

Special Issue

Advances in Water Distribution Networks

Message from the Guest Editors

In the last few decades, the research has deepened the well established topics related to the quantitative simulation and optimization of water distribution systems, and it has broadened to water quality aspects, such as those concerning the network capacity in terms of residual disinfection and its protection from the effects of accidental or terroristic contamination events. This Special Issue aims to point out the recent trends on water distribution modeling, regarding the opportunities introduced by technical progress for the simulation, design, and management of water distribution systems. Contributions are welcome on the following topics: simulation and optimization of water distribution systems, including pressure driven models, leakage detection and control, operation, pipe design, control valves, micro-turbines, pump scheduling, energy optimization, etc.; unsteady flow simulation, including unsteady friction, viscoelastic pipe behavior, transient cavitating flow, etc.; and water quality, including optimal placement of sensors for contaminant detection, reaction to contamination, network recovery after contamination, etc.

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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.

Editor-in-Chief

Dr. Jean-Luc PROBST

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