"IN THE NAME OF GOD"

Dr Javad Zolgharnein Professor of Analytical Chemistry

Arak University



Update 20/July/2017

I - Personal Information:

Name: Javad Family name: Zolgharnein

Date of birth: 30, Apr 1954, Place of birth: Arak

Marriage Status: Married, two children: girl and boy Nationality: Iranian

Address: Department of Chemistry, Arak University, Arak-Iran.

Fax: +86-34173406

E-mail: j-zolgharnein@araku.ac.ir, j.zolgharnein@gmail.com

Homepage: http://www.araku.ac.ir/~j zolgharnein

https://scholar.google.com/citations?hl=en&user=LmJtiIYAAAAJ

II-	Education	ial Re	co	rds:	
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	Name of Institute	Year	Degree	Major
1-	Tabriz University, Iran	1976	B.Sc	Chemistry
2-	Tarbiat Moalem Tehran	1991	M.Sc	Analytical Chemistry
	University, Iran			
3-	Razi University, Kermanshah, Iran	2000	Ph.D	Analytical Chemistry

Experiences

III- Academic Experience

- 1- Assistance Professor: 2000(Feb) 2003(Sep).
- 2- Associate Professor: 2003(Sep) 2010(Oct).
- 3- Professor: 2010(Oct)

IV- Memberships:

1- Iranian Chemical Society.

V- Awards:

1- Distinguished Ph.D student in Razi University- Kermanshah

2- Distinguished researcher of Chemistry Department at 2004.

VI- Courses Taught:

B.S.: Analytical Chemistry (I), (II), Environmental Analysis.M.S.: Advanced Analytical Chemistry, Analytical Spectroscopy (II).Ph.D: Statistical treatment of Analytical data, New topics in Analytical Chemistry.

VII - Research interests:

- 1 -Removal of waste water pollutants through Adsorption process (Biosorption by tree leaves, Nanosorbents, ...)
- 2- Chemometrics methods (Optimization, Experimental Design, H-Point standard addition).
- 3 Ion-Selective electrode and Ion Transport through bulk liquid membrane

4- Spectroscopic Study of Charge – Transfer Complexes of Macrocyclic Polyethers.

5-Thermodynamic Study of complexation of **macrocyclic polyetheres** with metal ions in nonaqueous solvents (by: Cond, **Pot**, NMR, **UV-Vis Spec**... techniques).

VII – Executive Positions:

- 1- Head of Department of Chemistry, Arak University, 1991(Sep) 1994(Feb).
- 2- Head of Department of Chemistry, Arak University, 1999(Sep)- 2001(Sep).
- 3-Dean of Faculty of Science, Arak University, 2002(Nov)- 2007(Sep).

VII – Students Graduated:

M.Sc. Degree:

1-Hoomayuon Tahmasebi," Competitive Potentiometric Study of Complexation of a series of 18-crown-6 with some Alkali and Alkaline Earth ions in Methanol using Ag⁺/Ag

Electrode"& "Spectrophotometric Study of Complexation of Dibenzopyridino-18-crown-6

with some Transition and Heavy Metal Ions in Dimethylsulphoxide by using

Murexide as a Metallochromic Indicator", June 2000 (Tir 1379).

