or read elsewhere. All of the papers are well referenced and illustrated with diagrams and tabulated data. As this was a workshop of specialists, the Materials and Methods section in some of the papers is very short and hardly intelligible for a non-specialist.

On the whole this is a very interesting book illustrating the point of intersection of different research lines. The intensity of the workshop would have become even more evident if the editors had had the possibility to publish the discussions too.

Klaus-D. Gerbitz

## *Amino Acid Metabolism and Sulphur Metabolism*

### *Comprehensive Biochemistry; volume 19A*

Edited by A. Neuberger

*Elsevier Biomedical; Amsterdam, New York, 1981*
xviii + 482 pages. $85.00

This book contains 5 authoritative reviews, each of which attains such a high standard, that the book is even better than the sum of its parts. It would be difficult to find such a wealth of interest and information in this subject area in any other single volume.

H.E. Umbarger's review concentrates this time on the mechanisms of regulating amino acid biosynthesis and degradation in bacteria and is a valuable complement to the author's other reviews of recent years. The chapter by H. Reinbothe, J. Miersch and K. Mothes entitled 'Special problems of nitrogen metabolism in plants' demonstrates an astonishing coverage in its 102 pages. The subject matter ranges from $NH_4^+$ production from $N_2$ and $NO_3^-$ to the physiological significance of some non-protein amino acids in higher plants. An enormous amount of information has been presented in a readable form, with extensive tables providing valuable data for the research worker. No less impressive is the review on the 'Metabolism of simple sulphur compounds' by P.A. Trudinger and R.E. Loughlin, which discusses this subject in a wide taxonomic range of organisms at an admirable intellectual level. Readers who have not kept up to date with this topic, or who are new to the subject, will be surprised at the extent of the coverage, to which more than 700 cited references attest.

On perhaps more familiar ground the review of glycine and serine metabolism by A. Neuberger reminds us of the metabolic complexity of these chemically simple amino acids and directs us to recent developments concerning the importance of glycine and serine in the metabolism of higher plants and the metabolism of methane in bacteria. Finally, W.L. Nyhan's 'Inheritable abnormalities of amino acid metabolism' supplies an extensive coverage (165 pages) on the molecular and clinical bases, and rationale of treatment, of the well-established human disorders of amino acid metabolism. The sole reservation here is that most references pre-date 1978, but the style, readability and comprehensive coverage are commendable.

The reviewer greatly enjoyed reading this volume, which is strongly recommended.

P.B. Nunn