Crystal Data: Triclinic. *Point Group*: $\bar{1}$. As millimeter-sized masses of intergrown crystals. *Twinning*: Polysynthetic twinning well developed.

Physical Properties: *Cleavage*: n.d. *Fracture*: Conchoidal. *Tenacity*: Brittle. Hardness = n.d. D(meas.) = n.d. D(calc.) = 5.355

Optical Properties: Opaque. *Color*: Gray, white in reflected light. *Streak*: Black. *Luster*: Metallic. *Anisotropism*: Distinct, shades of gray.
Optical Class: n.d.
R_1-R_2: (470) 33.8-39.3, (546) 32.1-38.0, (589) 31.2-36.9, (650) 29.7-35.3

Cell Data: *Space Group*: $P\bar{1}$. a = 8.0929(4) b = 8.7610(5) c = 22.4971(11)
α = 90.868(4)° β = 97.247(4)° γ = 90.793(4)° Z = 2

X-ray Powder Pattern: Monte Arsiccio mine, Tuscany, Italy.
2.824 (vs), 2.707 (s), 3.705 (ms), 3.540 (ms), 2.977 (ms), 2.324 (ms), 2.176 (ms)

Chemistry:

	(1)	(2)	(3)
Ag	1.48	1.37	1.46
Tl	9.72	8.96	11.38
Pb	23.36	25.74	20.57
Sb	35.25	33.46	33.48
Hg			0.13
As	5.78	6.54	8.24
S	22.14	22.08	22.89
Se	0.04	0.01	
Cl			0.05
Total	97.77	98.16	98.20

(1) Monte Arsiccio mine, Tuscany, Italy; electron microprobe analysis; corresponding to $Ag_{0.36}Tl_{1.23}Pb_{2.92}(Sb_{7.50}As_{2.00})_{\Sigma=9.50}S_{17.88}Se_{0.01}$. (2) Monte Arsiccio mine, Tuscany, Italy; electron microprobe analysis; corresponding to $Ag_{0.33}Tl_{1.13}Pb_{3.20}(Sb_{7.09}As_{2.25})_{\Sigma=9.34}S_{17.76}$. (3) Monte Arsiccio mine, Tuscany, Italy; average of 3 electron microprobe analyses; corresponding to $Ag_{0.42}Tl_{1.52}Pb_{2.14}Hg_{0.02}(Sb_{6.82}As_{3.08})_{\Sigma=9.90}S_{18.04}Cl_{0.04}$.

Occurrence: In a quartz vein cutting dolostone, associated with a barite-pyrite-iron oxide deposit in regionally metamorphosed rocks.

Association: Zinkenite, dolomite (Italy); stibnite and smithite (France).

Distribution: From at the Sant'Olga level, Monte Arsiccio mine, near Sant'Anna di Stazzema, Apuan Alps, Tuscany, Italy and the Jas Roux thallium mineralization, Hautes-Alpes, France.

Name: Honors Matteo Boscardin (b. 1939) for his contribution to the knowledge of the regional mineralogy of Italy.

Type Material: Natural History Museum, University of Pisa, Pisa, Italy (# 19349).

References: (1) Orlandi, P., C. Biagioni, E. Bonaccorsi, Y. Moëlo, and W.H. Paar (2012) Lead-antimony sulfosalts from Tucsany (Italy). XII. Boscardinite, $TlPb_4(Sb_7As_2)_{\Sigma9}S_{18}$, a new mineral species from the Monte Arsiccio mine: occurrence and crystal structure. Can. Mineral., 50(2), 235–251. (2) (2014) Amer. Mineral., 99, 2152 (abs. ref. 1). (3) Biagioni, C. and Y. Moëlo (2017) Lead-antimony sulfosalts from Tuscany (Italy). XVIII. New data on the crystal-chemistry of boscardinite. Mineral. Mag., 81(1), 47-60. (4) (2017) Amer. Mineral., 102, 1570 (abs. ref. 3).