

structure to function is more extensive than for that of any other vitamin.

The great interest at present shown in the origin of cardiovascular disease is illustrated by the review "Vitamins and Other Nutrients in Cardiovascular Disease", by W. C. Felch, L. Sinisterra, T. B. Van Itallie, and F. J. Stare, and also by that on "Hormonal Aspects of Coronary Artery Disease", by M. F. Oliver and G. S. Boyd. "The Physiology of Secretin" is ably reviewed by M. I. Grossman, while the "Chemistry and Physiology of the Thyroid-stimulating Hormone" is discussed by M. Sonenberg. In the chapter on "Glucagon", by O. K. Behrens and W. W. Bromer, the biology and the chemistry of glucagon are succinctly surveyed, and the concluding article, entitled "Synthetic Derivatives of Cortical Hormones", by J. Fried and A. Borman, includes a consideration of the synthesis and biological activities of eleven different types of artificially produced chemical relation of the naturally occurring adrenal cortical hormones.

The book includes a cumulative index for Volumes 11-15 of "Vitamins and Hormones", which is shorter and more compact than the two previous cumulative indexes, and adequate author and subject indexes for Volume 16.

This volume should be of interest to biochemists, physiologists, to medical men, and to biologists in general, as well as to those whose interest is mainly in the chemistry of substances of biological importance. Without exception, the articles are authoritative and well written.

F. G. YOUNG

BIOCHEMICAL ANALYSIS

Methods of Biochemical Analysis

Vol. 6. Edited by Prof. David Glick. Pp. ix+358. (New York: Interscience Publishers, Inc.; London: Interscience Publishers, Ltd., 1958.) 8.50 dollars.

THE sixth volume of this valuable series contains ten contributions. The first two are concerned with the determination of nucleic acids; chemical means are dealt with by J. M. Webb and H. B. Levy, and microbiological assay methods by H. K. Miller. Both contributions describe a number of different methods and both sets of authors are confident that reliable results can be obtained when these methods are applied to suitable starting materials. However, there are warnings that care must be taken if either type of analysis is applied to material of a new type and it is suggested that a new material should initially be analysed by at least two independent methods.

Formaldehyde and serine estimations are described by W. R. Frisell and C. G. Mackenzie, and purine analysis by F. Bergmann and S. Dikstein, who describe the relatively new mercury salt procedures.

Serotonin and related compounds are considered by S. Udenfriend, H. Weissbach and B. B. Brodie, who include related indoles and also the preparation and assay of enzyme systems related to serotonin metabolism. They conclude with a short section on related drugs and also include an interesting account of spectrophotofluorimetric analysis.

A determination which is now becoming of great clinical importance is transaminase, which is described by A. J. Aspen and A. Meister. A variety of procedures are included, although the section is orientated more towards the classical analysis of enzymes in

tissue preparations rather than the rapid simple serum methods which to-day are used by many more laboratories.

N. S. Radin contributes a section on glycolipide determination which has valuable sections on the extraction and handling of these compounds which may be unfamiliar to workers in other fields. He also describes details of the laboratory techniques which he has found advantageous, and these are applicable also to any type of work which involves the quantitative handling of small volumes of volatile organic solvents.

The determination of thiamine by animal and microbiological assay and by chemical methods, including the well-known thiochrome technique, is described by O. Mickelson and R. S. Yamamoto. A. Kolin describes his elegant techniques of electrophoresis combined with physical gradients and shows a number of examples of the separations he obtained. Finally, S. Gardell describes hexosamine determination. His contribution and the purine chapter are the only ones by non-American authors.

The production and appearance of the volume are of the standard which we associate with Interscience Publishers.

I. D. P. WOORTON

SCIENCE AND TECHNOLOGY OF RUBBER

British Compounding Ingredients for Rubber

Compiled by Brian J. Wilson. Pp. xx+528. (Cambridge: W. Heffer and Sons, Ltd., 1958. Published for the Research Association of British Rubber Manufacturers.) 60s. net.

Rubber

Fundamentals of Its Science and Technology. By Dr. Jean le Bras. Translated by Dr. Irene E. Berck. Pp. 464. (London: Crosby Lockwood and Son, Ltd., 1957.) 65s. net.

Chemistry of Natural and Synthetic Rubbers

By Prof. Harry L. Fisher. Pp. vii+208. (New York: Reinhold Publishing Corporation; London: Chapman and Hall, Ltd., 1957.) 52s. net.

TWO of these three books have been written by authors connected with national research organizations. The third has been written by an author well known for his contributions to rubber chemistry.

The books of le Bras and Fisher are eminently readable and can be perused with pleasure even by those who have spent many years in the study of rubber. They are to rubber men what such a book as Lachmann's "Spirit of Organic Chemistry" was to organic chemists of the past generation.

Wilson's book, however, is essentially a reference book similar to that published in France several years ago by Jacobs. It is limited to British products; but this has not the restricting influence that one might at first expect since so many foreign producers have associated organizations within the British Commonwealth. This book has four main sections on compounding ingredients for natural and synthetic rubbers; compounding ingredients, processing and modifying agents for natural and synthetic latices; special-purpose products such as mould lubricants, anti-tack agents, etc.; and indexes of manufacturers and trade names. The book has been produced with