## **Curriculum Vitae**



## **Personal information**

First name(s) / Surname(s)

Haslet Eksi-Kocak

E-mail

hasletkocak@aydin.edu.tr hsleksi@gmail.com

Nationality

Turkish

Date of birth

18.10.1980

Marital status

Married

# Desired employment / Occupational field

Chemistry and Nanotechnology/Research and Development Applied chemistry in industry, environmental and pharmaceutical

## Work experience

Dates

From August 2016- still continuing

Occupation or position held

Assistant Prof.

Name and address of employer

Faculty of Engineering, Department o Biomedical Engineering

Istanbul Aydın University, Istanbul

Type of business or sector

Higher Education

Dates

From January 2014- August 2016

Occupation or position held

Post-doctoral Researcher

Main activities and responsibilities

Planning, management and tracking of development projects, reporting directly to the

supervisor

Support and maintenance of all the laboratory equipments including chemicals, instruments.

Research and development of new materials

Name and address of employer

Faculty of Engineering, Department of Food Engineering

Hacettepe University, Ankara

Type of business or sector

**Higher Education** 

Dates

From September 2007 to September 2011

Occupation or position held

Project Assistant

Main activities and responsibilities Planning, management and tracking of development projects, reporting directly to the

Support and maintenance of all the laboratory equipments including chemicals, instruments.

Research and development of new materials

Faculty of Science, Surface and Electroanalytical Chemistry Research Laboratory Name and address of employer

Ankara University, Ankara

Type of business or sector **Higher Education** 

> Dates From March 2006 to December 2006

Occupation or position held Training and support specialist

Training the users about the software which is used by the Ministry of Justice in the various Main activities and responsibilities

provinces of Turkey.

Havelsan A.Ş, Ankara, Name and address of employer

Type of business or sector Computer Software

## **Education and training**

**Dates** From September 2007 to September 2011

Title of qualification awarded Ph.D. in Analytical Chemistry

Principal subjects/occupational skills Thesis Title: "Developing Nanoparticle-Tagged Biosensors"

Relevant courses taken: Electroanalytical Chemistry I-II, Surface modification and characterization, Atomic spectroscopy, Electrochemistry of metal complexes

Level in national or international

classification

Ankara University, Faculty of Science

Name and type of organisation Department of Chemistry providing education and training Dogol Street, 06100

PhD

Tandogan, Ankara, Turkey

Dates From September 2003 to February 2006

Title of qualification awarded M.Sc. in Physical Chemistry

Principal subjects/occupational skills Thesis Title: "Investigation of swelling properties, fluconazole release behaviours and covered microbiological interactions of Poly(Acrylamide-co-itaconic acid) and Poly(Acrylic acid-co-

itaconic acid) copolymeric hydrogels"

Relevant courses taken: Polymer Chemistry, Advanced Physical Chemistry, Biopolymers and

Drug delivery systems

Level in national or international

classification

Name and type of organisation Gazi University, Faculty of Science providing education and training Department of Chemistry

M.Sc.

06500, Teknikokullar, Ankara, Turkey

Dates From September 1997 to June 2003

Title of qualification awarded B.Sc. in Chemistry

Principal subjects/occupational skills Relevant courses taken: General Chemistry, Analytical Chemistry-qualitative and quantitative, Physical Chemistry, Biochemistry, Instrumental Analysis, Fundamentals of Organic Chemistry, covered

Seperation methods, Coordination Chemistry, Electrochemistry, Calculus, Physics

Level in national or international

classification

Chemist

Name and type of organisation providing education and training

Gazi University. Faculty of Science Department of Chemistry 06500, Teknikokullar, Ankara, Turkey

# Personal skills and competences

Mother tongue(s)

**Turkish** 

Other language(s)

**English** 

Social skills and competences

Experienced in both individual and team work Good ability to adapt to multicultural environments

Good communication skills gained through my experiences

Effective communication to varied audiences, including formal public speaking (acquired during

PhD studies)

Passion for learning new areas and subjects

Organisational skills and competences Being an organization committee member in various national and international congresses. 8th International Electrochemistry Meeting in Turkey, 8-11 October 2009

The 13th National Spectroscopy Conference with International Participation, 18-22 May 2011

Technical skills and competences

Good knowledge in laboratory methods for chemical analysis.

Spectroscopic techniques: FT-IR spectroscopy(Bruker Tensor 27) with ATR and grazing angle accessories, FT-Raman Spectroscopy (Thermo Nicolet iS50), Surface-enhanced Raman spectroscopy (SERS) (DeltaNu), Near-Infrared Raman Spectroscopy (Thermo Nicolet iS50) and UV-Vis spectroscopy.

Electrochemical techniques: Gamry 300 and BAS 100 including impedance spectroscopy, voltammetric and stripping methods.

