

Special Issue

Microbial Bioactive Metabolites: Extraction, Purification, Characterization and Its Pharmacological Relevance

Message from the Guest Editor

The isolation of natural products that originate as secondary metabolites from a myriad of sources, including plants, animals, marine organisms, and microorganisms, is a growing field, particularly due to the potential application of these natural products in pharmacology and medicine.

This Special Issue covers the microbial production of these biologically active secondary metabolites and the generation of new molecules using diverse bioactivity-guided extraction, purification, and structural determination approaches. A full elucidation of the structure of naturally occurring secondary metabolites is achieved via spectroscopic techniques, including full 2D-NMR datasets as well as high-resolution mass spectroscopy. Additionally, applications of cutting-edge developments and technological advances in the microbial production of bioactive natural products are desirable.

We cordially invite you to contribute your original research as well as review articles to this Special Issue, which aims to critically explore and examine the biological and medicinal significance of microbial metabolites, as well as methods of isolation, characterization, and the analysis of generated molecules.

Guest Editor

Dr. Abbas G. Shilabin

Department of Chemistry, East Tennessee State University, Johnson City, TN 37614, USA

Deadline for manuscript submissions

closed (31 December 2022)



Molecules

an Open Access Journal
by MDPI

Impact Factor 4.6
CiteScore 8.6
Indexed in PubMed



mdpi.com/si/122297

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).