PROCEEDINGS OF SOCIETIES

PHILADELPHIA MINERALOGICAL SOCIETY

Academy of Natural Sciences, April 4, 1929.

A stated meeting of the Philadelphia Mineralogical Society was held on the above date with the president, Mr. Trudell, in the chair. Fifty-five persons were present, including thirty-nine members.

Upon favorable recommendation of the council the following were elected junior members: Messrs. Ruben Loebel, Theodore Grau, and F. Schwan. Mr. Oldach presented the names of Robert Bradley, and Jack Simless; and Mr. Cienkowski proposed the name of Mr. Edward Wojtowicz. Mr. Biernbaum outlined the details of the proposed competitive exhibit of minerals by High School boys. Supplementary remarks were contributed by Messrs. Toothaker and Cienkowski.

The evening was then devoted to an examination of box mounts of minerals under the microscope. The members were seated about five rotating tables, each accommodating from eight to twelve persons. Each table was provided with a binocular microscope, and the exhibits, changed by one of the members, were rotated successively to each person. The mounts shown were those from the collection of Dr. L. C. Wills, who made some remarks on this phase of mineralogy.

SAMUEL G. GORDON, *Secretary*

THE MINERALOGICAL SOCIETY (ENGLAND)

Mineralogical Society, March 19, 1929. Dr. G. T. Prior, President, in the chair.

DR. A. W. GROVES AND MR. A. E. MOURANT: *Inclusions in the apatites of some igneous rocks.* Apatite crystals with dark cores of inclusions have been observed among the heavy minerals of some English sedimentary rocks, but there are few records of such apatites in igneous rocks. The authors record several such occurrences in granites and in volcanic rocks from Normandy, Jersey, and Brittany. Five different types are distinguished in the granite of northern Brittany alone. In one type with a definitely pleochroic core the inclusions appear to consist of biotite or chlorite, but in other types it has not been possible to determine their nature.

MR. L. A. NARAYANA IYER: *Calc-gneisses and cordierite-sillimanite-gneisses of Coimbatore, Madras Pres., and of similar occurrences in India.* The paper dealt with a suite of crystalline gneisses in the ancient Archaean complex of India of Dharwar age (Huronian), consisting of the above two facies, which are in close association. Similar suites of rock occur in different parts of India, forming a definite stratigraphic horizon. The author considers their formation as due to thermal or "infra-plutonic" metamorphism followed or accompanied by regional or dynamo-thermal metamorphism of pelitic schists and calcarous sediments.

MR. F. A. BANNISTER: *A relation between the density and refractive index of silicate glasses with application to the determination of imitation gemstones.* The study of simple glass families leads to a relation between the refractive index and density which can be applied in a modified form to the determination of imitation gem-stones. n-N/d-D, where N and D are the refractive index and density of silica glass, is plotted against n by a simple graphical method whereupon the

various imitations separate into groups; the members comprising any one group are chemically similar. Doubtful cases can be solved by measuring in addition the relative dispersion.

MR. H. E. BUCKLEY: *The crystallization of potash-alum.* The author described the results of experiments on the differences of crystal habit obtained under varying conditions of cooling, and evaporation, and in the presence of various substances in solution.

W. CAMPBELL SMITH, *General Secretary*

NEW MINERAL NAMES

Renardite

ALFRED SCHOEP: La renardite, nouveau Minéral uranifére (Renardite, a new uranium mineral). *Bull. Soc. Min. Fran.*, **51**, 1–6, 1928.

NAME: In honor of A. F. Renard, formerly professor of mineralogy at the University of Gand.

CHEMICAL PROPERTIES: A hydrous phosphate of uranium and lead, $PbO \cdot 4UO_3 \cdot P_2O_5 \cdot 9H_2O$. Analysis: Insol. 2.11, PbO 12.26, P_2O_5 8.15, CoO 3.68, MoO 0.74, UO_3 64.82, H_2O 8.74. Sum 100.50. In a closed tube it yields water and turns brown. Fuses on charcoal to a black scoriaceous mass. Easily soluble in hot HNO_3, in HCl with separation of lead on cooling.

CRYSTALLOGRAPHIC PROPERTIES: Orthorhombic. $a \cdot c = 1 \cdot 1.209$. Flat, rectangular prisms. Forms (100), (010), (101). Cleavage parallel to (100), perfect.

PHYSICAL AND OPTICAL PROPERTIES: Color yellow, luster greasy. Biaxial negative, plane of optic axes is parallel to (001). $X=a$, $Y=c$, $Z=b$, $\alpha=1.715$, $\beta=1.736$, $\gamma=1.739$. Dispersion $\rho>\nu$. Pleochroism X=colorless, Y=yellow, Z=yellow.

OCCURRENCE: Found as minute crystals with quartz, torbernite and clay from the Kasolo Mine, Katanga, Belgian Congo. Resembles dewindtite and dumotite.

W. F. FOSHAG

Chile-Loweite

W. WETZEL: Die Salzbildungen der Chilenischen Wüste (The formation of Salts in the Chilean Desert). *Chemie der Erde*, **3**, 388–389, 1928.

CHEMICAL PROPERTIES: A hydrous sodium, potassium, magnesium sulphate, $K_2Na_4Mg_2(SO_4)_5 \cdot 5H_2O$. Analysis (on impure material): K_2O 10.83, Na_2O 20.51, MgO 7.15, SO_3 43.43, N_2O_5 8.73, $H_2O-0.23$, $H_2O+9.05$.

CRYSTALLOGRAPHIC PROPERTIES: Trigonal. Habit: thin tabular to the base. $a:c=1:1.19$ ca. Forms: base and rhombohedron.

PHYSICAL AND OPTICAL PROPERTIES: Optically negative. $\epsilon=1.434$, $\omega=1.470$. Sp. Gr. 2.153 ca.

OCCURRENCE: Found in the "calichera" between the "Chile" "Alemania" works, at Taltal, Chile, as minute crystals.

W.F.F.