

## Special Issue

# Monitoring and Assessment of Water Quality in Watersheds: Advances, Challenges, and Integrated Approaches

### Message from the Guest Editor

Watershed water quality is a critical determinant of ecosystem health, human well-being, and sustainable water resource management. Rapid urbanization, industrialization, agricultural activities, and climate change are increasingly affecting the physical, chemical, and biological characteristics of surface and groundwater systems, making the accurate monitoring and comprehensive assessment of water quality essential for informed management and policy-making. This Special Issue aims to bring together recent advances in methods, technologies, and frameworks for water quality monitoring, modeling, and evaluation in river basins, lakes, and other watershed systems.

- Water quality monitoring techniques and sensor development;
- Remote sensing and GIS applications for watershed water quality assessment;
- Modeling and prediction of pollutant transport and fate in watersheds;
- Assessment of nutrient loading, heavy metals, and emerging contaminants;
- Water quality indices, risk assessment, and decision-support tools;
- Impacts of land use, climate change, and anthropogenic activities on water quality;
- Integrated watershed management and sustainable remediation strategies.

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### Guest Editor

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### Deadline for manuscript submissions

30 November 2026



## Water

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## 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.

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### Editor-in-Chief

Dr. Jean-Luc PROBST

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