



Modeling and Analysis of Chemical Engineering Processes

By K Balu, K. Padmanabhan

I.K. International Publishing House Pvt. Ltd., 2007. Paperback. Book Condition: New. 18cm x 24cm. The chemical process industry faces serious problems with regard to new materials and efficient methods of production due to increasing costs of energy, stringent environmental regulations and global competition.A clear understanding of the processes is required in order to solve these problems. One way is through crisp modeling method; another is through an optimal operation of the process to improve profitability and efficiency. The book is in two parts. The first part discusses the methods of modeling chemical engineering processes through well known mathematical methods involving numerical calculations. This includes the recent concepts of Fuzzy logic and neural nets. The second part describes the efficient optimization methods, which are available for the effective application in many chemical processes. This involves methods of search for extrema as well as optimization, with and without constraint relations.Most books on nonlinear programming are of theoretical type, and the exact procedures of computation are often obscure. But in this book, a number of problems have been worked out. In addition to this, computer programs are included for almost all the topics. Due to the intricacy of optimization programs, the flow charts and...



Reviews

Definitely one of the best book I actually have ever go through. Sure, it can be perform, nonetheless an amazing and interesting literature. I found out this pdf from my dad and i suggested this book to discover. -- Ms. Chanel Streich

It in one of my personal favorite book. Sure, it is engage in, continue to an amazing and interesting literature. I am quickly could possibly get a enjoyment of looking at a published book. -- Wellington Rosenbaum