1. Record Nr. UNINA990006909230403321

Autore	Naylor, Helen
Titolo	Cambridge first certificate handbook / Helen Naylor and Stuart Hagger
Pubbl/distr/stampa	Cambridge : Cambridge University Press, 1999
ISBN	0-521-62918-7
Descrizione fisica	219 p. : ill. ; 29 cm + 2 audiocassette
Collana	Cambridge examinations publishing
Disciplina	428
Locazione	FSPBC
Collocazione	XV Ib 392
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910829007203321

Autore	Posten Clemens
Titolo	Integrated bioprocess engineering / / Clemens Posten
Pubbl/distr/stampa	Berlin ; ; Boston : , : De Gruyter, , [2018] ©2018
ISBN	1-5231-2472-5 3-11-038200-8 3-11-031539-4
Descrizione fisica	1 online resource (356 pages)
Collana	De Gruyter Textbook
Disciplina	660.6
Soggetti	Biotechnology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Frontmatter -- Preface - a short pitch for this book -- Contents -- 1.

Introduction - a thread through this book -- 2. Biosystems - microorganisms and other biocatalysts -- 3. Media - supplying microorganisms with a comfortable environment and building blocks for growth -- 4. Kinetics - finding quantities for bioprocess reactions -- 5. Bioreactors - designing a home for the bioreaction -- 6. Not always so simple - the batch process reconsidered -- 7. Little by little one goes far - the fed-batch process -- 8. Microalgae - the solar cell factory -- 9. Continuously operating bioprocesses - production under steady state conditions -- 10. Measuring principles - how to put an end to the blind flight -- 11. The practice of fermentation - a step by step guide through the workflow -- 12. Modeling - art and handcraft of mathematically describing bioprocesses -- Further Reading - still curious? -- Acknowledgments - dedicated to all the people who supported the compilation of this book -- Copyrights - pictures provided with courtesy and accepted with thanks -- Index

Sommario/riassunto

Bioprocess engineering employs microorganisms to produce biological products for medical and industrial applications. The book covers engineering tasks around the cultivation process in bioreactors including topics like media design, feeding strategies, or cell harvesting. All aspects are described from conceptual considerations to technical realization. It gives insight to students of technical biology, bioengineering, and biotechnology by detailed explanations, drawings, formulas, and example processes. In Bioprocess Engineering upstream, bioreaction, and downstream stages are closely linked to each other. From a biological point of view photo-biotechnology is in the centre of interest as well as processes, where the particulate properties play an important role. The main technical means are fermentation under highly controlled conditions, mathematical modelling of bioprocesses including measurement of intracellular compounds, as well as mechanical separation methods arising from downstream processing.