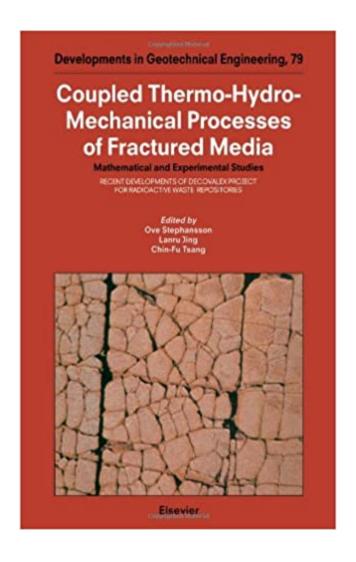


The book was found

Coupled Thermo-Hydro-Mechanical Processes Of Fractured Media: Mathematical And Experimental Studies (Developments In Geotechnical Engineering)





Synopsis

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 presents, for the first time, a comprehensive analysis of continuum, and discrete approaches to the study of the problems of (as well as a complete description of), the computer codes applied to the studies. The first two chapters provide a conceptual introduction to the coupled T-H-M processes in fractured media and the DECOVALEX project. The next seven chapters give a state-of-the-art survey of the constitutive models of rock fractures and formulation of coupled T-H-M phenomena with continuum and discontinuum approaches, and associated numerical methods. A study on the three generic Bench-Mark Test problems and six Test Case problems of laboratory and field experiments are reported in chapters 10 to 18. Chapter 19 contains lessons learned during the project. The research contained in this book will be valuable for designers, practising engineers and national waste management officials who are concerned with planning, design and performance, and safety assessments of radioactive waste repositories. Researchers and postgraduate students working in this field will also find the book of particular relevance.

Book Information

Series: Developments in Geotechnical Engineering (Book 79)

Hardcover: 596 pages

Publisher: Elsevier Science (February 24, 1997)

Language: English

ISBN-10: 0444825452

ISBN-13: 978-0444825452

Product Dimensions: 1.2 x 7 x 10 inches

Shipping Weight: 2.6 pounds

Average Customer Review: Be the first to review this item

Best Sellers Rank: #8,395,991 in Books (See Top 100 in Books) #43 inà Â Books > Textbooks >

Engineering > Nuclear Engineering #130 inà Â Books > Science & Math > Environment >

Recycling #541 in A A Books > Engineering & Transportation > Engineering > Materials & Material

Science > Strength of Materials

Download to continue reading...

Coupled Thermo-Hydro-Mechanical Processes of Fractured Media: Mathematical and Experimental Studies (Developments in Geotechnical Engineering) Perspectives on Earthquake Geotechnical Engineering: In Honour of Prof. Kenji Ishihara (Geotechnical, Geological and Earthquake Engineering) Seismic Risk and Engineering Decisions (Developments in Geotechnical Engineering) Geotechnical Engineering and Earth's Materials and Processes (Engineering in Action) Geotechnical Earthquake Engineering, Second Edition (Mechanical Engineering) The Micro-Hydro Pelton Turbine Manual: Design, Manufacture and Installation for Small-Scale Hydro-Power Geotechnical Engineers Portable Handbook, Second Edition (Mechanical Engineering) Fractured State: A Post-Apocalyptic Thriller (Fractured State Series Book 1) Heat, Bearings, and Lubrication: Engineering Analysis of Thermally Coupled Shear Flows and Elastic Solid Boundaries Shigley's Mechanical Engineering Design (McGraw-Hill Series in Mechanical Engineering) Code Check Plumbing & Mechanical 4th Edition: An Illustrated Guide to the Plumbing and Mechanical Codes (Code Check Plumbing & Mechanical: An Illustrated Guide) Social Media: Master Social Media Marketing - Facebook, Twitter, Youtube & Instagram (Social Media, Social Media Marketing, Facebook, Twitter, Youtube, Instagram, Pinterest) Principles of Geotechnical Engineering (Activate Learning with these NEW titles from Engineering!) Seismic Design and Assessment of Bridges: Inelastic Methods of Analysis and Case Studies (Geotechnical, Geological and Earthquake Engineering) Experimental Methods for Engineers (McGraw-Hill Mechanical Engineering) Sport Beyond Television: The Internet, Digital Media and the Rise of Networked Media Sport (Routledge Research in Cultural and Media Studies) Handbook of Inductively Coupled Plasma Mass Spectrometry Modal Testing, Theory, Practice, and Application (Mechanical Engineering Research Studies: Engineering Dynamics Series) Geometric Dimensioning and Tolerancing for Mechanical Design 2/E (Mechanical Engineering) Practice Problems for the Mechanical Engineering PE Exam, 13th Ed (Comprehensive Practice for the Mechanical Pe Exam)

Contact Us

DMCA

Privacy

FAQ & Help