

## Special Issue

# Industrial Chemistry Reactions (3rd Edition): Kinetics, Mass and Heat Transfer in View of the Industrial Reactors Design

### Message from the Guest Editors

We would like to promote the publication of innovative approaches to catalysis, kinetics, mass and heat transfer, reactor design and simulation, and scale-up from laboratory to industrial plant. In particular, the publication of reviews on new trends and advances in the abovementioned fields are encouraged. The aim of this proposed Special Issue is to collect contributions from experts worldwide in the field of industrial reactors design based on kinetic and mass transfer studies. The following areas/topics will be covered:

- Kinetic studies for complex reaction schemes (multiphase systems);
- Kinetics and mass transfer in multifunctional reactors;
- Reactions in a mass transfer dominated regime (fluid–solid and intraparticle diffusive limitations);
- Kinetics and mass transfer modeling with alternative approaches (e.g., stochastic modeling);
- Pilot plant and industrial-size reactor simulation and scale-up based on kinetic studies (lab-to-plant approach).

---

### Guest Editors

Prof. Dr. Elio Santacesaria

Prof. Dr. Riccardo Tesser

Prof. Dr. Vincenzo Russo

---

### Deadline for manuscript submissions

closed (15 February 2025)



## Processes

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.5



[mdpi.com/si/180170](https://mdpi.com/si/180170)

*Processes*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[processes@mdpi.com](mailto: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))