

# Prof. ÇİĞDEM ARPA ÇALIŞIR

## Personal Information

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## International Researcher IDs

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## Education Information

Post Doctorate, Universiteit Antwerpen, Mitac, Arastırma Enst, Belgium 2006 - 2007

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Kimya A.B.D., Turkey 2000 - 2005

Postgraduate, Hacettepe University, Fen Bil. Enst, Kimya Böl, Turkey 1997 - 1999

Undergraduate, Hacettepe University, Fen Fak, Kimya Böl, Turkey 1992 - 1997

## Foreign Languages

English, B2 Upper Intermediate

## Dissertations

Postgraduate, Kuzey Anadolu Smektitleri ile sulu sistemlerden Ağır Metal İyonlarının Uzaklaştırılması, Hacettepe Üniversitesi, Fen Fakültesi, Kimya Bölümü, 1999

## Research Areas

Chemistry, Analytical Chemistry, Atomic and Molecular Spectroscopy, Natural Sciences

## Academic Titles / Tasks

Professor, Hacettepe University, Fen Fakültesi, Kimya Bölümü, 2020 - Continues

Associate Professor, Hacettepe University, Fen Fakültesi, Kimya Bölümü, 2014 - 2020

Assistant Professor, Hacettepe University, Fen Fakültesi, Kimya Bölümü, 2010 - 2014

Research Assistant, Hacettepe University, Fen Fakültesi, Kimya Bölümü, 1998 - 2010

## Academic and Administrative Experience

Deputy Head of Department, Hacettepe University, Fen Fakültesi, Kimya Bölümü, 2018 - Continues

## Advising Theses

ARPA ŞAHİN Ç., Alevli atomik absorpsiyon spektrometrisi kullanılarak su örneklerinde eser miktardaki Hg(II) iyonlarının tayini için katılaştırılmış yüzen organik damla ile ultrason-destekli emülsifikasyon mikroekstraksiyonunun uygulanması, Postgraduate, Ö.KENANOĞLU(Student), 2014

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

- I. **An effervescence-assisted switchable hydrophobicity solvent microextraction before microsampling flame atomic absorption spectrometry for copper ions in vegetables**  
Pelvan H. E., ARPA ÇALIŞIR Ç.  
INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY, vol.103, no.9, pp.1955-1970, 2023 (SCI-Expanded)
- II. **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)
- III. **Ultrasound assisted ion pair based surfactant-enhanced liquid-liquid microextraction with solidification of floating organic drop combined with flame atomic absorption spectrometry for preconcentration and determination of nickel and cobalt ions in vegetable and herb samples**  
ARPA ÇALIŞIR Ç., Aridasir I.  
FOOD CHEMISTRY, vol.284, pp.16-22, 2019 (SCI-Expanded)
- IV. **A Method to Determination of Lead Ions in Aqueous Samples: Ultrasound-Assisted Dispersive Liquid-Liquid Microextraction Method Based on Solidification of Floating Organic Drop and Back-Extraction Followed by FAAS**  
Arpa Ç., Aridasir I.  
JOURNAL OF ANALYTICAL METHODS IN CHEMISTRY, 2018 (SCI-Expanded)
- V. **Effervescence-assisted dispersive liquid-liquid microextraction based on deep eutectic solvent for preconcentration and FAAS determination of copper in aqueous samples**  
Arpa Ç., Albayati S., Yahya M.  
INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY, vol.98, no.10, pp.938-953, 2018 (SCI-Expanded)
- VI. **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)
- VII. **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)
- VIII. **Preparation and characterization of composite cryogels containing imidazole group and use in heavy metal removal**  
Tekin K., UZUN L., Sahin Ç., Bektaş S., DENİZLİ A.  
REACTIVE & FUNCTIONAL POLYMERS, vol.71, no.10, pp.985-993, 2011 (SCI-Expanded)
- IX. **Determination of iron and copper in food samples by flow injection cloud point extraction flame atomic absorption spectrometry**  
Durukan I., Sahin Ç., ŞATIROĞLU N., Bektaş S.  
MICROCHEMICAL JOURNAL, vol.99, no.1, pp.159-163, 2011 (SCI-Expanded)

