

Curriculum Vitae

Current position:

Professor of Physical Chemistry
Department of Chemistry, College of Sciences, Persian Gulf University, Boushehr 75168,
Iran

Personal Data

Hossein Eslami
Born: July 22, 1970.
Married (One daughter, 12 years old).

Education

B. Sc. in Chemistry, Tehran University, Tehran, Iran (1992).
M. Sc. in Physical Chemistry, Shiraz University, Shiraz, Iran (1995).
Ph.D. in Physical Chemistry, Shiraz University, Shiraz, Iran (1998).

Teaching Experience

Persian Gulf University as an Assistant Professor of Physical Chemistry, Boushehr, Iran,
from Sep.1998 to Sep. 2002.
Persian Gulf University as an Associate Professor of Physical Chemistry, Boushehr, Iran,
from Sep.2002 to May 2007.
Persian Gulf University as a Professor of Physical Chemistry, Boushehr, Iran, from May
2007 to now.

The courses thought include General Chemistry, Physical Chemistry, Quantum
Chemistry, Molecular Spectroscopy, Advanced Chemical Kinetics, Advanced Physical
Chemistry, and Statistical Thermodynamics.

Research Interests

Equation of state for nonpolar fluids, Molecular Dynamics Simulation

Honors and Awards:

Distinguished Researcher of Persian Gulf University.
Distinguished Iranian Young Researcher in Physical Chemistry (2002).
Distinguished Researcher of the Ministry of Science, Iran (2005).
Alexander von Humboldt Research Fellowship, Germany (2005-2006).

Papers presented at national and international conferences

Statistical Mechanics: Interplay between Theory and Simulation, Mainz, Sep. 2012.
Trends in Nanotribology, Sep. 2011, Trieste, Italy.
Physics, Chemistry, and Applications of nanostructures, May 2011, Minsk, Belarus.
The 14th Iranian conference of Physical Chemistry, April 2011, Kish Island, Iran.
The 13th Iranian Conference of Physical Chemistry, April 2010, Shiraz, Iran.
International Bunsen Discussion Meeting on Polymer Interfaces: Science and
Technology, July 2009, Darmstadt, Germany.
The 12th Iranian Conference of Physical Chemistry, April 2008, Isfahan, Iran.

Workshop on Ionic Liquids, Darmstadt, Germany, July 2008.
CCP5, Phase Equilibria from MD Simulation, Sep. 2006, Bradford, UK.
The 12th International Conference on Liquid and Amorphous Metals, July 2004, Metz, France.
Global Phase Diagrams, 3rd International Workshop, September 2003, Odessa, Ukraine.
The 17th IUPAC Conference on Chemical Thermodynamics, July 2002, Rostock, Germany.
The 76th Bunsen Discussion Meeting Global Phase Diagrams, August 2001, Walberberg, Germany.
The 5th Conference of Physical Chemistry, Persian Gulf University, Boushehr, Iran.
The 6th Congress of Chemical Engineering, June 2002, Isfahan University of Technology, Isfahan, Iran.
The 4th Conference of Physical Chemistry, February 2001, Kish Island, Iran.
The 5th National and 4th International Congress of Chemical Engineering, June 2000, Shiraz University, Shiraz, Iran
The First Physical Chemistry Conference Held by the Iranian Universities' Faculty, May 1992, Shiraz University, Shiraz, Iran.

Industrial Experiences:

1-H. Eslami and N. Mehdipour, Prediction of Phase Equilibria in Oil and Gas Fluids, National Iranian Oil Company, 1386-188.

2-H. Eslami and R. Azin, Prediction of the Density of Crude Oil Mixtures, National Iranian Oil Company, 1386-188.

