

Crystal Data: Hexagonal. *Point Group:* 6/m 2/m 2/m. As euhedral crystals to 3 μm intimately intergrown with murashkoite and transjordanite.

Physical Properties: *Cleavage:* n.d. *Tenacity:* n.d. *Fracture:* n.d. Hardness = n.d.
D(meas.) = n.d. D(calc.) = 6.626

Optical Properties: [Opaque.] *Color:* Bluish gray color in reflected light. *Streak:* n.d.
Luster: [Metallic.]
Optical Class: No observable birefractance or anisotropy.

Cell Data: *Space Group:* P6₃/mmc. *a* = 3.330(1) *c* = 11.227(4) *Z* = 2

X-Ray Diffraction Pattern: Calculated pattern.
2.011 (100), 2.884 (71), 1.665 (35), 2.807 (14), 2.793 (9), 1.432 (9), 2.565 (8), 5.614 (4)

Chemistry:	(1)
Mo	44.10
Ni	22.73
Fe	4.60
<u>P</u>	<u>29.02</u>
Total	100.45

(1) Halamish wadi, southern part of the Hatrurim Formation, Negev Desert, Israel; average electron microprobe analysis; corresponds to Mo_{0.99}(Ni_{0.83}Fe_{0.18}) $\Sigma=1.01$ P_{2.01}.

Occurrence: In phosphide assemblages in severely altered, diopside microbreccia in pyrometamorphic rocks.

Association: Murashkoite, transjordanite, Si-rich fluorapatite, hematite, magnetite.

Distribution From Halamish wadi, southern part of the Hatrurim Formation, Negev Desert, Israel.

Name: Honors Yuri Stepanovich *Polekhovsky* (1947-2018), Russian geologist and mineralogist, for his contributions to the studies of opaque minerals, including phosphides.

Type Material: A.E. Fersman Mineralogical Museum, RAS, Moscow, Russia (5287/1).

References: (1) Britvin, S.N., M.N. Murashko, O.S. Vereshchagin, Y. Vapnik, V.V. Shilovskikh, N.S. Vlasenko, and V.V. Permyakov (2022) Expanding the speciation of terrestrial molybdenum: Discovery of polekhovskyite, MoNiP₂, and insights into the sources of Mo-phosphides in the Dead Sea Transform area. *Amer. Mineral.*, 107, 2201-2211.