- 2- Fatemeh Zahiredini, "Spectophotometric Study of Complexes of Dibenzopyridino-18-crown-6 with Ca²⁺, Sr²⁺, and Ba²⁺ in Binary Dimethylsulphoxide- Acetonitrile at 25° C by using Murexide as a Metallochromic Indicator"& "Silver Ion- Selective PVC Membrane Based on Dibenzopyridino-18- crown-6", Sep 2001(Mehr 1380).
- 3- Shieda Hossini, "High ly Selective and Efficient membrane Transport of Silver as AgBr₂⁻ ion using K⁺- decyl-18-crown-6 as carrier"& "Dibenzopyridino-18-crown-6 as Highly Selective and Effective Carrier for Uphill Transport of Lead (II) Ions through a Bulk Liquid Membrane", Sep 2001(Mehr 1380).
- 4- Davoud Jafarifar, "Simultaneous Determination of Fe (II) and Fe (III) by Kinetic-Spectrophotometric H-Point Standard Addition Methods" & "Simultaneous Determination of Iron and Vanadium by Spectrophotometric H-Point Standard Additions Method in Micellar Media", 2002(Bahman 1380).
- 5- Morteza Habibi., "Competitive Potentiometric Study of a Series of 18-crown-6 with Some Heavy Metal Ions in Methanol Using Ag⁺/Ag &A Selective Membrane electrode for Thallium (I) based on Dibenzopyridino-18-crown-6", January2003(Day 1381).
- 6- Kamal Kamandi, "Spectrophotometric determination of acidity constants of Xylenol Orange in binary methanol–water mixtures", June2005(Tir 1384).
- 7- Ali- Asghar Shamoradi, "Potentiometric Study of Complexation of a Series of 18- crown 6 and New derivative of 15-Crown-5 with Na⁺, Ag⁺, Pb²⁺, Zn²⁺, Cd²⁺ Ion In Methanol & Spectrophotometric study of Complexation of Methyl thymol Blue and Xylenol Orange with La (III), Ce(III) and Ce(IV)", October 2005(Mehr 1384).
- 8- Saeideh Yousefi, "Spectrophotometric study of complexation of a new synthesized Schiff- base With some transition metal ion", October 2005(Mehr 1384).

- 9- Somaie Afuini-Zadeh, "Simultaneous Spectrophotometric determination of Thiamine, Riboflavin and Pyridoxal by Parallel Factor Analysis and Partial Least Squares Regression&Chromatographic Determination of Chichoric Acid Contents in aerial Parts of Purpurea Herb", Sep 2006(Shahrivar 1385).
- 10- Akram Shahrjerdi, "Selective and Efficient Transport of Au (III) Ion through Bulk Liquid Membrane Using Dicyclohexyl-18-crown-6 as a Carrier & Spectrophotometric Study of Al-Xylenol orange Complex and using it for Determination of Trace Amount of Fluoride Ion", Jan 2007(Day 1385).
- 11- Hassan Shamas, "Selective and Efficient Transport of Tl(III), Cu(II) ions by dicyclohexyl-18-crown-6and 2-(ethyl amino)-5-(2- pyridil)-1,3,4 –thiadiazole", Jan 2007 (Bahman1385).
- 12-Gholamreza Davoodabadi, "Simultaneous determination of aluminum and iron with hematoxylin using spectrophotometric and orthogonal signal correction-partial least squares in plant and water" & "Spectrophotometric determination of acidity constant of some indicators in various micellar media solutions by rank annihilation factor analysis", June 2007(Tir 1386).
- 13- Zhaleh Adhami, "Using statistical design of experiment for optimization conditions of Biosorption of Cd(II) by *Ulums* and Methylene blue by *Platanus*", Feb 2008 (Bahman 1386).
- 14- Maryam Khorami," Multivariate spectropholurimetric study of complexation of Methylene blue with β-cyclodextrin and sodim dodecylsulphate", June 2008 (Khordad 1387).

