

Special Issue

Innovative Green Technologies for Wastewater Treatment and Sludge Valorization Towards a Circular Economy

Message from the Guest Editors

The treatment and disposal of wastewater and sludge remain critical challenges in the face of rapid urbanization, industrialization, and climate change. Conventional technologies often incur high energy consumption, limited resource recovery, and significant environmental impacts. As the global community increasingly moves toward carbon neutrality and circular economy models, there is an urgent need for green, sustainable, and low-carbon solutions that transform wastewater and sludge from environmental burdens into valuable resources. This Special Issue aims to highlight cutting-edge research and practical advances in green technologies for wastewater and sludge management. Topics include, but are not limited to, green hydrogen production from wastewater, sludge valorization into value-added products, sustainable electrochemical and biological treatment processes, and circular economy-based water management strategies. We invite original research articles, reviews, and case studies from multidisciplinary fields that contribute to a greener, more sustainable future.

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Deadline for manuscript submissions

31 December 2026



Water

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0



mdpi.com/si/239529

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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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