

Special Issue

Rock Mass Characterization: A Focus on Geometrical Features of Discontinuities

Message from the Guest Editors

Discontinuities are an intrinsic characteristic of rock masses, and they appear at every scale of a technical survey. Discontinuity geometry is mainly characterized by location, orientation, spacing, and persistence. Since discontinuities have essential effects on rock mass behavior, it is crucial to estimate their mean geometry.

The automatization of the non-contact survey of discontinuity orientation is a recurrent topic in the research community. On the other hand, spacing and persistence are still the most challenging characteristics to be determined. The natural variability of discontinuity spacing in a rock mass leads to difficulties in collecting enough data to properly describe its statistical distribution.

This Special Issue aims to collect all research developments related to non-contact survey methods devoted to rock mass characterization, with a special focus on geometrical features of discontinuities, combining multidisciplinary approaches coming from rock mechanics, geology, remote sensing, and numerical simulations, to provide a comprehensive update of the state-of-the-art findings in this field.

Guest Editors

Prof. Gessica Umili

Department of Earth Sciences, Università degli Studi di Torino, via Valperga Caluso 35, 10125 Torino, Italy

Dr. Lauri Uotinen

Department of Civil Engineering, School of Engineering, Aalto University, Espoo, Finland

Prof. Dr. Nick Barton

Nick Barton & Associates, Oslo, Norway

Deadline for manuscript submissions

closed (25 November 2022)



Geosciences

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 5.1



mdpi.com/si/97176

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

[mdpi.com/journal/
geosciences](https://mdpi.com/journal/geosciences)





Geosciences

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 5.1



[mdpi.com/journal/
geosciences](https://mdpi.com/journal/geosciences)



About the Journal

Message from the Editor-in-Chief

Understanding the Earth's origin and its bio-geological evolution, the multiple implications of the geosciences (as a coherent set of interconnected disciplines), and the sociocultural and ethical interdisciplinary approaches, will be crucial for a better understanding of Nature, and also for undertaking scientifically based political decisions.

We are committed to drive *Geosciences* to a position in which it is recognized for its high-quality, cutting-edge research and scientific influence, and strongly encourage and invite your participation and manuscripts.

Editor-in-Chief

Prof. Dr. John C. Eichelberger

Alaska Center for Energy and Power, University of Alaska Fairbanks,
Fairbanks, AK, USA

Author Benefits

Open Access:

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

High Visibility:

indexed within Scopus, ESCI (Web of Science), GeoRef, Astrophysics Data System, and other databases.

Journal Rank:

CiteScore - Q1 (General Earth and Planetary Sciences)