

Curriculum Vitae



PERSONAL INFORMATION:

Name: Maryam Abbasi Tarighat

Date of Birth: January, 21, 1979

Place of Birth: Hamedan, Iran

Marital Status: Married

Email: matarighat@gmail.com, matraighat@pgu.ac.ir

ADDRESS:

Department of Chemistry, Persian Gulf University, Bushehr. Iran.

Tel: +98-771-4546518 (Office)

Tel (mobile): +98-918-8158127

Email address: matarighat@gmail.com matarighat@pgu.ac.ir

Research: 50%

Teaching: 50%

EDUCATION:

May 2009 Received PhD in Analytical Chemistry from Bu-Ali Sina University, Hamedan 65174, Iran.

October 2003 Received M.Sc. in Analytical Chemistry from Institute for advanced study in basic science, Zanjan, Iran.

Agues 2001 Received B. Sc. in Pure Chemistry From Bu-Ali Sina University, Hamedan 65174, Iran.

EXPERIENCES:

- | | |
|-----------|---|
| 2006–2009 | Teaching, Dept of Engineering, Bu-Ali Sina University, Iran (General Chemistry) |
| 2008-2010 | Teaching, Dept of Agriculture, Bu-Ali Sina University, Iran <ul style="list-style-type: none"> • General Chemistry, Analytical Chemistry, Application of Chemistry in Agriculture. |
| 2006-2009 | Teaching, Dept of Biology, Bu-Ali Sina University, Iran <ul style="list-style-type: none"> • General Chemistry, Analytical Chemistry, Application of Chemistry in Agriculture. |
| 2006-2009 | Teaching, Dept of Chemistry, Bu-Ali Sina |

	University, Iran
	<ul style="list-style-type: none"> • General Chemistry 1 and 2, Analytical Chemistry, instrumental analysis (Theory and Laboratory)
2009-2010	Teaching, Dept of Chemistry, Payam Noor University, Hamedan, Iran
	<ul style="list-style-type: none"> • General Chemistry 1 and 2, Analytical Chemistry, Instrumental Analysis, Advanced Instrumental Analysis (Theory and Laboratory), Chemical and physical Separation Method, Molecular Spectroscopy and Atomic Spectroscopy
2009-2010	Teaching, Dept of Chemistry, Malayer University, Malayer, Iran
	<ul style="list-style-type: none"> • General Chemistry 1 and 2, Analytical Chemistry 1 and 2, Instrumental Analysis, (Theory and Laboratory)
2011-2014	Teaching, Dept of Chemistry, Payam Noor University, Bushehr, Iran
	<ul style="list-style-type: none"> • Advanced Analytical Chemistry
2010- Present	Academic Staff, Dept of Chemistry. Persian Gulf University, Bushehr, Iran.
	<ul style="list-style-type: none"> • General Chemistry 1 and 2, Analytical Chemistry 1 and 2, Instrumental Analysis, (Theory and Laboratory), Chemical and physical Separation Method, Molecular Spectroscopy and Atomic Spectroscopy, Chemometrics

COURSES TAUGHT

- General Chemistry 1 and 2,
- Analytical Chemistry 1 and 2
- Instrumental Analysis
- Chemical and physical Separation Method
- Molecular Spectroscopy and Atomic Spectroscopy
- Chemometrics

TECHNICAL SKILLS:

- Fluent with different analytical apparatus such as Flame Atomic Absorption, HPLC, UV-Vis spectrophotometers, FT-IR, GC-MS
- Statistical software: SAS, SPSS, MSTATC and Matlab
- Text formatting and office computing: Word, Excel, PowerPoint, Access and Publisher

HONORS AND AWARDS:

- The first highest rank graduated student in B.Sc. C.G.P.A. (17.78 out of 20.00)
- The appreciable grade at Science section at 7th festival of superior, ingenious and innovator Basij and Shahed, 2008.

- The appreciable grade at 29th and 30th Basij Festival, Hamedan, Iran, 2008 and 2009

RESEARCH PROJECTS:

- 1- Determination of heavy metals using chemometrics approach at different environmental sample such as foodstuffs, water, vegetable and medicinal plant
- 2- Study and determination of equilibrium, kinetic and formation constant using rank annihilation-factor analysis
- 3- Quantitative determination of PAHs by Nano extraction and chemometrics approach
- 4- Simultaneous determination of phosphate and silicate in complex unknown mixtures by H-point curve isolation (HPCIM) and H-point standard addition method
- 5- Evaluation of the orthogonal projection approach and wavelet transformation on simultaneous determination of heavy metals in diet samples
- 6- Micelle mediated extraction and simultaneous determination by chemometrics approaches
- 7- Simultaneous trace-levels determination of some heavy metals in various samples using a modified carbon paste electrode based on multi-walled carbon nanotubes and a new synthesized Schiff base
- 8- Investigation of surfactants and cyclodextrins effects on kinetic and equilibrium of some heavy metals with new synthesized Schiff bases

