

**Crystal Data:** Hexagonal. *Point Group:*  $\bar{3} 2/m$ . As equant anhedral grains to 2 cm.

**Physical Properties:** *Cleavage:* Distinct on {100}. *Fracture:* Uneven. *Tenacity:* Brittle. Hardness = 6 VHN = 696-737, 714 average (100 g load). D(meas.) = 2.73. D(calc.) = 2.734 Dim dark purple fluorescence under SW UV.

**Optical Properties:** Transparent. *Color:* White to colorless. *Streak:* White. *Luster:* Vitreous. *Optical Class:* Uniaxial (+).  $\omega = 1.526(2)$   $\epsilon = 1.531(2)$

**Cell Data:** *Space Group:*  $P\bar{3} m1$ .  $a = 14.3770(8)$   $c = 4.8786(3)$   $Z = 1$

**X-ray Powder Pattern:** Dara-i-Pioz glacier, South Tien-Shan Mountains, Tajikistan. 3.162 (100), 3.382 (75), 4.149 (50), 3.456 (40), 3.113 (36), 6.226 (35), 2.465 (30)

<b>Chemistry:</b>	(1)
Na <sub>2</sub> O	13.53
K <sub>2</sub> O	0.47
Cs <sub>2</sub> O	7.25
Rb <sub>2</sub> O	0.15
BeO	3.46
ZnO	1.71
Al <sub>2</sub> O <sub>3</sub>	7.26
SiO <sub>2</sub>	64.32
F	2.84
- O = F	1.20
Total	99.79

(1) Dara-i-Pioz glacier, South Tien-Shan Mountains, Tajikistan; average electron microprobe analysis, BeO by colorimetry; corresponding to (Cs<sub>0.74</sub>Na<sub>0.31</sub>K<sub>0.14</sub>Rb<sub>0.02</sub>) $\Sigma=1.16$ Na<sub>6.00</sub>[Be<sub>2.04</sub>(Si<sub>15.46</sub>Al<sub>2.06</sub>Zn<sub>0.30</sub>) $\Sigma=17.82$ O<sub>38.84</sub>F<sub>2.16</sub>].

**Occurrence:** In boulders from glacial moraine.

**Association:** Reedmergnerite, microcline, pectolite, hyalotekite, shibkovite, nordite-(Ce), leucophanite, kentbrooksitite, polyolithionite, albite.

**Distribution:** In moraine boulders, Dara-i-Pioz glacier, South Tien-Shan Mountains, Tajikistan.

**Name:** Honors petrographer and teacher Tamara Matveyevna *Telyushenko* (1930-1997) for her contributions to understanding the geology of Central Asia and service as head of the Young Geologists' School of Ashkhabad for over thirty years.

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

**References:** (1) Agakhanov, A.A., L.A. Pautov, D.I. Belakovskiy, E.V. Sokolova, and F.C. Hawthorne (2003) Telyushenkoite CsNa<sub>6</sub>[Be<sub>2</sub>(Si,Al,Zn)<sub>18</sub>O<sub>39</sub>F<sub>2</sub>]: a new cesium mineral of the leifite group. *New Data on Minerals*, 38, 5-8. (2) Sokolova, E., D.M.C. Huminicki, F.C. Hawthorne, A.A. Agakhanov, L.A. Pautov, and E.S. Grew (2002) The crystal chemistry of telyushenkoite and leifite, ANa<sub>6</sub>[Be<sub>2</sub>Al<sub>3</sub>Si<sub>15</sub>O<sub>39</sub>F<sub>2</sub>], A = Cs,Na. *Can. Mineral.*, 40, 183-192. (3) (2004) *Amer. Mineral.*, 89(10), 1577-1578 (abs. refs. 1 & 2).