

Book reviews

Wood and Cellulosics: Industrial Utilisation, Biotechnology, Structure and Properties: edited by J. F. KENNEDY, G. O. PHILLIPS, AND P. A. WILLIAMS, Ellis Horwood Limited, Chichester, 1987, xiv + 664 pages, £ 69.50.

This book is a collection of the papers presented at the "Second International Cellucon Conference", although this fact is not explicitly stated anywhere in the book. For readers who did not attend this conference, the fact must be deduced from some passing comments in the Introduction and in the "Overview". There is no record of the date or place of the conference beyond the name Cellucon-86 (actually, it took place in Wrexham, Wales, in 1986). We are not told whether all of the papers presented at the conference are included in the book. The written papers have apparently not been subjected to peer review, but this aspect, although not to be applauded, is not unusual in such collections.

The book contains 65 chapters, presumably based on this number of presented papers, divided into three sections plus a fourth section containing a further 6 chapters based on poster presentations. There is no record of discussion resulting from the presentations. The book includes a subject index and a list of names and addresses of 144 participants, but no author index.

The style of the papers ranges from the very general, with no experimental content and no references, to the type of complete research paper which might find a home in a research journal. It would probably be invidious to attempt to select any of this large number of papers for individual comment, but some overall statistics may be of interest to the potential reader. The 65 papers in the first three sections have the following predominant geographical origins. The first section, on "Structure and Properties", contains 23 papers, ten of which originated in the U.K. and six in Japan. The second section, on "Biotechnology", contains 15 papers rather uniformly spread between nine countries, and the third section, on "Industrial Utilization", contains 27 papers, 12 of which are from the U.K., five from Japan, and five from the U.S.A. As a result, the book gives a reasonably balanced picture of the current state of the art and activities in the U.K. in the first and third sections. It is quite certain, however, that it represents a relatively selective and incomplete coverage of current worldwide research in some respects. Perhaps worthy of comment is the surprisingly sparse contribution to "Biotechnology" from France and Sweden (*viz.*, one paper, and this paper would seem more properly placed in "Industrial Utilization"). Another notable feature is the relatively small number of communications on general biomass utilization, especially in view of the claim in the Introduction to "place greater emphasis on the value of cellulose as a

renewable resource". In this respect, the further statement that "wood as a rich source of chemical materials has all but been neglected except in Japan" is surprising, in view of the very extensive research in this field in North America (especially thermal methods), and Russia, which is essentially not represented in the book. It is probable in this respect that the conference was originally designed to emphasize biological and biochemical utilization rather than thermal and chemical utilization, although this intention is not stated in the book.

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Towards Better Carbohydrate Vaccines, edited by R. BELL AND G. TORRIGIANI,
John Wiley & Sons, Chichester, 1987, ix + 357 pages + Subject Index, £37.50.

This book consists of the proceedings of a meeting organized by the World Health Organization in October, 1986. It contains papers presented on various topics relevant to the development of carbohydrate vaccines, followed by a discussion of each paper; there is a general discussion section at the end of the book. Among the topics considered are (a) the occurrence of carbohydrates on various cells, (b) carbohydrates as antigens, (c) disease agents and current prophylaxis, and (d) carbohydrates as immunogens.

The papers presented are rather uneven in quality. Some are well written and concise, providing adequate background information, with appropriate references, on the topic being considered. Others are too general and sketchy, and not very illuminating, and they cite old, rather than more-recent, work to make a point. The lack of editing is woefully apparent in the discussion that follows. In some places, the text is incoherent and redundant. Sometimes, reference is made to data (apparently shown on a slide) that do not appear in the text of the paper being discussed. Often, abbreviations and terms are used which are not defined, and reference is made to work which is not cited.

On balance, this book does a good job in defining all of the major issues involved in developing carbohydrate vaccines, and in describing many of the promising experimental approaches now being applied; however, it does not provide much in the way of answers to the problems involved. The General Discussion section illustrates how little is really known on how carbohydrates are handled, processed (?), and presented to the immune system, as well as of the events involved in initiating an antibody response to these materials. Obviously, it