Kitagohaite Pt_7Cu

Crystal Data: Isometric. *Point Group*: 4/*m* $\bar{3}$ 2/*m.* As grain cores or rims on grains to ~0.5 mm.

Physical Properties: *Cleavage*: None. *Fracture*: n.d. *Tenacity*: Malleable. Hardness = 3.5 VHN = 206-237 (100 g load). D(meas.) = n.d. D(calc.) = 19.958

Optical Properties: Opaque. *Color*: Grayish white, white in reflected light. *Streak*: Gray. *Luster*: Metallic.
Optical Class: Isotropic.
R: (470) 63.2, (546) 66.6, (589) 68.2, (650) 70.1

Cell Data: *Space Group*: *Fm*$\bar{3}$ *m.* *a* = 7.7891(3) Z = 4

X-ray Powder Pattern: Kitagoha river, Lubero region, Democratic Republic of the Congo.
2.246 (100), 1.377 (77), 1.123 (31), 1.174 (27), 0.893 (13), 1.948 (8), 3.871 (3)

Chemistry:

	(1)	(2)
Pt	95.49	95.55
Cu	4.78	4.45
Total	100.26	100.00

(1) Kitagoha river, Lubero region, Democratic Republic of the Congo; average of 13 electron microprobe analyses; corresponding to $Pt_{6.93}Cu_{1.07}$. (2) Pt_7Cu.

Occurrence: In heavy mineral concentrates from river sediment perhaps derived from hydrothermal quartz vein deposits of unknown type.

Association: Commonly rimmed by hongshiite, with luberoite, quartz, zircon, hematite.

Distribution: From the Kitagoha river basin, Lubero region, Democratic Republic of the Congo; also reported from sediment in the Lemmenjoki and Ivalojoki river systems, Finnish Lapland.

Name: For the Kitagoha river, Democratic Republic of the Congo. The river's name probably comes from 'kitahuha', which in the local Bantu language means 'the river that does not make noise'.

Type Material: Clausthal University of Technology, Clausthal-Zellerfeld, Germany (# 11331).

References: (1) Cabral, A.R., R. Skála, A. Vymazalová, A. Kallistová, B. Lehmann, J. Jedwab, and T. Sidorinová (2014) Kitagohaite, Pt_7Cu, a new mineral from the Lubero region, North Kivu, Democratic Republic of the Congo. Mineral. Mag., 78(3), 739-745. (2) (2015) Amer. Mineral., 100, 336 (abs. ref. 1).