Cuboargyrite $AgSbS_2$

Crystal Data: Cubic. *Point Group*: 4/*m* $\bar{3}$ 2/*m*. As anhedral grains, to 0.5 mm.

Physical Properties: *Cleavage*: None. *Fracture*: Conchoidal. *Tenacity*: Brittle. Hardness = ~3
D(meas.) = n.d. D(calc.) = 5.325

Optical Properties: Opaque. *Color*: Grayish black; in reflected light, gray. *Streak*: Black.
Luster: Metallic.
Optical Class: Isotropic. *n* = n.d.
R: (400) 34.21, (470) 35.18, (500) 35.05, (546) 34.88, (589) 34.72, (600) 34.65, (650) 34.26, (700) 33.76

Cell Data: *Space Group*: *Fm*3*m*. *a* = 5.650(5) Z = 2

X-ray Powder Pattern: Baberast, near Haslach, Central Black Forest, Germany.
2.83 (100), 3.26 (90), 1.998 (80), 1.703 (60), 1.630 (50), 1.263 (30), 1.296 (20)

Chemistry:

	(1)
Ag	36.1
Sb	41.4
S	22.1
Total	99.6

(1) Baberast, near Haslach, Central Black Forest, Germany; by energy-dispersion analysis; corresponds to $Ag_{0.97}Sb_{0.99}S_2$.

Polymorphism & Series: Trimorphic with miargyrite and baumstarkite.

Occurrence: In a hydrothermal assemblage.

Association: Quartz, arsenopyrite.

Distribution: From Baberast, near Haslach, Central Black Forest, Germany.

Name: The prefix, *cubo*, alludes to a cubic polymorphic relation with mi*argyrite.*

References: (1) Walenta, K. (1998) Cuboargyrit, ein neues Silbermineral aus dem Schwarzwald. Lapis, 23(11), 21-23. (2) (1999) Amer. Mineral., 84, 1196 (abs. ref. 1). (3) Geller, S. and J.H. Wernick (1959) Ternary semiconducting compounds with sodium chloride-like structures: $AgSbSe_2$, $AgSbTe_2$, $AgBiS_2$, $AgBiSe_2$. Acta Cryst., 12, 46-54.