

Crystal Data: Monoclinic. *Point Group:* 2/m. As acicular crystals to 2 mm, elongated and striated parallel to [010].

Physical Properties: *Cleavage:* None. *Fracture:* n.d. *Tenacity:* n.d. *Hardness:* = n.d. VHN = n.d. D(meas.) = n.d. D(calc.) = 5.86

Optical Properties: Opaque. *Color:* Black, sometimes with bluish violet iridescence, light gray in reflected light. *Streak:* n.d. *Luster:* Metallic.

Optical Class: n.d.

R: (470) 38.2, (546) 36.2, (589) 35.4, (650) 32.8

Cell Data: Space Group: C2/m. $a = 43.113(9)$ $b = 4.0591(8)$ $c = 37.874(8)$ $\beta = 117.35(3)^\circ$
Z = 2

X-ray Powder Pattern: Buca della Vena deposit, Tuscany, Italy.

3.402 (100), 3.369 (74), 2.815 (70), 2.756 (36), 3.84 (31), 2.251(31), 2.116 (31)

Chemistry:	(1)	(2)
Cu	1.34	1.23
Ag		0.48
Hg	1.76	1.40
Tl		0.59
Pb	45.08	42.13
Sb	31.50	32.88
S	20.07	20.32
As		0.47
Bi		0.05
O	0.39	.
Total	100.14	99.55

(1) Buca della Vena deposit, Tuscany, Italy; average of 6 electron microprobe analyses; corresponds to $\text{Cu}_{2.20}\text{Hg}_{0.92}\text{Pb}_{22.78}\text{Sb}_{27.10}\text{S}_{65.53}\text{O}_{2.55}$. (2) Monte Arsiccio mine, Tuscany, Italy; average of 3 electron microprobe analyses; corresponds to $\text{Cu}_{2.00}(\text{Hg}_{0.72}\text{Ag}_{0.28})_{\Sigma=1.00}\text{Pb}_{20.98}(\text{Tl}_{0.30}\text{Ag}_{0.18})_{\Sigma=0.48}(\text{Sb}_{27.87}\text{As}_{0.65}\text{Bi}_{1.03})_{\Sigma=28.55}\text{S}_{65.39}$.

Occurrence: In calcite veinlets cutting dolomitic lenses in a barite, pyrite and Fe-oxide deposit.

Association: Bournonite, tetrahedrite, sphalerite (Buca della Vena Fe-Ba deposit); Tl-bearing chovanite, sphalerite, valentinite (Monte Arsiccio mine).

Distribution: From the Buca della Vena Fe-Ba deposit, near the village of Ponte Stazzemese, and the Sant'Olga tunnel, Monte Arsiccio mine, near Sant'Anna di Stazzema, Apuan Alps, Italy. From the Magurka antimony deposit, Slovakia.

Name: Honors Jean Rouxel (1935-1998), a specialist in solid-state chemistry and member of the French Academy of Science, for his studies of chalcogenides.

Type Material: Natural History Museum, University of Pisa, Italy.

References: (1) Orlandi, P., A. Meerschaut, Y. Moëlo, P. Palvadeau, and P. Léone (2005) Lead-antimony sulfosalts from Tuscany (Italy). VIII. Rouxelite, $\text{Cu}_2\text{HgPb}_{22}\text{Sb}_{28}\text{S}_{64}(\text{O},\text{S})_2$, a new sulfosalts from Buca Della Vena Mine, Apuan Alps: definition and crystal structure. *Can. Mineral.*, 43(3), 919-933. (2) (2006) *Amer. Mineral.*, 91, 219 (abs. ref. 1). (3) Biagioni, C., Y. Moëlo, and P. Orlandi (2014) Lead-antimony sulfosalts from Tuscany (Italy). XV. (Tl-Ag)-bearing rouxelite from Monte Arsiccio Mine: occurrence and crystal chemistry *Mineral. Mag.*, 78(3), 651-661.