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Altri autori (Persone)	StephanssonOve <1938-> HudsonJohn (John A.) JingLanru
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Nota di contenuto	Front Cover; Coupled Thermo-Hydro-Mechanical-Chemical Processes in Geo-Systems; Copyright Page; Series Preface; Preface; About the Editors; International and Organizing Committees; Contents; Part I: Introductory Article; Chapter 1. Coupled THM processes in geological systems and the DECOVALEX project; Part II: Keynote Contributions; Chapter 2. Predicting solute transport in fractured rocks - processes, models and some concerns; Chapter 3. Modelling gas flow through deformable fractured rocks Chapter 4. Research and application on coupled T-H-M-C processes of geological media in China - A reviewChapter 5. Coupled processes and petroleum geomechanics; Chapter 6. Some THMC controls on the evolution of fracture permeability; Chapter 7. Detection of hydraulically created permeable structures in HDR/HWR reservoir by high resolution seismic mapping techniques; Chapter 8. Recent study of coupled processes in geotechnical and geoenvironmental fields in China; Theme

1. Coupled T-H-M-C Processes in Radioactive Waste Disposal Systems; Theme 1-1 DECOVALEX III/BENCHPAR Projects- Task 1
Chapter 9. The FEBEX benchmark test. Case definition and comparison of different modelling approachesChapter 10. Modelling the response of the bentonite in the FEBEX heater experiment; Chapter 11. THM simulation of the full-scale in-situ engineered barrier system experiment in Grimsel Test Site in Switzeriand; Chapter 12. Hydromechanical response of jointed host granitic rock during excavation of the FEBEX tunnel; Chapter 13. Analyses of coupled hydrological-mechanical effects during drilling of the FEBEX tunnel at Grimsel; Chapter 14. Thermomechanical model for compacted bentonite
Chapter 15. A fully coupled three-dimensional THM analysis of the FEBEX in situ test with the ROCMAS code: Prediction of THM behavior in a bentonite barrierChapter 16. A discrete approach to modelling hydromechanical rock response of FEBEX tunnel excavation (Grimsel Underground Research Laboratory, Switzerland); Theme 1-2 DECOVALEX III/BENCHPAR Projects- Task 2; Chapter 17. Measuring thermal, hydrological, mechanical, and chemical responses in the Yucca Mountain Drift Scale Test
Chapter 18. Analysis of stress and moisture induced changes in fractured rock permeability at the Yucca Mountain Drift Scale TestChapter 19. Thermal-mechanical modeling of a large-scale heater test; Chapter 20. Numerical simulation of thermal-hydrological processes observed at the Drift-Scale Heater Test at Yucca Mountain, Nevada; Chapter 21. THM analysis of a heating test in a fractured tuff; Chapter 22. Comparative analyses of predicted and measured displacements during the heating phase of the Yucca Mountain Drift Scale Test; Theme 1-3 DECOVALEX III/BENCHPAR Projects- Task 3: BMT1/WP2
Chapter 23. Building confidence in the mathematical models by calibration with a T-H-M field experiment

Sommario/riassunto

Among the most important and exciting current steps forward in geo-engineering is the development of coupled numerical models. They represent the basic physics of geo-engineering processes which can include the effects of heat, water, mechanics and chemistry. Such models provide an integrating focus for the wide range of geo-engineering disciplines. The articles within this volume were originally presented at the inaugural GeoProc conference held in Stockholm and contain a collection of unusually high quality information not available elsewhere in an edited and coherent form. This coll