

Special Issue

Microbial Diversity in Freshwater Ecosystems

Message from the Guest Editor

Freshwater ecosystems harbor incredibly diverse microbes that play an important role in nutrient cycling, ecosystem functioning, and water quality maintenance. Microbial communities in these environments are highly dynamic and sensitive to natural variations, as well as anthropogenic influences such as pollution, climate change, eutrophication, and land-use change. Despite their ecological importance, microbial diversity in freshwater habitats remains underexplored compared to marine or terrestrial systems. This Special Issue will bring together cutting-edge research that enhances our understanding of microbial diversity, community structure, and function in freshwater ecosystems across geographical and temporal scales. We welcome submissions on microbial ecology, metagenomics, bioinformatics, environmental microbiology, and biogeochemical interactions. Studies employing innovative methodologies to characterize microbial taxa, functional genes, or microbial responses to environmental stressors are particularly encouraged. Comparative analyses, novel methodological approaches, and applied perspectives on microbial indicators for freshwater health are also of interest.

Guest Editor

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Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

Editor-in-Chief

Dr. Jean-Luc PROBST

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