

Special Issue

Geomechanics, Georesources and Their Role to Combat the Climate Emergency

Message from the Guest Editors

Climate change is no longer a theory; it is the greatest challenge faced by humanity, and essentially threatens its very own existence. Advances in geomechanics play a pivotal role in combatting the impending climate emergency in both climate change mitigation and adaptation strategies. The increased demand for renewable and sustainable energy recovery and storage systems has stressed the wider geo-resources industry, which is contributing to over 10% of the global greenhouse gas emissions. Therefore, substantial transformation is required in the geo-energy and geo-resource sectors in order to realize the 2050 net-zero emissions target. The scope of this Special Issue focuses on reducing carbon emissions related to the prevailing energy/resource harvesting technologies and geomechanics for climate change adaptation. This Issue welcomes papers on both of these fronts related to topics including, but not limited to, carbon capture and sequestration in geological formations, deep earth energy storage, geothermal energy extraction, in situ mineral recovery, and resilient infrastructure geomechanics design for climate adaptation.

Guest Editors

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Deadline for manuscript submissions

closed (31 October 2023)



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I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Editor-in-Chief

Prof. Dr. Steve W. Lyon

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