

## Special Issue

# Aquatic Macrophytes and Pollutants: Interactions, Indicator Role, and Phytoremediation Possibilities

### Message from the Guest Editors

Aquatic macrophytes can survive in polluted habitats to a certain extent and respond to different pollutants in various ways. They constitute the largest amount of biomass in aquatic ecosystems and are often the first organisms affected by pollution as well as being responsible for introducing toxic substances into the food chain. The species with bioaccumulation abilities are useful phytoremediation agents, while those that exhibit a proportional dose–response have applications in biomonitoring and bioindication. The aim of this Special Issue is to provide a platform to promote, share, and discuss new scientific evidence on the interactions between aquatic macrophytes and pollutants, their environmental consequences, and possible applications. We welcome papers addressing topics including, but not limited to, the following:

- Impacts of pollution and water quality on the performance of aquatic plants;
- Uptake, sorption mechanisms and accumulation of pollutants in macrohydrophytes;
- Distribution of pollutants in aquatic plant tissues and communities;
- The application of aquatic plants in biomonitoring, bioindication, and phytoremediation.

---

### Guest Editors

Dr. Ludmiła Polechońska

Department of Ecology, Biogeochemistry and Environmental Protection, University of Wrocław, 50-328 Wrocław, Poland

Prof. Dr. Mateja Germ

Biotechnical Faculty, University of Ljubljana, Jamnikarjeva 101, SI-1000 Ljubljana, Slovenia

---

### Deadline for manuscript submissions

closed (25 May 2024)



## Water

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 6.0



[mdpi.com/si/190880](https://mdpi.com/si/190880)

*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/  
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)