Special Issue

Earth Stress and Subsurface Geoengineering

Message from the Guest Editors

This Special Issue aims to explore the multifaceted relationship between earth stress and subsurface geoengineering, thus providing a platform for researchers to present innovative research. methodologies, and specific case studies. By exploring this intersection, we aim to advance our understanding of how earth stress influences subsurface processes and how engineering activities impact regional tectonics. The contributions to this Special Issue will address key questions, including the characterization of regional tectonic stress fields, the assessment of energy and resource extraction-induced seismicity risks, and the development of innovative strategies for mitigating geological hazards in subsurface operations. Ultimately, the findings presented in this Special Issue will contribute to the development of understanding in both geoscience and engineering, with practical implications for sustainable subsurface utilization and risk management.

- tectonic stress
- subsurface geoengineering
- seismic hazard assessment
- reservoir-induced seismicity
- underground injection techniques
- subsurface stress redistribution

Guest Editors

Prof. Dr. Maurice B. Dusseault

Earth and Environmental Sciences, University of Waterloo, Waterloo, ON N2L 3G1, Canada

Dr. Ali Yaghoubi

Earth and Environmental Sciences, University of Waterloo, Waterloo, ON N2L 3G1. Canada

Deadline for manuscript submissions

30 June 2025



Geosciences

an Open Access Journal by MDPI

Impact Factor 2.4 CiteScore 5.3



mdpi.com/si/197562

Geosciences
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
geosciences@mdpi.com

mdpi.com/journal/ geosciences





Geosciences

an Open Access Journal by MDPI

Impact Factor 2.4 CiteScore 5.3



About the Journal

Message from the Editor-in-Chief

Understanding the Earth's origin and its bio-geological evolution, the multiple implications of the geosciences (as a coherentset of interconnected disciplines), and the sociocultural and ethical interdisciplinary approaches, will be crucial for a better understanding of Nature, and also for undertaking scientificallybased political decisions.

We are committed to drive *Geosciences* to a position in which it is recognized for its high-quality, cutting-edge research and scientific influence, and strongly encourage and invite your participation and manuscripts.

Editor-in-Chief

Prof. Dr. John C. Eichelberger

Alaska Center for Energy and Power, University of Alaska Fairbanks, Fairbanks, AK, USA

Author Benefits

Open Access:

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

High Visibility:

indexed within Scopus, ESCI (Web of Science), GeoRef, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Geosciences, Multidisciplinary) / CiteScore - Q1 (General Earth and Planetary Sciences)

