

Special Issue

Microbial Remediation of Polluted Water Bodies and Degraded Water Ecosystems

Message from the Guest Editors

Recent decades have witnessed increasing deterioration of the global aquatic environment, which has been damaged by ubiquitous contaminants that have not undergone treatment or have been incompletely reclaimed from wastewater, which accounts for half of worldwide production. Traditional contaminants and contaminants of emerging concern, despite belonging to a wide variety of natural or anthropogenic chemicals, such as agrochemicals, personal care products, industrial additives, hormones, and drugs, all pose severe threats to human health and environmental safety, whereas traditional wastewater treatment methods lack removal capacities. Notably, many microorganisms (including bacteria, archaea, fungi, protists, and metazoans) have not only shown tolerance to these toxic compounds but also driven biodegradation processes. Studies have highlighted the necessity of exploring structural, genomic, and metabolic adaptations of these extremotolerant or functional microorganisms to uncover microbial bioremediation and biotechnologies processes.

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Deadline for manuscript submissions

closed (31 March 2023)



Water

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0



mdpi.com/si/136714

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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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