

## Special Issue

# Application of Microbial Technology in Wastewater Treatment

### Message from the Guest Editors

Wastewater treatment systems are facing increasing challenges in the context of global environmental and sustainability goals. Biological treatment processes are the most widely employed methods in wastewater treatment due to their effectiveness in pollutant removal, operational stability, and cost efficiency. Microorganisms play a pivotal role in the biodegradation of pollutants in biological wastewater treatment systems.

This Special Issue focuses on the application of microbial technologies to advance wastewater treatment and overcome current limitations. We invite researchers to contribute original research articles, reviews, and case studies on topics including, but not limited to:

Microbial methods for effectively controlling greenhouse gas emissions in wastewater treatment processes.

Identification and bioaugmentation of microorganisms capable of degrading high-risk pollutants in wastewater.

Development and application of microbial consortia for the removal of high-risk pollutant

Synthetic biology approaches for addressing high-risk pollutants in wastewater.

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### Guest Editors

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### Deadline for manuscript submissions

15 January 2026



## Water

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## About the Journal

### 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.

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### Editor-in-Chief

Dr. Jean-Luc PROBST

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