

Book Review

Chitin and Chitosan. Sources, Chemistry, Biochemistry, Physical Properties and Applications. Edited by G. Skjåk-Bræk, T. Anthonsen and P. Sandford, Elsevier Applied Science, London, 1989. xxii + 835 pp. ISBN 1 85166 395 9, Price £86.00.

Chitin is widely distributed throughout nature. Chitosan is the name used for low acetyl forms of chitin and is composed primarily of glucosamine, 2 amino-2-deoxy-D-glucose. Currently the most easily exploited source of chitin and chitosan are the protective shells of crustaceans such as crabs and shrimps. With the commercial availability of purified chitosans coupled with its ability to be used in a variety of forms (powder, solution, gel, film, bead, membrane), chitosan is being used in many commercial applications.

The importance of chitin and chitosan has grown partly because they represent a renewable and biodegradable source of materials, and partly because of the recent increased understanding of their functionality in biology and in technological, biotechnological and medical applications.

This book is based on a major collection of 87 papers presented at the 4th International Conference on Chitin and Chitosan held in Trondheim, Norway. It comprises six parts which are the plenary lectures; sources and biochemical aspects; structure and chemical modification; physical chemistry and functional properties; application in medicine and biotechnology; and other applications.

The wide range of topics in this volume represents an impressive survey of scientific papers dealing with basic and applied aspects of

chitin and chitosan. Therefore, it provides material of direct relevance to those involved in the research, development, industrial processes and teaching of the subject.

**Marion Paterson
John F. Kennedy**