

Master's Projekt (MP, 5ECTS)

FMT

Working title Hard Soil – Soft Rock: Limits of current testing techniques in situ

Description

Many engineering problems in geotechnics can be linked to excavations in hard soils or soft rocks. Challenges already arise within the characterization of the material in situ, which is fundamental for all (numerical) calculations. Incomplete descriptions of the composite, its constituents and the material behavior, or the use of unsuitable characterization methods, eventually result in an inadequate design. Nevertheless, there is a lack of appropriate testing equipment for on sight investigation.



The aim of this project is to find and outline the problems and limits when applying common in situ measurement systems like dynamic probing, standard penetration tests and cone penetration tests on hard soils and soft rocks. The outcome of this literature study should form the basis for further research regarding the development of improved and up to date in situ testing equipment. The conducted work can, if wanted, lead to a subsequent Master's thesis in this field of expertise.

Supervisor	Start	Duration	Contact
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