

General Microbiology (Sixth Edition)

by H.G. Schlegel (assisted by K. Schmidt; translated by M. Kogut)

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xix + 587 pages. £12.50, \$18.95

This translation of the 1985 Edition of a widely used German textbook is a very welcome addition to the current range of introductory Microbiology texts, which includes those by Brock et al., Pelczar et al., Davis et al. and Stanier et al. The scope of Professor Schlegel's book is ambitious. It includes microbial cell ultrastructure, characteristics of the bacteria, viruses and fungi, microbial growth, basic metabolism and its regulation, energy inter-conversions, microbial genetics and environmental microbiology. Unlike many of its competitors, however, which devote much attention to disease-causing organisms and immunology, Schlegel's book is rooted in the biochemical and physiological characteristics of microbes, emphasizing those aspects that are unique to the microbial world. This approach does not preclude good coverage of applied aspects, however. Thus, fermentation, the degradation of natural substances, the chemolithotrophic leaching of ores, for example, are all discussed in their proper physiological context.

The material is well-organized and begins with a review on the place of the Protista, their general properties, roles in nature and familiar involvements. The text is well-illustrated with clear diagrams and black and white photographs. The potential problem of retaining an integrated overview of the subject area for the newcomer to

Microbiology, whilst providing more detail for the reader who requires it, is solved in part by the occasional interjection of short paragraphs in smaller print. Suggestions for further reading are grouped by chapter near the end of the book and generally refer to review articles and textbooks. The list is commendably up-to-date with many citations to the literature of the 1980's, up to 1984. All of the material cited should be quite readily available to most students. There is a list of common abbreviations, a very useful comparison of recent changes in bacterial nomenclature and an unconventional but fascinating vocabulary, which shows the meaning of the many words taken from Latin and Greek. The index is comprehensive but revealed a few surprising omissions, such as 'single cell protein', and the fact that the Protozoa receive very scant attention.

These are, however, very minor quibbles about a book that can be highly recommended as a basic text by virtue of its compact format, very reasonable price and authoritative coverage of a wide area.

Finally, the translation is definitely a success; to say that Dr Kogut's contribution would not have been evident if it were not shown on the cover or explained within is an appropriate compliment.

Robert K. Poole