Crystal Data: Monoclinic. *Point Group: m.* As anhedral crystals to $65 \,\mu$ m.

Physical Properties: Cleavage: None. *Tenacity*: Brittle. *Fracture*: Uneven. Hardness = \sim 3 D(meas.) = n.d. D(cale.) = 6.192

Optical Properties: Opaque. *Color*: Black, creamy in reflected light. *Streak*: Black. *Luster*: Metallic.

Optical Class: Anisotropism: Weak, blueish to light blue. Moderately bireflectant. Non-pleochroic. R₁-R₂: (471.1) 35.9-37.5, (548.3) 34.7-36.2, (586.6) 33.8-35.3, (652.3) 31.5-33.7

Cell Data: Space Group: Pc. a = 11.0895(9) b = 14.3124(11) c = 7.9352(6) $\beta = 96.230(8)^{\circ}$ Z = 8

X-ray Powder Pattern: Hemlo gold deposit, near Marathon, Ontario, Canada. 3.56 (100), 3.37 (75), 3.79 (60), 3.03 (60), 3.16 (49), 3.68 (40), 3.48 (40)

Cher	nistry:

	(1)	(2)
Tl	65.12	68.74
Ag	3.52	
Sb	20.22	20.48
S	10.80	10.78
Total	99.66	100.00

(1) Hemlo gold deposit, near Marathon, Ontario, Canada; average electron microprobe analysis; corresponds to $(Tl_{1.87}Ag_{0.19})_{\Sigma=2.06}Sb_{0.97}S_{1.97}$. (2) Tl_2SbS_2 .

Occurrence: In a hydrothermal gold deposit along a shear zone.

Association: Aurostibite, stibarsen, native gold, calcite.

Distribution: In a museum sample from the Hemlo gold deposit, 35 km east of Marathon, Ontario, Canada.

Name: Honors Cristian *Biagioni* (b. 1981), Associate Professor of Mineralogy, Department of Earth Sciences, University of Pisa, Italy, co-author of the descriptions of more than 50 new minerals.

Type Material: Natural History Museum, University of Florence, Italy (46582/G).

References: (1) Bindi, L. and Y. Moëlo (2020) Biagioniite, Tl₂SbS₂, from the Hemlo gold deposit, Marathon, Ontario, Canada: occurrence and crystal structure. Mineral. Mag., 84, 390-397.