Synthesizing and characterizing nanoparticles.

Research areas:

Surface modification of carbon and metal surfaces with various molecules using diazonium salt reduction.

Surface characterization using electrochemical and spectroscopic techniques.

Fabrication of metallic and bimetallic nanoparticles and using them as chemical and biological sensors.

Computer skills and competences

Good command of Microsoft Office™ tools (Word, Excel, PowerPoint), ChemDraw and Origin Data bases of Web of Science, Scopus, Science direct Application of different instrument software packages

Other skills and competences

Hobbies: going to theatre and cinema Sports: swimming

Driving licence

Turkish national driving licence "B"

#### Annexes

#### Papers published in journals:

- **A1.** Ö. Özgenç, S. Durmaz, I. H. Boyaci, **H. Eksi-Kocak**, Determination of chemical changes in heat-treated wood using ATR-FTIR and FT Raman spectrometry <u>Spectrochim. Acta A</u>, 2017, 171, 395-400
- **A2.** S. Varlıklıoz Er, **H. Eksi-Kocak**, H. Yetim, I. H. Boyaci, Novel spectroscopic method for determination and quantification of saffron adulteration, *Food Analytical Methods*, 2016, DOI 10.1007/s12161-016-0710-4
- **A3. H. Eksi-Kocak**, O. Mentes-Yilmaz, I.H. Boyaci, Detection of green pea adulteration in pistachio nut granules by using Raman hyperspectral imaging, *Eur Food Res Technol*, 2016, DOI 10.1007/s00217-015-2538-3
- **A4.** D.Rodoplu, İ.H. Boyacı, A.G. Bozkurt, **H. Eksi**, A. Zengin, U. Tamer, N. Aydogan, Ş. Ozcan, F. Tuğcu-Demiröz, Quantitative Characterization of Magnetic Mobility of Nanoparticle in Solution-Based Condition, *Current Pharmaceutical Design*, 2015, 21, 5389-5400
- **A5.** S. Uluok, B. Güven, **H. Ekşi**, Z. Üstündağ, U. Tamer, İ.H. Boyacı, Designing multilayered nanoplatforms for SERS-based detection of genetically modified organisms, *Journal of Nanoparticle Research* 2015, 17, 1-12
- **A6. H. Ekşi**, R. Güzel, B. Güven, I. H. Boyaci, and A. O. Solak, Fabrication of an Electrochemical E. coli Biosensor in Biowells Using Bimetallic Nanoparticle-Labelled Antibodies, *Electroanalysis*, 2015, 27, 343 35
- A7. S. Uluok, M.S. Erdoğan, A. Erkal, I. Aşık, G. Kuzu, H. Ekşi, Z. Üstündağ, Nanocharacterization of the Graphene Oxide Terminated Platform on Polycrystalline Gold Surface, <u>J. Comput. Theor. Nanosci.</u>, 2015, 12, 1–8
- **A8.** R. Güzel, **H. Eksi**, E. Dinç, and A. O. Solak, New Voltammetric Approach to the Quantitative Estimation of Sildenafil Citrate in Tablets Using Disposable Pencil Graphite Electrode, *Sensor Lett.* 2014, 12, 1675-1681
- **A9.** A. Erkal, M. S. Erdoğan, İ. Aşık, **H. Ekşi**, S. Jeon, A.O. Solak and Z. Üstündağ, Electrografting and Surface Properties of Some Substituted Nitrophenols on Glassy Carbon Electrode and Simultaneous Pb<sup>2+</sup>- Cd<sup>2+</sup>Analysis via Assist of Graphene Oxide Terminated Surface, *Journal of The Electrochemical Society* 2014, 161 (10) H696-H704
- **A10.** R. Güzel, **H. Ekşi**, Z. Üstündağ, A.O. Solak, Synthesis, characterization, and application of silver nanoparticle- thiophenol nanocomposite film on the glassy carbon surface, <u>Surface and Interface Analysis</u> 2013, 45, 1821-1829
- **A11. H. Ekşi,** V.K. Gupta, Z. Üstündağ, N. Atar, M.O. Çağlayan, A.O. Solak, Surface characterization of dinitrophenyl-diaminophenyl nanoplatform on glassy carbon, *Journal of Molecular Liquids* 2013, 187, 49–53
- **A12.** R. Güzel, **H. Ekşi**, E. Dinç and A. O. Solak, Determination of Acetaminophen in Commercial Formulations Using Silver Nanostructured Aniline Modified Pencil Graphite Electrode, *Journal of The Electrochemical Society* 2013, 160, B119-B124
- **A13.** E. Dinç, D. Baleanu , A.O. Solak, **H. Ekşi**, R. Güzel, Factor Analysis for the Characterization of the Nano-Surface of the Nitroazobenzene-Modified Glassy Carbon Electrode, *J. Comput. Theor. Nanosci.*, 2012, 9, 319-326
- **A14.** E. Dinç, D. Baleanu, A.O. Solak, **H. Ekşi**, R. Güzel, A New Approach to the Characterization of the Nano-Surface Structure by Using Factor Analysis, *Communications in Nonlinear Science and Numerical Simulation*, 2012, 17, 1012-1020
- **A15**. A.A. İ.-Turan, E. Kılıç, Z. Üstündağ, **H. Ekşi**. A.O. Solak, B. Zorer, Syntheses and modifications of bisdiazonium salts of 3,8-benzo[c]cinnoline and 3,8-benzo[c]cinnoline 5-oxide onto glassy carbon electrode, and the characterization of the modified surfaces, <u>J Solid State</u> Electrochem, 2012, 16, 235-245

