Special Issue

New Insights into Intramolecular Hydrogen Bonds

Message from the Guest Editor

The importance of the hydrogen bond in chemistry and in the existence of life itself on Earth cannot be overestimated. It is suffice to recall its role in the formation of biological structures, ice, and liquid water. Notwithstanding the enormous efforts of academic researchers over the past 100 years, understanding the nature of the H-bond is still a serious problem. This is most relevant for strong hydrogen bonds in chemistry, examples of which are not as numerous as weak and medium bonds. The work of recent years on the role of quantum uncertainty of the proton on the H-bond has significantly advanced the solution of this problem, but the findings need experimental confirmation. This is especially true of the intramolecular hydrogen bond, where its characteristics can be influenced by the effects of electron density delocalization in adjacent aromatic rings as well as in cycles of which the intramolecular H-bond itself is a part. This Special Issue aims to provide selected articles on theoretical and experimental advances in the description of intramolecular hydrogen bonding and the role of aromatization effects in strong bond formation.

Guest Editor

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As the premier open access journal dedicated to experimental organic chemistry, and now in its 25th 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 multidisciplinary topics bridging biochemistry, biophysics and materials science, as well as timely reviews and topical issues on cutting edge fields in all these areas.

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