



water

an Open Access Journal by MDPI



Applications of Biotechnology for Treatment of Poly- and Perfluoroalkyl Substances (PFASs) in Water and Wastewater

Guest Editor:

Dr. Wenjie Sun

Department of Atmospheric and
Hydrologic Sciences, St. Cloud
State University, St. Cloud, MN
56301, USA

Deadline for manuscript
submissions:

31 August 2024

Message from the Guest Editor

Poly- and perfluorinated alkyl substances (PFAS) constitute a diverse array of fully and partially fluorinated compounds, comprising over 4000 linear, branched, or cyclic variations. Growing concerns about PFAS have been raised due to their environmentally persistent and bioaccumulative nature and adverse human health effects. Comprehensive surveys in the United States and other nations have been conducted to monitor PFAS distribution, transport, transformation, and removal in both drinking water and wastewater systems. Recently, regulatory agencies worldwide have proposed national drinking water standards for certain PFAS compounds, such as PFOS and PFOA to protect communities from PFAS-contaminated water. Despite the development of physicochemical treatments for PFAS, biodegradation of PFAS offers a potentially cost-effective approach. Therefore, a thorough investigation into the integration of current biotechnological treatment and emerging microbial ecology techniques is warranted to comprehend the fate, transport, and removal of PFAS in water and wastewater systems



mdpi.com/si/198174

Special Issue



water



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, CAPlus / 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](https://twitter.com/Water_MDPI)