Special Issue

Role of Microorganisms and Their Metabolites in Agriculture, Food and the Environment

Message from the Guest Editor

Even though people have been using microorganisms for thousands of years, they still surprise us with their possibilities.

The production of fermented foods is one of the oldest food processing technologies known since ancient times. Nowadays, microorganisms are used in the production of foods not only as a strategy for food preservation but also for improving specific characteristics, such as flavor, aroma, texture, and digestibility.

The antagonistic activity of microorganisms is widely used, both in biological plant protection to reduce environmental degradation due to the widespread use of fungicides and against food-borne pathogens to prevent disease. In turn, the ability of microorganisms to adsorb, accumulate, and degrade common and emerging pollutants has attracted the use of biological resources in treating contaminated food, feed, and the environment.

This Special Issue focuses on shed light on the molecular aspects and enhancing the current research in the field of new high-throughput technologies, such as genomics, metagenomics, transcriptomics, metatranscriptomics, and metabolomics, allowing a deeper description of the microbial constituents of different environments.

Guest Editor

Prof. Dr. Barbara Sokolowska

- Department of Microbiology, Prof. Wacław Dąbrowski Institute of Agricultural and Food Biotechnology—State Research Institute, 02-532 Warsaw, Poland
- 2. Institute of High Pressure Physics, Polish Academy of Sciences, 01-142 Warsaw, Poland

Deadline for manuscript submissions

closed (31 January 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/159623

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)

