There are, therefore, grounds for questioning some of the conclusions reached in the monographs. Nevertheless, in the wake of the Health and Safety at Work Act in this country and similar legislation in the United States and elsewhere, this collection of monographs is extremely useful in pointing the finger at carcinogenically hazardous and suspect chemicals and in providing summaries of available relevant information.

F. J. C. ROE

Chromatographic and Electrophoretic Techniques. Volume 1. **Paper and Thin Layer Chromatography**, 4th edition. Edited by Ivor Smith and J. W. T. Seakins. (Pp. ix + 465; illustrated; £9.00.) London: Heinemann Medical Books. 1976.

The fourth edition of this wellknown book, now co-edited by Drs Smith and Seakins and with a number of new contributors, has been entirely rewritten. Although only half the size of the previous volume, nothing of value has been lost and the clear presentations of technique now make it a very valuable laboratory manual. The introduction includes a section on the early history of chromatography and this enables one to set in perspective the modern techniques which are used in areas such as screening for inborn errors of metabolism and toxicological analyses. Most of the applications described are taken from clinical biochemistry and toxicology but the very explicit practical information given will allow the application of these techniques across the field of biological sciences. I feel this book must be considered essential in all clinical chemistry laboratories.

BRENDA M. SLAVIN

Molecular and Cellular Mechanisms in Disease. Parts 1 and 2 (not available separately). By Julien L. van Lancker. (Pp. 1168; illustrated; US \$148.50) Berlin: Heidelberg: New York: Springer-Verlag. 1976.

This attractively presented two-volume textbook of pathology is a mammoth undertaking for a single author. It is well illustrated by electron micrographs and black-and-white tissue photographs collected over a 20-year period; there is also good use of figures and diagrams to illustrate the pathological basis of disease.

In 16 chapters, starting with 'Cellular Sources of Energy' and ending with

'Cancer', the author covers a wide range of pathology which is presented as a mixture of biochemistry, molecular biology, and tissue pathology. This provides a vast amount of information, which is often given a short historical perspective, but it is difficult to read except as a reference textbook.

Inevitably a text of this scale suffers the lack of depth of the single-author approach, and postgraduates will prefer shorter, more specialised texts or similar textbooks of multi-author origin. Nor is the text or price appropriate for the undergraduate.

J. STUART

British Medical Bulletin, Volume 32, No. 3, September 1976, **Haemoglobin: Structure, Function and Synthesis**. Edited by D. J. Weatherall. (Pp. 193-292; illustrated; £3.00, \$9.00) London: The British Council Medical Department. 1976.

This number of the Bulletin is devoted to selected aspects of current haemoglobin research in the United Kingdom. The 14 papers include such aspects as molecular structure, oxygen binding and altered affinity, measurement of globin gene number, control mechanisms of globin synthesis, globin messenger RNA, erythroid cell differentiation, and intrauterine synthesis of haemoglobin. There are also the obligatory sections on thalassaemia, sickle-cell disease and unstable haemoglobins. It offers good value and essential reading for the specialist with a major laboratory or clinical interest in the evolving saga of the haemoglobin molecule.

J. STUART

Dermatological Photobiology. By I. A. Magnus. (Pp. xii + 292; illustrated; £9.75.) Oxford: Blackwell Scientific Publications. 1976.

Photobiology impinges on a sizable part of dermatological practice; it also relates to topics in general medicine, such as porphyria and vitamin D synthesis, and it even involves the general practitioner who has to arbitrate on the dinner-party chit-chat about supersonic cancers. The timing of Professor Magnus' book is therefore excellent; so, in general, is the book. It gives a mostly clear, practical, and theoretical account of the subject with a good bibliography for further reading. Professor Magnus has himself

worked in the field for many years and his views are based on a deep understanding born of a close contact with the subject. Inevitably the book does suffer from the drawback of accounts written by those who have themselves contributed to the story, and that is a tendency to unbalance it. Thus the stunning new findings on ultraviolet radiation and DNA repair are dismissed in just over twice the space spent on the history, mostly nomenclatural of polymorphic light eruption (which, after a scathing attack on the pseudoclassical ancestry of clinical scientific jargon, is surprisingly called PLE in deference to a barren contemporary firstletterese); the prostaglandin story is likewise brief. In these rapidly moving fields the account is a little dated (and occasionally is the writing, with its academic baroque—'the author of this book...', '... the present author—academic olympian—'skin responses that seem to be photosensitive may, one supposes, be of various origin (a) ...', 'academic popular—the charming Boy Annual account on page 33 of how to demonstrate phosphorescence). But these whims of the personal approach are not important; in fact my main disappointment was that we do not have enough of Professor Magnus' own views: for me there was a lack of personal synthesis. From Professor Magnus' great expertise in the field I had hoped for more resolution of problems on the one hand and more controversy on the other. For example, with few notable exceptions, the monochromator (in diagnostic) practice is a disappointment. Why? I have my own personal explanations but I was hoping to find a more critical discussion. Again, to take a few points at random, I would have liked a much sharper discussion of β -carotene therapy, lysosomes, screening tests, and the Tyndall effect. Professor Magnus has shown in other sections of the book that he is able to give such a critical review and I hope that he will extend this in the next edition, which I am quite sure will be called for.

S. SHUSTER

Microbiological Methods, 4th edition. By C. H. Collins and Patricia M. Lynne. (Pp. 521; illustrated; £9.50.) London: Butterworths. 1976.

This book had three editions within six years of its original publication, but further six were to elapse before the appearance of the present edition. It was