

Special Issue

Microbial Diversity and Ecology in Different Environments

Message from the Guest Editors

This Special Issue focuses on the comprehensive characterization of microbial diversity and ecology across various environments, including terrestrial ecosystems (soil, rhizosphere, plant-associated microbiomes), aquatic systems (marine, freshwater, sediments), extreme environments (hypersaline, acidic, high-temperature, polar regions), and host-associated microbiomes (animals, plants, humans). We encourage submissions that employ cutting-edge approaches, such as metagenomics, metatranscriptomics, and culturomics, to explore microbial community structure, function, and dynamics. Other omics to understand the molecular mechanisms related to microbial characteristics are welcome. Particular emphasis is placed on studies that correlate microbial diversity with ecosystem functions, investigate host-microbe interactions, and explore the biotechnological potential of novel microorganisms and their metabolic pathways. We expect research addressing microbial adaptation mechanisms, community assembly processes, response to environmental changes, and the discovery of new bioactive compounds or enzymes with industrial applications.

Guest Editors

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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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