

# Special Issue

## Molecular Mechanisms of Algal Adaptation to Extreme Temperature Conditions

### Message from the Guest Editor

As global warming continues to reshape our planet, understanding how algae adapt to changing temperatures has become increasingly crucial. Algae thriving in extreme environments—such as polar regions, equatorial waters, snowfields, hot springs, and hydrothermal vents—offer valuable insights into these adaptive processes. By studying algae that survive and flourish under both freezing and denaturing temperatures, researchers can uncover the molecular mechanisms that enable these primary producers to cope with temperature fluctuations. This Special Issue aims to bring together and highlight the latest research on this topic, providing phycologists with a comprehensive resource to advance their studies and explore the complex strategies algae employ to thrive in diverse thermal conditions. We look forward to your contributions.

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### Guest Editor

Prof. Dr. Senjie Lin

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### Deadline for manuscript submissions

30 October 2025



**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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