Curriculum Vitae

Hossein Farsi

Associate Professor

Department of Chemistry

University of Birjand

Tel: +98 (0)563 220 2065

Fax: +98 (0)563 220 2065

Email: hofarsi AT birjand.ac.ir

Date of Birth: 1968

Material Status: Married, two children

Educational Background

Date	Place	Degree Obtained	Title of Thesis
1987-1992	Dept. of Chemistry, Univ. of Sistan & Baluchistan, Iran	BSc. Degree in Pure Chemistry	Qualitative analysis of metallic ions in Zahedan water.
1992-1995	Dept. of Chemistry, Sharif Univ. of Technology, Iran	MSc. Degree in Physical Chemistry (Surface Chemistry)	Preparation and investigation of Ni-W/Al_2O_3 catalysts for hydrodesulfurization process
2001-2007	Dept. of Chemistry, Sharif Univ. of Technology, Iran	PhD degree in Physical chemistry (Electrochemistry)	Modeling and experimental study of mixed oxide supercapacitors

Sabbatical Leaves

Date	Place	Supervisor
2/2005-2/2006	Department of Chemistry, Simon Fraser University, Burnaby, Canada	Prof. Michael H. Eikerling
2/2016-8/2016	Department of Chemistry, Ball State University, USA	Prof. Zhihai Li

Research and Training Experiences

Date	Title	Place
May 1997	Research methods workshop	Research Affairs University of Birjand, Birjand, Iran.
October 2004	Nanocarbons in Energy and Environmental Applications, workshop	Research Institute of Petroleum Industry, Tehran, Iran.
November 2004	Winter School of numerical modeling methods and computational simulation in nanoscale, workshop	Research institute of Fundamental Sciences, Department of Nano-Science, Tehran, Iran.
September 2008	Ab initio Modeling in Solid State Chemistry, MSSC2008	Imperial College London, UK
Februaury 2010	Dye Sensitized Solar Cells	Sharif University of Technology, Kish island, Iran

Research Interests

- ***Nanomaterials,*** especially metal oxide nanoparticles and nanostructures
- ***Electrochemical Energy Storage and conversion Devices,*** such as supercapacitors, batteries (lithium ion batteries), fuel cells and Solar cells
- ***Surface chemistry,*** consisting of catalysts, surfactants, reverse micelles and colloids
- ***Artificial Neural Network Simulation***
- ***Magnetic Materials***

Educational and Work Experiences

a) *Courses taught*

General Chemistry, Physical Chemistry I & II, Molecular Spectroscopy, Surface & Solid State Chemistry, Industrial Electrochemistry, Corrosion, Physical Chemistry Lab I & II, Surface Chemistry Lab, Corrosion Lab, Cement Chemistry.

Advanced Electrochemistry, Surface Chemistry, Advanced physical Chemistry.

Modern topics in Physical Chemistry, Nanosurface Chemistry, Photoelectrochemistry and solar cells

b) *Work Experiences*

- ***Quality Control Engineer,*** Iran Manyazia Factory, Birjand, Iran, 1988 (for 6 months)
- ***Rsearcher,*** Catalyst department, Research Institute of Petroleum Industry, Tehran, Iran (1993-1995).

Membership in Scientific Societies

1. Student member, The American Chemical Society, 1990-1993
2. Student member, The Royal Society of Chemistry, 1990-1993
3. Active member, The Iranian Society of Chemistry and Chemical Engineering, 1993-2002
4. Active member, The Electrochemical Society, 2002-present
5. Active member, International Society of Electrochemistry, 2003-present
6. Active member, Iranian Society of Chemistry, from 2007

سوابق اجرایی–مدیریتی

الف) معاون گروه شیمی، دانشکده علوم دانشگاه بیرجند–سال ۱۳۷۷–۱۳۷۶

ب)معاون اداری و مالی دانشکده علوم دانشگاه بیرجند، سال ۱۳۷۸–۱۳۷۷

پ)مسئول دفتر نمایندگی دانشگاه بیرجند در تهران، ۱۳۷۹–۱۳۸۴

ت)مسئول خریدهای ارزی دانشگاه و مشاور رئیس دانشگاه در امور خریدهای ارزی ۱۳۸۴–۱۳۸۰

ث)مدیر تحصیلات تکمیلی دانشگاه بیرجند ۱۳۹۴-۱۳۸۶

* Publications*

i) Published papers

1. H. Farsi, F. Gobal, *"An artificial neural network simulator for supercapacitors performance"*, **Computational Materials Science**, 39 (2007) 678-683.