Publications:

61. H. Eslami and F. Müller-Plathe, How Thick is the Interphase in an Ultrathin Polymer Film? Coarse-Grained Molecular Dynamics Simulations of Polyamide-6,6 on Graphene, *J. Phys. Chem. C* 117 (2013) 5249–5257.
60. H. Eslami, B. Jaafari, and N. Mehdipour, Coarse Grained Molecular Dynamics Simulation of Nanoconfined Water, *ChemPhysChem* 14 (2013) 1063-1070.
59. H. Eslami and N. Mehdipour, Local Chemical Potential and Pressure Tensor in Inhomogeneous Nanoconfined Fluids, *J. Chem. Phys.* 137 (2012) 144702.
58. H. Eslami and N. Mehdipour, “Molecular Dynamics Simulation of Permeation in Polymers” in *Molecular Dynamics - Studies of Synthetic and Biological Macromolecules*, ed. L. Wang, Chapter 4, PP. 61-82 (2012).
<http://www.intechopen.com/articles/show/title/molecular-dynamics-simulation-of-permeation-of-gases-in-polymers>.
57. H. Eslami, L. Mohammadzadeh, and N. Mehdipour, Anisotropic heat transport in nanoconfined polyamide-6,6 oligomers: Atomistic reverse nonequilibrium molecular dynamics simulation, *J. Chem. Phys.* 136 (2012) 104901.

56. H. Eslami and N. Mehdipour, Grand Canonical Ensemble Molecular Dynamics Simulation of Water Solubility in Polyamide-6,6, *Phys. Chem. Chem. Phys.* 13 (2011) 669-673.
55. H. Eslami, N. Mousavian, N. Mehdipour, Diffusion Coefficient of Nanoconfined Fluids, *J. Iran. Chem. Soc.* (in press).
54. H. Eslami, and F. Müller-Plathe, Molecular Dynamics Simulation of Water Influence on Local Structure of Nanoconfined Polyamide-6,6. *J. Phys. Chem. B.* 115 (2011) 9720-9731.
53. H. Eslami, L. Mohammadzadeh, and N. Mehdipour, Reverse Nonequilibrium Molecular Dynamics Simulation of Thermal Conductivity in Nanoconfined Polyamide-6,6, *J. Chem. Phys.* 135, (2011) 064703.
52. H. Eslami, H. A. Karimi-Varzaneh, and F. Müller-Plathe, Coarse-Grained Computer Simulation of Nanoconfined Polyamide-6,6, *Macromolecules* 44 (2011) 3117–3128.
51. R. Azin, H. Eslami, A. R. Shah Karami, G. Keshavarz, The Corresponding-States Correlation for the Prediction of Crude Oil Undersaturated Densities, *Energy Sources*, 33 (2011) 1739–1746.
50. H. Eslami, N. Mehdipour, Grand Canonical Ensemble Molecular Dynamics Simulation of Water Solubility in Polyamide-6,6, *Phys. Chem. Chem. Phys.* 13 (2010) 669-673.
49. H. Eslami, F. Mojahedi, J. Moghadasi, Molecular Dynamics Simulation with Weak Coupling to Heat and Material Baths, *J. Chem. Phys.* 133 (2010) 084105.
48. H. Eslami, and F. Müller-Plathe, Viscosity of Nanoconfined Polyamide-6,6 Oligomers: Atomistic Reverse Nonequilibrium Molecular Dynamics Simulation, *J. Phys. Chem. B* 114 (2010) 387.
47. F. Mozaffari, H. Eslami, J. Moghadasi, Molecular Dynamics Simulation of Diffusion of Gases in Polystyrene, *Polymer* 51 (2010) 300-307.
46. H. Eslami, F. Mozafari, J. Moghadasi, Molecular Dynamics Simulation of Potassium along the Liquid-Vapor Coexistence Curve, *J. Iran. Chem. Soc.* 7 (2010) 308-317.
45. H. Eslami, and F. Müller-Plathe, Water Permeability of Poly(ethylene terephthalate): A Grand Canonical Ensemble Molecular Dynamics Simulation Study, *J. Chem. Phys.* 131 (2009) 234904.
44. H. Eslami and F. Müller-Plathe, Structure and Mobility in Poly(ethylene terephthalate): A Molecular Dynamics Simulation Study, *Macromolecules* 42 (2009) 8241.
43. H. Eslami, A. Dargahi, H. Behnejad, Molecular Dynamics Simulation of Liquid-Vapor Phase Equilibria in Polar Fluids, *Chem. Phys. Lett.* 473 (2009) 66-71.
42. H. Eslami and F. Müller-Plathe, Structure and Mobility of Nanoconfined Polyamide-6,6 Oligomers: Application of a Molecular Dynamics Technique with Constant Temperature, Surface Area and Parallel Pressure, *J. Phys. Chem. B* 113 (2009) 5568.
41. H. Eslami, J. Moghadasi, F. Mozafari, F. Müller-Plathe, Molecular Dynamics Simulation of Confined Fluids in Isothermal-Isobaric-Isosurface Ensemble, *J. Chem. Phys.* 129 (2008) 194702.

