

beyond the preceding year's accomplishments and literature citations results all too often in a report which is necessarily historically distorted, which for the most part is difficult for the non-specialist to comprehend except superficially, and which, for the specialist should be unnecessary. That the very able editors are aware of these problems is shown on p. vi of their preface to the present volume: "Some of us desire that the reviews shall be selective but critical, judicious appraisals of the present status of the subject; others, fortunately in the minority, request that they be comprehensive with every paper on the subject receiving citation." The most successful reviews have generally been compromises between these extremes, for an annual report does not lend itself readily to the free expression of personal appraisal, and a comprehensive coverage of the literature even of a single year is not practical. The fact that summaries of distinction, style and grasp have frequently made their appearance in various volumes of the Reviews, despite the limitations of format, is a tribute as much to the expository skill of the authors as to their scientific judgment. Some notable examples are to be found in the present volume. It would be well to overwork them.

The contents of the present volume are as follows: Biological Oxidations by D. E. Green and H. Beinert; Non-oxidative, Nonproteolytic Enzymes by B. Axelrod; Proteolytic Enzymes by G. W. Schwert; Chemistry of the Carbohydrates by J. K. N. Jones; Chemistry of the Phosphatides by E. Baer; Metabolism of the Complex Lipides by D. B. Zilversmit; Chemistry of Proteins, Peptides, and Amino Acids by A. G. Ogston; Carbohydrate Metabolism by B. L. Horecker and A. H. Mehler; Metabolism of Amino Acids and Proteins by G. Ehrensward; Nucleic Acids by D. M. Brown and A. R. Todd; Water-Soluble Vitamins, Part I by G. M. Briggs and F. S. Daft; Water-Soluble Vitamins, Part II by R. Fried and H. Lardy; Water-Soluble Vitamins, Part III by B. C. Johnson; Fat-Soluble Vitamins by P. D. Boyer, Carotenoids by T. W. Goodwin; Nutrition by J. F. Brock, Biochemistry of the Steroid Hormones by S. Roberts and C. M. Szego; Biochemistry of Antibiotics by S. B. Binkley; Clinical Applications of Biochemistry by O. Bodansky; Lipide Metabolism by F. Lynen, and The Biochemistry of Cancer by A. Haddow.

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Silicic Science. A Review of the Colloid Scientific Properties and Phenomena Exhibited by Matter Composed Essentially of the Element Silicon. By ERNST A. HAUSER, Ph.D., Sc.D., Professor of Colloid Science, Massachusetts Institute of Technology. D. Van Nostrand Company, Inc., 250 Fourth Avenue, New York 3, N.Y. 1955. xii + 188 pp. 16 X 23.5 cm. Price, \$5.00.

In the preface of this book the author states, "This monograph . . . approaches the chemistry of silicon from a new angle based primarily on the colloid chemical properties of silicon compounds." Thus the major portion of this work is devoted to colloidal phenomena of silicon compounds. As such, many brief discussions of colloid chemistry are found throughout the text. Unfortunately, both the colloid chemistry and the silicon chemistry suffer from the necessarily sketchy coverage attributed to them in a book of this size. Therefore, this volume will be of greatest value on the graduate level or advanced undergraduate level for the student interested in attaining a superficial knowledge of the field of silicon chemistry. The expert will be disappointed by the lack of detail. Furthermore, at the end of each chapter there appears a list of general references rather than an item-by-item and page-by-page reference system. This is cumbersome for the reader who is interested in a specific item.

The subject matter is greatly diversified including among others, chapters on the structures of silicates, silicic acid, ion-exchange reactions of silicates, periodic precipitation, reactions of bentonites, soil stabilization and silicones. The final chapter is devoted to applied silicic science and should be of interest to even those chemists who are but casually concerned with this subject. Throughout, the

reader is plagued by a large number of confusing minor errors. The inclusion of a greater amount of data from the original literature would have greatly helped the clarity in some places.

Finally, it should be emphasized again that all of these factors tend to reduce the value of the book to the specialist in the field. Those who will benefit most from study of this work are the general readers or students interested in a survey of a large number of topics in the area of silicon chemistry.

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Anti-Composition Tables for Carbon Compounds (CH, CHO, CHS and CHOS). Compiled by H. H. HATT, T. PEARCEY and A. Z. SZUMER for the Commonwealth Scientific and Industrial Research Organization, Australia. Cambridge University Press (American Branch), 32 East 57th St., New York 22, N.Y. 1955. 191 pp. 19 X 24.5 cm. Price, \$4.00.

The philosophy underlying the writing of this book appears to lie in a desire to spare laboratory workers the necessity of computing percentage compositions from empirical formulae or vice versa. Thus on page 13 will be found four columns of figures, each column consisting of multiples of the atomic weight, respectively, of carbon hydrogen, oxygen and sulfur. Table I begins on page 17. In three pages of quadruple columns there will be found, reading from left to right in each column, the percentage of carbon, percentage of hydrogen, number of carbons per molecule and number of hydrogens per molecule. Table II, beginning on page 23 and extending through 191, lists three columns to the page. The same system is followed as in Table I save that carbon, hydrogen and oxygen are involved. If the percentage composition of a compound containing sulfur is desired, sulfur is considered the equivalent of two oxygens. Listings in both tables are found in order of ascending percentages of carbon and in cases where this is constant, in ascending percentages of hydrogen. This is the sort of book which one might keep for some time without the need for its use but which would suddenly find quick and critical value at some opportune moment.

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BOOKS RECEIVED

January 10, 1956-February 10, 1956

SIDNEY P. COLOWICK AND NATHAN O. KAPLAN (edited by). "Methods in Enzymology." Volume II. Academic Press, Inc., Publishers, 125 East 23rd Street, New York 10, N. Y. 1955. 987 pp. \$23.80.

JACK HINE. "Physical Organic Chemistry." McGraw-Hill Book Company, Inc., 330 West 42nd Street, New York 36, N. Y. 1956. 497 pp. \$9.00.

ELVIN A. KABAT. "Blood Group Substances. Their Chemistry and Immunochemistry." Academic Press, Inc., Publishers, 125 East 23rd Street, New York 10, N. Y. 1956. 330 pp. \$8.00.

A. J. C. WILSON, General Editor, N. C. BAENZIGER, J. M. BIJVOET, AND J. MONTEATH ROBERTSON, Section Editors. "Structure Reports for 1942-1944." Volume 9. N. V. A. Oosthoek's Uitgevers MIJ, Domstraat 1-3, Utrecht, Holland. 1955. 448 pp. Dfl. 65.-.

HUGH C. WOLFE (edited by). "Temperature. Its Measurement and Control in Science and Industry." Volume II. Reinhold Publishing Corporation, 430 Park Avenue, New York 22, N. Y. 1955. 467 pp. \$12.00.

MELVILLE L. WOLFROM, Editor, AND R. STUART TIPSON, Assistant Editor. "Advances in Carbohydrate Chemistry." Volume 10. Academic Press, Inc., Publishers, 125 East 23rd Street, New York 10, N. Y. 1955. 437 pp. \$10.50.