

Ghadamali Bagherian Dehaghi
College of Chemistry, Shahrood University of Technology,
Shahrood, I.R. IRAN

Position:

July 2001, Assistant Professor of Analytical Chemistry.

January 2008, Associate Professor of Analytical Chemistry.

Marital Status: Married, one children

Education

Bsc: 1988-1992, Chemistry, Department of Chemistry, Isfahan University, Isfahan, IRAN

Msc: 1992-1994, Analytical Chemistry, College of Chemistry, Isfahan University of Technology, Isfahan, IRAN

Msc Thesis: Kinetic Spectrophotometric Determination of Trace Amounts of Selenium and Thiosulfate.

PhD: 1995-2000, Analytical Chemistry, College of Chemistry, Isfahan University of Technology, Isfahan, IRAN

PhD Thesis: Determination of Nitrite, Periodate and Iodate by Flow Injection Analysis and Preparation of *para*-Toluenesulfonic Acid With High Purity in Pilot Scale

Teaching Experience:

Graduate

1. Advanced Analytical Chemistry
2. Atomic Spectroscopy
3. Separation Methods

Undergraduate

1. Analytical Chemistry I & II,
2. Instrumental Analysis,
3. General Chemistry,
4. Instrumental Analysis Lab.,
5. Analytical Chemistry Lab.

Research Experience

- 1- Introduction of New Kinetic Catalytic Reactions for Determining of Ultra Traces Amounts of Some Species, by Voltammetric Techniques and Spectrophotometry.
- 2- Flow Injection Analysis
- 3- Application of Chemometrics Techniques: Simultaneous Determination of Anion, Cation and Organic Species.

Refereed Journal Papers

1. Ali A. Ensafi & G. Bagherian, Determination of Amounts of Thiosulfate with Application of the Induced Iodine/Azide Reaction, *Indian J. of Chem.*, **1995**, *34A*, **498- 500**.
2. Ali A. Ensafi & G. Bagherian, Kinetic Spectrophotometric Determination of Trace Amounts of Selenium with Catalytic Reduction of Gallocyanine by Sulphide, *Anal.*

Letters, 28(2), (1995) 335- 347.

3. Ali A. Ensafi, & G. Bagherian Dehaghi, Ultra-Trace Analysis of Nitrite in Food Samples by Flow Injection with Spectrophotometric Detection, *Fresenius J. Anal. Chem.*, 363, (1999) 131- 133.
4. Ali A. Ensafi, G. Bagherian Dehaghei, Flow Injection Simultaneous Determination of Iodate and Periodate by Spectrophotometric and Spectrofluorimetric Detection, *Anal. Sci.*, 2000, 16, 1- 4.
5. Ali A. Ensafi & G. Bagherian, Spectrofluorometric Flow Injection Determination of Trace Amounts of Periodate, *Spectrochim. Acta, Part A*, 2001, 57(9), 1739-43.
6. Habibollah Eskandari and Ghadamali Bagherian Dehaghi; H-Point Standard Addition Method for Simultaneous Determination of Palladium and Cobalt *Microchim. Acta* 146, (2004) 265–270.
7. H. Eskandari, G. H. Imanzadeh Karkaragh, A. Ghanbari Saghseloo and G. Bagherian Dehaghi, Spectrophotometric and AAS Determination Of Trace Amounts of Cobalt After Preconcentration By using α - Benzilmonoxime- Microcrystalline Naphthalene. *Anal. Sci.*, 20, (2004) 1227-1230.
- 8 - Arab Chamjangali, M., Bagherian, G., Azizi, G., Simultaneous Determination of Cobalt, Nickel and Palladium in Micellar Media using Partial Least Square Regression and Direct Orthogonal Signal Correction, *Spectrochimica Acta Part A*, 2005, Vol 62 pp 189-196.
- 9 - Arab Chamjangali, M., Keley, V., Bagherian, G., Kinetic Spectrophotometric Determination of Ultra Trace Amounts of Oxalate Based on an Activation Effect, *Anal. Sci.*, 2006, Vol. 22, 333-336.
- 10- Bagherian, G., Arab Chamjangali, M., Eskandari, H., Simultaneous determination of cobalt and palladium in micellar media using H-point standard addition method and partial least square regression, *Spectrochimica Acta Part A*, 67 (2007) 378-384.
- 11- Arab Chamjangali, M., Bagherian, G., Salek-Gilani, N., Determination of Trace Amounts of Thiocyanate by a New Kinetic Procedure Based on an Induction Period, *Spectrochimica Acta Part A*, 67 (2007) 1252-1256.
- 12- Arab Chamjangali, M., Beglari, M., Bagherian, G., Prediction of cytotoxicity data (CC₅₀) of anti-HIV 5-phenyl-1 phenylamino-1H-imidazole derivatives by artificial neural network trained with Levenberg-Marquardt algorithm, *Journal of molecular graphics and modeling* 26 (2007) 360-367.
- 13- Arab Chamjangali, M., Bagherian, G., Sabbaghian, H.R., Cathodic adsorptive stripping voltammetric determination of molybdenum using Mo-Cr-pyrocatechol violet ternary complex. *Eurasian Journal of Analytical Chemistry* 3 (2008) 254-269.
- 14- Bagherian, G., Arab Chamjangali, M., Berenji, Z., Kinetic Spectrophotometric Determination of Trace Amounts of Thiocyanate Based on its Catalytic Effect on the Bromate-Crystal Violet Reaction in Biological Samples. *Eurasian Journal of Analytical Chemistry* 3 (2008) 393-403.
- 15- Goudarzi, N., Arab Chamjangali, M., Bagherian, G., Silicon-29 NMR Study of Alkaline Aqueous and Alcoholic Tri-butylmethyl Ammonium (TBMA) Silicate Solutions, *Spectroscopy Letters* 42 (2009) 20- 27.
- 16- Arab Chamjangali, M., Bagherian, G., Ameri, S., A new induction period based reaction rate method for determination trace amounts of phenylhydrazine in water samples. *Journal of hazardous materials*, 166 (2009) 701-705.
- 17- Arab Chamjangali, M., Bagherian, G., Salek-Gilani, N., New Induction Period

