

these elements interferes. Moreover, it should be remarked that the selenium precipitate is the only intensely colored reaction given by any of the common elements with thiourea. Thus, selenium can be detected even in the presence of large amounts of copper, mercury or bismuth. The greatest advantage of the test, aside from its extreme sensitivity, is the fact that the product with selenium is wholly dissimilar from that given by any other common element.

This test appears much more satisfactory to the writer than either of the common microchemical tests used in mineralogical identification. Both stannous chloride and potassium iodide precipitate many elements whose products may obscure one another, whereas this reaction is very sensitive, the colored product is unique, and it can be made specific. The nature of the precipitate is not known but it is presumed to be a complex organic compound since it is quite different from the elemental selenium precipitate produced by stannous chloride.

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## PROCEEDINGS OF SOCIETIES

### PHILADELPHIA MINERALOGICAL SOCIETY

*Academy of Natural Sciences of Philadelphia, April 1, 1937*

Mr. Arndt presided at a stated meeting, with 39 members and 35 visitors present. Messrs. Richmond E. Myers, John S. Penny, and George R. Cope were elected to membership.

Participation in the Hobby Show at the Commercial Museum, May 10th to 15th, with exhibits of mineral specimens, was approved. Mr. Morrell G. Baldwin spoke on "Ancient and Medieval Gemology."

Albert Jehle reported malachite and quartz crystals from Bridgeport, and Edwin Roedder exhibited thorianite, gummite, and uranophane from Easton, and jeffersonite and calcite from Franklin, New Jersey.

*May 6, 1937*

A stated meeting was held with Mr. Arndt in the chair, 49 members and 33 visitors were in attendance. The deaths of J. Rady Miller, and Fred Hilbiber were announced.

Dr. J. D. H. Donnay, assisted by Dr. David Harker, of Johns Hopkins University, addressed the society on his new law of crystallography, which is a further development of the Law of Bravais. The use of perforated cards (representing properties of minerals) in the determination of non-opaque minerals was demonstrated.

A number of trips were reported, and many specimens were exhibited: W. H. Flack, collected at Easton, Pa. (aragonite, asbestos, eastonite, gummite, thorianite, uranophane); Leonard Morgan, at Bernardsville, N. J. (natrolite); at Prospect Park, N. J. (amethyst, chabazite); George R. Cope, at Unionville, Pa. (chesterlite, beryl, corundum); Samuel G. Gordon, at Grafton, N. H. (apatite, uraninite, uranophane, autunite); Edwin Roedder, at Unionville, Pa. (beryl); Louis Moyd, at Sparta, N. J. (allanite).

June 3, 1937

Mr. Arndt presided at a stated meeting with 49 members and 27 visitors present. Albert Jehle was elected to junior membership, and Joseph Berman to senior membership.

Vice-president Joseph L. Gillson described his "Rambling in the Southwest," with descriptions of the fluor spar deposits of New Mexico, and the titaniferous magnetite deposits of the San Gabriel Mountains in California.

Dr. H. E. McKinstry discussed the distribution of metamorphic minerals in southeastern Pennsylvania, particularly in the Wissahickon gneiss. He requested that members report occurrences of garnet, staurolite, cyanite, and sillimanite in the area between the Delaware River and the Susquehanna.

A number of trips were reported: Albert Jehle and Leonard Morgan, collected at Ellenville, N. Y. (quartz, galena), at Hudson, N. Y. (fluorescent and phosphorescent selenite); Louis Moyd, at Chimney Rock, N. J. (calcite); Edwin Roedder, at Media, Pa. (a feldspar crystal).

W. H. FLACK, *Secretary*

## NEW MINERAL NAMES

### Arsenostibite

P. QUENSEL: Minerals of the Varuträsk Pegmatite. III. Arsenostibite, a hydrous oxidation product of allemontite. *Geol. Fören. Förhandl. Stockholm.*, vol. 59, pp. 145-149, 1937.

CHEMICAL PROPERTIES: A hydrous oxide of antimony and arsenic,  $(R_2O_3, R_2O_5) \cdot 3H_2O$ . Analysis:  $Sb_2O_5$  45.4,  $As_2O_5$  5.8,  $Sb_2O_3$  4.3,  $As_2O_3$  5.6,  $Fe_2O_3$  6.2,  $Bi_2O_3$  0.3,  $CuO$  0.0,  $H_2O$  - 8.1  $H_2O$  + 6.6, insol. 18.1; Sum 100+.

PHYSICAL PROPERTIES: Color, sulfur-yellow. Isotropic, with index of refraction variable, 1.670-1.685.

OCCURRENCE: Found as a porous coating, an alteration of allemontite from the pegmatite at Varuträsk, Sweden.

W. F. FOSHAG

### Alpha-wiikite

### Beta-wiikite

JALO ANT-WUORINEN: Der Wiikite und Seine Chemische Zusammensetzung. 2d Mitt. *Bull. Com. Geol. Finlande*, No. 115, pp. 213-229, 1936.

Wiikite is interpreted as an isomorphous mixture of (1) Alpha-wiikite,  $3CaO \cdot UO_3 \cdot 1.5Cb_2O_6 \cdot 1.5H_2O$  and Beta-wiikite,  $2Y_2O_3 \cdot 1.5Cb_2O_6 \cdot 1.5H_2O$ .

W. F. F.

## NEW DATA

### Tuhualite

P. MARSHALL: The mineral tuhualite. *Trans. Proc. Roy. Soc. N. Z.*, vol. 65, pp. 330-336, 1936, 11 text figures.

CHEMICAL COMPOSITION: Analysis (by Mrs. F. T. Seelye) (calculated from rock analyses),  $SiO_2$  75.36,  $Al_2O_3$  9.33,  $Fe_2O_3$  3.61,  $FeO$  2.33,  $MgO$  0.06,  $CaO$  0.25,  $Na_2O$  4.75,  $K_2O$  4.06,  $H_2O$  - 0.21,  $H_2O$  + 0.12,  $TiO_2$  0.23,  $MnO$  0.18; Total 100.16.