Special Issue

Geotechnical Seismic Isolation System: Development and Challenges

Message from the Guest Editor

Increasing the earthquake resistance of buildings in developing countries is a major challenge. One possible solution is seismic isolation using a cost-effective and engineered layer under the building's foundation to dissipate the seismic hazard, which is called a geotechnical seismic isolation (GSI) system. This solution is particularly suitable for developing countries due to its rationality and simplicity while providing an acceptable reduction in seismic forces on the building. In this approach to seismic isolation, the dissipation of seismic energy is primarily achieved by reducing the friction under the foundation and any sliding on the ground, as well as any sliding between the intermediate layers of "soft" shear material. This Special Issue of *Vibration* aims to provide an up-to-date overview of the most exciting and popular research trends in this field. A non-exhaustive list of topics of interest could be formulated as follows:

- Analytical and numerical modelling of soil–foundation–structure systems;
- Shake table tests;
- Field tests.

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Message from the Editor-in-Chief

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