PUBLICATIONS

1. Abbas Afkhami, **Maryam Abbasi-Tarighat**, Morteza Bahram, Hamid Abdollahi, 'A new strategy for solving matrix effect in multivariate calibration standard addition data using combination of H-point curve isolation and H-point standard addition methods', *Aalytica chimica acta*, 613 (2008) 144.
2. Abbas Afkhami, **Maryam Abbasi-Tarighat**, Morteza Bahram, Artificial neural networks for determination of enantiomeric composition of phenylglycine using UV spectra of cyclodextrin host–guest complexes Comparison of feed-forward and radial basis function networks', *Talanta* 75 (2008) 91.
3. Abbas Afkhami, **Maryam Abbasi-Tarighat**, 'Comparative determination of phosphate and silicate using molybdenum blue by radial basis function and feed-forward neural networks assisted by principal component analysis', *Analytical Science*, 24(2008),779.
4. Abbas Afkhami, Tayyebeh Madrakian, **Maryam Abbasi-Tarighat**, 'Simultaneous determination of calcium, magnesium and zinc in different foodstuffs and pharmaceutical samples with continuous wavelet transforms', *Food Chemistry*, 109(2008) 660.

5. Abbas Afkhami, **Maryam Abbasi-Tarighat**, 'Application of continuous wavelet transformation to the simultaneous kinetic determination of binary mixtures', *Talanta* 78 (2009) 424.
6. Abbas Afkhami, Davood Nematollahi, Tayyebeh Madrakian, **Maryam Abbasi Tarighat**, Mitra Hajihadi, 'Simultaneous spectrophotometric determination of binary mixtures of surfactants using continuous wavelet transformation', *Journal of Hazardous Materials*, 166(2008)660.
7. Abbas Afkhami, **Maryam Abbasi-Tarighat**, Hamid Khanmohammadi, 'Simultaneous determination of Co^{2+} , Ni^{2+} , Cu^{2+} and Zn^{2+} ions in foodstuffs and vegetables with a new Schiff base using artificial neural networks', *Talanta* 77 (2009) 995–1001
8. **Maryam Abbasi Tarighat**, Fereshteh Abasi Tarighat, 'Simultaneous determination of phosphate and silicate in complex unknown mixtures by H-point curve isolation (HPCIM) and H-point standard addition method (HPSAM)', *Analytical Chemistry : An Indian Journal*, 2013
9. Soheila Kashanian, Fereshteh Abasi Tarighat, **Maryam Abbasi-Tarighat**, 'Biomimetic synthesis and characterization of cobalt nanoparticles using ferritin, and investigation of direct electron transfer of Co(NPs)-Ferritin at modified glassy carbon electrode to design a novel biosensor', *Mol. Biol. Rep.* (2012) 39:8793–8802.
10. Maryam Abbasi Tarighat, 'Simultaneous determination of phosphate and silicate in complex unknown mixtures by H-point curve isolation method and H-point standard addition method', *Analytical Chemistry : An Indian Journal*, 2013
11. **Maryam Abbasi Tarighat**, Elahe shahbazi, 'Simultaneous determination of Mn^{2+} and Fe^{3+} as 4, 4' [(4-chlorophenyl) methylene] bis(3-methyl-1-phenyl-1H-pyrazol-5-ol) complexes in some foods, vegetable and water samples by artificial neural networks', *Food chemistry*, 138,991(2013).
12. **Maryam Abbasi**, Abbas Afkhami, 'Simultaneous Spectrophotometric Determination of Cu(II), Co(II) and Ni(II) using Ratio Spectra-Continuous Wavelet Transformation in some Food and Environmental Samples', *J. Braz. Chem. Soc.*, Vol. 00, No. 00, 1-8, 2012.
13. **Maryam Abbasi Tarighat**, Mohammad Reza Mohammadizadeh, Gh. Abdi, 'Simultaneous spectrophotometric determination of Cd^{2+} , Cu^{2+} and Zn^{2+} in rice and vegetal samples with dimethyl spiro[isobenzofuran-1,6-pyrorolo[2,3d]pyrimidine]-2', 3,4,5 tetraone using wavelet transformation-feed forward neural networks', *J. Aric. Food Chem*, 2013, 61, 6832-6840
14. 'Chemometrics-assisted spectrophotometric method for simultaneous determination of Pb^{2+} and Cu^{2+} ions in different foodstuffs, soil and water

