

Special Issue

Ionic Liquids: Modeling, Design and Applications

Message from the Guest Editors

The distinctive characteristics and diverse applications of ionic liquids position them as an appealing subject for research and development across various scientific and industrial domains. Despite their potential, the ionic liquid community faces several challenges hindering the exploration and development of these unique solvents for diverse applications. To address these challenges and promote the utilization of ionic liquids in innovative and sustainable manners, collaborative endeavors involving researchers, industries, and regulatory bodies are imperative. This Special Issue serves as a platform for researchers and scientists to share innovative research ideas, fostering the realization of the complete potential of ionic liquids in modeling, design and applications. The topics covered include, but are not limited to, the following:

- Thermodynamic modeling of ionic liquids;
- Molecular dynamics simulation of ionic liquids;
- Ionic liquid solvent design;
- Ionic liquid-based process design;
- Ionic liquids in CO₂ capture;
- Ionic liquids in electrolyte chemistry.

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Deadline for manuscript submissions

closed (15 March 2025)



Processes

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CiteScore 5.5



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