

Towards a Carbohydrate-Based Chemistry. Published by The Commission of the European Communities, Luxembourg, 1990. iv + 283 pp. ISBN 92 826 1420 4.

Carbohydrate chemistry plays a central and coherent role in the living world. Almost all the components of living things derive in one way or another from simple sugars. However, carbohydrate chemistry plays no such central role in modern technology. The bulk chemicals industry is dominated by products from hydrocarbons, while the main theme in biotechnology is the relationship between nucleic acids and proteins.

In order to identify the gaps in science and technology inhibiting industrial use of products, consisting of, containing, or derived from carbohydrates, a symposium was organised by the Concertation Unit for Biotechnology in Europe (Commission of the European Communities). This symposium, which was held in Amiens, France, brought together many prominent scientists from all over the world to discuss the prospects for carbohydrates. *Towards a Carbohydrate-Based Chemistry* is based on a collection of ten papers presented at this symposium, each of which focuses on different fields of the carbohydrate chemistry.

The opening chapter by B. Lindberg provides a brief discussion on the chemistry and technology of the carbohydrates. The other chapters include a wide range of topics, such as: carbohydrate feedstocks; application of carbohydrates in food and feed, in the chemical industry, and as medical products; microbial reactions with, and derivatives of carbohydrates; use of enzymes in carbohydrate chemistry; commercial potential of plant cell wall polysaccharides and oligosaccharins; chitin and chitosan; and information on opportunities and needs in the carbohydrate field. The concluding chapter by D. C. Ellwood and K. Sargeant gives an overall analysis of carbohydrate based chemistry and the work needed to facilitate and promote increased use of products based on carbohydrate chemistry.

This book provides an up-dated coverage of the subject and is a useful reference for researchers working in this field.

**John F. Kennedy
Marion Paterson**