

**Crystal Data:** Monoclinic. *Point Group:* 2/m. As irregular grains to 200  $\mu\text{m}$ .  
*Twining:* Twinned on {100}.

**Physical Properties:** *Cleavage:* None. *Fracture:* Uneven. *Tenacity:* Brittle.  
Hardness = 2.5-3 VHN = 128 (100 g load). D(meas.) = n.d. D(calc.) = 5.146

**Optical Properties:** Opaque. *Color:* Black. *Streak:* Black. *Luster:* Metallic.  
*Optical Class:* Anisotropic. *Birefractance:* Weak to moderate. *Pleochroism:* Weak, dark gray to dark green.

R<sub>1</sub>-R<sub>2</sub>: (471.1) 33.1-39.8, (548.3) 31.8-38.0, (586.6) 30.9-37.3, (652.3) 29.0-35.8

**Cell Data:** *Space Group:* P2<sub>1</sub>/n. *a* = 19.233(2) *b* = 12.633(3) *c* = 8.476(2)  $\beta$  = 90.08(2)<sup>o</sup>  
*Z* = 2

**X-ray Powder Pattern:** Calculated pattern.

3.2853 (100), 2.8535 (49), 2.8519 (47), 3.4066 (39), 3.4025 (39), 2.1190 (33), 2.8585 (26)

Chemistry:	(1)	(2)
Pb	31.27	31.22
Ag	6.59	6.77
Cu	0.02	
Mn	5.52	5.52
Fe	0.03	
Zn	0.02	
Sb	23.26	22.93
As	9.27	9.41
Bi	0.03	
S	24.09	24.15
Se	0.02	
Total	100.12	100.00

(1) Uchucchacua deposit, Catajambo, Peru; average of 12 electron microprobe analyses, corresponding to Ag<sub>1.95</sub>Cu<sub>0.01</sub>Pb<sub>4.81</sub>Mn<sub>3.20</sub>Fe<sub>0.02</sub>Zn<sub>0.01</sub>Sb<sub>6.09</sub>As<sub>3.94</sub>Bi<sub>0.01</sub>S<sub>23.95</sub>Se<sub>0.01</sub>.

(2) AgPb<sub>2.40</sub>Mn<sub>1.60</sub>Sb<sub>3</sub>As<sub>2</sub>S<sub>12</sub>.

**Occurrence:** In a polymetallic (Ag-Mn-Pb-Zn) vein, replacement, and contact metamorphic mineral district.

**Association:** Orpiment, tennantite/tetrahedrite, quartz, calcite.

**Distribution:** From Level 890, Uchucchacua polymetallic deposit, Oyon district, Catajambo, Lima Department, Peru.

**Name:** Honors Silvio Menchetti (b. 1937), Professor of Mineralogy and Crystallography, University of Florence, Italy, in recognition of his contributions to the systematics of sulfosalt minerals.

**Type Material:** Natural History Museum, University of Florence, Italy (3109/I).

**References:** (1) Bindi, L., F.N. Keutsch, and P. Bonazzi (2012) Menchettiite, AgPb<sub>2.40</sub>Mn<sub>1.60</sub>Sb<sub>3</sub>As<sub>2</sub>S<sub>12</sub>, a new sulfosalt belonging to the lillianite series from the Uchucchacua polymetallic deposit, Lima Department, Peru. *Amer. Mineral.*, 97, 440-446.