NEW MINERAL NAMES

Priderite

K. Norrish, Priderite, a new mineral from the leucite-lamproites of the west Kimberley area, Western Australia: *Mineralog. Mag.*, **29**, 496–501 (1951).

Chemical Properties: Analysis of 0.15 g. gave: SiO_2 0.0, TiO_2 70.6, Fe_2O_3 12.4, Al_2O_3 2.3, BaO 6.7, K_2O 5.6, Na_2O 0.6, CaO trace, MgO 0.0; sum 98.2% (analysis by the Assay Dept., School of Mines, South Australia, and J. D. Hayton). This corresponds to $(K_{0.87}Ba_{0.32}Na_{0.14})(Ti_{6.48}Fe_{1.14}Al_{0.33})O_{16}$. The mineral's x-ray diffraction pattern is unchanged after the mineral is heated to 1400°.

Crystallographic Properties: Habit rectangular prisms with a lamellation parallel to the base. Cleavage basal, highly perfect and fair parallel to the prism. From powder data body-centered tetragonal with $a=10.11\pm.02$ Å. (10.09kX), $c=2.964\pm.004$ Å. (2.958kX); the unit cell contains approximately $(K, Ba)_{1.33}(Ti, Fe)_8O_{16}$. The x-ray pattern (data given) is very close to that of cryptomelane, (KR_8O_{16}, R = Mn mainly). The structure must be a defect structure and the formula is generalized to $A_{2-y}B_{8-z}O_{16}$, with y approximately 1 and z very small.

Physical and Optical Properties: Color black, reddish. Luster adamantine. Streak gray. Occurs as rods about 0.05 mm. long, also as stout prisms up to 1×0.5 mm. G. 3.86±.08 (micropyknometer). Optically positive with very high n; ω greater than 2.10. Pleochroic, ω deep reddish-brown, ϵ deep reddish-brown to black. Weakly attracted by an electromagnet. Closely resembles rutile, for which it was first mistaken.

Synthesis: The K and Ba compounds were prepared by fusing mixtures of TiO_2 with K_2CO_3 or $BaCO_3$ in an oxyacetylene flame, also by heating $KF+TiF_4$ at 1,000° C.

Occurrence: A characteristic accessory in all the leucite-bearing rocks of the area (Wade and Prider, *Quart. J. Geol. Soc. London*, **96**, 39–98 (1940).

Name: For Professor Rex Tregilgas Prider, Dept. Geology, University of Western Australia.

Michael Fleischer

Medmontite, Cupromontmorillonite

F. V. Chukhrov and F. Ya. Anosov, Medmontite, a copper-bearing mineral of the montmorillonite group: *Zapiski Vsesoiuznoe Mineralog. Obshch.* (Mem. soc. russe mineral.), **79**, No. 1, 23–27 (1950); abstracted from a translation kindly made by Mr. V. L. Skitsky.

This clay mineral occurs in the upper part of the oxidation zone of the Dzehzkazgan copper deposits, Kazakhstan, U.S.S.R. It is in compact aggregates gray to pinkish. H.$=2\frac{1}{2}$, G.=2.49–2.53. Fracture uneven to conchoidal. Adheres to the tongue. Under the microscope, it shows leaflets with mean $n=1.572$. When heated the clay turns black; after being heated to 500°, its $n=1.590$. Analysis gave: SiO_2 43.88, TiO_2 0.72, Al_2O_3 13.25, Fe_2O_3 3.25, CuO 20.96, MgO 0.59, MnO 0.06, CaO 1.58, Na_2O 0.44, K_2O 0.87, H_2O- 7.02, H_2O+ 7.52; sum 100.14%. This gives $Cu_{1.33}Mg_{0.08}Al_{1.04}(Al_{0.28}Si_{3.72})O_{10}(OH)_2X_{0.33}$ in the Ross-Hendricks' formulation, where X is exchangeable cations (K, Na, Ca). X-ray data show the mineral to be a member of the montmorillonite group. Differential thermal analysis shows peaks at 140, 570, and 800° C. Like montmorillonite, the mineral absorbs much water (up to 49% in 136 hours) and loses it readily on exposure to a drier atmosphere. Very little Cu was leached by treatment with concentrated ammonia.

Name: Apparently coined from mede (=copper) and montmorillonite.

M. F.

Nogizawalite

Teikichi Kawai, On nogizawalite, a new mineral found near Ishikawa, Fukushima Prefecture (Japan): *J. Chem. Soc. Japan* (Pure Chemistry Section) **70,** 268–270 (1949). Abstracted from a translation by Skigeo Ofuji, edited by Miss Rachel Barker, U. S. Geological Survey, Tokyo.

The name, for one of the areas (Nogizawa-mura) in which the material was found, is given to a fine-grained aggregate shown by *x*-ray study to contain xenotime and zircon. Apatite may be present and the presence of other minerals is suggested by the low specific gravity, 3.42, and the analysis, which gave: MgO 4.47, CaO 14.01, FeO 3.00, Fe_2O_3 10.08, Al_2O_3 10.55, rare earths 25.99, SiO_2 15.09, ZrO_2 4.55, P_2O_5 9.78, H_2O 2.52; sum 100.04%. Occurs in several pegmatites.

Discussion: Kawai states, "It does not form a new species in a rigorous sense of mineralogy, as it is an aggregate consisting of two or more species. However, it is reasonable that a new name should be given to the mineral since these constituents are so closely connected that they are inseparable, and this aggregate is not formed accidentally, but fixed."

The reasons given are not valid and names like this one are useless.

M. F.