### Annexes

#### Papers published in journals:

- **A16.** A.A. İ.-Turan, Z. Üstündağ, **H. Ekşi**, R. Güzel, A.O. Solak, Spectroscopic and Electrochemical Characterization of Benzoylglycine Modified Glassy Carbon Electrode: Electrocatalytic Effect towards Dioxygen Reduction in Aqueous Media, *Spectroscopy Letters*, 2011, 44, 158-167.
- **A17**. J.A. Tenreiro Machado, D. Baleanu, E. Dinç, A.O. Solak, **H. Ekşi**, R. Güzel, Characterization Approach to Modified Glassy Carbon Electrode Nanofilm System Within Multidimensional Scaling, *J. Comput. Theor. Nanosci.*, 2011, 8, 268-273
- **A18.** R.R. Nigmatullin, I.I. Popov, D. Baleanu, E.Dinç, A.O. Solak, **H. Ekşi**, R. Güzel, Application of the linear principle for the strongly-correlated variables: Calculations of differences between spectra, *Communications in Nonlinear Science and Numerical Simulation*, 2011, 16, 4028-4036
- **A19.** J.A. Tenreiro Machado, D. Baleanu, E. Dinç, A.O. Solak, **H. Ekşi**, R. Güzel, Analysis of the Nano-Surface of a Modified Glassy Carbon Electrode by Pseudo Phase Plane Method, <u>J. Comput. Theor. Nanosci.</u>, 2011, 8, 1986-1992.
- **A20.** R. Güzel, Z. Üstündağ, **H. Ekşi**, S. Keskin, B. Taner, Z.G. Durgun, A.A. I.-Turan, A.O. Solak, Effect of Au and Au@Ag core-shell nanoparticles on the SERS of bridging organic molecules, *Journal of Colloid and Interface Science*, 2010, 351, 35-42
- **A21.** B. Taner, E. Özcan, Z. Üstündağ, S. Keskin, A.O. Solak, **H. Ekşi**, Fabrication of calix[4]pyrrole nanofilms at the glassy carbon surface and their characterization by spectroscopic, optic and electrochemical methods, *Thin Solid Films*, 2010, 519, 289–295
- **A22.** R.R. Nigmatulin, A.P. Alekhin, D. Baleanu, E. Dinç, Z. Üstündağ, **H. Ekşi**, A.O. Solak, Analysis of the effect of potential cycles on the reflective infrared signals of nitro groups in nanofilms: Application of the fractional moments statistics, *Electroanalysis*, 2010, 22, 419-426
- **A23.** M. Pulat, **H. Ekşi**, U. Abbasoglu, Fluconazole release from hydrogels including acrylamide-acrylic acid-itaconic acid, and their microbiological interactions, <u>J. Biomater. Sci. Polymer Edn</u>, 2008, 19, 193–205
- **A24.** M. Pulat, **H. Eksi**, Determination of swelling behavior and morphological properties of poly (acrylamide-co-itaconic acid) and poly (acrylic acid-co-itaconic acid) copolymeric hydrogels", *Journal of Applied Polymer Science*, 2006, 102, 5994-5999

# Projects:

Synthesis And Characterization of Hydrogel-Coated Bimetallic Nanoparticles and Investigation of Application Areas, Ankara University Research Foundation, 09B4240012, Researcher, 2011

Fabrication of Electrochemical Biosensor for the Determination of E.Coli using Au@Ag and Ag@Au Bimetallic Nanoparticle Labelled Antibodies, The Scientific and Technological Research Council of Turkey-TBAG, 109T633, Researcher, 2011

Developing New Bread and Durum Wheat Varieties and Lines in Line with Industry, Consumer and Farmer's Needs, The Scientific and Technological Research Council of Turkey-TOVAG,113O119, Postdoctoral Researcher, 2014-2016