

Special Issue

Blueprints of Enzymatic Function and Structure in Biocatalysis

Message from the Guest Editor

In this Special Issue of the *International Journal of Molecular Sciences*, entitled "Blueprints of Enzymatic Function and Structure in Biocatalysis", we delve into the intricate relationship between enzyme structure, kinetics, and thermodynamics in the realm of biocatalysis. Enzymes, as nature's catalysts, play a vital role in accelerating biochemical reactions, and a deeper understanding of their structural and thermodynamic blueprints is essential for innovations in synthetic biology, pharmaceuticals, and industrial applications. This Special Issue aims to present cutting-edge research on enzyme engineering, mechanistic pathways, and the kinetic and thermodynamic principles that govern enzyme efficiency, shedding light on the design of more effective and sustainable biocatalysts.

Guest Editor

Prof. Dr. Francesco Malatesta

Department of Biochemical Sciences, Sapienza University of Rome, Rome, Italy

Deadline for manuscript submissions

20 March 2026



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/218037

*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](https://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



[mdpi.com/journal/
ijms](https://mdpi.com/journal/ijms)



About the Journal

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)