

Special Issue

Geomechanics and Reservoirs: Modeling and Simulation

Message from the Guest Editors

Geomechanics integrates rock mechanics, fluid mechanics, geophysics, and geology to determine the mechanical behavior of geological materials and applies from the microscale to the modeling of wellbores, reservoirs, fields and basins. It is critical to reduce risks and optimize rewards related to mechanical failure of the reservoir and surrounding formations. This Special Issue aims to cover multidisciplinary studies and provide a cutting-edge look at original research in geomechanics modeling and numerical simulations of subsurfaces. Topics of interest include, but are not limited to, coupled thermal-hydrological-mechanical-chemical (THMC) modeling, multiscale characterization and modeling, constitutive behavior, micromechanics, time effects, artificial intelligence and digital twin in geomechanics, conventional and unconventional reservoirs, geothermal energy, gas hydrate, waste disposal, subsurface storage and sequestration, salt systems and induced seismicity.

Guest Editors

Prof. Dr. Haizhu Wang

State Key Laboratory of Petroleum Resources and Prospecting, China
University of Petroleum (Beijing), Beijing 102249, China

Dr. Zhuang Sun

Dassault Systèmes, 343 Sansome St, San Francisco, CA 94104-5607,
USA

Deadline for manuscript submissions

closed (30 October 2023)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/96708

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

mdpi.com/journal/

[appls](https://appls.mdpi.com)





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



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



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)