

Raeispour-Shirazi Abtin

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➤ During the three years of my PhD. in IFPEN, I was trained to be solution and detailed-oriented engineer. I do believe that I am ready to implement my experience, knowledge and expertise in order to solve complex problems in industrial or academic fields.

➤ Research Experience

Researcher at Thermodynamic department of IFP Nouvelles Energies (12/2021 – 10/2024)

Project:

- Thermodynamic modeling of electrolyte solutions using Statistical association perturbation fluid theory (SAFT) models

Researcher at chemical Engineering department of Semnan university (03/2017 – 08/2020)

Projects:

- Modeling the VLE of H₂O-MDEA-CO₂-CH₄ quaternary system utilizing the ePC-SAFT-MB Equation of State
- Modeling the solubility of Hydrocarbons-H₂O binary systems utilizing PC-SAFT Equation of State

➤ Education

PhD. Sorbonne University (Phenix lab) (12/2021 – 10/2024)

Thesis: “Effect of ion pair formation on phase equilibria of electrolyte containing mixtures”

M.Sc. Semnan University (09/2014 – 03/2017)

Major: Chemical Engineering, Separation process (GPA:17.34/20)

Coursework: Advanced thermodynamics, Advanced mass transfer, Advanced heat transfer, Surface phenomenon

Thesis: “Modeling of H₂S solubility by solvent using a new developed equation of State for electrolyte solutions”

B.Sc. Islamic Azad University North Tehran Branch (09/2009 – 12/2013)

Major: Chemical Engineering (GPA:16.44/20)

Thesis: “Salicylic Acid’s Process Design”

➤ Publications

- Raeispour Shirazi A, Yang F, Ngo T, Ferrando N, Bernard O, Simonin JP, de Hemptinne JC, Thermodynamic modeling of aqueous and mixed-solvent alkali chloride solutions using an ion-pairing equation of state, Fluid Phase Equilibria (**revised**).
- Simonin JP, Raeispour Shirazi A, Bernard O, de Hemptinne JC. Simplified Versions of the Mean Spherical Approximation (MSA) for the Prediction of Activity Coefficients in Electrolytes. Industrial & Engineering Chemistry Research. 2024 Jul 5.
- Yang F, Raeispour Shirazi A, Roa Pinto JS, Kontogeorgis GM, Ferrando N, Galindo A, de Hemptinne JC. Ion Pairing in ePPC-SAFT for Aqueous and Mixed-Solvent Alkali Halide Solutions. Industrial & Engineering Chemistry Research. 2024 Jul 3.
- Raeispour Shirazi, M.N. Lotfollahi. "Application of ePC-SAFT-MB EoS in prediction of VLE for CO₂+ MDEA+ H₂O ternary and H₂O+ MDEA+ CO₂-CH₄ quaternary mixtures. Fluid Phase Equilibria 525 (2020) 112801.
- Raeispour Shirazi, M.N. Lotfollahi. "Modeling H₂S solubility in aqueous N-methyldiethanolamine solution using a new ePC-SAFT-MB equation of state. Fluid Phase Equilibria 502 (2019) 112289.

➤ Computer skills

Aspen HYSYS, MATLAB, Microsoft Office, C++, Python

➤ **Formations**

Introduction to Renewable Energies, ENERGY ECONOMICS, Hybrid & Electric Powertrains

➤ **Languages**

English: Full Professional proficiency

Persian: Native

French: Limited Working Proficiency (A1)

➤ **References**

- **Jean-Pierre SIMONIN**
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- **Jean-Charles de HEMPTINNE**
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- **Olivier BERNARD**
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