NEW MINERAL NAMES

Tchinglusuite
(Chinglusuite)


NAME: From the locality, Chinglusuite River, Kola, U.S.S.R.

CHEMICAL PROPERTIES: A complex hydrous titano-silicate of sodium and manganese, 2(Na,K)O·5(Mn, Ca)O·3(Ti,Zr)O₂·14SiO₂·9H₂O. Analysis: SiO₂ 39.50, TiO₂ 9.62, ZrO₂ 3.02, rare earths 1.18, ThO₂ 0.06, Al₂O₃ n.d., Fe₂O₃ 2.84, FeO n.d., CaO 1.75, SrO none, MnO 14.53, MgO none, Na₂O 5.52, K₂O 0.41, H₂O(+110°), 7.92 H₂O(–110°), 13.92, Cl, 0.12, F none, P trace. Sum 100.39, less O = Cl+F 0.02, Total = 100.37 per cent. Does not gelatinize with acids. In conc. HCl decomposes easily without warming. In conc. HNO₃ decomposes on warming. In conc. H₂SO₄ decomposes slowly upon heating. Spectrographic examination shows the rare earths to be chiefly Yb, Y, Ho.

PHYSICAL AND OPTICAL PROPERTIES: Grains about 0.5 cm. in diameter, crystals not observed. Color black. Streak brownish. Luster resinos. Cleavage lacking. Fracture uneven. Opaque. Hardness 2–3. Gravity by pyknometer 2.151 on a sample of 3.2518 g. In closed tube swells and easily melts to a dark-brown glass, almost black in color. With borax in oxidizing flame gives a bead of rather pale violet-rose color (both hot and cold), which fades in the reducing flame. Salt of phosphorus bead is pale yellowish-green in both oxidizing and reducing flames, the color disappearing on cooling.

In thin section pale yellow, in powder yellow-brown to black. Isotropic. Index of refraction 1.582. X-ray studies show the mineral to be amorphous, hence in the metamict state, probably due to the content of radioactive matter.

OCCURRENCE: Found in pegmatites in the Chinglusuite River valley, Lovozero Tundra, Kola, U.S.S.R., with hackmannite, eudyalite, lamprophyrite, ramsayite, etc. Exact locality uncertain, as it apparently was found only in blocks of sodalite-syenite pegmatite in the stream debris.

J. P. MARBLE

Magnophorite


NAME: Magnophorite, from its relationship to katophorite; a kali-magnesio-katophorite.

CHEMICAL PROPERTIES: A member of the amphibole group; (Ca, Na, K)₃.15(Mg, Fe, Ti, Mn)₄.32(Si, Al, Ti)₆.86O₂₂(OH, F)₄.₄₆. Analysis: SiO₂ 52.67, Al₂O₃ 1.72, TiO₂ 3.53, Fe₂O₃ 0.58, FeO 2.41, MnO 0.06, MgO 21.32, CaO 6.95, SrO 0.15; Na₂O 3.64, K₂O 5.70, H₂O+0.46, F 1.29; Sum 100.48, less O = F 0.54; Total 99.94.

PHYSICAL AND OPTICAL PROPERTIES: Color pale reddish brown. Pleochroism, α = colorless to pale yellow, β = reddish, γ = pale to bright yellow, occasionally slightly greenish. Absorption β > γ > α. G = 3.12.

Biaxial, 2V = 70°. Dispersion rather strong r < v. Optic plane (010). α = 1.616, γ = 1.632, γ – α = 0.016.
Occurrence: As an abundant essential constituent of the leucite lamproites (made up of diopside, phlogopite, magnophorite and leucite) from West Kimberley, Western Australia. A similar amphibole is found in the junillites of Murcia, Spain, and the orendites of the Leucite Hills, Wyoming.

W. F. Foshag

Wadeite


Name: In honor of Dr. Arthur Wade, who collected the material.

Chemical Properties: A silicate of potassium, calcium, zirconium, related to catapleiite. Formula: essentially $K_2CaZrSi_3O_{12}$. Analysis SiO$_2$ 39.43, $P_2O_5$ 3.15, $Al_2O_3$ 5.98, Fe$_2O_3$ trace, $TiO_2$ 1.63, MgO 0.28, $ZrO_2$ 21.29, CaO 5.22, SrO 0.16, $Na_2O$ 2.82, $K_2O$ 18.40, BaO 1.20, $H_2O + 1.30$; sum 100.86. Insoluble in hot acids.

Crystallographical Properties: Hexagonal. Habit, hexagonal shaped basal sections.


Occurrence: Found at the Wolgidee Hills, associated with magnophorite (*vide supra*) and making up 1 or 2 per cent of the rock.

W. F. F.

Magnesiumapjohnite
Manganpickeringite
Eisenpickeringite
Magnesiumhalotrichite


Intermediate members of the halotrichite group.

W. F. F.

The Division of Geological Sciences of Harvard University, together with many friends and former students, tendered a dinner to Professor Charles Palache upon his retirement as Professor of Mineralogy and Curator of the Mineralogical Museum on Monday, February 5, 1940. After the dinner a portrait of the Professor was presented to the University in the Mineralogical Museum.

Professor Palache has served Harvard University for forty-five years and in these years the Department of Mineralogy and the Mineralogical Museum have grown into great prominence.

Teaching Fellowship in Mineralogy

A teaching fellowship in mineralogy has been established at Stanford University. The fellowship is open to graduate students who intend to specialize in mineralogy, and preference will be given to those who have had one or two years of graduate work. The chief work duty of the fellow is to assist in laboratory instruction. Not more than eight or nine hours a week will be required. The amount of the fellowship is $750.

Application for the year 1940-41, supported by testimonial letters should be made to Professor Austin F. Rogers, Box 87, Stanford University, California.