Curriculum Vita

1- Personal Information

First Name: Hossein
Last Name: Nikoofard
Date of Birth: 1969
Place of Birth: Burojerd

Position: Associated professor of Physical Chemistry
Marital Status: Married, two children
Current Address: Faculty of Chemistry, Shahrood University, P.O. Box 3619995161, Shahrood, Iran
Tel/Fax: +98 23 32395441
E-mail: hnikoofard@shahroodut.ac.ir
nikomahdieh@yahoo.com

2- Research Interest

1) Statistical Thermodynamic (Dense Fluids)
2) Quantum Chemistry (DFT and *ab inito* Calculations)
3) Electrochemistry (Conductive Polymers)

3- Education

B. Sc. 1989-1993, Applied chemistry, Mazandaran university, Iran.

M. Sc. 1993-1995, Physical chemistry, Mazandaran university, Iran.

Ph.D. 1998-2003, Physical chemistry, Mazandaran University, Iran.

M. Sc. dissertation title: 'Investigation of the polymerization of pyrrole in present of additive materials using electrochemical methods'.

Ph. D. dissertation title: 'Prediction of structural factor, S(k), at small-k in supercritical fluids and the long-range correlation length in near critical region'

4- Publications

1. H. Eisazadeh, A.A. Rostami, H. Nikoofard, “Influence of electropolymerization conditions on the electrochemical behaviour and morphology of polypyrrole film”, *Iranian J. Polymer. Sci. Tech.*, 36 (1997) 97-107.

2. H. Eisazadeh, A.A. Rostami, H. Nikoofard, “Influence of stabilizers on the electroactivity and morphology of polypyrrole film”, *Iranian J. Polymer. Sci. Tech.*, 37 (1997) 167-175.

3. A.A. Rostami, M.V. Mohades, H. Nikoofard, “Kinetic and activation parameters of electrochemical polymerization of o- aminiophenol and investigation of the process in the presence of various aromatic additives”, *Int. J. Chem.*, 12 (2002) 29-40.

4. E. Keshavarzi, H. Nikoofard, A.A. Rostami, “Prediction of the low-k behaviour of S(k) via a new model for the DCF in sub- and supercritical regions”, *J. Phys. Soc. Jpn*, 72(2003)1983-1988.

5. E. Keshavarzi, H. Nikoofard, A.A. Rostami, “Prediction of the long-range correlation length and the structure factor for monoatomic fluids in the supercritical region”, *J. Phys. Soc. Jpn*, 73 (2004) 374-379.

6. H. Sabzyan and H. Nikoofard, “Halomethylpyrroles as candidate monomers for conducting polymers: a theoretical study”, *Chem. Phys.*, 306 (2004) 105-113.

7. Hossein Nikoofard, “Analysis of ^{1}H-NMR and ^{13}C-NMR spectra properties of FMP oligomers using quantum mechanic calculations”, *J. Sci. Tech.*, 11 (2006) 1-8.

8. H. Nikoofard and H. Sabzyan, “DFT study of molecular structure and electronic properties of fluoromethylpyrrole oligomers including di-, tri- and tetramer”, *J. Fluor. Chem.*, 128 (2007) 668-673.

9. Hossein Nikoofard, "Investigation of structural fluctuation of supercritical Xenon fluid by low-angle structue factor calculation", *J. Phys. Soc. Jpn*, 81(2012)12401-8.

10. M. Farzaneh-Gord, H.R. Rahbari, H. Nikoofard, "The effect of important parameters on the natural gas vehicles driving range", *Polish J. Chem. Tech*, 4 (2012) 61-68.

11. H. Rahimov, H. Nikoofard, S. Zarrinkamar, H. Hassanabadi, "Any *l*-state solutions of the Schrodinger equation for the modified Woods-Saxon potential in arbitary dimentions", *Appl. Math. Comp.*, 219 (2013) 4710-7.

12. H. Nikoofard and B.A. Esmaeili, "Determination of the structure factor for the rare gas fluids bases on the ORPA theory and LIR equation of state", *Mol. Phys.*, 111 (2013) 192-199.

13. H. Nikoofard, E. Maghsoodi, S. Zarrinkamar, M. Farhadi, H. Hassanabadi, "The nonrelativistic molecular Tietz potential", *Turk. J. Phys.*, 37 (2013) 74-82.

14. Z. Kalantar, H. Nikoofard, F. Javadi, "Extention of LIR equaton of state to alkylamines using group cintribution method", *ISRN Phys. Chem.*, 219 (2013) 1-9.

