ing utility. Most practicing biologists may find more mathematics in it than they can easily digest, although they may be comforted by the authors' cautioning against *misuse* of mathematics (p. 11). Others may feel that some conclusions are presented a little too confidently, with insufficient allowance being made for alternative interpretations or for the still unknown. My impression, however, is that the tone of the writing is reasonable, good natured, and objective, and that certainly much of what is demolished is philosophically shaky anyway.

In appraising the factual content, I paid special attention to the parts dealing with the groups of higher vertebrates that I happen to have worked with, and, on the whole, feel satisfied with what I read there. Very nearly all the exceptions to the treatment of higher vertebrates that I would be disposed to take have to do either with minor points or with those about which no one has, as yet, conclusive answers, and about which some legitimate disagreement may be expected for a long time to come.

The book shows evidence of continued revision and probably came off the press in an exceptional state of up-to-dateness for such a big job in a difficult and rapidly advancing field.

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Entire Functions. Ralph Philip Boas, Jr. vol. V of *Pure and Applied Mathematics.* Paul A. Smith and Samuel Eilenberg, Eds. Academic Press, New York, 1954. xi + 276 pp. $6.

The theory of entire functions is a vast, rich chapter in the general theory of functions of a complex variable. Its literature is tremendous. The bibliography of the present monograph, which is concerned principally with the special class of entire functions of exponential type, consists of 17 pages. Intentionally, many topics of the general theory of entire functions, such as the Picard theorem and its developments, are omitted in this monograph. The result of this imposed restriction is a unity of theme and method. The interest of the special class of entire functions of exponential type is, of course, well known. As the author remarks, an account of the applications of functions of exponential type would call for a book by itself. What has been achieved here is a comprehensive account of the modern theory of functions of exponential type. The book is a valuable addition to the existing monographic literature on the theory of functions of a complex variable and is to be warmly recommended to both specialist and student.

The reader is expected to have a knowledge of the elements of the theory of analytic functions, including the theorems of Jensen, Carleman, and Phragmèn-Lindelöf, as well as some knowledge of the theory of subharmonic functions and of Lebesgue and Stieltjes integrals.

A summary of the contents follows: "Preliminaries"; "General properties of entire functions of finite order"; "The minimum modulus"; "Functions with real negative zeros"; "General properties of functions of exponential type"; "Functions of exponential type restricted on a line: I, Theorems in the large"; "Functions of exponential type restricted on a line: II, Asymptotic behavior in a half plane"; "Functions of exponential type: Connections between growth and distribution of zeros"; "Uniqueness theorems"; "Growth theorems"; "Operators and their extremal properties"; "Applications."

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Progress in the Chemistry of Organic Natural Products. vol. 10. L. Zechmeister, Ed. Springer, Vienna, 1953. ix + 529 pp. Illus. Paper, $19; cloth, $19.80.

This, the tenth volume of the Zechmeister series, follows the excellent tradition of the previous volumes with regard to the choice of subject matter and clarity of presentation. The authors, experts in their fields, have succeeded in conveying a well-rounded picture of the complexity and importance of the subject matter.

The first chapter, by K. Adler and M. Schumacher, deals with the applications of the "Diene synthesis" to the elucidation of the formation and constitution, as well as to the preparation, of natural products. The tremendous progress in this field becomes quite apparent if one compares the 347 references cited in this work with the 44 cited by O. Diels who covered the same topic in 1939 for the third volume of this series.

H. Mark discusses the physical chemistry of rubbers in the second chapter. The author utilizes only a minimum of mathematical equations in his presentation and treats, among other topics, the fundamental aspects of rubberiness, the structure of natural and synthetic rubbery polymers, and the kinetic theory of rubber elasticity.

The third chapter, by J. Asselineau and E. Lederer, treats the chemistry of the lipoids of bacilli. The various compounds that have been isolated from bacilli are enumerated, and structure proofs and syntheses are presented.

Syntheses of cortisone and related compounds are reviewed in a chapter by G. Rosenkranz and F. Sonderheimer. The authors give a number of useful charts in their discussion of the highly complex chemistry; they have covered the literature up to 1952.

The final two chapters, by A. Chatterjee and by L. Feinstein with M. Jacobson, deal, respectively, with the alkaloids of Rauwolfia plants and with the insecticidal principles of higher plants.

Not only researchers in the various fields presented but also all those who are interested in gaining a better insight into the complexity of natural products will profit from this volume.

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