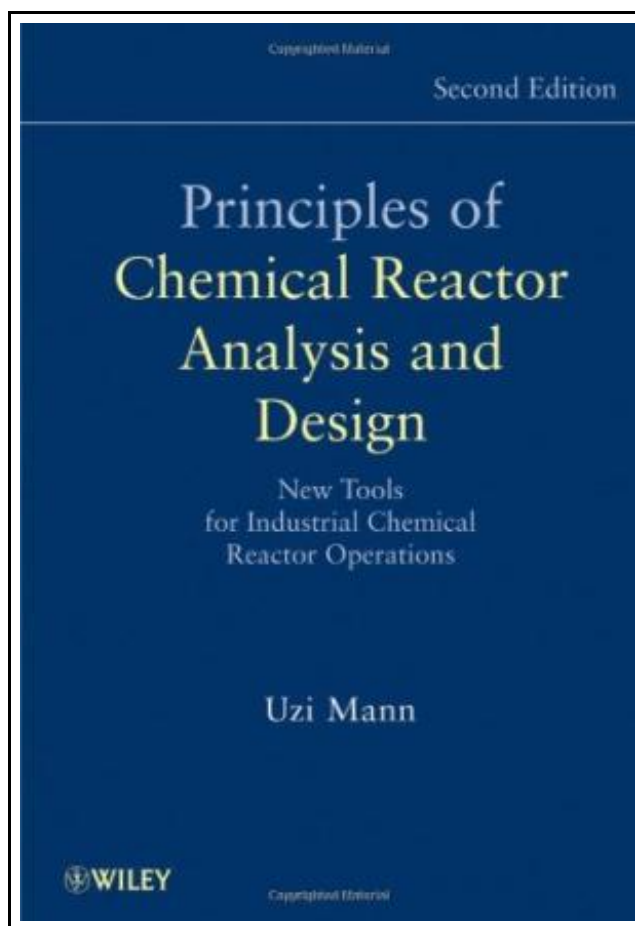


Principles of Chemical Reactor Analysis and Design: New Tools for Industrial Chemical Reactor Operations



Filesize: 5.66 MB

Reviews

Complete information for book fanatics. It normally does not cost excessive. I am very easily can get a satisfaction of reading a created publication.

(Mrs. Winifred Fritsch)

PRINCIPLES OF CHEMICAL REACTOR ANALYSIS AND DESIGN: NEW TOOLS FOR INDUSTRIAL CHEMICAL REACTOR OPERATIONS

DOWNLOAD



To download **Principles of Chemical Reactor Analysis and Design: New Tools for Industrial Chemical Reactor Operations** PDF, make sure you follow the web link below and download the ebook or get access to other information which might be highly relevant to **PRINCIPLES OF CHEMICAL REACTOR ANALYSIS AND DESIGN: NEW TOOLS FOR INDUSTRIAL CHEMICAL REACTOR OPERATIONS** book.

Wiley-Interscience, 2009. Book Condition: New. Brand New, Unread Copy in Perfect Condition. A+ Customer Service! Summary: Preface. Notation. Chapter 1: Overview of Chemical Reaction Engineering. 1.1 Classification of Chemical Reactions. 1.2 Classification of Chemical Reactors. 1.3 Phenomena and Concepts. 1.4 Common Practices. 1.5 Industrial Reactors. 1.6 Summary. Bibliography. Chapter 2: Stoichiometry. 2.1 The Four Contexts of "Chemical Reactions". 2.2 Chemical Formula and Stoichiometric Relations. 2.3 Reaction Extent. 2.4 Independent and Dependent Chemical Reactions. 2.5 Characterization of Reactor Feed. 2.6 Characterization of Reactor Performance. 2.7 Dimensionless Extents. 2.8 Independent Species Specifications. 2.9 Summary. Bibliography. Problems. Chapter 3: Chemical Kinetics. 3.1 Species Formation Rates. 3.2 Rates of Chemical Reactions. 3.3 Rate Expressions of Reaction Rates. 3.4 Effects of Transport Limitations. 3.5 Characteristic Reaction Time. 3.6 Summary. Bibliography. Problems. Chapter 4: Species Balances and Design Equations. 4.1 Macroscopic Species Balances - General Species-based Design Equations. 4.2 Species-based Design Equations of Ideal Reactors. 4.3 Reaction-based Design Equations. 4.4 Dimensionless Design Equations. 4.5 Summary. Bibliography. Problems. Chapter 5: Energy Balances. 5.1 Review of Thermodynamic Relations. 5.2 Energy Balances. 5.3 Summary. Bibliography. Problems. Chapter 6: Ideal Batch Reactor. 6.1 Design Equations and Auxiliary Relations. 6.2 Isothermal Operations with Single Reactions. 6.3 Isothermal Operations with Multiple Reactions. 6.4 Non-Isothermal Operations. 6.5 Summary. Problems. Chapter 7: Plug Flow Reactor. 7.1 Design Equations and Auxiliary Relations. 7.2 Isothermal Operations with Single Reactions. 7.3 Isothermal Operations with Multiple Reactions. 7.4 Non-Isothermal Operations. 7.5 Effects of Pressure Drop. 7.6 Summary. Problems. Chapter 8: Continuous Stirred Tank Reactor (CSTR). 8.1 Design Equations and Auxiliary Relations. 8.2 Isothermal Operations with Single Reactions. 8.3 Isothermal Operations with Multiple Reactions. 8.4 Non-Isothermal Operations. 8.5 Summary. Problems. Chapter 9: Other Reactor Configurations. 9.1 Semi-Batch Reactors. 9.2 Plug-Flow Reactor with Distributed Feed. 9.3 Distillation Reactor. 9.4 Recycle Reactor. 9.5 Summary. Problems. Chapter 10: Economic-Based Optimization of Reactor Operations. 10.1 Economic Objective Functions. 10.2 Batch and Semi-Batch Reactors. 10.3 Flow Reactors. 10.4 Summary. Problems. Appendices. Appendix A: Summary of Key Relationships. Appendix B: Microscopic Species Balances - Continuity Equations. Appendix C: Summary of Numerical Methods. Index.



[Read Principles of Chemical Reactor Analysis and Design: New Tools for Industrial Chemical Reactor Operations Online](#)



[Download PDF Principles of Chemical Reactor Analysis and Design: New Tools for Industrial Chemical Reactor Operations](#)

Other eBooks



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

Access the hyperlink under to download "Grandpa Spanielson's Chicken Pox Stories: Story #1: The Octopus (I Can Read Book 2)" file.

[Read Document »](#)



[PDF] Maisy's Christmas Tree

Access the hyperlink under to download "Maisy's Christmas Tree" file.

[Read Document »](#)



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

Access the hyperlink under to download "The Web Collection Revealed, Premium Edition: Adobe Dreamweaver CS6, Flash CS6, and Photoshop CS6 (Stay Current with Adobe Creative Cloud)" file.

[Read Document »](#)



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

Access the hyperlink under to download "Star Flights Bedtime Spaceship: Journey Through Space While Drifting Off to Sleep" file.

[Read Document »](#)



[PDF] Pilgrim: Book 8 (Paperback)

Access the hyperlink under to download "Pilgrim: Book 8 (Paperback)" file.

[Read Document »](#)



[PDF] TJ new concept of the Preschool Quality Education Engineering: new happy learning young children (3-5 years old) daily learning book Intermediate (2)(Chinese Edition)

Access the hyperlink under to download "TJ new concept of the Preschool Quality Education Engineering: new happy learning young children (3-5 years old) daily learning book Intermediate (2)(Chinese Edition)" file.

[Read Document »](#)