

*Guide to the Marine Stations of the North Atlantic and European Waters. Part I. Northern Europe and the East Atlantic Coast.* Compiled by J. E. Webb. Pp. 263+34 figs. (The Royal Society; London, 1974.) £2.50 (UK); £2.60 (overseas).

THIS guide, compiled by Professor J. E. Webb, is the first of a new series of handbooks which will be extended in further parts to cover marine stations of the Mediterranean, the Atlantic seaboard of USA and Canada, and the Caribbean and Gulf of Mexico.

Part I is an invaluable source of information on the facilities offered at 33 European marine stations, including 12 within the United Kingdom and Eire. The information is concise and practical. Short descriptions are given of the main types of shores to be found in the neighbourhood of the stations; of the common animals that can be obtained without difficulty; at the time of year when they occur; of the ships, boats and vehicles that are available for field surveys; and of the types of gear at hand for the collection of specimens and data.

The number and nature of the services provided in the research rooms and laboratories of the station are listed. The availability of special apparatus, such as is often required by physiologists, is briefly but usefully noted; and an intending visitor may be guided on the nature of the apparatus, equipment and materials which a station may be able to provide. Notes on the voltage, d.c./a.c. frequency, and phase of the electricity supply at the various stations are especially useful. Excellent outline maps showing the locations, the nature of the shorelines and the approaches to stations, illustrate the guide.

The guide, as noted in the preface, is not intended to be comprehensive. Some additional information would perhaps have been useful, such as the languages commonly spoken, the technical assistance that a visitor might expect to receive and fuller notes on the characteristics of the plankton and algae. The guide is, however, in a form which lends itself to ready revision as the need arises, and in its present form it is up-to-date and informative. **J. E. Smith**

*Comprehensive Virology.* Edited by Heinz Fraenkel-Conrat and Robert E. Wagner. Vol. 2: Reproduction—Small and Intermediate RNA Viruses. Pp. xiv+340. \$33.60. Vol. 3: Reproduction—DNA Animal Viruses. Pp. xiv+488. \$38.50. Vol. 4: Reproduction—Large RNA Viruses. Pp. xii+347. \$34.90. (Plenum: New York and London, 1974-75.)

VOLUME I of *Comprehensive Virology* was essentially a catalogue, containing a very limited amount of descriptive material. The next four volumes, of which volumes 2, 3 and 4 are now published, are entirely different from Volume 1, and are all concerned with the ways in which viruses reproduce themselves. These are major reviews, and although one or two contributions show signs of being variations upon earlier texts by the same author(s), much of the work is new and up to date. The sections in Volume 2 by E. R. Pfefferkorn and D. Shapiro on togaviruses, and in Volume 3 by B. Roizman and D. Furlong on herpesviruses, are particularly fresh and original. Later volumes will deal with structure and assembly, and with regulation and genetics. This approach means that a virologist with an interest in one particular virus family is obliged to buy three volumes in order to cover all aspects of his particular virus. By so doing, however, he is likely to read more widely than if he confined himself to single-virus books on 'poxviruses' or 'herpesviruses', and will thus benefit himself as well as the publishers. **J. S. Porterfield**

## Books brief

*Introduction to Geochemistry.* (Geophysics and Astrophysics Monographs, vol. 10.) By Claude-Jean Allègre and Gil Michard. Pp. viii+142. (Reidel: Dordrecht and Boston, Massachusetts, 1974.) n.p.

*Handbook of Geochemistry*, vol. 2, part 4. Edited by K. H. Wedepohl. Pp. vi+898. (Springer: Berlin and New York, 1974.) DM.298; \$122.20.

WERE he to judge from the title the tyro might expect *Introduction to Geochemistry* to provide a comprehensive appraisal of geochemistry at a reasonably elementary level. Instead, he will find a good introduction to certain important geochemical processes. The book confines itself essentially to element fractionation: the fractionation of major and trace elements through magmatic processes and in the hydrosphere; the fractionation of light isotopes, with particular reference to  $^{18}\text{O}/^{16}\text{O}$  and  $^{32}\text{S}/^{34}\text{S}$  isotopic compositions; and of radioactive isotopes. Natural processes in which chemical equilibrium is not attained are also considered.

The book is a translation, "done without amendments, editings or alterations", and, consequently, it appears as a translation, although the

sentence, 'A test of the validity of these equations can be gotten here in a simple way' conjures up some thoughts about the original French. The authors' "rule" to omit many text citations from the bibliographies is irritating.

The *Handbook of Geochemistry*, the latest part of a continuing project, upholds its high standard of content and production, and meets its publication date. The authors, editors and publishers are all to be congratulated on maintaining the impetus of the project. Chapters covering a further 24 elements (including carbon, nitrogen, oxygen, silicon, magnesium and iron) are now supplied; little is missing from another 21 chapters; and with more than three quarters of the elements completed only relatively small gaps remain. Inevitably, with publication over a six-year period, costs have escalated, but at least fairly uniformly. The price is now 14.7 cents for each page, compared with a price of 5.5 cents in 1969. The *Handbook of Geochemistry* is invaluable to earth scientists, but regrettably, it is a library purchase, and these days even some libraries may resist temptation. **Duncan Murchison**

*Fast Reactions.* (Oxford Chemistry Series.) By J. N. Bradley. Oxford Chemistry Series (Number 23). Pp. x+121. (Clarendon: Oxford; Oxford University Press: London, June 1975.) £3.25.

PROFESSOR Bradley has written a very concise description of fast reaction kinetic studies, emphasising throughout his book the experimental rather than the chemical aspects of the subject. The descriptions of the individual techniques are not very detailed, and the author's own interest in gaseous, rather than solution work, is very apparent. A preferable presentation would have been to split the subject into two parts of this series, one referring to gaseous the other to solution kinetics. In any case the value of the book would be greatly enhanced by the provision of many more up-to-date chemical examples, particularly for the solution kinetic techniques. The standard of production of the book does not compare favourably with others in the series: the print was blurred on many of the pages of the reviewer's copy, and the line lengths had not been justified. A number of diagrams need better description or more labelling, and there are a few text errors. The reviewer will continue to use Caldin's *Fast Reactions in Solution* (1964) and Hague's *Fast Reactions* (1971) as preferred recommended texts.

**John Maher**