

**Crystal Data:** Orthorhombic. *Point Group:* 2/m 2/m 2/m. As blocky grains with striations parallel to [001], to 0.4 mm.

**Physical Properties:** *Cleavage:* Perfect on {100} and {010}. *Tenacity:* Brittle. *Fracture:* n.d. Hardness = 4-5 D(meas.) = 4.63(3) D(calc.) = 4.654

**Optical Properties:** Transparent. *Color:* Dark blue. *Streak:* Pale blue. *Luster:* Vitreous. *Optical Class:* Biaxial (-).  $\alpha = 1.750(1)$   $\beta = 1.761(1)$   $\gamma = 1.765(1)$   $2V(\text{meas.}) = 66(2)^\circ$   $2V(\text{calc.}) = 62^\circ$  *Orientation:* X // a, Y // b, Z // c. *Pleochroism:* X = medium blue, Y = dark blue, Z = medium blue. *Absorption:* Y > X = Z. *Dispersion:* None.

**Cell Data:** *Space Group:* Pnma.  $a = 6.8556(2)$   $b = 13.1725(2)$   $c = 6.8901(1)$  Z = 4

**X-ray Powder Pattern:** Calculated pattern.

3.0406 (100), 3.0527 (64), 6.5862 (52), 2.7262 (52), 2.4299 (37), 3.9105 (22), 1.9552 (20)

|                   |       |
|-------------------|-------|
| <b>Chemistry:</b> | (1)   |
| CuO               | 36.98 |
| BaO               | 35.12 |
| SiO <sub>2</sub>  | 27.01 |
| SrO               | 0.28  |
| Na <sub>2</sub> O | 0.06  |
| Total             | 99.45 |

(1) Wessels mine, Kalahari Manganese Fields, South Africa; average of 8 electron microprobe analyses supplemented by Raman spectroscopy, (NH<sub>4</sub>)<sub>2</sub>O calculated from stoichiometry; corresponds to Ba<sub>1.00</sub>Sr<sub>0.01</sub>Na<sub>0.01</sub>Cu<sub>2.04</sub>Si<sub>1.97</sub>O<sub>7</sub>.

**Occurrence:** Likely of hydrothermal origin in a metamorphosed manganese deposit.

**Association:** Wesselsite, pectolite, richterite, sugilite, lavinskyite.

**Distribution:** From the central-eastern ore body, Wessels mine, Kalahari Manganese Fields, Northern Cape Province, South Africa. Also reported from Eifel, Germany.

**Name:** Honors Michael M. Scott "Scotty", the co-founder and first CEO of Apple Computer Corporation (February 1977 to March 1981), and the founding sponsor of the RRUFF project - an internet-based, internally consistent, and integrated database of Raman spectra, X ray diffraction, and chemical data for minerals.

**Type Material:** Mineral Museum, University of Arizona, Tucson, Arizona, USA (19334) and the RRUFF Project (R120077).

**References:** (1) Yang, H., R.T. Downs, S.H. Evans, and W.W. Pinch (2013) Scottyite, the natural analog of synthetic BaCu<sub>2</sub>Si<sub>2</sub>O<sub>7</sub>, a new mineral from the Wessels mine, Kalahari Manganese Fields, South Africa. *Amer. Mineral.*, 98, 478-484.