Special Issue

Microbial Adaptation and Tolerance to Environmental Stresses

Message from the Guest Editor

Climate change has impacted every aspect of human lives as well as other living organisms on earth. We all know that the silent majority of microorganisms play significant roles in human health and the health of animals, plants, and other living things. We need to examine how microbes deal with environmental stresses in order to protect human health, food safety, and agriculture productivity. Understanding how microbes respond and adapt to environmental conditions will ultimately benefit the health of our planet and us. In this Special Issue, we invite you to send contributions concerning microbial responses to environmental challenges involving:

- natural physical environmental factors such as temperature, air pollution, salt tolerance, osmotic stress, and increased accumulation of antibiotics and changes of pH in their environments
- fermentative bioreactor conditions such as increased production of biofuels and bioproducts in bioreactors, inhibitor tolerance, high substrate loading, microbial contamination, and the dealing of various control strategies to reduce contaminations
- stress-related responses such as competitions and interactions within a microbial community

Guest Editor

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Deadline for manuscript submissions

closed (31 March 2022)

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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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Journal Rank:

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

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.2 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).

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