- X. **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)
- XI. **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)
- XII. **Reactive Green HE-4BD Functionalized Supermacroporous Poly(hydroxyethyl methacrylate) Cryogel for Heavy Metal Removal**  
Arpa Ç., BERELİ N., OZDİL E., Bektas S., DENİZLİ A.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.118, no.4, pp.2208-2215, 2010 (SCI-Expanded)
- XIII. **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)
- XIV. **Combination of cloud point extraction and flame atomic absorption spectrometry for preconcentration and determination of nickel and manganese ions in water and food samples**  
Sahin Ç., Efecinar M., ŞATIROĞLU N.  
JOURNAL OF HAZARDOUS MATERIALS, vol.176, pp.672-677, 2010 (SCI-Expanded)
- XV. **Cloud point extraction for the determination of trace copper in water samples by flame atomic absorption spectrometry**  
ŞATIROĞLU N., Arpa Ç.  
MICROCHIMICA ACTA, vol.162, pp.107-112, 2008 (SCI-Expanded)
- XVI. **Preconcentration and determination of lead, cadmium and nickel from water samples using a polyethylene glycol dye immobilized on poly(hydroxyethylmethacrylate) microspheres**  
Arpa Ç., Bektas S.  
ANALYTICAL SCIENCES, vol.22, no.7, pp.1025-1029, 2006 (SCI-Expanded)
- XVII. **Comparative biosorption of mercuric ions from aquatic systems by immobilized live and heat-inactivated *Trametes versicolor* and *Pleurotus sajor-caju***  
Arica M., Arpa Ç., Kaya B., Bektas S., Denizli A., Genc O.  
BIORESOURCES TECHNOLOGY, vol.89, no.2, pp.145-154, 2003 (SCI-Expanded)
- XVIII. **Ca-alginate as a support for Pb(II) and Zn(II) biosorption with immobilized *Phanerochaete chrysosporium***  
Arica M., Arpa Ç., Ergene A., Bayramoglu G., Genc O.  
CARBOHYDRATE POLYMERS, vol.52, no.2, pp.167-174, 2003 (SCI-Expanded)
- XIX. **Cysteinylhexapeptide attached poly(2-hydroxyethyl methacrylate) beads for Cd(II) removal from human plasma in a packed-bed column**  
DENİZLİ A., Yavuz H., ARPA Ç., BEKTAS S., GENÇ O.  
SEPARATION SCIENCE AND TECHNOLOGY, vol.38, no.8, pp.1869-1881, 2003 (SCI-Expanded)
- XX. **Selective recovery of mercury by Procion Brown MX 5BR immobilized poly(hydroxyethylmethacrylate/chitosan) composite membranes**  
Genc O., Arpa Ç., Bayramoglu G., Arica M., Bektas S.  
HYDROMETALLURGY, vol.67, pp.53-62, 2002 (SCI-Expanded)
- XXI. **Biosorption of Hg(II) and Cd(II) from aqueous solutions: Comparison of biosorptive capacity of alginate and immobilized live and heat inactivated *Phanerochaete chrysosporium***  
Kacar Y., Arpa Ç., Tan S., Denizli A., Genc O., Arica M.  
PROCESS BIOCHEMISTRY, vol.37, no.6, pp.601-610, 2002 (SCI-Expanded)
- XXII. **Adsorption of mercury(II) ions by poly(hydroxyethylmethacrylate) adsorbents with thiazolidine groups**  
Arpa Ç., Sağlam A., Bektas S., Patir S., Genc O., Denizli A.

