



water

an Open Access Journal by MDPI



Application of Biotechnology in Water Purification

Guest Editor:

Dr. Razieh Rafieenia

MSCA Fellow, Department of
Bioengineering, Imperial College
London, London, UK

Deadline for manuscript
submissions:

20 September 2024

Message from the Guest Editor

This Special Issue, titled “Applications of Biotechnology for Water Purification”, aims to showcase and disseminate recent developments related to bio-based technologies for water treatment and pollutant removal. We aim to explore key challenges in developing sustainable bio-based processes for water and wastewater treatment.

Topics of interest for this publication include, but are not limited to, the following:

- Emerging technologies for wastewater treatment based on biological degradation;
- Use of metabolic engineering to enhance degradation of water pollutants;
- Microbial electrochemical systems;
- Integrated systems combining microbes and other advanced oxidation processes, such as photocatalysis;
- Modelling of biological systems for wastewater treatment;
- Removal of persistent pollutants, including microplastics, antibiotics, pesticides, etc.;
- Techno-economic and environmental impact assessment of hydrogen production bio-based water treatment;
- Renewable energy generation from wastewaters using microbes;
- Algal-based wastewater treatment



mdpi.com/si/200634

Special Issue

anaerobic, membrane bioreactors, etc.



water

IMPACT
FACTOR
3.4

CITESCORE
5.5

an Open Access
Journal by MDPI

Editor-in-Chief

Dr. Jean-Luc PROBST

Laboratory of Functional Ecology
and Environment, Centre
National de la Recherche
Scientifique (CNRS), University of
Toulouse, Campus ENSAT,
Auzeville Tolosane, France

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.

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](#), [CAPus / SciFinder](#), [Inspec](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Water Resources*) / CiteScore - Q1 (*Water Science and Technology*)

Contact Us

Water Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/water
water@mdpi.com
[X@Water_MDPI](#)