tiation' and discusses cell shape in *Arthrobacter spp.*, yeast-mycelial dimorphism, spore formation, and the life cycle of the slime mould.

This has been (and is) a useful text which reads easily and covers a wide field. It is a pity that the figures are even less good and in some instances have diminished in size alarmingly, and that the treatment of topics is somewhat uneven. However, it is certain to be useful to undergraduates although not, perhaps, of such 'value to postgraduates embarking on research' as the publishers claim.

Kenneth McQuillen

Thiamine

Edited by C. J. Gubler, M. Fujiwara and P. M. Dreyfus
John Wiley & Sons; New York, Sydney, Toronto, London, 1976
x + 393 pages. £16.75; $ 30.00

This volume contains the proceedings of the 2nd US–Japan Thiamine Seminar held in Monterey, California in October, 1974. It consists of 26 articles contributed by workers with interests in the fields of thiamine biochemistry and nutrition and of pathological states associated with deficiency of, or disorders involving, this vitamin, together with the discussions (presumably edited) which followed the oral presentations.

As is often the case with published proceedings of symposia of this type, most of the articles in this volume fall between two stools. They are neither sufficiently lengthy or incisive to serve as authoritative reviews of given aspects of thiamine metabolism nor, in most cases, sufficiently detailed to be adequate as definitive reports of original data. Indeed, certain of the authors appear to have taken care to omit relevant supporting material. Furthermore, the initial section on the thiamine-dependent enzymes contains much material which has been very adequately reviewed elsewhere in greater detail. These articles, which in any case appear to add little to the subsequent discussions on thiamine deficiency and pathophysiology, seem therefore to be superfluous to the main theme.

The remaining sections of the book are devoted primarily to the description and characterisation of thiamine transport systems and to consideration of various aspects of the role of thiamine in brain metabolism and function. Although it is clear that much work is in progress, one does not gain the impression that rapid progress is being made, or that new concepts are in process of formulation. In particular, a satisfactory explanation of the neurological consequences of thiamine deficiency is still apparently not in prospect. Nonetheless, some studies of considerable interest are described. For example, several articles are devoted to the processes involved in formation and degradation of thiamine triphosphate, a thiamine derivative for which no biochemical role has yet been established.

I would expect this book to be of prime interest to those who wish to have a 1974 vintage view of studies in the field of thiamine metabolism. Its chief value lies in the assembly, between two covers, of accounts representing most of the current research trends in this area. However, it is questionable whether in this instance the sum is greater than the component parts.

M. C. Scrutton