

Resume

Maryam Farmand

The George Washington University
Department of Chemistry
725 Twenty First Street, NW
Washington, DC 20052

Phone: (202)-994-6124
Fax: (202)-994-5873
Cell: (240) - 4860270
Email: mfarmand@gwu.edu

Education

The George Washington University, Washington, DC

Ph.D. in Analytical Chemistry, May 2010 (anticipated)
Cumulative GPA: 3.51/4.0
Research Director: Professor Akbar Montaser

Sharif University of Technology, Tehran, Iran

B.Sc. in Applied Chemistry, June 2003
Cumulative GPA: 80.02 % (16.04/20)
Ranked fourth among 45 graduates

Research Experience

Graduate Research Assistant, The George Washington University, Washington DC, August, 2005-Present:

Research Advisor: Professor Akbar Montaser

- Developing Multiphase Flow Numerical Models to Characterize Sprays Produced by Direct Sample Introduction Devices used in Inductively Coupled Plasma (ICP) Spectrometry.
- Nano-HPLC-Plasma Mass Spectrometry using a d-DIHEN to Obtain the Chromatographic Separation of Five Arsenic Species with Good Resolution.
- Aerosol Diagnostics of Various Sample Introduction Systems of ICPMS using Phase Doppler Particle Analyzer.
- Theoretical Studies on Nebulization Processes.

Undergraduate Research Project, Sharif University of Technology, Tehran, IRAN, February 2003- June 2003:

Research Advisor: Professor Habib Bagheri

- Measurement of organic pollutants' level (such as Geosmin) in Bokan dam reservoir water, using Solid Phase Microextraction-Gas Chromatography-Mass Spectrometry (SPME/GC-MS).

INTERNSHIP AND WORK EXPERIENCE:

- May, 2005-August, 2005: Researcher, International and Scientific Cooperation Office, Sharif University of Technology, Iran.
- January, 2004-August, 2005: Researcher, Iranian Association for Energy Economics.
- Summer 2003 : Internship at Research Institute of Petroleum Industry, Iran, Project titles:
 1. Synthesis and Formulation of Emulsifier A, Upscale to Pilot Size Production.
 2. Condensation Reaction of Naphthalene with Formaldehyde.
 3. Alkylation and Nitration of Phenol Derivatives and Analysis of the Products by Gas Chromatography.

Awards and Honors

- August, 2005- Present: Presidential Merit Fellowship, The George Washington University, Washington DC 20052.

Publications and Selected Presentations

1. R. G. Brennan, S-A. E. O'Brien Murdock, **M. Farmand**, K. Kahen, S. Samii, J. M. Gray and A. Montaser, Nano-HPLC-Plasma Mass Spectrometry for Arsenic Speciation, Accepted for publication, J. Anal. Atom. Spectrom. 2007, DOI:10.1039/b703257a.
2. R.G. Brennan, S-A. E. O'Brien Murdock, **M. Farmand**, K. Kahen, S. Samii, J. M. Gray and A. Montaser, Nano-HPLC-Plasma Mass Spectrometry for Arsenic Speciation, presented at 33rd Annual Meeting of Federation of Analytical Chemistry and Spectroscopy Societies, Lake Buena Vista, Florida, USA, September 24 - 28, 2006.
3. R. G. Brennan, K. Jorabchi, J. A. Levine, **M. Farmand**, M. Taghioskouei, and A. Montaser, Interferometric Droplet Imaging for In-situ Aerosol Characterization in an Inductively Coupled Plasma, presented at 33rd Annual Federation of Analytical Chemistry and Spectroscopy Societies meeting, Lake Buena Vista, Florida, September 24 - 28, 2006.
4. R. G. Brennan, S-A. E. O'Brien Murdock, **M. Farmand**, K. Kahen, S. Samii, J. M. Gray and A. Montaser, Arsenic Speciation with Nano-HPLC-Plasma Mass Spectrometry, European Plasma Winter Conference, Toarmina, Italy, February 18-23, 2007.

Computer Programming Skills

- Knowledge of Pascal and JAVA Programming Languages.
- Working Knowledge of Hyperchem, Gaussian (Chemical Simulation Software) and Fluent (CFD Software).

Collaborations

- Department of Mechanical and Aerospace Engineering, The George Washington University, Professor Charles A. Garris.
- Savillex Corp., 6133 Baker Road, Minnetonka, MN 55345; Mr. Terry Nagel.

Affiliations

- Student Member of American Chemical Society, USA.
- Member of Kavosh Chieme Society, Sharif University of Technology, Tehran, Iran.
- Member of Sharif University of Technology Alumni Association, Tehran, Iran.
- Member of Iranian Association for Energy Economics, Tehran, Iran.

Languages

- Farsi (Persian): Native Speaker.
- English: Fluent.
- Working Knowledge of French.
- Arabic: Reading and writing.

EXTRACURRICULAR ACTIVITIES:

- Painting.
- Reading European Contemporary Literature and Philosophical works.
- Swimming.

References

- **Professor Akbar Montaser**, Columbian Professor of Chemistry, Department of Chemistry, The George Washington University, Email: Montaser@gwu.edu; Phone: 202-994-6480.