

<<生物反应工程原理>>

图书基本信息

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内容概要

Preface This is the second edition of the text “ Bioreaction Engineering Principles ” by Jens Nielsen and John Villadsen, originally Published in 1994 by Plenum Press (now part of Kluwer). Time runs fast in Biotechnology, and when Kluwer Plenum stopped reprinting the first edition and asked us to make a second, revised edition we happily accepted. A text on bioreactions written in the early 1990 ’ s will not reflect the enormous development of experimental as well as theoretical aspects of cellular reaction during the past decade. In the preface to the first edition we admitted to be newcomers in the field. One of us (JV) has had 10 more years of job training in biotechnology, and the younger author (JN) has now received international recognition for his work with the hottest topics of “ modern ” biotechnology. Furthermore we are happy to have induced Gunnar Lid é n, professor of chemical reaction engineering at our sister university in Lund, Sweden to join us as co-author of the second edition. His contribution, especially on the chemical engineering aspects of “ real ” bioreactors has been of the greatest value. Chapter 8 of the present edition is largely unchanged from the first edition. We wish to thank professor Martin Hjortso from LSU for his substantial help with this chapter. As was the case for the first edition numerous people helped us by carefully reviewing individual chapters. Professor Lars K Nielsen of University of Queensland was a constant sparring partner, both in Australia and lately as a visiting professor at DTU. The help of Dr. Mats Akesson and of our PhD students, in particular Mikkel Nordkvist, Thomas Grotkjaer, Jochen F rster and Morten Skov Hansen is also gratefully acknowledged. MSc student Rebecca Munk Vejborg was of great help in her careful editing of the final version of the manuscript. All three authors are chemical engineers by education, and we followed in the footsteps of other chemical engineers who “ converted ” to biotechnology, but retained their passion for a quantitative treatment of problems from the physical world. One of the greatest innovators of biochemical engineering, professor James E. Bailey was also a chemical engineer by education. We wish to dedicate this book to the memory of this eminent scientist, who was a close colleague and a friend (of the senior author for more than 35 years), and whose work is admired by all three of us. If the pages of this book could inspire some students in the way Jay Bailey inspired hundreds of chemical engineering and biochemical engineering students we could hope for no better reward.

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