Special Issue

Real-Time Optimal Control of Water Distribution Networks

Message from the Guest Editor

This Special Issue aims at improving our knowledge of real-time control (RTC) applications in water distribution networks (WDNs). Contributions investigating the RTC framework for pressure regulation by means of pressure-reducing valves (PRVs) from both theoretical (reliability and performance of controllers, optimization algorithms, etc.) and practical (valves and devices available for applications, management, and operation in real field, etc.) standpoints are especially welcome. Other issues of interest include hydropower generation, control of valves and devices for identification and monitoring of contamination, operation of inverters for optimal pumping in WDNs, and analysis of economic aspects of RTC. Special attention will be given to works dealing with laboratory and/or field experiments, showing effectiveness and advantages of RTC.

- Controllers for RTC of pressure in WDNs
- Operation of PRVs for real-time pressure regulation
- Electric and hydraulic RTC of PATs and/or turbines
- Identification and control of contaminants in WDNs
- RTC of inverters for optimal pumping

Guest Editor

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Deadline for manuscript submissions

closed (15 December 2019)

Water

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 6.0

mdpi.com/si/26578

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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

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