



## Geomechanics and Reservoirs: Modeling and Simulation

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)**

### 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.





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**Prof. Dr. Giulio Nicola Cerullo**

Dipartimento di Fisica,  
Politecnico di Milano, Piazza L.  
da Vinci 32, 20133 Milano, Italy

## 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.

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*Applied Sciences* Editorial Office  
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