

**Scheuchzerite****Crystal Data:** Triclinic. *Point Group:*  $\bar{1}$ . As acicular crystals to 0.5 mm along  $[1\bar{1}1]$ .**Physical Properties:** *Cleavage:* Good parallel elongation. *Tenacity:* Brittle. *Fracture:* n.d.  
Hardness = ~2.5 D(meas.) = 3.50(2) D(calc.) = 3.52**Optical Properties:** Transparent. *Color:* Yellow-orange. *Streak:* Yellow-orange. *Luster:* Vitreous.  
*Optical Class:* Biaxial (+).  $n(\text{min.}) = 1.74$   $n(\text{max.}) = 1.75$   $n(\text{calc.}) = 1.74$   
*Pleochroism:* Weak, X = brown-yellow, Y = pale yellow.**Cell Data:** *Space Group:*  $P\bar{1}$ .  $a = 9.831(5)$   $b = 10.107(5)$   $c = 13.855(7)$   $\alpha = 86.222(10)^\circ$   
 $\beta = 73.383(9)^\circ$   $\gamma = 71.987(9)^\circ$   $Z = 2$ **X-Ray Diffraction Pattern:** Fianel mine, near Ausserferrera, Graubünden, Switzerland.  
2.71 (100), 3.09 (80), 7.91 (70), 8.68 (50), 3.22 (40), 2.92 (40), 1.61 (40)

<b>Chemistry:</b>	(1)
V <sub>2</sub> O <sub>5</sub>	6.46
As <sub>2</sub> O <sub>5</sub>	0.14
SiO <sub>2</sub>	41.02
Al <sub>2</sub> O <sub>3</sub>	0.04
MgO	2.86
MnO	41.54
CaO	0.13
Na <sub>2</sub> O	2.25
NiO	0.22
ZnO	0.96
<u>H<sub>2</sub>O</u>	<u>2.71</u>
Total	98.33

(1) Fianel mine, near Ausserferrera, Graubünden, Switzerland; average electron microprobe analysis supplemented by FTIR spectroscopy; corresponds to Na<sub>0.97</sub>(Mn<sub>7.79</sub>Mg<sub>0.95</sub>Zn<sub>0.16</sub>Ni<sub>0.04</sub>Ca<sub>0.03</sub>Al<sub>0.01</sub>)<sub>Σ=8.98</sub>(V<sub>0.95</sub>As<sub>0.02</sub>Si<sub>9.08</sub>)<sub>Σ=10.05</sub>O<sub>32.05</sub>H<sub>4</sub>.**Mineral Group:** Chain silicate.**Occurrence:** In a metamorphosed syn-sedimentary exhalative Mn deposit.**Association:** Saneroite, tiragalloite.**Distribution:** At the Fianel Fe-Mn mine, near Ausserferrera, Ferrera valley, Graubünden, Switzerland.**Name:** Honors Swiss naturalist Johann Jakob *Scheuchzer* (1672-1733), junior physician of the city of Zürich, curator of the *Kunstammer* - a cabinet of natural history and curiosities, and the chair of physics and mathematics at the University of Zürich.**Type Material:** Geological Museum, Lausanne, Switzerland (MGL 79355).**References:** (1) Brugger, J., S. Krivovichev, N. Meisser, S. Ansermet, and T. Armbruster (2006) Scheuchzerite, Na(Mn,Mg)<sub>9</sub>[VSi<sub>9</sub>O<sub>28</sub>(OH)](OH)<sub>3</sub>, a new single-chain silicate. *Amer. Mineral.*, 91, 937-943.