

## Special Issue

# Fractal Analysis and Its Applications in Rock Engineering, Second Edition

### Message from the Guest Editors

In rock mechanics, fractal analysis is used to study the behavior and properties of rock fractures. Fractal analysis has also been applied to study the fragmentation of rocks. The application of fractal analysis in rock mechanics and rock engineering has broadened our understanding of the mechanical behavior of rocks and rock masses at various scales, and has the potential to improve the design and safety of rock engineering projects. The scope of this Special Issue includes, but is not limited to, the following topics:

- The fractal analysis of rock fractures and their properties, such as their size distribution, orientation, and connectivity.
- The fractal modeling and simulation of rock fragmentation processes, including the study of rock blasting and rock cutting.
- Applications of fractal analysis in rock engineering, including the characterization of rock mass properties and the prediction of rock mass behavior.
- The fractal analysis of geomechanical processes, such as the faulting, folding, and deformation of rocks.
- The fractal analysis of rock microstructures, including the study of grain size distribution and pore space characterization.

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### Guest Editors

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Dr. Lihai Tan

Dr. Gaofeng Liu

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### Deadline for manuscript submissions

15 December 2026



## Fractal and Fractional

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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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### Editor-in-Chief

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