Based Kinetic Spectrophotometric Method for the Determination of Iron (II) in Pharmaceutical Products. *Acta Chimica Slovenica*, **56** (2009) 434.

18 - Goudarzi, N., Goodarzi, M., Arab Chamjangali, M., Bagherian, G., Study of the ethanolic tributylmethylammonium aluminosilicate solutions using ^{27}Al NMR, *Journal of Molecular Structure*, **930** (2009) 2-8.

19- Bagherian G., Arab Chamjangali M, and Brenji Z., **Determination of Iron(II) in Pharmaceutical Based on Its Catalytic Effect on the Bromate– Crystal violet Reaction by Spectrophotometric Detection**, *Eurasian J. Anal. Chem.* **4(3)** (2009) 285-293.

20- Bagherian, G., Arab Chamjangali, M., Goudarzi, N., Namazi, N., Selective spectrophotometric determination of periodate based on its reaction with methylene green and its application to indirect determination of ethylene glycol and glycerol. *Spectrochimica Acta Part A*, **76(1)** (2010) 29-32.

21- MA Chamjangali, L Sharif-Razavian, B Bahramian, G Bagherian, Synthesis and application of a functionalized polystyrene resin for on-line preconcentration and determination of cobalt (II) in water samples by flow injection/FAAS, *Journal of the Brazilian Chemical Society* **21** (3) (2010) 525-532

22- N Goudarzi, MA Chamjangali, G Bagherian, Application of ^{29}Si NMR spectroscopy to study of alkaline aqueous and alcoholic tetraoctylammonium (TOA) silicate solutions, *Journal of Molecular Structure* **982** (1) (2010) 127-132

23- MA Chamjangali, S Soltanpanah, G Bagherian, AH Amin, Development of a Simple and Inexpensive Optical Absorption One-Shot Sensor Membrane for Detection and Determination of Cyanide Ions in Water Samples, *Journal of the Chinese Chemical Society* **58** (1) (2011) 118-125

24- MA Chamjangali, G Bagherian, A Mokhlesian, B Bahramian, Synthesis and application of chloromethylated polystyrene modified with 1-phenyl-1, 2-propanedione-2-oxime thiosemicarbazone (PPDOT) as a new sorbent for the on-line preconcentration and determination of copper in water, soil, and food samples by FAAS, *Journal of hazardous materials* **192** (3) (2011) 1641-1649

25- MA Chamjangali, G Bagherian, S Mehrjoo-Irani, Determination of Piroxicam in different pharmaceutical products by a simple kinetic procedure based on an induction period effect, *Analytical Chemistry Letters* **2** (1) (2012) 44-55

26- N Goudarzi, KH Aghajanoor, G Bagherian, AH Amin, Determination of Trace Amounts of Copper (I) in Water and Soil Samples Using Directly Suspended Droplet Microextraction-flame Atomic Absorption Spectrometry (DSDME-FAAS), *Analytical Chemistry Letters* **2** (2) (2012) 103-113

27- G Bagherian, MA Chamjangali, AH Amin, S Ameri, Selective kinetic-spectrophotometric determination of trace amounts of As (III) based on an induction period, *Eurasian Journal of Analytical Chemistry* **7** (2)(2012) 78-88

