

**Campostriniite**

**Crystal Data:** Monoclinic. *Point Group:* 2/m. As terminated prismatic crystals, to 0.2 mm.

**Physical Properties:** *Cleavage:* None. *Fracture:* n.d. *Tenacity:* n.d. *Hardness =* n.d.  
D(meas.) = n.d. D(calc.) = 3.87

**Optical Properties:** Transparent. *Color:* White. *Streak:* White. *Luster:* Vitreous.  
*Optical Class:* Biaxial.  $n(\text{calc.}) = 1.680$

**Cell Data:** *Space Group:* C2/c.  $a = 17.748(3)$   $b = 6.982(1)$   $c = 18.221(3)$   $\beta = 113.97(1)^\circ$   $Z = 4$

**X-ray Powder Pattern:** La Fossa Crater, Vulcano, Aeolian Islands, Italy.  
6.396 (100), 7.507 (75), 2.766 (60), 3.380 (57), 5.677 (55), 3.166 (50), 4.410 (47)

<b>Chemistry:</b>	(1)
Bi <sub>2</sub> O <sub>3</sub>	46.65
SO <sub>3</sub>	40.33
Na <sub>2</sub> O	6.21
K <sub>2</sub> O	1.88
(NH <sub>4</sub> ) <sub>2</sub> O	[3.28]
<u>H<sub>2</sub>O</u>	<u>[1.50]</u>
Total	99.85

(1) La Fossa Crater, Vulcano, Aeolian Islands, Italy; average of 18 electron microprobe analyses supplemented by FTIR spectrometry, H<sub>2</sub>O and (NH<sub>4</sub>)<sub>2</sub>O calculated from stoichiometry; corresponding to Bi<sub>2.41</sub>N<sub>1.52</sub>Na<sub>2.41</sub>K<sub>0.48</sub>S<sub>6.07</sub>H<sub>8.08</sub>O<sub>25</sub>.

**Occurrence:** A sublimate on pyroclastic breccia at a volcanic fumarole.

**Association:** Adranosite, demicheleite-(Br), demicheleite-(I), argesite, sassolite.

**Distribution:** From La Fossa Crater, Vulcano, Aeolian Islands, Italy.

**Name:** Honors Italo Campostrini (b. 1959), a mineralogist active in the study of volcanic sublimates.

**Type Material:** Department of Chemistry, University of Milan, Italy (2013-03).

**References:** (1) Demartin, F., C. Castellano, and C.M. Gramaccioli (2015) Campostriniite, (Bi<sup>3+</sup>,Na)<sub>3</sub>(NH<sub>4</sub>,K)<sub>2</sub>Na<sub>2</sub>(SO<sub>4</sub>)<sub>6</sub>·H<sub>2</sub>O, a new sulfate isostructural with görgeyite, from La Fossa Crater, Vulcano, Aeolian Islands, Italy. *Mineral. Mag.*, 79(4), 1007-1018. (2) (2016) *Amer. Mineral.*, 101, 1241-1242 (abs. ref. 1).