



an Open Access Journal by MDPI

# **Theory and Applications of Seismic Inversion**

Guest Editors:

#### **Message from the Guest Editors**

Dr. Mehrdad Soleimani Monfared

Dr. Behshad Jodeiri Shokri

Dr. Amin Roshandel Kahoo

Deadline for manuscript submissions: closed (31 December 2022) Dear Colleagues,

Seismic inversion consists of a wide range of methods, techniques and algorithms, each dealing with a specific part in the whole range of seismic data analysis and interpretation. Seismic inversion is not only the heart of the seismology and seismic exploration, but is always at the leading edge of investigation and research. Advanced methods in waveform inversion algorithms are still rapidly developing towards resolving the problem of seismic imaging in complex geological structures, resolving the obstacles of obtaining high seismic images from deep earth and using the contribution of all information imbedded in recorded data by inversion of the full waveform in full-waveform inversion methods. In velocity analysis, the inversion methods largely consist of investigations seismic inversion. Traveltime on tomography, gridded or layer-based and hybrid inversion techniques are among the seismic inversion methods that are developing rapidly and finding vast application in the chain of seismic data processing and interpretation.



**Special**sue





an Open Access Journal by MDPI

## **Editor-in-Chief**

**Prof. Dr. Leonid Dubrovinsky** Bayerisches Geoinstitut, University Bayreuth, D-95440 Bayreuth, Germany

### Message from the Editor-in-Chief

*Minerals* welcomes submissions that report basic and applied research in mineralogy. Research areas of traditional interest are mineral deposits, mining, mineral processing and environmental mineralogy. The journal footprint also includes novel uses of elemental and isotopic analyses of minerals for petrology, geochronology and thermochronology, thermobarometry, ore genesis and sedimentary provenance. Contributions are encouraged in emerging research areas such as applications of quantitative mineralogy to the oil and gas, manufacturing, forensic science, climate change, geohazard and health sectors.

## **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), GeoRef, CaPlus / SciFinder, Inspec, Astrophysics Data System, AGRIS, and other databases. **Journal Rank:** JCR - Q2 (*Mining & Mineral Processing*) / CiteScore - Q2 (*Geology*)

## **Contact Us**

*Minerals* Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/minerals minerals@mdpi.com X@Minerals\_MDPI/