- 15- Neda Asanjarani, "Thermodynamic study, equilibrium modeling and characterization of Effective variables by statistical design of experiments for biosorption of Tl(I) onto modified Ulmustree Leaves sugar beet pulp", Sep 2008(Sharivar 1387).
- 16- Akramsadat Hamidi, "Selective and efficient transport of Cu(II) with a cooperative carrier Composed of tetraza -12-crown-4 and oleic acid & Designing of Cr(III) selective electrode based on methylviolet and optimization of its polymeric membrane using statistical design of experiments", Feb 2009 (Bahman1387).
- 17- Fatemeh Gholami, "The investigation of removal of methyl violet by *Platanus* tree leaves from aqueous waste", Sep 2009 (Sharivar 1388).
- 18-Nahid Ghadiri, "Multivariate optimization, thermodynamic, and kinetic studies of biosorption of Pb (II) and Cd(II) by some natural sorbent (*Acer, Vitis, Poapratensis and Ligestrum*)", Feb 2010(Bahman 1388).
- 19-Rahil Moeinosadat, "Thermodynamic, Kinetic and Multivariate Optimization of Biosorption of Pb(II) and Zn(II) onto some Natural Sorbents (*Julangsregia, Nigra, and Ficuscarica*)", Feb 2010(Bahman 1388).
- 20- Saeideh Dehghan, Removal of single and binary mixture of Cu(II) and Co(II) from aqueous Solutionby Using modified *pop corn*& Preconcentration of Co(II) by cloud point extraction, Feb2011(Bahman1389).
- 21-Saeideh Ahangrani, Study of removal conditions of Pb(II), Cr(III) and Cr(VI) from Aqueous Solutions through Adsorption onto *Elaeagnus* Tree Leaves & Preconcentration of Cu (II) by cloud point extraction, Feb 2011(Bahman 1389).
- 22-Sharbano Faraji, Optimization and characterization of removal of Bromophenol Blue by and its Cloud point extraction, Sep 2011(Sharivar 1390).

- 23- Mahdie Rastgordani, Optimization, and characterization of adsorption of Methylene blue onto nano ά-alumina and removal of binary mixture of pb(II) and Zn(II) by *Julangsregia* tree leaves, Feb 2012(Day1390).
- 24- Zahra Malekhossini, Removal of Alizarin Yellow Dye by *Nano-Alumina* in Aqueous Solutions and Determination by Cloud Point Extraction, Sep 2012(Sharivar 1391).
- 25- Zahra Choghaee, Comparisons of characteristics behavior of *Corn cover*, *nano-Iron Oxide* and their composition as sorbent for removal of Alizarin Red (dye) from water solution, Multivariate optimization, Jan 2013(Bahman1391).
- 26-Kolsom Dalvand, Multivariate optimization and removal characterization of phosphate and methyl orange dye using nano hydroxide cobalt adsorbent from aqueous solution, Sep 2013 (Sharivar 1392).
- 27- Marzieh Yarmand, "Optimzation and chractization of adsorptin of thymol blue by nanohydroxide cobalt and Cersis siliquastrum Tree Leaves from aqueous solution, Sep 2013(Sharivar 1392).
- 28- Fahime Malijerdi, Simultaneous spectrophotometric determination of copper (II) and nickel (II) with Sodium diethyldithio cabamate using multivariate calibration and cloud point extraction method, Jan 2014(Bahman 1392).
- 29- Arman Sharifi, Multivariate Optimization and Characterization of Removal of Lead (II) by Ion of Blend Exchange Membranes SPPO and PVDF and Malachite Green by Nano-SiO₂ from Aqueous Solutions, Sep 2014(Sharivar 1393).
- 30- Hassan Sadeghi, Multivariate optimization and removal study of nitrate and Pb(II) solutions using heterogeneous membranes based on polymer polyvinyl chloride (pvc) and polycarbonate(pc), Sep 2014(Mehr 1393).

