**Crystal Data**: Monoclinic. *Point Group: m.* As clusters of stacked, platy crystals to  $200 \,\mu$ m. *Twinning*: Inversion twinning inferred from the structure refinement.

**Physical Properties**: *Cleavage*: Perfect on {100}. *Tenacity*: Brittle. *Fracture*: Uneven. Hardness =  $\sim$ 3 D(meas.) = 3.1(2) D(calc.) = 3.183 Nonfluorescent. Soluble in dilute HCl and in dilute H<sub>2</sub>SO<sub>4</sub>.

**Optical Properties**: Translucent to transparent. *Color*: White to colorless. *Streak*: White. *Luster*: Pearly. *Optical Class*: Biaxial (-).  $\alpha = 1.561(3)$   $\beta = 1.619(3)$   $\gamma = 1.621(5)$  2V(meas.) = 20(1)°

Orientation:  $X \sim \perp$  (100),  $Y \parallel$  [010]. Dispersion: Very weak, r < v.

**Cell Data**: Space Group: Pc. a = 9.4160(3) b = 5.3000(2) c = 10.8931(4)  $\beta = 91.767(1)^{\circ}$  Z = 2

**X-Ray Diffraction Pattern**: Plaka mine No. 80, Lavrion District Mines, Attiki Prefecture, Greece. 9.406 (100), 4.619 (80), 2.984 (60), 2.922 (50), 3.612 (35), 3.494 (35), 2.647 (25)

Chemistry:		(1)	(1)
	$As_2O_5$	42.93	44.14
	$Sb_2O_5$	2.45	
	CaO	10.90	10.76
	ZnO	29.79	32.25
	$H_2O$	[13.93]	13.85
	Total	100.00	100.00

(1) Plaka mine No. 80, Lavrion District Mines, Attiki Prefecture, Greece; average electron microprobe and Raman spectroscopic analyses, H<sub>2</sub>O calculated from structure; corresponds to  $Ca_{1.02}Zn_{1.91}[(As_{0.95}Sb_{0.08})O_4]_{\Sigma=2.03}$ ·4H<sub>2</sub>O. (2)  $CaZn_2(AsO_4)_2$ ·4H<sub>2</sub>O.

**Occurrence**: Secondary on amorphous films coating the matrix of a galena and sphalerite-bearing vein.

**Association**: Galena, sphalerite, native arsenic, sulfur, pharmacolite, köttigite, picropharmacolite, hörnesite.

Distribution From the Plaka Mine No. 80, Lavrion District Mines, Attikí Prefecture, Greece.

**Name**: Honors Vasilis *Stergiou* (b. 1958) for contributions to the mineralogy of the Lavrion deposits.

Type Material: Natural History Museum, Vienna, Austria (O342).

**References**: (1) Rieck, B., G. Giester, C.L. Lengauer, N.C. Chanmuang, and D. Topa (2020) Stergiouite, CaZn<sub>2</sub>(AsO<sub>4</sub>)<sub>2</sub>·4H<sub>2</sub>O - a new mineral from the Lavrion Mining District, Greece. Mineralogy and Petrology, 114, 319-327.