Special Issue

Metabolomics to Explore Specialized Metabolites Involved in Chemical Ecology

Message from the Guest Editors

Specialized metabolites are often involved in the interactions of the producing organisms with their environment. The investigation of these interactions is the core of chemical ecology. In this context, the key aspects are the identification of the metabolites involved and the understanding of how these compounds perform their action.

Metabolomics has been proposed as an invaluable tool to address these challenging tasks. This approach can be used to identify the chemicals involved in the interaction as well as to tackle the mechanistic aspects related for example to compounds' biosynthesis, emission, uptake, metabolism, and mode of action.

This Special Issue welcomes submissions (both in the form of original research papers and reviews) that deal with the study of specialized metabolites involved in chemical ecology through metabolomics and related technologies:

- -New metabolomics-based methods in chemical ecology;
- -The discovery of new compounds involved in chemical ecology through metabolomics;
- -Metabolomics-guided elucidation of the role/biosynthesis/metabolism/mode of action of both new and known metabolites involved in chemical ecology.

Guest Editors

Dr. Monica Scognamiglio

Department of Environmental, Biological and Pharmaceutical Sciences and Technologies—DiSTABiF, University of Campania "Luigi Vanvitelli", Via Vivaldi 43, 81100 Caserta, Italy

Dr. Fernanda Maria Marins Ocampos

Brazilian Agricultural Research Corporation (EMBRAPA) Instrumentation, Rua 15 de Novembro 1452, Centro, São Carlos, SP 13560-970, Brazil



Molecules

an Open Access Journal by MDPI

Impact Factor 4.6
CiteScore 8.6
Indexed in PubMed



mdpi.com/si/35558

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).

