

# Zahra Kalantar Kohdami

College of Chemistry, Shahrood University of Technology,  
Shahrood, I.R. IRAN

## Position:

From September 2006, Assistant Professor of Physical Chemistry.

**Marital Status:** Married, Two children

## Education

**Bsc:** 1990-1994, Chemistry, College of Chemistry, Isfahan University of Technology, Isfahan, IRAN

**Msc:** 1999-2001, Physical Chemistry, College of Chemistry, Isfahan University of Technology, Isfahan, IRAN

**Msc Thesis:** Extension of Linear Isotherm Regularity (LIR) to Long Chain Organic Compounds.

**PhD:** 2001-2006, Physical Chemistry, College of Chemistry, Isfahan University of Technology, Isfahan, IRAN

**PhD Thesis:** Prediction of Thermodynamic Properties of Dense Organic Fluids Using Group Contribution Method and Wavelet Neural Network.

## Teaching Experience:

### Graduate

1. Advanced Physical Chemistry
2. Statistical Thermodynamic
3. Kinetic and Mechanism of Chemical Reactions
4. Advanced Molecular Spectroscopy
- 5- Quantum Chemistry II

### Undergraduate

1. Physical Chemistry I & II
2. Physical Chemistry Lab I & II
3. Quantum Chemistry I
- 4- Molecular Spectroscopy
5. General Chemistry I
6. Basics of Chemical Industries
7. Solid State Chemistry

### Research Experience

1. Artificial Neural Network (ANN) and Wavelet Neural Network (WNN) modeling of Thermodynamic and Transport Properties of Different Chemical Compounds
2. Statistical Thermodynamic
3. Quantum Chemistry

### Refereed Journal Papers

1. Calculation of the transport properties of dense fluids using modified Enskog theory and an appropriate equation of state, *Fluid Phase Equilibria*, Vol. 253 (2007) 108–117.
2. Extension of linear isotherm regularity to long chain primary, secondary and tertiary alcohols, ketones and 1-carboxylic acids by group contribution method, *Fluid Phase Equilibria*, Vol. 234 (2005) 11-21.
3. Ab initio RHF and density functional B3LYP and B3PW91 study of  $(\text{NPF}_2)_n$ ;  $n=2, 3, 4$  and  $(\text{NPX}_2)_3$ ; X= H, Cl, Br cyclic phosphazenes, *Journal of Molecular Structure (Theochem)*, Vol. 663, (2003) 149-157.
4. Extension of linear isotherm regularity to long chain Alkanes, *Iranian Journal of Chemistry & Chemical Engineering*, Vol. 22, No. 2, (2003) 1-8.

5. Pd/C-catalyzed heterocyclization during copper-free Sonogashira coupling: synthesis of 2-benzylimidazo[1,2-*a*]pyrimidines in water, *Tetrahedron Letters*, *Accepted*
6. Regioselective syntheses of 1-aryl-substituted-5*H*-[1,3]thiazolo[3,2-*a*]quinazoline-5-ones during Sonogashira coupling, *Phosphorus, Sulfur, and Silicon and related elements*, *Accepted*

### Paper Presented at Seminars and Conferences

1. 4<sup>th</sup> Physical Chemistry Seminar Held by Shahid Bahonar University of Kerman at University of Kish, Kish Island, Iran, March 10-12, 2001: **One paper.**
2. 5<sup>th</sup> Conference of Physical Chemistry, Persian Gulf University, Boushehr, Iran, January 31-February 2, 2002, **One paper.**
3. 5<sup>th</sup> Canadian Computational Chemistry Conference (CCCC5), University of Toronto, Toronto, Ontario, Canada, July 27-30, 2003, **One paper.**
4. 7<sup>th</sup> Iranian Physical Chemistry Seminar, Isfahan University of Technology, Isfahan, Iran, March 8-10, 2005; **One paper.**
5. 9<sup>th</sup> Iranian Physical Chemistry Seminar, University of Guilan (Zibakenar), Rasht, Iran, June 12-15, 2006, **One paper.**
6. The 5<sup>th</sup> Chemistry Conference of Payam noor University, Tehran Payam noor University, Tehran. Iran, february23-24, 2008, **Two papers.**
7. 14<sup>th</sup> Iranian Seminar of Organic Chemistry, University of Zabol, Zabol, Iran, March 4-6 2008, **One paper.**
8. 11<sup>th</sup> Iranian Physical Chemistry Seminar, University of Mohaghegh Ardebili, Ardebil, Iran, July 21-24, 2008, **Three papers.**

9. 15<sup>th</sup> Iranian Seminar of Organic Chemistry, Razi University, Kermanshah, Iran, August 27-29 2008, **One paper**.

10. The 6<sup>th</sup> Chemistry Conference of Payam noor University, Abhar Payam noor University, Abhar. Iran, November 15-16, 2008, **Two papers**.

11. 12<sup>th</sup> Iranian Physical Chemistry Seminar, University of Kurdistan, Sanandaj, Iran, July 20-23, 2009, **Four papers**.

12. The 7<sup>th</sup> Chemistry Conference of Payam noor University, Shiraz Payam noor University, Shiraz. Iran, October 21-23, 2009, **Six papers**.

13. 2<sup>nd</sup> Iranian Biennial Seminar of Chemometrics, Urmia University, Urmia, October 29-30, 2009, **Four papers**.

14. 13<sup>th</sup> Iranian Physical Chemistry Seminar, Shiraz University, Shiraz, Iran, July 20-23, 2010, **Seven papers**.

15. 17<sup>th</sup> Iranian Seminar of Analytical Chemistry, University of Kashan, Kashan, Iran, 12-14 September, 2010, **Seven papers**.

16. 14<sup>th</sup> Iranian Physical Chemistry Seminar, Kish International Paradise of University of Tehran, Kish, Iran, 26-28 february, 2011, **Seven papers Accepted**.

## Certificates

1- Participate and Certificate on Statistical Thermodynamic of Mixtures in First Iranian Physical Chemistry Workshop, Faculty of Chemistry, Isfahan University of Technology, June 23–July 5, 2001.

2- Participate and Certificate on Special Course of Nanothermodynamic in the First Academic Workshop on Nanoscience & Nanotechnology, University of Kashan, May 23-24, 2002.

3- Participate and Certificate on the DME's AFM and STM Training, Faculty of Metallurgy, Isfahan University of Technology, January, 2005.