

Special Issue

Multiscale Modeling and Numerical Simulation of Multiphase Flow

Message from the Guest Editors

This Special Issue on 'Multiscale Modeling and Numerical Simulation of Multiphase Flow' seeks high quality papers focusing on the multiscale simulation of different multiphase flow system. Topics include, but are not limited to:

- Development, verification and validation of advanced multiscale numerical models such as Direct Numerical Simulation, Discrete Element Method, Two Fluid Model, MPPIC, etc.
- Model development for interphase drag, heat and mass transfer.
- Coupling of multiscale models with machine learning.
- Utilization of multiscale models in solving different industrial problems.
- Design and optimization of various industrial reactors using multiscale modeling.

Guest Editors

Dr. Yupeng Xu
Dr. Xiaogang Shi
Dr. Lei Yang

Deadline for manuscript submissions

closed (28 February 2026)



Processes

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.5



mdpi.com/si/138508

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))