Orthocuproplatinum Pt_3Cu

Crystal Data: Orthorhombic. *Point Group*: 2/*m* 2/*m* 2/*m*. As a 1.5 mm grain.

Physical Properties: *Cleavage*: n.d. *Tenacity*: Malleable. *Fracture*: n.d. Hardness = 4
VHN = 232-258, 243 average (25 g load). D(meas.) = n.d. D(calc.) = 17.866

Optical Properties: Opaque. *Color*: Grayish white, whitish in reflected light. *Streak*: Gray.
Luster: Metallic.
Optical Class: Essentially isotropic. Slight perceptible anisotropy.
R: (470) 58.4, (546) 62.9, (589) 65.0, (650) 67.3

Cell Data: *Space Group: Cmmm.* a = 7.681(1) b = 5.4318(8) c = 2.7502(4) Z = 2

X-Ray Diffraction Pattern: Calculated pattern.
2.236 (100), 2.217 (97), 1.932 (61), 1.362 (36), 1.920 (30), 1.169 (24), 1.161 (23)

Chemistry:

	(1)
Cu	12.9
Pt	87.3
Total	100.2

(1) Lubero region, North Kivu, Democratic Republic of the Congo; average electron microprobe analysis; corresponds to $Pt_{2.76}Cu_{1.24}$.

Occurrence: An alluvial grain in a heavy-mineral concentrate.

Association: Hongshiite, calcite.

Distribution: From the Lubero region, North Kivu, Democratic Republic of the Congo.

Name: For the crystal system and essential chemical components.

Type Material: Mineralogical collection, Technical University of Clausthal, Clausthal-Zellerfeld, Lower Saxony, Germany (11331).

References: (1) Cabral, A.R., R. Skála, A. Vymazalová, J. Maixner, C.J. Stanley, B. Lehmann, and J. Jedwab (2019) Orthocuproplatinum, Pt_3Cu, a new mineral from the Lubero region, North Kivu, Democratic Republic of the Congo. Mineralogy and Petrology, 113, 527-532.