

# Special Issue

## Microorganisms in Extreme Environments

### Message from the Guest Editor

Extreme environments on Earth host extreme lifeforms. This Special Issue explores the fascinating world of cold-adapted microorganisms and lifeforms thriving in Earth's most extreme low-temperature environments. From the icy expanses of polar and alpine regions to the depths of oceans, cold lakes, caves, and permafrost, including snow, glaciers, and certain human-made cold settings, a diverse array of microbial life persists. These extraordinary organisms, representing the domains Archaea, Bacteria, and Eukarya, are broadly categorized into psychrophiles, which exclusively flourish at low temperatures, and psychrotolerants, which are capable of growth across a wider temperature range, including cold conditions. This Special Issue focuses on research surrounding the isolation, ecology, cold adaptation strategies, genetics, and practical applications of these resilient psychrophilic and psychrotolerant strains, inviting authors and readers to discover the hidden potential of life in extreme environments.

### Guest Editor

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### Deadline for manuscript submissions

closed (31 January 2026)



## Microorganisms

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## About the Journal

### Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

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### Editor-in-Chief

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#### Journal Rank:

JCR - Q2 (Microbiology) / CiteScore - Q1 (Microbiology (medical))

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 20 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the second half of 2025).