1. Record Nr. UNINA9910484507503321 Autore Khare Neloy Titolo Engineering and communications in Antarctica: enabling technologies in Antarctica / / Neloy Khare Gateway East, Singapore: ,: Springer, , [2021] Pubbl/distr/stampa ©2021 **ISBN** 981-15-5732-2 Edizione [1st ed. 2021.] Descrizione fisica 1 online resource (XVII, 199 p. 121 illus., 95 illus. in color.) Collana Springer transactions in civil and environmental engineering Disciplina 624.15136 Soggetti Civil engineering - Cold weather conditions Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Utilization of Wind Energy at Indian Antarctic Station Near term and Long-term Objectives -- Engineering in Antarctica: Assesment report -- Review of the status of Engineering aspects of Dakshin Gangotri and Maitri -- Dakshin Gangotri Station - The pride of India --Communication from Antarctica -- Commercial Polymers and their Utility in Cold Region -- Antarctic Environmental Study in the Last 25 Years of Indian Antarctic Expedition -- Natural Radioactivity and Heavy Metal Concentrations in Antarctic Region -- Environmental Management Services at Maitri-Antarctica -- Fire Safety at Maitri station: a Brief Report -- Establishment of India's Third Research base in Antarctica -A review. Sommario/riassunto India launched its maiden scientific expedition to Antarctica way back in 1981 and ever since annual expeditions are launched to address thematic research in the contemporary areas of Antarctic Science and Engineering. The initial efforts and achievements of India are not only

significant but are of historical importance. This book discusses a wide array of topics that have entered the mainstream of geotechnical and geo environmental engineering over the initial two and half decades of India's presence in the icy continent 'Antarctica'. At the same time, it highlights the lessons learnt in cryo-engineering technologies. It covers various articles on many aspects of environmental science and collates

engineering and environmental impact assessment. Accordingly, this

the overall achievements in the fascinating field of Antarctic

book covers articles on wind energy by Ramesh et al., and engineering aspects in Antarctica by Rai. Similarly, Pathak has reviewed the engineering details of Dakshin Gangotri and Maitri. On the contrary, Sharma has provided an interesting history about the process of establishment of Dakshin Gangotri station. Similarly, communication aspects have been highlighted by Dhaka. Commercial polymers and their utility in cold region have been discussed by Dabholker et al. Besides, Tiwari and Khare have reviewed the environmental studies carried out during the initial 25 years in Antarctic research base 'Maitri'. Similarly, Ramchandran and Sathe have studied the natural radioactivity in Antarctica while fire safety in Antarctica has been touched upon by Chatterjee. On the other hand, Veerbhadraiah and Jain have provided a status on environmental management services at Maitri station Additionally Tiwari has provided details on the new Indian Research Base 'Bharti' at Larsemann Hills region. It provides a one-stop reference for researchers and those working in industry and government.