

A chemical analysis of the mineral yielded,  $\text{SiO}_2$  63.30,  $\text{Al}_2\text{O}_3$  11.74,  $\text{Fe}_2\text{O}_3$  0.50,  $\text{CaO}$  9.54,  $\text{MgO}$  0.39,  $\text{Na}_2\text{O}$  3.28,  $\text{K}_2\text{O}$  0.42,  $\text{BaO}$  0.21,  $\text{H}_2\text{O}$  10.42; Total 99.80. This analysis yields the simple formula  $9\text{SiO}_2 \cdot \text{Al}_2\text{O}_3 \cdot 2\text{RO} \cdot 5\text{H}_2\text{O}$ , which differs from that of the pilolite group by having 2RO instead of 1RO.

A fuller account of the mineral will appear in a forthcoming Museum Bulletin of the National Museum of Canada.

Watson's Microscope Record (London: 24, September 1931, page 22) carries a note on the Double Refraction of Cellophane. Sheets of this substance behave like a single crystal. They are uniform in optical character, show the same polarization color over a sheet, and definite orientation of the principal optic axes. Pieces can therefore be used in much the same way as mica and selenite plates. Cellophane has the same composition as artificial viscose silk.

The National Research Council has announced a new Committee on Accessory Minerals of Crystalline Rocks to study the nature of such minerals, their variation in time and space in igneous bodies and metamorphosed masses and their distribution in sediments. Such studies in the past have shown that some igneous masses have rather characteristic accessory minerals which may be useful in some cases in determining the relationships between isolated outcrops, but very little is known regarding the differences in different parts of a single intrusion or in successive intrusions from a single magmatic source. The committee will attempt to correlate work now in progress and stimulate further study along these lines. At present the committee consists of E. S. Larsen of Harvard, J. C. Reed of the U. S. Geological Survey, J. E. Stark of Northwestern, A. C. Tester of Iowa, A. N. Winchell of Wisconsin (chairman), and J. F. Wright of the Canadian Geological Survey.

## PROCEEDINGS OF SOCIETIES

### PHILADELPHIA MINERALOGICAL SOCIETY

*Academy of Natural Sciences of Philadelphia, November 5, 1931*

A stated meeting of the Philadelphia Mineralogical Society was held on the above date with the president, Dr. Cajori, in the chair. Forty-two members and twenty-eight visitors were present.

Mr. William T. Clay spoke on "Some Mining Camps of Colorado," descriptive of a trip taken during the summer, and visits made to various mines in company with Dr. Florian Cajori, and Mr. Lazard Cahn. Geologic details were presented, introductory to an account of the present state of activity at the various mines. Many mineral specimens and ores were exhibited.

Mr. Knabe exhibited a garnet, measuring three inches across, from the Mermaid quarry at Mt. Airy. Mr. Hoadley reported little success on a visit to the quarries near Portland, Conn., all but Strickland's quarry now being idle.

Mr. Edmund Cienkowski presented a brief report on a trip with Mr. Bernheimer to localities in England, France, Germany, and Switzerland. Fine specimens were exhibited from Cornwall, Cumberland, and Durham.

W. H. FLACK, *Secretary*

*Academy of Natural Sciences of Philadelphia, December 3, 1931*

A stated meeting of the Philadelphia Mineralogical Society was held on December 3, with Dr. Cajori presiding. Forty-members and twenty-six visitors were present.

The resignation of Mr. Louis Bregy was read. Upon favorable recommendation of the executive council, the following were elected junior members: Louis Moyd, William H. Yost, 3rd, and Charles M. Jackson.

Dr. Edward S. Sampson of Princeton University addressed the society on "Minerals and Magmas." It is surprising how some of the rarer minerals form at all, when the amount of concentration necessary is considered in comparison with the distribution of the elements in igneous rocks. When magmas cool to form igneous rocks, the various constituents of the magma separate as minerals in a definite order. Dr. Sampson presented a theory for the probable origin of the Sudbury ore deposits, based on the character and location of the ore deposits in the basin and a microscopic study of the ores. The talk was illustrated by means of charts, sketches and maps. A rising vote of thanks was tendered to the speaker for his highly instructive lecture.

W. H. FLACK, *Secretary*

*Academy of Natural Sciences of Philadelphia, January 7, 1932*

A stated meeting of the Philadelphia Mineralogical Society was held on the above date, with Dr. Cajori presiding. Thirty-six members and seventeen visitors were present.

Dr. Joseph L. Gillson addressed the society on "Post-Consolidation Mineralization in Igneous Rocks." Reviewing early work on the subject, Dr. Gillson pointed out that Rosenbusch had stated the rule that most basic non-silicate minerals crystallize first, followed by the minerals low in silica. Recent work by various Scandinavian and American petrographers indicated that these supposed earlier minerals may have formed later by replacement of the silicates after the rocks had become quite solid. He cited the Engles Copper mine in California as an example. Earlier writers had considered this deposit of bornite and chalcopyrite to have crystallized from a molten magma, but later investigators believe it to be essentially a replacement deposit. Dr. Gillson described a deposit of ilmenite at Bay St. Paul, near Quebec, which he had mapped with the aid of a Hotchkiss Dip Needle. Study of diamond drill cores showed that the ilmenite had replaced minerals in an already solid anorthosite. Sapphirine was found with the ilmenite. Endomorphism and exomorphism at the contact of quartz monzonite and limestone near Pioche, Nevada, was described and the occurrence of szaibelyite and ludwigite there was noted. A rising vote of thanks was tendered to Dr. Gillson for his instructive talk.

WILEY H. FLACK, *Secretary*

## MINERALOGICAL SOCIETY OF SOUTHERN CALIFORNIA

The seventh meeting of the Mineralogical Society of Southern California was held on Monday, January 11, 1932, in the lecture hall of the Pasadena Public Library. Mrs. Gertrude S. McMullen of the Southwest Gem and Jewelry Co., of Los Angeles, spoke on "Gems."

The third trip of the Society took place on January 17 at the Palos Verdes Estates where barite crystals and Indian artifacts were obtained.