- ADSORPTION SCIENCE & TECHNOLOGY, vol.20, no.3, pp.203-213, 2002 (SCI-Expanded)
- XXIII. **Adsorption of mercury(II) ions on Procion Blue MX-3G-attached magnetic poly(vinyl alcohol) gel beads**  
Denizli A., Arpa Ç., Bektas S., Genc O.  
ADSORPTION SCIENCE & TECHNOLOGY, vol.20, no.1, pp.91-106, 2002 (SCI-Expanded)
- XXIV. **Adsorption of heavy metal ions on polyhydroxyethylmethacrylate microbeads carrying Cibacron Blue F3GA**  
Arpa Ç., Alim C., Bektas S., Genc O., Denizli A.  
COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS, vol.176, pp.225-232, 2001 (SCI-Expanded)
- XXV. **Cation exchange properties of low rank Turkish coals: removal of Hg, Cd and Pb from waste water**  
Arpa Ç., Basyilmaz E., Bektas S., Genc O., Yurum Y.  
FUEL PROCESSING TECHNOLOGY, vol.68, no.2, pp.111-120, 2000 (SCI-Expanded)
- XXVI. **Heavy Metal Removal From Aquatic System by Northern Anatolian Smectite**  
ARPA ŞAHİN Ç., SAY R., ŞATIROĞLU N., BEKTAŞ F. S., YÜRÜM Y., GENÇ Ö.  
TURKISH JOURNAL OF CHEMISTRY, vol.24, no.2, pp.209-215, 2000 (SCI-Expanded)
- XXVII. **Heavy metal removal from aquatic systems by northern Anatolian smectites**  
Arpa Ç., Say R., Satiroglu N., Bektas S., Yurum Y., Genc O.  
TURKISH JOURNAL OF CHEMISTRY, vol.24, no.2, pp.209-215, 2000 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Cloud Point Extraction For Preconcentration And Determination Of Uranium In Water Samples By Spectrophotometry**  
ARPA ŞAHİN Ç., ŞATIROĞLU N., BEKTAŞ F. S.  
Hacettepe J. Biol. & Chem., vol.37, no.3, pp.241-247, 2009 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **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**  
Arpa Şahin Ç., Durukan I., Bektaş S.  
16th International Conference on Heavy Metals in the Environment, ICHMET 2012, Rome, Italy, 23 - 27 September 2013, vol.1
- II. **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
- III. **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
- IV. **Cloud Point Extraction Of Nickel Ion And Determination By Flame Atomic Absorption Spectrometry**  
ŞATIROĞLU N., ARPA ÇALIŞIR Ç., BEKTAŞ F. S.  
European Symposium On Atomic Spectroscopy (ESAS 2008), Weimar, Germany, 28 September - 01 October 2008
- V. **Cloud Point Extraction For The Determination Of Iron (III) Ion In Water Samples By Flame Atomic Absorption Spectrometry**  
Efeçinar M., ŞATIROĞLU N., ARPA ÇALIŞIR Ç., BEKTAŞ F. S.

European Symposium On Atomic Spectroscopy (ESAS), Weimar, Germany, 28 September 2008

**VI. Online Preconcentration And Determination Of Lead, Cadmium And Nickel In Minicolumns Packed With Ligand Immobilized Polymeric Support**

ARPA ÇALIŞIR Ç., ŞATIROĞLU N., BEKTAŞ F. S.

3rd Black Sea Basin Conference On Analytical Chemistry, Constanta, Romania, 12 - 14 September 2005

## Supported Projects

ARPA ÇALIŞIR Ç., Pelvan H. E., Project Supported by Higher Education Institutions, Tahıl örneklerindeki eser düzeydeki kadmiyum iyonlarının efervesan destekli değiştirilebilirçözücü bazlı sıvı faz mikroekstraksiyonunun EASSLLME ardından alevli atomik absorpsiyon spektrometrisi ile tayini, 2020 - 2021

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

ARPA ÇALIŞIR Ç., Project Supported by Higher Education Institutions, Gıda Örneklerindeki Nikel ve Kobaltın UltrasonDestekli Katılaştırılmış Yüzen Organik Damla Mikroekstreksiyonunun Ardından Alevli Atomik Absoprsiyon Spektrometrisiyle Tayini, 2017 - 2017

ARPA ÇALIŞIR Ç., Project Supported by Higher Education Institutions, Analitik kimyadaki gelişmeler ve yeni yaklaşımlar, 2016 - 2017

ARPA ÇALIŞIR Ç., Project Supported by Higher Education Institutions, Su örneklerindeki Pb<sup>2+</sup> nın ultrason destekli katılaştırılmış yüzen organik damla dispersif sıvı ekstreksiyonu ve alevli atomik absorpsiyon spektrometrisi 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

ARPA ÇALIŞIR Ç., Project Supported by Higher Education Institutions, Gıda Ürünlerindeki Kurşun'un AAS ve Elektrokimyasal Yöntemlerle Tespiti, 2015 - 2015

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

## Metrics

Publication: 34

Citation (WoS): 1014

Citation (Scopus): 1123

H-Index (WoS): 17

H-Index (Scopus): 17

## Non Academic Experience

Hacettepe universitesi

Hacettepe universitesi

Hacettepe universitesi