include such information in a book of this kind, since these topics are dealt with comprehensively and probably more appropriately in other specialist publications. The remaining chapters deal with experimental animals as models for the study of infectious, metabolic and hereditary diseases, for behavioural research, and for studies in endocrinology, reproductive physiology, toxicology, cancer, gerontology, teratology and environmental health hazards. The last chapter, entitled "Uniquely useful animal species for biomedical research", describes less commonly used species, such as the nine-banded armadillo and wild llama, that may contribute to the investigation of certain biomedical problems. Each chapter ends with a long list of references.

It is understandable that the editors necessarily had to be selective in what to include and what to omit. However, it seems a pity that, despite the importance of, for example, dental diseases, immunology and organ transplantation, there are no descriptions of suitable animal models for the study of these subjects. They, and possibly some others, would have been preferable to the chapters on nutrition, breeding, management and diseases of laboratory animals.

The quality of reproduction of the photographs throughout is not very good and the tables, summarising the conditions that can be studied in various species, appear to have been copied directly from type-written manuscripts. There is also a lack of uniformity of type between tables and sometimes even within tables, for example on p. 571. Not uncommonly the Latin names of animals are incorrectly spelt or printed with the first letter of the trivial name as a capital instead of in lower case.

This relatively expensive book will be of interest to a wide range of biomedical scientists, and is a reasonable purchase for the reference section of a library. However, it is unlikely that many people will wish to purchase a catalogue of this kind for their personal use.

C. R. COID

Chemical microbiology: an introduction to microbial physiology

By A. H. ROSE. 3rd ed., 1976. Sevenoaks, Kent: Butterworth. Pp. x and 469. £7.75.

The third edition of "Chemical Microbiology", which deals with the chemical activities of prokaryotic and eukaryotic micro-organisms, follows the same basic format as previous editions. It is 8 years, however, since the 2nd edition was published, and all the chapters have been revised and up-dated. In particular, the sections dealing with chemical aspects of cell structure, transport of compounds into and out of the cell, electron transport, energetics of biosynthesis, growth and differentiation reflect recent advances in microbial physiology. The author is to be congratulated on summarising the essential aspects of a rapidly expanding field while adhering to his basic aim of presenting a comprehensive coverage of the subject in a relatively small volume.

This is a book that will help lecturers in Universities and Colleges to structure courses in microbial physiology and will provide students with an account of basic information which can be supplemented by more specialised texts and review articles. The author has included helpful lists of authoritative reviews at the end of each chapter.

The publishers have chosen a relatively cheap method of publication. This is probably an inevitable trend designed to offset the rising cost of textbooks but the loss of quality in presentation of some of the diagrams and photographs is to be regretted.

J. P. ARBUTHNOTT