

One additional page is to be devoted to our "Abstracts of mineralogic literature," enabling us to bring this department up to date more rapidly than has heretofore been possible, and to increase somewhat the average length of abstracts, thereby enhancing their usefulness. We will also be able to publish at least one full-page plate in every number. We are planning a number, to appear early next year, devoted to the application of the Goldschmidt two-circle goniometer to the study of crystals, and an appreciation of the contributions to science of Professor Victor Goldschmidt. We are glad to announce that the construction of these goniometers in this country is under consideration by a well-known firm of instrument-makers.

## PROCEEDINGS OF SOCIETIES

### THE NEWARK MINERALOGICAL SOCIETY

The twenty-ninth regular meeting of the Newark Mineralogical Society was held on February 2, at the Newark Technical School, with Dr. Colton presiding and an attendance of 52 per cent. of our membership; there were also present three visitors.

After the usual routine of business, during which one application was favorably acted upon and two others received, one of our members, Mr. Schoonmaker, presented a paper on quartz inclusions, supplemented with a large array of specimens.

The presenting of papers by members has proved to be a great incentive towards bringing out the members. Last month Mr. A. C. Bates read a paper on quartz inclusions, and the month previous Mr. Holzman read a paper on the minerals of Chimney Rock, N. J., and Wm. H. Broadwell a paper on Paterson as a mineral locality.

WM. H. BROADWELL, *Secretary*.

### THE PHILADELPHIA MINERALOGICAL SOCIETY

*Wagner Free Institute of Science, February 13, 1919*

A stated meeting of The Philadelphia Mineralogical Society was held on the above date with the President, Dr. Leffmann, in the chair, and later, Mr. Trudell. Fifteen members and visitors were present.

Mr. J. C. Boyle and Mr. William Lee were elected active members.

Mr. R. J. Hagey addressed the society on "The rudiments of optical mineralogy." The movement of light in anisotropic media was described, and illustrated with sections projected on a screen, showing the various phenomena of interference and dispersion.

A vote of thanks was extended to Mr. Hagey for his interesting communication and exhibition.

SAMUEL G. GORDON, *Secretary*.

### THE MINERALOGICAL SOCIETY (LONDON)

January 14, 1919

Mr. W. Barlow, past-president, in the chair. A. Hutchinson: Stereoscopic lantern-slides of crystal pictures. The twin pictures are projected by means of a double lantern thru screens of complementary colors—red and green—and are viewed thru similarly tinted screens, one for each eye. If the adjustment is correct, a black and white picture stands out in relief. The method admits of the properties of crystals and crystal structure being demonstrated

simultaneously to a large number of students. J. S. Spencer: Mineralogical characters of "turite" (= turgite) and some iron-ores of Nova Scotia. The mineral collection of the late Dr. H. S. Poole, which was presented to the British Museum in 1917, contains among the iron-ores specimens of magnetite, hematite, "turite," goethite, limonite, chalybite (siderite), mesitite, and ankerite from many localities in Nova Scotia. The dehydration curves and optical properties of "turite" ( $2\text{Fe}_2\text{O}_3 \cdot \text{H}_2\text{O}$ ), goethite ( $\text{Fe}_2\text{O}_3 \cdot \text{H}_2\text{O}$ ), and limonite ( $2\text{Fe}_2\text{O}_3 \cdot 3\text{H}_2\text{O}$ ) are regarded as indicating that these, at least, among the large group of ferric hydroxide minerals, are distinct species with crystalline structure; some others are colloidal. "Turite" (= turgite, an incorrect German transliteration from the Russian) is a hard, lustrous, black mineral, with a radial-fibrous and concentric-shelly structure, and gives a dark cherry red streak; the fibers are optically birefringent and strongly pleochroic. Sharp brilliant crystals with the form of goethite, but consisting of anhydrous ferric oxide, or pseudomorphs of hematite after goethite, were also described. *Nature*, 102, (2569), 418-419, 1919.

## NEW MINERALS

### ORVILLITE

T. H. Lee. Two new zircon minerals—orvillite and oliveiraite. *Am. J. Sci.*, [4], 47, (2), 126-132, 1919. (Translated by J. C. Branner from *Revista da Sociedade Brasileira de Ciencias*, No. 1, pp. 31-38, Rio de Janeiro, 1917.)

NAME: after the late Dr. Orville A. Derby.

An analysis of zircon crystals in cavities in "caldasite,"—a rock composed of baddeleyite, from Caldas, Minas Geraes,—indicated the presence of a relatively soluble zirconium silicate corresponding to  $8\text{ZrO}_2 \cdot 6\text{SiO}_2 \cdot 5\text{H}_2\text{O}$ . Some of the material was separated under the microscope by Derby and analyzed:  $\text{ZrO}_2$  68.04,  $\text{SiO}_2$  25.45, volatile matter and combined  $\text{H}_2\text{O}$  6.35, sum, 99.72 per cent. No description of the physical properties is given.

S. G. G.

### OLIVEIRAITE

T. H. Lee, *place cited*. NAME: after Dr. Francisco de Paula Oliveira.

COLOR: yellowish green. Apparently amorphous, but under the microscope shows in places multiple twinning and a radial fibrous structure.

COMPOSITION: a hydrated titanate of zirconium  $3\text{ZrO}_2 \cdot 2\text{TiO}_2 \cdot 2\text{H}_2\text{O}$ . An analysis of material selected under the microscope gave:  $\text{ZrO}_2$  63.36,  $\text{TiO}_2$  29.92, combined  $\text{H}_2\text{O}$  6.48, sum 99.76 percent.

OCCURRENCE: with euxenite, as a secondary product.

LOCALITY: Espirito Santo, Brazil.

S. G. G.

## ABSTRACTS OF MINERALOGIC LITERATURE

### TWO NEW ZIRCON MINERALS—ORVILLITE AND OLIVEIRAITE.

T. H. LEE. *Am. J. Sci.*, [4], 47, (2), 126-132, 1919. (Translated by J. C. Branner.)

The two minerals described have been noted above, under NEW MINERALS. The paper includes 2 analyses of euxenite from Espirito Santo, and Pomba,