

## Special Issue

# Water Resource Simulation and Optimal Allocation: Theory, Methods and Applications

### Message from the Guest Editors

The development of simulation and optimisation approaches for the planning and operation of water resources systems has engaged researchers for a long time. This has led to the publication of numerous research articles, and the development of bespoke user-friendly software tools for their implementation. Despite these efforts, however, the deployment of these paradigms in practical applications has been limited. Possible reasons for this might have to do with perceived complexity of the approaches, and the unclear way they have been communicated especially to the practice community. The aim of this Special Issue is to document examples of successful applications of simulation and optimization approaches in water resource planning and management at different spatial and temporal scales. Specifically, articles addressing.

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### Guest Editors

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### Deadline for manuscript submissions

closed (20 December 2025)



## 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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