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Emerging Issues of Urban Water Systems Modeling and Analysis, Volume II

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Message from the Guest Editors

Urban water systems (UWSs) are the most essential part of public infrastructure and face multiple challenges related to future uncertainties in providing a more sustainable and resilient service. UWSs typically include water collection, storage, treatment, transport, sewer, and drainage facilities.

Special Issue Topics

- New hydraulic, hydrologic, and water quality modeling and analysis techniques in UWSs;
- Optimal design of urban water supply and drainage systems, including water network partitioning;
- (Dynamic) calibration and verification issues for real-time modeling and data analysis;
- UWSs response and recovery under catastrophic failure events;
- Big data and analytic challenges for the management of UWSs using IoT-based measured data;
- Innovative metrics for resilience computation in UWSs;
- Rainfall-runoff modeling in UWSs under climate change and urbanization;
- Actions to protect UWSs from accidental and intentional contamination;
- Optimization algorithms and artificial intelligence base techniques for dealing with large networks.



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Editor-in-Chief

Message from the Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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