



ELSEVIER

Carbohydrate Polymers 53 (2003) 509

---

## Carbohydrate Polymers

---

[www.elsevier.com/locate/carbpol](http://www.elsevier.com/locate/carbpol)

### Book Review

#### Protein-based Films and Coatings

Aristippos Gennadios (Ed.); CRC Press LLC, Boca Raton, FL, 2002, 672 pages, ISBN 1-58716-107-9, £112.00

Packaging is on the increase, but the majority of packaging is made from plastics. With recent technological advances, however, packaging is increasingly being made from proteins. This means that the packaging can be edible or is biodegradable. The applications for this are innumerable, from film capsules for pharmaceuticals to packaging food. If the packaging or coating is protein based, then the environmental issues concerning the packaging are negated, as it will either be ingested or will biodegrade. These protein based technologies and applications are renewable resources, and as there is such great interest in the field of renewable resources, the concept of packaging that is edible or biodegradable is one that garners further research and interest.

*Protein-based Films and Coatings* is clearly divided into 26 chapters, with the first chapter giving an overview to the topic as a whole. Chapters 2–12 give detailed information about the origin, physical properties and applications of films and coatings derived from specific sources. Chapter 13 describes the transport models across the films, Chapters 14–22 describe the applications of films and coatings in specific situations, such as foodstuffs or pharmaceuticals. Chapters 23–25 deal with specific issues, such as military packaging applications or the implications for the Kosher and Halal markets. Finally, Chapter 26 is concerned with the concept of degradable plastics.

Each chapter is set out independently of the others, and is concerned with purely the topic in the chapter. Some overlapping of information and techniques does occur between the chapters, however, as they often discuss similar topics. Each chapter has its own comprehensive reference section, and where there is need for illustration through the use of graphs and diagrams, these are provided in an easy to understand style. There are also a large number of well laid out tables to illustrate many of the key points. As a whole, the text is divided into clear sections within the chapters, with the sections dealing with a specific characteristic or property in a concise and effective manner.

The objective of the book is to draw together all the current trends and ideas within the topic, and to provide an effective reference text for anyone who requires information or data on a specific subject. The tone of the book is set such that anyone with a degree of protein understanding will be able to use the book without further recourse to additional texts for clarification, as the clear manner with which it has been written means that the book is accessible by all who would have need to read it.

Michael McCluskie\*

John F. Kennedy

ChembioTech Laboratories,  
Institute of Research and Development,  
University of Birmingham Research Park,  
Birmingham B15 2SQ, UK