Special Issue

Synthesis and Properties of Macrocyclic Compound

Message from the Guest Editor

Nitrogen-bridged macrocycles, beginning with cyclophanes synthesized in the early 1950s, have been the subject of Nobel Prizes for bicyclic amines, azacrown ethers, and cryptands. Even today, nitrogen atoms are essential for catenanes, rotaxanes, and self-assembling molecules. Nitrogen macrocycles play an important role in various situations. Nitrogen atoms are useful for the synthesis of host compounds with three-dimensional structures, characterized by their trivalent nature, simple and broad synthetic methods, and electron lone pairs. This make it possible to synthesize azacrown ethers and cryptands, among others. Moreover, their basicity can be increased tens of thousands of times by appropriate spatial arrangements of nitrogen atoms. In other words, the birth of the proton sponge. In this Special Issue, we invite original research papers and timely reviews on the synthesis, structure, and properties of nitrogen-bridged macrocycles and other compounds with special properties based on the properties of nitrogen atoms.

Guest Editor

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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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