

Special Issue

Simulation and Modeling of Subsurface Energy Processes

Message from the Guest Editors

We are inviting submissions to a Special Issue of *Energies* on the subject area of “Simulation and Modeling of Subsurface Energy Processes”. Numerical simulators are important tools for subsurface processes. In the oil and gas industry, reservoir simulators are used to history match and optimize production. With the worsening climate crisis, new computational techniques have been devoted to other areas of the subsurface energy, including geothermal and hydrogen storage. This Special Issue invites contributions on novel numerical methods and computational frameworks for the improvement in performance and accuracy of subsurface processes. Topics of interest for publication include, but are not limited to:

- Advanced time and space discretization techniques;
- Solution schemes in reservoir simulation;
- Subsurface reactive flow;
- Geomechanics modeling and simulation;
- Fracture modeling;
- Multiphase flow in subsurface;
- Subsurface energy transport;
- Numerical methods on hydrogen storage;
- Numerical methods on CO₂ storage.

Guest Editors

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Deadline for manuscript submissions

closed (25 May 2022)



Energies

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Impact Factor 3.2
CiteScore 7.3



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About the Journal

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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