

Special Issue

Frontiers in Deep Sea Mining: Current Status and Future Prospects

Message from the Guest Editors

There are abundant mineral resources at the bottom of the ocean at a depth of several thousand meters, which vary in type and have large reserves and high grades. In the current situation of resource shortage, deep-sea mining has great potential for development, which is of enormous significance to mankind in its search for alternatives to onshore mineral resources.

However, there are still many gaps in related research that need to be filled. The purpose of this Special Issue is to gain a more in-depth understanding of the development of existing deep-sea mining technologies, analyze key issues that need to be solved urgently, and point out the direction for subsequent research on deep-sea-mining-related technologies. This Special Issue will summarize the development history of deep-sea mining technology research, focus on analyzing and classifying feasible deep sea mining systems and the progress of sea trials and laboratory research that have been carried out around the world, and look ahead to the future development prospects of deep-sea mining under the requirements of commercial exploitation.

Guest Editors

Prof. Dr. Yu Dai

School of Mechatronic Engineering, Central South University,
Changsha 410017, China

Dr. Yangrui Cheng

State Key Laboratory of Exploitation and Utilization of Deep Sea Mineral
Resources Technology, Changsha Research Institute of Mining and
Metallurgy, Changsha 410012, China

Deadline for manuscript submissions

closed (31 March 2023)



Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



mdpi.com/si/129219

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

[mdpi.com/journal/
sustainability](https://mdpi.com/journal/sustainability)





Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



[mdpi.com/journal/
sustainability](https://mdpi.com/journal/sustainability)



About the Journal

Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Editor-in-Chief

Prof. Dr. Marc A. Rosen

Faculty of Engineering and Applied Science, University of Ontario
Institute of Technology, Oshawa, ON L1G 0C5, Canada

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Environmental Studies) / CiteScore - Q1
(Geography, Planning and Development)