

by *Sherrington*, deals with broader aspects of this field, covering new types of supports, polymeric vesicles, microcapsules, polymeric drugs, photoresists, etc. This clearly demonstrates the interdisciplinary aspects of functional polymers, and should stimulate further research interest.

One would have wished to find additional chapters on the applications of functional polymers for immobilization of enzymes and microorganisms, as well as on polymer-supported synthesis of oligonucleotides, which are likely to be some of the more rapidly expanding areas of research involving polymer supports. Nevertheless, this book serves as an excellent source of information on the applications of functional polymers. The bibliography is extensive (over 1500 citations) and up-to-date. In one particular chapter, citations are sometimes given for less accessible periodicals, even though the same results have also been published in more generally available journals. Figures and formulas are quite clear and the presentation of the book is excellent, with a colorful waterproof cover. It should find its place in all chemical libraries, and is highly recommended to all scientists working with polymeric supports, as well as to aspiring newcomers to this field. It is likely to serve as the standard monograph for some years to come.

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Polymer Modified Textile Materials. By *J. Wypych*, Wiley, New York 1988. xiii, 317 pp., bound, £ 70.00.—ISBN 0-471-83959-0

Composites have been treated frequently in reviews and monographs; polymer-coated textile fibers, however, have been considered to a much lesser degree in the literature, although the materials and their interactions are similar. It is true that in the latter materials the polymer constitutes only a small fraction of the total mass, but it plays a key role in the often highly sophisticated applications of these textile materials.

The raw materials for coating polymers, textile materials and release papers are treated in the first chapter. In particular, solutions, emulsions/dispersions and plastisols are discussed. The second chapter deals with machines and equipment for compounding, coating, heating and finishing. Six commonly used processes, namely spreading, dipping, spraying, immersion, melt coating and lamination are treated in detail. Many photographs and diagrams of machines giving useful information are included, particularly in conjunction with examples of applications, cost analysis and ecological aspects. Production lines are described in Chapter 5, in a manner similar to that in Chapter 2, but it is incomprehensible why these two chapters were not kept together in their logical sequence.

"The scope of application of coating methods", with emphasis on end-use, type of resins, and technical demands, is discussed in Chapter 3. Topics included are consumer items, industrial uses, technical products, geotextiles and -membranes, special yarns, and PTFE-coated glass fibers. Chapter 4 describes some interesting developments, including products with advanced mechanical, thermal, and optical properties, textiles with improved dimensional stability, permeability to water and air, and special properties with regard to burning, abrasion, cleaning and ageing behavior, to give only a few examples.

Chapters 6–8 treat the rheology of the coating processes and the most important factors affecting the processes. Numerous scanning electron micrographs showing the structure of the coated materials are included. Heat and mass transfer in coating processes are discussed in relation to recent achievements of chemical engineering.

The last two chapters are concerned with toxicity (LD₅₀ values, smoke production, water pollution) and waste aspects, with particular consideration of recycling and separation methods, topics which have become increasingly important.

The organization of the material in the monograph is not entirely convincing. Furthermore, the presentation is strong in some chapters and weak in others – as is to be expected for a book written by a single author and covering such a broad field. Finally, some editorial effort would certainly have improved the text.

Nevertheless, the book gives a most valuable review of the state of the art of applying polymers to textile materials to improve their properties and make them suitable for special applications.

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Foams and Biliquid Foams—Aphrons. By *F. Sebba*, Wiley, Chichester 1987. vii, 236 pp., bound, £ 29.59.—ISBN 0-471-91685-4

It is not easy to assign this book to a specific category. On the one hand it is intended as a textbook on foam systems, while on the other hand it contains a number of sections which are more in the nature of popular scientific writing. The author tends very much towards a simplified style of presentation. This is certainly an advantage for readers who are not specialists in colloid chemistry. In the diagrams too one finds that only the essential relationships are outlined. The illustrations look as though they have been taken from a set of lecture notes. Furthermore the whole book makes a similar impression.

The most important of the 13 chapters have the following titles: Forces Operating at Interfaces; Thin Liquid Films; Polyhedral Gas Foams; Colloidal Gas Aphrons;