Special Issue

Advances in Computational Fluid Dynamics (CFD) Simulation of Thermal Chemical Processes

Message from the Guest Editor

This Special Issue of *Processes* aims to highlight recent advances in computational fluid dynamics (CFD) simulation of thermal chemical processes. We invite contributions that showcase the use of CFD simulations to study a wide range of thermal-chemical processes, including but not limited to combustion, pyrolysis, gasification, torrefaction, catalysis, and electrochemistry, among others. The Special Issue will also explore the integration of CFD simulations with experimental techniques and machine learning approaches to improve the accuracy and efficiency of process modeling and optimization. The goal of this Special Issue is to provide a comprehensive overview of the latest advances in CFD simulation of thermalchemical processes and to foster a deeper understanding of their potential applications in various industries, including energy, environment, and manufacturing.

Guest Editor

Dr. Guozhao Ji School of Environmental Science and Technology, Dalian University of Technology, Dalian, China

Deadline for manuscript submissions

closed (31 May 2025)



Processes

an Open Access Journal by MDPI

Impact Factor 2.8 CiteScore 5.5



mdpi.com/si/219660

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

mdpi.com/journal/

processes





Processes

an Open Access Journal by MDPI

Impact Factor 2.8 CiteScore 5.5



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))