

Special Issue

Advances in Natural Gas Hydrate Exploitation, Hydrate Technology, Carbon Capture and Storage

Message from the Guest Editors

This Special Issue, entitled “Advances in Natural Gas Hydrate Exploitation, Hydrate Technology, Carbon Capture, and Storage”, seeks contributions including basic and applied research, experimental studies, and simulation studies for hydrate-related technologies in the fields of natural gas hydrate exploitation, gas separation, solution concentration, cold storage, desalination, carbon capture, and storage, etc. Papers related to hydrate reaction devices and processes in hydrate-based utilization technologies will also be included. We welcome researchers to submit both original research articles and review papers to this Special Issue. Topics include, but are not limited to, the following:

- Formation, dissociation, and exploitation of natural gas hydrate;
- Hydrate-based utilization technology in separation processes and gas storage;
- Hydrate-based desalination technology;
- Hydrate-based utilization technology in cold storage with various media and a new hydrate cold storage system;
- The development of high-efficiency hydrate reaction equipment and continuous hydrate processes;
- Hydrate-based carbon capture and storage technology;
- Other cutting-edge applications.

Guest Editors

Dr. Kun Ge

Dr. Jiaqi Wang

Dr. Lunxiang Zhang

Deadline for manuscript submissions

closed (30 June 2025)



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

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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

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