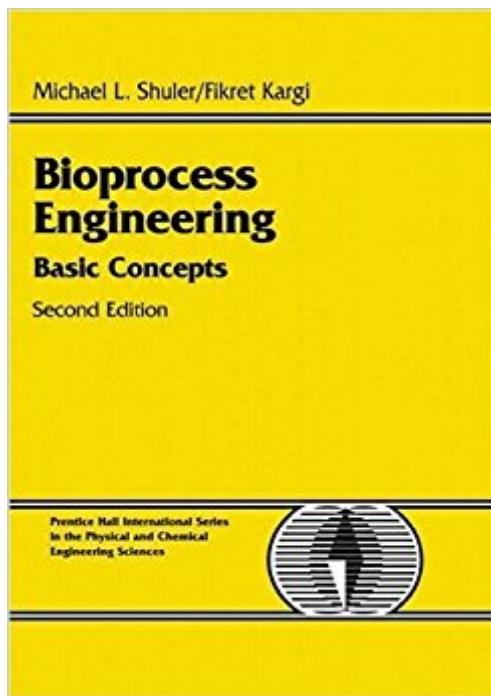


The book was found

# Bioprocess Engineering: Basic Concepts (2nd Edition)



## **Synopsis**

Bioprocess Engineering, Second Edition thoroughly updates the leading introductory textbook on biochemical and bioprocess engineering to reflect advances that are transforming the field -- from genomics to cellular engineering, modeling to nonconventional biological systems. It introduces techniques with wide applicability in pharmaceuticals, biologics, medicine, environmental engineering, and beyond.

## **Book Information**

Hardcover: 576 pages

Publisher: Prentice Hall; 2 edition (November 10, 2001)

Language: English

ISBN-10: 0130819085

ISBN-13: 978-0130819086

Product Dimensions: 7 x 1.3 x 9.1 inches

Shipping Weight: 2.1 pounds (View shipping rates and policies)

Average Customer Review: 3.7 out of 5 stars 25 customer reviews

Best Sellers Rank: #60,704 in Books (See Top 100 in Books) #29 in Books > Engineering & Transportation > Engineering > Bioengineering > Biotechnology #40 in Books > Textbooks > Engineering > Chemical Engineering #64 in Books > Engineering & Transportation > Engineering > Chemical

## **Customer Reviews**

An introduction to the fundamentals of cellular structure and physiology, protein structure and function, genetics, and molecular biology -- for those with an understanding of the principles of process engineering, but with a limited background in biology. --This text refers to an alternate Hardcover edition.

The complete, fully updated introduction to biochemical and bioprocess engineering. Bioprocess Engineering, Second Edition is a comprehensive update of the world's leading introductory textbook on biochemical and bioprocess engineering. Drs. Michael L. Shuler and Fikret Kargi review the relevant fundamentals of biochemistry, microbiology, and molecular biology, introducing key principles that enable bioprocess engineers to achieve consistent control over biological activity. This edition reflects powerful advances that are transforming the field, ranging from genetic sequencing to new techniques for producing proteins from recombinant DNA. It introduces

techniques with broad application to the production of pharmaceuticals, biologics, and commodities; to medical applications such as tissue engineering and gene therapy; and for solving critical environmental problems. This new edition includes: Essential biological basics: microorganism structure and functions, major metabolic pathways, enzymes, microbial genetics, kinetics, and stoichiometry of growth New coverage of posttranslational processing of proteins—an essential technique for manufacturing therapeutic proteins In-depth coverage of animal cell culture processes New coverage of noncarbohydrate metabolism Functional genomics and cellular engineering: concepts, techniques, and applications Applying bioprocess engineering approaches to biomedical applications Nonconventional biological systems applications, including host-vector systems for producing proteins from recombinant DNA Extensive coverage of mixed cultures, including advanced wastewater treatment processes Expanded coverage of modeling, including models in continuous cultures and cybernetic modeling How the rapidly evolving governmental regulatory environment constrains bioprocess design and modification Bioprocess Engineering, Second Edition makes extensive use of illustrations, examples, and problems, and contains extensive references for further reading as well as a detailed appendix describing traditional bioprocesses.

