

Special Issue

Microbial Biotechnology for Water and Sludge Treatment

Message from the Guest Editors

This Special Issue is devoted to exploring novel and robust pure or mixed cultures for the biological treatment of both wastewater and sludge. We invite submissions of review articles and case studies covering, but not limited to, the following topics:

- Biological processes for wastewater and sludge management and valorization for their conversion to bioenergy and/or added-value products.
- Unraveling the fate and transport mechanisms of organic pollutants in water and sludge matrices.
- Mechanistic mathematical modeling of biological processes for application in wastewater treatment.
- Identification and characterization methods of pollutants of municipal, industrial, and agricultural wastewater and/or sludge.
- Sustainability analysis (techno-economic analysis and/or life cycle assessment) of applied biological methods for waste and wastewater management.
- Zero waste and circular economy approach on wastewater and sludge valorization, with emphasis on the application of biological methods. [...]

For further reading, please follow the link to the Special Issue Website at:

https://www.mdpi.com/journal/water/special_issues/5ZF45EW7OZ

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Deadline for manuscript submissions

closed (20 July 2025)



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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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