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Nota di contenuto	Comparison of prediction models for the permeability of granular materials using a database -- Virtual reality and neural networks for exploting geotechnical data -- Validation of compression index approximations using soil liquid limit -- Validation of compression index approximations using soil void ratio -- Innovative model for settlement calculations in organic soils -- Resilient modulus prediction of subgrade soil using dynamic cone penetrometer -- Phosphogypsum management challenges in Tunisia -- Variation of some hydrogeochemistry with cbr of residual soils from north-central nigeria: impact of underlying lithology -- G shear box test to determine shear characteristics of coarse grained soils at low normal stresses -- Use of the method of concrete lozenges to strengthening the slopes stability: assessment of the safety factor by the finite element method -- Modelling landslides by the finite element method: application to an

embankment on a railway in the moroccan rif -- Features of investigation of soil according to kazakhstan norm and international standards -- Marsh funnel test as an alternative for determining the liquid limit of soils -- Contribution to the study of geotechnical characterization and behaviour of tunis soft clay -- Drained response of granular material -- Cut slope stability analysis of rangvamual landslide along aizawl airport road, northeast india -- Geo-mechanical characterization in laterite soil mixtures - aerial lime for road based use in federal district, brazil -- Effects of sand sizes on engineering properties of tropical sand matrix soils. .

Sommario/riassunto

This volume is of interest to practical engineers. It discusses some contemporary issues related to soil mechanics in earthwork projects which are critical components in civil construction and often require detailed management techniques and unique solution methods to address failures. Being earth bound, earthwork is influenced by geomaterial properties at the onset of a project. Hence, an understanding of the in-situ soil properties is essential. Slope stability is a common problem facing earthwork construction, such as excavations and shored structures. Analytical methods for slope stability remain critical for researchers due to the mechanical complexity of the system. Striving for better earthwork project managements, the geotechnical engineering community continues to find improved testing techniques for determining sensitive properties of soil and rock, including stress-wave based, non-destructive testing methods. To minimize failure during earthwork construction,past case studies and data may reveal useful lessons and information to improve project management and minimize economic losses. This volume discusses these aspects using appropriate methods in a simple way. The volume is based on the best contributions to the 2nd GeoMEast International Congress and Exhibition on Sustainable Civil Infrastructures, Egypt 2018 – The official international congress of the Soil-Structure Interaction Group in Egypt (SSIGE).