

**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:*  $X = Z = \text{colorless}$ ,  $Y = \text{light brown}$ .

**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)

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

(1) Mount Karnasurt, Lovozero massif, Kola Peninsula, Russia; electron microprobe analysis, H<sub>2</sub>O by TGA; corresponds to  $(K_{2.27}Zn_{0.62}Ca_{0.47}Na_{0.41}Ba_{0.21})_{\Sigma=3.98}(Mn_{1.77}Fe_{0.08})_{\Sigma=1.85}(Nb_{5.23}Ti_{2.76})_{\Sigma=7.99}[Si_{15.86}Al_{0.14}O_{48}][O_{6.03}(OH)_{1.97}]_{\Sigma=8.00} \cdot 12.80H_2O$ .

**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,  $K_2Mn(Nb,Ti)_4(Si_4O_{12})_2(O,OH)_4 \cdot 6H_2O$ , 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).