Special Issue

Process Modeling, Simulation and Optimization in Chemical Reaction Engineering

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.

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

closed (10 December 2024)

Processes

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.5

mdpi.com/si/179124

Processes
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
processes@mdpi.com

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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

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

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