



## Process Modeling, Simulation and Optimization in Chemical Reaction Engineering

Guest Editors:

**Dr. Amjad Riaz**

School of Chemical Engineering,  
Yeungnam University, Gyeongsan  
38541, Republic of Korea

**Dr. Arif Hussain**

Biological and Chemical  
Engineering, Aarhus University,  
8000 Aarhus, Denmark

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### Message from the Guest Editors

Chemical reaction engineering lies at the heart of several industrial processes, encompassing the design, analysis, and optimization of chemical reactions. Process modeling, simulation, and optimization play a pivotal role in enhancing our understanding of complex reaction systems and enabling the development of efficient and sustainable processes. This Special Issue aims to explore the diverse aspects of process modelling, simulation, and optimization in chemical reaction engineering, shedding light on both theoretical and practical advancements. We encourage contributions that address the following topics, but are not limited to:

- Novel kinetic models and reaction mechanisms.
- Mathematical and computational models for reaction systems.
- Multi-scale and multi-phase modeling approaches.
- Design and optimization of reactor systems.
- Process intensification and innovative reactor configurations.
- Novel catalyst materials and catalytic processes.
- Integration of novel technologies and process intensification approaches.
- Process control and monitoring in chemical reaction systems.
- Experimental validation of modeling and simulation results.





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## Editor-in-Chief

### **Prof. Dr. Giancarlo Cravotto**

Department of Drug Science and  
Technology, University of Turin,  
Via P. Giuria 9, 10125 Turin, Italy

## Message from the Editor-in-Chief

*Processes* (ISSN 2227-9717) provides an advanced forum for process/system-related research in chemistry, biology, material, energy, environment, food, pharmaceutical, manufacturing and allied engineering fields. The journal publishes regular research papers, communications, letters, short notes and reviews. Our aim is to encourage researchers to publish their experimental, theoretical and computational results in as much detail as necessary. There is no restriction on paper length or number of figures and tables.

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Processes Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

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