Hastite

\[\text{CoSe}_2\]

Crystal Data: Orthorhombic. Point Group: 2/m 2/m 2/m. As radiating starlike aggregates of crystals; small idiomorphic grains. Twinning: Common.


R1–R2: (400) 46.6–47.2, (420) 46.4–47.7, (440) 46.2–48.2, (460) 46.1–48.8, (480) 46.0–49.6, (500) 46.2–50.4, (520) 46.6–51.2, (540) 46.9–52.2, (560) 47.4–53.3, (580) 47.9–54.2, (600) 48.5–55.4, (620) 49.1–56.4, (640) 49.7–57.2, (660) 50.4–58.0, (680) 51.0–58.6, (700) 51.4–59.0

Cell Data: Space Group: Pmnn. \(a = 3.60\) \(b = 4.84\) \(c = 5.72\) \(Z = 2\)

X-ray Powder Pattern: Trogtal quarry, Germany. 
2.58 (10), 2.47 (10), 1.90 (10), 1.021 (10), 2.9 (3), 1.61 (3), 1.44 (3)

Chemistry: Composition inferred by similarity of X-ray pattern with marcasite.

Polymorphism & Series: Dimorphous with trogtalite.

Mineral Group: Marcasite group.

Occurrence: In hydrothermal veins.

Association: Trogtalite, bornhardtite, gold, claustralitize, selenium (Trogtal quarry, Germany).

Distribution: In Germany, from the Trogtal quarry, near Lautenthal, Harz Mountains [TL]. In the USA, at the La Sal mine, Beaver Mesa, Montrose Co., Colorado. From the San Francisco mine, La Rioja Province, Argentina.

Name: In honor of Dr. P.F. Hast, mining engineer.