- 31- Sahar Ravansalar, Removal of some heavy metals by bio and nanosorbents from aqueous solution: Optimization and adsorption cheractrization, Sep 2014(Mehr 1393).
 - 32- Sara Eskini, Theoretical study of relation between stability energy complexes hydrogen bond weak acid-base with acidity(pKa) and basisity(pKb) molecular interactions, Jun 2015(Khordad 1394).
 - 33- Meisam Japelaghi, Multivariate Optimization and Adsorption Characterization of Toluidine Blue Removal from Aqueous Solution by Surfactant Modified Nano-γ-alumina, October 2015 (Mehr 1394).
 - 34- Reza Rostampoor, Determination of polycyclic aromatic hydrocarbons in bread using microwave assisted extraction and dispersive liquid-liquid micro-extraction followed by gas chromatography-mass spectrometry, Nov 2015(Aban 1394).
 - 35- Saeideh Dermanaki Frahani, "Adsorptive removal of Congo red dye by a metal-organicframework (MOF) as a new adsorbent; Multivariate optimization and adsorption characterization" Sep 2016(Shahrivar 1395).
 - 36- Fatemeh Mohmmadi, "Adsorptive removal of a dye by a new polymeric adsorbent; Multivariate optimization and adsorption cheractrization", Sep 2016 (Shahrivar 1395).

Ph. D Degree:

- 1-Ali Shahmoradi, "Characterization Studies and Multivariate Optimization Using Experimental Design for Removal of Some Toxic Metal Ions: Pb(II), Cr(VI), Hg(II), As (III) and Mixture of Pb(II), Cu(II) and Cd(II) from Aqueous Solutions Through Adsorption onto Some Tree Leaves", Oct 2010 (Mehr 1389).
- 2- Tahere Shariatmensh,"Multivariate Optimization and Characterization Studies on removal of some Pollutant from water solution by Natural Sorbents and Design of Electrodes for Pollutants Measurement Using Nanomaterial", Sep 2013(Sharivar 1392).
- 3- Neda Asanjarani,"Characterization studies and multivariate optimization using chemometrics

methods for the removal of some environmental pollutants from aqueous solution by some biosorbents and nanosorbents", **Sep 2013(Sharivar 1392)**.

- 4- Maryam Bagtash," Simluenous Removal of Mixture of some Pollutants (metal ion, dye) from water solution using modified Naturaland Nanomaterials Sorbents; Multivariate Optimization and Characterization Studies by Chemometric methods", Sep 2014(Mehr 1393).
- 5- Shahab Feshki, "Removal of some dyes and polycyclic aromatic hydrocarbon (PAHS) using modified magnetic nanoparticles, characterization of sorbent and multivariate optimization by chemometrics methods", July 2017(Tir 1396).

Postdoctoral researcher (postdoc)

1- Maryam Bagtash

III- Current Students: M. Sc. Degree:

1-Zahra Godarzi

2-Zahra Naderi

3-Farzaneh Rajabalipoor

Ph.D. Degree:

- 1- Mahdie Rastgordani
- 2- Mostafa Kazemi
- 3- Amenh Asheghhossini
- 4- Saeideh Demanaki Farahani

Publications:

IX-List of Publication

73. J. Zolgharnein, Maryam Bagtash, Neda Asanjarani, Taguchi design based neural network

approach for Modeling removal process Using Nano TiO2 immobilized on ligestrum leaves for

simultaneous removal of Cu(II) and Zn(II), (under review).

- 72. J. Zolgharnein, Neda Asanjarani, Maryam Bagtash, A comparison between response surface methodology and artificial neural network for modeling adsorptive removal of phenol red by nanocobalt hydroxide, (under review).
- 71. J. Zolgharnein, T. Shariatmanesh, N. Asanjarani, Artificial Neural Network (ANN) Approach for Modeling of Pb(II) and Cu(II) Adsorption from Aqueous Solution by Cobalt Hydroxide Nano-flakes, . JIEC(under review).
- 70. M. Bagtash, J. Zolgharnein, Crossed mixture-process design as multivariate optimization approach for simultaneous removal of binary mixture of Tartrazine and Indigo carmine dyes using by cobalt hydroxide nanosorbent; adsorption characterization, (under review).
- 69. J. Zolgharnein, M. Rastgordani, Taguchi optimization approach for Simultaneous removal of binary mixture of Indigo carmine and Methyl orange dyes using cobalt hydroxide nano-particles,(under review), (under review).
- 68. M. Bagtash, **J. Zolgharnein**, Hybrid central composite design for simultaneous optimization of removal of Methylene Blue and Alizarin Red S from aqueous solutions using Vitis tree leaves, *J. Chemometrics*.
- 67. J. Zolgharnein, Sh. Feshki, Multivariate Optimization of Pre-concentration and Separation of

Brilliant Green using Magnetic Nanoparticles (Fe₃O₄) Functionalized by CTAB, *Journal of*

Analytical Chemistry (under review).

