Record Nr. UNINA9910366652803321 Innovative Infrastructure Solutions using Geosynthetics: Proceedings of **Titolo** the 3rd GeoMEast International Congress and Exhibition, Egypt 2019 on Sustainable Civil Infrastructures - The Official International Congress of the Soil-Structure Interaction Group in Egypt (SSIGE) / / edited by Fumio Tatsouka, Erol Guler, Hany Shehata, J. P. Giroud Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2020 3-030-34242-5 **ISBN** Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (165 pages) Sustainable Civil Infrastructures, , 2366-3405 Collana Disciplina 624.15 624.18923 Soggetti Geotechnical engineering Civil engineering Geotechnical Engineering & Applied Earth Sciences Civil Engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Giant Geotextile Tube Applied to the Temporary Cofferdam Reclamation Construction for a New-Build Container Base at Harbor in Taiwan -- Effect of Strain Rate on Cyclic Behavior of Pond Ash Reinforced with Geocell -- Developments in MSE Wall Research and Design -- Cemented Lateritic Soil as Base Material Improvement using Compression -- Potentiality of Boehmeria Nivea as Alternative Material in the Production of Geotextile -- Geomembrane stress cracking resistance depending on the polymer used -- A geomembrane liner to stop water seepage in an 8 km long embankment; the Bill Young reservoir case history -- Experimental Research and Application of Geopolymer in Soft Soil Foundation Treatment -- Effect of offset distance on tiered reinforced soil retaining wall subjected to dynamic excitation -- Review of Process Control and Assurance for Optimized Seaming Condition Optimization of Woven Geotextiles to Improve

Stability in Soft Soil Structure -- Celebrating Reinforced Soil Structures: A historic review from the original concept to today design and GOOD

construction practice using site-won and other reinforced soil fills.

## Sommario/riassunto

This book contains contributions on advances in geosynthetics engineering. Soil reinforcement is a very useful technique to construct several cost-effective soil structures in an environmentally friendly and sustainable manner. The most commonly used reinforcement materials are galvanized steel strips, geosynthetics in the form of woven geotextiles, geogrids and geocomposites, and fibres from natural and waste products. In recent years, there have been advances in the area of soil reinforcement, especially in the utilization of the technique in field projects. The researchers have also been working to understand the behaviour of reinforced soil considering the field challenges of reinforced soil structures.