Erikapohlite $Cu_3(Zn,Cu,Mg)_4Ca_2(AsO_4)_6{\cdot}2H_2O$

Crystal Data: Monoclinic. *Point Group*: 2/*m*. As very thin lamellar crystals to 0.7 mm.

Physical Properties: *Cleavage*: n.d. *Fracture*: n.d. *Tenacity*: n.d. Hardness = n.d. D(meas.) = n.d. D(calc.) = 4.55

Optical Properties: Transparent. *Color*: Deep blue. *Streak*: Pale blue. *Luster*: Vitreous. *Optical Class*: n.d. *n*(calc.) = 1.78

Cell Data: *Space Group*: *C*2/*c*. a = 12.6564(6) b = 12.7282(8) c = 6.9148(3) β = 113.939(4)° Z = 2

X-ray Powder Pattern: Tsumeb mine, Otjikoto region, Namibia.
2.892 (100), 3.304 (49), 2.788 (40), 3.160 (32), 2.764 (14), 1.728 (10), 1.650 (10)

Chemistry:

	(1)
CuO	22.42
ZnO	14.45
CaO	8.21
MgO	2.21
FeO	0.03
As_2O_5	51.02
H_2O	[1.66]
Total	100.00

(1) Tsumeb mine, Namibia; average of several electron microprobe analyses, H_2O by difference, AsO_4, OH, H_2O confirmed by Raman spectroscopy; corresponding to $Cu_3(Zn_{2.48}Cu_{0.93}Mg_{0.77}Fe_{0.01})_{\Sigma=4.19}Ca_{2.04}As_{6.20}O_{24.71}{\cdot}1.29H_2O$.

Occurrence: A secondary mineral formed by weathering tennantite-rich veins in the oxidized zone of a dolostone-hosted, hydrothermal polymetallic deposit.

Association: Lammerite, conichalcite, quartz.

Distribution: From level 44, Tsumeb mine, Otjikoto (Oshikoto) region, Namibia.

Name: Honors Erika Pohl (b. 1919) who donated her mineral collection of more than 40,000 specimens to the Bergakademie Freiberg, Saxony, Germany, on the condition that it should be accessible to a broad public and scientifically supervised. The collection is on display in the Freudenstein Castle in the center of Freiberg.

Type Material: Mineralogical Museum, University of Hamburg, Hamburg, Germany (TS 117c).

References: (1) Schlüter, J., T. Malcherek, B. Mihailova, and G. Gebhard (2013) The new mineral erikapohlite, $Cu_3(Zn,Cu,Mg)_4Ca_2(AsO_4)_6{\cdot}2H_2O$, the Ca-dominant analog of keyite, from Tsumeb, Namibia. Neues Jahrbuch für Mineralogie Abhandlungen, 190/3, 319-325. (2) (2015) Amer. Mineral., 100, 2007 (abs. ref. 1).