



an Open Access Journal by MDPI

Advancements in Magnetic Field Methods and Natural Resources Exploration

Guest Editors:

Prof. Dr. Valeria Paoletti

Department of Earth, Environment and Resources Science, University Federico II, Complesso di Monte S. Angelo, Via Cintia, Edifice L, 80126 Naples, Italy

Mag. Ingrid Schattauer

Geologische Bundesanstalt, Vienna, Austria

Deadline for manuscript submissions: closed (30 September 2020)

Message from the Guest Editors

Dear Colleagues,

Geophysical exploration methods play a key role in natural resources studies. The role of these methods is to provide valuable information on the type, shape, size, and depth of the geological structures constituting the natural-resources reservoirs. In past decades, magnetic surveying had become popular as one of the most effective techniques supporting seismic methods in natural resources exploration. Indeed, magnetic methods are now standard in the pre-drilling phase to identify areas of interest and estimate size and location of reservoirs.

The aim of this Special Issue of Geosciences is to showcase the latest developments in the field of exploration of natural resources by magnetic methods, with emphasis on advancements in exploration and interpretation techniques. We specifically invite contributions addressing the following aspects:

- Methods for Magnetic Data Processing included Noise Removal;
- Methods for Signal Enhancement;
- Imaging and Inversion Techniques;
- Significant Case Studies in Natural Resources Exploration (oil, gas, water, geothermal reservoirs).









an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Jesus Martinez-Frias

Instituto de Geociencias, IGEO (CSIC-UCM), C/ Del Doctor Severo Ochoa 7, Edificio Entrepabellones 7 y 8, 28040 Madrid, Spain

Message from the Editor-in-Chief

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

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:** JCR - Q2 (*Geosciences, Multidisciplinary*) / CiteScore - Q1 (General Earth and Planetary Sciences)

Contact Us

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