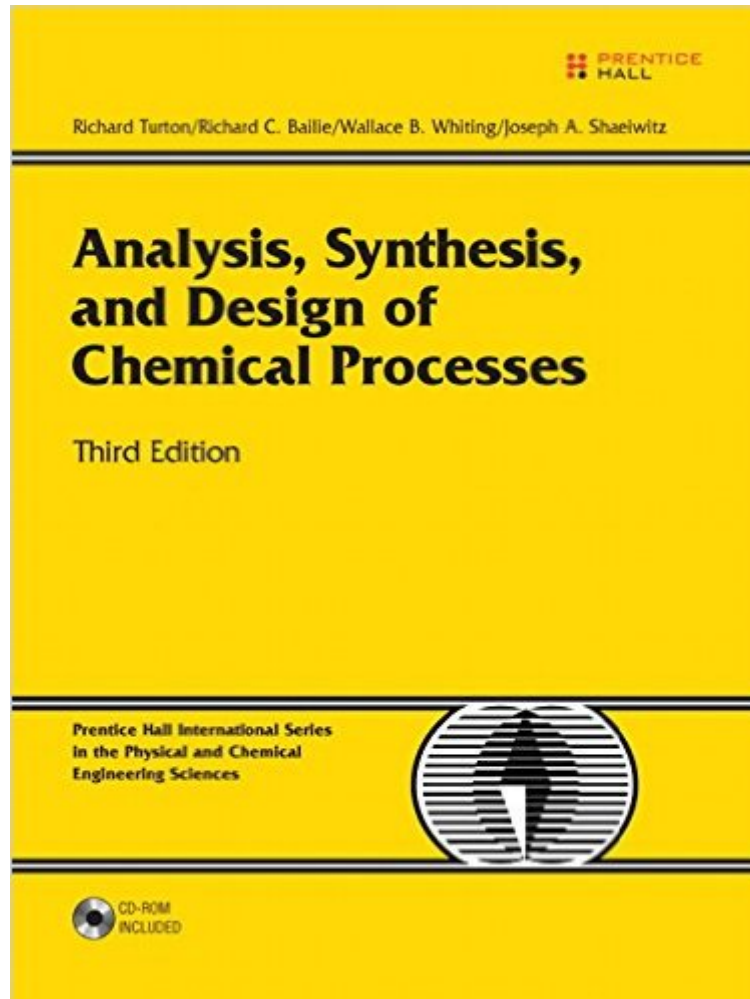The book was found

Analysis, Synthesis And Design Of Chemical Processes (3rd Edition)

Synopsis

The Leading Integrated Chemical Process Design Guide: Now with New Problems, New Projects, and More More than ever, effective design is the focal point of sound chemical engineering. Analysis, Synthesis, and Design of Chemical Processes, Third Edition, presents design as a creative process that integrates both the big picture and the small detailsâ "and knows which to stress when, and why. Realistic from start to finish, this book moves readers beyond classroom exercises into open-ended, real-world process problem solving. The authors introduce integrated techniques for every facet of the discipline, from finance to operations, new plant design to existing process optimization. This fully updated Third Edition presents entirely new problems at the end of every chapter. It also adds extensive coverage of batch process design, including realistic examples of equipment sizing for batch sequencing; batch scheduling for multi-product plants; improving production via intermediate storage and parallel equipment; and new optimization techniques specifically for batch processes. Coverage includes Conceptualizing and analyzing chemical processes: flow diagrams, tracing, process conditions, and more Chemical process economics: analyzing capital and manufacturing costs, and predicting or assessing profitability Synthesizing and optimizing chemical processing: experience-based principles, BFD/PFD, simulations, and more Analyzing process performance via I/O models, performance curves, and other tools Process troubleshooting and â œdebottleneckingâ • Chemical engineering design and society: ethics, professionalism, health, safety, and new â œgreen engineeringâ • techniques Participating successfully in chemical engineering design teams Analysis, Synthesis, and Design of Chemical Processes, Third Edition, draws on nearly 35 years of innovative chemical engineering instruction at West Virginia University. It includes suggested curricula for both single-semester and year-long design courses; case studies and design projects with practical applications; and appendixes with current equipment cost data and preliminary design information for eleven chemical processesâ "including seven brand new to this edition.   About the CD-ROM The CD-ROM contains the latest version of CAPCOST, a powerful tool for evaluating fixed capital investment, full process economics, and profitabilityâ "now expanded with cost data for conveyors, crystallizers, dryers, dust collectors, filters, mixers, reactors, and screens. It also contains the HENSAD tool for constructing temperature interval, cascade, and temperature enthalpy diagrams; estimating optimal approach temperatures; and designing heat exchanger networks. Also provided: additional chapters on outcomes assessment, written and oral communications, and a written report case study, as well as six complete student design projects.

