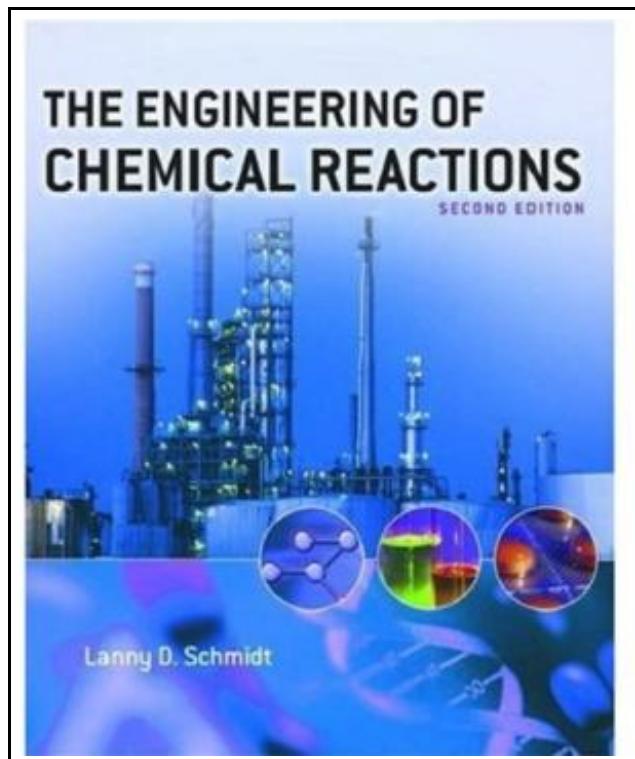


The Engineering of Chemical Reactions (Topics in Chemical Engineering)



Filesize: 6.66 MB

Reviews

The book is fantastic and great. it was written really perfectly and useful. I discovered this pdf from my i and dad suggested this book to learn.

(Dr. Cordie Upton III)

THE ENGINEERING OF CHEMICAL REACTIONS (TOPICS IN CHEMICAL ENGINEERING)

[DOWNLOAD PDF](#)

To save **The Engineering of Chemical Reactions (Topics in Chemical Engineering)** PDF, make sure you click the hyperlink below and save the document or have accessibility to additional information which might be relevant to THE ENGINEERING OF CHEMICAL REACTIONS (TOPICS IN CHEMICAL ENGINEERING) ebook.

Oxford University Press, 2004. Book Condition: New. Brand New, Unread Copy in Perfect Condition. A+ Customer Service! Summary: Each Chapter ends with Problems. Most chapters end with References.Preface to the Second EditionPreface to the First EditionPART I: FUNDAMENTALS1. Introduction1.1. Chemical Reactors1.2. Chemical Reaction Engineering1.3. What Do We Need To Know?1.4. Industrial Processes1.5. Modeling1.6. Sources2. Reaction Rates, The Batch Reactor, and The Real World2.1. Chemical Reactions2.2. Multiple Reactions2.3. Reaction Rates2.4. Approximate Reactions2.5. Rate Coefficients2.6. Elementary Reactions2.7. Stoichiometry2.8. Reaction Rates Near Equilibrium2.9. Reactor Mass Balances2.10. The Batch Reactor2.11. Variable Density2.12. Chemical Reactors2.13. Thermodynamics and Reactors2.14. Adiabatic Reactor Temperature2.15. Chemical Equilibrium2.16. Petroleum Refining2.17. Polyester from Refinery Products and Natural Gas2.18. "What Should I Do When I Don't Have Reaction Rates?"2.19. Reaction-Rate Data2.20. Summary3. Single Reactions in Continuous Isothermal Reactors3.1. Continuous Reactors3.2. The Continuous Stirred Tank Reactor3.3. Conversion in a Constant-Density CSTR3.4. The Plug-Flow Tubular Reactor3.5. Conversion in a Constant-Density PFTR3.6. Comparison Between Batch, CSTR, and PFTR3.7. The 1/r Plot3.8. Semibatch Reactors3.9. Variable-Density Reactors3.10. Space Velocity and Space Time3.11. Chemical Reactors in a Series3.12. Autocatalytic Reactions3.13. Reversible Reactions3.14. Transients in Continuous Reactions3.15. Some Important Single-Reaction Processes: Alkane Activation3.16. Synthesis Gas Reactions3.17. Staged Reactors3.18. The Major Chemical Companies3.19. Reactor Design for a Single Reaction3.20. Notation4. Multiple Reactions in Continuous Reactors4.1. Some Important Industrial Chemical Processes4.2. The Petrochemical Industry4.3. Olefins4.4. Mass Balances4.5. Conversion, Selectivity, and Yield4.6. Complex Reaction Networks4.7. Series Reactions4.8. Parallel Reactions4.9. Multiple Reactions with Variable Density4.10. Real Reaction Systems and Modeling4.11. Approximate Rate Expressions for Multiple-Reaction Systems4.12. Simplified Reactions4.13. Reaction Mechanisms4.14. Collision Theory of Bimolecular Reactions4.15. Activated Complex Theory4.16. Designing Reactors for Multiple Reactions5. Nonisothermal Reactors5.1. Heat Generation and Removal5.2. Energy Balance in a CSTR5.3. Energy Balance in a PFTR5.4. Equations to be Solved5.5. Heat Removal or Addition to Maintain a Reactor Isothermal5.6. Adiabatic Reactors5.7. Trajectories and Phase-Plane Plots5.8. Trajectories of Wall-Cooled Reactors5.9. Exothermic...

[Read The Engineering of Chemical Reactions \(Topics in Chemical Engineering\)](#)[Online](#)[Download PDF The Engineering of Chemical Reactions \(Topics in Chemical Engineering\)](#)

Other eBooks



[PDF] **Grandpa Spanielson's Chicken Pox Stories: Story #1: The Octopus (I Can Read Book 2)**

Click the web link under to download "Grandpa Spanielson's Chicken Pox Stories: Story #1: The Octopus (I Can Read Book 2)" document.

[Save ePub »](#)



[PDF] **Star Flights Bedtime Spaceship: Journey Through Space While Drifting Off to Sleep**

Click the web link under to download "Star Flights Bedtime Spaceship: Journey Through Space While Drifting Off to Sleep" document.

[Save ePub »](#)



[PDF] **The Web Collection Revealed, Premium Edition: Adobe Dreamweaver CS6, Flash CS6, and Photoshop CS6 (Stay Current with Adobe Creative Cloud)**

Click the web link under to download "The Web Collection Revealed, Premium Edition: Adobe Dreamweaver CS6, Flash CS6, and Photoshop CS6 (Stay Current with Adobe Creative Cloud)" document.

[Save ePub »](#)



[PDF] **You Shouldn't Have to Say Goodbye: It's Hard Losing the Person You Love the Most**

Click the web link under to download "You Shouldn't Have to Say Goodbye: It's Hard Losing the Person You Love the Most" document.

[Save ePub »](#)



[PDF] **Maisy's Christmas Tree**

Click the web link under to download "Maisy's Christmas Tree" document.

[Save ePub »](#)



[PDF] **My Windows 8.1 Computer for Seniors (2nd Revised edition)**

Click the web link under to download "My Windows 8.1 Computer for Seniors (2nd Revised edition)" document.

[Save ePub »](#)