# "Curriculum Vitae"

## Kamran Dastafkan

## 1) Personal Information

Date of birth:	12/06/1986		
Place of birth:	Sari, Iran		
Gender:	Male		
<b>Nationality:</b>	Iranian		
Passport No.	Z35991928		
Marital status:	Single		
Cell phone:	0410386951		
<b>Postal Code:</b>	2036		
Address	2/1 Elliot Place, Hillsdale, Sydney, NSW, Australia		
Email	k.dastafkan@student.unsw.edu.au, Kamran.a.chem@gmail.com		

# 2) Work History

# **Professional experience (Full time)**

• July 2015 – July 2017

**Employer:** KAVA Research Institute **Type of Business:** R&D, Research

Address: No. 308, Jamalzadeh St., Enghelab Square, Tehran, Iran

**Position:** Researcher

**Duties:** Conducting Research projects in nanotechnology fields such as nanofabrication and synthesis, separation, sensors, luminescent

nanomaterials.

• July 2013 – July 2015 (Full-time)

Military Service in I.R. Army-Tehran, Iran

• Sep 2012 – July 2013

**Employer:** Self-employed **Type of Business:** Education

Address: No. 2, Fadak 2 Alley, Fadak St., Payam Noor St., 15 Khordad Ave.,

Sari, Mazandaran, Iran. **Position:** Instructor

**Duties:** Teaching general and Hi school chemistry to applicants which were

preparing for Bachelor of Science entrance exam

## • July 2011-Sep 2012 (Part-time)

Employer: Center of Analysis, Faculty of Engineering, University of Tehran

Type of Business: Research

Address: 16 Azar Ave., Enghelab Square, Tehran, Iran.

**Position:** Researcher

**Duties:** Conducting Research projects in nanoadsorption fields such as nanofabrication and synthesis, separation, solid phase extraction,

liquid-liquid phase extraction, liquid phase micro-extraction.

## **Part-time experience**

## • July 2015 – July 2017

**Employer:** Coffeehouse

**Type of Business:** Food and entertainment

**Address:** No. 244, Jamalzadeh St., Enghelab Square, Tehran, Iran **Duties:** Greeting customers, serving tea & coffee, taking-filling orders

## 3) Academic Background

#### • August 2017-Present

Qualification: Doctor of Philosophy (PhD)- Nano-Electrochemistry

**Provider:** University of New South Wales, Sydney, Australia

**Address:** Sydney NSW 2052

**PhD. Thesis Title:** "Gas bubble evolution mechanisms and electrochemical efficiency in whole water splitting through electrolyte and electro-catalyst optimization"

Supervisor: Professor Chuan Zhao

#### • Sep 2010 – Sep 2012

**Qualification:** Master of Science- Analytical Chemistry **Provider:** University of Zabol, Sistan and Baluchestan, Iran

**GPA:** 16.58 out of 20.00

**M. Sc. thesis Title:** "Silver nanoparticles attached to silica gel as a new solid phase adsorbent for preconcentration and determination of iron from biological samples"

**Thesis Grade:** 19.80 out of 20.00

**Supervisor:** Prof. Mostafa Khajeh, Prof. Mansour Ghaffari Moghaddam

#### • Oct 2009 – Aug 2010

I had been studying hard to prepare for the university (Master of Science) entrance exam

#### • Sep 2005 – Oct 2009

**Qualification:** Bachelor of Science-Applied Chemistry

Provider: University of Sistan and Baluchestan, Zahedan, Sistan and

Baluchestan, Iran

**GPA:** 14.09 out of 20.00

## • June 2004 – Aug 2005

I had been studying hard to prepare for the university (Bachlor of Science) entrance exam

#### • Sep 2003 – June 2004

**Qualification:** Pre-university Degree in Experimental Sciences

**Provider:** Mirdamad High School

Address: Varzesh St., Ferdowsi Ave., Sari, Mazandaran, Iran

#### • Sep 2000 – June 2003

Qualification: 1st, 2nd, and 3rd grade of High School Diploma

**Provider:** Mirdamad High School

Address: Varzesh St., Ferdowsi Ave., Sari, Mazandaran, Iran

## 4) Publications

- Khajeh, M. and Dastafkan, K. Silver nanoparticles attached to silica gel as a new solid phase adsorbent for preconcentration and determination of iron from biological samples. *J. Appl. Spectros.* 2012, 79, 5, 788-792. DOI: 10.1007/s10812-012-9672-5
- Khajeh, M. Laurent, S. Dastafkan, K. Nanoadsorbents, Classification, Preparation and Applications (with Emphasis on Aqueous Media). *Chem. Rev.* 2013, 113, 7728-7768. DOI: 10.1021/cr400086v
- Khajeh, M. and Dastafkan, K. Removal of molybdenum using silver nanoparticles from water samples: Particle swarm optimization—artificial neural network. *J. Ind. Eng. Chem.* 2014, 20, 3014-3018. DOI: 10.1016/j.jiec.2013.11.036
- 4. **Dastafkan, K**. Khajeh, M. Ghaffari-Moghaddam, M. Bohlooli. M. Silver nanoparticles for separation and preconcentration processes. *Trends Anal. Chem.; TrAC* **2015**, 64, 118-126. DOI: 10.1016/j.trac.2014.08.017
- 5. Aleebrahim Dehkordi H. **Dastafkan, K**. Moshaii, A. Mokhtari, A. Thermal post-annealing and gas concentration effect on liquid petroleum gas sensing characteristics of nanocrystalline zinc oxide thin films. *J. Mater. Sci. Mater.*

