

## Special Issue

# EGS Reservoir Simulation: Tools, Challenges and Innovations

### Message from the Guest Editors

In this Special Issue, topics of interest for publication include, but are not limited to, the following:

- Thermo–hydro–mechanical–chemical (THMC) simulation in EGS reservoirs;
- Fracture propagation modelling in naturally fractured rock mass;
- Proppant transport, settlement, embedment in EGS stimulation and operation;
- Innovative well (e.g., parent–child wells) and stimulation (e.g., zipper fracking) design;
- Induced seismicity prediction and mitigation through simulation;
- Fracture network permeability evolution due to geochemical reaction;
- Data assimilation and uncertainty quantification in reservoir simulations;
- AI and machine learning in geothermal reservoir modeling;
- Case studies and field-scale applications of EGS simulation;
- Integration of geophysical monitoring data into simulation workflows;
- Coupled simulation of surface and subsurface systems;
- Simulation tools for sustainability, performance optimization, and risk assessment.

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### Guest Editors

Prof. Dr. Eva Schill

Lawrence Berkeley National Laboratory, Berkeley Laboratory, Berkeley, CA, USA

Dr. Wencheng Jin

Harold Vance Department of Petroleum Engineering, Texas A&M University, 245 Spence Street, College Station, TX 77843, USA

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### Deadline for manuscript submissions

closed (15 April 2026)



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Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[energies@mdpi.com](mailto:energies@mdpi.com)

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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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### Editor-in-Chief

Prof. Dr. Enrico Sciubba  
Department of Mechanical and Industrial Engineering, University  
Niccolò Cusano, 00166 Roma, Italy

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