



## Therapeutic Potential of Natural Compounds: Insights into Mechanisms, Molecular Docking, and Biological Activities

Guest Editor:

**Dr. Rafał Hałasa**

Department of Pharmaceutical  
Microbiology, Medical University  
of Gdańsk, 80-416 Gdańsk,  
Poland

Deadline for manuscript  
submissions:

**20 December 2024**

### Message from the Guest Editor

Dear Colleagues,

For centuries, folk medicine has been used to treat various ailments afflicting people and animals stemming from plants, lichens, mushrooms, etc. The accurate determination of the biological properties of chemical compounds have progressed in tandem with the development of science. Naturally occurring compounds have become the basis for modern synthetic modifications, leading to the creation of active substances with more effective mechanisms of action, improved pharmacological parameters, and low side effects. Unfortunately, new or known diseases that are resistant to current preparations have been detected. Therefore, there is a constant need to identify new compounds/mixtures of compounds that can combat new diseases, or allow us to control diseases that are immune to current treatments.

Led by Dr. Rafał Hałasa and assisted by the Topical Advisory Panel Member Dr. Katarzyna Turecka (Medical University of Gdańsk), this Special Issue is devoted to natural compounds and their derivatives, including their biological activity and mechanisms of action that may have therapeutic uses in the fight against diseases.





an Open Access Journal by MDPI

## 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

## 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.

## 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 (Inorganic Chemistry)

## Contact Us

---

*International Journal of Molecular  
Sciences* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/ijms  
ijms@mdpi.com  
X@IJMS\_MDPI