

Chapters 2, 3, 4, 5 and 7 cover aspects centred on the use of peptides in vaccines and in the immunodiagnosis of viruses. These chapters are generally well written, up-to-date and contain much useful reference material. The general overview by S.J. Barteling is particularly informative (206 references, over 40% being 1985 or later).

Chapters 5 and 9 are unrelated to the rest of the book. Chapter 5 is a fascinating article on fluoropeptides – which will be of great interest to

the synthetic chemist, but less so for biotechnologists. Likewise chapter 9 concerns enkephalins and is of more relevance to the medicinal chemist and pharmacologist.

The editor has not completely succeeded in his claim to have presented a state-of-the-art analysis of the role of synthetic peptides in biotechnology.

R.C. Hider

Bacterial Cell Surface Techniques

By I.C. Hancock and I.R. Poxton

Wiley; Chichester, 1988

xvi + 329 pages. £40.00

This book is a multiauthor text with approximately 40% being written by the two named authors and the rest by 14 other experts who have contributed to parts of chapters. It is the second in a series of books whose stated aim is to stimulate the development of microbiology by 'promoting the use of new and updated methods'. I suspect that no book on practical methods is likely to encourage new practitioners, but instead will be read only by those who are already involved in matters microbiological. For such a readership this present volume represents an excellent compilation of the methodology associated with a wide range of aspects of research into the surface structures of bacteria.

The opening two chapters deal with bacterial wall/envelope structures and bacterial culture. These provide good short reviews of the subjects and give the general background to the rest of the book. The next two chapters concentrate on methods for isolating cell walls/envelopes and their individual components, followed by a chapter on the chemical analysis of polysaccharides, peptidoglycan, lipopolysaccharides and other wall polymers. The next chapter deals with immunological methods that are used in the analysis of cell surfaces. The last chapter is a miscellany of methods and applications related to adhesion, vaccine development and diagnostic assays. There are two appendices, the first on general methods and

the second giving a list of major suppliers' names and addresses.

These chapters contain many well-trying and established methodologies as well as those which have been developed only recently. However, although the book will find justified use as a practical manual in laboratories, it is more than a compilation of recipes. There is a lot of useful background information and the methods are generally presented in a critical manner with indications of their limitations and some of the problems that might be encountered.

Overall I was pleased with both the content and the approach of this book, despite the fact that the information is usually available in other sources such as *Methods in Microbiology*. What this volume does is to bring together in a critical and informative manner those techniques specifically related to bacterial cell surfaces. Inevitably there are omissions: personally I would have liked to see more about Gram-negative membrane preparation. The archaeobacteria are given scant coverage, and no doubt other readers may find that their particular specialist bacterium is not mentioned. Nonetheless the coverage is broad but detailed and authoritative. I would certainly recommend that anyone already carrying out or embarking on a study of bacterial surfaces should purchase a copy.

N.J. Russell

