

Special Issue

Novel Outlook in Environmental Microbial Ecology

Message from the Guest Editors

This Special Issue provides updates on environmental microbiology within the context of global biogeochemical cycle dynamics. This Special Issue proposes the integration of cutting-edge methodologies—including microscopy, FISH, geochemistry, metagenomics, metaproteomics, and stable isotope probing—with cross-disciplinary perspectives to unravel the complexity of the roles of microbes in extreme environments and their influence on global biogeochemical processes. We welcome papers that focus on the structural and functional analysis of microbial communities—by exploring omics approaches, microbe–mineral interactions, and the detection of biosignals through stable isotope analysis, microcosms, and environmental monitoring—at both the micro- and macro-scales to understand how variable environmental conditions influence microbial communities and how microbial processes, in turn, provide feedback to the environment.

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Deadline for manuscript submissions

20 January 2026



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/244439

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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