

Mr. Frankenfield reported drusy quartz, talc, and deweylite from Newtown Square.

Mr. Trudell reported (exhibiting lantern slides) the results of the society's trip to Vanartsdalen's quarry, attended by Messrs. Hagey, Bengé, Gordon, Knabe, Warford, and Trudell. Graphite, blue quartz, blue microcline, wollastonite, wernerite, zircon, titanite, phlogopite, chondrodite, and stilbite were found.

SAMUEL G. GORDON, *Secretary.*

NEW MINERALS

FERRIERITE

R. P. D. Graham: Ferrierite, a new zeolitic mineral from British Columbia, with notes on some other Canadian minerals. *Trans. Royal Soc. Canada* [3], 12, 185-201, 1918.

NAME: After the discoverer, Dr. W. F. Ferrier.

CRYSTALLOGRAPHIC PROPERTIES

System: Orthorhombic; habit: radiated groups of very thin blades, tabular on a (100) and elongated on the c -axis; forms: a (100), b (010), and d (101), with $a : d = \text{approx. } 67^\circ 47'$.

PHYSICAL PROPERTIES

Color: colorless to white; luster: vitreous to pearly; cleavage: perfect on a (100); H. = 3 - 3½; sp. gr. = 2.150.

OPTICAL PROPERTIES

Biaxial; refractive indices: $\alpha = 1.478$, $\beta = 1.479$, $\gamma = 1.482$, $\gamma - \alpha = 0.004$; $2V = 50^\circ 25'$; sign +; orientation: axial plane in direction of elongation of blades and obtuse bisectrix normal to the blades (a -axis).

CHEMICAL PROPERTIES

SiO₂ 69.13, Al₂O₃ 11.44, CaO none, MgO 2.92, Na₂O 3.97, K₂O 0.36, H₂O 13.05, sum 100.87 per cent. This yields the ratios: SiO₂ : Al₂O₃ : MgO : Na₂O : H₂O = 10 : 1 : 0.6 : 0.6 : 6.5. The mineral is thus related to morденite and ptilolite, but is remarkable in containing magnesium in place of calcium, differing thus from all other known zeolites. The water begins to come off below 100° and is then given off gradually tho not quite continuously; to bring the formula into accord with that of the related minerals, 1.35 per cent. of this water is regarded as basic, giving R₂Al₂(Si₂O₅)₅ · 6H₂O.

OCCURRENCE

Found in a cut of the Canadian Northern Railway west of Mile Post 17, on the north shore of Kamloops Lake, B. C. Occurs intimately associated with chalcedony in seams in basalt; often covered by subsequent calcite.

E. T. W.

ABSTRACTS OF MINERALOGIC LITERATURE

FERRIERITE, A NEW ZEOLITIC MINERAL FROM BRITISH COLUMBIA, WITH NOTES ON SOME OTHER CANADIAN MINERALS. R. P. D. Graham. *Trans. Royal Soc. Canada* [3], 12, 185-201, 1918.