Introduction to Groundwater Modeling: Finite Difference and Finite Element Methods, Herbert F. Wang, Mary P. Anderson, Academic Press, 1995, 0080571948, 9780080571942, 237 pages. The dramatic advances in the efficiency of digital computers during the past decade have provided hydrologists with a powerful tool for numerical modeling of groundwater systems. Introduction to Groundwater Modeling presents a broad, comprehensive overview of the fundamental concepts and applications of computerized groundwater modeling. The book covers both finite difference and finite element methods and includes practical sample programs that demonstrate theoretical points described in the text. Each chapter is followed by problems, notes, and references to additional information. This volume will be indispensable to students in introductory groundwater modeling courses as well as to groundwater professionals wishing to gain a complete introduction to this vital subject. Key Features: * Systematic exposition of the basic ideas and results of Hilbert space theory and functional analysis * Great variety of applications that are not available in comparable books * Different approach to the Lebesgue integral, which makes the theory easier, more intuitive, and more accessible to undergraduate students.

DOWNLOAD FULL VERSION HERE


Designing Groundwater Models With Windows Software, William Clarence Walton, 1995, Science, 196 pages. This book explains how to design a groundwater model using the accompanying customized DesignMod software. DesignMod does not require a digitizer, but instead uses the mouse....

Groundwater Modelling An Introduction with Sample Programs in BASIC, W. Kinzelbach, Jan 1, 1986, Computers, 332 pages. With the growing concern about groundwater resources both with respect to quantity and quality, the need for groundwater modelling tools is increasing. Although there are a ....


Analytic Element Modeling of Groundwater Flow, H.M. Haitjema, Henk M. Haitjema, 1995, Electronic books, 394 pages. Modeling has become an essential tool for the groundwater hydrologist. Where field data is limited, the analytic element method (AEM) is rapidly becoming the modeling method of....


Groundwater Modeling by the Finite Element Method, J. D. Istok, Jan 1, 1989, Science, 495 pages. The finite element method is now widely used to solve a variety of important problems in the field of groundwater hydrology. Thus a clear understanding of the method is....


Mixed and hybrid finite elements methods, Franco Brezzi, Michel Fortin, 1991, 350 pages. Research on non-standard finite element methods is evolving rapidly and in this text Brezzi and Fortin give a general framework in which the development is taking place. The....

Ground Water Models Scientific and Regulatory Applications, Committee on Ground Water Modeling Assessment, National Research Council, Jan 1, 1990, Science, 305 pages. The discovery of toxic pollution at Love Canal brought ground water contamination to the forefront of public attention. Since then, ground water science and modeling have ....

Groundwater Science , Charles R. Fitts, Nov 5, 2012, Science, 692 pages. Groundwater Science, 2E, covers groundwater’s role in the hydrologic cycle and in water supply, contamination, and construction issues. It is a valuable resource for students ....


Numerical Models in Groundwater Pollution , Karel Kovarik, May 25, 2000, Science, 221 pages. Mathematical models are the effective tool to solve different tasks predicting pollutant movement. The finite difference method is the oldest, but still remains widely used in ....