Special Issue

Evaluation of Geomechanical Characteristics

Message from the Guest Editor

Recently, geomechanics has become a major research topic in the geosciences area due to its role in hydrocarbon recovery, underground waste disposal, groundwater pumping, geothermal energy extraction, and geologic carbon sequestration. Problems of fluid-induced seismicity, hydraulic and thermal stimulation of rocks, enhanced oil/gas recovery from fractured or unconsolidated rocks, and ground subsidence or uplift cannot be solved without recourse to the concepts of geomechanics. These characteristics often depend on geologic structure and mineralogic composition of the rock across nano–micro–macro scales. Recent advances in optical, acoustic, electrical, and mechanical testing and measurements have enabled higher resolution and more accurate characterization of geomechanical properties and processes in the lab and in wells. Application of machine learning methods on noisy and/or big datasets from lab and field measurements or computer simulations has shown promise in improving the structural and functional characterization of geomaterials. This special issue invites your manuscripts based on research in any of these areas.

Guest Editor

Dr. Birendra Jha
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Deadline for manuscript submissions

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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

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