2. H. Farsi, F. Gobal, *"Theoretical analysis of the performance of a model supercapacitor consisting of metal oxide nanoparticles"*, **J. Solid State Electrochem.**, 11 (2007) 1085-1092.

3. H. Farsi, F. Gobal, *"A mathematical model of a nanoparticulated mixed oxides pseudocapacitor; Part I: model development and particle size effects"*, **J. Solid State Electrochem.**, 13 (2008) 433-443.

4. H. Raissi, A. F. Jalbout, **H. Farsi**, B. Abbasi, A. de Leon, S. Moghiminia, *"Intramolecular hydrogen bonding in 3-imino-propenylamine: Theoretical investigations"*, **Int. J. Quant. Chem.**, 109 (2009) 1609-1616.

5. H. Farsi, F. Gobal, H. Raissi, S. Moghiminia, "*On the pseudocapacitive behavior of nanostructured molybdenum oxide*", **J. Solid State Electrochem.**, 14 (2010) 643-650.

6. H. Farsi, F. Gobal, H. Raissi, S. Moghiminia, "The pH effects o*n the capacitive behavior of nanostructured molybdenum oxide*", **J. Solid State Electrochem.**, 14 (2010) 681-686.

7. H. Frasi, F. Gobal, *"A mathematical model of a nanoparticulated mixed oxides pseudocapacitor; Part II: The effects of intrinsic factors"*, **J. Solid State Electrochem.,** 15 (2011).

8. H. Raissi, F. Farzad, E.S. Nadim, M. Yoosefian, **H. Farsi**, A. Nowroozi, D. Loghmaninejad, *" Theoretical study of the effects of substitution, solvation, and structure on the interaction between nitriles and methanol"*, **Int. J. Quant. Chem.**, 112 (2012) 1273-1284.

9. A. Amirabadizadeh, **H. Farsi**, H. Arabi, M. Dehghani, *"Effect of Substitutions of Zn for Mn on Size and Magnetic Properties of Mn–Zn Ferrite Nanoparticles"*, **J. Supercond. Nov. Magn.**, 25 (2012) 2763-2765.

10. **H. Farsi**, F. Gobal, Z. Barzgari,*" A study of nanostructured hydrated tungsten trioxide as electroactive material for pseudocapacitors"* **IONICS,** 19 (2013) 287-294

11. **H. Farsi**, S.A. Hosseini, *"The electrochemical behaviors of methylene blue on the surface of nanostructured $NiWO_4$ prepared by coprecipitation method"*, **J. Solid State Electrochem.** 17 (2013) 2079-2086.

12. H. Raissi, F. Farzad, **H. Farsi**, *"Theoretical investigation of substitution effect on the proton transfer mechanism in 3-mercapto-propenethial"*, **J. Theor. Comput. Chem.,** 12 (2013) 1350045

13. **H. Farsi**, Z. Barzgari, *"The lithiation studies of nanostructured tungsten oxide film prepared via electrochemical precipitation"*, **IONICS,** 19 (2013) 1349-1357.

14. F. Farzad, **H. Farsi**, H. Raissi, *"Quantum chemical studies on molecular conformations, energetic and interamolecular hydrogen bonding in ground and exited electronic state of (thioxosily) ethyleneselenol"*, **Journal of Sulfur Chemistry,** 35 (2014) 152-163.

15. **H. Farsi**, Z. Barzgari, *"Chemical synthesis of nanostructured $SrWO_4$ for electrochemical energy storage and conversion application"*, **International Journal of Nanoscience,** 13 (2014) 1450013.

16. S. Moghiminia, **H. Farsi**, H. Raissi, *"Comparative optical and electrochemical studies of nanstructured $NiTiO_3$ and $NiTiO_3$-TiO_2 prepared by a low temperature modified Sol-Gel route"*, **Electrochimica Acta,** 132 (2014) 512-523.

17. **H. Farsi**, Z. Barzgari**, "***Synthesis, characterization and electrochemical studies of nanostructured $CaWO_4$ as platinum support for oxygen reduction reaction***"**, **Materials Research Bulletein,** 59 (2014) 261-266.

