DESCRIPTION

In this expert handbook both the topics and contributors are selected so as to provide an authoritative view of possible applications for this new technology. The result is an up-to-date survey of current challenges and opportunities in the design and operation of bioreactors for high-value products in the biomedical and chemical industries.

Combining theory and practice, the authors explain such leading-edge technologies as single-use bioreactors, bioreactor simulators, and soft sensor monitoring, and discuss novel applications, such as stem cell production, process development, and multi-product reactors, using case studies from academia as well as from industry. A final section addresses the latest trends, including culture media design and systems biotechnology, which are expected to have an increasing impact on bioreactor design.

With its focus on cutting-edge technologies and discussions of future developments, this handbook will remain an invaluable reference for many years to come.

ABOUT THE AUTHOR

Carl-Fredrik Mandenius is professor of Engineering Biology at Linköping University (Sweden) since 1999 and head of the Division of Biotechnology. He holds a master and PhD degree in Engineering from Lund University. His main research interests are bioprocess engineering, biosensor technology and biotechnology design.
To purchase this product, please visit https://www.wiley.com/en-us/9783527337682