Special Issue

Flow and Transport in Fractal Models of Rock Mechanics

Message from the Guest Editor

Flow and transport in fractal models have gained significant attention in the field of rock mechanics, particularly in the context of oil and gas production. Fractal models provide a powerful framework for understanding the complex behavior of fluid flow and transport in porous media with intricate geometries and heterogeneous structures. Additionally, the use of fractal models allows for the investigation of transport phenomena, including dispersion, diffusion, and mixing, which are essential for assessing the efficiency of enhanced oil recovery techniques. Topics of this Special Issue may include (but are not limited to): Fractal-based characterization of reservoir heterogeneity;
Fractal modeling of fluid flow in unconventional reservoirs;
Fractal analysis of fracture networks in shale formations;
Transport phenomena and numerical simulation in fractal porous media;
Fractal-based simulation methods for reservoir engineering;
Flow and transport in naturally fractured reservoirs using fractal models;
Fractal-based approaches for enhanced oil recovery in unconventional reservoirs.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

Fractal and Fractional (*Fractal Fract.*) is a scholarly online journal which provides a forum for discussion on new original models and methods in fractals and fractional calculus both from theory and applications. It is a peer-reviewed, open access journal that publishes high quality original research articles, review papers and short communications.

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