66. J. Zolgharnein, A. Shahmoradi, Maryam Bagtash, S. Dermanki Frahani, P. Zolgharnein, Chemometrics optimization for simultaneous adsorptive removal of ternary mixture of (Cu (II), Cd (II) and Pb (II)) by *Fraxinus* tree leaves, *J. Chemometrics, accepted(online)*.

- 65. J. Zolgharnein, K. Dalvand, M. Rastgordani, P. Zolgharnein, Nano Cobalt Hydroxide as an efficient sorbent for removal of Phosphate from aqueous Solution; Multivariate optimization and adsorption Characterization, *Journal of Alloys and Compounds*, 725, 1006–1017(2017).
- 64. J. Zolgharnein, Sh. Feshki, Solid-phase Extraction and Separation of Brilliant Green by Fe₃O₄ Magnetic Nanoparticles Functionalized by Sodium Dodecyl Sulphate from Aqueous Solution; Multivariate optimization and adsorption characterization, *Desalination and Water Treatment*, **75**,**58-69**(2017).
- 63. J. Zolgharnein, M. Bagtash, Crossed Mixture-process Design Optimization and Adsorption Characterization of Multi-metal (Cu(II), Zn(II)and Ni(II)) Removal by Modified *Buxus Sempervirens* Tree Leaves, *J Taiwan Institute of Chemical Engineering*, 78, 104-117(2017).
- 62. J. Zolgharnein, M. Bagtash, N. Asanjarani, Chemometrics approach for Simultaneous removal of Alizarin Red S and Congo Red from aqueous solution by cobalt hydroxide nanoparticles, J Chemometrics, 31(5), 1-12(2017).
- 61. J. Zolgharnein, Z. Choghaei, M. Bagtash, Sh. Feshki, M. Rastgordani, P. Zolgharnein, Corn cover and nano-Fe₃O₄ composite for removal of Alizarin Red S from aqueous solution: Characterization and optimization investigations, *Desalination and Water Treatment*, 57(57), 27672-27685(2016).
- M. Bagtash, Y. Yamini, E. Tahmasebi, J. Zolgharnein, Z. Dalirnasab, Magnetite nanoparticles coated with tannic acid as a viable sorbent for solid-phase extraction of Cd²⁺, Co²⁺ and Cr³⁺, *Microchim Acta* 183(1), 449-456(2016).
- 59. J. Zolgharnein, A. Shahmoradi, S. Amani, P. Zolgharnein, Experimental design optimization and biosorption characterization of As (III) using *Fraxinus* tree leaves, *Chemical Engineering Com*, 203(2), 210-223(2016).
- 58. J. Zolgharnein, Maryam Bagtash, Hybrid design as an optimization approach for removal of

Methylene blue by *Acer* tree leaves; Characterization of Adsorption, *Desalination and Water Treatment*, 54(9), 2601-2610 (2015).

