

BOOK REVIEW

The Ore Minerals and Their Intergrowths by Paul Ramdohr (1980). English translation of the 4th Edition (with additions and corrections by the author) by a team organized by Professor Amstutz. Pergamon Press, Oxford; International Series in Earth Sciences, Vol. 35 in two volumes, 1207 pages, \$230.00 U.S.

The present volumes will probably be the last edition revised by the author. The English translation of the 3rd edition was published in 1969 as a single volume. As the author has noted, some of his previous statements were, for a variety of reasons, simply wrong; in other cases, nature is much more complicated than he had assumed. The new edition has corrected many of these inaccuracies, but the author has overlooked or ignored some excellent research papers available to him. For example, the author uses the term *chalcopyrrhotite* to describe high-temperature mixed crystals of $\text{CuFeS}_2\text{-FeS}$, whereas these phases are accepted as valid mineral species, namely, talnakhite, mooihoekite and haycockite. Similarly, in some cases the use of names or the spelling is not in agreement with those recognized by the Commission on New Minerals and Mineral Names, IMA. The major changes from the first English translation have been the addition of 132 new ore minerals, the deletion of 22 invalid mineral names, 94 new photomicrographs and expanded reflectance data, especially following Besmertnaya, Picot and Vjalsov. The Commission on Ore Microscopy, IMA, have been compiling a

Quantitative Data File but unfortunately, as the author has noted, it has come too late to be used in his book. Owing to the expanded edition, the second English translation is divided into two volumes. *Volume 1* covers the genesis of ore deposits (78 p.), the ore textures (201 p.), description of minerals covering the elements and intermetallic compounds, alloy-like compounds and tellurides (152 p.). *Volume 2* continues with the description of minerals, including the common sulfides and sulfosalts (452 p.), oxidic ore minerals (204 p.), gangue minerals and nonopaque oxide ore minerals (19 p.), coal macerals (5 p.), locality index (37 p., expanded especially to cover the new uranium minerals), bibliography (40 p., selected literature references up to mid-1977), an alphabetical index and general index.

The student of ore minerals must be aware that the science of ore microscopy is rapidly changing, and that it is next to impossible to keep up-to-date in a textbook. Unfortunately, the price \$230.00 U.S. is very high and will prevent the books from being purchased by individuals who would profit from a personal copy. For the geological libraries that have a copy of the first English edition on their shelves, it is difficult to recommend acquisition of this second English version.

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