

Crystal Data: Orthorhombic. *Point Group:* 2/m 2/m 2/m. As cm-sized wheat-sheaf, subspherical aggregates.

Physical Properties: *Cleavage:* None. *Tenacity:* Brittle. *Fracture:* Irregular. Hardness = 5-5.5
D(meas.) = 3.05(3) D(calc.) = 3.102 Deep red fluorescence under SW UV.

Optical Properties: Transparent. *Color:* Pale to intense reddish pink. *Streak:* White.
Luster: Vitreous.

Optical Class: Biaxial (+). $\alpha = 1.663(1)$ $\beta = 1.672(1)$ $\gamma = 1.694(1)$ $2V(\text{meas.}) = 71.8(1)^\circ$
 $2V(\text{calc.}) = 66(8)^\circ$ *Orientation:* $X = a$, $Y = c$, $Z = b$. *Dispersion:* $r > v$, distinct.

Cell Data: *Space Group:* Pbca. $a = 9.249(3)$ $b = 9.076(9)$ $c = 10.342(9)$ $Z = 8$

X-Ray Diffraction Pattern: N'Chwaning II mine, Kalahari Mn fields, Republic of South Africa.
3.19 (100), 4.14 (45), 2.361 (40), 2.807 (35), 2.545 (35), 2.762 (30), 2.521 (30)

| Chemistry: | (1) | (2) |
|------------------|--------|--------|
| SiO ₂ | 29.47 | 29.29 |
| FeO | 0.18 | |
| MnO | 29.28 | 34.58 |
| CaO | 31.33 | 27.34 |
| H ₂ O | [8.89] | 8.79 |
| Total | 99.15 | 100.00 |

(1) N'Chwaning II mine, Kalahari manganese fields, Republic of South Africa; average electron microprobe analysis, H₂O calculated from structure; corresponds to Ca(Mn_{0.85}Ca_{0.14}Fe_{0.01}) [SiO₃(OH)](OH). (2) CaMn[SiO₃(OH)](OH).

Occurrence: A product of hydrothermal alteration of primary sedimentary and low-grade metamorphic manganese ores.

Association: Poldervaartite, celestine, sturmanite, bultfonteinite, hematite.

Distribution: From the N'Chwaning II mine, Kalahari manganese fields, Republic of South Africa.

Name: Honors Filippo *Olmi* (1959-2005), for his mineralogical studies at the CNR-Istituto di Geoscienze e Georisorse in Florence, Italy.

Type Material: Department of Earth Sciences, University of Florence, Italy (2987/I)

References: (1) Bonazzi, P., L. Bindi, O. Medenbach, R. Pagano, G.I. Lampronti, and S. Menchetti (2007) Olmite, CaMn[SiO₃(OH)](OH), the Mn-dominant analogue of poldervaartite, a new mineral species from Kalahari manganese fields (Republic of South Africa). *Mineral. Mag.*, 71, 193-201.