Clinocervantite $Sb^{3+}Sb^{5+}O_4$

Crystal Data: Monoclinic. *Point Group*: 2/*m*. As aggregates of prismatic crystals, elongated along [001], to 0.2 mm. *Twinning*: Multiple, with twin and composition plane {100}.

Physical Properties: *Cleavage*: None. *Fracture*: Uneven. *Tenacity*: Brittle.
Hardness = n.d. D(meas.) = n.d. D(calc.) = 6.72

Optical Properties: Transparent. *Color*: Colorless. *Streak*: White. *Luster*: Vitreous.
Optical Class: Biaxial. $\alpha = 1.72$ β = n.d. $\gamma = 2.10$

Cell Data: *Space Group*: *C*2/*c*. $a = 12.061(1)$ $b = 4.836(1)$ $c = 5.383(1)$ $\beta = 104.60(4)°$ Z = 4

X-ray Powder Pattern: Cetine mine, Siena, Italy.
3.244 (100), 2.877 (68), 2.920 (33), 2.640 (23), 1.861 (21), 1.783 (21), 1.812 (20)

Chemistry:

	(1)
Sb	99.19 wt. %

(1) Cetine mine, Siena, Italy; average electron microprobe analysis; corresponds to $Sb_{2.00}O_4$.

Occurrence: In vugs in waste rock from an antimony mine.

Association: Valentinite, tripuhyite, bindheimite, rosiaite.

Distribution: From the Cetine mine, Siena, Italy.

Name: The prefix, *clino*, indicates the monoclinic analog of *cervantite*.

Type Material: Department of Earth Science, University of Genoa, Italy.

References: (1) Basso, R., G. Lucchetti, L. Zefiro, and A. Palenzona (1999) Clinocervantite, ß-Sb_2O_4, the natural monoclinic polymorph of cervantite from the Cetine mine, Siena, Italy. Eur. J. Mineral., 11, 95-100.