

Special Issue

Molecular Chemistry of Ionic Liquids and Deep Eutectic Solvents

Message from the Guest Editor

Ionic liquids and deep eutectic solvents represent a versatile and rapidly expanding class of molecular liquids, attracting interest due to their tunable physicochemical properties and wide application potential. Their molecular diversity, enabled by numerous combinations of ions and hydrogen-bond donors and acceptors, allows control of structure–property relationships beyond those of conventional solvents. This Special Issue, *Molecular Chemistry of Ionic Liquids and Deep Eutectic Solvents*, highlights recent advances in molecular-level understanding of these systems, with emphasis on intermolecular interactions, nanostructuration, solvation, and transport behavior. We welcome experimental, theoretical, and computational studies, including spectroscopy, thermophysical measurements, molecular simulations, and quantum chemical analyses. The issue also encourages work linking molecular chemistry to applications such as green solvent design, biomass processing, electrochemistry, catalysis, separations, and energy technologies, with special focus on sustainable and bio-derived systems, including natural deep eutectic solvents.

Guest Editor

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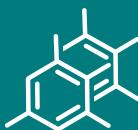


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Message from the Editor-in-Chief

As the premier open access journal dedicated to molecular chemistry, now in its 30th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts, and novel materials. Pushing the boundaries of the discipline, we invite papers on all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

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