİK DAMLA MİKROEKSTRAKSİYONU YÖNTEMİYLE KOBALT TAYİNİ, Postgraduate, M.ÜNALDI(Student), 2017

DURUKAN TEMUGE İ., PRECONCENTRATION OF TRACE HEAVY METAL IONS IN TEXTILES AND DETERMINATION BY FLAME ATOMIC ABSORPTION SPECTROMETER, Doctorate, S.KESEKLER(Student), 2015

DURUKAN TEMUGE İ., PRECONCENTRATION OF TRACE HEAVY METAL IONS IN COSMETICS AND DETERMINATION BY FLAME ATOMIC ABSORPTION SPECTROMETER, Doctorate, M.YAHYA(Student), 2015

Published journal articles indexed by SCI, SSCI, and AHCI

- I. Ionic Liquid-Solidified Floating Organic Drop Microextraction for the Preconcentration of Lead in Environmental Water Samples Prior to Its Determination with Electrothermal Atomic Absorption Spectrometry**

DURUKAN TEMUGE İ., YILDIZ B.

MOLECULES, no.17, 2024 (SCI-Expanded)

- II. Ionic Liquid-Based Solidified Floating Organic Drop Micro-Extraction Followed by Graphite Furnace Atomic Absorption Spectrometry for the Determination of Mercury in Water Samples**

DURUKAN TEMUGE İ.

APPLIED SCIENCES-BASEL, no.14, 2024 (SCI-Expanded)

- III. **Green Surfactant Assisted-Solidified Floating Organic Drop Micro-Extraction (SA-SFODME) for the Preconcentration of Trace Lead with Determination by Flame Atomic Absorption Spectrometry (FAAS)**
DURUKAN TEMUGE İ.
ANALYTICAL LETTERS, 2024 (SCI-Expanded)
- IV. **Microwave-Assisted Hydrothermal Synthesis of Zinc-tin Based Nanoflower for the Adsorptive Removal of Cadmium from Synthetic Wastewater**
Toprak M., YILDIZ B., Zaman B. T., DALGIÇ BOZYİĞİT G., DURUKAN TEMUGE İ., Cetin G., BAKIRDERE S.
WATER AIR AND SOIL POLLUTION, no.5, 2024 (SCI-Expanded)
- V. **Prevalence, comorbidities and mediators of childhood anxiety disorders in urban Turkey: a national representative epidemiological study**
Mutluer T., GÖRKER I., AKDEMİR D., ÖZDEMİR D., Ozel O. O., Vural P., Tufan A., Karacetin G., ARMAN A., Fis N. P., et al.
Social Psychiatry and Psychiatric Epidemiology, vol.58, no.6, pp.919-929, 2023 (SCI-Expanded)
- VI. **Determination of prohibited lead and cadmium traces in hair dyes and henna samples using ultrasound assisted-deep eutectic solvent-based liquid phase microextraction followed by microsampling-flame atomic absorption spectrometry**
Yahya M., Kesekler S., DURUKAN TEMUGE İ., ARPA ÇALIŞIR Ç.
ANALYTICAL METHODS, vol.13, no.8, pp.1058-1068, 2021 (SCI-Expanded)
- VII. **Co-hydrothermal Liquefaction of Lignocellulosic Biomass with Kukersite Oil Shale**
Akalin E., Kim Y., Alper K., Oja V., TEKİN K., Durukan İ., Siddiqui M. Z., Karagöz S.
Energy and Fuels, vol.33, no.8, pp.7424-7435, 2019 (SCI-Expanded)
- VIII. **Determination of Antimony from Polyethylene Terephthalate in Drinking Water by Solid Floating Organic Drop Microextraction and Electrothermal Atomization Atomic Absorption Spectrometry**
ATAKAN D., Durukan İ., Bektas S.
Analytical Letters, vol.49, no.7, pp.1066-1078, 2016 (SCI-Expanded)
- IX. **Preconcentration of Bismuth(III) by Ultrasound Assisted Emulsification Solidified Floating Organic Drop Microextraction and Analysis by Atomic Absorption Spectrometry**
TEKİN K., Durukan I.
Clean - Soil, Air, Water, vol.44, no.4, pp.356-361, 2016 (SCI-Expanded)
- X. **An application of coacervate-based extraction for the separation and preconcentration of cadmium, lead, and nickel ions prior to their determination by flame atomic absorption spectrometry in various water samples.©Tüübütak.**
SATTI A. A., DURUKAN TEMUGE İ., Bektaş S., ARPA ŞAHİN Ç.
Turkish Journal of Chemistry, vol.40, no.6, pp.979-987, 2016 (SCI-Expanded)
- XI. **Effect of Bleaching on Mercury Release from Amalgam Fillings and Antioxidant Enzyme Activities: A Pilot Study**
Cakir F. Y., ERGİN E., Gurgan S., SABUNCUOĞLU S., Arpa Ç., Tokgoz I., Ozgunes H., Kiremitci A.
JOURNAL OF ESTHETIC AND RESTORATIVE DENTISTRY, vol.27, no.1, pp.29-36, 2015 (SCI-Expanded)
- XII. **Arsenic removal in a sulfidogenic fixed-bed column bioreactor**
Altun M., ŞAHİNKAYA E., Durukan I., Bektas S., Komnitsas K.
JOURNAL OF HAZARDOUS MATERIALS, vol.269, pp.31-37, 2014 (SCI-Expanded)
- XIII. **Indoor Aerosol Determination with Respect to a Soiling Phenomenon in Private Residences**
Fittschen U. E. A., Santen M., Rehmers A., Durukan I., Wesselmann M.
ENVIRONMENTAL SCIENCE & TECHNOLOGY, vol.47, no.1, pp.608-615, 2013 (SCI-Expanded)
- XIV. **Enrichment and Separation of Fe(III), Mn(II), Ni(II), and Zn(II) as Their Congo Red Chelates on Multiwalled Carbon Nanotube (MWCNT) Disk in Food and Water Samples**
Durukan I., SOYLAK M., Dogan M.
ATOMIC SPECTROSCOPY, vol.34, no.1, pp.20-25, 2013 (SCI-Expanded)
- XV. **Plasma protein oxidation is correlated positively with plasma iron levels and negatively with**

