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Numerical Simulations of Fracturing in Petroleum Engineering

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Message from the Guest Editors

The rapid development of unconventional resources and energies has led to the use of hydraulic fracturing technology in petroleum engineering. Hydraulic fracturing stimulates a natural gas, oil, or geothermal well to maximize extraction.

It is one of the key methods of extracting unconventional oil and unconventional gas resources. In recent years, many researchers and scientists have made great achievements in this field. However, some urgent problems, such as geomechanical and huge environmental problems, still need to be solved. Therefore, it is necessary for us to find a suitable and innovative way to develop this technology. Numerical analysis and modeling of hydraulic fracturing is helpful in identifying tight oil/gas formations and providing accurate solutions for optimizing well spacing for the design of zipper-frac wells.

This Special Issue covers a comprehensive array of manuscripts and research papers that explore various aspects of hydraulic fracturing, including early design, modeling, field practices, and characterization.

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Message from the Editor-in-Chief

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