- Electron. 2015, 26, 3134-3142. DOI: 10.1007/s10854-015-2808-7
- Dastafkan, K. Sadeghi, M. Obeydavi, A. Manganese dioxide nanoparticles-silver-Y zeolite as a nanocomposite catalyst for the decomposition reactions of O, S-diethyl methylphosphonothiolate. *Int. J. Sci. Technol.* 2015 12, 905-918. DOI: 10.1007/s13762-014-0701-1
- Dastafkan, K. Khajeh, M. Bohlooli. M. Ghaffari-Moghaddam, M. Sheibani, N. Mechanism and behavior of silver nanoparticles in aqueous medium as adsorbent. *Talanta* 2015, 144, 1377-1386. DOI: 10.1016/j.talanta.2015.03.065
- 8. Kiani, A. **Dastafkan, K**. Zinc oxide nanocubes as a destructive nanoadsorbent for the neutralization chemistry of 2-chloroethyl phenyl sulfide: A sulfur mustard simulant. *J. Colloid Interface Sci.* **2016**, 478, 271-279. DOI: 10.1016/j.jcis.2016.06.025
- Khajeh, M. Dastafkan, K. Bohlooli, M. Ghaffari-Moghaddam, M. In Advanced Environmental Analysis: Applications of Nanomaterials Vol 1, Sample Preparation and Extraction Techniques Using Nanomaterials. Hussain, C. Kharisov, B. (Eds.), Royal Society of Chemistry, London, 2016. DOI: 10.1039/9781782623625-00221
- 10. Obeydavi, A. Dastafkan, K. Rahimi, M. Ghadam Dezfouli, M.A. Insights into post-annealing and silver doping effects on the internal microstructure of ZnO nanoparticles through X-ray diffraction probe. *Solid State Sci.* 2017, 69, 71-81. DOI: 10.1016/j.solidstatesciences.2017.05.004
- 11. Mokhtari, A. Soleimanian, V. Aleebrahim Dehkordi, H. **Dastafkan, K**. Applying the X-ray diffraction analysis for estimating the height and width of nanorods in low symmetry crystal multiphase materials. *J. Cryst. Growth* **2017**, 478, 58-63. DOI: 10.1016/j.jcrysgro.2017.08.026
- Kiani, A. Dastafkan, K. Obeydavi, A. Rahimi, M. Solid solutions of gadolinium doped zinc oxide nanorods by combined microwave-ultrasonic irradiation assisted crystallization. *Solid State Sci.* 2017, 74, 152-167. DOI: 10.1016/j.solidstatesciences.2017.10.002
- 13. **Dastafkan, K**. Kiani, A. Obeydavi, A. Rahimi, M. Crystallization and solid solution attainment of samarium doped ZnO nanorods via a combined

- ultrasonic-microwave irradiation approach. *Ultrasonics Sonochem.* 2018, 42, 97-111. DOI: 10.1016/j.ultsonch.2017.11.008
- Yang, W. Dastafkan, K. Jia, Chen. Zhao, C. Design of Electrocatalysts and Electrochemical Cells for Carbon Dioxide Reduction Reactions. Adv. Mater. Technol. 2018, 1700377. DOI: 10.1002/admt.201700377
- 15. Wang, Q. Dastafkan, K. Zhao, C. Design strategies for non-precious metal oxide electrocatalysts for oxygen evolution reactions. *Curr. Opin. Electrochem*. In Press. DOI: 10.1016/j.coelec.2018.03.015

## 5) Courses Attended

- Advanced analytical chemistry
- Advanced physical Chemistry
- Advanced organic chemistry
- Analytical electrochemistry
- Analytical spectroscopy (1)
- Chemical and physical methods of separation
- •New topics in analytical chemistry (Micrextraction methods, molecular sieves, ion-exchange solid phases)
- Special topics in analytical chemistry (Nanoextraction)
- Seminar in sample pretreatment and extraction procedures

## 6) Laboratory Skills

- Assisting in Analytical Chem. Lab in "University of Zabol" (2010-2012)
- Research fellow at Nano-Electrochemical Lab in UNSW (2017-present)

## 7) Computer Skills

Application Software: MS OFFICE (WORD, EXCEL, POWERPOINT),
Origin, X'Pert Program for X-ray diffraction

# 8) Extracurricular Activities

- Sports: Mountain climbing
- Books, Movies, and Music

# 9) Language

- Persian: Native Language (Mother Tongue)
- English:

**IELTS** 

Date	Overall	Speaking	Writing	Reading	Listening	CEFR Level
31/10/2015	7.5	8.0	7.5	7.0	7.5	C1

GRE

Date	Verbal Reasoning	Quantitative Reasoning	Analytical Writing
13/04/2015	141	150	3.0

May 2018