

Special Issue

Leading the Way in Hydraulic Fracturing and Reservoir Technologies

Message from the Guest Editors

Economic production from unconventional petroleum and geothermal reservoirs (such as EGS and superhot EGS) relies on engineering a reservoir through reservoir stimulation while minimizing the risk of felt seismicity. The stimulation results are often poorly predictable because of multiscale multiphysics processes that operate in the target rock mass with complex textures and are variable in in situ stress conditions. Much effort has been spent in the last decade to improve the understanding and design of stimulation treatments. This Special Issue will draw upon recent advances to characterize the state of the art and to help to chart a course for future research activity. Studies pertaining to empirical, analytical, numerical, and/or experimental developments related to reservoir geomechanics with emphasis on injection/extraction and stimulation in reservoirs, the impact of coupled processes, the role of heterogeneous and anisotropic rock fabric, the dynamics of complex fracture networks, frac hits, proppant transport, and settling are of particular relevancy to this Special Issue.

Guest Editors

Prof. Dr. Ahmad Ghassemi

Mewbourne School of Petroleum and Geological Engineering, The University of Oklahoma, Norman, OK, USA

Dr. Zhi Ye

Department of Geological Engineering, The South Dakota School of Mines & Technology, Rapid City, SD, USA

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

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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.

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University
Niccolò Cusano, 00166 Roma, Italy

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