



an Open Access Journal by MDPI

Hydraulic Fracturing in Oil and Gas Reservoirs

Guest Editors:

Dr. Jeoung Seok Yoon

GFZ German Research Centre for Geosciences, Helmholtz Centre Potsdam, DynaFrax UG, Germany

Prof. Kwang Yeom Kim

Department of Energy & Resources Engineering, Korea Maritime and Ocean University, Busan, Korea

Deadline for manuscript submissions: closed (20 August 2021)



Message from the Guest Editors

Dear Colleagues,

Hydraulic fracturing is a method to enhance oil and natural gas extraction from underground geological formations. It involves injection of an engineered fluid under high pressure in order to crack the rock containing the hydrocarbon. The method is not new, but its use has been wide since being combined with horizontal drilling technology. Hydraulic fracturing is now widely practiced in the US and in China for both natural gas and oil production, and even in deep geothermal reservoir development. The technology has evolved in various ways, such as use of CO2 as a fracturing fluid, microwave fracturing, cyclic fatigue fracturing, as well as development of various numerical modeling techniques to simulate thermohydromechanical coupled processes in hydraulic fracturing. In this Special Issue on "Hydraulic Fracturing in Oil and Gas Reservoirs", we would like to encourage you to share and discuss your recent findings related to hydraulic fracturing technology, which include but are not limited to numerical modelings, laboratory experiments, and field observations

Dr. Jeoung Seok Yoon

Prof. Kwang Yeom Kim

Guest Editor







an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Aerospace Engineering, University of Roma Sapienza, Via Eudossiana 18, 00184 Roma, Italy

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: CiteScore - Q1 (Control and Optimization)

Contact Us

Energies Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/energies energies@mdpi.com X@energies_mdpi