





Special Issue Reprint

# Measurement Technologies for up- and Downstream Bioprocessing

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This book is devoted to new developments in measurement technologies for upstream and downstream bioprocessing. The recent advances in biotechnology and bioprocessing have generated a number of new biological products that require more qualified analytical technologies for diverse process analytical needs. These includes especially fast and sensitive measurement technology that, early in the process train, can inform on critical process parameters related to process economy and product quality and that can facilitate ambitions of designing efficient integrated end-to-end bioprocesses. This book covers these topics as well as analytical monitoring methods based either on real-time or in-line sensor technology, on simple and compact bioanalytical devices, or on the use of advanced data prediction methods.





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