40. H. Eslami and F. Müller-Plathe, Solvation in Polymers, Ed. S. Canuto in "Solvation Effects on Molecules and Biomolecules (Challenges and Advances in Computational Chemistry and Physics, Vol. 6, Springer (2008) pp. 279-320.
39. L. Maftoon-Azad, H. Eslami, A. Boushehri, A Perturbed Hard-Sphere Equation of State for Alkali Metals, *Fluid Phase Equilib.* 263 (2008) 1-5.
38. W. Zhao, H. Eslami, W. L. Cavalcanti, F. Müller-Plathe, A Refined All-Atom Model for the Ionic Liquid 1-*n*-butyl 3-methylimidazolium bis(trifluoromethylsulfonyl)imide [bmim][Tf₂N], *Z. Phys. Chem.* 221, 1647 (2007).
37. F. Mozaffari, H. Eslami, A. Boushehri, A Perturbed Hard-Sphere Equation of State for Alkali Metal Alloys, *Int. J. Thermophys.* 28 (2007) 1-8.
36. H. Eslami and F. Muller-Plathe, Molecular Dynamics Simulation of Sorption of Gases in Polystyrene, *Macromolecules* 40 (2007) 6413-6421.
35. H. Eslami and F. Muller-Plathe, Grand Canonical Molecular Dynamics Simulation, *J. Comput. Chem.* 28 (2007) 1763-1773.
34. F. Sabzi, A. Boushehri, and H. Eslami, Modified Perturbed Hard-Sphere Equation of State for Alkali Metal Alloys, *J. Non-Cryst. Solids* 352 (2006) 3113-3120.
33. N. Mehdipour, A. Boushehri, and H. Eslami, Prediction of the Density of Molten Metals, *J. Non-Cryst. Solids* 351 (2005) 1333-1337.
32. H. Eslami and M. Farrokhnia, A Modified Perturbed Hard-Sphere-Chain Equation of State for Pure Halogenated Organic Compounds, *Int. J. Ref.* 28 (2005) 1057-1063.
31. H. Eslami, N. Mehdipour, A. Boushehri, An Analytical Equation of State for Refrigerant Mixtures, *Int. J. Ref.* 29 (2006) 150-154.
30. H. Eslami and R. Azin, Corresponding-States Correlation for Compressed Liquid Density of Mixtures, *Fluid Phase Equil.* 226 (2004) 103-107.
29. H. Eslami and M. Farrokhnia, A Perturbed Hard-Sphere Equation of State for Refractory Metals, *Fluid Phase Equil.* 226 (2004) 277-281.
28. H. Eslami, A Perturbed Hard-Sphere-Chain Equation of State for Liquid Metals, *J. Nucl. Mat.* 336 (2005) 135-139.
27. H. Eslami, An Analytical Equation of State for Refrigerants, *Int. J. Ref.* 27 (2004) 649-655.
26. H. Eslami, L. Maftoon, and A. Boushehri, Equation of State for Alkaline Earth Metals: Prediction from Boiling Point Constants, *J. Chem. Eng. Jpn.* 37 (2004) 871-874.
25. H. Eslami, A Perturbed-Hard-Chain Equation of State: Prediction from Critical Point Constants, *Fluid Phase Equil.* 216 (2004) 21-26.
24. H. Eslami, A General Equation of State for Compressed Liquid Metals, *J. Nucl. Mat.* 325 (2004) 188-194.
23. H. Eslami, J. Moghadasi, L. Maftoon, and A. Boushehri, An Analytical Equation of State for Molten Alkaline Earth Metals from Surface Tension, *Int. J. Thermophys.* 25 (2004) 901-908.
22. H. Eslami, Corresponding-States Correlation for Compressed Liquid Density of Metals, *Fluid Phase Equil.* 215 (2004) 23-28.
21. H. Eslami and R. Azin, Corresponding-States Correlation for Compressed Liquid Densities, *Fluid Phase Equil.* 209 (2003) 245-254.

