Special Issue

Thermodynamics, Structure, and Intermolecular Interactions in Solutions

Message from the Guest Editors

The key issues of structural evolution and intermolecular interactions in molecular thermodynamics, statistical thermodynamics, and molecular self-assembly play important roles in a range of multidisciplinary fields such as chemistry, materials science, crystal engineering, pharmaceutical science, environmental science, and earth science. Robust discussion on the evolution of molecular structures and intermolecular interactions in solution has already resulted in vast leaps in science and technology, and will undoubtedly lead to further insights and open new horizons in relation to molecular thermodynamics and phase transition mechanisms and kinetics. The manuscripts might relate to, but are by no means limited to, the following topics:

- Experimental, theoretical, or combined perspective views on molecular thermodynamics or molecular simulation in organic, inorganic or physical chemistry;
- The exploitation of different experimental techniques (NMR, IR, Raman, UV-vis spectroscopy, etc.) for the characterization of intermolecular interactions or solution species;
- Physical interpretations or molecular insights into the molecular self-assembly process.

Guest Editors

Dr. Shijie Xu

Tianjin Key Laboratory of Brine Chemical Engineering and Ecological Utilization of Resources, Tianjin Engineering Center of Marine Chemical Engineering & Technology, College of Chemical Engineering and Materials Science, Tianjin University of Science and Technology, Tianjin 300457, China

Dr. Tao Li

School of Chemical Engineering, Zhengzhou University, Zhengzhou 450001, China

Deadline for manuscript submissions

closed (31 May 2023)



Molecules

an Open Access Journal by MDPI

Impact Factor 4.6 CiteScore 8.6 Indexed in PubMed



mdpi.com/si/123907

Molecules
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
molecules@mdpi.com

mdpi.com/journal/molecules





Molecules

an Open Access Journal by MDPI

Impact Factor 4.6 CiteScore 8.6 Indexed in PubMed



About the Journal

Message from the Editor-in-Chief

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.

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 16.1 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).

