Special Issue

Design and Management of Water Distribution Systems

Message from the Guest Editors

Water distribution systems (WDSs) play a crucial role in providing access to safe and sufficient drinking water for consumers, making them a vital component of critical infrastructure. This involves both the development of new systems and the upgrading and expansion of existing ones to address increasing water demands. Within the context described above, this special issue aims at presenting the latest developments and approaches for the sustainable management of WDSs. The scope of the special issue is broad, as it includes different types of solutions for managing WDSs; the development of new algorithms for optimal design and operational statuses of components (e.g., pipes, pumps, tanks, and valves) for deterministic and probabilistic conditions: novel advanced network simulation procedures, as well as machine learning-based frameworks focused on the dynamic performance of WDSs, e.g., identifying contamination sources, predicting water pressure and demands at nodes, lifecycle assessment, sensitivity analysis, etc. Both theoretical developments and practical applications of WDSs are particularly welcomed.

Guest Editors

Dr. Jafari-Asl Jafar

Department of Civil Engineering and Environmental Engineering, The Hong Kong Polytechnic University, Kowloon, Hong Kong

Prof. Dr. Helena M. Ramos

Department of Civil Engineering, Architecture and Environment, CERIS, Instituto Superior Técnico, University of Lisbon, 1049-001 Lisbon, Portugal

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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

Centre de Recherche sur la Biodiversité l'Environnement (CRBE) UMR CNRS/UPS/INPT/IRD, Centre National de la Recherche Scientifique (CNRS), University of Toulouse, Campus ENSAT, Auzeville Tolosane, Toulouse. France

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