Record Nr. UNINA9910874685003321 Autore Jose Babu T **Titolo** Proceedings of the Indian Geotechnical Conference 2022 Volume 5: Geotechnics: Learning, Evaluation, Analysis and Practice (GEOLEAP) // edited by Babu T. Jose, Dipak Kumar Sahoo, Thomas Oommen, Kasinathan Muthukkumaran, S. Chandrakaran, T. G. Santhosh Kumar Singapore: .: Springer Nature Singapore: .: Imprint: Springer. , 2024 Pubbl/distr/stampa **ISBN** 9789819733897 9789819733880 Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (517 pages) Lecture Notes in Civil Engineering, , 2366-2565;; 483 Collana Altri autori (Persone) SahooDipak Kumar OommenThomas MuthukkumaranKasinathan ChandrakaranS Santhosh KumarT. G Disciplina 624.15 Soggetti Engineering geology **Building materials** Geotechnical engineering Geoengineering **Building Materials** Geotechnical Engineering and Applied Earth Sciences Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Instument of a Road Tunnel under Overburden Loading of a Four Storied Building Structure, in Lonavla, Maharashtra, India -- Stability Assessment and Support Design of a Tunnel Excavation in Different Rock Mass Conditions -- Tunnel Face Stability in the Soil Medium under Collapse and Blow-up Conditions -- Numerical Investigations on Strip Footing near Vertical Cut Rockmass Cliff -- Sensitivity Analysis of Stability of Rockmass Slope Using Finite Element Limit Analysis --

> Influence of Weathering on Mechanical Behaviour of Garnetiferous Quartzo-feldspathic Biotite Gneiss -- Laboratory Assessment for Frictional and Joint Deformation Properties of Rock -- Analysis of Twin

Bored Tunnel Using Plaxis 3d for the Proposed Metro Rail at Coimbatore District -- Influence of Density on the Dynamic Properties of Intact Rock Masses -- Brittle – Ductile Transition of Oil Shale -- Numerical Simulation Study on Detection of Subsurface Microcrack Using Active Infrared Thermography -- Comparison of Joint Models Usedfor the Propagation of Shear Waves Across Jointed Rock -- Time-dependent Behaviour of Underground Openings in Rock Salt -- Mechanical Behaviour of Rocklike Material with an Open Flaw under Triaxial Loading -- An Explicit Finite Element Approach to Tbm Disc Cutter Induced Rock Fragmentation Simulation Asif.

## Sommario/riassunto

This book comprises the select proceedings of the Indian Geotechnical Conference (IGC) 2022. The contents focus on recent developments in geotechnical engineering for a sustainable world. The book covers behavior of soils and soil-structure interaction, soil stabilization. ground improvement, and land reclamation, shallow and deep foundations, geotechnical, geological and geophysical investigation. rock engineering, tunneling, and underground structures, slope stability, landslides and liquefaction, earth retaining structures and deep excavations, geosynthetics engineering, geo-environmental engineering, sustainable geotechnics, and landfill design, geohydrology, dam and embankment engineering, earthquake geotechnical engineering, transportation geotechnics, forensic geotechnical engineering and retrofitting of geotechnical structures, offshore geotechnics, marine geology and subsea site investigation, computational, analytical and numerical modeling, and reliability in geotechnical engineering. The contents of this book are useful for researchers and professionals alike.