

NEW MINERAL NAMES

Vernadite

A. G. BETEKHTIN, Genetic types of manganese deposits. *Bull. Acad. Sci. U.R.S.S., Sér. géol.*, 1944, No. 4, 1-46. (Russian with English summary 43-46.)

The name vernadite is given, in honor of V. I. Vernadsky, to a mineral formed in the early stages of oxidation of manganese silicates and carbonates. The composition is stated to be $MnO_2 \cdot H_2O$, plus a varying amount of water. The mineral is widespread in occurrence and was previously taken to be manganite. It is black when massive, compact; reddish to chocolate brown when finely dispersed. Streak is chocolate brown.

DISCUSSION. So vague a description scarcely warrants a new name.

MICHAEL FLEISCHER

Christensenite

TOM. F. W. BARTH AND ASLAK KVALHEIM, Christensenite, a solid solution of nepheline in tridymite. *Norsk. Videnskaps-Akad. Oslo, Sci. Results Norwegian Antarctic Expeditions 1927-1928*, No. 22, 1-9 (1944).

Tridymite from a lava on Deception Island has $n(Na) \alpha=1.479$, $\beta=1.480$, $\gamma=1.483$, each about 0.01 higher than the corresponding n of pure tridymite. Spectrographic study showed the presence of Na, Al and traces of Fe and Ca. Quantitative photometric comparison with mixtures of quartz and nepheline showed that this tridymite contained 5.2% nepheline. Whereas normal tridymite has inversions at 117° and 163°, christensenite has a single inversion at 130° to 140°, the temperature varying somewhat for different crystals. It is probable that other tridymites from lavas will be found to belong to this series.

The name is for Consul Lars Christensen, who supported the expeditions financially.

M.F.

Unnamed

F. C. PARTRIDGE, Trevorite and a suggested new nickel-bearing silicate from Bon Accord, Sheba Siding, Barberton District. *Trans. Geol. Soc. S. Africa*, 46, 119-126 (1943).

This is a preliminary description of a mineral associated with trevorite ($NiFe_2O_4$). It may be the nickel analogue of talc.

CHEMICAL PROPERTIES: Analysis by H. J. Weall gave SiO_2 47.1, Al_2O_3 , Cr_2O_3 , TiO_2 none, Fe_2O_3 6.65, FeO 1.15, NiO 30.6, CoO 3.5, MgO 9.45, alkalis none, $H_2O-0.2$, $H_2O+1.45$; sum 100.1%. This corresponds, after deduction of 5% trevorite, to $6NiO \cdot 3MgO \cdot 10SiO_2 \cdot H_2O$ or, as suggested in a note by J. E. de Villiers, to $(Ni,Mg,Fe,Co)_{14}Si_{16}O_{44}(OH)_4$. Talc is $Mg_{12}Si_{16}O_{40}(OH)_8$.

PHYSICAL PROPERTIES: Color is dark green in massive aggregates, apple-green in flakes. Streak, pale greenish white. Luster pearly in flakes, greasy to waxy in massive aggregates. $H=2-2\frac{1}{2}$. $G=3.037$. Cleavage micaceous, tough and flexible (like chlorites). Attracted in a strong field of an electromagnet, but not in a weak field.

OPTICAL PROPERTIES: Biaxial negative, $n_X=1.605 \pm .003$, $n_Y=n_Z=1.650 \pm .002$, $2V_x=14 \pm 2^\circ$. Weakly pleochroic, Z =bluish green, X =yellowish green. Optic plane nearly normal to micaceous cleavage. Extinction is sensibly straight.

M.F.

NEW DATA

Ahlfeldite

ROBERTO HERZENBERG, Ahlfeldita, un nuevo mineral de Bolivia. Notas sobre la cobaltomenita. *Bol. Fac. Cienc. Exact. Fis Naturales, Univ. Córdoba (Argentina)* VII, No. 4, 4 pp. (1944).

Ahlfeldite was described in 1935 as an alteration product of penroseite (blockite) and was thought to be a nickel selenate. In 1937 it was stated to be identical with the cobalt selenate cobaltomenite. Re-examination of ahlfeldite shows it to consist of greenish crystals, probably triclinic, that contained much nickel and selenium, and little or no cobalt. The red color previously ascribed to the mineral is confined to a thin outer crust and may be due to native selenium. Ahlfeldite is therefore a valid species.

M.F.

At the December meeting of the New York Mineralogical Club held December 19, 1945 new membership and excursion committees were appointed and the Club voted to contribute to the Harry Berman Memorial Laboratory Fund. Mr. Clyde Schumacher of the Johns-Manville Co. spoke on the general subject "Asbestos."

Dr. George T. Faust, associate mineralogist of the U. S. Geological Survey has been appointed professor of mineralogy at Indiana University, and Dr. Eugene Callaghan, commodity geologist of the Survey, has been appointed professor of economic geology.