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## BIOSEPARATION AND BIOPROCESSING -A HANDBOOK, VOLUMES 1 AND 2





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This two volumes set "Bioseparation and Bioprocessing" – A Handbook' brings together all aspects of purification in biotechnology. The handbook covers all the technology that is needed for the manufacture of "biologicals" such as antibodies and other biopharmaceuticals, diagnostics and food additives. It presents recent developments in cleaning, separation and processing of biomolecules, as well as the ever more important issues of process development, quality control and validation. The biological safety required for working with infectious or genetically modified production organisms is also discussed.

The first volume looks at separation techniques, forms of biochromatography and membrane separations. The suitability of each is assessed according to scale and product purity. Modeling and validation of potential purification strategies are the other two sections which comprise this volume. The only resource to cover all post-production issues for biopharmaceuticals and other "biologicals", from crude separation to processing and quality control, has now been completely rewritten and expanded to keep pace with the rapidly evolving technology in the field.

In the second volume strategies which can be applied in downstream processing, product quality and characterisation, and the economics, safety and hygiene considerations of a process are reviewed. All of these topics must be considered when designing and implementing a commercial process.

Although much of the information is presented in the form of general strategies a number of case studies are also included which serve to illustrate the full range of things which must be considered for any commercially viable separation/purification strategy. This book will be an invaluable companion for biotechnologists, pharmaceutical engineers and others who are involved in the manufacture of biologically active biotechnological products.

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