Crystal Data: Triclinic. *Point Group*: $\bar{1}$. As lamellar bundles of plates flattened on $(01\bar{1})$ to 1 mm. Visually indistinguishable from guérinite.

Physical Properties: *Cleavage*: Perfect on $\{01\bar{1}\}$. *Tenacity*: Brittle. *Fracture*: Uneven. Hardness = ~1.5 D(meas.) = 2.92(2) D(calc.) = 2.92 Nonfluorescent.

Optical Properties: Transparent to translucent. *Color*: Colorless to white. *Streak*: White. *Luster*: Waxy.
Optical Class: Biaxial (+). α = 1.601(2) β = 1.607(2) γ = 1.619(2) 2V(meas.) = 72(2)° 2V(calc.) = 71.0° *Orientation*: $X \wedge c = 45°$, $Y \wedge b = 35°$, $Z \wedge a = 27°$. *Dispersion*: Weak, $r < v$.

Cell Data: *Space Group: P*$\bar{1}$. a = 6.710(6) b = 14.90(1) c = 15.94(1) α = 73.58(1)° β = 81.98(1)° γ = 82.75(1)° Z = 3

X-Ray Diffraction Pattern: Mohawk No. 2 mine, Mohawk, Keweenaw Co., Michigan, USA.
9.25 (100), 2.954 (86), 5.39 (80), 3.180 (60), 2.854 (46), 3.791 (41), 1.799 (34)

Chemistry:

	(1)	(2)
As_2O_5	51.54	51.99
SO_3	0.03	
CaO	31.26	31.71
MgO	0.06	
Na_2O	0.12	
H_2O	[16.18]	16.30
Total	99.19	100.00

(1) Mohawk No. 2 mine, Mohawk, Keweenaw Co., Michigan, USA; average electron microprobe, TGA and FTIR and Raman spectroscopic analyses, H_2O calculated; corresponding to $(Ca_{4.97}Na_{0.013}Mg_{0.017})(As_{3.99}S_{0.01})_4O_{23}H_{16}$. (2) $Ca_5(AsO_4)_2(AsO_3OH)_2(H_2O)_7$.

Occurrence: As intergrowths with guérinite coating oxidized copper arsenides. Likely formed by a topotactic reaction during dehydration of preexisting guérinite and post-mining oxidation.

Association: Guérinite, calcite, ankerite, rauenthalite, annabergite, lavendulan.

Distribution: From the Mohawk No. 2 mine, Mohawk, Keweenaw Co., Michigan, USA.

Name: Honors *Jean* Petermann *Kemp* Zimmer (1917-2001), curator of the A. E. Seaman Mineral Museum in Houghton, Michigan, USA, from 1975 to 1986.

Type Material: A.E. Seaman Mineral Museum, Michigan Tech, Houghton, Michigan, USA (DM 31705) and the Natural History Museum of Los Angeles County, Los Angeles, California, USA (66799).

References: (1) Olds, T.A., A.R. Kampf, F. Dal Bo, P.C. Burns, X. Guo, and J.S. McCloy (2020) Jeankempite, $Ca_5(AsO_4)_2(AsO_3OH)_2(H_2O)_7$, a new arsenate mineral from the Mohawk Mine, Keweenaw County, Michigan, USA. Mineral. Mag., 84, 959-969.