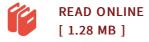




Modeling, Simulation, and Optimization of Geological Carbon Storage

By Zheming Zhang

SPS Apr 2014, 2014. Taschenbuch. Book Condition: Neu. 220x150x12 mm. Neuware - Geological Carbon Storage (GCS) is one of the most promising technologies to address the issue of excessive anthropogenic CO2 emissions into the atmosphere due to fossil fuel combustion. For GCS, the saline aquifers are considered very attractive compared to other options because of their huge sequestration capacity in U.S. and other parts of the world. However, in order to fully exploit their potential, the injection strategies need to be investigated that can address the issues of both the CO2 storage efficiency and safety along with their economic feasibility. Numerical simulations can be used to determine these strategies before the deployment of full scale sequestration in saline aquifers. This book presents the physical models, numerical simulation techniques and genetic algorithm based optimization method for CO2 sequestration in saline aguifers. Several model examples, benchmark studies as well as examples of actual large scale sequestration efforts in saline aquifers worldwide are presented and compared with available field data. The goal of the book is to provide important insights in physical modeling as well uncertainties associated with the numerical simulation of GCS. 204 pp. Englisch.



Reviews

It is an awesome publication which i actually have ever read through. it had been writtern really properly and valuable. I found out this book from my i and dad recommended this pdf to discover.

-- Doyle Schmeler

This book is definitely not simple to begin on studying but quite fun to see. I actually have read and that i am sure that i will gonna read through yet again once again in the foreseeable future. It is extremely difficult to leave it before concluding, once you begin to read the book.

-- Brennan Koelpin