20. J. Moghadasi, L. Maftoon, A. Boushehri, and H. Eslami, Equation of State for Molten Alkaline Earth Metals derived from the Heat of Vaporization, High Temp.-High Press. 35/36 (2003/2004) 447-451.
19. H. Eslami, Z. Sharafi, and A. Boushehri, Calculation of the Second Virial Coefficient of Nonspherical Molecules: N_2O , CH_4 , C_2H_4 , C_2H_6 , and SF_6 , Int. J. Thermal. Sci. 42 (2003) 295-302.
18. N. Mehdipour and H. Eslami, Calculation of Transport Properties of Simple Fluids, Int. J. Thermal Sci., 41 (2002) 949-954.
17. H. Eslami, Corresponding-States Correlation for Saturated Liquid Density of Metals and Metal Mixtures, Fluid Phase Equil. 201 (2002) 57-65.
16. H. Eslami, Equations of State for Long-Chain n-Alkanes, High Tem.-High Press., 34 (2002) 487-494.
15. H. Eslami, Prediction of the Density for Natural Gas and Liquefied Natural Gas Mixtures, AIChE J., 47 (2001), 2585-2592.
14. H. Eslami, Equation of State for Nonpolar fluid Mixtures: Prediction from Boiling Point Constants, Int. J. Thermophys. 22 (2001) 1781-1793.
13. H. Eslami, F. Mozaffari, and A. Boushehri, Calculation of the Second Virial Coefficient of Nonspherical Molecules: Revisited, Int. J. Thermal Sciences, 40 (2001) 999-1010.
12. H. Eslami, M. M. Papari, and Boushehri, Equation of State for Quantum Fluid Mixtures, J. Phys. Soc. Jpn., 70 (2001) 245-251.
11. H. Eslami, S. Sheikh, and A. Boushehri, Equation of State for Compressed Liquid Alkali Metals:-Part II, High Temp.-High Press. 33 (2001) 725-731.
10. H. Eslami, Corresponding-States Correlation for the Surface Tension of Molten Salts, High Temp.-High Press. 33 (2001) 245-251.
9. H. Eslami, S. Sheikh, and A. Boushehri, Equation of State for Compressed Liquid Alkali Metals, High Temp.-High Press. 33 (2001) 237-243.
8. H. Eslami, Equation of State for Nonpolar fluids: Prediction from Boiling Point Constants, Int. J. Thermophys. 21 (2000) 1123-1136.
7. H. Eslami, Equation of State for Long-Chain n-Alkanes, Fluid Phase Equil. 169 (2000) 19-30.
6. H. Eslami, M. M. Papari, and A. Boushehri, On the Equation of State for Quantum Systems, J. Phys. Soc. Jpn. 69 (2000) 1731-1734.
5. H. Eslami, F. Sabzi, and A. Boushehri, The ISM Equation of State Applied to Refrigerants, Int. J. Thermophys. 20 (1999) 1547-1555.
4. H. Eslami, Equation of State for Molten Alkali Metal Alloys, Int. J. Thermophys. 20 (1999) 1575-1585.
3. H. Eslami and A. Boushehri, Equation of State for Molten Alkali Metal Alloys, Fluid Phase Equil. 152 (1998) 235-242.
2. H. Eslami and A. Boushehri, The Equation of State of Song and Mason Applied to Fluorine, Int. J. Thermophys. 20 (1998) 611-629.
1. A. Boushehri and H. Eslami, Thermophysical Properties from the Equation of State of Mason and Coworkers, Int. J. Thermophys. 18 (1997) 1027-1034.