The oxygen metabolism of microorganisms

By D. E. F. HARRISON. 1976. Patterns of progress (microbiology) series. Shildon, Co. Durham: Meadowfield Press Ltd. Pp. 69. £2.80.

This little book deals concisely with several aspects of oxygen metabolism in microorganisms including electron transport, oxidases, oxygenases and physiological responses of growing cells to oxygen. The author also traces advances in techniques available for measuring the response of cells to dissolved oxygen emphasising that accurate measurement of dissolved oxygen has been a limiting factor in this field. Viewed as a whole the review usefully supplements information on oxidative metabolism to be found in standard texts on microbial physiology. Graduate researchers and students taking advanced courses in microbial physiology will gain from Dr Harrison's treatment of the subject but the book is unlikely to be of general interest to medical microbiologists. Although clearly and concisely written the presentation is spoiled by certain tables that are printed in such a small type face that they are extremely difficult to read.

J. P. ARBUTHNOTT

Dengue viruses

By R. W. SCHLESINGER. 1977. Virology Monographs, vol. 16, edited by S. GARD and C. HALLAUER. Vienna and New York: Springer Verlag. Pp. 132. US\$ 33.20.

As the title suggests, this monograph concentrates on the viruses that cause dengue fever, and carries a detailed discussion of the biological, biophysical and biochemical properties of these agents. However, the historical aspects of the disease and the clinical manifestations of classical dengue fever, a troublesome but non-fatal condition, are also well covered, as are those of haemorrhagic dengue, now recognised as an important cause of death in children in urban areas of South East Asia. Four different serotypes of dengue viruses are recognised, any one of which can cause either form of the disease. Although still controversial, the favoured model for the pathogenesis of haemorrhagic dengue is the "second infection hypothesis", in which, under conditions still imperfectly understood, a sensitised individual reacts abnormally to infection with a second serotype of the virus.

This is a scholarly work which draws attention to the fact that in spite of considerable advances in our knowledge of the molecular biology of animal viruses we are still far from understanding precisely how these agents produce their pathological effects in man.

J. S. PORTERFIELD

Virus hepatitis and its control

By YVONNE E. COSSART. 1977. London: Ballière Tindall. Pp. x and 294. £7.50.

The enormous and prolific literature on viral hepatitis increases logarithmically each year and the wealth of new information is often bewildering. It is, therefore, an ambitious and unenviable task to attempt to write a book on this rapidly moving subject and Dr Yvonne Cossart is to be congratulated on her efforts.

Unfortunately, it has appeared too early to include the many advances that have been made in our knowledge of hepatitis A and of a new form of hepatitis (neither A nor B) since 1975. Yet, even a brief guide on methods for the control of the various types of viral hepatitis is praiseworthy, although to dismiss in three pages virtually the entire work on experimental hepatitis B vaccines, which are now under trial in man, lacks balance in a book devoted to the control of these infections. Passive immunisation is also dealt with in only a few words; lengthy catalogues of relevant publications are given, but they are arranged uncritically in a series of tables.

The problem of drug addiction and hepatitis is glossed over; the new type of viral hepatitis that is now the most common form of post-transfusion hepatitis in some areas, the significant progress that has recently been made in the suggested role of hepatitis B virus in primary liver cancer, and the advances in the physico-chemical characterisation of hepatitis