

**Crystal Data:** Monoclinic. *Point Group:* 2/m. As prismatic crystals elongated on [001], to 0.6 mm. In radial spherical aggregates or botryoidal crusts, to 1 mm.

**Physical Properties:** *Cleavage:* Imperfect on {100}. *Fracture:* Uneven. *Tenacity:* Brittle. Hardness = ~ 2 D(meas.) = 2.82(1) D(calc.) = 2.828

**Optical Properties:** Transparent. *Color:* Light blue to bright sky-blue. *Streak:* White. *Luster:* Vitreous.

*Optical Class:* Biaxial (+).  $\alpha = 1.626(3)$   $\beta = 1.642(5)$   $\gamma = 1.665(3)$   $2V(\text{meas.}) = 80(10)^\circ$   $2V(\text{calc.}) = 81^\circ$  *Dispersion:* Weak,  $r < v$ . *Pleochroism:* Weak;  $Z =$  bluish gray;  $Y =$  pale bluish gray;  $X =$  colorless. *Absorption:*  $Z > Y > X$ . Extinction angle with  $Z = 2(1)^\circ$ .

**Cell Data:** *Space Group:* C2/c.  $a = 9.9078(2)$   $b = 10.1325(3)$   $c = 9.8375(2)$   $\beta = 91.839(2)^\circ$   $Z = 4$

**X-ray Powder Pattern:** Sentyabr'skoe deposit, Western Chukotka, North-Eastern Russia. 7.088 (100), 4.949 (91), 4.507 (50), 5.815 (35), 2.694 (29), 5.690 (23), 3.310 (21)

Chemistry:	(1)	(2)
MgO	10.68	9.56
CuO	18.09	18.87
SO <sub>3</sub>	0.44	
TeO <sub>3</sub>	41.19	41.65
H <sub>2</sub> O	[29.60]	29.92
Total	100.00	100.00

(1) Sentyabr'skoe deposit, Western Chukotka, North-Eastern Russia; average of 7 electron microprobe analyses supplemented by IR spectroscopy, H<sub>2</sub>O calculated by difference; corresponds to Cu<sub>0.96</sub>Mg<sub>1.11</sub>Te<sub>0.99</sub>S<sub>0.02</sub>O<sub>4.20</sub>(OH)<sub>1.80</sub>·6H<sub>2</sub>O. (2) CuMg[Te<sup>6+</sup>O<sub>4</sub>(OH)<sub>2</sub>]<sub>2</sub>·6H<sub>2</sub>O.

**Occurrence:** A secondary mineral in the oxidation zone of polymetallic sulfide and telluride-bearing veins.

**Association:** Gypsum, malachite, azurite, cerussite, anglesite, brochantite, linarite, posnjakite, secondary gold and acanthite, chlorargyrite, brucite, goethite, coronadite, paratellurite, xocomecatlite.

**Distribution:** At the Sentyabr'skoe deposit, Ilirney district, Western Chukotka, North-Eastern Russia.

**Name:** Honors Dr. Raisa Aleksandrovna Vinogradova (b. 1935), a Russian specialist in ore mineralogy, Moscow State University, Russia.

**Type Material:** A.E. Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia (94994).

**References:** (1) Pekov, I.V., E.A. Vlasov, N.V. Zubkova, V.O. Yapaskurt, N.V. Chukanov, D.I. Belakovskiy, I.S. Lykova, A.V. Apletalin, A.A. Zolotarev, and D.Y. Pushcharovsky (2016) Raisaite, CuMg[Te<sup>6+</sup>O<sub>4</sub>(OH)<sub>2</sub>]<sub>2</sub>·6H<sub>2</sub>O, a new mineral from Chukotka, Russia. *Eur. J. Mineral.*, 28, 459-466. (2) (2016) *Amer. Mineral.*, 101, 2572 (abs. ref. 1).