

Special Issue

Advanced Chemical Reaction Kinetics of Pharmaceutical Processes

Message from the Guest Editors

This Special Issue aims to integrate the novel advances in the development of theoretical, computational, and experimental works on advanced chemical reactions to address scientific and technical difficulties/opportunities related to (bio) pharmaceutical processes.

- Design and control of multiphase pharmaceutical reactor systems;
- Experimental studies, mechanistic modeling, flowsheet simulation, process control, and process optimization for the following reaction systems during drug development:
- Fundamental understanding of structure–property relationships in catalysts and pharmaceutical materials;
- Enhanced understanding of drug substance stability, e.g., degradation due to oxidation by kinetic rate determination;
- Alternative route of drug substance synthesis based on quantitative coupling of experiment/theory for kinetic reactions;
- Kinetic of drug synthesis by a continuous manufacturing approach, such as flow chemistry;
- Recent advancements in numerical simulations of reaction–diffusion phenomena;
- Monte Carlo simulations for enhance pharmaceutical kinetic understanding;
- Bioreactor design and role of reaction mechanism in drug product development;

Guest Editors

Dr. Abdollah Koolivand

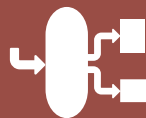
Department of Chemical & Biomolecular Engineering, University of Maryland, College Park, MD 20740, USA

Prof. Dr. Blaž Likozar

Department of Catalysis and Chemical Reaction Engineering, National Institute of Chemistry, 1000 Ljubljana, Slovenia

Deadline for manuscript submissions

closed (31 May 2021)



Processes

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.5



mdpi.com/si/31658

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

[mdpi.com/journal/
processes](https://mdpi.com/journal/processes)





Processes

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.5



[mdpi.com/journal/
processes](https://mdpi.com/journal/processes)



About the Journal

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

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, AGRIS, and other databases.

Journal Rank:

CiteScore - Q2 (Chemical Engineering (miscellaneous))