- samples using 2-Benzylspiro [isoindoline-1,5'-oxazolidine]-2',3,4'-trione using continuous wavelet transformation and 2) Calculation of pK_f of complexes with rank annihilation factor analysis, **Maryam Abbasi Tarighat***, Masoume Nabavi, Mohammad Reza Mohammadzadeh, *Spectrochim Acta A*, 2015.
۱۰. Simultaneous spectrophotometric determination of Cu^{2+} , Hg^{2+} , and Cd^{2+} ions using 2-(3-hydroxy-1-methylbut-2-enylideneamino)pyridine-3-ol, **Maryam Abbasi Tarighat**, Khosro Mohammadi, *Environ Monit Assess*, 2015.
۱۶. Extraction of the Contribution of Kinetic Profile for Reaction of a Chemical Species in Unknown Matrices by Standard Addition Method, **Maryam Abbasi tarighat**, *Arabian Journal of Chemistry*, 2015
17. **Maryam Abbasi Tarighat**, Spectrophotometric simultaneous determination of metal ions in cows' milk and vegetables with the aid of artificial neural networks using synthetic 2-benzylspiro[isoindoline-1,5-oxazolidine]2,3,4-trione, *Journal of the Science of Food and Agriculture*, 1513–1520, June 2014
18. **Maryam Abbasi Tarighat**, Simultaneous spectrophotometric determination of phosphate and silicate in different water and soil samples using chemometric approaches, *Int. J. Environ. Sci. Technol.* 2016
19. **Maryam Abbasi Tarighat**, **Ali Reza Hasani nejad**, **Gholam Reza Abdi**, Chemometrics-Enhanced Micelle-Mediated Extraction Spectrophotometric Method for Simultaneous Determination of Cu^{2+} and Zn^{2+} in Medicinal Plant, Rice and Water Samples Using Continuous Wavelet Transform, *Food Anal. Method*, 2016
20. **Maryam Abbasi Tarighat**, [Orthogonal projection approach and continuous wavelet transform-feed forward neural networks for simultaneous spectrophotometric determination of some heavy metals in diet samples](#), *Food Chemistry*, 192, 2016, Pages 548-556

UNDER REVIEW PUBLICATION

1. **Maryam Abbasi Tarighat**, Spectrophotometric determination of the formation constants of Ni^{2+} , Cu^{2+} and Zn^{2+} with a new synthetic Schiff base in different solvent mixtures using orthogonal projection approach, evolving factor analysis and rank annihilation factor analysis
2. **Maryam Abbasi Tarighat** Simultaneous determination of Pb^{2+} and Cu^{2+} ions in different foodstuffs, vegetable and water samples with

new synthetic benzyl espiro ligand using continuous wavelet transformation

3. **Maryam Abbasi Tarighat**, Comparative Simultaneous Determination of Hg^{2+} and Cd^{2+} Using Artificial Neural Networks
4. **Maryam Abbasi Tarighat**, Spectrophotometric determination of pK_a values coupling H-point curve isolation method and H-point standard addition method
5. **Maryam Abbasi Tarighat**, Comparison of continuous wavelet transformation and partial least square for the Simultaneous spectrophotometric determination of phosphate and silicate in different water and soil samples
6. **Maryam Abbasi Tarighat**, Spectrophotometric determination of the formation constants of Ni^{2+} , Cu^{2+} and Zn^{2+} with a new synthetic Schiff base in different solvent mixtures using orthogonal projection approach, evolving factor analysis and rank annihilation factor analysis

PUBLICATION (ABSTRACT)

1. Afkhami, **Maryam Abbasi Tarighat**, Comparing the applicability of artificial neural networks for the simultaneous kinetic spectrophotometric determination of Sn(II) and Sn(IV) , 16th Iranian Seminar of Analytical Chemistry, Hamedan, Bu Ali Sina University, 28-30 July, 2009.
2. **Maryam Abbasi Tarighat**, Fereshteh Abasi Tarighat Simultaneous Determination of Phosphate and Silicate in Complex unknown Mixtures by H-Point Curve Isolation (HPCI) and H-Point Standard Addition Method (HPSAM), 3rd Iranian Biennial Seminar of Chemometrics, Tabriz, Iran, 9-10 Nov., 2011.
3. **Maryam Abbasi Tarighat**, Mohammad Reza Mohammadzadeh, Simultaneous spectrophotometric determination of Cd^{2+} , Cu^{2+} and Zn^{2+} in drinking water, sea water and foodstuff samples with dimethylspiro[isobenzofurane-1,6'-pyrrolo [2, 3-d] pyrimidine]-2', 3, 4, 5'(1'H,3'H,7'H) tetraone using wavelet transformation-artificial neural networks, 3rd Iranian Biennial Seminar of Chemometrics, Tabriz, Iran, 9-10 Nov., 2011.
4. **Maryam Abbasi Tarighat**, Khodabakhsh Niknam, E. Tammari, Elahe Shahbazi, Simultaneous determination of metal ions with synthetic ligand 4,4'[(4-chlorophenyl)methylene]bis(3-methyl-1-phenyl-1H-pyrazol-5-ol) by artificial neural networks, 3rd Iranian Biennial Seminar

