Special Issue

Coalbed Degassing Method and Technology

Message from the Guest Editors

This Special Issue serves research on coalbed degassing methods and technology. With spectacular economic growth, coal consumption in China comprised over 50 percent of the country's total energy consumption in 2022. However, numerous gas accidents can occur in coal mining, such as gas explosions and coal–gas outbursts. These accidents are mainly due to the inherent characteristics (such as large coal reservoir stress, low permeability, and high gas content) of coalbeds in China. Moreover, Coalbed methane is a highly valuable and clean energy source. Therefore, degassing coal seams could be a double-win strategy for coal mine safety and fulfilling energy consumption. The broad scope of this Special Issue covers the study of coalbed degassing methods and technology, such as an increase in coal seam permeability and gas desorption, coal cracking by hydraulic fracturing, and physical field excitation methods. As we all know, the safe engineering of coal mines is important for human beings. It has a strong correlation with sustainability and the sustainable development of society.

Guest Editors

Dr. Yidu Hong

School of Environmental and Safety Engineering, Fuzhou University, Fuzhou 350108, China

Dr. Xiangliang Zhang

School of Safety Engineering, China University of Mining and Technology, Xuzhou 221116, China

Deadline for manuscript submissions

29 May 2026

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/206612

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

mdpi.com/journal/applsci

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/journal/applsci

MDPI

About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, 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, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)