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Taranto; 14. The Wurster process J. Seville, S. Palmer and A. Ingram; 15. Gasification and combustion A.P. Watkinson and A. Lisboa; 16. Spouted bed electrolytic reactors J.W. Evans and V. Jiricny; 17. Scale-up, slot-rectangular and multiple spouting J. Grace and C.J. Lim; 18. Mechanical spouting T. Szentmarjay, E. Pillai and Judit Toth; 19. Catalytic reactors and their modelling G. Rovero and N. Piccinini; 20. Liquid and liquid-gas spouting Z.B. Grbavcic, H. Littman and M.H. Morgan III; 21. Concluding chapter N. Epstein and J. Grace.

Sommario/riassunto

Since the pioneering text by Mathur and Epstein over 35 years ago, much of the work on this subject has been extended or superseded, producing an enormous body of scattered literature. This edited volume unifies the subject, pulling material together and underpinning it with fundamental theory to produce the only complete, up-to-date reference on all major areas of spouted bed research and practice. With contributions from internationally renowned research groups, this book guides the reader through new developments, insights and models. The hydrodynamic and reactor models of spouted and spout-fluid beds are examined, as well as such topics as particle segregation, heat and mass transfer, mixing and scale-up. Later chapters focus on drying, particle-coating and energy-related applications based on spouted and spout-fluid beds. This is a valuable resource for chemical and mechanical engineers in research and industry.
