The volume also contains a number of personal memories and an amusing after-dinner speech by Wilfrid Mommaerts. I am often distressed by how little interest modern graduate students show in the history of science. They have little knowledge of how ideas developed and who developed them. Perhaps it is a good thing to have some history at the end of a volume which describes topics with a future.

H. Gutfreund

**Iodinated Density Gradient Media: A Practical Approach**

Edited by D. Rickwood

*IRL Press; Oxford and Washington, DC, 1983*

xii + 240 pages. £8.50, $17.00

This is the latest book in the Practical Approaches series edited by Rickwood and his colleagues. Its publication marks the tenth anniversary of the introduction of the first iodinated density-gradient material to gain general acceptance in laboratory practice. An extensive bibliography has accumulated in these 10 years, and this book covers a wide range in topics. Both of these facts bear witness to the usefulness of iodinated non-ionic compounds for fractionating, separating and purifying biological particles and macromolecules under conditions for which the ionic environment can be chosen to accommodate the biological materials themselves rather than the gradient needed to make the separation.

After an informative introductory chapter by the editor summarizing those properties of iodinated gradient materials that are pertinent to density-gradient centrifugation techniques, other authors describe their use in isolating and/or fractionating macromolecules (nucleic acids, proteins and carbohydrates), ribonucleoproteins, nuclei and deoxyribonucleoproteins, cell membranes, other cell organelles (lysosomes, peroxisomes and mitochondria), whole cells and viruses. In addition, there are two useful appendices. The first contains cook-book descriptions of 19 commonly required enzyme and chemical assays that are compatible with iodinated gradient materials. The second is a sectionalized compilation of key references in the field. These are the editor's personal choice, and some omissions will surprise some readers. However, no doubt to demonstrate the absence of bias, the editor has omitted an earlier, very comprehensive contribution of his own - modesty indeed!

The authors are all expert practitioners in their fields, and have written accordingly. Moreover, there has clearly been strong editorial direction to ensure that each contribution is presented from a very practical aspect, and in a uniform format. While readers will have to turn elsewhere for critical comparisons of the efficacies of these methods with other separation techniques, this book does contain a lot of practical information, much of which is clearly presented by the lavish use of tables and diagrams. There is a reasonable index and a detailed list of contents which together will help readers extract data from the book. There are not too many obvious errors; however, there is such a wealth of detail that one hopes that the authors have checked their proofs very carefully.

While there is not much new information of note in this book, it is a unique (in this field) and modestly priced compilation of data and techniques that will be a very useful addition to the bookshelves and the benches of all who are concerned with subcellular biochemistry and molecular biology, and so necessarily with the isolation and fractionation of biological particles and macromolecules.

G.D. Birnie

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