



## Advances in Earthquake Geotechnical Engineering

Guest Editor:

**Dr. Salvatore Grasso**

Department of Civil Engineering  
and Architecture, University of  
Catania, 95131 Catania, Italy

sgrasso@dica.unict.it

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### Message from the Guest Editor

It is now widely recognized that geotechnical earthquake engineering is a multidisciplinary task covering structural engineering, seismology, geotechnical engineering, soil dynamics and microzonation disciplines. Performance-based design in geotechnical earthquake engineering has been developed mainly for new geotechnical systems designed to resist even severe earthquakes.

In this Special Issue, we offer the opportunity to present high-quality works regarding geotechnical earthquake engineering, considering the recent advances in performance-based design methodology, in damage evaluation due to local site amplification, in slope failure including landslide seismic hazard assessment and consequent risk mitigation, and in soil liquefaction phenomena.

We encourage submissions related, but not limited, to the seismic performance of buildings with shallow or pile foundations; to soil-structure interaction problems; to new developments on the performance-based analysis and design of buildings to resist earthquakes; and to displacement-based analysis for the seismic performance of retaining walls.





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### **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 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.

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*Geosciences*  
MDPI, St. Alban-Anlage 66  
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