

background chemistry such as 'a refresher course in inorganic chemistry', the balance, volumetric standards, and to a description of some instruments and general techniques used in biochemical laboratories. There is much useful material in this though the range covered in the space allotted leads at times to undue brevity.

The remainder of the book is devoted to a description of techniques used for determining constituents of body fluids. For the most part these are well selected familiar standard methods widely used. In several cases only one technique is given although more than one is in common use. Sometimes the method chosen is not the best. Thus the Somogyi iodometric method, the only one given for serum amylase, is inferior to techniques based on the iodometric method of Huggins and Russel. The technique of Broughton for barbiturates is much superior to the cobalt one given. There are also a number of substances for which no technique is given when one might have expected one. Considering its importance in connexion with prolonged apnoea following scoline, it is surprising to find the determination of serum cholinesterase dismissed as of little value because it is not required as a liver function test; consequently no technique is given.

Brief interpretations are included but are rather short and too general. These contain some errors. Thus on p. 201 it is said that serum globulin falls with liver impairment whereas it usually rises while albumin falls. On p. 205 thymol turbidity is said to be increased in multiple myeloma; it is more often normal. It may be noted that on p. 229 42% hydrated sodium sulphite *i.e.*, 21% anhydrous, is used to precipitate globulins whereas on p. 235 in the biuret method 28% anhydrous sulphite is used. The latter corresponds to the salt concentrations now accepted as giving the most satisfactory separation.

The book is said in the Preface to fill a notable gap between books written for clinicians and giving a minimum of working details and many small books of collections of technical methods. It is difficult to agree with this. There are available both practical books with fewer techniques than this and with a wider range. There are also books with a similar sort of mixture of background material and techniques aimed primarily at technicians. With these latter the present book compares well. It is pleasantly and compactly written. It contains a good deal but by no means all of the knowledge, not even of the techniques, technicians require for their qualifying examination in this subject.

H. VARLEY

COLORIMETERS WITH FLOW THROUGH CELLS A critical assessment of 4 instruments. (Pp. 54; 12 figures; 14 tables. 13s. 6d.) Association of Clinical Biochemists, London. 1965.

This is an excellent summary of the performance of four flow-through colorimeters used or likely to be used in routine laboratories. This is the first of a series of scientific reports to be produced by the Association of Clinical Biochemists. It is easy to read and could be followed by a person with little scientific experience. This is a most valuable contribution and I look forward to other reports by the scientific committee of the Association. This

should be in the hands of every laboratory which takes its biochemistry seriously.

NICHOLAS H. MARTIN

NEW BIOCHEMICAL SEPARATIONS Edited by A. T. James and L. J. Morris (Pp. ix + 424; 84s.) London:Van Nostrand. 1964.

This book, containing articles by authors from many countries, is intended primarily for research biochemists. Gas-liquid chromatography and thin-layer chromatography predominate with five papers each of the 17 in the book. In the case of both of these techniques, chapters are devoted to steroids, amino-acids, and bile acids. Gel filtration techniques for proteins, peptides and amino-acids, and for polysaccharides are discussed and three chapters consider techniques for the separation of lipids. The object of the book is to provide workers with the very latest developments. This it does well with adequate references and much practical detail. It is thus a book to be consulted by those with problems in the fields dealt with.

H. VARLEY

STEROID ANALYSIS BY GAS LIQUID CHROMATOGRAPHY By A. A. Patti and A. A. Stein (Pp. viii + 95. 30 tables \$5.50). Springfield, Illinois: Charles C. Thomas, 1964.

This monograph will only be of value to analysts with experience of gas liquid chromatography who will recognize the limitations of the work reported and know of the literature not reported. The essential practical preliminaries are either neglected, as with column, paper, and thin-layer chromatography, inferring naively that they are not necessary, or are presented in out-of-date form, as with conjugate hydrolysis and steroid extraction with solvents. In addition, the varieties of adrenal hyperplasia are confused, steroid nomenclature is haphazard, and the proof reading inadequate.

R. W. H. EDWARDS

FIBRINOLYSE ET PATHOLOGIE VASCULAIRE By J. Salmon (Pp. 219; 47 figures.) Brussels: Editions Alsacia. 1964.

Because of the length of time involved in their preparation, monographs on subjects developing as rapidly as fibrinolysis soon become dated. This 200 page review, published from Brussels, suffers this defect because it refers largely to work between 1957 and 1962. Written in French, it nonetheless provides a useful bibliography, including a number of continental references not readily available to English-speaking workers.

Dr. Salmon's principal interests span the four sections into which he has divided this book: a general discussion on the physiological significance of fibrinolysis, comments upon the role of fibrinolytic enzymes in thrombocytopenic purpura, the application of immunoelectrophoretic techniques to the study of the fibrinolytic system and, finally, the place of fibrinolysis in the treatment of vascular lesions.

With frequent reference to animal experimentation the author attempts to reconcile platelet function, vascular fragility, and plasmin activity in the causation of purpura. In the rat, reduction of platelets alone, or fibrinolytic activation alone, failed to cause purpura which, however, became manifest when both occurred together. The use is thus advocated of fibrinolytic inhibi-