Special Issue

Earthquake Hazard Modelling

Message from the Guest Editors

Earthquakes, with their catastrophic effects, are natural phenomena that are studied from various perspectives to understand their triggering mechanisms and improve our predictive capabilities to mitigate damage. Over the past decade, numerous studies have proposed seismic hazard models (SHMs) utilizing earthquake catalogs, consistent tectonic zonation, geological data, active fault datasets and subduction zone sources. The primary goal of these models is to generate hazard curves, maps and uniform hazard spectra for the regions that are most affected by seismic events. This Special Issue welcomes contributions across a wide spectrum of research areas and case studies focused on seismic hazard modeling and earthquake risk mitigation. We encourage submissions on a variety of topics, including but not limited to physics-based seismicity models, ground motion models, site response characterization and the limitations of seismic hazard analyses. Additionally, we invite studies that incorporate machine learning techniques and advanced statistical methods in the context of seismic hazard assessment.

Guest Editors

Dr. Cristiano Fidani
Istituto Nazionale di Geofisica e Vulcanologia, Rome, Italy

Prof. Dr. Pan Xiong
Institute of Earthquake Forecasting, China Earthquake Administration, Beijing, China

Dr. Serena D'Arcangelo
Istituto Nazionale di Geofisica e Vulcanologia, Rome, Italy

Deadline for manuscript submissions

31 January 2026

Geosciences

an Open Access Journal by MDPI

Impact Factor 2.1
CiteScore 5.1

mdpi.com/si/216843

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

mdpi.com/journal/geosciences

Geosciences

an Open Access Journal by MDPI

Impact Factor 2.1
CiteScore 5.1

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 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.

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)