hemolysate zinc levels in sickle-cell anemia patients

Oztas Y., Durukan I., Unal S., Ozgunes N.

INTERNATIONAL JOURNAL OF LABORATORY HEMATOLOGY, vol.34, no.2, pp.129-135, 2012 (SCI-Expanded)

- XVI. **Plasma protein oxidation is correlated positively with plasma iron levels and negatively with hemolysate zinc levels in sickle-cell anemia patients.**
Er Öztaş Y., Durukan Temuge İ., Ünal S., Özgüneş N.
International Journal Of Laboratory Hematology, vol.34, no.2, pp.129-135, 2012 (SCI-Expanded)
- XVII. **Decolorization of textile basic dye in aqueous solution by ozone**
TURHAN K., Durukan I., Ozturkcan S. A., TURGUT Z.
DYES AND PIGMENTS, vol.92, no.3, pp.897-901, 2012 (SCI-Expanded)
- XVIII. **Determination of iron and copper in food samples by flow injection cloud point extraction flame atomic absorption spectrometry**
Durukan I., Sahin Ç., ŞATIROĞLU N., Bektas S.
MICROCHEMICAL JOURNAL, vol.99, no.1, pp.159-163, 2011 (SCI-Expanded)
- XIX. **Determination of copper traces in water samples by flow injection-flame atomic absorption spectrometry using a novel solidified floating organic drop microextraction method**
Durukan I., Sahin Ç., Bektas S.
MICROCHEMICAL JOURNAL, vol.98, no.2, pp.215-219, 2011 (SCI-Expanded)
- XX. **Ligandless-solidified floating organic drop microextraction method for the preconcentration of trace amount of cadmium in water samples**
Sahin C. A., Durukan I.
TALANTA, vol.85, no.1, pp.657-661, 2011 (SCI-Expanded)
- XXI. **Preconcentration and determination of iron and copper in spice samples by cloud point extraction and flow injection flame atomic absorption spectrometry**
Sahin C. A., Tokgoz I., Bektas S.
JOURNAL OF HAZARDOUS MATERIALS, vol.181, pp.359-365, 2010 (SCI-Expanded)
- XXII. **A novel solidified floating organic drop microextraction method for preconcentration and determination of copper ions by flow injection flame atomic absorption spectrometry**
Sahin C. A., Tokgoz I.
ANALYTICA CHIMICA ACTA, vol.667, pp.83-87, 2010 (SCI-Expanded)
- XXIII. **Cloud point extraction of aluminum (III) in water samples and determination by electrothermal atomic absorption spectrometry, flame atomic absorption spectrometry and UV-visible spectrophotometry**
ŞATIROĞLU N., Tokgoz İ.
INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY, vol.90, no.7, pp.560-572, 2010 (SCI-Expanded)
- XXIV. **Comparison of Copper, Zinc, Iron and Calcium Levels in Plasma and Hemolysate of Steady State Sickle Cell Anemia Patients with Carriers**
Oztas Y. E., Tokgoz I., Unal S., Ozgunes N.
TURKISH JOURNAL OF BIOCHEMISTRY-TURK BIYOKIMYA DERGISI, vol.35, no.3, pp.203-207, 2010 (SCI-Expanded)
- XXV. **The effect of three different mouthrinses on the surface hardness, gloss and colour change of bleached nano composite resins.**
Gurgan S., Cakir F. Y.
