are contributions on test-groupings to illuminate particular patient problems, on enzyme diagnosis of myocardial infarction, on problems of enzyme measurements, on pancreatic function tests, on laboratory profiling in disseminated intravascular coagulation, on monitoring heparin therapy, on assessing recovery from infective hepatitis, on trend analysis, on subject-specific reference ranges, on detecting vitamin B deficiencies by red-cell-enzyme-activation tests, on evaluating methods for measuring aspartate transaminase activity, on evaluating materials and methods for coagulation testing, on regional quality control programmes, on the latest state of computerisation in the Youngston Hospital laboratory, and on the role of the professions, government agencies, and industry in fostering standardisation. The contributions are of variable standard, contain little new material, and cannot be regarded as comprehensive reviews.

This is not a book that the clinical pathologist will want to purchase, but parts could be read with profit by candidates for the final MRCPPath examinations in Chemical Pathology or Haematology or the MCB.

F. V. FLYNN

Automated Immunoanalysis. Part 2. Clinical and Biochemical Analysis. Volume 7. Edited by R. F. Ritchie. (Pp. xiii + 304; illustrated; \$29.75.) New York: Marcel Dekker. 1978.

Quantitative immunochemical analysis has already made an impact on the clinical laboratory, but its potential for further exploitation has led to the development of many new approaches. In this book 19 leaders in this field record their experiences with some of the newest devices; the emphasis is on methods of improving and automating immunonephelometry and radioimmunoassays, but a contribution on automatic haemagglutination is included. Enzyme- and fluorochrome- labelled immunoassay is not covered. All of the contributions are of a high standard and very readable.

This book is recommended as providing a ready means for the chemical pathologist or clinical biochemist to bring himself up to date on light-scattering techniques, which seem destined to become a major growth area of the laboratory. It could also prove invaluable to the trainee preparing for the Final MRCPPath Examination in Chemical Pathology or the MCB.

The publishers are to be congratulated on producing so timely a publication.

F. V. FLYNN

Systemic Pathology. 2nd edition, Volume 3. 'Alimentary System'. By 38 authors. Edited by W. St. C. Symmers. (Pp. viii + 448 + Index Pp. 59; illustrated; £29.50.) Edinburgh, London, New York: Churchill Livingstone. 1978.

Twelve years ago, at the time of the first edition, there were few systematic special pathology textbooks. 'Payling Wright and Symmers' was as gratefully accepted by the senior registrar working for final Membership as by the histopathologist faced with an unusual specimen. Now things are different, and it is often difficult to know to which to refer or which to buy. Volume 3 of the second edition has competitors, with others in the pipeline, and it cannot deal with the whole of the alimentary system, including liver and pancreas, in as much detail as more specialised works. But the facts are there and many of the short sections are beautiful cameos. There are good illustrations and bibliography, though the gap between the completion of the text and publication has meant that, with occasional exceptions, there are few references to papers of the middle seventies. Major works like this represent enormous scholarship and time, but we have to obtain our recent references at source.

Systemic Pathology, now well on the way towards completion of publication, is a goldmine of traceable, readable information that reflects its very careful editing. The only difficulty will be to find the volume you want, because someone is sure to be using it somewhere in the laboratory.

R. A. B. DRURY

Methods in Cancer Research. Volume XV. Edited by Harris Busch. (Pp. xix + 445; illustrated; \$43.00.) Academic Press: New York. 1978.

Five of the seven chapters of this book are concerned with viral oncology and other molecular biological topics. In the first, recently developed methods for characterising the translation products of certain RNA viruses are reviewed, and in the second are described the techniques now available for determining whether DNA viruses are implicated in the aetiology of human cancers. tRNA methyltransferases are enzymes which

modify preformed tRNA by the transfer of methyl groups from S-adenosylmethionine to specific positions in the tRNA molecule. Recent research on them is reviewed in Chapter 3. Chapter 4 ranges over the broad topic of biochemical phenomena associated with the ionising irradiation of cells, and Chapter 5 describes methods for the isolation of immune RNA and RNA fractions utilised in transferring both tumour and non-tumour sensitivity, and methods to assay for transfer of cell-mediated immunity.

The book ends with reviews of antigens in human breast cancer and of factors that need to be considered in experimental studies of metastasis.

This is a substantial volume in a highly technical, well-produced, and well-edited series.

F. J. C. ROE

Scientific Foundations of Clinical Biochemistry. Volume 1. Analytical Aspects. Edited by D. L. Williams, R. F. Nunn, and V. Marks. (Pp. 490; illustrated; £25.00.) London: Heinemann Medical Books. 1978.

Most of the longer works devoted to clinical biochemistry published in English are devoted largely either to the assessment of biochemical technology or to the evaluation of disturbed biochemical processes in patients. This work is divided into two volumes. The first (reviewed here) is concerned with the basic processes of biochemical analysis, and the second with the interpretation of the data produced.

This volume is the product of the MSC course in clinical biochemistry given at the University of Surrey and has the advantages of clarity of exposition and directness of a book based on a lecture course, but at times this gives way to the occasional looseness of expression unexpected outside the lecture theatre.

The authors of each section review, in a short and readable form, the basic principles of each type of chemical technology in clinical use (for example, analytical atomic spectroscopy, radioimmunoassay, thin-layer chromatography), discuss their uses and problems but do not, in contrast with other works, present suggested methods of analysis in detail which can occupy considerable space, often with little gain to the reader.

Mathematical techniques are not neglected; there are short discussions of 'normal'