- 57. J. Zolgharnein, N. Asanjrani, Gh.Azimi. J.B. Ghasemi, Simultaneous Spectrophotometric Determination of Ga(III) and Tl(III) by Using Genetic Algorithm Based on Wavelength Selection Partial Least Squares Regression, J. Anal. Chem., 70(2) 148-153(2015).
- 56. J. Zolgharnein, T. Shariatmanesh, N. Asanjarani, Doehlert design as optimization approach for removal of Pb(II) from aqueous solution by *Catalpa speciosa* tree leave: Equilibrium modeling and Kinetic studies, *Desalination and Water Treatment*, 53(2), 430-445(2015).
- 55. J. Zolgharnein, M. Bagtash, T. Shariatmanesh, Simultaneous Removal of Binary Mixture of Brilliant Green and Crystal Violet using Derivative Spectrophotometic for Multivariate Optimization and Adsorption Characterization of dyes onto Surfactant Modified Nano-γ- Alumina, *Spectrochim Acta*. A, 137, 1016-1026(2015).
- 54. S.Y. Kazemi, A.Hamidi, J. Zolgharnein, M. Lakouraj, Experimental Design as an Optimization

Approach for Fabrication a New Selective Sensor for Thallium (I) based on Calix[6]arene. *J. Anal. Chem*, 69(7), 715-724(2014).

- 53. J. Zolgharnein, M. Bagtash, N. Asanjarani, Hybrid central composite design approach for Simultaneous Optimization of Removal of Alizarin Red S and Indigo Carmine dyes using Cetyltrimethylammonium bromide-modified TiO₂ nano-particles, *J. Environmental Chemical Engineering*, 2(2), 988–1000 (2014).
- 52.J. Zolgharnein, T. Shariatmanesh, A. Babaei, Simultaneous Determination of Propanil and

Monalide by Modified Glassy Carbon Electrode with Nickel Oxide Nanoparticles, Using Partial

Least Squares modified by Orthogonal Signal Correction and Wavelet Packet Transform, Sensor and

Actuators B, 197, 326-333(2014).

- 51.J. Zolgharnein, F. Gholami, N.Asanjarani, P.Zolgharnein, Gh.Azimi, *Platanus Carpinifolia* Tree Leaves as Highly Efficient Sorbent for Removal of Methyl Violet Dye from Aqueous Solution; Multivariate Optimization, Isotherm Modeling andKineticStudies. *Sep. Scien. Technol.*, 49(5), 752-762(2014).
- 50. J. Zolgharnein, N. Asanjrani, M. Bagtash, G. Azimi, Multi-response optimization using Taguchi design and principle component analysis for removing binary mixture of alizarin redand alizarin yellow from aqueous solution by nano- γ -alumina, *Spectrochim Acta. A*, 126,291-300(2014).
- 49. J. Zolgharnein, T. Shariatmanesh, N. Asanjarani, *Cersissiliquastrum* Tree Leaves as efficient adsorbent for removal of Ag(I):Response Surface Optimization and Characterization of Biosorption, *Clean-Soil, Air, Water*, 41(12), 1183-1175(2013).
- 48. J. Zolgharnein, N. Asanjarani, T. Shariatmanesh, Taguchi L₁₆orthogonal array design for

optimization and characterization of the removal of Cd(II) using Carpinus betulus tree leaves,

International Biodeterioration & Biodegradation, 85, 66-77(2013).

- 47. J. Zolgharnein, T. Shariatmanesh, Ali Babaei, Multivariate optimization of a new 4-chlorophenol sensor fabricated by modification of glassy carbon electrode using Ni(OH)₂ nanoparticles-carbon nanotubes(*NNH–MWCNTs*). Sensor and Actuators B, 186, 636-644(2013).
- 46. M. Rajabi, M. Kamalabadi, M. R. Jamali, J. Zolgharnein, N. Asanjarani, Application of response Surfacemethodology for optimization of ionic liquid–based dispersive liquid–liquid microextraction of cadmium from water samples, *Human& Toxicological Chemistry*, 32,620-631(2013).
- 45. J. Zolgharnein, A.Shahmoradi, J.B.Ghasemi, Comparative Study of Box-Behnken, Central composite And Doehlert Matrix Designs for Multivariate Optimization of Pb (II)Adsorption onto *Robinia* Tree Leaves. J. Chemometrics, 27, 12-40(2013).

