Ag$_{1.1}$Hg$_{0.9}$

**Schachnerite**

Crystal Data: Hexagonal. **Point Group:** 6/m 2/m 2/m. As crystals up to 1 cm in length, but most much smaller.

**Physical Properties:**
- Hardness = Low. VHN = n.d.
- D(meas.) = n.d. D(calc.) = 13.52

**Optical Properties:**
- Opaque. **Color:** In polished section, gray. **Luster:** Metallic.
- Anisotropism: Very weak.
- R$_1$–R$_2$: n.d.

**Cell Data:**
- Space Group: $P6_3/mmc$. $a = 2.978$  $c = 4.842$  $Z = 2$

**X-ray Powder Pattern:**
- Landsberg, Germany.
  - 2.273 (100), 0.8595 (60), 2.420 (50), 1.268 (50), 0.9538 (50), 1.489 (40), 0.9373 (40)

**Chemistry:**
- Microprobe analyses give low totals because of high absorption; results cluster about Ag$_{1.12}$Hg$_{0.98}$.

**Occurrence:**
- Found in the zone of oxidation, formed by the alteration of moschellandsbergite.

**Association:**
- Paraschachnerite, mercurian silver, acanthite, cinnabar, ankerite, "limonite" (Landsberg, Germany); paraschachnerite, mercurian silver, sphalerite, pyrite (Sala, Sweden).

**Distribution:**
- In the Vertraun Gott mercury mine at Landsberg, near Obermoschel, Rhineland-Palatinate, Germany. At Sala, Västmanland, Sweden.

**Name:**
- For Professor Doris Schachner, ore mineralogist, Institute for Mineralogy and Ore Deposits, Rhine Westphalian Technical School, Aachen, Germany.

**Type Material:**
- Technical University, Berlin, Germany; National Museum of Natural History, Washington, D.C., USA, 150256.

**References:**
1. Seeliger, E. and A. Mücke (1972) Para-schachnerite, Ag$_{1.2}$Hg$_{0.8}$, und Schachnerite, Ag$_{1.1}$Hg$_{0.9}$, vom Landsberg bei Obermoschel, Pfalz. Neues Jahrb. Mineral., Abh., 117, 1–18 (in German with English abs.).
2. (1973) Amer. Mineral., 58, 347 (abs. ref. 1).