

Special Issue

Extremozymes for Industrial Biocatalysis and Green Chemistry

Message from the Guest Editor

For the chemical industry, the use of enzymes presents important benefits, which include higher selectivity, increased sustainability and a low toxicity. These efforts in novel green chemistry processes are translated to cleaner production and lower environmental impact at the industrial and global levels. Enzymes derived from extremophiles, or extremozymes, have already adapted to thrive in environments that present extreme physicochemical conditions. They often have natural outstanding properties, which include being able to carry out reactions under nonstandard conditions (e.g., high or low temperatures, acidic or alkaline pH, high concentrations of salt or organic solvents, and high pressure) where traditional mesophilic enzymes underperform. Moreover, extremozymes are a better starting point for protein design and engineering. This Special Issue aims to present recent advances in the discovery of novel enzymes derived from extremophiles, their use to design or optimize biotechnological processes and/or potential industrial applications.

Guest Editor

Dr. Jenny M. Blamey

1. Facultad de Química y Biología, Universidad de Santiago de Chile, Alameda 3363, Santiago 9170022, Chile
2. Fundación Científica y Cultural Biociencia, José Domingo Cañas 2280, Nuñoa, Santiago 7750132, Chile

Deadline for manuscript submissions

closed (20 March 2025)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/203555

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

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)