Record Nr. UNINA9910299377303321 Advances in Analysis and Design of Deep Foundations: Proceedings of **Titolo** the 1st GeoMEast International Congress and Exhibition, Egypt 2017 on Sustainable Civil Infrastructures / / edited by Murad Abu-Farsakh. Khalid Alshibli, Anand Puppala Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2018 **ISBN** 3-319-61642-0 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (304 pages): illustrations (some color), graphs Collana Sustainable Civil Infrastructures, , 2366-3405 Disciplina 624.15 Soggetti Geotechnical engineering Engineering geology Engineering—Geology Foundations Hydraulics Computer simulation Buildings—Design and construction Building Construction Engineering, Architectural Engineering design Geotechnical Engineering & Applied Earth Sciences Geoengineering, Foundations, Hydraulics Simulation and Modeling **Building Construction and Design Engineering Design** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references at the end of each chapters and Nota di bibliografia index. 1 Evaluation of Ultimate Pile Compression Capacity from Static Pile Load Nota di contenuto

Test Results -- 2 Behavior of Piles in Two Soil Layers, Sand Overlaying Compressible Clay (Case Study) -- 3 Laboratory Study of Plug Length

## Sommario/riassunto

Development and Bearing Capacity of Pipe Pile Models Embedded within Partially Saturated Cohesionless Soils -- 4 Bearing capacity and settlement of pile based on cone loading test -- 5 Experimental Study on Ultimate Capacity of Large Screw Piles in Beijing.

This volume on "Advances in Analysis and Design of Deep Foundations" contains 22 technical papers which cover various aspects of analysis and design of deep foundations based on full-scale field testing, numerical modeling, and analytical solutions. The technical papers are 8-10 pages long that present the results and findings from research as well as practical-oriented studies on deep foundations that are of interest to civil/geotechnical engineering community. The topics cover a wide spectrum of applications that include evaluation of the axial and lateral capacity of piles, pile group effects, evaluation of the increase in pile capacity with time (or pile setup), influence of excavation on pile capacity, study the behavior of pile raft caisson foundations, evaluate the bearing capacity and settlement of piles from cone penetration tests, etc. This volume is part of the proceedings of the 1st GeoMEast International Congress and Exhibition on Sustainable Civil Infrastructures, Egypt 2017.