18. **H. Farsi**, Z. Barzgari, Z. Askari, *"Sunlight-induced photocatalytic activity of nanostructured calcium tungstate for methylene blue degradation"*, **Research on Chemical Intermediate**, 41 (2015) 5463-5474.

19. **H. Farsi**, S. Moghiminia, A. Roohi, S.-A. Hosseini, *"Preparation, characterization and electrochemical behaviors of Bi_2O_3 nanoparticles dispersed in silica matrix"*, **Electrochimica Acta,** 148 (2014) 93-153

20. **H. Farsi**, S. Soleimanzadegan, F. Ebrahimi, *"Molecular dynamic simulation of some organic compounds solubilization into the nanometric core of cetyltrimethylammonium bromide micelle"*, **Journal of Molecular Structure,** 1079 (2015) 494-501

21. R. Mardani, A. Amirabadizadeh, M. Ghanaatshoar, **H. Farsi,** *"The Influence of Magnetic Field Direction and Amplitude in Direct Current-Field Annealing on the Magnetoimpedance of Co-Based Wires"*, **Journal of Superconductivity and Novel Magnetism**, 28 (2015) 2441-2446.

22. S. Hosseini, H. Farsi, S. Moghiminia, T. Zubkov, I. V. Lightcap, A. Riley, D. G. Peters, Z. Li, *"Nickel tungstate ($NiWO_4$) nanoparticles/graphene composites: preparation and*

photoelectrochemical applications", **Semiconductor Science and Technology,** 33 (2018) 055008.

ii) Submitted papers

1. S. Moghiminia, H. Farsi, H. Raissi, M.A. Nasseri, *"The synergistic effect between extracted dyes from Saffron for sensitizing of TiO_2 nanoparticles for harvesting the light",* **Electrochimica Acta,**

Abstract:

The natural dyes were extracted from both stigma and petals of saffron and used as photo-sensitizers. It was found that for a cell which has been sensitized by a mixture of these extracted dyes the energy conversion efficiency (η) was around 46% higher than that achieved by the linear superposition of the cells sensitized by individual extracted dyes. This indicates that the mixed dyes co-sensitization involves a synergistic effect in the energy transfer of the dye-sensitized mesoporous TiO_2 solar cells. A mechanism was proposed for this synergistic effect.

2. Z. Barzgari**, H. Farsi,** ***"****A study of Pt nanoparticles supported on $CoWO_4$/ graphite as catalyst for oxygen reduction reaction****"****,* **Electrochimica Acta**

Abstract

Nanostructured cobalt tungstate has been synthesized via co-precipitation method, and its electrochemical capacitance behavior was studied in a 0.5 M NaOH solution. Scanning electron microscopy (SEM) and X-ray diffraction (XRD) were used to characterize the surface morphology and crystallinity of the obtained $CoWO_4$ powder. The Pt/$CoWO_4$-graphite catalysts were fabricated by the electrodeposition of platinum onto the surface of $CoWO_4$/ graphite. The physical properties of the prepared catalyst were investigated using scanning electron microscopy (SEM) and EDX. The electrochemical activity of the Pt/$CoWO_4$- graphite for the oxygen reduction reaction was studied using cyclic

voltammetry, linear sweep voltammetry, and electrochemical impedance spectroscopy. In comparison to the Pt/graphite catalyst, Pt/$CoWO_4$- graphite showed higher electrocatalytic activity.

3. S. Moghiminia, **H. Farsi**, H. Raissi, *" Preparation, characterization and electrochemical investigation of nanostructured p-type cobalt titanate"*, **Solid State Commun.**

Abstract

Nanostructured $CoTiO_3$ was prepared by a low temperature modified sol-gel method. X-ray diffractometry and transmission electron microscopy were used for characterization of crystal structure and morphology of prepared materials. A crystallite size of 57 nm for cobalt titanate and a nanoparticle size smaller than 70 nm were obtained for prepared samples. Using UV-Vis diffuse reflectance spectroscopy and Mott-Schottky analysis, the energy band structures of nanostructured $CoTiO_3$ was determined and cyclic voltammograms were interpreted in terms of the energy band structure.

