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## Stochastic Simulation and Optimization of Water Resources

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Deadline for manuscript submissions:

**closed (31 December 2022)**

### **Message from the Guest Editors**

This *Special Issue* welcomes scientific contributions that will enhance the knowledge in research and applications in the field stochastic simulation and optimization of water resources. Specifically, submissions may address one of the following issues:

- Recognition, modeling and interpretation of uncertainty sources and their dependencies;
- Performance assessment under the concepts of change and risk;
- Modern simulation-optimization solutions built upon recent advances in hydroinformatics (e.g., emulation models, machine learning, digital twins);
- Effective and efficient coupling of different modelling philosophies (physically-based, conceptual, data-driven, stochastic);
- Systematic representation of socioeconomic aspects across the water cycle;
- Propagation of uncertainty and multi-criteria optimization within real-world decision-making (design, operation, management);
- Scalable methods from the long-term planning to the real-time control.
- Software solutions for scholars and practitioners.



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# Special Issue



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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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