

Crystal Data: Orthorhombic. *Point Group:* $2/m\ 2/m\ 2/m$. Crystals, terminated acicular to stout prismatic, to 0.25 mm; with forms $\{110\}$ and $\{010\}$.

Physical Properties: *Cleavage:* None observed. *Fracture:* n.d. *Tenacity:* Brittle. Hardness = n.d. D(meas.) = n.d. D(calc.) = 5.934 Non-fluorescent.

Optical Properties: Translucent. *Color:* Red to black. *Streak:* Brown. *Luster:* Submetallic. *Optical Class:* n.d.

Cell Data: *Space Group:* $Pnam$. $a = 7.802(1)$ $b = 9.930(1)$ $c = 3.9905(6)$ $Z = 4$

X-ray Powder Pattern: La Fossa crater, Vulcano Island, Sicily, Italy. 2.896 (100), 4.174 (45), 2.684 (42), 2.784 (33), 1.725 (30), 2.543 (27), 1.992 (25)

Chemistry:	(1)	(2)
Bi	72.74	75.58
S	11.74	11.60
Se	0.01	
Br	3.13	
Cl	11.42	12.82
Total	99.04	100.00

(1) La Fossa crater, Vulcano Island, Sicily, Italy; electron microprobe analysis, corresponding to $\text{Bi}_{0.97}\text{S}_{1.02}(\text{Cl}_{0.90}\text{Br}_{0.11})_{\Sigma=1.01}$. (2) BiSCI.

Occurrence: A product of fumarolic alteration of pyroclastic breccia.

Association: Demicheleite-(Br), bismoclite, bismuthinite, godovikovite, panichiite, aiolosite, brontesite, adranosite.

Distribution: La Fossa crater, Vulcano Island, Aeolian archipelago, Sicily, Italy.

Name: Honors Vincenzo *de Michele* (b. 1936), former curator of the Natural History Museum, Milan, Italy, and suffix for its chemical composition.

Type Material: Department of Structural Chemistry and Inorganic Stereochemistry, University of Milan, Italy (reference collection 2008-03).

References: (1) Demartin, F., C.M. Gramaccioli, and I. Campostrini (2009) Demicheleite-(Cl), BiSCI, a new mineral from La Fossa Crater, Vulcano, Aeolian Islands, Italy. *Amer. Mineral.*, 94, 1045-1048.