

Crystal Data: Monoclinic. *Point Group:* 2/m. As stubby prismatic crystals, to 0.5 mm, and as pseudomorphs after crystals of vuonnemite, to 4 cm.

Physical Properties: *Cleavage:* None. *Tenacity:* Brittle. *Fracture:* Uneven. Hardness = 5
D(meas.) = 2.88(1) D(calc.) = 2.92(1)

Optical Properties: Transparent to translucent. *Color:* Pinkish in various shades, rose-brown, yellow-brown. *Streak:* White. *Luster:* Vitreous.

Optical Class: Biaxial (+). $\alpha = 1.683(2)$ $\beta = 1.692(3)$ $\gamma = 1.775(5)$ $2V(\text{calc.}) = 38^\circ$

Dispersion: Weak. *Pleochroism:* X = Z = colorless, Y = light brown.

Cell Data: *Space Group:* C2/m. $a = 14.551(2)$ $b = 14.001(2)$ $c = 15.702(2)$ $\beta = 117.584(2)^\circ$ Z = 1

X-ray Powder Pattern: Mount Karnasurt, Lovozero massif, Kola Peninsula, Russia.
6.99 (100), 3.227 (89), 3.123 (68), 2.520 (29), 4.936 (28), 6.43 (25), 2.607 (25)

Chemistry:	(1)
Na ₂ O	0.51
K ₂ O	4.31
CaO	1.06
BaO	1.31
MnO	5.07
FeO	0.24
ZnO	2.04
Al ₂ O ₃	0.28
SiO ₂	38.36
TiO ₂	8.87
Nb ₂ O ₅	27.97
<u>H₂O</u>	<u>10.40</u>
Total	100.42

(1) Mount Karnasurt, Lovozero massif, Kola Peninsula, Russia; electron microprobe analysis, H₂O by TGA; corresponds to (K_{2.27}Zn_{0.62}Ca_{0.47}Na_{0.41}Ba_{0.21}) $\Sigma=3.98$ (Mn_{1.77}Fe_{0.08}) $\Sigma=1.85$ (Nb_{5.23}Ti_{2.76}) $\Sigma=7.99$ [Si_{15.86}Al_{0.14}O₄₈][O_{6.03}(OH)_{1.97}] $\Sigma=8.00$ ·12.80H₂O.

Polymorphism & Series: Forms a series with kuzmenkoite-Mn.

Mineral Group: Labuntsovite group.

Occurrence: In alkaline pegmatite.

Association: Microcline, albite, aegirine, arfvedsonite, eudialyte, sodalite, natrolite, elpidite, cristobalite, steenstrupine-(Ce), rhabdophane-(Ce), yofortierite (Mount Karnasurt); calciohilairite, natrolite, albite, aegirine, vuoriyarvite-K, kuzmenkoite-Mn (Mount Flora).

Distribution: At Mount Karnasurt [TL] and Mount Flora, Lovozero alkaline massif, Kola Peninsula, Russia.

Name: Honors crystallographer Natalia Ivanovna *Organova* (b. 1929).

Type Material: A.E. Fersman Mineralogical Museum, Moscow, Russia.

References: (1) Chukanov, N.V., I.V. Pekov, A.E. Zadov, S.V. Krivovichev, P.C. Burns, Yu. Schneider (2001) Organovaite-Mn, K₂Mn(Nb,Ti)₄(Si₄O₁₂)₂(O,OH)₄·6H₂O, a new labuntsovitegroup mineral from the Lovozero massif, Kola Peninsula. Zap. Vseross. Mineral. Obshch., 130(2), 46-53 (in Russian, English abs.). (2) (2002) Amer. Mineral., 87, 1734 (abs. ref. 1).