- 28- MA Chamjangali, G Bagherian, B Bahramian, BF Rad, Synthesis and application of multiple rods gold–zinc oxide nanostructures in the photocatalytic degradation of methyl orange, *International Journal of Environmental Science and Technology* 12 (1) (2015) 151-160
- 29- MA Chamjangali, G Bagherian, M Ashrafi, AH Amin, Prediction of the anti-HIV activities of PTT analogs as non-nucleoside HIV-1 reverse transcriptase inhibitors by linear and non-linear QSAR models, *Journal of Applied Chemistry Vol 9* (32) (2015) 23-33
- 30- MA Chamjangali, G Bagherian, N Goudarzi, S Mehrjoo-Irani, A new and sensitive reaction rate method for spectrophotometric determination of trace amounts of thiourea in different water samples based on an induction period, *Journal of Analytical Science and Technology* 6 (1) (2015) 1
- 31- N Goudarzi, S Farsimadan, MA Chamjangali, GA Bagherian, Optimization of modified dispersive liquid–liquid microextraction coupled with high-performance liquid chromatography for the simultaneous preconcentration and determination of nitrazepam and midazolam drugs: An experimental design, *Journal of separation science* 38 (10) (2015) 1673-1679
- 32- MA Chamjangali, N Goudarzi, G Bagherian, AA Reskety, Development of a new electrochemical sensor for verapamil based on multi-walled carbon nanotube immobilized on glassy carbon electrode, *Measurement* 71 (2015) 23-30
- 33- N Goudarzi, S Farsimadan, M Arab Chamjangali, GA Bagherian, Development of coupled ultrasound-assisted and reversed-phase dispersive liquid–liquid microextraction before high-performance liquid chromatography for the sensitive determination of vitamin A and vitamin E in oil samples, *Journal of separation science* 38 (18) (2015) 3254-3261
- 34- MA Chamjangali, G Bagherian, A Javid, S Boroumand, N Farzaneh, Synthesis of Ag–ZnO with multiple rods (multipods) morphology and its application in the simultaneous photocatalytic degradation of methyl orange and methylene blue, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* 150 (2015) 230-237
- 35- M Arab Chamjangali, AA Reskety, N Goudarzi, G Bagherian, Methylthiouracil-modified Carbon Paste Electrode as a New Voltammetric Sensor Based on a 1, 4-Michael Addition Reaction for Detection of Dopamine, *Electroanalysis* 27 (12) (2015) 2708-2717
- 36- G Bagherian, M Arab Chamjangali, H Mohammadian, H-point Standard Addition Method (HPSAM) for Simultaneous Spectrophotometric Determination of Cu (II) and Pd (II) by 1-(2-thiazolylazo)-2-naphthol (TAN) in Micellar Media, *Analytical Chemistry Letters* 6 (2) (2016) 181-192
- 37- M Pouyan, G Bagherian, N Goudarzi, Determination of ultra-trace palladium (II) in water, soil, and food samples by dispersive liquid-liquid microextraction-atomic absorption spectrometry using 2-mercaptobenzimidazole as a complexing agent, *Microchemical Journal* 127 (2016) 46-51
- 38- A Taghani, N Goudarzi, G Bagherian, Application of multiwalled carbon nanotubes for the preconcentration and determination of organochlorine pesticides in water samples by gas

chromatography with mass spectrometry, *JOURNAL OF SEPARATION SCIENCE* 39 (21) (2016) 4219–4226

39- S Farsimadan, N Goudarzi, MA Chamjangali, G Bagherian, Optimization of ultrasound-assisted dispersive liquid-liquid microextraction based on solidification of floating organic droplets by experimental design methodologies for determination of three anti-anxiety drugs in human serum and urine samples by high performance liquid chromatography, *Microchemical Journal* 128 (2016) 47-54.

40- S Boroumand, MA Chamjangali, G Bagherian, Double injection/single detection asymmetric flow injection manifold for spectrophotometric determination of ascorbic acid and uric acid: Selection the optimal conditions by MCDM approach based on different criteria weighting methods, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 174 (2016) 203-213.

41- M Ashrafi, MA Chamjangali, G Bagherian, N Goudarzi, Application of linear and non-linear methods for modeling removal efficiency of textile dyes from aqueous solutions using magnetic Fe₃O₄ impregnated onto walnut shell, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* 171, (2017) 268-279

PAPER PRESENTED AT MEETINGS AND CONGRESSES

1- A. A. Ensafi and G. Bagherian, 5th IRANIAN SEMINAR OF ANALYTICAL CHEMISTRY, Isfahan University of Technology, 12-14 Apr. 1994, **Catalytic-Spectrophotometric Determination of Low Levels of Thiosulphate.**

2- A. A. Ensafi, Elham Asgarymogadam and G. Bagherian, 9th Iranian Chemistry and Chemical Engineering, Assr Enghelab Research Complex, 6-8 Sep., 1994, **Spectrophotometric-Flow Injection Analysis Determination of Selenium.**

