

minerals. It was in the roof, which was very solid and hardly accessible, and only a few small specimens of matrix containing less than a gram of brandtite altogether could be collected.

The crystals are colorless, up to 8 mm. in their longest dimension, seldom as much as 1 mm. wide, and 0.2 mm. or less in thickness. Associated minerals are rhodochrosite as a fine grayish-pink drusy coating; chalcopyrite, as minute groups of crystals; an unidentified pink mineral as a thin powdery coating of crystals; and an unidentified transparent red mineral in rare crystals. These latter are square, tabular, apparently tetragonal, and have a luster and color similar to proustite. The ground-mass consisted of a coarse intergrowth of calcite, franklinite, brown willemite, and sphalerite.

The brandtite crystals are simple and show the following forms in the unit and orientation of Dana (1951): *b*, *a*, *m*, *p*. Their habit is slender, prismatic, unlike the crystals from Harstig, Sweden, which are more nearly equant. Cleavage {010} perfect and {001} good. Colorless, transparent. Optically, the crystals are biaxial positive, with $\beta = 1.7070$ and $\gamma = 1.7215$. $r < v$, very strong. $2V$ small, $\cong 15^\circ$.

X-ray powder photographs and single-crystal rotation and Weissenberg photographs confirmed that the material is identical with brandtite from Langban, Sweden. Insufficient material was recovered for chemical analysis, and the observed optics were close enough to those of brandtite from the type locality so that no major variation in the constituents would be expected.

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CALIBRATION OF SINGLE-CRYSTAL WEISSENBERG FILMS

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To supplement the calibration methods for Weissenberg films described in this *Journal* by Christ (1956) and Pabst (1957), it might be of interest to mention a simple method used in this laboratory for several years.

The crystal is mounted on a thin wire (*ca.* 0.1 mm.) of some pure metal with accurately known spacing values (Ag, Al, Pt). The drawn-out powder lines of the metal are superimposed on the Weissenberg pattern of the crystal over the whole width of the film, as shown in Fig. 1.

This method has the advantage that no alteration of the Weissenberg camera is necessary, the change of goniometer heads (with possible mis-setting errors) is obviated, no double or triple exposures are needed and

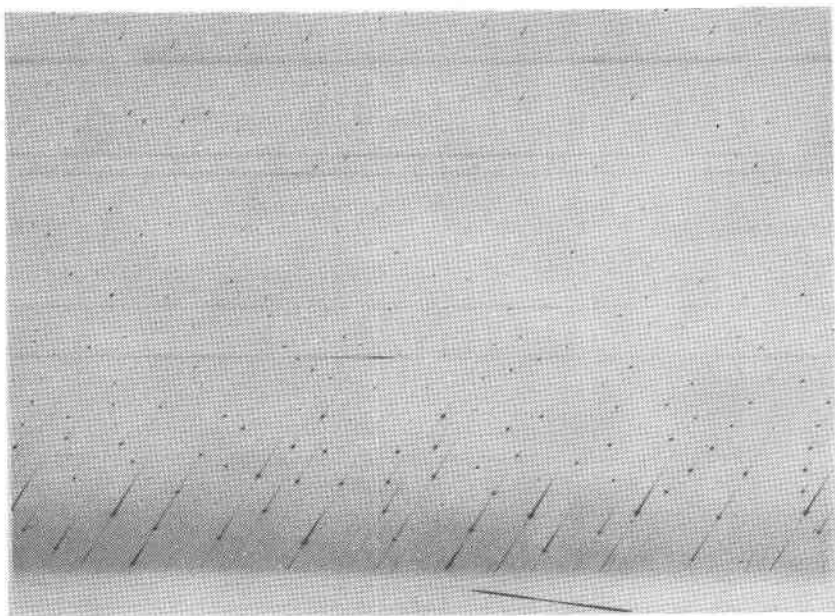


FIG. 1. Weissenberg photograph with continuous powder photograph lines from the wire mount.

the calibration is reliable in any region of the film, not merely in the region of the calibration strips, as in the methods mentioned above.

REFERENCES

- CHRIST, C. L. (1956), *Am. Mineral.*, **41**, 569-580.
PABST, A. (1957), *Am. Mineral.*, **42**, 664-666.