As an introduction to bioprocess engineering I do not care for this book at all. It isn't student friendly, though it may do better as a shelf reference for those who already know the subject. Concepts are not given enough explicit explanation. For example variables are often introduced in equations and are never explicitly defined or named elsewhere in the text. To compound the problem there isn't master list of variables in the appendices and the reader is supposed to intuit what the author meant. The initial coverage of microbiology is fairly light. As a student who has more experience in biology than most of my classmates I'm studying out of my old microbio book since the explanations and diagrams are so much clearer. Admittedly, microbiology alone is not the main purpose of this text, but that does not help students of engineering rather than biology. The overall feeling I get from this text is that the author knows his subject, but has forgotten what it was like to learn it in the first place.

Had to use this textbook for class; so to preface this review, I had a bad teacher which frustrated me along with the book. The book is weird. On some topics it goes way too in depth (enzymes) meanwhile on other things (organisms) it barely touches. To be honest this is a difficult topic to cover as this book attempts to teach all of Biotech Processing, but nonetheless they went about it awkwardly. Doesn't serve as a fantastic reference book, nor does it serve as a great high level

overview. Not overly thrilled. Go Yellow Jackets!

There is a huge industry emerging in bioprocess engineering and Shuler knows this. He crammed a ton of dense lessons into a relatively small text. If you enjoy reading this stuff it'll be nice, like a magazine. If you're a young student trying to learn, this book doesn't help very much. You will need to confirm things with your own research because the explanations aren't helpful.

Very good deal Thanks @ all

A very in depth textbook on key processes like fermentation, with some basic biology to refresh your memory too.

About a book: Excellent book to getting started in bioprocess engineering, specially if your background is not in biological sciences. About the seller: The book was in great shape, as promised. I would definitely buy a book at this place again.

text book worked fine

The book was arrived in great condition and it was well protected.

[Download to continue reading...](#)

Bioprocess Engineering: Basic Concepts (3rd Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Bioprocess Engineering: Basic Concepts (2nd Edition) Bioprocess Engineering Principles, Second Edition Bioprocess Engineering Principles Chirelstein's Federal Income Taxation: A Law Student's Guide to the Leading Cases and Concepts (Concepts and Insights) (Concepts and Insights Series) Master Your Project Management Basic Concepts: Essential PMP® Concepts Simplified (Ace Your PMP® Exam Book 2) Abraham's the Forms and Functions of Tort Law: An Analytical Primer on Cases and Concepts (2nd Edition) (Concepts and Insights Series) Essentials of Neurophysiology: Basic Concepts and Clinical Applications for Scientists and Engineers (Series in Biomedical Engineering) Basic Principles and Calculations in Chemical Engineering (8th Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Probability Concepts in Engineering: Emphasis on Applications to Civil and Environmental Engineering (v. 1) System Engineering Analysis, Design, and Development: Concepts, Principles, and Practices (Wiley Series in Systems Engineering and

Management) Fundamental Concepts and Computations in Chemical Engineering (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) G.Dieter's Li.Schmidt's Engineering 4th (Fourth) edition(Engineering Design (Engineering Series) [Hardcover])(2008) Hacking: Basic Security, Penetration Testing and How to Hack (hacking, how to hack, penetration testing, basic security, arduino, python, engineering Book 1) Basic Transport Phenomena In Biomedical Engineering (Chemical Engineering) Introduction to Engineering Design and Problem Solving (BEST Basic Engineering Series & Tools) Introduction to Engineering Ethics (Basic Engineering Series and Tools) Introduction to Biomaterials: Basic Theory with Engineering Applications (Cambridge Texts in Biomedical Engineering) Gravity Sanitary Sewer Design and Construction (ASCE Manuals and Reports on Engineering Practice No. 60) (Asce Manuals and Reports on Engineering ... Manual and Reports on Engineering Practice) Earthquake Engineering: From Engineering Seismology to Performance-Based Engineering

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)