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Sommario/riassunto	If you have an interest in geohazards and the repercussions of human intervention, this book will provide you with fresh insights into exciting challenges. You will learn about natural hazards like rockfall, landslides and subsidence, while also exploring safe and cost-effective construction, the mapping of contaminated sites, the remediation of post-mining landscapes and the storage of hazardous waste. Organized into three stages, this book presents the interdisciplinary field of engineering geology. It starts with the fundamentals, then explores the expansive domain of site investigation and finally applies the acquired knowledge to practical scenarios. You will also discover how engineering geology contributes to contemporary issues such as

sustainable raw material use, the green energy transition, the water crisis and climate adaptation. The concluding chapter delves into utopias, some of which are potentially feasible, like a tunnel through the Atlantic, inhabitable islands made of plastic waste or towers breaking height records. Engineering Geology navigates readers through a myriad of practical examples, showcasing both impressive projects and cautionary tales of costly failures whose causes are thoroughly examined and analyzed. The book features approximately one hundred worked-out exercises, offering readers an immersive experience across various topics. Following each chapter, practical exercises and suggestions for further reading are provided. With its excellent illustration through numerous diagrams, tables, drawings and photos, this textbook caters to engineers and geoscientists, as well as students and practitioners. This book is a supplemented translation of the original German 3rd edition "Ingenieurgeologie" by Dieter D. Genske, published by Springer-Verlag GmbH Germany, part of Springer Nature in 2021. The translation was done with the assistance of artificial intelligence (machine translation by the service DeepL.com). Subsequent human revision primarily focused on content, resulting in a stylistically distinct read compared to a conventional translation. Springer Nature continually works to advance tools for book production and related technologies to support authors. The author Dieter D. Genske worked as Humboldt Research Fellow in Kyoto, then for DMT Geo-Consultants Essen. Later, he taught at TU Delft, EPF Lausanne, ETH-Zurich and the University of Nordhausen. His projects include the IBA Emscher Park, the 2000-Watt-Society for Basel, the IBA Hamburg and the site investigation for the new parliament quarter in Berlin. In 2012, Professor Genske was awarded the European Solar Prize.

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