The European journal of prosthodontics and restorative dentistry, vol.16, no.3, pp.104-8, 2008 (SCI-Expanded)
- XXVI. **Diurnal IOP control with bimatoprost versus latanoprost in exfoliative glaucoma: a crossover, observer-masked, three centre study**
Konstas G. P., Hollo G., Irkeç M., Tsironi S., Durukan I., Goldenfeld M., Melamed S.
BRITISH JOURNAL OF OPHTHALMOLOGY, vol.91, no.6, pp.757-760, 2007 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **Heavy metal concentration of house dust**
BABAEİ P., DURUKAN TEMUGE İ., GÜLLÜ G.
International Conference on Civil and Environmental Engineering, ICOCEE, Cappadocia, 20 - 23 May 2015
- II. **A novel solidified floating organic drop microextraction method for preconcentration and determination of copper ions by flow injection flame atomic absorption spectrometry in water samples**
ŞAHİN C., Durukan I., Bektas S.
16th International Conference on Heavy Metals in the Environment (ICHMET), Rome, Italy, 23 - 27 September 2012, vol.1
- III. **Analysis of trace elements in airborne particulate matters collected in Ankara, Turkey by TXRF**
Durukan I., Bektas S., Dogan M., Fittschen U.
16th International Conference on Heavy Metals in the Environment (ICHMET), Rome, Italy, 23 - 27 September 2012, vol.1
- IV. **Comparison Of Traditional Cloud-Point Extraction And On-Line Flow-Injection Cloud-Point Extraction Of Iron With Flame Atomic Absorption Spectrometry**
DURUKAN İ., ARPA ÇALIŞIR Ç., ŞATIROĞLU N.
Colloquium Spectroscopicum Internationale XXXVI, Budapest, Hungary, 30 August - 03 September 2009
- V. **Determination Of Nickel, Manganese, Iron, Chromium And Lead Ions By Flame Atomic Absorption Spectrometry After Cloud Point Extraction**
ARPA ÇALIŞIR Ç., DURUKAN İ., Efeçinar M., ŞATIROĞLU N.
Colloquium Spectroscopicum Internationale XXXVI, Budapest, Hungary, 30 August - 03 September 2009
- VI. **Cloud Point Extraction of Aluminium As A Preconcentration Method For Electrothermal Atomic Absorption Spectrometry**
DURUKAN İ., ŞATIROĞLU N., BEKTAŞ F. S.
VII European Furnace Symposium On Atomic Absorption Spectrometry, Electrothermal Vaporization And Atomization (VII EFS), St. Petersburg, Russia, 02 July 2006
- VII. **Preconcentration Of Lead By On-Line Solid-Phase Extraction Using PTFE Packed Colum And Flame Atomic Absorption Spectrometry**
DURUKAN İ., ŞATIROĞLU N., BEKTAŞ F. S.
4th Aegean Analytical Chemistry Days, Aydın/Kuşadası, Turkey, 29 September - 03 October 2004

Supported Projects

DURUKAN TEMUGE İ., Company, ELEKTROLİZ YÖNETİM İLE DEZENFEKTAN ÜRETİM DANIŞMANLIK PROJESİ, 2020 - 2020

ARPA ÇALIŞIR Ç., DURUKAN TEMUGE İ., Project Supported by Higher Education Institutions, Gıda örneklerindeki kurşun iyonlarının ultrason destekli derin ötektik çözücü temelli dispersif sıvı ekstreksiyonunun ardından alevli atomik absorpsiyon spektrometresiyle tayini, 2018 - 2019

