

## 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

Prof. Dr. Boris A. Kolesov  
A.V. Nikolaev Institute of Inorganic Chemistry, Siberian Branch, Russian Academy of Sciences, 630090 Novosibirsk, Russia

---

### Deadline for manuscript submissions

closed (17 February 2023)



## Molecules

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.6  
CiteScore 8.6  
Indexed in PubMed



[mdpi.com/si/94563](https://mdpi.com/si/94563)

*Molecules*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[molecules@mdpi.com](mailto:molecules@mdpi.com)

[mdpi.com/journal/  
molecules](https://mdpi.com/journal/molecules)





# Molecules

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.6  
CiteScore 8.6  
Indexed in PubMed



[mdpi.com/journal/  
molecules](https://mdpi.com/journal/molecules)



## About the Journal

### 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.

---

### Editor-in-Chief

Prof. Dr. Thomas J. Schmidt

Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Corrensstrasse 48, D-48149 Münster, Germany

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Reaxys, CaPlus / SciFinder, MarInLit, AGRIS, and other databases.

#### Journal Rank:

JCR - Q2 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.1 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2025).