Food Flavours: Generation, Analysis and Process Influence. Developments in Food Science, Volume 37. Edited by G. Charalambous. Elsevier Science, Amsterdam, The Netherlands, 1995. **37A**: vii + 1099 pp; **37B**: v, 1001 + 2236 pp. Price US$442.75.

This volume details the lectures and many of the feature presentations held at the 8th International Flavour Conference (6–8 July 1994). The underlying theme of the conference was 'Recent Developments in Food Science and Nutrition'. These volumes contain separate chapters for each of the papers presented, where major emphasis was placed on the effects of processing and food components upon the flavour of food and beverages.

The research shown in these volumes further confirms the tremendous importance of flavour chemistry in a wide variety of food and beverage products. With existing analytical and instrumentation being developed and improved, food scientists have greater ability to isolate, identify and quantitate food flavour compounds. These volumes are a testament to this progress.

This book aims to present the latest development in the broad field of Food Science and Nutrition. It achieves this through incorporation of the numerous papers, ranging from food applications of biopolymers —theory and practice, to the interactions between polysaccharides and aroma compounds. The size and diversity of the content of these volumes, with entries such as roasting of peanuts, gamma irradiation of packaging films, and factors affecting development of flavour in whisky, wines, fermented products, alcohol precursors, and model food systems, means there is insufficient space in this review to do the subject matter justice.

The varying text font types in these volumes create a lack of uniformity in the book. However, the editor has ensured a high quality of diagrams allowing unhindered comprehension. This is an excellent book, particularly suited to carbohydrate scientists, food scientists and those associated with the food industry in general.

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Spectroscopic Techniques for Food Analysis. By R.H. Wilson. VCH Verlagsgesellschaft mbH, Weinheim, Germany, 1994. 246 pp. Price DM 165.00. ISBN 1-56081-037-8.

There are many methods of analysis available to the food analyst including gas chromatography for volatile component analysis, liquid chromatography for the analysis of solutes in solution, electrophoresis for protein profiling and spectroscopy, which can assist in providing information on composition and structure of foods. One of the primary classes of food which must be considered consists of the carbohydrates, monosaccharides, oligosaccharides, and polysaccharides as they play a major role in the functional and aesthetic qualities of foods. The spectroscopic techniques are some of the most important for the composition and structural analysis of carbohydrates.

Spectroscopic Techniques for Food Analysis details the different forms of spectroscopy which are applicable for the analysis of food components and total foods. The book is split into seven chapters, the first of which is an overview of the various spectroscopic methods and gives a good foundation for the other six chapters which detail individual spectroscopic techniques, near infra-red, mid-infra-red, nuclear magnetic resonance, analytical spectroscopy (for the determination of metals in foods), mass spectroscopy, and UV/visible. The focus for each of the techniques is on practical applications rather than theoretical detail. Mass spectrometry coupled to gas chromatography is discussed for the analysis of nature and linkage positions of the individual monosaccharides which constitute a polysaccharide, and there is an excellent summary on the use of nuclear magnetic resonance spectroscopy for the structural determination of the often complex polysaccharide component of foods.

The book is well written, although the index is not as comprehensive as it might be, and each chapter is well referenced. It is recommended not only for food analysts, but also for those requiring a general introduction to the potential of spectroscopy.

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Monosaccharides: Their Chemistry and their Roles in Natural Products. By P.M. Collins and R.J. Ferrier. Wiley, Chichester, UK, 1995. vi + 574 pp. Price US$30.35. ISBN 0-4719-5343-1.

Monosaccharide research is now practiced in several subject areas, having rapidly diversified and expanded as a branch of modern chemistry. It has now been incorporated into modern organic chemistry though its central significance lies in biology and the new science 'glycobiology'. With the general advancement and utilisation of organic chemistry knowledge, carbohydrate chemistry has long been accepted as a potent force in science. This has meant many 'Organic Chemists' jumping on the carbohydrate 'Band-Wagon'.

For those aware of the previous work of the authors, this is effectively the second edition; however, due to the advancement of this branch of chemistry, this edition has undergone major restructuring and expansion to accommodate the subject. Each chapter introduces the subject either by dealing with matters relating to molecular structure and conformation (Chapter 2), or