DURUKAN TEMUGE İ., Project Supported by Higher Education Institutions, Civa(II) iyonlarının Alevli Atomik Absorpsiyon tekniği ile analizini mümkün kılmak için önderleştirilmesi ve su örneklerinden tayini, 2017 - 2017

DURUKAN TEMUGE İ., Project Supported by Higher Education Institutions, Katılaştırılmış Yüzen Organik Damla Mikroekstreksiyonu ile Eser Düzeydeki Kurşun İyonunun Ligandsız ekstreksiyonu ve Atomik Absorpsiyon Spektrometre ile Tayini, 2017 - 2017

DURUKAN TEMUGE İ., Project Supported by Higher Education Institutions, KATILAŞTIRILMIŞ YÜZEN ORGANİK DAMLA MİKROEKSTRASİYON TEKNİĞİ İLE NİKEL İYONLARININ ÖNDERİŞTİRİLMESİ VE ALEVLİ ATOMİK ABSORPSİYON SPEKTROMETRESİ İLE TAYİNİ, 2016 - 2017

DURUKAN TEMUGE İ., Project Supported by Higher Education Institutions, Çevresel Örneklerde Bizmut(III) İyonlarının Ultrason Destekli Yüzen Katı Organik Damla Mikroekstreksiyonu ve Atomik Absorpsiyon Spektrometri Yöntemi ile

Tayini, 2016 - 2017

DURUKAN TEMUGE İ., Project Supported by Higher Education Institutions, MANGANIN ÖNDERİŞTİRİLMESİ VE ALEVLİ ATOMİK ABSORPSİYON SPEKTROMETRESİ İLE TAYİNİ İÇİN YENİ KATILAŞTIRILMIŞ YÜZEN ORGANİK DAMLA MİKROEKSTRAKSİYON TEKNİĞİNİN KULLANILMASI, 2016 - 2016

DURUKAN TEMUGE İ., Project Supported by Higher Education Institutions, PET şişelerden içme suyuna geçen antimon miktarının tespiti ve bu geçişi etkileyen faktörlerin incelenmesi, 2015 - 2016

DURUKAN TEMUGE İ., Project Supported by Higher Education Institutions, Çevresel örneklerden Pb(II) ağır metalinin katılmış yüzen organik damla mikroekstraksiyon yöntemiyle önderiştirilmesi ve atomik absorpsiyon spektrometresi ile tayini, 2015 - 2016

ARPA ÇALIŞIR Ç., DURUKAN TEMUGE İ., Project Supported by Higher Education Institutions, Kimya Bölümü Atomik Spektroskopi Araştırma Grubu tarafından kullanılan Perkin Elmer marka AAnalyst 800 model atomik absorpsiyon spektrofotometresinin bakım ve onarımı, 2015 - 2016

DURUKAN TEMUGE İ., TUBITAK Project, Çeşitli Gıda ve İçeceklerde Pet Ambalajlarından Geçen Antimon Miktarının Belirlenmesi, 2014 - 2016

DURUKAN TEMUGE İ., Project Supported by Higher Education Institutions, Su örneklerinden Co(II) ağır metalinin katılmış yüzen organik damla mikroekstraksiyon yöntemiyle zenginleştirilmesi ve atomik absorpsiyon spektrometresi ile tayini, 2015 - 2015

DURUKAN TEMUGE İ., Project Supported by Higher Education Institutions, Gıda ve su örneklerinden Fe (III), Mn (II), Ni (II) ve Zn (II) iyonlarının Congo Red şelatları şeklinde çok duvarlı karbon nanotüp (MWCNT) disk yardımıyla ayrılması ve zenginleştirilmesi, 2015 - 2015

ARPA ÇALIŞIR Ç., DURUKAN TEMUGE İ., Project Supported by Higher Education Institutions, Doğal Örneklerdeki Ağır Metal İyonlarının Bulutlanma Noktası Ekstraksiyonu ile Önderiştirilmesi ve Atomik Absorpsiyon Spektrometresiyle Tayini, 2011 - 2015

Activities in Scientific Journals

Journal of Atmospheric Pollution, Committee Member, 2016 - Continues

Metrics

Publication: 34

Citation (WoS): 584

Citation (Scopus): 633

H-Index (WoS): 11

H-Index (Scopus): 12

Scholarships

Doktora yurtdışı araştırma bursu, TUBITAK, 2007 - 2008

Non Academic Experience

MİLLİ EĞİTİM BAKANLIĞI