4. **H. Farsi**, Z. Barzgari, M. Zargazi, *" Effects of the electropolymerization conditions of aniline on the properties of polyaniline-coated stainless steel bipolar plates for fuel cells"*, **Electrochim. Acta**

Abstract

To achieve different morphologies, polyaniline was electropolymerized on the surface of commercial stainless steel by galvanostatic, potentiostatic and potentiodynamic methods and also, sodium dodecylsulfate, cetyltrimethylamonium bromide and TX100 were used in electropolymerization bath as anionic, cationic and nonionic surfactant additives, respectively. Potentiodynamic polarization curves, electrochemical impedance spectroscopy and contact angle measuring were used for investigating the properties of polyaniline-coated stainless steel as bipolar plate materials for fuel cell. Our studies showed that although sodium dodecylsulfate makes a more compact polyaniline film with a low corrosion rate but enhances the film wetability.

Presentations

1. **H. Farsi,** F. Gobal, R. Mondegarian, *"The Energetic Study of Reduction Ni-W Catalysts and HDS Reaction of thiophen on them"*, in **The Second Iranian Seminar of Physical Chemistry,** Isfahan, IRAN, 28-30 Agu., **1996**

2. **H. Farsi,** F. Gobal, R. Mondegarian, *"Investigation and Preparation of Ni-W Catalysts for HDS"*, in **The 11th Iranian Congress of Chemistry and Chemical Engineering,** Tehran, IRAN, 3-5 September, **1997**

3. **H. Farsi,** H. Nejati, *"Investigation of Micellization Thermodynamics Properties of Sodium lauryl Sulfate and its correlation to Detergency",* in **The first Seminar of Chemistry and Detergent Industries,** Tehran, IRAN, 23 Feb., **1998**

4. **H. Farsi,** F. Ravary, R. Azam-Sadeghi, *"Investigation of Micellization Thermodynamics Properties of Sodium lauryl Ether Sulfate and its correlation to Detergency",* in **The first Seminar of Chemistry and Detergent Industries,** Tehran, IRAN, 23 Feb., **1998**

5. **H. Farsi,** N. Arzani, M. Hosseinaei, *"Determination of Formaldehyde in Shampoo's Sample",* in **The Second Seminar of Chemistry and Detergent Industries,** Tehran, IRAN, 28 Feb., **1999**

6. **H. Farsi,** S. H. Karimi, F. Sabzevari, H. Asadollahi, *"The Importance of CMC and Some Methods for its Determination",* in: **The Second Seminar of Chemistry and Detergent Industries,** Tehran, IRAN, 28 Feb., **1999**

7. **H. Farsi,** Y. Taherirad, *"The Study of Correlation between Surface Excess, Critical Micelle Concentration and Minimum Surface Tension for Some Surfactants",* in: **4th Physical Chemistry Seminar,** Kish Island, IRAN, March 10-12, **2001**

8. **H. Farsi**, M. H. Eikerling, F. Gobal; *"Structural model of impedance response of faradaic pseudocapacitors"* in: **The 10th annual meeting of the Pacific Center for Advanced Materials (PCAMM)**, Victoria, BC, Canada, 2005***

9. **H. Farsi**, M. H. Eikerling, F. Gobal,; *"A two-level Structural model of impedance response of faradaic pseudocapacitors"* in: **The fourth International Society of Electrochemistry spring meeting,** 17-20th, April, Singapore, 2006

10. **H. Farsi**, M. H. Eikerling, F. Gobal, *"Model of Impedance Response of Faradaic Pseudocapacitors with Hierarchical Pore Structure"* in: **The 58th Annual meeting of the International Society of Electrochemistry**, Banff, Canada, September 9-14, 2007

11. H. Farsi, **F. Gobal,** *"On the Modeling of the Performance of Mixed Oxide Electrochemical Capacitors"* in: **The 58th Annual meeting of the International Society of Electrochemistry,** Banff, Canada, September 9-14, 2007

12. **H. Farsi,** M. H. Eikerling, F. Gobal, *"On the modeling of the impedance response of faradaic pseudocapacitors with hierarchical pore structure consisting of nanopores to mesopores"*, in: **International Battery Materials Association 2007,** Shenzhen, China, November 16-20, 2007

13. **H. Farsi,** F. Gobal**, "***A Mathematical Model of a Nanoparticulate Mixed Oxide Pseudocapacitor***",** in: **International Battery Materials Association 2007,** Shenzhen, China, November 16-20, 2007

14. **H. Farsi,** S. Moghiminia, "*The capacitive behavior of electrodeposited molybdenum oxide as pseudocapacitor*", in: **International Battery Materials Association 2007,** Shenzhen, China, November 16-20, 2007

15. **H. Farsi,** Z. Barzgari, "*Electrochemical investigation of capacitive behavior of tungsten oxide as a supercapacitor*", in: **International Battery Materials Association 2007,** Shenzhen, China, November 16-20, 2007.

