Special Issue

In Situ and Laboratory Tests for Analysis and Application in Soil Mechanics

Message from the Guest Editor

Geotechnical engineers work closely with structural and environmental engineers. Understanding and applying the concepts of soil mechanics requires sound knowledge of the physics, statics, dynamics, mathematics, and mechanics of materials. For the purpose of correctly analyzing soil behavior, it is essential to possess appropriate knowledge of its mechanical characteristics. In this context, the execution of tests in situ or in the laboratory, both in static and dynamic fields, allows us to evaluate the basic behavior parameters for the subsequent processes of the problems present in the application field under study. Subsequently, it is therefore possible to use numerical simulations, developed within different fields of soil behavior, which allow for the identification of the solutions necessary for solving case studies. On the one hand, it is important to have in-depth knowledge of the materials being analyzed, and on the other hand, a mechanical analysis of the soils is necessary to define and understand the fields of application.

Guest Editor

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