# Special Issue

# Computer Modelling Techniques in Environmental Hydraulics and Water Resource Engineering

### Message from the Guest Editors

Mathematical models have played increasingly important roles in investigating complex water resources and water environmental problems over the past 100 years. With the rapid development of big data technology, scientific computing is now evolving from the traditional physical-based calculations to the increasingly popular data-driven models based on artificial neural networks. The active research topics include the model selection, algorithm output judgment, visualization of results, useful information extraction, and the integration of physical-based and machine learning approaches.

This Special Issue focuses on mathematical modeling and numerical simulations in the fields of environmental hydraulics and water resource engineering, aiming to share the latest research endeavors, technological progress, and case studies from around the world. We look forward to the integration and application of artificial intelligence technologies into the conventional computational modeling exercises, addressing the difficulties of small datasets, interconnected systems, and extreme environmental changes. We look forward to your contributions.

### Guest Editors

Prof. Dr. Dongfang Liang

Prof. Dr. Hao Hu

Prof. Dr. Yizi Shang

### Deadline for manuscript submissions

20 September 2025

**Water**

**an Open Access Journal by MDPI**

**Impact Factor 3.0**
**CiteScore 6.0**

mdpi.com/si/215776

*Water*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
water@mdpi.com

mdpi.com/journal/water

# Water

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 6.0

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)

MDPI