

Crystal Data: Cubic. *Point Group:* 23. As inclusions with rectangular outline, to 35 μm , in galena and chalcopyrite.

Physical Properties: *Cleavage:* n.d. *Fracture:* n.d. *Tenacity:* Brittle. *Hardness* = n.d. *D(meas.)* = n.d. *D(calc.)* = 9.25 (synthetic).

Optical Properties: Opaque. *Color:* Creamy gray in plane-polarized reflected light. *Streak:* Gray (synthetic). *Luster:* Metallic. *Optical Class:* Isotropic. *R:* (470) 46.35, (546) 47.65, (589) 48.5, (650) 49.5

Cell Data: Space Group: $I2_13$. $a = 8.3097(9)$ $Z = 4$

X-ray Powder Pattern: Synthetic Pd_{3.04}Bi_{1.97}S_{1.99}. 2.40 (100), 2.93 (78), 2.08 (53), 1.468 (35), 1.695 (34), 4.15 (32), 1.252 (31)

Chemistry:	(1)	(2)
Pd	40.42	39.84
Bi	49.15	52.16
Ag	0.55	
Pb	1.02	
S	7.77	8.00
Se	0.26	
Total	99.17	100.00

(1) Komsomolsky mine, Talnakh deposit, Noril'sk district, Russia; average of 7 electron microprobe analyses; corresponds to Pd_{3.05}(Bi_{1.89}Ag_{0.04}Pb_{0.04}) $\Sigma=1.97$ (S_{1.95}Se_{0.03}) $\Sigma=1.98$. (2) Pd₃Bi₂S₂.

Mineral Group: Platinum group.

Occurrence: In vein-disseminated pyrite-chalcopyrite-galena ores in diopside-hydrogrossular-serpentine metasomatites in diopside-monticellite skarn.

Association: Telargpalite, cooperite, braggite, vysotskite, sopcheite, stibiopalladinite, sobolevskite, moncheite, kotulskite, malyshevite, insizwaite, Au-bearing silver, kravtsovite, pyrite, chalcopyrite, galena.

Distribution: From the Komsomolsky mine, Talnakh deposit, Noril'sk district, Russia.

Name: Honors Dr Anna Vymazalová (b. 1974) research scientist at the Czech Geological Survey for her contributions to the ore and experimental mineralogy of the platinum-group minerals and for her participation in the description of several new minerals.

Type Material: Department of Earth Sciences, Natural History Museum, London, England (BM 2016, 150).

References: (1) Sluzhenikin, S.F., V.V. Kozlov, C.J. Stanley, M.L. Lukashova, and K. Dicks (2018) Vymazalováite, Pd₃Bi₂S₂, a new mineral from the Noril'sk-Talnakh deposit, Krasnoyarskiy region, Russia. *Mineral. Mag.*, 82(2), 367-373. (2) (2019) *Amer. Mineral.*, 104(4), 629 (abs. ref 1).