

## Special Issue

# Offshore Oil and Gas Development Theory, Numerical Simulation and Technology

### Message from the Guest Editors

In recent years, offshore oil and gas reservoirs have gained significant attention due to their unique properties. Unlike onshore reservoirs, offshore exploitation often involves centralized well layouts with horizontal wells, facing challenges such as platform spatial limitations, simultaneous multi-layer exploitation, and large liquid volumes. These complexities make traditional methods insufficient for effective reservoir characterization. As a result, new multiscale and multiphysical methods are being developed to better describe flow, transport, and development mechanisms. This Special Issue focuses on the sustainable development of offshore oil and gas resources, highlighting recent advances, challenges, and new techniques. It will bring together researchers to exchange knowledge on underlying mechanisms, advanced modeling algorithms, and innovative experimental methods, fostering interdisciplinary collaboration. We welcome original research and review article submissions.

---

### Guest Editors

Dr. Chao Zhang

School of Petroleum Engineering, China University of Petroleum (East China), Qingdao 266580, China

Prof. Dr. Wei Liu

College of Energy Resources, Chengdu University of Technology, Chengdu 610059, China

---

### Deadline for manuscript submissions

29 July 2026



## Processes

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.5



[mdpi.com/si/265118](https://mdpi.com/si/265118)

*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))