

Special Issue

Advances and Applications of Fluidized Bed Technology

Message from the Guest Editor

Topics include, but are not limited to, the following:

- Fundamentals and Phenomena: Particulate solids and fluidization dynamics; solid inventory and distribution; advanced experimental diagnostics.
- Modeling and Simulation: Multiscale modeling; CFD simulations; AI and machine learning applications; scale-up methodologies and design optimization.
- Reactions and Processes: Chemical reaction engineering; combustion, pyrolysis, and gasification; chemical looping, calcium looping, and solid looping processes; CO₂ capture; energy storage.
- Systems and Applications: FB boiler operational experience; emission control and environmental impact; technologies supporting sustainable and green transition.

We invite contributions that provide new insights and foster technological developments in these areas.

Guest Editor

Dr. Yangfan Song

Department of Power Engineering, North China Electric Power University, Baoding 071003, China

Deadline for manuscript submissions

31 May 2026



Processes

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.5



mdpi.com/si/254570

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))