Special Issue

Machine Learning Optimization of Chemical Processes

Message from the Guest Editor

The integration of machine learning techniques into chemical process optimization represents a transformative approach in the field of chemical engineering. As industries strive for efficiency, sustainability, and innovation, the application of machine learning offers unprecedented opportunities to enhance process design, control, and optimization. This Special Issue on "Machine Learning Optimization of Chemical Processes" aims to gather cutting-edge research that explores the intersection of machine learning and chemical engineering. We invite submissions that demonstrate the application of machine learning algorithms to optimize chemical processes, improve process safety, and enhance product quality. Topics of interest include, but are not limited to, the following:

- Machine learning models for process optimization;
- Predictive maintenance and fault detection;
- Data-driven process control strategies;
- Process simulation and modeling using AI;
- Sustainable process design through machine learning;
- Real-time process monitoring and analytics;
- Case studies on industrial applications of machine learning.

Guest Editor

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Editor-in-Chief

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