

Special Issue

Recent Advances in Non-Newtonian Fluid Flows and Pumping of Concrete

Message from the Guest Editors

This Special Issue welcomes topics including, but not limited to:

- Rheological properties of cement-based materials, filling slurry, drilling fluids, sewage sludge, muds, etc.
- 3D concrete/slurry printing processes.
- Flow behavior of concrete during pumping and/or 3D printing.
- Pumping prediction models and validations.
- Interrelations of non-Newtonian fluid dynamics, rheology, and the processing of concrete and other similar fluids.
- Test methods to characterize concrete rheology and lubrication layer properties.
- Changes in materials properties induced by pumping/processing.
- Long-distance slurry pipeline transportation and filling processes.
- Active rheology control and the design of yield-stress fluids.
- Data-driven and/or physics-driven methods for Non-Newtonian Fluid Flows.
- Digital twins for non-Newtonian fluids.
- Advances in experimental, theoretical, and computational studies of yield-stress fluids.
- New technologies and perspectives in Non-Newtonian Fluid Flows and the processing of yield-stress fluids.

Guest Editors

Dr. Yanwei Wang

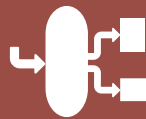
1. Department of Chemical and Materials Engineering, School of Engineering and Digital Sciences, Nazarbayev University, Astana 010000, Kazakhstan
2. Laboratory of Computational Materials Science, Center for Energy and Advanced Materials Science, National Laboratory Astana, Astana 010000, Kazakhstan

Dr. Mengyuan Li

1. BGRIMM Technology Group, Beijing 100160, China
2. National Centre for International Research on Green Metal Mining, Beijing 102628, China

Deadline for manuscript submissions

closed (30 September 2023)



Processes

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.5



mdpi.com/si/141405

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))