

Crystal Data: Orthorhombic. *Point Group:* 222. As rims or veinlets to 60 μm .

Physical Properties: *Cleavage:* None. *Tenacity:* Brittle. *Fracture:* Irregular to subconchoidal. Hardness = 3.5 VHN = 190-215 202 average (100 g load). D(meas.) = n.d. D(calc.) = 4.319

Optical Properties: Opaque. *Color:* Orange-brown in reflected light. *Streak:* Reddish brown. *Luster:* Metallic.

Optical Class: n.d. *Anisotropism:* Distinct, brownish-orange to greenish-brown.

Pleochroism and bireflectance: Weak.

R₁-R₂: (400) 22.0-21.9, (420) 20.9-21.5, (440) 20.2-21.0, (460) 19.7-21.0, (480) 19.5-21.0, (500) 19.4-21.1, (520) 19.75-21.4, (540) 20.4-21.8, (560) 21.2-22.2, (580) 22.1-22.8, (600) 23.2-23.5, (620) 24.2-24.2, (640) 25.3-25.0, (660) 26.2-25.7, (680) 27.2-26.6, (700) 28.2-27.4

Cell Data: *Space Group:* I222. *a* = 10.774(1) *b* = 5.3921(5) *c* = 16.085(2) *Z* = 2

X-ray Powder Pattern: Calculated pattern.

3.1063 (100), 1.9055 (24), 1.9010 (23), 1.9001 (23), 1.6248 (12), 1.6237 (12), 1.6181 (11)

Chemistry:	(1)	(2)
Cu	42.18	41.83
Fe	9.37	9.19
Zn	5.17	5.38
In	0.20	
Ge	11.62	11.95
S	31.80	31.65
Total	100.34	100.00

(1) Capillitas deposit, Catamarca Province, Argentina; average of 45 electron microprobe analyses; corresponds to $\text{Cu}_{8.04}(\text{Fe}_{2.03}\text{In}_{0.02})_{\Sigma=2.05}\text{Zn}_{0.96}\text{Ge}_{1.94}\text{S}_{12.01}$. (2) $\text{Cu}_8\text{Fe}_2\text{ZnGe}_2\text{S}_{12}$.

Occurrence: In low-temperature, polymetallic, hydrothermal vein mineralization associated with a diatreme.

Association: Putzite, catamarcaite, zincobriartite, bornite, chalcocite, digenite, covellite, sphalerite, tennantite, luzonite, wittichenite, thalcuosite, mawsonite.

Distribution: From near the La Rosario vein of the Capillitas deposit, Catamarca Province, Argentina.

Name: Honors Dr. Ricardo Héctor Omarini (1946-2015), Professor, University of Salta, for his numerous contributions to the geology of Argentina.

Type Material: Systematic Reference Series, National Mineral Collection of Canada, Geological Survey of Canada, Ottawa, Ontario, Canada (NMCC 68096), and the collections of the University of Florence, Italy and the Natural History Museum, London, England.

References: (1) Bindi, L., H. Putz, W.H. Paar, and C.J. Stanley (2017) Omariniite, $\text{Cu}_8\text{Fe}_2\text{ZnGe}_2\text{S}_{12}$, the germanium analogue of stannoidite, a new mineral species from Capillitas, Argentina. *Mineral. Mag.*, 81(5), 1151-1159. (2) (2018) Amer. Mineral., 103, 834-835 (abs. ref. 1).