

PROCEEDINGS OF SOCIETIES

MINERALOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND

Meeting held January 27, 1938

DR. L. J. SPENCER, President, in the chair.

DR. C. E. TILLEY exhibited lamprophyllite from the Kola peninsula and molengraaffite from Pilansberg, Transvaal, and gave evidence to prove the identity of the two species. The following papers were read:—

- (1) *The paragenesis of a Malvern hydrobiotite, and the variable content of hydroxyl in micas generally.* By A. BRAMMALL, F. A. BANNISTER, AND J. G. C. LEECH

X-ray and chemical work show that the so-called hydrobiotite is not a mica but a new member of the chlorite family. Its constitution was compared with that of three hydromuscovites, two normal biotites, and a lithionite from Trelavour Down, Cornwall. Dehydration data were given, and experimental work on the hydrolysis of these micas was briefly demonstrated.

- (2) *The Kaalijärvi meteorite from the Estonian craters.* By DR. L. J. SPENCER

The crater-lake of Kaalijärvi on the island of Oesel was first described in 1827, and many suggestions have been made as to its mode of origin. A detailed survey, with excavations and borings, of this and of five other smaller craters was made by Mr. I. Reinvald in 1929 and 1932, and he was convinced of their meteoritic origin, although no trace of meteoritic material could be found. With remarkable persistence he returned to the work of excavation in July, 1937, when he was rewarded by finding thirty small fragments of much rusted meteoritic iron with a total weight of about 100 grams. A polished and etched section of one piece shows much schreibersite in an ataxite groundmass, the latter containing 8.32% of nickel. The meteoritic origin of these craters is therefore now established.

- (3) *Curvature in crystals of vein-quartz.* By DR. A. T. J. DOLLAR

Genetic problems presented by curved and fractured quartz crystals, closely associated with straight and unfractured crystals of the same mineral, are discussed in relation to anomalies of their surface form and internal optical properties. The specimens were derived from a vein in the slates of Lundy Island, Bristol Channel.

- (4) *A petrographic description of lundyite from Lundy Island, Bristol Channel.* By DR. A. T. J. DOLLAR

Lundyite was named by T. C. F. Hall in the Summary of Progress of the Geological Survey of Great Britain for 1914. Two chemical analyses have been made and details of the petrography are brought forward.

NEW YORK MINERALOGICAL CLUB

American Museum of Natural History, New York City
March 16, 1938

With Vice-President Dr. Andersen presiding, the meeting was called to order with 55 members and guests present. After some preliminary business and the election of new members, the speaker of the evening, Dr. A. F. Buddington, of Princeton University, addressed the Club upon "Economic Geology of the Karelian-Kola trip of the 17th International Congress." The talk was illustrated with lantern slides.

Dr. Buddington gave an interesting presentation, describing the geology and the unusual deposits of the area. The talk was illustrated by fine maps of the localities and a display of some excellent specimens collected at the localities visited. He complimented the leaders highly upon their careful preparations which made the trip so successful. The personal sidelights that Dr. Buddington was able to give added much to the interest and enjoyment of his audience.

F. H. POUGH, *Secretary*

PHILADELPHIA MINERALOGICAL SOCIETY

Academy of Natural Sciences of Philadelphia, March 3, 1938

A stated meeting of the Philadelphia Mineralogical Society was held on the above date, with the President, Mr. Trudell, in the chair. Forty-three members and twenty-two visitors were present.

Dr. Edward H. Watson, of Bryn Mawr College, spoke on "Some Geological Observations in Mexico." During the spring of 1937, Dr. Watson drove through Mexico, stopping for a few weeks to study the San Carlos Mts. Dr. Watson described huge alkaline laccoliths, some thirty miles wide with a very complex composition. The speaker also drove to Mexico City and described the trip up through the dissected escarpment of the plateau.

Dr. Watson concluded from observations of the Great Valley of Mexico that it is a huge caldera, larger than any yet described. He based his conclusions on structural features, the valley being rimmed by large active and extinct volcanos, smaller vents marking faults within the caldera.

The lecture was interspersed with comments concerning the people and politics of Mexico, and was well illustrated with photographs.

LOUIS MOYD, *Secretary*

Professor Terence T. Quirk of the Department of Geology, University of Illinois, has translated into English two articles by Professor V. M. Goldschmidt. They pertain to the Laws of Rock Metamorphism, with examples from the geology of southern Norway. Students of metamorphic geology who have difficulty in reading German will find these translations very helpful. Mimeographed copies, with paper covers, may be secured from the University of Illinois Supply Store, Inc., Champaign, Illinois, upon payment of a nominal price of sixty-five cents.

