



## Computer Methods in Chemical Engineering (Paperback)

By Nayef Ghasem

Taylor Francis Inc, United States, 2011. Paperback. Condition: New. Language: English . Brand New Book. While various software packages have become quite useful for performing unit operations and other kinds of processes in chemical engineering, the fundamental theory and methods of calculation must also be understood in order to effectively test the validity of these packages and verify the results. Computer Methods in Chemical Engineering presents the most commonly used simulation software, along with the theory involved. It covers chemical engineering thermodynamics, fluid mechanics, material and energy balances, mass transfer operations, reactor design, and computer applications in chemical engineering. Through this book, students learn: \* What chemical engineers do \* The functions and theoretical background of basic chemical engineering unit operations \* How to simulate chemical processes using software packages \* How to size chemical process units manually and with software \* How to fit experimental data \* How to solve linear and nonlinear algebraic equations as well as ordinary differential equations Along with exercises and references, each chapter contains a theoretical description of process units followed by numerous examples that are solved step by step via hand calculations and computer simulation using Hysys/Unisim, PRO/II, Aspen Plus, and SuperPro Designer....



## Reviews

This ebook is fantastic. It is probably the most awesome book i actually have read. I found out this ebook from my i and dad suggested this book to understand.

## -- Ethel Mills

Extensive guide! Its such a very good read. I really could comprehended almost everything out of this created e ebook. You will like how the writer write this ebook.

-- Katherine Feil