Special Issue

Reservoir Modeling and Simulation with Machine Learning and Data Mining

Message from the Guest Editor

Reservoir simulation is the backbone of many decision-making processes in the oil and gas industry. Topics such as history matching, uncertainty quantification and production optimisation are key research areas in petroleum engineering and geosciences. Although advances in research on physics-based models are growing, the development of approximate proxy models based on data analytics is in high demand in research activities on multi-phase flow simulation in subsurface formations. With recent development in computer hardware and super computation, new techniques such as deep learning algorithms have received attraction among researchers in resource engineering, computer science and geoscience, and other related fields. This Special Issue aims to collect original research or review articles on different aspects of reservoir simulation, data analytics and machine learning. Different types of reservoir simulation and proxy modelling for hydrocarbon reservoirs, water resources, CO2 sequestration and unconventional resources will be considered.
Dr. Mohammad Sayyafzadeh

Guest Editor

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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