

BOOK REVIEWS

The Chemistry and Chemotherapy of Diabetes Mellitus. ALEXANDER MARBLE and GEORGE F. CAHILL, Harvard Medical School. xv + 204 pp. Charles C Thomas, Publisher, Springfield, Illinois, 1962. \$7.75. Reviewed by ALFRED BURGER, University of Virginia.

In this compact monograph the authors have compiled the theoretically and practically most significant data concerning diabetes. The subject is introduced by a review of the chemistry, mechanism of action and transport characteristics of insulin. Forty years after the discovery of the hormone, the mechanism of its action remains in doubt, and this critical lack of understanding has slowed down the ultimate medical conquest of the disease. However, a very large number of observations have accumulated, and some of them have lent themselves to theoretical assessment. One-half of the book deals with every aspect of insulin; the other half with diabetes, its management, and oral hypoglycemic agents. While the review of the chemistry, biology and clinical manifestations of insulin is authoritative and nearly complete, the survey of oral hypoglycemic drugs leaves much to be desired. It gives the clinical slant of the more important agents but does not point the way to improvement or variation. On the whole, the clinician will profit mostly from this book, and the medical scientist. It offers an interesting refresher to the medicinal chemist, but not more.

Molecular Biochemistry. EDWARD M. KOSOWER, New York University. xii + 304 pp. McGraw Hill Book Co., Inc., New York, N.Y., 1962. \$12.50. Reviewed by ALFRED BURGER, University of Virginia.

The hopes for a rationale in drug synthesis are based on a detailed and intimate understanding of the interplay of the maze of metabolic reactions, with which one may hope to interfere selectively as the need arises. On the horizon lies the mirage of the active receptor site; the drama of a very few active enzyme sites is just beginning to unfold. Professor Kosower has compiled much of the available information on these subjects in a critical and original manner and has given us a book that we cannot afford not to read. Presented in the most modern vein of the physical-organic biochemist, the rates, charge transfer complexes, transition states and ramifications of every important metabolic reaction are recorded in an easily readable style. Each chapter begins with a quotation of poetry or sayings whose bearing on the subject becomes apparent as one reads the discussion of the reaction or product. Our specialized profession can stand a reminder that our field is but one cog in the varied and complex metabolic wheel at the borderline of chemistry and biology. Each reaction sequence is extensively illustrated with well-printed formula schemes, and documented with references. Author and subject indexes are adequate. The book is one of the most stimulating and accurate biochemical monographs this reviewer has read.