16. S. Moghiminia, **H. Fasri**, H. Raissi, *"Electrodeposition of nanostructured molybdenum oxide and its capacitive behavior"*, in: **10th Iranian Inorganic Chemistry Conference,** Zahedan, Iran, May 16-17, 2008

17. Z. Barzgari, **H. Farsi,** *"On the Capacitive Behavior of Nanoparticulate Tungsten Oxide"* in: **10th Iranian Inorganic Chemistry Conference**, Zahedan, Iran, May 16-17, 2008

18. **H. Farsi**, S. Moghiminia, Z. Barzgari, "*The pH Effects on the Capacitive Properties of Tin Oxide*" in: **59th annual meeting of International society of Electrochemistry,** Seville, Spain, September 7-12, 2008

19. S. Moghiminia, **H. Farsi**, H. Raissi, "*Effects of Electrochemical-Deposition Method on the Capacitive Behavior of Molybdenum Oxide*" in: **59th annual meeting of International society of Electrochemistry,** Seville, Spain, September 7-12, 2008

20. Z. Barzgari, **H. Farsi**, "*Electrochemical Studies of Nanoparticulate Tungsten Oxide Prepared by Acidic Precipitation Method*" in: **59th annual meeting of International society of Electrochemistry,** Seville, Spain, September 7-12, 2008

21. **H. Farsi**, F. Gobal, M.H. Eikerling, *"On the modeling of impedance response of nanostructured metal oxides"*, in: **Second international congress on nanoscience and nanotechnology,** Tabriz, Iran, October 28-30, 2008

24. S. Moghiminia, **H. Farsi**, H. Raissi, *"On the capacitive behavior of nanostructured molybdenum oxide"*, in: **2th international congress on nanoscience and nanotechnology**, Tabriz, Iran, October 28-30, 2008.

25. M. Shiri, **H. Farsi**, A.A. Esmaili, *"The comparative study of the capacitive behavior of electropolymerized polyaniline and polyorthoaminophenol"*, in: **8th Iranian Biennial seminar of electrochemistry**, Sanandaj, Iran, July 14-16, 2009.

26. A. Zarei-Darmian, **H. Farsi**, *"On the modeling of galvanostatic discharge of a capacitive nanostructured metal oxide electrode"*, in: **8th Iranian Biennial seminar of electrochemistry**, Sanandaj, Iran, July 14-16, 2009.

27. Z. Barzgari, **H. Farsi**, *"The lithiation studies of electrodeposited tungsten oxide film"*, in: **8th Iranian Biennial seminar of electrochemistry**, Sanandaj, Iran, July 14-16, 2009.

28. S. Moghiminia, **H. Farsi**, H. Raissi, *"On the acid concentration effects on the pseudocapacitive behavior of nanostructured molybdenum oxide"*, in: **8th Iranian Biennial seminar of electrochemistry**, Sanandaj, Iran, July 14-16, 2009.

29. **H. Farsi**, H. Raissi, S. Moghiminia, *"The effects of Sodium sulfate concentration on the electrochemical behavior of nanostructured molybdenum oxide"*, in: **8th Iranian Biennial seminar of electrochemistry**, Sanandaj, Iran, July 14-16, 2009.

30. H. Farsi, S. Moghiminia, F. Gobal, H. Raissi, "*On the Effects of Electrolyte on the Capacitive Behavior of Nanostructured Molybdenum Oxides"*, in: **3rd conference on nanostructures,** Kish Island, Iran, March 10-12, 2010.

31. H. Arabi, **H. Farsi**, S. Dashti-Khadivak, *"Preparation of Ni nanowire with electrodeposition method into anodic aluminum oxide template (AAO)"*, Turkey

32. A. Amirabadizadeh**, H. Farsi**, M. Dehghani, *"Effect of substitutions of Zn for Mn on size and magnetic properties of Mn-Zn ferrite nanoparticles",* Turkey

33. **H. Farsi**, Z. Barzgari, *"The effects of $LiClO_4$ concentration on the electrochemical lithium intercalation into a nanostructured tungsten oxide",*in: **6th Annual seminar of Electrochemistry of Iran,** Kish Island, Iran, October 9-11, 2010.

