

## Special Issue

# Numerical Modeling in Geotechnical Engineering

### Message from the Guest Editors

In recent decades, numerical simulation has increasingly been used for the analysis of stress–strain levels in many fields of geotechnical engineering toward better accounting for the possible initial and boundary conditions associated with micro- to megascale problems, including groundwater flow, fully coupled soil–structure systems, and environmentally friendly innovative materials. In addition to the developments related to the methods itself, the role of the numerical approach has evolved from the research field into a daily engineering tool due to the increase of computer power. Contributions regarding tunnels and deep excavations in urban areas, soil–structure interaction issues, cultural heritage protection, retaining walls, foundations, dams, slope stability, and innovative materials are welcome. Applications of numerical modeling to dynamics, geotechnical earthquake engineering, and constitutive models including of unsaturated soil and soil–structure interface are also welcome. Finally, we encourage the submission of contributions concerning operative applications with the experimental validation of the models.

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### Guest Editors

Dr. Valentina Lentini

Dr. Maria Rossella Massimino

Dr. Maurizio Ziccarelli

Dr. Dimitris Pitilakis

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### Deadline for manuscript submissions

closed (28 February 2021)



## Geosciences

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### 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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### Editor-in-Chief

Prof. Dr. John C. Eichelberger

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