15. H. Nikoofard, T. Rezaye, A.H. Amin, "The static structure factor of monatomic liquids using an analyitical expression for the hard-sphere correlation functions", *Phys. Chem. Indian J.*, 8 (2013) 126-131.

16. M. Farzaneh-Gord, M. Saadat. A. Nabati, A. Rasekh, H. Nikoofard, "Calculation of Wax Precipitation Magnitude in Crude Oil Storage Tanks in Khark Island", *Petro. Sci. Tech.*, 31 (2013) 1215-1227.

17. H. Nikoofard and A.H. Amin, "Use of the Attractive Hard-Core Yukawa Interaction for Predicting of the Small-k Behavior of the Structure Factor for Simple Fluids", *J. Phys. Soc. Jpn*, 82 (2013) 084602-6.

18. H. Nikoofard, A.H. Amin, M. Khorami, "Molecular structure and electronic properties of a series of oligoalkylthiophenes: A theoretical investigation", *C. R. Chimie*, 16 (2013) 1147-1152.

19. H. Nikoofard, A. Omrani, M. Meftah, "Preparation and characterization of poly(1-amino-9,10-anthraquinone)/multi-walled carbon nanotube nanocomposite", *Monat. fur. Chim.*, 144 (2013) 1090-8.

20. H. Nikoofard, and M. Gholami, "Theoretical investigation of structures and electronic states of a series of phenyl-caped oligothiophenes", *C. R. Chimie*, 17 (2014) 1034-1040.

21. H. Nikoofard, Z. Kalantar, P. Omidian, "Electrochemical preparation and characterization of polypyrrole films in an aqueous solution containing a biocompatible surfactant ", *Res. Rev. Electrochem.*, 5 (2014) 101-108.

22. H. Nikoofard, Z. Kalantar, A. Zare, "A theory based on the RPA to calculate the static structure factor for argon-like fluids using LIR equation of state", *Phys. Chem. Liq.*, 53 (2015) 335-347.

23. H. Nikoofard, F. Masdaroolomor, M. Falahatkar, A.H. Amin, "Electro-chemical preparation and characterization of poly(1-amino- 9,10-anthraquinone) films in a micelle solution of sodium dodecyl sulfate", *Synth. Met.*, 209 (2015) 212-219.

24. H. Nikoofard, H. Hassanabadi, M. Ganjali Koli, "Structural and thermodynamic properties of argon liquid as a square-well fluid based on a modification of the ORPA theory", *Phys. Chem. Liq.*, 53 (2015) 335-347.

25. H. Nikoofard, L. Hajiashrafi, "Studying structural properties of rubidium and cesium liquid metals using an effective hard-core Yukawa potential", *Fluid Phase Equlibria*, 409 (2016) 113-118.

26. H. Nikoofard, "Computational thermo-chemical study of enthalpies of formation of B-alkylthiophenes using ab initio and DFT calculations", *Acta Chim. Slov.*, 62 (2015) 33-37.

27. H. Nikoofard, M. Sargolzaei, B. Kia, and A.H. Amin, "DFT study of conjugational electronic structure of aminoalkyl end-capped oligothiophenes up to octamer ", *C. R. Chimie*, 19 (2016) 646-651.

28. H. Nikoofard, M. Solbi, "Electro-catalytic oxidation of catechol at poly(1-amino-9,10–anthraquinone)-SDS film as a modified electrode", *Acta Chim. Slov.*, 63 (2016) 57-61.

29. H. Nikoofard, "Theoretical study of fluorinated phenylthiophene as candidate materials for charge-storage applications", *J. Fluor. Chem.*, 185 (2016) 181-186.

30. H. Nikoofard, A.H. Amin," Theoretical treatment of reduced and oxidized conducting oligo (p-fluorophenylthiophene) ", *J. Fluorine Chem.*, UnderReview.

31. M. Sargolzaei, H. Nikoofard , " Investigation of structural and electronic properties of 3-alkoxythiophene ", *Pharm. Chem. J.*, 50 (2016) 140-145.

5- Presentation in Conferences

1. H. Eisazadeh, A.A. Rostami, H. Nikoofard, “Study of Preparation and Electrochemical of behaviour polypyrrole film”, 3th Iranian Seminar of Physical Chemistry, 1996, Mashhad, Iran.

