Crystal Data: Hexagonal. *Point Group*: 6/*m* 2/*m* 2/*m*. As sheaf-like aggregates to 4 cm of hexagonal prismatic crystals, to 1 cm, that consist of epitactically intergrown avdeevite (core) and beryl (rim).

Physical Properties: *Cleavage*: Imperfect on {001}. *Tenacity*: Brittle. *Fracture*: Uneven. Hardness = 8 VHN = 1200-1400, 1300 average (150 g load). D(meas.) = 2.89(2) D(calc.) = 2.875

Optical Properties: Transparent. *Color*: Pink. *Streak*: n.d. *Luster*: Vitreous. *Optical Class*: Uniaxial (-). ω = 1.601(2) ε = 1.594(2) Nonpleochroic.

Cell Data: *Space Group: P*6/*mmc*. *a* = 9.2287(4) *c* = 9.2610(3) Z = 2

X-Ray Diffraction Pattern: Khat Chey (Kat Chay) mine, Kyaukme district, Shan State, Myanmar. 3.26 (100), 2.866 (84), 7.96 (82), 3.02 (37), 4.60 (31), 3.99 (20), 1.742 (19)

Chemistry:

	(1)
SiO_2	61.06
Al_2O_3	17.40
BeO	8.58
Na_2O	1.77
K_2O	0.09
Cs_2O	6.44
Rb_2O	1.38
Li_2O	2.51
H_2O	0.42
Total	99.63

(1) Khat Chey (Kat Chay) mine, Kyaukme district, Shan State, Myanmar; average electron microprobe and Raman spectroscopic analyses, Be, Li and H by SIMS; corresponding to $[Na_{0.34}Cs_{0.27}(H_2O)_{0.14}Rb_{0.09}K_{0.01}]_{\Sigma=0.85}(Be_{2.04}Li_{1.00})_{\Sigma=3.04}Al_{2.03}Si_{6.03}O_{18}$.

Mineral Group: Beryl group.

Occurrence: In granitic pegmatite.

Association: Quartz, orthoclase, microcline, albite, muscovite, biotite, tourmaline, beryl, garnet, topaz, lepidolite, magnetite, wolframite, cassiterite, columbite.

Distribution: From the Khat Chey (Kat Chay) mine, near Khetchel, Molo quarter, Momeik township, Kyaukme district, Shan State, Myanmar [TL]. Other documented occurrences in granite pegmatite include Voron'i Tundry, Kola Peninsula, Russia; Margaritra, Madagascar; Koktokay, China; Elba, Italy; from Zambia; and at Tanco, Manitoba, Canada.

Name: Honors Ivan Vasil'evich *Avdeev* (1818-1865), Russian chemist and mining engineer, who led major studies of natural and synthetic beryllium compounds.

Type Material: A.E. Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia (5279/1; 86533).

References: (1) Agakhanov, A.A., D.A. Stepanenko, N.V. Zubkova, L.A. Pautov, I.V. Pekov, A.V. Kasatkin, V.Y. Karpenko, V.A. Agakhanova, R. Škoda, S.N. Britvin, and D.Y. Pushcharovsky (2021) Avdeevite, a Na-dominant alkali beryl: Determination as valid mineral species and new data. Geology of Ore Deposits 63, 654-667.