## **BOOK REVIEWS**

## The Lipid Handbook

F. D. GUNSTONE, J. L. HARWOOD, AND F. B. PADLEY, EDS.

Chapman and Hall, London, 1986

The editors outline their aim in the Preface: "to produce a reference which will be of value to those who are interested in lipids." To achieve such an aim in a single volume (of 570 pages, plus a 314 page long "dictionary section" listing lipid compounds) is a formidable task, even if the "value" is defined very broadly. I believe the authors succeeded in producing a volume of value to the nonspecialist, and to chemists who are in need of occasional information about lipids.

The volume covers: structure of lipids, occurrence of specific oils and fats, separation procedures, processing, analytical methods, synthesis, properties, metabolism and medical and agricultural aspects of lipids. I found the individual chapters to be well written, informative, and in most cases up-to-date. Several rapidly moving fields, however, are not brought up-to-date. The chapter on prostaglandins, thromboxanes, and leukotrienes has only 2 references from the 1980s (a 1982 review and a 1981 research paper). The chapter on autoxidation fails to mention the most recent reviews, especially the work of Ned Porter at Duke. There is no mention of the outstanding monograph by Smith on cholesterol oxidation, and cholesterol oxides are not listed in the index. The chapters on physical properties, and structural and physical characteristics of lipids and on lipid-water interactions make only two fairly old references to the work of Donald Small, whose recent book on Physical Chemistry of Lipids is a most relevant citation. Antioxidants are mentioned only in passing, with fairly old references given for further study.

These omissions are probably unavoidable in a "Handbook" of this scope, but they do diminish its usefulness.

Marcus Karel

Massachusetts Institute of Technology Cambridge, MA 02139