entering virology. For the more traditional biological or medical virologists the books
offer an easily digested assessment of modern biochemical methods in research virology.

J. S. OXFORD

Biochemistry of antimicrobial action
£3-95.

Many medically-qualified microbiologists have not had the advantage of a formal
course in microbiology. Certain science graduates who have received formal training in
chemistry or biochemistry undoubtedly wish to apply their hard-won knowledge in the
medical field. Such persons might be expected to buy this book, the first to gain insight into
biochemical modes of action, the second to relate their training to the medical usage of
antimicrobial agents. Each will, however, obtain a slightly distorted view of the subject.
After an introductory chapter that whets the appetite, the M.B. is likely to find subsequent
sections somewhat heavy going, particularly those on polypeptide antibiotics, intercalating
agents and the ionophors, the last of these calculated to make the head spin (how many
medical microbiologists know what "ORD" is, for instance?). The section on antiseptics
is helpful and could have been longer; however, it is curious that there is no mention
of iodophors.

The majority of compounds mentioned in this book have no clinical value, so that the
biochemist will receive a rather blurred view of their medical importance. It is surprising
that there is no mention of anaerobic bacteria; this gives rise to fallacious statements such
as "Lincomycin and . . . clindamycin are inactive against gram-negative species" (p. 129).
Proprietary names are almost completely absent, except for "Dettol" and "Seprin" ("Bactrim"
is not mentioned), which will be a relief for some readers and a hindrance for others.
Perhaps a separate section for this might have been usefully included.

There appears to be some uncritical carry-over from the first edition, published in 1971;
for example, the hoary myth of "cephalosporiates", analogous to penicillinates, can be
found on p. 189, there is no mention of amikacin (BB-K8) on p. 206, and the mode of action
of griseofulvin is still talked of in terms of "curling factor" (p. 154).

Throughout the book there are clearly delineated chemical formulae, which will be
welcomed by many. However, despite the stress on biochemistry, there is no illustration
of molecules in a state of physiological ionisation and, oddly enough, pKα appears not to
merit a mention in the Index. The chapter on penetration, a new feature, is a worthwhile
try to clarify a field in which knowledge is at present fragmentary, and the final chapter,
on mechanisms of resistance, is very clear.

The overall impression to the reviewer, after reading the book several times, is that
it might lull biochemists and antimicrobial chemists into a false sense of security. The
statement on p. 12, "New antibiotics continue to appear, but the urgency of discovery is
now much less since most of the important infections are now controllable", is, to a medical
microbiologist, a very dangerous one. Methicillin was not a true advance, as it merely
restored the status quo of the 1940's; the true advances of ampicillin and gentamicin are
now in danger of being eroded by the emergence of resistance. There is no place whatever
for complacency in the field of antimicrobial agents, either from the biochemical or the
medical standpoint.

J. M. T. HAMILTON-MILLER

Practical chemical microbiology and mycology: techniques and interpretations
By P. L. WOLF, BETTY RUSSELL and ADRIENNE SHIMODA. 1975. Chichester, Sussex: John

This book is the bench manual of the Stanford Hospital Clinical Laboratory reproduced
directly from the typewritten draft. Despite its title, it deals only with bacteriology, serology
and mycology; there are no sections on viruses, chlamydia, mycoplasmas or rickettsiae.