

This book is highly recommended as a comprehensive overview of the state of the art in the research on, and the industrial potential and applications of both low- and high-molecular weight carbohydrates/polysaccharides.

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***Surface Activity*, K. Tsujii. Academic Press, 1998, 245 pp., \$79.00, ISBN 0-12-702280-5**

The fundamental importance of surfaces and interfaces in everyday life as well as in materials science and technology is well known. Household products such as soap, shampoo and detergents are surface active materials. Surfactants are key materials in technological processes involving adhesion, coating and many more phenomena in the chemical, electronic, pharmaceutical and medical industries. Understanding phenomena associated with surfactants, such as micelle and layer formation, is not only a challenge for chemists and physicists, but is also of paramount technological importance.

*Surface Activity* is a comprehensive, up-to-date contribution to the science and technology of surface activity. Basic concepts of surface and interfacial tension, surface active

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***Polysaccharide Dispersions: Chemistry and Technology in Food*, R.G. Walter. Academic Press, 1997, 236 pp., \$99.95, ISBN 0-12-733865-9**

Polysaccharides are biopolymers which are extremely versatile. In nature they perform a wide variety of different functions; in foods they are vital components which determine texture and changes in texture which occur on storage or cooking. Certain food polysaccharides, such as dietary fibre, are thought to provide protection against heart disease and some forms of cancer. Particular polysaccharides tend to be traditionally associated with particular types of food: this reflects features of their chemical structures which lead to specific properties. Small changes in their structure can have a major influence on functionality: it is this aspect which makes their study so attractive. Polysaccharides are high molecular weight polymers, so that many concepts and techniques for their study are derived from the field of synthetic polymer science.

*Polysaccharide Dispersions: Chemistry and Technology in Food* recognises that there are few texts which adequately

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materials and their associated phenomena, and practical applications in everyday life and industry are covered in detail. Novel potential future applications of materials such as liposomes, bilayer membranes and lyotropic liquid crystals are discussed.

This book is a thorough, well-presented, and readable text. It is highly recommended, not only as excellent introductory material for students in the field of surface science, but also as a valuable reference work for research scientists and engineers who wish to know more about surfactants.

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describe how the knowledge in the field of synthetic polymer science can be, or has been applied to polysaccharides, while acknowledging that polysaccharides present their own particular problems. This book is an attempt to bridge this gap, while being comprehensible to a wide audience, ranging from researchers to readers with only a modest technical background.

Though this text contains much useful information, coverage is often fragmented and disjointed: there is an overall lack of general structure. Explanations of some well-known concepts are very difficult to understand. A number of topics, including mathematical models for the functional behaviour of polysaccharides, so important for technological applications, are not clearly explained. The book is a valiant attempt to cover an area in need of attention, but unfortunately it fails to achieve its objectives.

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