topics are clearly illustrated by ample use of structures and diagrams. Information is extensively cross-referenced to show the interrelationship of important concepts.

Mercedes Garaita
John F. Kennedy

Application of Chitin and Chitosan. Mattheus F.A. Goosen (ed.), Basel, Switzerland, 1997, Technomic Publishing AG, xi + 336 pp., Sfr. 314.00, ISBN 1-56676-449-1.

Chitin and its derivative chitosan, the second most abundant polysaccharide, occur mainly in the exoskeleton of crustaceans, insects and in the cell walls of some microorganisms. With better understanding of the structure and properties of chitin and chitosan, substantial progress has been made over the years on their functionality and applications especially in biotechnological and medical areas.

"Application of Chitin and Chitosan" examines the state-of-the-art of new as well as potential products. Written by various experts, this book has been designed for an audience of diverse background with interest in the application areas. Research students and scientists as well as industrial people would find this a fascinating insight into the subject matter.

"Application of Chitin and Chitosan" is divided into six parts beginning with two comprehensive chapters which make up the overview and four chapters covering structure and properties. Further chapters on applications have been broken down into four sections according to their application areas i.e. food and agriculture, medicine and biotechnology, textiles and polymer and waste-water treatment.

As in many other multi-authored books, overlapping and inconsistencies in the style of writing and depth of discussion have not been avoided. The chapter on 'characterization and solution properties' was very specific and was written in a formal research report format whilst the chapters on 'chitin structure and activity of chitin-specific enzymes and inhibition of molting in chewing insect pest' were rather brief. Despite that, *"Application of Chitin and Chitosn"* is an excellent review of the new as well as potential applications and would be invaluable to students, academic and industrial scientists.

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Trends in Carbohydrate Chemistry – Volume 2. P.L. Soni (ed.), Surya International Publications, Dehra Dun, India, 1996, 139 pp., ISBN 81-85276-57-9

Being a tropical and a large country, India has a great potential of biopolymer resource derived from various types of plants. Hence, a better understanding of the latest technology of carbohydrate chemistry will definitely boost the agricultural and industrial sectors for the benefit of mankind. Therefore, the proceedings of any conference in the form of a book would facilitate the dissemination of knowledge and help the technologists to build up on the scientific know-how into accepting new ideas and methodologies.

"Trends in Carbohydrate Chemistry – Volume 2" is merely a collection of papers presented during Xth Carbohydrate Conference which was held in Gujarat, India. Unfortunately the topics are not organised systematically for the benefit and convenience of the readers searching for their own desired area of interest. The 14 topics are probably aimed at covering the main area of carbohydrate chemistry carried out in various universities and research institutions of India and focussed the ones which have commercial and industrial values.

However, the papers are relatively simple and very informative. Since natural polymers are becoming popular, both the chemical and physical understanding of these biopolymers are essential for the commercial and industrial communities as well as to the researchers in the area of carbohydrate chemistry in order to optimise the usage of biopolymers and to produce higher value-added products. Topics on natural and modified gum products are also well covered and elaborated, particularly the seed gums which are obtained from the seed endosperm of leguminous seeds and which have widespread applications in paper, textile, food, cosmetics, petroleum and pharmaceuticals.

Another area which is highlighted in the book is the study on cassava starch and the various applications of starch in its native and modified forms. The properties of the starch derivatives are discussed and the possible new avenues of applications are also presented. With more information in carbohydrate chemistry, the usage of starch is then further expanded to the non-food application such as biodegradable polymers or plastics.

The book will be a supplementary resource for researchers and academicians in carbohydrate chemistry to gain extra input for better understanding and improvement in the teaching and R & D aspects.

John F. Kennedy
W.H. Wan Hassan

Food Colloids, Proteins, Lipids and Polysaccharides. E. Dickinson and B. Bergenstahl (eds.), Royal Society of Chemistry, Birmingham, UK, 1997, x + 401 pp., price £89.50, ISBN 0-85404-776-X