- 44. J. Zolgharnein, A.Shahmoradi, J.Ghasemi, Pesticides removal using conventional and low cost adsorbents: a review. *Clean-Soil, Air, Water*, 39(12), 1105-1119 (2011).
- 43. J. Zolgharnein, N. Asanjarani, S.N. Mousavi, Optimization and Characterization of Tl (I) Adsorption onto Modified*UlmusCarpinifolia* Tree Leaves. *Clean-Soil, Air, Water*,39(3), 250-258(2011).
- J. Zolgharnein, N. Asanjarani, T. Shariatmanesh, Removal of Tl(I) from aqueous solution Using modified sugar beet pulp, *Toxicological& Environmental Chemistry*, 93(2),207-214(2011).
- 41.**J. Zolgharnein**, A.Shahmoradi, Characterization of Sorption Isotherms, Kinetic Models and Multivariate Approach for Optimization of Hg(II) Adsorption onto *Fraxinus* Tree Leaves.

J. Chem. Eng. Data. 55(11), 5040(2010).

- 40. J. Zolgharnein, A. Shahmoradi, "Adsorption of Cr(VI) onto *Elaeagnus*Tree Leaves: Statistical Optimization, Equilibrium Modeling, and Kinetic Studies. *J. Chem. Eng. Data*, 55(10), 3428(2010).
- 39. J. Zolgharnein, A, Niazi, S. Afiuni-Zadeh ,Kh. Zamani , Determination of Chichoric Acid as a Biomarker in Echinacea Purpurea Cultivated in Iran Using High Performance Liquid Chromatography, *Chinese Medicine*, 1,23(2010).
- 38. S.Y.Kazemi, A.S.Hamidi, N.Asanjarani, J. Zolgharnein, Optimization of Anew PVC membrane electrode for Cr (III) based on methylviolet using experimental design. *Talanta*, 81,773(2010).
- 37. J. Zolgharnein, Zh. Adhami, A .Shahmoradi, S.N.Mousavi, M.R. Sangi, "Multivariate Optimization of the Removal of Cd(II) by *Ulmus* Tree Leaves By Statistical design of Experiments", *Toxicological & Environmental Chemistry*, 92(08), 1461-1470(2010).

36. N. Pourreza, J. Zolgharnein, A.R. Kiasatat, T. Dastyar, "Silica gel-polyethylene glycol as

a new adsorbent for solid phase extraction of cobalt and nickel and determination by flame atomic

absorption spectrometry, *Talanta* 81,773 (2010).

- 35. A.Hamidi, S.Y.Kazemi, **J. Zolgharnein**, Highly Efficient and Selective Ttransport of Cu(II) with a Cooperative Carrier Composed of Tetraaza-14- Crown-4 and Oleic Acid through a Bulk Liquid Membrane, *Sep. Scien. Technol*, **45**, **58**(2010).
- 34. J. Zolgharnein, Zh. Adhami, A.Shahmoradi, S. N.Mousavi, "Optimization of Removal of Methylene Blue by *Platanus* Tree Leaves Using Response Surface Methodology", *Analytical Sciences (JPN)*, 26, 111(2010).
- 33. F. Hasanvand, A. Hoseinzadeh. J. Zolgharnein, S. Amani., "Synthesis, and characterization of two acetato- bridged dinuclear copper (II) complexes with 4-bromo-2-((4 or 6-methylpyridin-2-ylimino) methyl) phenol as the ligand", *Journal of Coordination Chemistry*, 63(2), 346(2010).
- 32. J. Zolgharnein, A.Shahrjerdi, G. Azimi, J. Ghasemi, "Spectrophotometric Determination of Trace amounts of Fluoride using an Al-Xylenol Orange Complex as a colored reagent", *Analytical Sciences (JPN)*, 25, 1249(2009).
- 31. G.Azimi, J. Zolgharnein and M.R. Sangi, S. Ebrahimi, "Solid Phase Selective and Extractive preconcentration of Silver Ion from Aqueous Samples on Modified Silica Gel with 5-(4-Dimethylaminobenzylidene)-Rhodanine; Prepared by Sol- Gel Method", *Analytical Sciences (JPN*), 25,711(2009).
- 30. J. Zolgharnein, H. Tahmasebi, S. Amani, "Spectrophotometric Study of Complexatition of dibenzopyridino-18-crwon-6 with Some Transition and post Transition metal ions in DMSO Solution Using Murexide as a Metallochromic Ligand",

Russian Journal of Coordination Chemistry, 35(7), 512(2009).

