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Real-Time Optimal Control of Water Distribution Networks

Guest Editor:

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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



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Special Issue



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Message from the Editor-in-Chief

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