

## Special Issue

# Numerical Simulation of Flow and Heat Transfer Processes

### Message from the Guest Editors

The potential topics include, but are not limited to the following:

- Numerical simulation of turbulent reacting flows in combustion systems;
- Computational modeling of combustion processes for clean and alternative fuels;
- Fluid–structure interaction analysis incorporating multi-physics and multi-scale approaches;
- Heat transfer enhancement using nanofluids in microchannel heat sink applications;
- Advanced modeling techniques for fluid flow and heat transfer in porous media systems;
- Development of next-generation turbulence models for high-reynolds-number and unsteady flows;
- Hybrid computational techniques for multiscale and multiphysics simulation challenges;
- Integration of machine learning for accelerated and enhanced flow and heat transfer simulations.

---

### Guest Editors

Prof. Dr. Cesar Nieto-Londoño

School of Engineering, Universidad Pontificia Bolivariana, Medellín  
050031, Colombia

Dr. William Quitiaquez

Escuela de Ingenierías, Universidad Politécnica Salesiana, Quito,  
Ecuador

---

### Deadline for manuscript submissions

30 April 2026



## Processes

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.5



[mdpi.com/si/228913](https://mdpi.com/si/228913)

*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))