

PROCEEDINGS OF SOCIETIES

PHILADELPHIA MINERALOGICAL SOCIETY

Academy of Natural Sciences of Philadelphia, Dec. 2, 1926

A stated meeting of the Philadelphia Mineralogical Society was held on the above date, the president, Mr. Vaux, presiding. Twenty-five members and five visitors were present.

Mr. Frederick Richter was elected to membership. Dr. Paul F. Kerr of Columbia University addressed the society on "*X-ray crystal methods applied to mineral study.*" The three methods used for the study of minerals with X-rays were described. The Laue and the Bragg's methods for photographing X-rays reflected from crystal or cleavage surfaces are of limited application since both of these methods require the presence of rather large crystal or cleavage faces in the mineral under investigation. The photographic record of the diffraction pattern obtained when X-rays are passed through powdered minerals gives promise of wide use. A diffraction pattern may be obtained from as little as 50 mg. of some minerals.

The speaker explained the way X-ray photographs are taken and the manner of measuring and interpreting the patterns. The talk was illustrated by means of numerous lantern slides showing the apparatus used for X-ray investigations of minerals and the patterns obtained from a number of minerals.

Specimens of prehnite, pectolite and other minerals from Paterson, N. J. were exhibited by Mr. Biernbaum.

F. A. CAJORI, *Secretary*

NEW MINERAL NAMES

Salmoite

E. S. LARSEN: Microscopic determination of the nonopaque minerals. *U. S. Geol. Surv. Bull.* **678**, p. 135 (1921).

NAME: From the locality, *Salmo*, British Columbia.

CHEMICAL PROPERTIES: Presumably a basic zinc phosphate.

OPTICAL PROPERTIES. Optically—; 2 V moderately large; $\rho > \nu$ (perceptible); $\alpha = 1.645$, $\beta = 1.683$, $\gamma = 1.695$; (all ± 0.003). Colorless.

OCCURRENCE. With spencerite and hibbenite at the Hudson Bay Mine, Salmo, British Columbia.

DISCUSSION. Salmoite is presumably the "new basic zinc phosphate" mentioned by A. H. Phillips, *Am. J. Sc.*, **42**, 278 (1916). No evidence as to the chemical composition of the material described optically by E. S. Larsen is given.

J. F. SCHAIRER.

Yuksporite

A. E. FERSMAN. *C. R. Acad. Sc. Russie*, p. 60, (1922); *Trans. Northern Sc. Econ. Exped.*, No. 16, pp. 16, 52, 68, 73, (1923).

NAME. From the locality, *Yuksporlack* in the Kola peninsula.

CHEMICAL PROPERTIES: Analysis SiO_2 40.92, Fe_2O_3 9.10, MnO 0.91, CaO 20.56, MgO 0.42, Na_2O 7.94, K_2O 12.57, H_2O 8.52; sum 100.94. Referred by Fersman to the pectolite group.

PHYSICAL PROPERTIES: Color rose-red, fibrous and lamellar.

OCCURRENCE: With titanite, pectolite, astrophyllite, biotite and aegirite in veins in nephelite-seynite.

DISCUSSION: Optical data and proof of homogeneity are needed. It seems to be the same as natroxonotlite (J. F. Williams, *Ann. Rept. Geol. Surv. Ark.*, **2**, 355 et seq. 1891).

J. F. S.