Balestraite KLi₂VSi₄O₁₀O₂

Crystal Data: Monoclinic. *Point Group*: 2/m. As tabular crystals to 400 μm.

Physical Properties: Cleavage: Perfect on $\{001\}$. Fracture: Uneven. Tenacity: Brittle. Hardness = 2.5-3 D(meas.) = n.d. D(calc.) = 2.946

Optical Properties: Transparent. *Color*: Pale yellow, pale gray in transmitted light.

Streak: n.d. Luster: Silky.

Optical Class: Biaxial (-). $\alpha = 1.642(2)$ $\beta = 1.664(2)$ $\gamma = 1.676(2)$ 2V(meas.) = 84.4(2)° 2V(calc.) = 72° *Dispersion*: Distinct, (r < v).

Cell Data: Space Group: C2. a = 5.2024(5) b = 8.9782(7) c = 9.997(2) $\beta = 100.40(2)^{\circ}$ Z = 2

X-ray Powder Pattern: Cerchiara mine, Eastern Liguria, Italy. 4.51 (100), 2.592 (70), 2.574 (70), 2.385 (70), 9.9 (50), 1.503 (50), 4.34 (40)

Chemistry:	(1)
K_2O	11.24
Li_2O	7.20
V_2O_5	21.15
$\underline{SiO_2}$	58.46
Total	98.05

(1) Cerchiara mine, Eastern Liguria, Italy; average electron microprobe analysis supplemented by laser ablation-inductively coupled plasma-mass spectrometry and Raman spectroscopy; corresponds to $K_{0.99}Li_{2.00}V^{5+}_{0.97}Si_{4.04}O_{12}$.

Mineral Group: Mica group.

Polymorphism & Series: 1*M* polytype.

Occurrence: In manganesiferous beds within the metacherts (prehnite-pumpellyite facies) of an ophiolitic sequence.

Association: Hematite, quartz, calcite.

Distribution: From the Cerchiara mine, Eastern Liguria, Italy.

Name: Honors Corrado Balestra (b. 1962), an Italian amateur mineralogist and expert on Ligurian minerals.

Type Material: Natural History Museum, Florence, Italy (3133/I).

References: (1) Lepore, G.O., L. Bindi, A. Zanetti, M.E. Ciriotti, O. Medenbach, and P. Bonazzi (2015) Balestraite, $KLi_2VSi_4O_{10}O_2$, the first member of the mica group with octahedral V^{5+} . Amer. Mineral., 100, 608-614.