

Crystal Data: Monoclinic. *Point Group:* 2/m. Crystals acicular along [010] to 2 mm.

Physical Properties: *Cleavage:* None. *Fracture:* Irregular. *Tenacity:* Brittle. Hardness = n.d. VHN = ~192 (20 g load). D(meas.) = n.d. D(calc.) = 5.56

Optical Properties: Opaque. *Color:* Black, rare reddish internal reflection. *Streak:* n.d. *Luster:* Bluish metallic.

Optical Class: Weakly anisotropic and bireflectant. Nonpleochroic.
R₁-R₂: (470) 37.3-19.9, (546) 35.5-19.2, (589) 34.4-18.3, (650) 32.8-16.5

Cell Data: *Space Group:* C2/m. *a* = 51.996(8) *b* = 8.148(1) *c* = 24.311(4) *β* = 104.09(1)° *Z* = 4

X-ray Powder Pattern: Buca della Vena mine, southern Apuan Alps, Tuscany, Italy. 3.472 (100), 2.956 (54), 2.052 (46), 3.041 (35), 2.228 (22), 2.827 (20), 3.441 (18)

Chemistry	(1)
Pb	36.99
Sb	41.80
S	20.39
<u>O</u>	<u>0.65</u>
Total	99.83

(1) Buca della Vena mine, southern Apuan Alps, Tuscany, Italy; average of 10 electron microprobe analyses; corresponds to Pb_{15.05}Sb_{28.95}S_{53.62}O_{3.43}.

Occurrence: In late-stage hydrothermal calcite veins that cut Ba-Fe ores.

Association: Sphalerite, cinnabar, galena, tetrahedrite, chalcostibite, gersdorffite, barite, cerussite, stibiconite.

Distribution: From the Buca della Vena mine, near Pietrasanta, southern Apuan Alps, Tuscany, Italy.

Name: Honors engineer and mineralogist Dr. Giuseppe *Scaini* (1906-1988).

Type Material: Natural History Museum, University of Pisa, Italy (15521, 15522, and 15523) and the Museum of the School of Mines, Paris, France.

References: (1) Orlandi, P., Y. Moëlo, and A. Meerschaut (1999) Lead-antimony sulfosalts from Tuscany (Italy): I. Scainiite, Pb₁₄Sb₃₀S₅₄O₅, the first Pb-Sb oxy-sulfosalts, from Buca della Vena mine. *Eur. J. Mineral.*, 11, 949-954. (2) (2000) *Amer. Mineral.*, 85, 1323 (abs. ref. 1). (3) Molëo, Y., A. Meerschaut, P. Orlandi, and P. Palvadeau (2000) Lead-antimony sulfosalts from Tuscany (Italy): II - Crystal structure of scainiite, Pb₁₄Sb₃₀S₅₄O₅, an expanded monoclinic derivative of Ba₁₂Bi₂₄S₄₈ hexagonal sub-type (zinkenite group). *Eur. J. Mineral.*, 12(4), 835-846.