

Special Issue

Synthetic Receptor Molecules for and with Amino Acids and Peptides

Message from the Guest Editor

Since the Nobel Prize in 1987, supramolecular chemistry has considerably matured. However, the construction of functional supramolecular ligands for specific interference with biological systems is still in its infancy. Amino acids are the smallest building blocks for peptides and proteins. The design of artificial ligands with high affinity and selectivity for amino acids and peptides at physiological conditions is a challenging field, since these targets are small, highly polar and therefore well solvated. Peptides are in most cases highly flexible and dynamic; in addition, specific ligands must distinguish between a large number of possible sequences. On the other hand, advanced host molecules may be used for sensing applications and the elucidation of biological mechanisms as well as therapeutic agents. Powerful peptide recognition finally is a prerequisite for the recognition of proteins.

Guest Editor

Prof. Dr. Thomas Schrader

Organic Chemistry, Faculty of Chemistry, Duisburg-Essen University,
45117 Essen, Germany

Deadline for manuscript submissions

closed (31 March 2023)



Molecules

an Open Access Journal
by MDPI

Impact Factor 4.6
CiteScore 8.6
Indexed in PubMed



mdpi.com/si/56826

Molecules
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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).