

edition do not coincide with current literature values. Admittedly, it would constitute a major undertaking to research and revise the melting points of the principal entries, but such effort would be cognizant of the high quality of standards associated with this "Dictionary."

*The Uniqueness of Biological Materials.* By A. E. NEEDHAM. Pergamon Press, Inc., 122 East 55th Street, New York, N. Y. 10022, 1965. xi + 593 pp. 16 × 23 cm. Price \$15.00.

"Is the uniqueness of life inherent in the material of living organisms?" By posing this question the author states one of the reasons for writing the book. The other reason is a practical one. It was prompted by the need to persuade students that the study of the properties of biological materials such as lipids, carbohydrates, proteins, nucleic acids, and other cell components is not only essential but also very interesting.

The evidence as surveyed in the various chapters of the book seems to show rather consistently that the compounds used by living organisms are outstanding if not absolutely unique among the materials available on earth. It is further pointed out that these substances are unique in respects which make them ideal for some particular biological function.

All of the relevant elements and compounds are surveyed systematically. The author concentrates on the significance and interpretation of the properties studied rather than on the properties themselves. Biological rather than any other applications of the properties are stressed. Illustrations by use of figures, tables, and formulas are numerous.

The coverage of the subject matter is comprehensive; the bibliography, while not too extensive, is up-to-date and ample.

The concluding chapter entitled, "The Origin and Evolution of Biological Uniqueness," is very stimulating.

The book is very valuable to not only students of biochemistry, biology, and zoology, but also to students of chemistry. Students of pharmacy will find the text very informative and interesting.

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*The Structure of Lipids by Spectroscopic and X-Ray Techniques.* By D. CHAPMAN. John Wiley & Sons, Inc., New York, N. Y., 1965. xii + 323 pp. 16 × 24 cm. Price \$10.50.

In the past ten to fifteen years there has been a considerable increase in research in the field of lipids. This intensified interest in this class of compounds has stemmed largely from the growing interest in the causes of lipid diseases such as atherosclerosis.

In this book the author has described a number of modern physicochemical experimental methods that have been used extensively in recent years to study lipid molecules in the solid and liquid states. In each instance a great deal of data are presented

and their relationships to intra- and intermolecular structure and interactions are discussed. More than one-half of the book is devoted to X-ray diffraction and infrared spectroscopic studies with particular emphasis on crystal polymorphism. Separation techniques, ultraviolet, nuclear magnetic resonance, electron spin resonance, and mass spectroscopy and their application to lipids are discussed in the remainder of the book. It is shown that the combined applications of these techniques, particularly X-ray, infrared, and NMR, have unraveled a number of difficult problems such as the existence of the multiple melting points of triglycerides and their relationship to X-ray data.

The author has chosen to organize the subject matter from the standpoint of experimental techniques rather than from that of lipid chemistry. As a result, the book is somewhat difficult to read; but, on the other hand, this arrangement has permitted the presentation of a large amount of data.

It is the reviewer's opinion that the book is an outstanding contribution to the field and very useful for researchers in the field.

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## NOTICES

*La Relation Medecin-Malade Au Cours Des Chimio-therapies Psychiatriques.* Preface du PROFESSEUR J. DECHAUME. Textes Publies par P. A. LAMBERT. Masson et Cie, Editeurs, Libraires De L'Academie De Medecine, 120 Boulevard Saint-Germain, Paris VIe, France, 1965. 222 pp. 16 × 24 cm. Paperbound.

*Antibiotika-Fibel: Antibiotika und Chemotherapie.* 2nd rev. ed. By A. M. WALTER and L. HEILMEYER. Georg Thieme Verlag, Postfach 732, Herdweg 63, 7000 Stuttgart 1, Germany, 1965. U. S. and Canadian agent: Intercontinental Medical Book Corp., New York 16, N. Y. 897 pp. 14.8 × 21 cm. Price DM 88.

*Plantas Medicinales De Puerto Rico.* By E. NÚÑEZ MELÉNDEZ. Universidad de Puerto Rico, Estacion Experimental Agricola, Río Piedras, Puerto Rico, 1964. 245 pp. 15 × 23 cm. Paperbound.

*Functions of the Corpus Callosum.* Ciba Foundation Study Group. Edited by E. G. ETLINGER. Little, Brown and Co., Boston, Mass., 1965. xii + 156 pp. 12.5 × 19 cm. Price \$3.75.

*Advanced Practical Inorganic Chemistry.* By D. M. ADAMS and J. B. RAYNOR. John Wiley & Sons, Inc., 605 Third Ave., New York 16, N. Y., 1965. xiv + 182 pp. 15 × 23.5 cm. Price \$6.00.

*Hashish: Its Chemistry and Pharmacology.* Ciba Foundation Study Group. Edited by G. E. W. WOLSTENHOLME, F. I. BIOL, and J. KNIGHT. Little, Brown and Co., Boston, Mass., 1965. 96 pp. 12.5 × 19 cm. Price \$2.95.