

elegant slim-line instruments made by Powell and Lealand. The NA of objectives achieved their theoretical limits, reaching 0.97 in air in 1851 and 1.5 in oil by 1896. Since then this perfection may have decreased as electron microscopy now provides our high resolution in the same way that it has replaced staining methods for what we used to call intracellular organelles.

Being previously published papers, the chapters do not flow as well as those of a book. Many of the figures are repeated; one appears three times. Almost £15 for a paper-back (euphemistically called limp cover) is a bit steep for a private purse but a monochromatic library copy will provide an evening of pleasant escape from colour television.

RAB DRURY

**Cell Potassium.** RP Kernam. (Pp 200; illustrated; £17.70.) John Wiley and Sons. 1980.

Cell Potassium is the first of a series dealing with transport in the life sciences and sets a high standard of scholarship. Its author, who is Professor of physiology at University College Dublin and an authority in the field of electrogenesis of electrolyte transport, reviews recent studies of the movement, distribution and role of potassium ion in a wide variety of tissues and cells. Topics covered include assimilation of potassium from the environment, measurement of cellular potassium, potassium equilibrium in the resting cell, potassium fluxes and the action potential, active transport of potassium in epithelial tissues and non-epithelial cells, potassium fluxes in mitochondria, the role of potassium ions in cellular metabolism and the relationships with acid-base balance. Each aspect is dealt with in a critical manner but the depth of cover is variable.

This book is really for cell biologists, biophysicists, and physiologists and contains relatively little of immediate relevance to the everyday practice of clinical pathology. Chemical pathologists and clinical investigators in search of a fundamental understanding of the handling of potassium by cells will find that it provides a readable means of bringing themselves up to date.

FV FLYNN

**Centrifugal Analysers in Clinical Chemistry.** Ed Christopher P Price and Kevin Spencer. (Pp 506; illustrated; £28.50.) WB Saunders Ltd. 1980.

This book is the first of a series on methods in laboratory medicine, and is based on the proceedings of a three day symposium held at Southampton in September 1979. Of the 60 contributors 32 are from the UK and 21 from the USA. They include some well known names. Five chapters deal with the introduction of the technology, four with immunoassay applications, six with enzyme and substrate assays, five with the role of the centrifugal analyser and four with future developments; the remainder deal with a variety of topics which were covered in short papers. Edited discussion and references are included. The basic concepts of centrifugal analysers, the advances that have been made in the instrumentation and a wide range of applications are comprehensively reviewed, albeit with some duplication. The contributions are of variable quality but the potential value of this instrument comes over clearly.

The editors and publishers are to be congratulated on the speedy publication of this volume which should form essential reading for all who are contemplating either the purchase of a versatile high-throughput analyser or taking the MCB or MRCPATH examinations. It is recommended for the departmental library.

FV FLYNN

**Microbial Diseases 1980 Edition.** Ed Carl W May. (Pp 300; illustrated; \$7.95 paper-back; \$14.00 hard cover.) William Kaufmann Inc. 1980.

This publication is a very laudable attempt to try to bridge the gap which exists between reports in journals and authoritative accounts in standard textbooks. It presents selected articles and reports from the Morbidity and Mortality Weekly Report published by the Center for Disease Control, Atlanta, and covers bacterial, viral, fungal and protozoal infections. These are collected in chapters by diseases and many items include succinct editorial notes and comments. Data on the incidence of infectious disease throughout the United States are included up to 1978 and the detailed accounts cover a period from 1977 to early 1980. The data are entirely American and the individual items very largely so, but mention

is made of interesting infections and outbreaks in other parts of the world.

This is an informative and rewarding book and must make valuable reading to the examination candidate in microbiology and to anyone trying to keep up to date with events in infectious disease.

GL GIBSON

**International Histological Classification of Tumours.** No 21. Histological Typing of Tumours of the Central Nervous System. KJ Zülch. (Pp 66; 122 colour plates; Sw Fr 208 with colour plates; Sw Fr 49 book only.) World Health Organization. 1979.

The classification of central nervous system tumours has long presented a problem and in recent years the main aim has been to simplify the nomenclature. This WHO book sets out a very practical classification with descriptive notes and illustrations depicting the wide variety of central nervous system tumours. All the illustrations are in colour and most of them are of good quality. Common and rare tumours are well represented.

There are a few minor criticisms which may be a matter of personal opinion and preference. One relates to the question of grading of central nervous tissue tumours which was first instituted by Kernohan. Many of the disadvantages of the grading system are listed in the introductory chapter but, throughout the descriptions of the tumours, the grading system is maintained apparently for the benefit of the surgeons. Unfortunately the method of grading is not clearly defined so that a system which implies an increase in the accuracy of diagnosis tends to be used in a vague and apparently arbitrary fashion throughout an otherwise very informative text. There are also some areas where the terminology could be improved. Schwannomas are called neurilemmomas but as there is no such cell as a neurilemmal cell this seems a rather archaic term. Similarly, lack of modernisation is seen in the section on Primary Lymphomas where the terms used are not in line with the modern lymphoma classification.

Despite the few minor criticisms this book should be an essential volume on any pathologist's shelf.

RO WELLES