BOOK REVIEWS

Correction to a review of MINERAL RECOGNITION. IRIS VANDERS AND PAUL F. KERR. John Wiley & Sons, New York, 1967.

Book reviews published in the *American Mineralogist* are generally both objective and thorough and serve as an authoritative guide to readers. Such reviews stand as published, and authors whose books are reviewed, merely read and abide by the reviewer's statements without written comment. However, a recent review by William T. Holser (*Amer. Mineral.* **52,** 1257–1258 (1967) of our book *Mineral Recognition* includes a sentence that gives an implication believed to be beyond the limits of objectivity and accuracy and which the authors feel should not be allowed to stand without correction:

> ". . . . . The chapter on crystal growth does not mention John Sinkankas' *Mineralogy for Amateurs*, which, by some coincidence, has a remarkably parallel treatment of this subject with line drawings very similar to Vanders and Kerr's figures 2-22, 2-24, 2-11, 2-29, and 2-49."

The authors of *Mineral Recognition*, aside from the addition of several references as late as 1966, had completed their chapter on crystal growth before they saw the book by John Sinkankas, although the complete manuscript was not submitted to the publishers until later. The figures listed in the above quoted paragraph were definitely not adapted from Sinkankas.

Figure 2-22 is a relative growth rate diagram. Those familiar with solid-state physics will know that these diagrams are common. For example, similar diagrams are shown by W. H. Dennen, *Principles of Mineralogy*, Ronald Press, New York, 1959; A. Holden and P. Singer, *Crystals and Crystal Growing*, Anchor Books Doubleday & Company, New York, 1960; and L. V. Azároff, *Introduction to Solids*, McGraw-Hill, New York, 1960. These books are listed under references in *Mineral Recognition*, and were published prior to 1964.

Figure 2-24 shows the habit modification of lead nitrate crystals with the addition of methylene blue dye. A direct reference appears in the text above this figure. The reader may observe source diagrams by E. N. Slavnova in "New Data on the Interaction of Organic Impurities with Inorganic Crystals," *In* A. V. Shubnikov, ed., *Growth of Crystals* (original Russian text published Acad. Sci. USSR, Moscow, 1957; Transl. Consultants Bureau, New York, 1958, p. 117).

Figure 2-11 illustrates striations on a pyrite crystal caused by oscillatory growth between the cube and the pyritohedron. For generations, geologists have been writing about oscillatory striations. For example, such diagrams are shown by E. S. Dana and W. E. Ford, *Dana's Textbook of Mineralogy*, John Wiley & Sons, New York, 1932; etc.

Figure 2-29 illustrates a cross section of a zoned tourmaline crystal. This diagram was adapted from a photograph of a tourmaline crystal published in reference 15, chapter 2 of *Mineral Recognition*.

Figure 2-49 shows growth hillocks on the rhombohedral faces of a quartz crystal. This diagram was sketched from a quartz crystal collected by one of the authors (Vanders) in Brazil.

The text of *Mineral Recognition* is entirely different from the Sinkankas book. Further, no author has the exclusive rights to discuss common growth features, such as spiral growth, striated crystals, zoning, relative growth rates of crystal faces, growth hillocks, lineage structure, etc. In addition to common growth features, the crystal growth chapter of *Mineral Recognition* includes a number of topics not discussed in *Mineralogy for Amateurs* such as the growth of dendrites; the habit modification of ice crystals with changes in temperature; synthetic diamonds; and the effects of organic dyes on the habits of certain

crystals. Original references are also cited. Any similarity of treatment between the two books, which may appear on casual inspection, disappears on closer reading.

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MINERALY, SPRAVOCHNIK. TOM II, VYP. 3. COMPLEX OXIDES, TITANATES, NIOBATES, TANTALATES, ANTIMONATES, HYDROXIDES. Izdatel'stvo "Nauka," Moscow, 1967, 675 pp., 280 figures. Price 4 rubles, 40 kopecks (=about $5).

This is the fourth section published of this comprehensive reference work in mineralogy (see *Amer. Mineral.* **49,** 1781–1782 (1964), *Ibid.* **51,** p. 256 (1966)). Seventeen authors are listed. The coverage corresponds roughly to that in *Dana's Systen*, 7th Ed., v. 1, p. 607–808. As in the previous volumes, the treatment is much like that of *Dana's System*, with the addition of X-ray powder data and DTA diagrams. The literature coverage is thorough, with a number of 1965 references and some to 1966 papers. As in the preceding volumes, there is an English index.

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