ARMENITE, A NEW MINERAL
PRELIMINARY NOTE
BY
HENRICH NEUMANN

In the present paper a short description is given of a new mineral which is found on the silver-bearing calcite-veins near Kongsberg. The mineral is named after Armen Mine, the only locality in which it is found.

The only existing specimen was collected in this mine by cand. min. O. A. Corneliussen in 1877. He signed it “Epidote?”, and as such it has been kept in the collections of the university until it was rediscovered by me last February.

Crystallography. Pure armenite is colorless and has well developed prismatic pseudohexagonal crystals with poorly developed terminal faces. The crystals attain a size of $1\frac{1}{2} \times \frac{1}{2}$ cm. The pseudohexagonal form is due to twinning along an axis parallel to the optic direction $z$. Arimenite has three cleavages $\perp z$ cutting each other under nearly $60^\circ$; it may also be a cleavage $\perp z$. The crystals may be rhombic (?)..

Chemistry. A chemical analysis carried out by stud. mag. scient. Lars Lund shows that the mineral is a water-bearing alumo-silicate of Ba and Ca. The chemical composition approximately corresponds to the formula $\text{BaCa}_2\text{Al}_6\text{Si}_8\text{O}_{28} \cdot 2\text{H}_2\text{O}$. The analysis and a discussion of the formula will be published later.

Physical properties. Armenite is biaxial negative with the acute bisectrix near $60^\circ$. $\beta = 1.559 \pm 0.002$ and $\alpha = 1.551 \pm 0.002$. The hardness is between 7 and 8, and the specific gravity is 2.77.

The systematic position of armenite is still uncertain, but I hope to be able to discuss this matter in a later paper.

Occurrence and paragenesis. As mentioned above armenite is found in a silver-bearing calcite-vein near Kongsberg. It crystallized directly on the wall of the vein and was later encompassed by calcite. Other minerals occurring together with armenite on this specimen.
are pyrrhotite, axinite, and quartz. They are all younger than armenite except possibly pyrrhotite, the age of which is not quite certain.

Acknowledgements. I want to thank stud. mag. scient. Lars Lund for his excellent assistance in the chemical work.

Thanks are also due to the director of Mineralogisk Institutt Professor Tom. F. W. Barth and the director of Mineralogisk Museum Professor V. M. Goldschmidt for their kind help and advice, placing the facilities of both institutions to my disposal during this work.

The work is done with grants from the Sulitelma Fund.

Mineralogisk Institutt, Oslo.
June, 1939.