Special Issue

Advanced Technology in Geotechnical Engineering

Message from the Guest Editor

This Special Issue focuses on the microscale and mesoscale mechanisms driving innovations in geotechnical engineering. We invite research exploring advanced technologies such as micro-CT imaging, discrete element modeling (DEM), molecular dynamics, and nano-indentation techniques to unravel soil–structure interactions, particle-scale behavior, and fabric evolution. Contributions to AI-enhanced micromechanical analysis, in situ microstructural characterization, and multiscale modeling approaches are particularly encouraged. Studies should emphasize fundamental mechanisms, experimental advancements, or computational methods that bridge micro/meso observations with macro-scale geotechnical performance. Both theoretical and experimental investigations addressing the interplay between material science and geomechanics are welcome. Join us in advancing the understanding of geotechnical phenomena from the ground up.

Guest Editor

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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