

ELEMENTS OF CHEMICAL REACTION ENGINEERING

FIFTH EDITION

H. SCOTT FOGLER



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Elements Of Chemical Reaction Engineering

H. Scott Fogler



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processes from oil refining to the development of specialty and fine chemicals the text provides a clear understanding of chemical reactor analysis and design

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Chemical Reaction Engineering Octave Levenspiel, 1972-07-14 An improved and simplified edition of this classic introduction to the principles of reactor design for chemical reactions of all types homogeneous catalytic biochemical gas solid extractive etc Adds new material on systems of deactivating catalysts flow modeling and diagnosis of the ills of operating equipment and new simple design procedures for packed bed and fluidized bed reactors

The Elements of Chemical Kinetics and Reactor Calculations (a Self-paced Approach) H. Scott Fogler, 1974 Primarily aimed at the junior senior level student in chemical engineering

Sustainable Energy Jefferson W. Tester, 2005 Evaluates trade offs and uncertainties inherent in achieving sustainable energy analyzes the major energy technologies and provides a framework for assessing policy options

Process Technology André B. de Haan, Johan T. Padding, 2022-03-07 The book provides a general overview about process technology It focuses on the structure and development of production processes main technological operations and some important aspects of process economics For the technological operations the authors emphasize operating principles reasons for application and available industrial equipment

Chemical Reactions and Processes Under Flow Conditions Santiago V. Luis, Eduardo García-Verdugo, 2010 Pharmaceutical and fine chemical products are typically synthesised batchwise which is an anomaly since batch processes have a series of practical and economical disadvantages On the contrary flow continuous processes present a series of advantages leading to new ways to synthesise chemical products Flow processes enable control reaction parameters more precisely temperature residence time amount of reagents and solvent etc leading to better reproducibility safer and more reliable processes can be performed more advantageously using immobilized reagents or catalysts improve the selectivity and productivity of the process and possibly even the stability of the catalyst offer opportunities for heat exchange and energy conservation as well as an easy separation and recycling of the reactants and products by adequate process design achieve multistep syntheses by assembling a line of reactors with minimum or no purification in between two reaction steps can be assured by facile automation scale up can be easily conducted by number up With all the new research activity in manufacturing chemical products this comprehensive book is very timely as it summarises the latest trends in organic synthesis It gives an insight into flow continuous processes outlining the basic concepts and explaining the terminology of and systems approach to process design dealing with both homogeneous and heterogeneous catalysis and mini or micro reactors The book contains case studies extensive bibliographies and reference lists in each chapter to enable the reader to grasp the contents and to go on to more detailed texts on specific subjects if

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