

**Crystal Data:** Triclinic. *Point Group:*  $\bar{1}$ . Crystals are bladed to platy and elongated along [010], to 12 mm.

**Physical Properties:** *Cleavage:* Perfect on {101}. *Fracture:* Uneven. *Tenacity:* Sectile. Hardness = ~5 D(meas.) = 4.14(3) D(calc.) = 4.16

**Optical Properties:** Transparent. *Color:* Colorless to pale brown in transmitted light. *Streak:* White. *Luster:* Vitreous. *Optical Class:* Biaxial (-).  $\alpha = 1.690(1)$   $\beta = 1.699(1)$   $\gamma = 1.705(1)$   $2V(\text{meas.}) = 77(2)^\circ$   $2V(\text{calc.}) = 78^\circ$  *Orientation:*  $Y = b, Z \wedge c = 10.7^\circ$ .

**Cell Data:** Space Group:  $P\bar{1}$ .  $a = 9.6015(9)$   $b = 7.2712(7)$   $c = 7.9833(8)$   $\alpha = 105.910(4)^\circ$   $\beta = 118.229(4)^\circ$   $\gamma = 109.935(5)^\circ$   $Z = 2$

**X-ray Powder Pattern:** Kombat mine, Otavi Valley, Namibia. 2.909 (100), 7.361 (60), 2.985 (53), 3.697 (42), 4.472 (37), 3.514 (35), 6.671 (31)

<b>Chemistry:</b>	(1)
SiO <sub>2</sub>	36.59
MnO	14.45
PbO	45.46
H <sub>2</sub> O	[3.66]
Total	100.16

(1) Kombat mine, Otavi Valley, Namibia; average of 10 electron microprobe analyses supplemented by Raman spectroscopy, H<sub>2</sub>O calculated from structure; corresponds to Pb<sub>1.00</sub>Mn<sub>1.00</sub>Si<sub>3.00</sub>O<sub>8</sub>·H<sub>2</sub>O.

**Occurrence:** In rhodochrosite-bearing epithermal veins of a polymetallic sulfide deposit.

**Association:** Melanotekite, rhodochrosite, helvite, galena, barite.

**Distribution:** From the Kombat mine, Otavi Valley, Namibia.

**Name:** Honors the contributions of Hexiong Yang, Department of Geosciences, University of Arizona, Tucson, to the fields of chain silicates in particular and mineralogy in general, and his stewardship of the RRUFF project's attempt to characterize the known minerals chemically, structurally, and spectrographically.

**Type Material:** University of Arizona Mineral Museum (19341) and the RRUFF Project (R090031), Tucson, Arizona, and the National Museum of Natural History, Washington, D.C., USA (175983).

**References:** (1) Downs, R.T., W.W. Pinch, R.M. Thompson, S.H. Evans, and L. Megaw (2016) Yangite, PbMnSi<sub>3</sub>O<sub>8</sub>·H<sub>2</sub>O, a new mineral species with double wollastonite silicate chains, from the Kombat mine, Namibia. *Amer. Mineral.*, 101, 2539-2543.