Special Issue

Advances in Microbial Technology for Sustainable Wastewater Treatment

Message from the Guest Editors

Microbial communities profoundly impact Earth's ecosystems, making them powerful tools for mitigating humanity's global environmental footprint. This Special Issue is important for environmental protection and biotechnological processes for wastewater treatment based on microbial engineering. Novel approaches for applying microbes to new treatment technologies, biotechnological applications that substantially enhance wastewater treatment processes, and the ecology of microorganisms thriving in bioreactors and identification of their ecological roles within the wastewater treatment process deserve a spotlight, which we aim to provide. We will gather contributions on the following topics:

- Novel technologies for the bioremediation of environmental pollution in water;
- The effects of pollutants on microbial communities in biotechnological processes and the adaptation processes of such microbes used in response to the environmental stresses of pollution;
- The role of microbial communities in the removal of pollutants from wastewater;
- Ecological studies of novel microbial taxonomies thriving in wastewater systems.

Guest Editors

Dr. Alejandro Rodriguez-Sanchez
Department of Microbiology, University of Granada, Granada, Spain
Dr. Bárbara Muñoz Palazón

Institute of Water Research, University of Granada, Granada, Spain

Deadline for manuscript submissions

30 June 2026



Water

an Open Access Journal by MDPI

Impact Factor 3.0 CiteScore 6.0



mdpi.com/si/260294

Water Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 water@mdpi.com

mdpi.com/journal/ water





Water

an Open Access Journal by MDPI

Impact Factor 3.0 CiteScore 6.0



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.

Editor-in-Chief

Dr. Jean-Luc PROBST

Centre de Recherche sur la Biodiversité l'Environnement (CRBE) UMR CNRS/UPS/INPT/IRD, Centre National de la Recherche Scientifique (CNRS), University of Toulouse, Campus ENSAT, Auzeville Tolosane, Toulouse. France

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, PubAg, AGRIS, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Water Resources) / CiteScore - Q1 (Aquatic Science)

