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This book presents the selected papers from the 28th Annual Symposium organised by the Sydney Chapter of the Australian Geomechanics Society (AGS). The symposium brought together key stakeholders from the Australian geological and geotechnical community. The book showcases state-of-the-art practices, design approaches, recent research findings, and case histories covering a wide range of topics, including emerging technologies in ground improvement, advanced numerical models for soil consolidation, applications of machine learning, rock modelling, slope stability risk management, and innovative and sustainable considerations in design and construction. It also highlights the application of recent in-situ testing equipment and methodologies. Furthermore, the book discusses recent innovations, trends, concerns, practical challenges encountered, and solutions adopted within the field. It serves as a valuable reference for academics and industry professionals engaged in geotechnical engineering. This publication represents the collaborative efforts of numerous authors and qualified reviewers.
