



## Geological Seafloor Mapping

Guest Editors:

**Dr. Markus Diesing**

Geological Survey of Norway, Leiv  
Eirikssons vei 39, 7040  
Trondheim, Norway

**Dr. Peter Feldens**

Marine Geology, Leibniz-Institute  
for Baltic Sea Research  
Warnemünde, Seestraße 15,  
18119 Rostock, Germany

Deadline for manuscript  
submissions:

**closed (31 March 2019)**

### Message from the Guest Editors

Dear Colleagues,

Mapping the seafloor geology remains one of the great challenges in marine geoscience. However, recent advances in data acquisition (e.g. multispectral backscatter) and analysis (e.g. machine learning) put us in a better position to deliver accurate maps of seafloor sediment and substratum types.

This Special Issue aims to showcase the latest developments in geological seafloor mapping. We specifically invite contributions addressing the following aspects:

- Studies assessing the potential of multispectral backscatter for geological seafloor mapping
- Systematic and quantitative comparisons of mapping approaches
- Impact of spatial scale on mapping performance
- Assessment and communication of mapping uncertainty and confidence
- Quantification of relationships between sediments and environmental drivers
- Quantification of relationships between sediments, benthic organisms, and backscatter
- Case studies from local to global scales making innovative use of legacy data from data repositories



[mdpi.com/si/15282](https://mdpi.com/si/15282)

Dr. Markus Diesing  
Dr. Peter Feldens  
Guest Editors

# Special Issue



## Editor-in-Chief

**Prof. Dr. John C. Eichelberger**

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

## 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.

## 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)

## Contact Us

---

*Geosciences* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/geosciences](http://mdpi.com/journal/geosciences)  
[geosciences@mdpi.com](mailto:geosciences@mdpi.com)  
[X@Geosciences\\_OA](#)