4. H. Nikoofard and H. Sabzyan, “Ab initio study of halo-methyl pyrroles as monomer for conducting polymer”, 5th Conference of Physical Chemistry, 2002, Boushehr, Iran.

7. Hossein Nikoofard, “Structure study of xenon fluid using a presented model for the direct correlation function”, 7th Iranian Physical Chemistry Seminar, 2005, Isfahan, Iran.

9. Hossein Nikoofard, “Structure study of monoatomic fluids using the thermodynamic perturbation theory”, 9th Iranian Physical Chemistry Seminar, 2006, Guilan-Iran.

13. H. Nikoofard and S. Rahimi, "Application of Fuzzy logic in Study of Topological Indices", 2th Conference and workshop on Mathematical Chemistry, 2009, Kashan-Iran.

18. A. Ferdowsi, H. Nikoofard, H. Ghorbani, H. salami, A.A. Babae, M. Mirhydari, "Comparison of Adsorption Capacity of Metal Pollutants by Synthetic and Natural Zeolites", International Conference on Water Resource, 2009, Shahrood, Iran.

25. H. Nikoofard, Z. Kalantar, T. Rezaye, "Calculation of isothermal compressibility and pressyre of simple using the Hard-Sphere radial distribution function", 13th Physical Chemistry Seminar, 2010, Shiraz-Iran.

52. H. Nikoofard, Z. Kalantar, B.A. Esmaili, " Prediction of long-range correlation length for Ar fluid in the near critical point via LIR equation state", 13th Physical Chemistry Seminar, 2010, Shiraz-Iran.

35. H. Nikoofard, Z. Kalantar, M. Omidian, "Comparision the electropolymerization of pyrrole in presence and absent of sodium dodecyl sulfate (SDS) in aqueous media", 15th Chemistry Congress, 2011, Hamadan-Iran.

38. H. Nikoofard, M. Khorami, "Investigation of structural and electronic properties of 3-alkoxythiophene", 14th Physical Chemistry Conference, 2011, Kish-Iran.

42. H. Nikoofard, T. rezayei, "Prediction of the low-k behavior of structure factor of Xenon fluid by definition of direct correlation function", 14th Physical Chemistry Conference, 2011, Kish-Iran.

52. H. Nikoofard, Z. Kalantar, M. Ghanjali, "Prediction of compressibility factor of Argon fluid with hard-core square-well potential at different thermodynamic states", 15th Physical Chemistry Conference, 2012, Tehran-Iran.

.
.
.

6- Research Projects

1. “DFT Study of halomethyl pyrroles as candidate building blocks for conducting polymers”, Hossein Nikoofard, Shahrood University of Technology, 22012, 1383.

2. “The Study of IR and NMR spectroscopic properties of fluoromethyl pyrroles using DFT calculations”, Hossein Nikoofard, Shahrood University of Technology, 22016, 1384.

3. “The Study of Hypergraph Theory and their Applications in Chemistry”, S. Rahimi and Hossein Nikoofard, Shahrood University of Technology, 22028, 1386.

4. “Structure study of monoatomic fluids using an effective pair potential in the thermodynamic perturbation theory”, Hossein Nikoofard, Shahrood University of Technology, 22021, 1386.

5. "Thermodynamic study of monoatomic fluids using the self-consistent Ornstein-Zernike approximation", Hossein Nikoofard, Shahrood University of Technology, 22026, 1392.

6. " Prediction of standard enthalpies of formation for n-alkyl derivatives of B-thiophenes ", Hossein Nikoofard, Shahrood University, 22059, 1393.

7- Presented Courses

Graduate:

1- Advanced Physical Chemistry

2- Statistical Thermodynamic
3- Chemical Kinetic
4- Quantum Chemistry (1)
5- Advanced Electrochemistry
6- Statistical Thermodynamic of Dense Fluid

Undergraduate:

1- Physical Chemistry (1, 2)
2- Quantum Chemistry
3- Molecular Spectroscopy
4- Industrial Chemistry
5- Industrial Electrochemistry
6- Surface Chemistry
7- Principal of Computer in Chemistry
8- Physical Chemistry Labs

8- Workshops

1- First academic workshop on Nano-Science & Technology, Special Course of Nano thermodynamics, 23 May 2002, Kashan.
2- First academic workshop on Nano-Science & Technology, Special Course of Computational Methods in Nano Physics of Condensed Matter, 23 May 2002, Kashan.
3- Science & Technology of Polymeric Nanocomposits (PNC), 13 Oct 2004, Tehran.