

ume of this series is highly timely. The present volume is composed of 10 articles written by 12 contributors, four British and eight American, each of whom has been engaged for a number of years in work related to the topic he deals with.

In the introduction, the background and general picture of Protozoa as biochemical and phylogenetic tools are discussed interestingly. "Comparative biochemistry of flagellates" reviews the nutritional requirements and chemistry of some of the organelles of certain mastigophorans. The third article brings to light all available information on the synthesis of starch in *Polytomella*. Nutrition and metabolism of free-living ciliates are discussed in the fourth and sixth chapters, while the relationships of the rumen ciliates to ruminants and of xylophagous flagellates to termites and woodroach are reviewed in the seventh article. The ninth chapter deals with the present state of our knowledge of the chemotherapy of malaria and other diseases caused by hemozoic protozoans. The last article on comparative studies on amebas and amebicides considers free-living and parasitic amebas with special reference to *Entamoeba histolytica*.

The organization and presentation are excellent. References are abundant and up to date. Typographical errors are remarkably small in number and of minor character. For example, "*A. quadrimaculatus*" (the genus name should have been given fully) following "*Aedes aegypti*" (p. 228) appears in the index as "*Aedes quadrimaculatus*" (p. 363). This book is an excellent summation of the present state of biochemistry in relation to certain protozoans. It, like the first volume, makes a highly useful reference book and guide for those who are or intend to be students of protozoology and biochemistry.

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Ciba Foundation Symposium on Chemistry and Biology of Pteridines. G. E. W. Wolstenholme and Margaret Cameron, Eds. Little, Brown, Boston, 1954. xiv + 425 pp. Illus. \$8.

The Chemistry and Biology of Pteridines is an account of a symposium on pteridines sponsored by the Ciba Foundation. This symposium consisted of 29 participants who had been invited by this foundation both to present formal papers and to contribute to informal discussion on the chemistry and biochemistry of this interesting class of compounds. This volume represents the first printed account of a symposium of this

type, and the 28 papers contained in it are indicative of the wide scope of work involved. The book is divided into two parts: the first part contains 16 papers on the chemistry of pteridines, and the second part has 12 papers dealing with the biological aspects.

The reader will find the book to be interesting partly because of the wide variety of subjects covered and the interesting nature of the informal discussion. The section on the chemistry of these compounds may not prove to have as wide an interest as those dealing with their biochemistry. The biochemical subjects discussed will be of interest to all students of biochemistry in view of the fundamental role that is played by folic acid and its derivatives in metabolism.

This book will prove of value to the biochemist, because it gives an over-all picture of the occurrence of these compounds, which are widely distributed in nature both as pigments whose functions are unknown and as essential parts of enzyme systems. The biological importance of many of these compounds remains unknown, and it is reasonable to expect that this book will stimulate more research on this interesting class of compounds.

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Chemisorption. B. M. W. Trapnell. Academic Press, New York; Butterworths, London, 1955. vii + 265 pp. Illus. \$6.80.

During the past 15 years there has been a great deal of important new work concerned with chemisorption on solids. As the author explains, this monograph was written to fill a gap in the existing literature on the subject in which neither a selective nor an exhaustive treatment is to be found. The happy result has been a lucid and concise exposition on chemisorption which is a delight to read and a model for scientific writing.

Particular effort appears to have been made to discuss numerous recent developments. The thoroughly up-to-date character of the book becomes immediately evident on examination of the literature references. More than half of all the scientific papers drawn upon in the text have appeared since 1940. Such topics as the application of the field emission microscope to investigations of the mobility of adsorbed layers, the relevance of Pauling's new theory of metals to the interpretation of their catalytic activity, and the role of the semiconductor properties of several oxides in the decomposition of N_2O are touched upon.

By an admirable economy in style and in organization, the abundant material on chemisorption is compressed into 10 chapters requiring fewer than 300 pages. Yet very little seems to have been omitted, and a nice balance is maintained in the presentation of experimental detail and theory. Space is even found to illustrate the bearing of chemisorption on heterogeneous catalysis, as is evidenced by the last two chapters on catalytic specificity and on the mechanisms of catalytic reactions. There is hardly a doubt that this attractive little book affords an excellent introduction to chemisorption for the nonspecialist reader. For the specialist, this work will be important because a leading investigator in the field attempts to summarize the position today of our understanding of the chemical interactions of atoms and molecules with solid surfaces.

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The Skin, a Clinicopathologic Treatise.

Arthur C. Allen. Mosby, St. Louis, 1954. xv + 1048 pp. Illus. + plates. \$25.

The purpose of this book, according to the author, is to effect a better understanding between dermatologists and other practitioners of medicine. For those interested in dermatology and sufficiently familiar with histopathology, A. C. Allen certainly presents an extraordinarily well-prepared treatise and this in a field where unanimity of opinion is the exception. He chose the atlas type much like his monograph *The Kidney* in 8½ by 11½ in. format. Every chapter has an ample bibliography—in all there are more than 2000 references. Wherever systemic changes occur, aside from those in the skin, Allen describes and illustrates them lavishly, in this way linking the experience of the dermato-histopathologist with that of the general pathologist. He also gives excellent group discussions of entities in which his experience as a pathologist will stimulate dermatologic thinking.

His criticism of dermatologic terminology is shared by dermatologists. Correcting it will take much study and international cooperation, for which there has been no opportunity during the past 15 years. He offers no suggestions himself.

The field of allergic and eczematoid eruptions is not clearly presented, and at times Allen's remarks are at variance with generally accepted terminology and conceptions.

In covering therapy, the author is sometimes adequate. Frequently he confines himself to the newest and least tried medications that have not been generally