Red Cell Metabolism, Third Edition

A Manual of Biochemical Methods

by Ernst Beutler

Grune and Stratton; Orlando, Fl, 1984

xviii + 188 pages.$24.50

This book is an invaluable laboratory manual. It explains, with clarity and precision, the methods that can be used for the determination of erythrocyte enzymes and metabolites. Attention is also paid to methods of calculating and expressing results; for example, the comment "when the size or haemoglobin content of red cells is abnormal, the interpretation of results may depend greatly on which method of expression is used" could, if taken to heart by some scientists, have prevented a lot of misleading studies from being published.

The book also gives much other useful advice, e.g. a table of the effect of temperature on enzyme activity, the fact that aldolase should be assayed in uncentrifuged haemolysate (p.47) and the observation (p.29) that 'Parafilm' may shed fluorescent material into reaction cuvettes.

I unhesitatingly recommend this small manual to all scientists involved in studies of red cells.

B. Halliwell

The Eukaryotic Ribosome

Edited by H. Bielka

Springer-Verlag; Berlin, Heidelberg, New York, 1982

338 pages. DM 76.00

Research in the field of ribosome structure and function has been intensive for more than a quarter of a century and much is now known about the molecular architecture of the *Escherichia coli* ribosome and its role in protein biosynthesis. Indeed it seems likely that the prokaryotic ribosome will be the first cellular organelle to be fully understood at the molecular level. On the other hand, the eukaryotic ribosomes which occur in the cytoplasm, either free or bound to the endoplasmic reticulum, are considerably more complex than those of prokaryotes with respect to both the ribosomal RNA moieties and the protein components and there are still many puzzling aspects of the structure and function of these ribonucleoprotein particles.

Professor Bielka and his five colleagues have been active in research on liver ribosomes for many years and are well-qualified to discuss present knowledge. Together they have produced a thorough and well-documented account which will serve as an essential reference work in the 1980's and thus complement and update the contents of earlier books such as 'The Physical and Chemical Properties of Ribosomes' by Mary Petermann (1964) and 'The Ribosome' by A.S. Spirin and L.P. Gavrilova (1969).

In view of the vast literature to be covered, treat-