Book Information

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Customer Reviews

I really like how they focused on Hysys which is what is mostly used in industry. This is a great book for undergrads and grad taking designs in chemical engineering.

This is a highly referenced book in the subject of engineering economics for chemical engineers, but I feel like the section is lacking in content. The other parts of the textbook are decent such as describing block flow diagrams, process flow diagram, and cost scale up. Specifically, the program they provide CapCOST should be updated from its current 2001 status. The program has a lot of things going wrong such as not calculating the grass roots cost. It should have a function to calculate the bare module cost within it.

Pretty good book. The condition of the book was great. There are parts of the context that I may disregard and find elsewhere, but it's easy to read and informative. One problem I've run into so far is that there are a few examples where the values used are not referenced where they came from or what they are (not even units) and it may take awhile to figure out.

It's a very helpful book for getting a real and useful information about the common tasks and activities in the engineering design

This is a good book to first be learning process design off of. Very clear in its descriptions, good

amounts of information on all aspects of design (cost, analysis, heuristics, team...). Secondary material may need to be added in the future, but it's a great start.

This book contains brief information, that is easy to read, understand and keep in mind. My main interest was at the economic section of the textbook. And I found there some information from Perry and other references, but in this case it contained most concise and useful information, with lot of examples how to use formulas and calculations, performed in the text.Unfortunately, CD was broken, but readable. There are else two of the textbook chapters on the CD, and also two programs, and videoguide how to use these programs. I found CAPCOST program very useful for basic estimation of the process economics.The only upsetting for me thing was that almost all of the processes, that are widely described in the textbook, are organic or petroleum processes, and no examples of inorganic processes.But the book is great!

Analysis, Synthesis and Design of Chemical Processes (3rd Edition) 3rd (third) Edition by Turton, Richard, Bailie, Richard C., Whiting, Wallace B., Sh [2009] Analysis, Synthesis and Design of Chemical Processes (4th Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) 4th (fourth) Edition by Turton, Richard, Bailie, Richard, Whiting, Wallace B., Shaei [2012] Analysis, Synthesis and Design of Chemical Processes (3rd Edition) Introduction to Chemical Processes: Principles, Analysis, Synthesis Kinetics of Chemical Processes: Butterworth-Heinemann Series in Chemical Engineering Advances in Chemical Physics, Volume 15: Stochastic Processes in Chemical Physics (v. 15) Chemical Engineering Design and Analysis: An Introduction (Cambridge Series in Chemical Engineering) Analysis of Engineering Design Studies for Demilitarization of Assembled Chemical Weapons at Pueblo Chemical Depot (The Compass series) Structural Analysis and Synthesis: A Laboratory Course in Structural Geology 3rd (third) edition by Rowland, Stehen M., Duebendorfer, Ernest M., Schiefelbein, I published by Wiley-Blackwell (2007) [Spiral-bound] Mechanism Design: Analysis and Synthesis (4th Edition) Radiochemistry and Nuclear Methods of Analysis (Chemical Analysis: A Series of Monographs on Analytical Chemistry and Its Applications) Analysis and Purification Methods in Combinatorial Chemistry (Chemical Analysis: A Series of Monographs on Analytical Chemistry and Its Applications) Design of Machinery: An Introduction to the Synthesis and Analysis of Mechanisms and Machines The Organic Chemistry of Drug Synthesis, Volume 3 (Organic Chemistry Series of Drug Synthesis) Handbook of Petroleum Product Analysis (Chemical Analysis: A Series of Monographs on Analytical Chemistry and Its Applications) Handbook of Coal Analysis (Chemical

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