

Special Issue

Wastewater Discharge and Its Impacts on Microbial Communities in Receiving Waters

Message from the Guest Editor

As wastewater treatment plants discharge large volumes of treated effluent into surface waters, it is crucial to understand how this impacts indigenous microbial communities. Effluents contain complex mixtures of organic matter, nutrients, chemicals, and microbes that can alter the microbial ecology and water quality. Studying community composition changes and gene flow dynamics provides insight into microbial adaptation and reveals threats to ecosystem stability. Tracking the transmission of antimicrobial resistance is critical to managing public health risks. Suggested sub-topics include: Immediate and long-term impacts of effluent contents (organic matter, nutrients, metals, pharmaceuticals, etc.) on indigenous microbial communities

Threats of wastewater discharge to the ecosystem and human health

Mitigation strategies to minimize ecological impacts from wastewater discharge

Fate and transport of wastewater-derived microbes and antimicrobial resistance genes

Microbial community analysis as a tool for evaluating and improving wastewater treatment

Modeling approaches to predict impacts on microbial communities

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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