

## Special Issue

# Advanced Technologies in Sustainable Wastewater Treatment and Water Reuse

### Message from the Guest Editors

In recent decades, the occurrence of a huge amount of newly identified compounds of anthropogenic or natural origin in the aquatic environment has become a global issue. These contaminants typically occur in trace concentrations in the range from parts per trillion (ppt or ng/L) to parts per billion (ppb or µg/L). These compounds are named as “emerging contaminants (ECs)”. Conventional water treatment processes can remove naturally occurring contaminants but may not be able to remove ECs. Therefore, advanced technologies are required to address emerging issues. This Special Issue targets the development of advanced materials and technologies, novel systems for reaction intensification, system simplification, and high energy and chemical efficiency for wastewater treatment and reuse. We are also interested in manuscripts exploring process mechanisms, the progress made in analytical methodologies for advanced materials, mechanisms of novel treatment technologies, and their applications in wastewater treatment plants and water reuse.

### Guest Editors

Dr. Xiaying Xin

Faculty of Engineering and Applied Science, Queen's University,  
Kingston, ON, Canada

Dr. Bo Liu

Department of Civil Engineering, Memorial University, St. John's, NL,  
Canada

### Deadline for manuscript submissions

closed (31 August 2023)



## Water

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 6.0



[mdpi.com/si/164692](https://mdpi.com/si/164692)

*Water*

Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[water@mdpi.com](mailto:water@mdpi.com)

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