

Special Issue

Application of Biotechnology in Water Treatment and Specific Treatments for Water Reuse

Message from the Guest Editors

Global changes, including pollution, climate change, population growth, and soil sealing associated with increasing water needs, are putting pressure on the availability of water resources. In this context, effective water cycle management is a necessity. Various biotechnology approaches have been used on a worldwide scale for water treatment. Biotechnology constitutes a key technology in the treatment of wastewater and gray water and in the treatment of rain water for better recharge groundwater. Biotechnology can be used either alone or in combination with other technology. It can also be used in the treatment of non-conventional water for direct and indirect reuse purposes. However, even though biotechnologies have been used for decades, improvements and the development of new processes pose a challenge for better efficiency and/or to reduce the cost of treatment. This Special Issue covers both relevant topics: the application of biotechnology in water treatment (wastewater, agricultural effluent, rain water) and specific treatments for direct and indirect water reuse. Original research articles, reviews, and short communications are welcome.

Guest Editors

Dr. Sopheak Net

Faculty of Sciences and Technologies, University of Lille, Lille, France

Prof. Dr. Baghdad Ouddane

Faculty of Sciences and Technologies, University of Lille, Lille, France

Deadline for manuscript submissions

25 October 2025



Water

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0



mdpi.com/si/199867

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

[mdpi.com/journal/
water](https://mdpi.com/journal/water)





Water

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0



[mdpi.com/journal/
water](https://mdpi.com/journal/water)



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)