

Crystal Data: Hexagonal. *Point Group:* $\bar{3} 2/m$. As anhedral grains to 50 μm intergrown with moncheite.

Physical Properties: *Cleavage:* Good on {00*1}. *Tenacity:* Brittle. *Fracture:* n.d. *Hardness =* n.d. *D(meas.) =* n.d. *D(calc.) =* 11.18

Optical Properties: Opaque. *Color:* Bright white in reflected light. *Streak:* Gray. *Luster:* Metallic. *Optical Class:* Medium to strong birefractance. Slight pleochroism. Strongly anisotropic on non-basal sections with grayish brown tints. No internal reflections.
R₁-R₂: (470) 58.4-54.6, (546) 62.7-58.0, (589) 63.4-59.1, (650) 63.6-59.5

Cell Data: *Space Group:* $R\bar{3} m$. $a = 3.9874(1)$ $c = 35.361(1)$ $Z = 3$

X-Ray Diffraction Pattern: East Chuarvy deposit, Fedorovo-Pana complex, Kola Peninsula, Russia. 5.891 (100), 2.851 (26), 1.574 (24), 11.790 (23), 1.3098 (21), 2.039 (18), 2.137 (16)

Chemistry:	(1)
Pt	52.08
Pd	0.19
Te	47.08
<u>Bi</u>	<u>0.91</u>
Total	100.27

(1) East Chuarvy deposit, Fedorovo-Pana complex, Kola Peninsula, Russia; average electron microprobe analysis; corresponds to $(\text{Pt}_{2.91}\text{Pd}_{0.02})_{\Sigma=2.93}(\text{Te}_{4.02}\text{Bi}_{0.05})_{\Sigma=4.07}$.

Occurrence: In low-sulfide disseminated Cu-Ni-PGE ore in olivine-bearing gabbronorite in a layered igneous complex.

Association: Moncheite, lulkulaisvaaraita, kotulskite, vysotskite, braggite, keithconnite, rustenburgite, Pt-Fe alloys, chalcopyrite, pentlandite, pyrrhotite, orthopyroxene, augite, olivine, amphiboles, plagioclase.

Distribution: From the East Chuarvy deposit, Fedorovo-Pana complex, Kola Peninsula, Russia.

Name: Honors Dr. Felix P. *Mitrofanov*, a Russian geologist who was among the first to discover platinum-group element mineralization in the Fedorova-Pana complex.

Type Material: A.E. Fersman Mineralogical Museum, RAS, Moscow, Russia (5141/1).

References: (1) Subbotin, V.V., A. Vymazalová, F. Laufek, Y.E. Savchenko, C.J. Stanley, D.A. Gabov, and J. Plášil (2019) Mitrofanovite, Pt₃Te₄, a new mineral from the East Chuarvy deposit, Fedorovo-Pana intrusion, Kola Peninsula, Russia. *Mineral. Mag.*, 83, 523-530.