

Special Issue

Innovations in Unconventional Reservoirs and Their Integration into Natural Hydrogen Reservoirs Exploration: Advanced Drilling System Controls

Message from the Guest Editor

This Special Issue aims to publish the most recent advances in drilling vibration control designed for unconventional reservoirs, geothermal wells, and perspectives for hydrogen exploration:

- All aspects of drilling challenge modeling related to Axial, Lateral, and Torsional vibrations in unconventional reservoirs, geothermal wells, and natural hydrogen exploration
- Geomechanical properties studies linked to drilling
- Drilling efficiency improvement techniques
- Case studies of vibration control approaches integrations in unconventional reservoirs
- Comparative studies and review papers between drilling in conventional, unconventional, geothermal, and hydrogen reservoirs
- Simulation studies of new concepts in real-time vibration monitoring and control
- Geothermal wells drilling: challenges and innovations
- Perspectives of exploration wells drilling for hydrogen reservoirs
- AI and data-driven approaches for drilling performance improvement

Guest Editor

Dr. Mohamed Zinelabidine Doghmane

Bob L. Herd Department of Petroleum Engineering, Texas Tech University, Lubbock, TX 79414, USA

Deadline for manuscript submissions

25 September 2025



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/236024

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

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





Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



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



About the Journal

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Editor-in-Chief

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University
Niccolò Cusano, 00166 Roma, 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, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

CiteScore - Q1 (Control and Optimization)