Record Nr. UNINA9910337889803321 Advancements on Sustainable Civil Infrastructures: Proceedings of the **Titolo** 5th GeoChina International Conference 2018 – Civil Infrastructures Confronting Severe Weathers and Climate Changes: From Failure to Sustainability, held on July 23 to 25, 2018 in HangZhou, China // edited by Don Chen, Sonny Kim, Anand Tapase Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2019 3-319-96241-8 **ISBN** Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (VII, 162 p. 103 illus., 80 illus. in color.) Sustainable Civil Infrastructures, , 2366-3405 Collana 624.151 Disciplina Geotechnical engineering Soggetti Engineering geology Engineering—Geology **Foundations** Hydraulics Waste management Environmental engineering Biotechnology Geotechnical Engineering & Applied Earth Sciences Geoengineering, Foundations, Hydraulics Waste Management/Waste Technology Environmental Engineering/Biotechnology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia 1. The Use of Automated Flocculation Titrimetry and SARA Analysis to Nota di contenuto Predict the Performance of Bituminous Binders in Asphaltic Hot Mix and Bitumen Emulsions -- 2.Laboratory characterization of low temperature performance of high modulus asphalt concrete by beam bending test -- 3. Numerical Analysis at the Particulate Scale of Sand Erosion under Impinging Jet -- 4. Performance Studies of Microbial Induced Calcite Precipitation to Prevent the Erosion of Internally Unstable Granular Soils -- 5.On the determination of undrained shear strength of soft soils from vane test -- 6.Issues in Interpretation of Constant Rate of Strain Consolidation Test Data -- 7.Experimental Study on the Effects of Emulsion Wax Coating Agent (EWCA) about Isolation Performance of Cement Concrete Pavement's Transitional Layer -- 8.Evaluating the Settlement Problem in City of Jazan's Urban Roads: Pilot Study for King Faisal Road -- 9.Effect Of Using Sludge Waste Containing Calcium Carbonate On The Properties Of Asphalt And Hot Mix Asphalt Mixture -- 10.Mixture Design of Emulsified Asphalt Cold Recycled Mixture by Accurate Volume Method -- 11.Evaluation of Rutting and Cracking Resistance of Foamed Warm Mix Asphalt Containing RAP -- 12. Assessment of flexible pavement by finite element method -- 13. Automated Acoustic Scanning of Concrete Bridge Decks and Delamination Identification.

Sommario/riassunto

This book presents recent advances in the field of geomaterial and waste management. With high urbanization rates, advancement in technologies, and changes in consumer behavior, wastes generated through the daily activities of individuals and organizations pose many challenges in terms of their management. The studies presented in this book highlight attempts on the part of researchers and practitioners to address contemporary issues in geoenvironmental engineering such as the characterization of dredged sediments, geomaterials and waste, valorization of waste, sustainability in waste management, and various other geoenvironmental issues that are becoming increasingly relevant in today's world. The studies were selected from papers presented at the 5th GeoChina International Conference, Civil Infrastructures Confronting Severe Weathers and Climate Changes: From Failure to Sustainability, held in Hangzhou, China on July 23–25, 2018.