Special Issue

Advances in Water Distribution Networks: Optimal Design and Management in the Digital Transition Era

Message from the Guest Editors

Water distribution systems (WDSs) are complex systems whose layout and management emerge as a response to the challenges posed by climate change and population growth in urban areas. In this context, strategies for efficient planning and effective management of WDSs are essential to ensure adequate water supply to the current population and future generations. The design and the management of WDSs are typically guided by rules aimed at meeting multiple objectives, such as the minimization of operational cost and energy use and the maximization of water supply service quality and network reliability. Determining the optimal design and management for WDSs is challenging due to the need to find trade-offs between objectives, to which is added the uncertainty around future demand and the heterogeneity of water networks. The goal of this Special Issue is to provide insights into innovative approaches and solutions aimed at defining strategies for the optimal design and management of WDSs in the context of the ongoing digital transition. Both novel contributions and review papers providing insights into the state of the art are welcome.

Guest Editors

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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.

Editor-in-Chief

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