

Special Issue

Process Control and Optimization in the Era of Industry 5.0

Message from the Guest Editors

Given these developments, this Special Issue aims to highlight the latest trends, research, applications, and challenges in advanced process control and optimization for industrial processes in the era of Industry 5.0. We invite both theoretical and application-oriented contributions, as well as review articles that explore innovations in these areas. All submissions will undergo peer review and be evaluated for their originality, relevance, and contribution to the field. Potential topics of interest include, but are not limited to, the following:

- Advanced modeling and control methods for the process;
- Application of AI, machine learning, and data analytics in process modeling;
- IIoT-based data-driven modeling for processes;
- Collaborative and distributed control in industrial processes;
- Parameter estimation and system identification based on machine learning;
- Performance evaluation for industrial control systems;
- Nonlinear and coupled process control using model predictive control techniques;
- Digital twin applications for process simulation;
- Industrial intelligent control and intelligent optimization.

Guest Editors

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Message from the Editor-in-Chief

You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

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