



Modelling Rock Fracturing Processes: A Fracture Mechanics Approach Using FRACOD

Baotang Shen, Ove Stephansson, Mikael Rinne

Download now

[Click here](#) if your download doesn't start automatically

Modelling Rock Fracturing Processes: A Fracture Mechanics Approach Using FRACOD

Baotang Shen, Ove Stephansson, Mikael Rinne

Modelling Rock Fracturing Processes: A Fracture Mechanics Approach Using FRACOD Baotang Shen, Ove Stephansson, Mikael Rinne

This text book provides the theoretical background of rock fracture mechanics and displacement discontinuity methods used for the modelling of geomechanical problems. The computer program FRACOD is used to analyse the fracture problems, assessing fracture initiation and propagation in tension (Mode I), shear (Mode II) and mixed mode I and II of solid intact or jointed geomaterials. The book also presents the fundamentals of thermo-mechanical coupling and hydro-mechanical coupling. Formulations of multiple regional mechanical, thermal and hydraulic functions, which allow analyses of fracture mechanics problems for structures made of brittle, rock-like materials, are provided. In addition, instructive examples of code verification and applications are presented.

Additional material: The 2-D version of the FRACOD program, a manual on the program and a wealth of verification examples of classical problems in physics, mechanics and hydromechanics are available at <http://extras.springer.com>. A large number of applications related to civil, mining, petroleum and environmental engineering are also included.

- The first textbook available on modelling of rock fracture propagation
- Introduces readers to the fundamentals of rock fracturing
- Uses a modern style of teaching with theory, mathematical modelling and applications in one package
- The basic version of the FRACOD software, manual, verification examples and applications are available as additional material
- The FRACOD program and manual enable the readers to solve fracture propagation problems on their own

Ki-Bok Min, Department of Energy Resources Engineering,

College of Engineering, Seoul National University, Korea

“Challenging rock engineering applications require extreme conditions of stress, temperature and hydraulic pressure resulting in rock fracturing to a various extent. The FRACOD is one of few computer codes available in engineering rock mechanics that can simulate the initiation and propagation of fractures often interacting with natural fractures. Its capability has been significantly enhanced to include the hydraulic and thermal fracturing with concerted interaction from multi-national research and industry partners. My experience with the FRACOD is very positive and I am certain that its already-excellent track record will expand further in the future.”

 [Download Modelling Rock Fracturing Processes: A Fracture Me ...pdf](#)

 [Read Online Modelling Rock Fracturing Processes: A Fracture ...pdf](#)

Download and Read Free Online Modelling Rock Fracturing Processes: A Fracture Mechanics Approach Using FRACOD Baotang Shen, Ove Stephansson, Mikael Rinne

From reader reviews:

Frank Wimmer:

Do you one of people who can't read pleasant if the sentence chained inside straightway, hold on guys this aren't like that. This Modelling Rock Fracturing Processes: A Fracture Mechanics Approach Using FRACOD book is readable by simply you who hate those perfect word style. You will find the data here are arrange for enjoyable studying experience without leaving also decrease the knowledge that want to supply to you. The writer associated with Modelling Rock Fracturing Processes: A Fracture Mechanics Approach Using FRACOD content conveys prospect easily to understand by lots of people. The printed and e-book are not different in the information but it just different available as it. So , do you still thinking Modelling Rock Fracturing Processes: A Fracture Mechanics Approach Using FRACOD is not loveable to be your top list reading book?

Kevin Miller:

The experience that you get from Modelling Rock Fracturing Processes: A Fracture Mechanics Approach Using FRACOD is a more deep you rooting the information that hide in the words the more you get interested in reading it. It does not mean that this book is hard to understand but Modelling Rock Fracturing Processes: A Fracture Mechanics Approach Using FRACOD giving you thrill feeling of reading. The copy writer conveys their point in selected way that can be understood by simply anyone who read that because the author of this book is well-known enough. This book also makes your own vocabulary increase well. So it is easy to understand then can go with you, both in printed or e-book style are available. We propose you for having this specific Modelling Rock Fracturing Processes: A Fracture Mechanics Approach Using FRACOD instantly.

Helen Jackson:

Do you have something that that suits you such as book? The book lovers usually prefer to pick book like comic, limited story and the biggest the first is novel. Now, why not seeking Modelling Rock Fracturing Processes: A Fracture Mechanics Approach Using FRACOD that give your enjoyment preference will be satisfied simply by reading this book. Reading addiction all over the world can be said as the opportunity for people to know world considerably better then how they react to the world. It can't be explained constantly that reading habit only for the geeky man but for all of you who wants to become success person. So , for all you who want to start examining as your good habit, you may pick Modelling Rock Fracturing Processes: A Fracture Mechanics Approach Using FRACOD become your starter.

Clarice Stephens:

E-book is one of source of expertise. We can add our information from it. Not only for students but also native or citizen will need book to know the upgrade information of year to year. As we know those publications have many advantages. Beside we add our knowledge, may also bring us to around the world.

By book Modelling Rock Fracturing Processes: A Fracture Mechanics Approach Using FRANCOD we can take more advantage. Don't that you be creative people? To be creative person must want to read a book. Just choose the best book that ideal with your aim. Don't end up being doubt to change your life with this book Modelling Rock Fracturing Processes: A Fracture Mechanics Approach Using FRANCOD. You can more inviting than now.

**Download and Read Online Modelling Rock Fracturing Processes:
A Fracture Mechanics Approach Using FRANCOD Baotang Shen,
Ove Stephansson, Mikael Rinne #DCFKBJ0ZGMH**

Read Modelling Rock Fracturing Processes: A Fracture Mechanics Approach Using FRACOD by Baotang Shen, Ove Stephansson, Mikael Rinne for online ebook

Modelling Rock Fracturing Processes: A Fracture Mechanics Approach Using FRACOD by Baotang Shen, Ove Stephansson, Mikael Rinne Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Modelling Rock Fracturing Processes: A Fracture Mechanics Approach Using FRACOD by Baotang Shen, Ove Stephansson, Mikael Rinne books to read online.

Online Modelling Rock Fracturing Processes: A Fracture Mechanics Approach Using FRACOD by Baotang Shen, Ove Stephansson, Mikael Rinne ebook PDF download

Modelling Rock Fracturing Processes: A Fracture Mechanics Approach Using FRACOD by Baotang Shen, Ove Stephansson, Mikael Rinne Doc

Modelling Rock Fracturing Processes: A Fracture Mechanics Approach Using FRACOD by Baotang Shen, Ove Stephansson, Mikael Rinne Mobipocket

Modelling Rock Fracturing Processes: A Fracture Mechanics Approach Using FRACOD by Baotang Shen, Ove Stephansson, Mikael Rinne EPub