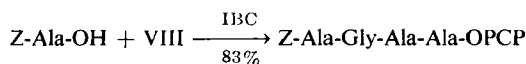


VIII



IX



The elemental analysis of the above compounds were within experimental tolerance.

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Books

REVIEWS

Molecular Orbital Theories of Bonding in Organic Molecules. By ROBERT L. FLURRY, JR. Marcel Dekker, Inc., 95 Madison Ave., New York, NY 10016, 1968. x + 334 pp. 16 × 23.5 cm. Price \$17.75.

This first book in the Applied Quantum Chemical Series is intended to provide a conceptual understanding of the principles of chemical bonding as explained by molecular orbital theory. In addition, it has been written to provide a working knowledge of the methods in common usage for applying molecular orbital theory to moderately large molecules. These objectives have been met admirably by the author. The book develops the subject in a clear logical manner from a nonrigorous but understandable considerable of wave mechanics, through Hückel theory to more sophisticated extended Hückel theory and self-consistent field methods. Along the way, the author makes generous use of examples and illustrates applications. There are occasional exercises which the serious student will find advantageous to consider.

Of particular value is the chapter on sigma bonds, which is certainly a burgeoning area of activity by organic and medicinal chemists. The final chapter, dealing specifically with applications listed under physical and chemical phenomena is perhaps too short and sparse on examples; however, it does serve as a good review of significant recent work.

In my view, the book is an invaluable addition to the working library of the medicinal chemistry graduate student and a valuable guide to the older medicinal chemist, trained in classical chemistry, but desirous of learning something of this rapidly emerging chemical philosophy. This book in the hands of the graduate student, and along with other good texts in this area, should provide the basis for the conception of useful applications of molecular orbital theory to problems of drug action, drug-receptor interaction, and drug design.

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A Manual of the Penicillia. By KENNETH B. RAPER and CHARLES THOM. Hafner Publishing Co., 31 East 10th Street, New York, NY 10003, 1968. ix + 875 pp. 15 × 23.5 cm. Price \$27.50.

A Manual of the Penicillia was an excellent thorough and authoritative treatise on an agriculturally and industrially most important group of fungi when it was first published in 1949. A review of that edition [*J. Am. Pharm. Assoc., Sci. Ed.*, **39**, 59 (1950)] concluded "The authors state a twofold purpose in preparation of the manual: First 'to facilitate the identification of the Penicillia'; second 'to introduce the user to whatever information has accumulated regarding the physiology, biochemistry, pathogenicity, or other characteristics of individual species and groups.' These objectives they have achieved with consummate skill and in an interesting manner. This book should be a classic for mycologists for many years to come."

The present volume is not a new edition but, as indicated on the title page, a "facsimile of the 1949 edition," the only difference between the two being an increase of more than one hundred percent in price since the original printing which sold at \$12.00—an interesting reflection on the economy of our time.

The book consists of three parts. Part I deals with Historical Aspects, Generic Diagnosis and Synonymy, Cultivation and Preservation of the Penicillia, and Penicillin. Part II is descriptive and taxonomic. The generous use of line drawings, black and white photographs, and color plates is a great asset. Part III contains two extensive bibliographies—one general, the other topical—and a useful check-list of organisms.

In view of the authors' second stated purpose, namely, "to introduce the user to . . . information that has accumulated regarding the physiology, biochemistry, pathogenicity . . . of individual species and groups," it is regrettable that cognizance has not been taken, even if only in the form of an addendum, of information that has accumulated in these areas during the 19 years since initial publication. The same comment applies also to the bibliographies in Part III, especially the topical one dealing with such subjects as allergy, antibiotics, deterioration and spoilage, culturing fungi, dermatomycoses, and enzymes—to mention only a few of the sixty categories covered.

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