NOTE ON LUZONITE

In the article "Luzonite, Famatinite and Some Related Minerals" which appeared in the November-December (1957) issue of this *Journal* reference was made on page 768 to the work of Professor Hideki Imai of the University of Tokyo. Imai's conclusion, as interpreted by the writer, was that "luzonite was a valid mineral species and that, although arsenic-rich, it did contain a little more antimony than enargite, yet considerably less than famatinite. Hence, in the series Cu_3AsS_4 - Cu_3SbS_4 , the mineral enargite corresponds to Cu_3AsS_4 , while luzonite is an intermediate compound with a different structure."

In fairness to Prof. Imai, it must be said that this interpretation refers to only one of several possible alternatives discussed in his article. His over-all conclusion about this problem was the correct one, namely that

luzonite was in dimorphous relationship with enargite.

Imai's reference to Sawada's work on this subject was taken from the abstract of Sawada's paper, read before the semicentennial meeting of the Geological Society of Japan and the abstract published in the *Journal of the Geological Society of Japan*, Vol. 51 (1944), p. 21. Some of the figures given in this abstract differ from those communicated by Sawada to the writer, and hence Imai's reference to this work and the writer's were at variance.

RICHARD V. GAINES

Dr. Earl Ingerson, Treasurer of our Society since 1941, has recently become professor of geology at the University of Texas, and due to the pressure of professional work he found it necessary to resign from the office of Treasurer as of November 15, 1958. A glance at his reports during the past two decades shows a marked increase in the financial resources of our Society, thus testifying to his able management in this important area. In accepting his resignation at the recent annual meeting, the M.S.A. Council, on behalf of the members and fellows, expressed sincere gratitude to Earl Ingerson for his many years of able and loyal service to the Mineralogical Society of America.

The Council appointed Miss Marjorie Hooker, of the U. S. Geological Survey, to succeed Dr. Ingerson as Treasurer. Miss Hooker has ably assisted Dr. Ingerson for many years in the treasurer's office.

Dr. V. I. Mikheev, x-ray crystallographer of the Leningrad Mining Institute, died December 12, 1956, at the age of 45. His work was mainly on the x-ray powder method for the determination of minerals, especially in isomorphous series. The mineral mikheevite (= gorgeyite) was named for him.

Dr. Erwin Hellner of the Mineralogical Institute, University of Marburg, is currently serving as Visiting Associate Professor of Mineralogy in the Department of Geology, University of Chicago.

Dr. A. J. Frueh is spending the school year at the Mineralogical Museum in Oslo.

Dr. J. Laurence Kulp, head of the Geochemistry Laboratory of

Columbia University, has been appointed Professor of Geochemistry. He is spending the current academic year at Oxford University as a National Science Foundation Senior Postdoctoral Fellow.

AMERICAN CRYSTALLOGRAPHIC ASSOCIATION

The 1959 summer meeting of the American Crystallographic Association will be held at Cornell University, Ithaca, New York, July 19–24. The local chairman is Dr. J. L. Hoard, Department of Chemistry, Cornell University; the program chairman is Dr. David P. Shoemaker, Department of Chemistry, Massachusetts Institute of Technology, Cambridge 39, Massachusetts.

Officers of ACA for 1959

President—Dr. Robert E. Rundle (Iowa State College)

Vice-President—Dr. Jurg Waser (California Institute of Technology)

Treasurer—Dr. Thomas C. Furnas, Jr. (Picker X-Ray Corporation)

Secretary—Dr. Leroy E. Alexander (Mellon Institute, 4400 Fifth Ave., Pittsburgh 13, Pa.)

RUSSIAN TRANSLATION JOURNAL "CRYSTALLOGRAPHY"

The journal "Crystallography" of the Academy of Sciences of the USSR is being published in (complete) translation by the American Institute of Physics. The translation began with the 1957 issues.

This relatively new journal is quite broad in scope, offering both experimental and theoretical papers on crystal structure, lattice theory, diffraction studies and effects of external influences, including radiation damage on crystalline structure. It also publishes studies employing *x*-ray, electron and neutron diffraction of all materials of interest to the crystallographer, metallurgist, mineralogist, solid-state physicist, and chemist.

There are six issues per year, approximately 1,000 Russian pages. Annual subscriptions are \$25.00 domestic, \$27.00 foreign (\$10.00 and \$12.00 respectively for libraries of non-profit degree-granting institutions). Subscription orders and inquiries should be addressed to: Translation Journals—American Institute of Physics, 335 East 45 Street, New York 17, New York.