1. Record Nr.   UNINA9910790358403321

   Autore   Little Keith W.

   Titolo   Environmental fate and transport analysis with compartment modeling
                        / / Keith W. Little

   Pubbl/distr/stampa   Boca Raton, Fla. : , : CRC Press, , 2012

   ISBN   0-429-11201-7
                        1-138-07413-6
                        1-4398-8797-7

   Descrizione fisica   1 online resource (239 p.)

   Classificazione   SCI013000SCI026000TEC010000

   Disciplina   363.7301/51

   Soggetti   Pollution - Mathematical models
                        Transport theory - Mathematical models
                        Diffusion - Mathematical models
                        Cross-media pollution
                        Compartmental analysis (Biology)
                        Pollutants
                        Differential equations

   Lingua di pubblicazione   Inglese

   Formato   Materiale a stampa

   Livello bibliografico   Monografia

   Note generali   Description based upon print version of record.

   Nota di bibliografia Includes bibliographical references and index.

   Nota di contenuto   Front Cover; Contents; Preface; Acknowledgments; Author; Chapter 1 -
                        Introduction; Chapter 3 - Compartment Approach, Transport
                        Mechanisms, and Boundary Conditions; Chapter 4 - Source and Sink
                        Terms; Chapter 5 - Solution Techniques for Steady-State Problems;
                        Chapter 6 - Solution Techniques for Dynamic Problems; Appendix:
                        Introduction to Matrices and Matrix Operations; Back Cover

   Sommario/riassunto   This book examines mathematical modeling and computer simulations
                        that estimate the distribution of chemical contaminants in
                        environmental media in time and space. Discussing various modeling
                        issues in a single volume, this text provides an introduction to a
                        specific numerical modeling technique called the compartment
                        approach and offers a practical user's guide to the GEM. It includes the
                        Generic Environmental Model (GEM) software package, which
                        implements the techniques described. The author presents algorithms

for solving linear and nonlinear systems of algebraic equations as well as systems of linear and nonlinear partial differential equations--