

BOOK REVIEW

QUARTZ FAMILY MINERALS. A HANDBOOK FOR THE MINERAL COLLECTOR. By H. C. Dake, Frank L. Fleener and Ben Hur Wilson. 304+xvi pages. McGraw-Hill Book Co., Inc. *New York*, 1938. Price \$2.50.

In this book of fifteen chapters the authors present a general discussion of quartz proper, the cryptocrystalline varieties of quartz and opal. The concluding chapter of 19 pages describes the art of cutting quartz. The book is intended primarily for the layman and mineral collector. The large number of illustrations together with a free and easy style of presentation has produced an interesting volume which should prove very popular.

Unfortunately, in numerous instances, the statements are either vague or inaccurate. Frequently the cryptocrystalline varieties are referred to as "amorphous," while the formula for opal (p. 35) is given as " $\text{SiO}_2 \cdot \text{H}_2\text{O}$," in which the water is referred to as "water of crystallization." The reader is informed (p. 85) that "silica crystallizes only below 800°C ," and that quartz melts at " 1600°C " (p. 36). Also, in discussing the sequence of crystallization of the various minerals from a magma (p. 48), the reader is told that the order of separation is based upon "congealing temperatures." Petrologists are agreed that laws of solubility control the sequence of separation.

While these "oversights" and others are not serious, perhaps, from the standpoint of the mineral collector, they do detract however from the scientific value of the book.

W. F. H.

PROCEEDINGS OF SOCIETIES

PHILADELPHIA MINERALOGICAL SOCIETY

Academy of Natural Sciences, Sept. 1, 1938

A stated meeting of the Philadelphia Mineralogical Society was held on September 1st, 1938, with the president, Mr. Trudell, in the chair. The treasurer, Mr. Flack, reported a balance on hand of \$101.88, no money owing, and \$210.50 receivable. The present officers were elected unanimously for the coming season.

The subject for the evening was "New Techniques of Modern Mineralogy," by Mr. William Parrish of the Massachusetts Institute of Technology. The first of the techniques described by Mr. Parrish was x-ray analysis. The speaker described, with illustrations, the use of the Bragg spectrometer, the powder method, and the Weissenberg method, showing photographic results obtained by each. Mr. Parrish then described the silica tetrahedron and its importance in silicate structures. He emphasized the relation between the structure of the crystals of rock-forming minerals and the petrology of the rocks in which they occur.

Another new technique is that of colorimetric analysis, now being developed by Mr. Parrish and his colleagues. The apparatus used, a recording photo-electric photometric spectrometer, was illustrated, and its use described. The analytical results expected of colorimetric analysis are: reflectivity, absolute color, identity, density, and conductivity. A vote of thanks was tendered Mr. Parrish for his lucid interpretation of a very technical subject.

LOUIS MOYD, *Secretary*

Academy of National Sciences, Oct. 6, 1938

President Harry Trudell called the meeting to order on October 6th, 1938. The present officers were re-elected for the 1938-9 season: President, Harry W. Trudell; Vice President, Morrell G. Baldwin; Secretary, Louis Moyd; and Treasurer, Wiley H. Flack.

The subject for the evening was the reporting of summer trips. Mr. Morgan collected at many localities. He obtained magnetite and pyrite crystals from Chester, Vt., gummite, uranophane, uraninite, and autunite from Grafton, N. H., triphylite and purpurite from Newry, Maine, and golden beryl from Easthampton, Conn.

Mr. Varni showed cat's eye tourmaline from Newry, Me.

Mr. Roedder found titanite at Lake Clear in Renfrew Co., Ont., very fine malachite at Bridgeport, Pa., pyrrhotite and an acicular pyroxene at Hillburn, N. Y.

At the Sparta Junction, N. J., quarry, Mr. Moyd collected stibnite associated with brown tourmaline, also plates of the vermiculite, philadelphite, at O'Neill's quarry, in Philadelphia.

Mr. Baldwin, reporting for Mr. D'Ascenzo, collected datolite, epidote, and babingtonite from Westfield, Mass.

Mr. Poppe described a trip through North and South Carolina, obtaining emeralds at the Crabtree Mt. mine, euxenite and thulite at Spruce Pine.

Mr. Toothaker described the use of a molding material known as "rubber latex" for making casts of specimens too delicate to move.

The first meeting of the new Philadelphia Geological Society, to be held on October 20th, 1938, was announced by its secretary, Mr. Adolph Meier.

LOUIS MOYD, *Secretary*

Correction

In the paper on "Prehnite from Coopersburg, Pennsylvania" (vol. 23, p. 583), the form p given as {221} in the abstract and text, and as {211} in the table, should be changed to read {112}.
