

## Special Issue

# Water Quality Management for Sustainable Aquaculture: Integrating Multi-Omics, Digital Technologies, and Climate Resilience

### Message from the Guest Editors

Topics to be covered under “Water Quality Management for Sustainable Aquaculture: Integrating Multi-Omics, Digital Technologies, and Climate Resilience” include, but are not limited to, the following:

- Fundamentals of Water Quality in Aquaculture
  - Key parameters such as dissolved oxygen, temperature, pH, ammonia, and nutrient balance.
- Role of Microbial Communities in Aquatic Systems
  - Importance of microbiomes in maintaining water quality and ecosystem stability.
- Application of Multi-Omics Technologies
  - Use of genomics, proteomics, metabolomics, and metagenomics in aquaculture research and management.
- Disease Monitoring and Biosecurity Strategies
  - Early detection of pathogens and prevention of disease outbreaks using advanced tools.
- Digital Technologies and Smart Aquaculture
  - Integration of sensors, Internet of Things (IoT), artificial intelligence (AI), and data analytics.
- Real-Time Water Quality Monitoring Systems
  - Automated and remote monitoring for continuous assessment and rapid response.
- Innovative Water Treatment Technologies
  - Recirculating aquaculture systems (RAS), biofloc systems, ozonation, and filtration techniques.

---

### Guest Editors

Dr. Minu Kesheri

Department of Biological Sciences, Boise State University, Boise, ID, USA

Dr. Swarna Kanchan

School of Medicine, Marshall University, Huntington, WV, USA

---

### Deadline for manuscript submissions

15 November 2026



## Water

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 6.0



[mdpi.com/si/279045](https://mdpi.com/si/279045)

*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)