Crystal Data: Orthorhombic. *Point Group*: 222. As euhedral to subhedral grains, to 50 μm, embedded in clausthalite.

Physical Properties: *Cleavage*: n.d. *Tenacity*: Brittle. *Fracture*: n.d. Hardness = n.d.
D(meas.) = n.d. D(calc.) = 7.23

Optical Properties: Opaque. *Color*: Grayish white, dark cream to slightly greenish cream in reflected light. *Streak*: Gray. *Luster*: Metallic.
Optical Class: *Anisotropism*: Weak, shades of pale orange-brown to gray. *Pleochroism*: Slight, shades of dark cream to slightly greenish cream.
R_1-R_2: (470) 42.4-43.0, (546) 45.4-44.4, (589) 46.8-44.6, (650) 47.7-44.6

Cell Data: *Space Group*: $P2_12_12_1$ a = 5.00520(10) b = 7.9921(2) c = 13.5969(2) Z = 4

X-ray Powder Pattern: Synthetic $PdCuBiSe_3$.
3.123 (100), 3.359 (97), 3.043 (75), 2.812 (73), 1.921 (70), 2.389 (39), 6.795 (38)

Chemistry:

	(1)
Pd	18.1
Bi	35.2
Cu	10.5
Se	33.5
S	2.6
Total	99.8

(1) Roter Bär mine, St. Andreasberg district, Harz Mountains, Germany; average electron microprobe analysis; corresponding to $Pd_{1.01}Cu_{0.98}Bi_{1.00}(Se_{2.53}S_{0.48})_{\Sigma=3.01}$.

Mineral Group: Lapieite group.

Occurrence: In a selenide-bearing carbonate veinlet of a polymetallic vein deposit.

Association: Gold, mertieite-II, bohdanowiczite, hematite, chalcopyrite, baryte, ankerite, dolomite.

Distribution: From the Roter Bär mine, northeastern part of the St. Andreasberg polymetallic vein district, Harz Mountains, Germany.

Name: For the *Roter Bär* mine, Harz Mountains, Germany.

Type Material: Technical University Clausthal, Clausthal-Zellerfeld, Germany.

References: (1) Vymazalová, A., A.R. Cabral, F. Laufek, W. Ließmann, C.J. Stanley, and B. Lehmann (2020) Roterbärite, $PdCuBiSe_3$, a new mineral species from the Roter Bär mine, Harz Mountains, Germany. Mineralogy and Petrology, 114, 443-451.