

Academic CV

Simin Asadabadi

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EDUCATION

	<u>Year</u>	<u>University</u>
Ph.D. (Applied Chemistry)	2010-2014	Bu-Ali Sina University, Hamedan, Iran
M.Sc. (Applied Chemistry)	2008-2010	Bu-Ali Sina University, Hamedan, Iran
B.Sc. (Applied Chemistry)	2003-2007	Bu-Ali Sina University, Hamedan, Iran

PROFESSIONAL MEMBERSHIPS

- Member of Iranian Chemical Society
- Member of Pars Geometry Consultants

SKILLS

- Expert in principal of water and wastewater treatment
- Expert in practical methods of water treatment in industries and laboratories including “reverse osmosis, resin ion exchanger, softening, chlorination, coagulation, degassing, electro dialysis, advanced oxidation process such as ozonation, Fenton, homogeneous photo-Fenton, heterogeneous photo-catalysis”
- Expert in water treatment laboratory including measurements of total hardness, alkalinity, acidity, residual chlorine, chemical oxygen demand (COD) and determination of different ions existence in the water samples
- Expert in theory of chemical reaction engineering
- Expert in conceptual design
- Expert in principal of instrumentation and control engineering
- Expert in English language
- Expert in chemistry softwares
- Familiar with petroleum technology
- Familiar with petroleum softwares

RESEARCH

Scientific fields of interest:

- Improving efficiency of water treatment methods
- Utilizing the most recent technologies to remove industrial contaminants from soil, water and fuel
- Studying renewable energies
- Simulating systems by molecular simulations

TEACHING

The offered undergraduate courses:

- General Chemistry I, (Theory and Laboratory, 2014 and 2016)
- Principal of Water and Wastewater Treatment (Theory and Laboratory, 2010-2015)
- Industrial Inorganic Chemistry, 2015
- Chemistry and Petroleum Technology, 2016
- Graphics and Industrial Diagram Study, 2016

PUBLICATIONS and PRESENTATIONS

- 1) **Simin Asadabadi**, Javad Saien, Effects of pH and salinity on adsorption of different imidazolium ionic liquids at the interface of oil–water, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 489 (2016) 36-45.
- 2) Javad Saien, Mona Kharazi, **Simin Asadabadi**, Adsorption behavior of long alkyl chain imidazolium ionic liquids at the n-butyl acetate + water interface, *Journal of Molecular Liquids*, 212 (2015) 58-62.
- 3) Javad Saien, **Simin Asadabadi**, Alkyl chain length, counter anion and temperature effects on the interfacial activity of imidazolium ionic liquids: Comparison with structurally related surfactants, *Fluid Phase Equilibria*, 386 (2015) 134-139.
- 4) Javad Saien, **Simin Asadabadi**, Salting out effects on adsorption and micellization of three imidazolium-based ionic liquids at liquid-liquid interface, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 444 (2014) 138-143.
- 5) Javad Saien, Azadeh Rezvani Pour, **Simin Asadabadi**, Interfacial tension of the n-hexane–water system under the influence of magnetite nanoparticles and sodium dodecyl sulfate assembly at different temperatures, *Journal of Chemical Engineering Data*, 59 (2014) 1835-1842.
- 6) **Simin Asadabadi**, Javad Saien, Vahid Khakizadeh, Interface adsorption and micelle formation of ionic liquid 1-hexyl-3-methylimidazolium chloride in the toluene + water system, *The Journal of Chemical Thermodynamics*, 62 (2013) 92-97.
- 7) Javad Saien, **Simin Asadabadi**, Temperature effect on adsorption of imidazolium-based ionic liquids at liquid–liquid interface, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 431 (2013) 34-41.
- 8) Javad Saien, **Simin Asadabadi**, Synergistic adsorption of triton X-100 and CTAB surfactants at the toluene + water interface, *Fluid Phase Equilibria*, 307 (2011) 16-23.

- 9) Javad Saien, **Simin Asadabadi**, Adsorption and interfacial properties of individual and mixture of cationic/nonionic surfactants in toluene – water System, *Journal of Chemical Engineering Data*, 55 (2010) 3817-3824.
- 10) Javad Saien, **Simin Asadabadi**, Salting-out effect of NaCl on the rate of mass transfer of liquid-liquid extraction in a two impinging-jets contacting device, *Journal of Taiwan Institute of Chemical Engineers*, 41 (2010) 295-301.

ORAL INTERNATIONAL PRESENTATIONS

- 1) **Simin Asadabadi**, Javad Saien, Influence of Electrolytes on Adsorption of 1-Hexyl-3-methylimidazolium Chloride Ionic Liquid at Liquid-Liquid Interface, *The 8th International Chemical Engineering Congress & Exhibition (ICHEC 2014)*
- 2) Javad Saien, Azadeh Rezvani Pour, **Simin Asadabadi**, Simultaneous Effect of Surfactant and Nanoparticles on the n-Hexane–Water Interfacial Tension, *The 8th International Chemical Engineering Congress & Exhibition (ICHEC 2014)*
- 3) Javad Saien, **Simin Asadabadi**, Properties of Cationic/Nonionic Surfactants at Organic/Aqueous Interface, *The 1st International Regional Chemical and Petroleum Engineering Conference (IChEC 2013)*

WORKSHOP CERTIFICATES

- “Producing Process Flow Diagram (PFD)”
- “Producing Piping and Instrumentation Diagram (P&ID)”
- “Hazard and Operability Study (HAZOP Study)”
- “Process Equipment Design (Datasheet)”
- “High-Performance Liquid Chromatography (HPLC)”
- “X-Ray Diffraction Spectrometry (XRD)”
- “Molecular Dynamic Simulation (Gromacs Software (MDS))”
- “Linux Operating System”
- “Nano Technology, Synthesis and Analyzing Nano Materials”
- “Safety in Chemistry Laboratory”

HONORS (Awards)

- Distinguished B.Sc. student among 45 ones at Bu-Ali Sina University, 2007
- First ranked in Ph.D. entrance exam among 17 participants at Bu-Ali Sina University, 2010
- Outstanding student in faculty of chemistry at Bu-Ali Sina University, 2012
- Outstanding researcher at Bu-Ali Sina University, 2014

EXECUTIVE ACTIVITIES

- Secretary of the chemical society at Bu-Ali Sina University
- Executive committee member of 13th and 20th organic chemistry seminars held at Bu-Ali Sina University (2006 and 2013)
- Conducting a workshop focusing on searching and finding ISI articles for students