

Lasnierite**Crystal Data:** Orthorhombic. *Point Group:* 2/m 2/m 2/m. As bladed crystals to 120 μm.**Physical Properties:** *Cleavage:* n.d. *Tenacity:* n.d. *Fracture:* n.d. Hardness = n.d. D(meas.) = n.d. D(calc.) = 3.162**Optical Properties:** Transparent. *Color:* Pale pinkish brown to nearly colorless. *Streak:* n.d. *Luster:* n.d.*Optical Class:* [Biaxial.] Anisotropic. No pleochroism observed. *n*(calc.) = 1.582**Cell Data:** *Space Group:* Pbcn. *a* = 6.2771(3) *b* = 17.684(3) *c* = 8.1631(4) *Z* = 4**X-ray Powder Pattern:** Calculated pattern.

3.706 (100), 3.305 (99), 2.601 (97), 2.890 (90), 4.421 (83), 2.781 (69), 2.772 (67)

Chemistry:	(1)
P ₂ O ₅	49.41
Al ₂ O ₃	10.30
MgO	13.34
FeO	9.08
CaO	7.65
SrO	9.00
BaO	0.06
SiO ₂	0.16
F	2.62
Cl	0.02
- O = (F, Cl) ₂	1.11
Total	100.52

(1) Mount Ibity (Bity), Antananarivo Province, Madagascar; average electron microprobe analysis supplemented by Raman spectroscopy; corresponds to

(Ca_{0.59}Sr_{0.37})_{Σ=0.96}(Mg_{1.42}Fe_{0.54})_{Σ=1.96}Al_{0.87}(P_{2.99}Si_{0.01})_{Σ=3.00}(O_{11.41}F_{0.59})_{Σ=12}.**Occurrence:** As inclusions in a 1.97 carat, faceted, oval piece of lazulite-bearing blue quartzite.**Association:** Quartz, lazulite, chlorapatite, celestite, monazite-(Ce), xenotime-(Y), augelite, trolleite, svanbergite, goyazite, crandallite, berlinite, anhydrite, ilmenite, titanomagnetite, rutile, hematite, muscovite, kyanite, zircon, dumortierite, tourmaline, clinoamphibole.**Distribution:** From Mount Ibity (Bity), ~30 km NNE of Soavina, Ambatofinandrahana district, Antananarivo Province, Madagascar.**Name:** Honors Emeritus Professor Bernard *Lasnier* (b. 1938), who taught geology, mineralogy, and gemology at the University of Nante, France, and studied lazulite-bearing quartzite from Intremo.**Type Material:** Natural History Museum, Paris, France (MNHN 217.001).**References:** (1) Rondeau, B., B. Devouard, D. Jacob, P. Roussel, N. Stephant, C. Boulet, V. Mollé, M. Corre, E. Fritsch, C. Ferraris, and G.C. Parodi (2019) Lasnierite, (Ca,Sr)(Mg,Fe)₂Al(PO₄)₃, a new phosphate accompanying lazulite from Mt. Ibity, Madagascar: an example of structural characterization from dynamic refinement of precession electron diffraction data on submicrometer sample. *Eur. J. Mineral.*, 31(2), 379-388. (2) (2021) *Amer. Mineral.*, 106, 1360 (abs. ref. 1).