

Chemical Engineering Computation with MATLAB (R)

Most problems encountered in chemical engineering are sophisticated and interdisciplinary. Thus, it is important for today's engineering students, researchers, and professionals to be proficient in the use of software tools for problem solving. MATLAB® is one such tool that is distinguished by the ability to perform calculations in vector-matrix form, a large library of built-in functions, strong structural language, and a rich set of graphical visualization tools. Furthermore, MATLAB integrates computations, visualization and programming in an intuitive, user-friendly environment. Chemical Engineering Computation with MATLAB® presents basic to advanced levels of problem-solving techniques using MATLAB as the computation environment. The book provides examples and problems extracted from core chemical engineering subject areas and presents a basic instruction in the use of MATLAB for problem solving. It provides many examples and exercises and extensive problem-solving instruction and solutions for various problems. Solutions are developed using fundamental principles to construct mathematical models and an equation-oriented approach is used to generate numerical results. A wealth of examples demonstrate the implementation of various problem-solving approaches and methodologies for problem formulation, problem solving, analysis, and presentation, as well as visualization and documentation of results. This book also provides aid with advanced problems that are often encountered in graduate research and industrial operations, such as nonlinear regression, parameter estimation in differential systems, two-point boundary value problems and partial differential equations and optimization.



129,50 €

121,03 € (zzgl. MwSt.)

Nicht mehr lieferbar

Artikelnummer: 9781138039896

Medium: Buch

ISBN: 978-1-138-03989-6

Verlag: Taylor & Francis Ltd

Erscheinungstermin: 02.08.2017

Sprache(n): Englisch

Auflage: 1. Auflage 2017

Produktform: Gebunden

Gewicht: 1340 g

Seiten: 608

Format (B x H): 261 x 185 mm

