

Special Issue

Progress in Seafloor Mapping

Message from the Guest Editors

Ocean and coastal seafloor mapping are critical to our understanding of the processes that shape these areas and help us better understand possible future landform evolution. The impacts of climate change include sea level rise, increasing storm intensities, and anthropogenic alteration. This Special Issue invites papers using sensors, techniques, and platforms for seafloor mapping, as well as those that use the latest seafloor mapping data.

- Acoustic: Side-scan imagery, bathymetry, backscatter, and seismic reflection profiling;
- Optical: bathymetric lidar, UAS imagery, structure from motion, and satellite;
- Modeling: wave, near-shore bathymetry, etc.;
- Multi-modal studies;
- Machine and deep learning and AI;
- Crewed and uncrewed vessels, autonomous surface vessels and autonomous underwater vessels and gliders.
- Sediment transport;
- Tidal inlets;
- Barrier islands and spits;
- Salt marsh and submerged aquatic vegetation;
- Mangroves and rocky coasts;
- Continental shelf and slope processes;
- Benthic habitat studies;
- Application of CMECS and other classification systems for seafloor mapping;
- Anthropogenic alterations;
- Marine debris;

Guest Editors

Dr. Mark Borrelli

1. School for the Environment, University of Massachusetts, 100 Morrissey Blvd, Boston, MA 02125, USA

2. Coastal Processes and Ecosystems (CaPE) Laboratory, Center for Coastal Studies, 5 Holway Ave, Provincetown, MA 02657, USA

Dr. Arthur Trembanis

College of Earth, Ocean and Environment, Newark, NJ, USA

Dr. Bryan A. Oakley

Department of Environmental Earth Science, Eastern Connecticut State University, Willimantic, CT 06226, USA

Deadline for manuscript submissions



Geosciences

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 5.1



mdpi.com/si/170861

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)