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| Nota di contenuto       | Front Cover; Coupled Thermo-Hydro- Mechanical Processes of Fractured Media; Copyright Page; CONTENTS; FOREWORD; PREFACE; Chapter 1. A Conceptual Introduction to Coupled Thermo-Hydro-Mechanical Processes in Fractured Rocks; Chapter 2. Validation of Mathematical Models Against Experiments for Radioactive Waste Repositories- DECOVALEX Experience; Chapter 3. Constitutive Models for Rock Joints; Chapter 4. Coupled Thermohydroelasticity Phenomena in Variably Saturated Fractured Porous Rocks- Formulation and Numerical Solution<br>Chapter 5. Continuum Representation of Coupled Hudromechanic Processes of Fractured Media: Homogenisation and Parameter IdentificationChapter 6. FEM Analysis of Coupled THM Processes in Fractured Media with Explicit Representation of Joints; Chapter 7. |

Distinct Models for the Coupled T-H-M Processes: Theory and Implementation; Chapter 8. Modelling Approaches for Discrete Fracture Network Flow Analysis; Chapter 9. Influence of Fictitious Outer Boundaries on the Solution of External Field Problems  
Chapter 10. Generic Study of Coupled THM Processes of Nuclear Waste Repositories as Far-field Initial Boundary Value Problems (BMT1)Chapter 11. Generic Study of Coupled T-H-M Processes of Nuclear Waste Repositories as Near-field Initial Boundary Value Problems (BMT2); Chapter 12. Generic Study of Coupled T-H-M Processes in the Near-field (BMT3); Chapter 13. Mathematical Simulations of Coupled THM Processes of Fanay-Augeres Field Test by Distinct Element and Discrete Finite Element Methods  
Chapter 14. Experimental Investigation and Mathematical Simulation of Coupled T-H-M Processes of the Engineered Buffer Materials, the TC3 ProblemChapter 15. Coupled Mechanical Shear and Hydraulic Flow Behaviour of Natural Rock joints; Chapter 16. Experimental Investigation and Mathematical Simulation of a Borehole Injection Test in Deformable Rocks; Chapter 17. Experimental Study on the Coupled T-H-M Processes of Single Rock Joint with a Triaxial Test Chamber; Chapter 18. Experimental Study on Dynamic Behaviour of Rock Joints; Chapter 19. Lessons Learned from DECOVALEX  
Chapter 20. Short Description of VIPLEF CodeChapter 21. Short Description of FLAC Version 3.2; Chapter 22. Short Description of UDEC\* and 3DEC\*; Chapter 23. The NAPSAC Fracture Network Code; Chapter 24. Description of the Computer Code FRACON; Chapter 25. THAMES; Chapter 26. ROCMAS Simulator; A Themohydronechanical Computer Code; Chapter 27. Short Description of CASTEM 2000 and TRIO-EF; Chapter 28. ABAQUS; SUBJECT INDEX

## Sommario/riassunto

This work brings together the results, information and data that emerged from an international cooperative project, DECOVALEX, 1992-1995. This project was concerned with the mathematical and experimental studies of coupled thermo(T) -hydro(H) -mechanical(M) processes in fractured media related to radioactive waste disposal. The book presents, for the first time, the systematic formulation of mathematical models of the coupled T-H-M processes of fractured media, their validation against theoretical bench-mark tests, and experimental studies at both laboratory and field scales. It also present