

1. Record Nr.	UNINA9910760276903321
Titolo	Geoenvironmental and Geotechnical Issues of Coal Mine Overburden and Mine Tailings // edited by Sarat Kumar Das, Krishna R. Reddy, Lohitkumar Nainegali, Surabhi Jain
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2024
ISBN	981-9962-94-3
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (202 pages)
Collana	Springer Transactions in Civil and Environmental Engineering, , 2363-7641
Disciplina	333.73
Soggetti	Engineering geology Mining engineering Environmental engineering Civil engineering Underground construction Geoengineering Mining and Exploration Environmental Civil Engineering Underground Engineering and Tunnel Construction
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Chapter 1. Tailings Characterisation Using Soil Behaviour Type Indices Based on CPTu Results (Luis Alberto Torres-Cruz) -- Chapter 2. Assessment of the ability of advanced constitutive models to simulate the behaviour of mine tailings (Andrés A. Peña Olarte) -- Chapter 3. Geotechnical Considerations of Mine Tailings Management through Mine Backfilling (Seneth Jayakodi) -- Chapter 4. Stability Assessment of Tailing Storage Facilities: geotechnical challenges and perspectives (Andrés A. Peña) -- Chapter 5. Remote-sensing based reclamation monitoring of coal-mining overburden dumps (Sukha Samadder) -- Chapter 6. Mine Closure Framework and Environmental Issues (Biswajit Paul) -- Chapter 7. Application of Electro Kinetics to Maintain Tailing Pond Integrity & Extend Service Life (Greg Smith) -- Chapter 8. Mine tailing dewatering. Reviews of current practices with emphasis on

electrokinetic techniques (Nikhil John) -- Chapter 9. Geochemical, microbial and Environmental aspects of Passive Acid Mine Drainage Treatment Techniques (M K Kaushik) -- Chapter 10. Carbon sequestration of mine tailings for carbon dioxide capture, utilization and storage (Dr. Faradiella Mohd Kusin) -- Chapter 11. Suitability/adaptability of bauxite residue as a liner material- a critical appraisal (Tayyaba Siddiqua).

Sommario/riassunto

This contributed book edited by leading global experts focuses on the geoenvironmental and geotechnical issues of coal mine overburden and mine tailings and its unengineered dumping. It aims to provide knowledge-based information for diverse readers to assess, monitor, and manage coal mine overburden and mine tailings in various engineering applications while highlighting efficient solutions to reutilize the waste and conserve natural resources leading to sustainable development. The content also assesses mine backfilling, techniques to stabilize mine tailing storage facilities, mineral carbonation of mine tailings, landfill liners and barrier systems, reclamation of coal mine overburden, and geochemical, microbial, and environmental sustainability assessment, among others. This book is a useful resource for those in academia and industry.