34. **H. Farsi**, S. Moghiminia, Z. Alborz, "*Electrochemical investigation of polypyrrole films prepared by potentiostatic of electropolymerization",* in: **6th Annual seminar of Electrochemistry of Iran,** Kish Island, Iran, October 9-11, 2010.

35. **H. Farsi**, S. Kheyrdust, *"Electrochemical studies of cobalt molybdate prepared bychemical precipitation method"*, in: **6th Annual seminar of Electrochemistry of Iran,** Kish Island, Iran, October 9-11, 2010.

36. M. Zargazi, **H. Farsi**, Z. Barzgari, *"On the effects of electropolymerization methods on the properties of polyaniline as a bipolar plate material",* in: **7th annual seminar of electrochemistry of Iran,** Tehran, Iran, November 18-19, 2011.

37. **H. Farsi**, Z. Barzgari, *"Fabrication and Electrochemical Properties of Cobalt Tungstate Nanostructures",* in: **7th annual seminar of electrochemistry of Iran,** Tehran, Iran, November 18-19, 2011.

38. S. Moghiminia, H. Farsi, H. Raissi, *"The electrochemical studies of sol-gel prepared nanostructured nickel titanate",* in: **14th Iranian inorganic chemistry conference**, Tehran, IRAN, August 28-29, 2012

39. H. Farsi, F. Ebrahimi, J. Torabi, *"Synthesis and Characterization and Electrochemical Behaviors of Nanostructured Zinc Silicate and Zinc Oxide in Silica Matrix",* **in:** 14th Iranian inorganic chemistry conference**, Tehran, IRAN, August 28-29, 2012**

40. H. Farsi, S. Moghiminia, M. Ahankoob, *"The effects of electrodeposition methods on the pesudocapacitive properties of nanostructured manganese oxide"*, in: **15th Iranian Physical Chemistry Conference**, Tehran, September 3-6, 2012

41. H. Farsi, H. Hosseinzadeh, *"Preparation and investigation of hydrogen storage properties of Pd-Ni nano-alloys for fuel cells",* in: **15th Iranian Physical Chemistry Conference**, Tehran, September 3-6, 2012

42. H. Farsi, F. Ebrahimi, B. Ghajar, *"The photocatalytic degradation of methylene blue on the surface of sol-gel prepared nanostructured $ZnTiO_3$ and Zn_2TiO_4",* in: **15th Iranian Physical Chemistry Conference**, Tehran, September 3-6, 2012

43. H. Farsi, M.A. Karimi, M.R. Aghazadeh-Soofali, *"Preparation and investigation of nanostructured zirconia",* in: **15th Iranian Physical Chemistry Conference**, Tehran, September 3-6, 2012

44. S. Moghiminia, H. Farsi, H. Raissi, *"Preparation and electrochemical capacitive behaviors of nanostructured molybdenum oxides",* in: **15th Iranian Physical Chemistry Conference**, Tehran, September 3-6, 2012

45. H. Farsi, S.Z. Askari, *"The synergism between nanostructured CdS and CdO in photocatalytic degradation of methylene blue",* in: **15th Iranian Physical Chemistry Conference**, Tehran, September 3-6, 2012

46. A. Amirabadizade, H. Farsi, A. Abedini, *"Preparation and Magnetic Properties of Nanostructured $Mn_{0.5}Zn_{0.5}Fxe_2O_4$ in Silica Matrix"*, in: **15th Iranian Physical Chemistry Conference**, Tehran, September 3-6, 2012

47. S. Soleimanzadegan, H. Farsi, F. Ebrahimi, *"Molecular Dynamics Simulation of Some Organic Compounds Solubilization into the Nanometric Core of CTAB micelle",* in: **15th Iranian Physical Chemistry Conference**, Tehran, September 3-6, 2012

48. H. Farsi, Z. Oftade, *"A comparative electrochemical study of nanostructured Sb_2O_3 and Sb_2S_3"* in: **The 16th Iranian Chemistry Congress,** Yazd, September 7-9, **2013**

49. H. Farsi, M. Safarzade, "*Electrochemical properties Rhodamin B on the surface of glassy carbon and nanostructured titanium dioxide*", in: **The 16th Iranian Chemistry Congress,** Yazd, September 7-9, **2013**

