

Book Reviews

Developments in Ionic Polymers—1. Edited by Alan D. Wilson and Havard J. Prosser, Applied Science Publishers, London, 1983. ix + 336 pp. £36.00.

The subject of ionic polymers started with Graham's recognition that sodium polyphosphate was macromolecular in nature. The subject has, of course, developed enormously since that time. This book is one of the Development Series and attempts to deal with the latest trends in a specific study. Given the usual time lag required to produce a book, the Editors have achieved this aim. The topics included in this book are 'Oxide Glasses as Ionic Polymers' (N. H. Ray), 'Structure and Properties of Ionomers' (Ruskin Longworth); 'Conformational Effects of Ion-Pair Clustering in Ionomers: A Theoretical Analysis' (W. C. Forsman); 'Polyelectrolyte Cements' (Havard J. Prosser and Alan D. Wilson); 'Ionic Polysaccharides' (D. S. Reid) and 'Polyelectrolyte Interactions Leading to Phase Demixing' (Arthur Vlès).

Each chapter is well written by a specialist and the topics are well covered. The book should be useful for those who require to be up to date in this subject.

Michael Hudson

Hydrogenation of Fats and Oils. By H. B. W. Patterson, Applied Science Publishers, London, 1983. 310 pp. Price: £38.00.

This book is a detailed practical guide to the use of hydrogenation as a process for altering the properties of edible fats and oils. The theoretical

background to the reaction, including selectivity aspects, is well covered in the first chapter. This is followed by chapters on hydrogenation process techniques, plant, hydrogen and catalysts. Hydrogenation methods applied to individual fats and oils are discussed in detail in the next chapter, with applications and limitations of the process for each oil being considered in turn. The book is completed with chapters on safety, quality and control, and a glossary of technical terms.

The author is successful in providing both basic information, which is valuable for the reader without any background in the oils and fats industry, and a wealth of practical detail which will make it an essential text for personnel involved in the hydrogenation of edible oils and fats on a daily basis.

The book is well written and the presentation is generally good, although the use of dots and colons to represent single and double bonds in molecular formulae is less clear than alternative methods of representation. A full list of references and an adequate index are included.

This book is one of the most comprehensive texts available in the field of the hydrogenation of edible fats and oils and it is recommended for purchase by all personnel who are interested in this process.

M. H. Gordon

Food Oils and Their Uses, 2nd Edition. By Theodore J. Weiss, Ellis Horwood Ltd, 1983. 310 pp. Price: £30.00.

This book is written with the aim of providing abridged technical information on fat and oil products and their uses, with emphasis on the 'art' involved in such products and associated processes. After brief chapters on the chemical and physical properties of fats and oils, commercial oil sources and basic processing methods, the bulk of the book covers the uses of fats in food products including shortenings, margarines, mayonnaise and salad dressing, peanut butter and confectionery coatings.

The book reflects Dr Weiss's experience in the US food industry, and the discussions on legislation and some of the product information are only relevant to the US market. This limits the usefulness of the book for the European reader, since important trends in the use of fats in food