



This experiment excludes a protonated cyclopropane intermediate from the neopentyl system

and diminishes considerably the over-all attractiveness of the protonated cyclopropane hypothesis relative to Wagner-Meerwein rearrangements.

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BOOK REVIEWS

Data for Biochemical Research. Edited by R. M. C. DAWSON, DAPHNE C. ELLIOTT, W. H. ELLIOTT, and K. M. JONES. Oxford University Press, 417 Fifth Avenue, New York 16, N. Y. 1959. xiii + 299 pp. 16 × 23.5 cm. Price, \$10.10.

The rapid advances made in biochemistry within the past few years have created a need for a reference book devoted specifically to data, compounds and methods which are commonly utilized in the biochemical research laboratory. This book represents an effort along this line; information of particular interest to the biochemist, but not exclusive to him, has been collected and organized for ready reference.

The substance of the book is divided into fifteen major sections. These are: table of biochemical compounds; enzymes commonly used as laboratory reagents; buffers and physiological media; methods for the detection of biochemical compounds on paper; the properties of some ion exchange resins; isotopic data; manometry; nomograms for manometer constants; ammonium sulfate solutions; miscellaneous reagents, tests, and recipes; acid-base indicators; table of normalities; autoclaves; temperature-pressure conversion table; miscellaneous formulae; international atomic weights, 1955.

The first section constitutes more than half the book. Approximately one thousand biochemical compounds are arranged alphabetically in nineteen different groups, all compounds being classified according to their type of chemical structure. Tabulated data are given which include structural formula, molecular weight, melting or boiling point, solubility, etc. Where applicable, spectral data are provided. Columns also are listed which contain journal references for the preparation and estimation of most of the compounds. As might be suspected, the assignment of a certain compound to a particular group often is arbitrary. This, however, does not detract from the usefulness of this part of the book since a comprehensive alphabetical index is provided of all compounds which are listed in these tables.

Methods for the detection of biochemical compounds on paper comprises the other most useful and comprehensive section in this book. In an index preceding this section, compounds are listed in fourteen groups beginning with acids and ending with vitamins. The information given is readily accessible, contains numerous references, and appears to be fairly complete.

The editors did well to state that this book was not intended to be an exhaustive work of reference. Any material not meeting their criterion of being useful in the laboratory was deliberately omitted. As a consequence, I am sure that practically every biochemical investigator will find this book to be lacking in many ways with regard to his or her own specialized area of research. The very definite limits of the book in this respect have to be considered in light of the fact that even the information contained therein is not con-

sistently presented, a not unusual development when several authors contribute to a single volume.

If the biochemist has the notion that this publication will provide him with all the reference material he needs under one cover, he will be disappointed. However, as a supplement to such standard reference volumes as "The Handbook of Chemistry and Physics" and the "Merck Index," this book will be of distinct value in the laboratory.

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Mechanical Properties of Intermetallic Compounds. A Symposium held during the 115th Meeting of the Electrochemical Society at Philadelphia, Penna., May 3-7, 1959, and sponsored by the Electrothermics and Metallurgy Division of the Society. Edited by J. H. WESTBROOK, Research Laboratory, General Electric Co. John Wiley and Sons, Inc., 440 Fourth Avenue, New York 16, N. Y. 1960. ix + 435 pp. 15.5 × 23.5 cm. Price, \$9.50.

This book constitutes a publication of the 17 papers read at an international symposium on the mechanical properties of intermetallic compounds which the Electrochemical Society sponsored at Philadelphia, Pennsylvania, in May, 1959. In addition, it includes the informal discussion which followed the presentation of each paper. This latter feature is of particular importance since the conferees were world authorities in this new field of science.

The subject matter of the book may be divided into five categories. The first chapter is an excellent review of the literature by J. H. Westbrook who also served as editor of these conference proceedings. This is followed by two chapters on crystal structure and temperature. The experimental techniques for investigating the mechanical properties of these new compounds are covered in three papers dealing with tensile, fracture and extrusion studies. The next four contributions, which discuss the effects of dislocations and point defects, are followed by seven chapters dealing with the mechanical properties of specific compounds. Included in this last section are two papers of particular interest which bear on the semi-conducting compound indium antimonide.

This is a very timely book in view of the current interest in the development of alloys for practical applications at elevated temperatures. It is useful to research workers in the field since it points out many problems requiring further investigation such as bonding, slip mechanisms and the interaction of imperfections in a high temperature environment.

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