50. H. Farsi, A. Amirabadizade, S. Soleimanzadegan, Z. Zaker, *"Preparation and magnetic properties of nanostructured zinc ferrite using microemulsion method"*, in: **16th Iranian Physical Chemistry Conference**, Babolsar, October 29-31, 2013

51. R. Rajaee, H. Farsi, N. Valipour-Motlagh, *"The Modification of Polythiophene with Nano-TiO_2, Graphene, Graphene Oxide and Carbon nanotubes for applications as Bipolar plate Materials in Fuel Cells",* in: **Asian Nano Froum Conference (ANFC2015),** Kish Island, March 8-11, 2015

52. R. Rajaee, H. Farsi, N. Valipour-Motlagh*, "The Comparative Studies of Capacitive Behaviors of Polythiophene and its nanocomposites for Application in Supercapacitors",* in: **Asian Nano Froum Conference (ANFC2015),** Kish Island, March 8-11, 2015

53.

* Supervised, co-supervised and advised M.Sc. thesises*

1. M.Sc. thesis, *"Preparation of Ni nanowires by electrodeposition within a porous alumina template and investigation of its physical properties"*, 2007, by: Saleh Dashti-Khavidak (Advised in a collaboration with Dr. Hadi Arabi, Physics department, University of Birjand)

2. M.Sc. thesis, *"Preparation of Ni-Zn-Cu ferrite by sol-gel technique"*, 2007, by: Saeid Sahraee (Advised in a collaboration with Dr. Ahmed Amirabadizadeh, Physics Department, University of Birjand)

3. M.Sc. thesis, *"Preparation and electrochemical investigation of nanostructured molybdenum oxide"*, 2008, by: Shokufeh Moghiminia (Supervised, University of Birjand)

4. M.Sc. thesis, *"Preparation and electrochemical investigation of the capacitive behavior of nanostructured tungsten oxide"*, 2008, by: Zahra Barzgari (Supervised, University of Birjand)

5. M.Sc. thesis, "*Preparation of Ni-Zn ferrites' nanoparticles by coprecipitation Method"*, 2008, by: Narjes Gholami (Co-supervised, in a collaboration with Dr. Ahmed Amirabadizadeh, Physics department, University of Birjand)

6. M.Sc. thesis, *"Modeling of diffusion effect on the performance of nanostructured pseudocapacitors"*, 2009, by: Afsaneh Zarei-Darmian (Supervised, University of Birjand)

7. M.Sc. thesis, "*Synhesis of Mn-Zn ferrite nanoparticles by chemical co-precipitation"*, 2009, by: Mahmud Dehghani (Co-supervised, in a collaboration with Dr. Ahmed Amirabadizadeh, Physics department, University of Birjand)

8. M.Sc. thesis, "*Synthesis and characterization of mechanical properties of polymer nanocomposites reinforced with ceramic nanoparticles*", 2009, by: Hamzeh Shahrajabian (Co-supervised, in a collaboration with Dr. Mohammad Reza Dasht e Bayaz, Department of Mechanical Engineering, University of Birjand)

9. M.Sc. thesis, *"The comparative study of the nanostructured polymers of aniline and o-aminophenol prepared by electropolymerization"*, 2010, by: Mahdi Shiri (Supervised, University of Birjand)

10. M.Sc. thesis, "*Preparation and investigation of the electrochemical behavior of nanostructured polypyrrol"*, 2011, by: Zahra Alborz (Supervised, University of Birjand)

11. M.Sc. thesis, "*Preparation and investigation of nanostructured cobalt molybdate"*, 2011, by Somaiyeh Kheirdust (Supervised, University of Birjand)

12. M.Sc. thesis, *"Preparation and investigation of nanostructured mixed metal oxides in silica matrix"*, 2011, by Azam Roohi (Supervised, University of Birjand)

13. M.Sc. thesis, *"Preparation and investigation of hydrogen storage properties of Pd-Ni nanoalloys for fuel cells"*, 2011, by Hoda Hossein-zadeh (Supervised, University of Birjand)

14. M.Sc. thesis, *"Synthesis, discussion and applications of nanostructured zirconia",* 2011, by: Mohammadreza Aghazadeh (Co-supervised, in a collaboration with Dr. Mohammad-Ali Karimi, Payam e Noor University, Sirjan branch, Iran)

15. M.Sc. thesis, "*Preparation and investigation of polyaniline-base nanocomposites as bipolar plates of fuel cells"*, 2012, by Maboobeh Zargazi, University of Birjand, Iran

16. M.Sc. thesis, *"The prediction of magnetic properties of nanoparticulate ferrites using of artificial neural networks"*, 2012, by: Tayyebeh Farzad, Payam e Noor University, Ardakan branch, Iran.

