

## Special Issue

# Towards Green Development: Heat Transfer and Advanced Technologies in Unconventional Oil and Gas Exploitation

### Message from the Guest Editors

This Special Issue, "Towards Green Development: Heat Transfer and Advanced Technologies in Unconventional Oil and Gas Exploitation", introduces efficient, green, and sustainable extraction technologies for unconventional oil and gas, and focuses on the latest advances in heat transfer mechanisms. Topics include, but are not limited to:

- Reservoir fracturing technology;
- Intelligent CBM exploitation;
- Coal and gas outburst prevention;
- Unconventional oil and gas extraction technology and equipment;
- Initial and modified geological modeling of unconventional reservoirs;
- The numerical simulation of production dynamics in unconventional reservoirs;
- The dynamic simulation of thermodynamic fields throughout the mining process;
- The heat transfer mechanisms involved in fracturing techniques;
- New technology and methods for carbon capture, storage, and utilization.

We thank you for your time and hope that you will consider contributing to this Special Issue.

### Guest Editors

Dr. Lei Qin

College of Safety Science and Engineering, Xi'an University of Science and Technology, Xi'an 710054, China

Dr. Ruiyue Yang

State Key Laboratory of Petroleum Resources and Prospecting, China University of Petroleum (Beijing), Beijing 102249, China

### Deadline for manuscript submissions

closed (15 January 2024)



## Processes

an Open Access Journal  
by MDPI

Impact Factor 2.8  
CiteScore 5.5



[mdpi.com/si/154115](https://mdpi.com/si/154115)

*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))