Book Reviews

Advances in Enzymology and Related Subjects of Biochemistry. vol. 15. F. F. Nord, Ed. Interscience, New York–London, 1954. x + 547 pp. Illus. $11.

There is little that one may add to past reviews of this well-established series. Volume 15 continues the high standard set by the previous volumes.

The topics reviewed were carefully selected to serve both general and special interests. From the table of contents, it is evident that there are several chapters for the many who follow the very rapid advances made in the field of metabolism. Not only are there three chapters concerned principally with enzyme mechanisms, but there are also sections of other articles that include the studies of the mechanisms proposed for the action of the particular enzyme system or systems reviewed. Articles that are well written and that serve a definite and worth-while purpose are never out of place. Therefore, in my opinion, the articles on virology and immunology need no rationalization for their inclusion.

The chapters are "The mechanism of enzymic oxidoreduction," by S. J. Leach; "Thermodynamique des reactions immunologiques," by Rene Wurmser; "Chemistry, metabolism, and scope of action of the pyridine nucleotide coenzymes," by Thomas P. Singer and Edna B. Kearney; "Alternate pathways of glucose and fructose metabolism," by Efraim Racker; "Enzymic mechanisms in the citric acid cycle," by Severo Ochoa; "The mechanism of action of hydrolytic enzymes," by H. Lindley; "Enzymatic synthesis of polysaccharides," by Maurice Stacey; "Urea synthesis and metabolism of arginine and citrulline," by S. Ratner; "Thiaminase," by Akiji Fujita; "Rennin and the clotting of milk," by N. J. Berridge; and "Die struktur des tabakmosaikvirus und seiner mutanten," by Gerhard Schramm.

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Limit Distributions for Sums of Independent Random Variables. B. V. Gnedenko and A. N. Kolmogorov. Trans. by K. L. Chung. Addison-Wesley, Cambridge, Mass., 1954. ix + 264 pp. $7.50.

K. L. Chung has rendered a service to students of probability theory by making available in English much material previously accessible only in Soviet periodicals. In the translator's preface he states:

> The systematic account presented here combines generality with simplicity, making some of the most important and difficult parts of the theory of probability easily accessible to the reader. Beyond a knowledge of the calculus on the level, say of Hardy's *Pure Mathematics*, the book is formally self-contained.

It seems to me that a more sophisticated mathematical background, including some knowledge of complex variable theory, is desirable if one is to read the book without considerable study. The majority of those to whom it would appeal no doubt possess the proper insight into this field of study. The book begins with a brief discussion of measure theory pertinent to the subject of probability, and to help the reader overcome the difficulties of this subject, an appendix by J. L. Doob is included. There are a considerable number of explanatory footnotes by the translator, and an extensive bibliography.

This might well serve either as a textbook or as reference reading in a course in advance probability.

The nine chapters are divided into three main parts: Introduction; General limit theorems; and Identically distributed summands. Chung suggests possible groupings of the material for several purposes to which the book seems suited. The first two chapters could serve as a rigorous course in probability. Other parts could be combined to serve the needs of those interested in the fundamental facts of stable laws, the law of large numbers, the central limit theorem, and asymptotic expansions.

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The Use of Stereographic Projection in Structural Geology. F. C. Phillips. Edward Arnold, London, 1954. vi + 86 pp. Illus. $3. (Distr. by St Martin's Press, New York 17.)

As a means of determining the three-dimensional angular relationships that exist between structural units, stereographic projection has the advantages of rapidity, ease of visualization, and adaptability to field methods. This is widely realized in North America, where at least two standard textbooks of structural geology now include an introduction to stereographic procedure, and where Bucher and others have popularized its use in solving everyday structural problems. Although it fills no obvious gap in the literature on this side of the Atlantic, Coles Phillips' book is nevertheless of value as a fairly comprehensive guide to procedures already described in scattered writings elsewhere. It assumes no previous knowledge of the subject and possesses extreme clarity of expression and of illustration.

Problems of which the stereographic method permits rapid solution, and which are dealt with here, include the obtaining of true dip from apparent dips, either measured at outcrop or along inclined angles of sight at a distance, as is the case in the interpretation of oblique aerial photographs; of plunge from pitch in a known plane; and of the attitude of intersection of oblique planes. The latter, for example, may be used in determining the direction of ore shoots, of plunging fold axes, and of traces of structures on inclined fault planes. Also described is the procedure employed to find the former attitude of