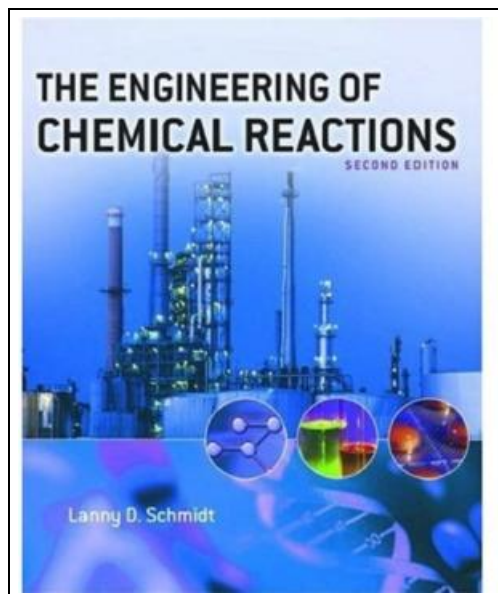


The Engineering of Chemical Reactions (Topics in Chemical Engineering)



Filesize: 5.59 MB

Reviews

Merely no words to spell out. I am quite late in start reading this one, but better then never. I am happy to explain how this is actually the very best publication we have go through within my personal daily life and can be he best ebook for at any time.

(Althea Christiansen)

THE ENGINEERING OF CHEMICAL REACTIONS (TOPICS IN CHEMICAL ENGINEERING)



To read **The Engineering of Chemical Reactions (Topics in Chemical Engineering)** PDF, please click the button listed below and save the ebook or gain access to additional information that are related 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 Edition Preface to the First Edition PART I: FUNDAMENTALS 1. Introduction 1.1. Chemical Reactors 1.2. Chemical Reaction Engineering 1.3. What Do We Need To Know? 1.4. Industrial Processes 1.5. Modeling 1.6. Sources 2. Reaction Rates, The Batch Reactor, and The Real World 2.1. Chemical Reactions 2.2. Multiple Reactions 2.3. Reaction Rates 2.4. Approximate Reactions 2.5. Rate Coefficients 2.6. Elementary Reactions 2.7. Stoichiometry 2.8. Reaction Rates Near Equilibrium 2.9. Reactor Mass Balances 2.10. The Batch Reactor 2.11. Variable Density 2.12. Chemical Reactors 2.13. Thermodynamics and Reactors 2.14. Adiabatic Reactor Temperature 2.15. Chemical Equilibrium 2.16. Petroleum Refining 2.17. Polyester from Refinery Products and Natural Gas 2.18. "What Should I Do When I Don't Have Reaction Rates?" 2.19. Reaction-Rate Data 2.20. Summary 3. Single Reactions in Continuous Isothermal Reactors 3.1. Continuous Reactors 3.2. The Continuous Stirred Tank Reactor 3.3. Conversion in a Constant-Density CSTR 3.4. The Plug-Flow Tubular Reactor 3.5. Conversion in a Constant-Density PFTR 3.6. Comparison Between Batch, CSTR, and PFTR 3.7. The $1/r$ Plot 3.8. Semibatch Reactors 3.9. Variable-Density Reactors 3.10. Space Velocity and Space Time 3.11. Chemical Reactors in a Series 3.12. Autocatalytic Reactions 3.13. Reversible Reactions 3.14. Transients in Continuous Reactions 3.15. Some Important Single-Reaction Processes: Alkane Activation 3.16. Synthesis Gas Reactions 3.17. Staged Reactors 3.18. The Major Chemical Companies 3.19. Reactor Design for a Single Reaction 3.20. Notation 4. Multiple Reactions in Continuous Reactors 4.1. Some Important Industrial Chemical Processes 4.2. The Petrochemical Industry 4.3. Olefins 4.4. Mass Balances 4.5. Conversion, Selectivity, and Yield 4.6. Complex Reaction Networks 4.7. Series Reactions 4.8. Parallel Reactions 4.9. Multiple Reactions with Variable Density 4.10. Real Reaction Systems and Modeling 4.11. Approximate Rate Expressions for Multiple-Reaction Systems 4.12. Simplified Reactions 4.13. Reaction Mechanisms 4.14. Collision Theory of Bimolecular Reactions 4.15. Activated Complex Theory 4.16. Designing Reactors for Multiple Reactions 5. Nonisothermal Reactors 5.1. Heat Generation and Removal 5.2. Energy Balance in a CSTR 5.3. Energy Balance in a PFTR 5.4. Equations to be Solved 5.5. Heat Removal or Addition to Maintain a Reactor Isothermal 5.6. Adiabatic Reactors 5.7. Trajectories and Phase-Plane Plots 5.8. Trajectories of Wall-Cooled Reactors 5.9. Exothermic...



