spectroscopy in particular, the degree and nature of its surface sensitivity is still an issue of considerable interest. The extent of this development is mirrored by the size of this book, a collection of 17 separate articles on the theory and experimental results of the technique, together with two articles on the intimately related problem of the electronic structure of clean surfaces and adsorbates on surfaces.

The editors have collected together a formidable team of authors for this work; very few of the 'big names' in the subject are missing and the resulting articles are authoritative and thorough. Of course, in any multiauthor book, particularly with authors active in an expanding and developing research field, the treatment of the subject is not always even and overlaps do exist, particularly in the introduction of the basic ideas behind several articles. Frequently, however, this overlap is beneficial; the reader is presented with contrasting views of the same material and can emerge with a more balanced appreciation as a result.

## Biology of RNAs

The Ribonucleic Acids. (Second edition.) Edited by P. R. Stewart and D. S. Letham. Pp. 374. (Springer: New York, Heidelberg and Berlin, 1978.) DM47.40; \$23.70.

As an antidote to the new-style undergraduate textbooks, awash with coloured diagrams and divided into easily digested segments, *The Ribo*nucleic Acids is recommended to students. Here the content is solid, the illustrations mainly restricted to structural formulae in sombre black and white.

This book is intended for students who already have basic training in biochemistry, and, although dealing with a specialist subject, does not aim to be either fully comprehensive or overly detailed. The first chapter is, typically, an historical introduction by the editors and is followed by chapters dealing with different species of RNA -nuclear, transfer, messenger, and so on-and their transcription and translation. The final chapter is a collection of recipes for the preparation and fractionation of RNA, curious in a textbook designed for students but undoubtedly of value to research workers.

Although the chapters have been written by different authors, some attempt has been made to make the style and structure uniform. Reading of the interaction between the 3' end

An intrinsic problem of any book in a very active research field is one of timing; has the subject developed sufficiently to warrant a book or will it be rapidly dated by new developments? In this case the timing seems to be a good compromise. Certainly new developments are occurring, and will continue to occur, which may change the detailed interpretation of specific problems. Also, the construction of many new synchrotron radiations sources around the world is bound to cause a shift in emphasis to the increased use of photon energy and polarisation-dependent effects as a means of studying surfaces. On the other hand, the stress in many articles in this volume is on basic physical principles and as such the book is likely to prove valuable for several years to those involved in, or wishing to learn more about, photoemission from surfaces and their electronic structure

D. P. Woodruff

D. P. Woodruff is Lecturer in Physics, University of Warwick, UK.

of 16S ribosomal RNA and the 5' end of mRNA in four different chapters suggests that a certain uniformity in content was also required! The balance between cataloguing the facts and critical appraisal of experimental results varies in different chapters, although perhaps some RNAs—nuclear RNA, for example—elicit a more controversial literature.

Distinguishing the characteristics of prokarvotes and eukarvotes is very much easier for research workers, where it is a case of 'us and them', than it is for students, who have no previous affiliations. The latter group of readers will find this book adds to their problems. Sometimes prokaryotes and eukaryotes are allocated different headings, sometimes they are contrasted in the same sentence. This makes the text easier to read and less repetitious, but will undoubtedly perpetuate the existence of that interesting ribosome, found only in undergraduate essays, having 30S and 50S subunits containing 18S and 28S RNAs.

The references accompanying each chapter are extensive, reviews being listed separately. This information, together with the up-to-date over view of the biology of RNA that the text provides, should make this a useful book for research workers in related fields as well as the students for whom the book was written.

Pamela Hamlyn

Pamela Hamlyn is at the MRC Laboratory of Molecular Biology, Cambridge, UK.

### SENSORY WORLD

# Hallmark of reporting

A quarterly communicating significant factors in sensory and contiguous areas

Brings you

\*Papers — research reports of highest calibre

\*Developments — innovative work as it happens

\*World Literature — comprehensive spectrum of references, by schedule

\$18/year; overseas \$20 (outside USA add \$2.80)

P.O. Box 270, Lusby, MD 20657, USA

Circle No. 19 on Reader Enquiry Card.

#### SCIENTIFIC — BOOKS

H. K. LEWIS can supply works in all branches of Pure and Applied Science. Catalogues on request. Please state interests.

### SCIENTIFIC LENDING LIBRARY

Annual Subscription from £7.00. (Available in U.K. only)

Reduced rates for multiple subscriptions.

Prospectus post free on request.

Quarterly List of New Books and new editions added to the Library sent post free to subscribers regularly.

H. K. LEWIS & Co. Ltd.

136 GOWER STREET, LONDON, WC1E 6BS

Telephone: 01-387 4282 Telegrams: "Publicavit, London, WC1E 6BS."

Circle No. 20 on Reader Enquiry Card.