Special Issue

Earthquake Geotechnical Engineering: Implications and Sustainable Solutions for Infrastructures and the Environment

Message from the Guest Editors

Geotechnical engineers continuously face new challenges in the design and management of structures and infrastructures prone to the destructive and longlasting earthquake effects. Considering the pressing call for sustainable protection of the built and natural environment in seismically active regions, the welcome the valuable contribution of all of those working in relevant geotechnical topics, including the following: Experimental characterization and numerical modelling of the dynamic behaviour of geotechnical materials, including unconventional geomaterials such as tailings, municipal solid waste, etc. Monitoring and physical and numerical modelling of the behaviour of large infrastructures under the effects of dynamic loading. Assessment and mitigation of the environmental impacts caused by earthquake and earthquake-related phenomena on different types of infrastructures. Sustainable design solutions to mitigate earthquake effects applying the principles of performance-based design and circular economy. Sustainable ground improvement to mitigate earthquake effects.

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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.

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