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## New Challenges in Water Systems

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### Message from the Guest Editors

This new era requires new thinking and focused resolve, through the identification of the biggest challenges and concerns in the water sector, to support the development of new design solutions and analyses. The decision on future directions is to look closely at what are the key issues, such as system efficiency, smart water grids, advanced simulations and analyses, losses control and gain opportunities, innovative integrated solutions, water-energy management, which researchers and engineers must address today towards the future challenges, research directions and applications.

This Special Issue aims to provide an investigation and engineering opportunity, where scientists, researchers and experts can submit their novel developments, new design solutions, innovative approaches in several fields of hydraulics, techniques, methods and analyses in order to respond to the new challenges in the water sector.

### Keywords

- water systems efficiency
- smart water grids
- water-energy nexus
- energy recovery
- safety and control
- hydraulic transients and CFD analyses
- new design solutions and eco-design
- water and energy losses
- pumped storage and water scarcity/supply



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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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