Special Issue

Microbial Community Structure and Functions in Marine Sediments

Message from the Guest Editor

This Special Issue welcomes original research articles, reviews, and short communications that explore the diversity, structure, and ecological roles of microbial communities in marine sediments. We invite studies that investigate bacterial, archaeal, and eukaryotic microbial assemblages using culture-dependent or -independent methods, including high-throughput sequencing, metagenomics, metatranscriptomics, and other omics approaches. Topics of interest include, but are not limited to, the following:

- Microbial community dynamics across spatial and temporal gradients.
- Responses of sediment microbiomes to environmental drivers, such as salinity, oxygen availability, organic matter, and pollution.
- Microbe-mediated biogeochemical processes in marine and coastal sediments (e.g., carbon, nitrogen, methane, sulfur cycles).
- The role of microbes in ecosystem functioning and resilience.
- Microbial interactions and network structures within sediment habitats.
- Comparative studies between natural and human-impacted systems.
- Microbial indicators of ecosystem health or environmental change.

Submissions focusing on both continental shelves and deep-sea sediments are encouraged.

Guest Editor

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Deadline for manuscript submissions

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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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