



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

Deadline for manuscript
submissions:

10 December 2024

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

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Processes Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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