

Special Issue

Data-Driven Machine Learning Approaches and Advanced Numerical Modelling Technology for Sustainable Geo-Energy Management

Message from the Guest Editors

Nowadays, various geo-energy resources, including oil fossil, geothermal and carbohydrate, etc., are widely distributed and abundant across the world. This Special Issue aims to present recent advances in various subjects addressing new data-driven approaches and modelling techniques for the exploration of subsurface resources efficiently and effectively. We will report some new findings to investigate how big data can be used for performance prediction, uncertainty reduction, and optimization in subsurface resource development. This will include topics such as the optimization of oil field, geothermal, carbohydrate and geological carbon storage operations, optimization under uncertainty, solution of inverse problems and geological model characterization. We invite investigators to contribute new work that will explore as many aspects as possible in the modelling of hydrocarbon energy exploration and development.

Guest Editors

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Deadline for manuscript submissions

closed (19 November 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. *Sustainability* publishes original research articles, review 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. Marc A. Rosen

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