fields of study (amniocentesis, ultrasound, α feto-protein, diagnosis of metabolic disorders, etc.) and these are excellent when based on great experience; for example the 1000 amniocenteses per year performed by the Rotterdam group. However they are necessarily brief and some of the data have been published in more detail elsewhere.

The volume contains interesting information on Italian disease patterns—300 homozygotes for α -thalassaemia are born per year—and will be of greatest interest to readers in that country. Others may find the reviews of value since they are collected in one volume, but from this point of view the price makes it an expensive set of reprints.

CL BERRY

Perspectives in Virology. Vol XI. Proceedings of the XI Gustav Stern Symposium on Perspectives in Virology. Ed M Pollard. (Pp 294; illustrated; no price given.) Alan R Liss Inc. 1981.

The proceedings of the XI Gustav Stern Symposium held in New York in February 1980 in honour of George Hirst, one of the pioneers of influenza virus research are recorded in this book. It is valuable as a record of what virologists were talking about nearly two years ago but much of what is included has been updated at the recent 5th International Congress of Virology which will have been attended by many of the possible purchasers.

The contributions cover most of the currently interesting topics in virology, although neither monoclonal antibodies nor the use of bacteria to produce viral antigens get a mention. They vary considerably in content from the highly complex chapters on molecular biology of adenovirus late transcription, assembly of viral glycoproteins and herpes simplex mutants to more general thoughts on virus diagnosis and chemotherapy. The former will be hard going for those not familiar with the background, and those that are will not want the latter. As might be expected this is an uneven book and is neither text-book nor journal.

It is probably not a book for more than a few individuals but virology departments and university libraries will want a copy. For the few it will provide stimulating reading until even more of the new work is published.

CR MADELEY

Advances in Hemoglobin Analysis. Progress in Clinical and Biological Research. Vol 60. Eds SM Hanash and GJ Brewer. (Pp 222; illustrated; £15.) Alan R Liss Inc. 1981.

"Advances in Hemoglobin Analysis" is a compilation of papers presented at a workshop at Ann Arbor in September 1980. It reviews the modern methodology in the field of haemoglobin analysis. Almost half of the book (the first five chapters) is devoted to high pressure liquid chromatography (HPLC) of haemoglobin, including its use in identifying variants, separation of globin chains, its application to prenatal diagnosis, the factors that affect resolution of haemoglobin mixtures, and the technique of quantifying haemoglobins S, C, A, A₂ and F in cord and adult samples.

This is an interesting and useful book, but not suitable for a novice, either in haemoglobinopathies or in chromatography. As is often the case with books compiled from workshops and symposia, this is not an easy book to read, but many fascinating details emerge if the reader is sufficiently persistent.

M BROZOVIĆ

The Function of Red Blood Cells: Erythrocyte Pathobiology. Progress in Biological Research. Vol 51. Ed Donald FH Wallach. (Pp 404; illustrated; £25.90.) Alan R Liss Inc. 1981.

The proceedings and edited discussion of an International Symposium on Erythrocyte Pathobiology held in Boston in April 1980 form the contents of this book. It consists of 17 chapters in photo-ready format including references. Five chapters are concerned primarily with the erythrocyte membrane and deal with its protein structure, transport mechanisms, and its involvement in the sickling process. Four others are also concerned with sickle-cell haemoglobin including oxygen transport, gelation, effect on intra-erythrocyte calcium, and its clinical effects. Other chapters deal with superoxide dismutases, methaemoglobin formation, unstable haemoglobins, haemolysis by oxidants, haemoglobin glycosylation, carbon monoxide poisoning, and the effects of lead and mercurials on erythrocyte membranes. The book's appeal is likely to be limited to medical and science graduates with a research interest in the above areas of erythrocyte

metabolism, for whom it will be a useful reference point in a rapidly developing field.

J STUART

Automation in Hematology. What to Measure and Why? Eds DW Ross, G Brecher and M Bessis. (Pp 338; illustrated; DM 78; £46.10 paperback.) Springer-Verlag. 1981.

This is the record of a symposium held in July, 1979 at the Institute de Pathologie Cellulaire, Bicetre, with the objective so concisely expressed in its subtitle. The discussions bring out very clearly the circularity of the process sometimes involved: advances in technology in many cases make possible the measurement of properties of blood cells for which a clinical application (if any) has yet to be discovered, so providing the means to answer questions which haematologists might not otherwise have thought to ask. It is equally clear that a heavy investment has been made in the automation of traditional procedures, notably the differential leucocyte count, the general utility of which was disputed by several distinguished participants.

The contributions are wide-ranging and provide a fascinating glimpse of the technological explosion now taking place. The book fulfils in some aspects the organisers' hope of presenting "..... a tentative look at the haematology of the year 2000."

MK ALEXANDER

Radionuclide Tracer Techniques in Haematology. CS Bowring. (Pp 140; £8.50.) Butterworths. 1981.

This attractive, slim volume is an excellent introduction into the basic physics and instrumentation of radionuclide tracer investigations used by the haematologists. The accepted and often used techniques such as the measurement of red cell and plasma volume, cell survival studies, and ferrokinetics are clearly explained. The possible errors, common technical problems, and ways of presentation of results are simply and clearly discussed. The chapters on external counting and imaging are particularly useful and new techniques are well described. The book can be used as a laboratory manual even by those not familiar with radionuclide techniques.

It is a pity that such a neatly presented book makes no mention of safety rules and regulations that are of paramount im-