

BOOK REVIEW

Ribonucleic Acid—Structure and Function: Proceedings of the 2nd Meeting of the Federation of European Biochemical Societies, Vienna, 21–24 April, 1965. Vol. 4. Edited by H. Tuppy, Pergamon Press, Oxford, 1967. 150 pp., 30s.

THE edited proceedings of this symposium form a useful and concise review of topics of current interest in nucleic acid research. Treatment ranges from review to detailed examination of an author's own experiments.

M. Staehelin (Basle) writes on preparative and analytical methods in the elucidation of the structure of transfer RNA. The use of non-standard abbreviations without definition and incomplete keys to figures may irritate but do not substantially detract from the understanding of this paper. Properties of transfer-RNA produced during amino acid starvation in *E. coli* are examined by Littauer and Milbauer (Rehovoth). Discussion here concerns the methylated base content of transfer-RNA in relation to its capacity to accept and transfer amino acids. Continuing the theme of transfer-RNA, Zachau *et al.* (Cologne) present a structural study of serine-specific transfer RNA.

F. Gros *et al.* (Paris) turn attention to physiological correlation between the synthesis and functioning of messenger RNA. This provides an interesting examination and extension of the hypothesis of Bremer, Konrad and Stent that, immediately upon formation, messenger RNA is engaged by ribosomes and that this removes the nascent RNA chain from combination with the enzyme. The relevance of this to the mechanism of repression is discussed. Evidence for the existence of messenger RNA in animal cells is considered by H. R. V. Arnstein (London) mainly in relation to RNA from reticulocytes. R. A. Cox (London) comments on the secondary structure of ribosomal RNA in solution and pays particular attention to base pairing, size of helical segments, and nucleotide composition of helical segments. Primary structure of ribosomal RNA is discussed by J.P. Ebel (Strasbourg).

The paper by D. Grünberger (Prague), "The function (*sic*) of RNA containing 8-azaguanine in protein synthesis" deals with the effect on protein synthesis of incorporating 8-azaguanine into RNA. G. Koch (Hamburg) discusses properties, functions, and replication of viral RNA, and S. Ochoa (New York) concludes the symposium with a review of RNA interactions in translation of the amino acid code.

The book is not expensive at thirty shillings and should prove valuable not only to the research specialist but also to those anxious to keep abreast of current aspects of nucleic acid research.

E. G. BROWN