

Special Issue

Optimal Design of Water Distribution Systems

Message from the Guest Editors

Water distribution systems (WDSs), classified as part of a critical infrastructure, aim at providing safe and sufficient drinking water access. The shape and capacity of water supply networks directly influences the water delivery and hence the optimal design of WDSs should be applied both to the development of new systems and to the upgrading of existing ones. The evolving challenges in urban water management such as the variability of water demands, aging infrastructure and environmental factors make the design process complex and challenging. Within the context described above, this Special Issue invites original research and case studies focused on the optimal design process of water distribution systems. Key areas include the integration of hydraulic and water quality aspects into the design frameworks, taking into account cost and energy efficiency as well as the resilience of water supply network operation. Both practical applications and novel theoretical approaches of WDS designing are welcome. We look forward to receiving your contributions

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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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