The examples described from the Antalya complex in south-west Turkey, and several of those from New Zealand, involve igneous activity, chiefly volcanism, but mineralization is rarely mentioned. This book is essential for any library on sedimentary facies; others may ignore it.

J. M. HANCOCK

Dennis, J. G., Murawski, H., and Weber, K., Editors. *International Tectonic Lexicon: a prodrome.* Stuttgart (E. Schweizerbart'sche Verlagsbuchhandlung: Nagele and Obermiller), 1979. vi + 153 pp., 13 figs. Price DM 48.00 ($29.80).

The earlier review of this book (*Mineral. Mag.* **43,** 958, 1980) omitted to mention the basic purpose of this lexicon—to present a survey of the divergent usage of tectonic terms in *six languages* (English, French, German, Italian, Russian, and Spanish). The editors regret this omission.

A. M. CLARK

Hoefs, J. *Stable Isotope Geochemistry* (Second, completely revised and updated edition). Berlin, Heidelberg, and New York (Springer-Verlag), 1980. xii + 208 pp., 52 figs. Price DM 59.00 ($34.90).

The second edition of Professor Hoefs's *Stable Isotope Geochemistry*, which is still the only general introduction to this important modern development in geology, is a very welcome addition to the literature. The first edition (*Mineral. Mag.* **39,** 735–6, 1974) was criticized by reviewers (including the present one) for a number of shortcomings which have now been successfully corrected. In comparison with the first edition the text-length, the number of figures, and the bibliography have all been increased by about 50% but the clarity of the text and the coverage of the subject have been transformed. The book is divided into three chapters: 1. Theoretical and Experimental Principles; 2. Isotopic Properties of Selected Elements; 3. Variations of Stable Isotope Ratios in Nature.

The organization of the third section is slightly idiosyncratic in that extraterrestrial material, igneous rocks, volcanic gases and hot springs, ore deposits, the hydrosphere, the atmosphere, the biosphere, sedimentary rocks, and metamorphic rocks are treated as separate sections and the variations in abundance of different stable isotopes in each of these 'spheres' are discussed in separate sub-sections. The result is a one-step-at-a-time text which is easy to read and thus probably excellent for students but does have the disadvantage that all the different lines of evidence bearing on a particular problem are rarely drawn together. This is, however, a very minor drawback in a book which can be recommended, really without reservation, as a thorough, easily read and enjoyable introductory text.

R. D. BECKINSALE

Tucker, M. E. *Sedimentary Petrology: An Introduction* (Geoscience Texts Volume 3). Oxford (Blackwell Scientific Publications) and Boston (Halsted Press), 1981. viii + 252 pp., 179 figs. Price £8·50.

In recent years, many texts have been published dealing with the depositional environment and facies of sediments. This book attempts to present a concise up-to-date account of the rocks themselves, with discussions of composition, petrography, sedimentary structures, and diagenesis. In general a better balance than usual is achieved. There are whole chapters on sedimentary phosphates, cherts and siliceous sediments, and volcaniclastic sediments, but in striving for completeness some topics are very inadequately covered, e.g. heavy minerals are poorly interpreted and badly illustrated.

The general tone is one of clear-cut statements in short readable sentences. There are good tables and diagrams and excellent photographs of rocks. The coverage of the literature in general is good, with suggestions for further reading at the end of each chapter in addition to some 600 references in the main list. The author has written this book with undergraduate students in mind and states that all the references cited should be readily available; this, however, does not excuse the complete lack of references to the French literature (which might have included the *Atlas photographique des Mineraux d'Alluvions* by Devismes, 1978).

The book is set out clearly and well printed. Although surely no gastropod has calcite as well as aragonite as a dominant mineral (as stated in Table 4.1), mineralogy and petrology students will find this an easy way in to the land of neomorphism, opal-CT, sabkhas, and wackestones.

R. A. HOWIE