

Special Issue

Synthesis and Applications of Porous Materials as Catalysts and Adsorbents

Message from the Guest Editors

The editorial board of *Molecules* (IF: 4.2, ISSN 1420-3049) invites you to submit an article or review to a Special Issue entitled "Synthesis and Applications of Porous Materials as Catalysts and Adsorbents". Porous materials, including metal oxides and carbon-based systems, are revolutionizing catalysis and adsorption technologies by offering tunable pore architectures and surface functionalities tailored for specific chemical challenges. This Special Issue focuses on advancing the design and application of porous metal oxides and carbon materials in transformative processes such as CO₂ conversion, photocatalytic water splitting, and thermal catalytic biomass upgrading. Of particular interest are studies that bridge synthesis innovation with environmental and energy applications, such as adsorbents for heavy metal removal, photocatalysts for pollutant degradation, and carbon materials enabling efficient CO₂ capture and electrocatalytic reduction.

Guest Editors

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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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