

## Special Issue

# Advances in Research on Membrane Filtration Technology in Water Treatment

### Message from the Guest Editor

This Special Issue aims to gather the latest research advances in membrane-based technologies for water treatment, highlighting innovative computational and experimental approaches. We invite contributions that explore new membrane materials, process optimization, and modelling and simulation methods, as well as experimental investigations that propel the field forward. Topics of interest include, but are not limited to, the following:

- The development of novel membrane materials and configurations for enhanced water purification;
- Computational modelling and simulation of membrane processes;
- Data science and machine learning applications in membrane filtration and fouling prediction;
- Experimental studies on membrane performance in water treatment applications;
- The integration of membrane technologies with other treatment processes for improved water quality;
- Life cycle assessment and environmental impact analysis of membrane-based water treatment methods;
- Energy-efficient membrane filtration systems;
- Advances in membrane bioreactors for wastewater treatment.

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### Guest Editor

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### Deadline for manuscript submissions

closed (20 May 2025)



## 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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