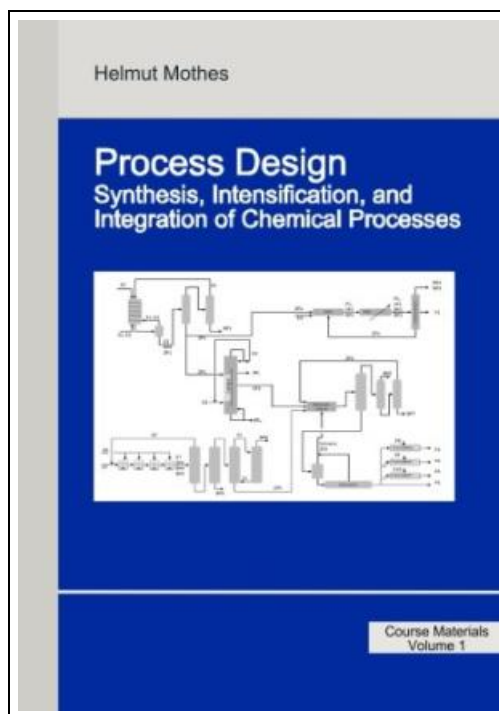


Process Design: Synthesis, Intensification, and Integration of Chemical Processes



Filesize: 7.36 MB

Reviews

This publication will be worth purchasing. It typically is not going to cost a lot of. Its been designed in an exceptionally straightforward way and it is just following i finished reading through this pdf through which actually changed me, change the way i believe.
(Irving Roob)

PROCESS DESIGN: SYNTHESIS, INTENSIFICATION, AND INTEGRATION OF CHEMICAL PROCESSES



Dr. Helmut Mothes. Paperback. Condition: New. 188 pages. Dimensions: 9.6in. x 6.7in. x 0.4in. This book promotes process design strategies and methods to chemical engineering students and encourages experienced engineers to reflect on and perhaps challenge their daily approach to process design. The production facilities and supply chains of the chemical industry represent complex, global systems built on sophisticated technological processes. While process design of the past could rely on steadily growing economies creating a predictable framework of product demand, raw material availability, and technological progress, today global competition, shorter product cycles, unreliable raw material supplies, and emerging, disruptive technologies create new challenges to the design of efficient, flexible, and sustainable processes. A holistic design methodology has to take care of these challenges. Process design can build on many excellent chemical engineering textbooks focusing on unit operations, process intensification, or process integration. Only a few books address the creative step finding an initial process structure. Process design methodologies constitute the main topic of this book. A special focus is given to the search for an optimal process structure (process synthesis), since an inferior process structure cannot be upgraded into an optimal process during later extensive optimization of process parameters regardless of the effort. The design methodology illustrated in the textbook first outlines alternate strategies to find an initial process structure (hierarchical approach or superstructure concepts with heuristic rules or mixed integer non-linear programming). The role of design targets to guide a process designer is shown for energy integration and capital investment. In a next design step, process intensification and integration are used to improve the initial process structure with respect to unit operation efficiencies (heating, cooling, and mixing) and process synergies (heat-power integration, reaction distillation, dividing wall column, etc.) resulting in superior processes. The last step of the process design...



[Read Process Design: Synthesis, Intensification, and Integration of Chemical Processes Online](#)



[Download PDF Process Design: Synthesis, Intensification, and Integration of Chemical Processes](#)

Other PDFs



Adobe Photoshop 7.0 - Design Professional

Book Condition: Brand New. Book Condition: Brand New.

[Save Book »](#)



Book Finds: How to Find, Buy, and Sell Used and Rare Books (Revised)

Perigee. PAPERBACK. Book Condition: New. 0399526544 Never Read-12+ year old Paperback book with dust jacket-may have light shelf or handling wear-has a price sticker or price written inside front or back cover-publishers mark-Good Copy- I...

[Save Book »](#)



Using Adobe InDesign CS, Photoshop CS, and Illustrator CS - Design Professional

Book Condition: Brand New. Book Condition: Brand New.

[Save Book »](#)



Design Collection Revealed: Adobe InDesign CS6, Photoshop CS6 Illustrator CS6

Cengage Learning, Inc, United States, 2012. Paperback. Book Condition: New. 236 x 190 mm. Language: English . Brand New Book. THE DESIGN COLLECTION REVEALED provides comprehensive step-by-step instruction and in-depth explanation for three of today...

[Save Book »](#)



Design Collection Creative Cloud Revealed Update (Mixed media product)

Cengage Learning, Inc, United States, 2013. Mixed media product. Book Condition: New. 239 x 193 mm. Language: English . Brand New Book. Your Adobe Creative Cloud package includes two components: 1) Online access to Adobe...

[Save Book »](#)