3- G. Bagherian Dehaghi, A. A. Ensafi and H. S. Ghaziaskar, 12th IRANIAN SEMINAR OF ANALYTICAL CHEMISTRY, Mazandaran University, 28-30 Jan. 2003, **Extraction and spectrophotometric determination of nickel with α -Benzilmonoxime.**

4- H. Eskandari, and G. Bagherian Dehaghi, 13th IRANIAN SEMINAR OF ANALYTICAL CHEMISTRY, Ferdowsi Unieversity Of Mashhad, 18-20 May 2004, **H-Point Standard Addition Method For Simultaneous Determination of Palladium and Cobalt.**

5- H. Eskandari, G. H. Imanzadeh Karkaragh and G. Bagherian Dehaghi, 14th IRANIAN Chemestry and chemical Engineering Congress, 17-19 Feb. 2004, **Determination Of Cobalt in Pharmaceuticals and Alloys using α -Benzilmonoxime after Adsorption onto Microcrystalline Naphthalene.**

6- M. Arab Chamjangali, G. Bagherian and H. Eskandari, 14th IRANIAN SEMINAR OF ANALYTICAL CHEMISTRY, Unieversity Of Birjand, 29-31 Agu. 2005, **Application of Direct-Orthogonal Correction-Artificial Neural Network(DOSCANN) to Simultaneous Determination of Cobalt, Nickel and Palladium.**

7- M. Arab Chamjangali, Vahid Keley and G. Bagherian, 14th IRANIAN SEMINAR OF ANALYTICAL CHEMISTRY, Unieversity Of Birjand, 29-31 Agu. 2005,

Kinetic Determination of Oxalate in Food Samples Using an Activation Effect.

8. G. Bagherian and M. Arab Chamjangali, 1st Iranian Seminar of Chemometrics, 5, 6 Sep. 2006, Arak University, **H-Point Standard Addition Method for Simultaneous Determination of Cobalt and Palladium in micellar media using 4- (2-Pyridylazo) resorsinol**
9. M. Arab Chamjangali, G. Bagherian, 1st Iranian Seminar of Chemometrics, Arak University, Sep., 5-6, 2006, **Prediction of cytotoxicity data (CC₅₀) of anti-HIV 5-phenyl-1-phenylamino-1H-imidazole derivatives by artificial neural network trained with Levenberg-Marquardt algorithm**
10. M. Arab Chamjangali, G. Bagherian, 1st Iranian Seminar of Chemometrics, Arak University, Sep., 5-6, 2006, **Application of singular value decomposition partial least square (SVD-PLS) to the simultaneous determination of cobalt and palladium in micellar media**
11. M. Arab Chamjangali, G. Bagherian and N. Salek-Gilani, 15th IRANIAN SEMINAR OF ANALYTICAL CHEMISTRY, Feb. 27-March 1, 2007, Shiraz University, **Determination of Trace Amounts Of Iron(II) By a New Kinetic Procedure Based On Its Enhancing Effect On Sodium Periodate- Potassium Bromide- Meta Cresol Purpule Reaction.**
12. M. Arab Chamjangali, G. Bagherian and N. Salek-Gilani, 15th IRANIAN SEMINAR OF ANALYTICAL CHEMISTRY, Feb. 27-March 1, 2007, Shiraz University, **Determination of Trace Amounts Of Thiocyanate By a New Kinetic Procedure Based On Its Inhibiting Effect On Sodium Periodate- Potassium Bromide- Meta Cresol Purpule System.**
13. M. Arab Chamjangali, G. Bagherian and H. R. Sabbaghian, 15th IRANIAN SEMINAR OF ANALYTICAL CHEMISTRY, Feb. 27-March 1, 2007, Shiraz University, **Cathodic Adsorptive Stripping Voltammetry Determination of Molybdenum By Pyrocatechol Violet.**
14. Nasser Goudarzi, G. Bagherian, M. Arab Chamjangali, Iran International Zeolite Conference (IIZC'08), April 29 – May 1, 2008, **Silicon-29 NMR spectroscopy study of alkaline aqueous and alcoholic tributylmethyl ammonium silicate solutions as a precursor for synthesis of zeolites in aqueous and nonaqueous media**
15. Nasser Goudarzi, G. Bagherian, M. Arab Chamjangali, Iran International Zeolite Conference (IIZC'08), April 29 – May 1, 2008, **Investigation of tributylmethylammonium aluminosilicate solutions by NMR spectroscopy**
16. Nasser Goudarzi, G. Bagherian, M. Arab Chamjangali, Iran International Zeolite Conference (IIZC'08), April 29 – May 1, 2008, **Use of phenyltrimethyl ammonium (PTMA) hydroxide as a template for synthesis of a new zeolite**