

Book Reviews

Electrophoresis '86. Edited by M. J. Dunn. VCH Publishers, Derrfield, FL. 1986. xviii + 765 pp. 17 × 24 cm. ISBN 0-89573-583-0. \$99.50.

This book represents the "Proceedings of the 5th Meeting of the International Electrophoresis Society" in London in September of 1986. The rapid publication of this collection of 144 papers and poster abstracts provides the reader with information regarding the latest developments in electrophoretic techniques and applications. The book is divided into seven sections including: Cell and Free Flow Electrophoresis, Isotachopheresis, Electrophoresis of Nucleic Acids, Analytical Electrophoresis of Proteins and Other Components, Isoelectric Focusing, 2-D PAGE, and Preparative Electrophoresis. Stop press papers not meeting the original deadline are also included. The book is well organized and contains a subject matter index which is extremely helpful.

The section on Cell and Free Flow Electrophoresis provides several new and exciting methods for cell separation for a variety of cell types. The methods are well defined and seem readily applicable. The section on Nucleic Acids covers areas of special interest to those working in recombinant DNA and DNA sequencing. Recent developments in the area of pulse field electrophoresis for large DNA molecules and the automation of sequencing and of blotting are included. Progress on silver staining of proteins and nucleic acid, new approaches for blotting of proteins, and some of the newer staining techniques for proteins are reported in the section on Analytical Electrophoresis. Use of isoelectric focusing to determine heterogeneity in several different proteins continues to be a powerful tool for many applications reported in the Isoelectric Focusing section. Current methods for computer analyzed protein databasing by high-resolution two-dimensional PAGE are described. Those working in biotechnology will be interested in the papers that reported on the use of this technique to analyze the fidelity of proteins made by recombinant DNA procedures to the native protein.

The timeliness and wide coverage in this book should make it generally useful to clinical chemists and to cellular and molecular biologists.

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Chemicals and Society. A Guide to the New Chemical Age. By Hugh D. Crone. Cambridge University, New York. 1986. x + 245 pp. 14 × 22 cm. ISBN 0-521-30869-0. \$39.50.

This very readable book by an Australian biochemist is addressed to educated persons who have no technical background. The author's intent is to present in clear and accurate language sufficient background information to provide the educated nonscientist with a rational perspective on chemical matters. He has succeeded admirably. Chemists would do well to make their nonscientist friends aware of this small volume.

Much of this book is devoted to a series of interesting and informative essays on selected kinds of chemicals or chemical substances which have achieved some prominence in our current society. These include, for example, synthetic and naturally occurring chemicals, drugs, pesticides, herbicides, food additives, nuclear weapons, and chemical and biological warfare agents. An early chapter presents useful concepts of toxicology and particularly the vital importance of dose-response relationships. This, in turn, leads to a well presented chapter on the analytical techniques for the detection, identification, and quantitation of chemicals. Special attention is devoted to the relationship of chemicals and cancer. Also treated are methods of protection against toxic chemicals, air, and water pollution and the disposition and disposal of chemicals.

Throughout the book, the author strives, and succeeds, in presenting the hazards and benefits involved in the use of chemicals in an unbiased and objective manner. Surprisingly, this is achieved in a lively and interesting fashion.

In each chapter, 5-20 relevant references are cited to provide the interested reader with more comprehensive information. One of the final chapters (Chapter 18) is a useful and practical guide for nonscientists to primary sources of chemical information and the techniques for accessing these sources.

As many others have done before, the author decries the superficiality and inaccuracies which characterize many chemical news reports. He is also dismayed at the prominent and deciding role that layers frequently play in many highly technical chemical controversies. In both instances, he feels that the public, or the parties involved, would be better served by well-trained and responsible individuals with a chemical or scientific background.

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