17. M.Sc. thesis, *"The prediction of thermodynamics properties of micellization and the size of nanopool by artificial neural networks"*, by: Seyyedeh-Mahnaz Vaezimoghaddam, 2012, Payam e Noor University, Ardakan branch, Iran.

18. M.Sc. thesis, *"Preparation, characterization and photocatalytic activity of nanostructured CdS and CdS/CdO nanocomposites"*, 2012, by: Seyyedeh-Zahra Askari

19. M.Sc. thesis, *"Preparation and investigation of nanostructured zinc titanate and zinc oxide in titan matrix"*, 2012, by: Boteh Ghajar

20. M.Sc. thesis, *"Preparation and investigation of nanostructured mixed molybdenum-manganese oxides",* 2012, by: Mahboobeh Ahankub

21. M.Sc. thesis, *"On the study of phase diagrams of microemulsions and their application in preparation of nanostructured ferrites"*, by: 2012, Zahra Zaker

22. M.Sc. thesis, *"Preparation and investigation of capability of nanostructured mixed Zinc-Cadmium oxides in silica matrix for Solar cell applications"*, 2012, by: Javad Torabi

23. M.Sc. thesis, *"Electrochemical and Photoelectrochemical Investigation of Nano-structured Nickel Tungstate for Solar Cell Application",* 2013, Seyyed-Amirhossein Hosseini

24. M.Sc. thesis, *"Preparation and comparative study of nanostructured antimony oxide and antimony sulfide-oxide nanocomposite in solar cells"*,2013, by: Zahra Oftade

25. M.Sc. thesis, *"Electrochemical properties rhodamin B on the surface of Glassy carbon and nanostructured titanium dioxide"*, 2013, by: Maryam Safarzade

26. M.Sc. thesis, "*Preparation and investigation of electrochemical and photoelectrochemical behaviors of nanostructured Fe_2O_3/nano-TiO_2 and nanostructured iron (III) for water splitting and solar cell applications"*, 2014, by: Nasrin Salimi

27. M.Sc. thesis, *"On the study of electrochemical polymerization of methylene blue on the surface of nanostructured TiO_2",* 2014, by: Hoda Zabihi

28. M.Sc. thesis, *"Preparation and investigation of magnetic and electrochemical properties of nanostructured strontium hexaferrites by microemulsion method"*, 2014, by: Sedighe Ameli

29. M.Sc. thesis, *"Preparation and investigation of polythiophen-base nanocomposites as bipolar plates of fuel cells",* 2015, by: Raziyeh Rajaee

30. M.Sc. thesis, *"Electrochemical properties Safranine on the surface of Glassy carbon and nanostructured titanium dioxide",* 2015, by: Roeya Rauph

31. M.Sc. thesis, *"On the modeling of the electrochemical impedance response of the capacitive behavior of nanostructured metal oxide",* 2015, by: Fariba Kazemi

29. Ph.D. thesis, *"Preparation and investigation of physical-chemical properties of nanostructured tin tungstate and its modification for applying in fuel cells"*, 2014, by: Zahra Barzgari

30. PhD thesis, *"The investigation of some dyes and nanostructured semiconductors for applying in solar cells"*, 2015, by: Shokufeh Moghiminia

31. MSc. thesis. *"Preparation, investigation and modification of nanostructured lead titanate for environmental protection",* 2016, by: Abdolhamid Javan

32. PhD thesis, *"Study of the effects of different factors on the size of nano-reactors formed by reverse micelles in microemulsion using molecular dynamic simulations"*, 2017, by: Sara Soleimanzadegan

33. MSc. thesis. *"Modification of nano-$MnMoO_4$ with copper ion for electroreduction of CO_2",* 2017, by: Elahe Dana

34. MSc. thesis. *"Modification of nano-$MnMoO_4$ with calcium ion for electrooxidation of water",* 2017, by: Safieh Kolangikhah

35. MSc. thesis. *"Preparation, investigation and modification of nanostructured $CuWO_4$ for electroreduction of CO_2",* 2017, by: Majid Raygan