

of nonradioactive RNA. The different types of chromatographic and electrophoretic methods are very carefully described and a separate chapter deals with the choice of the proper method. The absence of newer methods of fractionation of oligonucleotides

and DNA fragments limits the usefulness of an otherwise excellent book.

The price of this volume is a bit too high, though the separate parts are available also in paperback form.

B. Sain

Progress in Isoelectric Focusing and Isotachopheresis

Edited by F. G. Righetti
North-Holland Publishing Company; Amsterdam, 1975
425 pages. Dfl. 120.00, \$ 47.85

This book covers the basic aspects as well as the recent developments of isoelectric focusing and isotachopheresis, two excellent analytical techniques of protein separation. The 31 lectures presented at the Third International Symposium on Isoelectric Focusing and Isotachopheresis are collected into three main parts:

- I. General Aspects and Methodology
- II. Application of Isoelectric Focusing
- III. Isotachopheresis.

Biomedical applications of the two methods are well treated both in routine diagnosis and in research: screening of human sera, sweat, isoenzymes in normal and pathological tissues, etc. A new approach, the separation of nucleic acids (mRNAs for α - and β -globin chains) is reported, applications to the analysis of membrane and mitochondrial proteins and in separations of whole cells, subcellular particles, bacteria and viruses are presented. Problems due to extreme pH, artifacts and the stability of pH gradient are extensively discussed. Fortunately, the advantages as well as limitations and pitfalls of the methods are

presented in several papers. Particular emphasis is placed on the use of isoelectric focusing as a probe for interacting proteins.

A round table discussion is included on the fundamental and practical aspects of isoelectric focusing and isotachopheresis, containing valuable hints on ampholines, spacers, additives extreme pH, micro-methods and interacting molecules.

To make the symposium volume approach the value of a manual, a detailed list of the most important papers published in the field of isoelectric focusing and isotachopheresis and a subject index is added at the end of the book.

The publication of the material of this symposium is a 'fit for life' certificate of these excellent, however somewhat expensive analytical methods developed by LKB-Producter in the last ten years. The volume will be useful for people working in the fields of biochemistry, microbiology, cell biology and other related parts.

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