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



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



[Download ePub The Engineering of Chemical Reactions \(Topics in Chemical Engineering\)](#)

Related eBooks



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

Click the hyperlink beneath to get "You Shouldn't Have to Say Goodbye: It's Hard Losing the Person You Love the Most" PDF document.

[Read ePub »](#)



[PDF] The Tale of Jemima Puddle-Duck - Read it Yourself with Ladybird: Level 2

Click the hyperlink beneath to get "The Tale of Jemima Puddle-Duck - Read it Yourself with Ladybird: Level 2" PDF document.

[Read ePub »](#)



[PDF] California Version of Who Am I in the Lives of Children? an Introduction to Early Childhood Education, Enhanced Pearson Etext with Loose-Leaf Version -- Access Card Package

Click the hyperlink beneath to get "California Version of Who Am I in the Lives of Children? an Introduction to Early Childhood Education, Enhanced Pearson Etext with Loose-Leaf Version -- Access Card Package" PDF document.

[Read ePub »](#)



[PDF] Who Am I in the Lives of Children? an Introduction to Early Childhood Education, Enhanced Pearson Etext with Loose-Leaf Version -- Access Card Package

Click the hyperlink beneath to get "Who Am I in the Lives of Children? an Introduction to Early Childhood Education, Enhanced Pearson Etext with Loose-Leaf Version -- Access Card Package" PDF document.

[Read ePub »](#)



[PDF] Who Am I in the Lives of Children? an Introduction to Early Childhood Education with Enhanced Pearson Etext -- Access Card Package

Click the hyperlink beneath to get "Who Am I in the Lives of Children? an Introduction to Early Childhood Education with Enhanced Pearson Etext -- Access Card Package" PDF document.

[Read ePub »](#)



[PDF] The Mystery of God's Evidence They Don't Want You to Know of

Click the hyperlink beneath to get "The Mystery of God's Evidence They Don't Want You to Know of" PDF document.

[Read ePub »](#)



[PDF] Comic Illustration Book For Kids With Dog Farts FART BOOK Blaster Boomer Slammer Popper, Banger Volume 1 Part 1

Click the hyperlink listed below to get "Comic Illustration Book For Kids With Dog Farts FART BOOK Blaster Boomer Slammer Popper, Banger Volume 1 Part 1" document.

[Read PDF »](#)



[PDF] What is Love A Kid Friendly Interpretation of 1 John 311, 16-18 1 Corinthians 131-8 13

Click the hyperlink listed below to get "What is Love A Kid Friendly Interpretation of 1 John 311, 16-18 1 Corinthians 131-8 13" document.

[Read PDF »](#)



[PDF] The Adventures of Ulysses: A Supplement to the Adventures of Telemachus

Click the hyperlink listed below to get "The Adventures of Ulysses: A Supplement to the Adventures of Telemachus" document.

[Read PDF »](#)



[PDF] Read Write Inc. Phonics: Grey Set 7 Non-Fiction 2 a Flight to New York

Click the hyperlink listed below to get "Read Write Inc. Phonics: Grey Set 7 Non-Fiction 2 a Flight to New York" document.

[Read PDF »](#)



[PDF] Ninja Adventure Book: Ninja Book for Kids with Comic Illustration: Fart Book: Ninja Skateboard Farts (Perfect Ninja Books for Boys - Chapter Books for Kids Age 8 - 10 with Comic Pictures Audiobook with Book)

Click the hyperlink listed below to get "Ninja Adventure Book: Ninja Book for Kids with Comic Illustration: Fart Book: Ninja Skateboard Farts (Perfect Ninja Books for Boys - Chapter Books for Kids Age 8 - 10 with Comic Pictures Audiobook with Book)" document.

[Read PDF »](#)



[PDF] DK Readers L1: Jobs People Do: A Day in the Life of a Teacher

Click the hyperlink listed below to get "DK Readers L1: Jobs People Do: A Day in the Life of a Teacher" document.

[Read PDF »](#)