Special Issue

Recent Advances on the Synthesis, Biological Activity of Fungal Metabolites and Their Relation with Absolute Configuration

Message from the Guest Editors

Among natural organisms, fungi are one of the main sources of secondary metabolites with a variety of biological activities. Fungal metabolites have the advantage that they are ecofriendly, frequently lacking toxicity towards humans and animals and decomposing in a brief time. Unfortunately, these useful metabolites are often produced in a very low amount, and a complex process of purification needs to be applied to acquire them in pure form. These quantities are not sufficient for the different steps to test their biological activity and formulations required for their practical application. Thus, the only solution is the development of a convenient, ecofriendly, and simple enantioselective synthetic strategy. This process can only be developed if the bioactive metabolite has preliminarily been assigned with absolute configuration (AC) using different physic methods available today, as AC is strictly related to biological activity. Knowledge of the structure and AC also allows us to carry out chemical modification of the parent compound to modulate its biological activity to increase efficacy and selectivity and facilitate its formulation.

Guest Editors

Prof. Dr. Antonio Evidente

Institute of Biomolecular Chemistry, National Research Council, Via Campi Flegrei 34, 80078 Pozzuoli, Italy

Prof. Dr. Stefano Superchi

Department of Sciences, University of Basilicata, Via dell'Ateneo Lucano 10, 85100 Potenza, Italy

Deadline for manuscript submissions

closed (15 April 2024)



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/161578

International Journal of Molecular Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 ijms@mdpi.com

mdpi.com/journal/ ijms





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed





Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

