

**Crystal Data:** Monoclinic. *Point Group:* 2/m. As grains to 400 μm.

**Physical Properties:** *Cleavage:* None. *Fracture:* n.d. *Tenacity:* Brittle. Hardness = 4-4.5  
VHN = 150 (100 g load). D(meas.) = n.d. D(calc.) = 2.940

**Optical Properties:** Opaque. *Color:* Black. *Streak:* Black. *Luster:* Submetallic.  
*Optical Class:* Anisotropic. *Birefractance:* Weak. *Pleochroism:* Very weak, gray to dark green.  
R<sub>1</sub>-R<sub>2</sub>: (471.1) 18.5-19.0, (548.3) 17.2-17.8, (586.6) 16.8-17.5, (652.3) 16.2-16.8

**Cell Data:** *Space Group:* P2<sub>1</sub>/m. *a* = 5.313(3) *b* = 10.495(3) *c* = 8.568(4) β = 91.14(5)°  
Z = 2

**X-ray Powder Pattern:** Calculated pattern.  
8.5663 (100), 3.4049 (17), 2.8339 (15), 2.6550 (15), 1.8666 (15), 6.6363 (14), 3.4399 (14)

Chemistry:	(1)	(2)
SrO	23.66	24.41
CaO	0.27	
Na <sub>2</sub> O	0.07	
VO <sub>2</sub>	58.56	58.61
H <sub>2</sub> O	[16.99]	16.98
Total	99.55	100.00

(1) Molinello mine, Val Graveglia, Italy; average of 7 electron microprobe analyses, H<sub>2</sub>O calculated from stoichiometry and confirmed by Mössbauer spectroscopy; corresponding to (Sr<sub>0.97</sub>Ca<sub>0.02</sub>Na<sub>0.01</sub>)<sub>Σ=1.01</sub>V<sub>3.00</sub>O<sub>7</sub>·4H<sub>2</sub>O. (2) SrV<sub>3</sub>O<sub>7</sub>·4H<sub>2</sub>O.

**Occurrence:** In a metamorphosed bedded chert and Mn ore deposit.

**Association:** Rhodonite, quartz, braunite.

**Distribution:** At the Molinello manganese mine, Val Graveglia, eastern Liguria, northern Apennines, Italy.

**Name:** Honors Riccardo Basso (b. 1947), Professor of Mineralogy and Crystallography, University of Genoa, Italy.

**Type Material:** Dipartimento per lo Studio del Territorio e delle sue Risorse, Università di Genova, Italy, (M0480).

**References:** (1) Bindi, L., C. Carbone, R. Cabella, and G. Lucchetti (2011) Bassoite, SrV<sub>3</sub>O<sub>7</sub>·4H<sub>2</sub>O, a new mineral from Molinello mine, Val Graveglia, eastern Liguria, Italy. *Mineral. Mag.*, 75, 2677-2686. (2) (2012) *Amer. Mineral.*, 97, 1525 (abs. ref. 1).