should do much to stimulate further research into the subject and is wholeheartedly recommended as essential reading for all chemists, biochemists, food scientists and technologists who are engaged as teachers, students, research workers or managers in the food industry or academia.

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Chemistry and Physics of Baking. Edited by J. M. V. Blanshard, P. J. Frazier and T. Galliard. Royal Society of Chemistry, London, 1986. viii + 276 pp. ISBN 0-85186-995-5. Price: £39.50.

This volume represents the proceedings of an International Symposium with the same title, jointly organised by the Food Chemistry Group of the Royal Society of Chemistry and the Nottingham University School of Agriculture and held during April 1985 at Sutton Bonington. Both the symposium and this volume are an attempt to rectify the virtual total absence of a comprehensive, up-to-date examination of a subject which has an estimated total annual retail value (in the form of cakes, bread and biscuits) in excess of £3000 million in the UK alone. The drive behind this aim is the increasing awareness that nutritional and legislative issues can have opposing effects on commercial viability. A detailed knowledge of the materials and processes involved is therefore essential for the future wellbeing of the industry.

The 20 contributions, written by 34 authors from the UK, Europe, Australia, Canada and the US, are presented in three sections. The first section, entitled Basic Constituents of Baked Products, contains nine contributions dealing with the major components of baked products including polysaccharides, proteins, fats, emulsifiers, enzymes, yeast and water. The importance of water is frequently overlooked by many food scientists but this review illustrates the important role it plays in the baking process.

The second section, entitled Fundamental Interactions: Consequences, Control, contains seven contributions which cover both physical and chemical interactions that are important in the baking process including mixing, interactions of carbohydrates and lipids with proteins, oxidation-reduction systems, rheology and component interaction at various stages of processing. The final section entitled Developments

in Processes and Products, is brief and contains only four contributions. These deal with extrusion cooking, mathematical techniques in product/process optimization, quality improvement via wheat breeding and the way ahead for baking processes.

The presentation of the book is commendable but the delay in publication of over a year after the conference might have been reduced by use of more rapid publication techniques. The figures and tables which amply illustrate the text are clear and the reference lists comprehensive. Whilst some overlap between contributions is unavoidable in a subject of this nature, it does not detract from the appeal of the book but illustrates the different views held by the industry. We can recommend this book to all food scientists and technologists from academic or industrial backgrounds. Workers involved with chemistry, physics, biochemistry and engineering who have an interest in cereals, processing and baking products will also find this book a useful addition to their library.

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