

## Special Issue

# Molecular Enzymology and Biotechnology for Extreme Environments

### Message from the Guest Editor

Within the transition from a linear to a circular bioeconomy, the discovery and use of robust biocatalysts are crucial in obtaining specific bioproduct substitutes. However, most modern industrial processes are carried out in severe conditions; thus, the intrinsic properties of enzymes from extremophiles offer some advantages from an industrial perspective. In recent years, high-throughput sequencing in combination with advanced bioinformatics algorithms has allowed us to enhance and expand our insights into extremophilic microbial taxa, to decipher their functional capacities and activities and reconstruct their roles. However, metagenomics approaches give little information on the expression and function of genes. Only detailed enzymatic characterizations can confirm the inferred activity and evaluate potential applications.

From thriving in extreme environments to unlocking novel biotechnological applications, this Special Issue explores the profound impact of extremozymes in industrial processes. We welcome review, opinion, and research articles that focus on, but are not limited to, the above topics.

### Guest Editor

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closed (30 November 2024)



## International Journal of Molecular Sciences

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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.

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### Editor-in-Chief

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