

Special Issue

Advances in Aerobic and Anaerobic Wastewater and Sludge Treatment and Recovery

Message from the Guest Editors

The strict discharge limits for WWTPs, the growing need for energy savings and renewable energy generation, along with carbon capture and nutrient recovery require the research and implementation of innovative biological processes aimed at maximizing treatment efficiency, reducing the environmental impacts and increasing their circularity potential. Furthermore, the possibilities offered by digitalization in wastewater and sludge treatment are manifold, and could lead to substantial improvements of biological process management. The themes of this Special Issue include, but are not limited to, the following: Algae-bacteria interactions; Anaerobic digestion; Dark fermentation; Attached growth biofilm reactors; Biological nutrient removal; Biological process to minimize sludge production; Bioplastic production; Granular process; Greenhouse gas emissions from WWTPs; IFAS system; Innovative biological processes; Instrumentation, control and automation; Membrane bioreactors; Microbial fuel cells; Modelling; Moving bed biofilm reactors; New frontiers in wastewater treatment; Sequencing batch reactors; Nutrient recovery and valorisation; Carbon capture and utilization.

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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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