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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 Book reviews 81

products in Europe are not mentioned. For example, no reference is made to the use of vegetable fats at the 5% level in chocolate. However, the book is very readable, and it provides much practical information about the properties of fats required in the various products, and problems that may be encountered in their use.

One limitation of this edition is that many of the references quoted are somewhat dated, and, although some recent references are included, it appears that the updating of the first edition has been somewhat sketchy in places. Thus, reference is still made to the third edition of *Bailey's Industrial Oil and Fat Products*, published in 1964, rather than the fourth edition, published in two volumes in 1979 and 1981.

The author has not attempted to deal in depth with the scientific background to the use of fats in food, but the product information, which includes references to patents and articles from trade journals, is very useful. The book is a worthwhile introductory text, and it is recommended for purchase by those who are interested in gaining practical information about the use of fats in food products.

M. H. Gordon