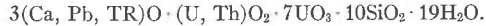


NEW MINERAL NAMES

Bilibinite

E. Z. BUR'YANOVA. A new hydrous uranium silicate—bilibinite. *Zapiski Vses. Mineralog. Obsch.*, v. **87**, No. 6, 667–674 (in Russian).

Analysis by E. A. Isaeva of material selected under the binoculars gave soluble silica 14.80, UO_2 5.07, UO_3 45.89, ThO_2 1.48, rare earth oxides 3.19, CaO 1.70, BaO 0.25, PbO 3.60, H_2O^+ 3.23, H_2O^- 4.90, insol. (quartz and feldspar) 16.33, sum 100.44%, corresponding to the formula



Spectrographic analysis by L. I. Denisenko showed also Al 0.1–0.03, Mg less than 0.003, Fe and Mn about 0.001, Ti 0.01–0.001, V 0.01–0.1%.

The mineral is black, streak gray, opaque, but translucent bottle-green on thin edges. Isotropic with n above 1.782, less than 1.820. Shows transitions to greenish-brown, brown, and amber-yellow isotropic material with n lower, down to 1.683 for amber-yellow. Decomposed by HCl or HNO_3 with separation of gelatinous silica. Infusible. Sp. gr. of impure material 3.5.

Bilibinite is amorphous to x -rays. Material heated at 980° gives a sharp x -ray pattern of U_3O_8 . A D.T.A. curve shows a large endothermal break at 80–160° and a very small endothermal break at 550–600°.

The mineral is considered to be the amorphous analogue of the crystalline mineral coffinite and the U analogue of thorigummite. It occurs as a cement in sandstones, associated with the secondary U minerals kasolite, β -uranotile, sklodowskite, autunite, and uranocircite. No locality is given, as usual.

The name is for Yu. A. Bilibin, Russian geologist.

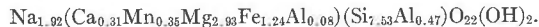
DISCUSSION.—Data insufficient to prove homogeneity.

MICHAEL FLEISCHER

Mangan-uralite

SRIPADRAO KALPADY AND A. S. DAVE. On mangan-uralite from Ponia, Balaghat District, Madhya Pradesh. *J. Univ. Geol. Soc. Nagpur*, **1**, 4–7 (1955–56) (Published 1958).

The name mangan-uralite is given to a pink amphibole formed by the alteration of the manganese pyroxene blandfordite in a pegmatite containing microcline, albite, and apatite. Analysis by A. S. D. gave SiO_2 55.35, Al_2O_3 3.52, Fe_2O_3 12.21, MgO 14.54, MnO 3.08, CaO 2.17, Na_2O 7.44, K_2O trace, H_2O 2.90, total 101.21% (given as 99.85%). (Nothing is said as to whether FeO was determined. M.F.) This gives the formula



The mineral occurs as radiating aggregates of needles and fibers projecting out from embayed proxene. Monoclinic, cleavage prismatic, color pink to pinkish violet (?), pale pink in thin-section. Optically negative, α 1.65–1.66, β 1.66–1.67, γ 1.66–1.67, 2 V large, birefringence variable, =0.014. Pleochroic, X light pink, Y pale brown to yellow, Z faint blue; absorption $X > Y = Z$.

DISCUSSION.—An unnecessary name. The composition is close to that of a manganian magnesioarfvedsonite in the classification of Miyashiro (see *Am. Mineral.*, **43**, 797–798 (1958)). The name is also somewhat inappropriate, because uralite is generally understood to be an amphibole of the actinolite group, low in alkali, that has been formed from pyroxene. The described transformation of the pyroxene blandfordite to this amphibole is somewhat surprising in the chemical changes involved; analysis of the blandfordite shows a composition close to that of the amphibole except for Fe_2O_3 18.29, CaO 8.41, MgO 4.74, which implies a large loss of Fe and Ca and a large gain in Mg.

M. F.