Book reviews 305

- Spill modelling (8).
- Recent spill experiences (4).
- Papers from poster presentations (2).

I look forward every year to receiving these proceedings which are published simultaneously with the conference. The papers are all peer reviewed.

G.f. Bennett

doi: 10.1016/S0304-3894(03)00216-4

## **Groundwater Modeling Using Geographical Information Systems**

George F. Pinder, John Wiley & Sons Inc., New York, NY, 2002, US\$90, 244 pp. + CD-ROM ISBN:0-471-08498-0

According to Pinder, "The purpose of this book is to present elements of the art of groundwater flow and transport modeling using tools generally identified with geographic information systems (GIS)." The advantage of GIS technology is that it "... allows for swift organization, quantification, and interpretation of large quantities of geohydrogeological data with computer accuracy and minimal risk of human error." This book evolved from a course Pinder taught on groundwater flow and transport modeling at Princeton University. He added the GIS concept while at the University of Vermont.

The book is divided into three major sections.

- Flow modeling
- Transport modeling
- Finite-element versus finite-difference simulation

As an example of the use of the model presented in this book, Pinder discusses contamination at the Tucson International Airport for trichloroethylene as a major contaminant of concern. Throughout the book, he works through the problem of modeling the plume giving numerous computer screen printouts of his work.

Accompanying the book is a CD-ROM that contains modeling software for groundwater. The programs found in this CD-ROM are as follows: MODFLOW, MOC3D, MT3D, MODPATH, ZONEBUDGET, HST2D, SUTRA, ModelViewer, and GWChart.

G.F. Bennett

doi: 10.1016/S0304-3894(03)00217-6