# **Special Issue**

### Hybrid Modeling of Chemical Processes: Theory and Applications

### Message from the Guest Editor

The main focus of this Special Issue is to collect stateof-the-art methods and new exciting applications of hybrid modeling (i.e., integrating data-driven and first principles modeling) for monitoring, forecasting, control and optimization, especially in industrial applications. Topics include, but are not limited to:

- New hybrid model architectures;
- Platforms for hybrid modeling;
- Parameter identification for hybrid modeling;
- Physics-informed neural networks (PINNs);
- Dealing with heterogeneous knowledge and data sources;
- Hybrid control theory, approaches, and applications;
- Fault diagnosis and process health monitoring;
- Condition-based monitoring;
- Optimization, scheduling, decision making, and simulation;
- Transfer learning.

### Guest Editor

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### Deadline for manuscript submissions

closed (30 June 2023)



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