- of Chemometrics, Tabriz, Iran, 9-10 Nov., 2011.
5. **Maryam Abbasi Tarighat**, Khodabakhsh Niknam, E. Tammari, Mehri Razavi, Comparative determination of metal ions using artificial neural networks by new synthetic ligand 3[1H-indol, 3-yl)(4-nitrophenyl)]1H-indol , 3rd Iranian Biennial Seminar of Chemometrics, Tabriz, Iran, 9-10 Nov., 2011.
 6. **Maryam Abbasi Tarighat**, Tahere Poursaffar, Spectrophotometric study of chemical first order and consecutive reactions kinetic by H-point curve isolation and H-point standard addition method, 10th Payame Noor Chemistry Conference Kerman Payam Noor University, 10-12 October, 2012.
 7. **Maryam Abbasi Tarighat**, Khosro Mohammadi, Masab Darbandi, Rank Annihilation Factor analysis for spectrophotometric determination of formation constants of new 2-Amino 3-hydroxypyridine Schiff base complexes, 10th Payame Noor Chemistry Conference Kerman Payam Noor University, 10-12 October, 2012.
 8. **Maryam Abbasi Tarighat**, Khosro Mohammadi, Masab Darbandi, Rank Annihilation Factor analysis for spectrophotometric determination of formation constants of complexes, 10th Payame Noor Chemistry Conference Kerman Payam Noor University, 10-12 October, 2012.
 9. **Maryam Abbasi Tarighat**, Extraction of contribution of kinetic profile for reaction of chemical species in unknown matrices by standard addition method, Bushehr, Persian Gulf University, 10-12 January, 2012.
 10. **Maryam Abbasi Tarighat**, Mohammad Reza Mohammadizadeh, Mahmud Pakniat, Masume Nabavi, Simultaneous determination of some heavy metal ions in different foodstuff, vegetable and water sample with new synthetic 2-benzylspiro[isoindoline-1,5-oxazoline] using continuous wavelet transform, 16th Iranian Congress of Chemistry, Yazd, Yazd University, 7-9 December, 2013.
 11. **Maryam Abbasi Tarighat**, Khosro Mohammadi, Marjan Khazaei, Masab Darbandi, Calculation of formation constants of metal ions synthesized 2-(4-hydroxy 1,1,1 trifluoro-ethyl)pyridine-3-ol using rank annihilation factor analysis, 16th Iranian Congress of Chemistry, Yazd, Yazd University, 7-9 December, 2013.
 12. **Maryam Abbasi Tarighat**, K. Mohammadi, M. Darbandi, M. Khazaei Zadeh, Spectrophotometric determination of pK_f of some metals with 2-(3-hydroxy-1-methylbut-2-enyl)dieneamino)pyridine-3-ol at different solvent mixtures using Rank Annihilation Factor Analysis, 4th Iranian Biennial Chemometric Seminars, Shiraz, 27-28 November 2013.

CONFERENCE AND WORKSHOP:

- 3th student seminar of chemistry respect of Professor Moshfegh Shirazi, 12-14 June, Shiraz University Shiraz, Iran,
- 12th Iranian Seminar of Analytical Chemistry, Mazandaran University, Babolsar, Iran, February 28-30 January, 2003.
- 16th Iranian Seminar of Analytical Chemistry, Bu Ali Sina University, Hamedan, Iran, 28-30 July 2009.
- 6th Aegean Analytical chemistry Days (AACD), Denizli Turkey 9-12 October 2009.
- 1th Iranian Workshop on Special techniques of FT, Institute of Advanced studies in basic, 30 August 2002.
- 2th Chemometrics Workshop, Institute of Advanced studies in basic Sciences, Zanjan, Iran, 3-5 September 2003.
- 3th Chemometrics Workshop, Institute of Advanced studies in basic Sciences, Zanjan, Iran, 27-29 August 2004.
- 7th Chemometrics Workshop, Institute of Advanced studies in basic Sciences, Zanjan, Iran, 26-28 August 2008.
- 16th Iranian Seminar of Analytical Chemistry, Hamedan, Bu Ali Sina University, 28-30 July, 2009.
- 3rd Iranian Biennial Seminar of Chemometrics, Tabriz, Iran, 9-10 Nov., 2011.
- 2rd Iranian chemistry Payam Noor, Kerman Payam Noor University, 19-21 Nov., 2011.

PROFESSIONAL MEMBERSHIPS

Iranian Society for Chemistry

Iranian expertise society

Iranian young researchers club

American Chemical Society (ACS) (applied for membership)

NON-WORK SPECIAL INTERESTS

Mountaineering, Handball, Ping-Pong and Chess.