29. G. Azimi, A. Khoobi, Kh. Zamani, **J. Zolgharnein**, Multi-wavelength Spectrophotometric Determination of acidity Constants of Newly synthesized 1,2,4- Triazole Derivatives in

Ethanol-Water Mixtures, J. Chem. Eng. Data, 53, 1862(2008).

- 28. J. Zolgharnein, A. Sharejerdi, N. Asanjarani, G. Azimi." Facilitated Transport of Au (III) through bulk liquid Membrane using Potassium-dicyclohexyl-18-crown-6 as Specific Carrier", Sep. Scien. Technol., 43, 3119(2008).
- 27. J. Zolgharnein, A. Shahmoradi, M. R. Sangi, "Optimization of Pb(II) Biosorption by *Robinia*TreeLeavesUsing Statistical Design of Experiments",

Talanta, 76,528(2008).

- 26. A. Niazi, **J. Zolgharnein**, M.R. Davoodabadi, "Spectrophotometric determination of acidity constant of some indicators in various micellar media solutions by rank annihilation factor analysis", *Spectrochim Acta. A*, **70,343(2008)**.
- 25. M.R.Sangi, A Shahmoradi, J. Zolgharnein, G.Azimi, M. Ghorbandoost, "Removal and recovery of heavy metals from aqueous solution using *Ulmus* and *Fraxinus* tree leaves", *J. Hazard. Mater.*,155, 513 (2008).
- 24. J. Zolgharnein, G. Shamoradi, S. Amani, "Study of complexation of phenylaza-15-crwon-5, 4-nitrobenzo- 15-crown-5, and benzo-15-crown-5 with Ag⁺, Tl⁺ and Pb²⁺ Ions in Methanol by Competitive Potentiometry", *J. Incl. Phenom.*, 60, 163(2008).
- 23. A. Niazi, J. Zolgharnein, M.R. Davoodabadi, "Simultaneous determination of aluminum and iron with hematoxylin using spectrophotometric and orthogonal signal correction-partial least squares in plant and water", *Annali di Chimica*, 97, 1181(2007).
- 22. A. Niazi, J. Zolgharnein, S.Afiuni-Zadeh, "Spectrophotometric determination of ternary mixtures of thiamin, riboflavin and pyridoxal in pharmaceutical and human plasma by least-squares support vector machines", *Analytical Sciences (JPN)*, 23, 1311 (2007).
- 21. J. Zolgharnein, H. Shams, G. Azimi, "Selective and Efficient Liquid Membrane

Transport of Thallium (III) ion by Potassium-dicyclohexyl-18-crown-6 as Specific Carrier", *Sep. Scien.Technol.*, 42, 2305(2007).

- 20. J. Zolgharnein, Gh Shahmoradi, Kh. Zamani, S. Amani," Potentiometric Study of Complexation of Phenylaz´a-15-crwon-5, 4-nitrobenzo-15-crown-5 and dibenzopyridino-18-crown-6 and other derivative of 18-crowns-6 with Na⁺ Ion in Methanol", *J. Incl. Phenom.*, 59, 99(2007).
- J. Zolgharnein, G. Azimi, M. Habibi," Thallium (I) ion Selective Membrane electrode based on Dibenzopyridino-18-crown-6", J. Chem, Soc. Pak., 29(5), 487(2007).
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