

## Special Issue

# Application of Smart Technologies in Integrated Water Quality Modeling, 2nd Edition

### Message from the Guest Editors

Human activities, while driving social and economic development, have introduced unpredictable impacts on the ecological environment, presenting challenges for its effective management. Among these challenges, fluctuations in water quality are particularly critical, as they are intricately intertwined with water resources, aquatic ecosystems, and human activities. Accurate water quality prediction is essential for enhancing ecological management, necessitating the exploration of comprehensive water quality models. This Special Issue aims to explore methodologies related to water quality, encompassing water resources, aquatic ecosystems, and the assessment of water environment carrying capacities, using case studies of representative regions. The scope of this Special Issue encompasses several dimensions: first, the refinement of mechanistic models through the assimilation of regional parameters acquired via on-site investigations or experiments; second, the development of nonlinear models tailored to special regions; and third, the exploration of integrated water quality models grounded in extensive datasets, integrating machine learning techniques.

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### Guest Editors

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### Deadline for manuscript submissions

20 January 2026



## Water

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### 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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