professional workers in the biochemical, biological, chemical, agricultural, and biomedical sciences." It will be an asset to all mass spectrometrists.

EDGAR M. EMERY
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McCutcheon's Detergents and Emulsifiers, 1972 Annual (McCutcheon's Div., Allured Publishing Corp., Ridgewood, N.J., 1972, 245 p., $10.00).

This paperback represents the 1972 edition of the compilation of detergents and emulsifiers that has been published for over 20 years.

This book is divided into seven sections, the format resembling the 1971 edition. The bulk of information is given in the tabulation of both U.S. and foreign detergents and emulsifiers which are arranged alphabetically by trade name. Each material listed contains information on the manufacturer, class and formula, form and concentration, type of surfactant and remarks, which consists mainly of usage information. The table also includes information on hydrophile-lipophile balance (HLB) values where available. In addition to the main listing, a useful cross index of trade names and manufacturers listed by chemical class is given. An important addition to this edition is the listing of telephone numbers of U.S. manufacturers of the products listed. A separate index of HLB values for materials, where data is available, is also included. An excellent survey of various aspects of the detergent industry including up to date information on ecological problems and a discussion of the various raw materials used in syndets, prepared by J.C. Harris, is a well written review of the current status of the industry. The volume contains several pages of advertisements which are arranged so that they do not detract from the technical content.

The volume will be most valuable to chemists engaged in formulation work involving the use of detergents and emulsifiers. It provides the user with basic, concentrated information on the large number of raw materials available to the industry in an easy-to-follow handbook form. Anyone interested in obtaining quick and up-to-date information on currently available detergents and emulsifiers will find this volume a useful reference work.

Principles of Enzymology for the Food Sciences, J.R. Whitaker, (Marcel Dekker, Inc., New York, May 1972, 636 p.).

This book was designed to encourage food scientists to become acquainted with the fundamental principles of enzymology and is intended to serve as a text for the teaching of enzymology in the food sciences. The subject matter presented can be divided into two sections. The first section, representing 14 chapters and 427 of the 617 pages, deals with the basic properties of enzyme-catalyzed reactions. These include an introductory chapter, which emphasizes the importance of enzymology in food science, and chapters covering protein structure, purification, active sites, reaction rates, substrate concentration effects, enzyme concentration effects, inhibitor effects, temperature effects, cofactors and nomenclature. The second section contains discussion of specific enzymes-hydrolases (glycosidases, pectic enzymes, esterases, nucleic acid hydrolases, proteases) and oxidoreductases (lactic dehydrogenase, glucose oxidase, polyphenol oxidase, xanthine oxidase, catalase, peroxidase and lipoxidase).

The book is a fine enzymology text in itself and should be especially useful to people interested in research of enzyme systems. The reading is lightly flavored with specific points of information pertinent to food scientists and technologists. The biomedical approach or such things as "*E. coli* chauvinism" in similar texts is minimized, and it is refreshing to see a book which provides relevance to the food scientist. Each chapter contains a series of review questions along with general and specific references. The review questions add much to the potency of this text and effectively challenge a person's understanding of the principles outlined in any given chapter.

The text is quite expensive, and one must question the usefulness of the latter section which is a sort of incomplete "Enzyme Handbook." Furthermore, in this reviewer's opinion, the author might have given more extensive coverage to certain areas such as: the response of enzymes to stress encountered during food storage or processing, e.g., temperature extremities, variations in water activity, ionizing irradiation, additives, etc.); the anabolic and catabolic role of enzymes in development of quality indices, e.g., flavor, color, texture, nutrition; and the use of enzymes as processing adjuncts or additives with the important implications of immobilization techniques. These topics are rather hollow if an individual has not been previously primed to the fundamentals.

In summary, *Principles of Enzymology for the Food Sciences* is highly recommended as a text that emphasizes the basic properties of enzymes for people in the applied sciences.

NORMAN HAARD

Progress in Thin Layer Chromatography and Related Methods, Vol. II., Edited by A. Niederwieser and G. Pataki (Ann Arbor Science Publishers, Inc., 1971, 259 p.).

This volume is a collection of seven chapters concerned with thin layer chromatography (TLC) authored by scien-

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CALL FOR PAPERS

AOCS 64TH ANNUAL SPRING MEETING

The Technical Program Committee has issued a call for papers to be presented at the AOCS Spring Meeting, April 29-May 3, 1973, in the Jung Hotel, New Orleans, La. Papers on lipids, fats and oils, and all related areas are welcome.

Submit three copies of a 100-300 word abstract with title, authors and speaker to Robert L. Ory and Harold P. Dupuy, Southern Regional Research Lab., P.O. Box 19687, New Orleans, La. 70179. The deadline for submitting papers is December 1, 1972.