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Sommario/riassunto	This is an open access book. In view of growing conflicts over strategic georesources, the use of the geological subsurface in the sense of a regional resource is becoming increasingly important. In this context, georeservoirs are playing an important role for the energy transition not only as a source of energy but also as a storage facility and deep geological disposal for energy waste. The success of the energy transition also depends to a large extent on the efficient and safe use of underground resources. This book complements the previous basic book (GeomInt -- Integrity of Host Rocks) with a series of application examples in different rock formations, clay, salt, and crystalline. The methodology developed in GeomInt is used, among others, in the Mont Terri underground research laboratory (Opalinus Clay), in the large borehole test in Springen (salt rock) and in the "Reiche Zeche" teaching

and research mine (crystalline rock). In addition, new methodological developments are also taken up in experiments and models and embedded in workflows for geotechnical system analyses. The present book summarizes the results of the collaborative project "GeomInt2: Geomechanical integrity of host and barrier rocks - experiment, modeling and analysis of discontinuities" within the program: Geo Research for Sustainability (GEO: N) of the Federal Ministry of Education and Research (BMBF).