

The coverage of the geology of Japan is, however, complete and the contributors will be well known to geologists who knew the Japanese geology fraternity of ten years ago. Sadly the affiliations of those authors are not given in the volume, thus making personal contact, with those writers who are still extant, difficult.

The key parts of this 249 page book after a brief introduction are Chapter 2—The pre-Neogene sedimentary and metamorphic rocks; Chapter 3—Ultramafic rocks and gabbros; Chapter 4—Granites and rhyolites; Chapter 5—Late Cenozoic strata; Chapter 6—Quaternary sediments of lowland plains and terraced uplands; Chapter 7—Cenozoic volcanic activities and their products; Chapter 8—Submarine topography and geology around the Japanese islands; Chapter 9—Ore deposits in relation to igneous activity and Chapter 10—Geotectonic history of the Japanese islands. The coverage, notwithstanding its somewhat dated nature, is excellent with each chapter having a long bibliography, though there are surprisingly few references to 'foreign' publications even when they might have been quite appropriate. See, for example, the chapter on ore deposits where one would have expected such references.

Some knowledge of Japanese geography is required to get maximum advantage from the book—it is not always easy to locate the places to which references are made in the text into the broader context. This can detract from the value of the locality sketch maps. Members of the Mineralogical Society will find the Chapter on Ores concise to the point of being disappointingly short—twelve pages can hardly be expected to do that subject justice. The plate tectonic story of Japan is only summarily described and much more has been published in and abroad about Japan's plate tectonic history since 1980.

Overall, the translation is excellent and very readable, spelling errors are rare and sometimes

amusing (Morasse appears several times instead of Molasse). There are many line diagrams and these are generally clear: the exception are the maps in the Introduction which are so reduced as to be indecipherable.

There is no doubt that, in spite of the caveats I have made, this book does fill a need and in spite of its high price, it is probably essential reading for anyone wishing to learn about the geology of Japan and it would make a useful compendium for anybody wishing to visit that fascinating country.

A. J. SMITH

Decker, R. W. and Decker, B. B. *Mountains of Fire: The Nature of Volcanoes*. Cambridge and New York (Cambridge University Press), 1991. x + 198 pp., 95 figs., 16 colour plates. Price £30.00 hardback, £10.95 paperback.

This well illustrated book is written in a popular but authoritative style (the senior author being formerly Scientist-in-Charge of the U.S.G.S. Hawaiian Volcano Observatory). Each chapter opens with an eyewitness account of a major volcanic eruption or a related phenomenon—the latter including hydrothermal ore deposits as exemplified by a 40-foot high vugh lined with gold crystals in the Cresson mine, Cripple Creek, Colorado, and the giant clams and anemones associated with a 'black smoker' 2500 m deep at the Galapagos Ridge axis. In addition to numerous drawings and black-and-white photographs there are 27 colour photographs showing a spectacular range of volcanic activity, including the eruption on Io, one of the moons of Jupiter.

This fascinating book should appeal to all earth scientists and is very reasonably priced.

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