Special Issue

Optimization and Control of Integrated Water Systems

Message from the Guest Editors

In the current market-driven industrial field, complex plants that deal with material recycling and heat integration are increasingly appearing, motivated by the considerable improvement of economic efficiency. This Special Issue will bring together methodologies for the optimization, supervision, and control of integrated water systems using advanced operational strategies. Topics include but are not limited to the following:

- Theoretical and practical advances in modeling, simulation, and control of integrated water systems
- Hybrid systems and mixed-logical dynamical modeling for control of IWS
- Decentralized and agent-based modeling of IWS
- Optimization of IWS and their components
- Environmental and economic distributed MPC control of IWS
- Decentralized, cooperative, and coordinated distributed MPC control of IWS
- Networked systems and sectorization methodologies
- Weather forecasting disturbance inclusion in control algorithms applied to integrated water systems
- Learning Strategies for multi-agent systems
- Data-driven fault detection, diagnosis, and prognosis solutions for integrated water systems
- Life cycle assessment of integrated water systems

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Message from the Editor-in-Chief

Automation (ISSN 2673-4052) is a international peer-reviewed open access journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of automation and control system. Both experimental and theoretical papers are published, including all aspects of manufacturing systems, energy management systems, aerospace control systems, micro- and nano-systems, learning systems, intelligent control systems and so on. Automation organizes Special Issues devoted to specific automation and controlling areas and applications each year.

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