Special Issue

Advances in the Design and Synthesis of Novel Macrocyclic Host Molecules

Message from the Guest Editor

Macrocycles hold a privileged place in the field of molecular recognition. Suitably designed, they can recognize ions and small molecules with great levels of selectivity, even in competing media such as water. Every day, macrocyclic hosts are finding new applications in the context of anion capture, transport, sensing, molecular machinery, etc. The structural diversity of synthetic macrocycles is constantly expanding, and the rapid development of strategies enabling access to macrocyclic species with complex topologies (e.g., multiply interlocked catenanes and knots) is likely to push the boundaries of the field in new directions in the near future. It is therefore timely to gather studies reflecting the current state-of-the-art of the host-guest chemistry of macrocycles. The aim of this Special Issue is to highlight some of the latest developments in all areas of research related to the design and synthesis of macrocyclic hosts.

Guest Editor

Prof. Dr. Fabien B. L. Cougnon

Department of Chemistry & Nanoscience Centre, University of Jyväskylä, Jyväskylä, Finland

Deadline for manuscript submissions

closed (31 October 2023)



Molecules

an Open Access Journal by MDPI

Impact Factor 4.6 CiteScore 8.6 Indexed in PubMed



mdpi.com/si/119233

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).

