Crystal Data: Cubic; may be metamict. *Point Group:* $4/m \overline{3} 2/m$. Rare rounded octahedra with small cube modifications, to 8 mm; commonly anhedral, granular, in veinlets and aggregates.

Physical Properties: *Fracture:* [Conchoidal to uneven] (by analogy to pyrochlore group). *Tenacity:* Brittle. Hardness = \sim 5 D(meas.) = 5.30 (on impure material). D(calc.) = 5.19

Optical Properties: Semitransparent. *Color:* Dark brown to brown-black; brown in transmitted light; medium gray in reflected light. *Streak:* Pale brown to cream. *Luster:* Vitreous. *Optical Class:* Isotropic. n = > 1.78

Cell Data: Space Group: $Fd\overline{3}$ m. a = 10.351 Z = 8

X-ray Powder Pattern: Věžná, Czech Republic; after heating at 700° C for one hour. 2.988 (10), 1.829 (6), 1.561 (5), 2.581 (4), 5.94 (3), 1.495 (3), 1.187 (3)

Chemistry:		(1)		(1)
	Nb ₂ O ₅	21.6	PbO	0.13
	Ta_2O_5	19.3	SnO	2.9
	TiO ₂	16.5	CaO	14.5
	Al ₂ O ₃	0.49	Na ₂ O	0.30
	Sb_2O_3	23.2	F	0.15
	FeO	0.6	H_2O	0.44
	MnO	0.6	$-O = F_2 0.06$	
			Total	100.65

(1) Věžná, Czech Republic; by electron and ion microprobe; total Sb as Sb₂O₃, Fe as FeO, Mn as MnO, Sn as SnO; corresponds to $(Ca_{1.11}Sb^{3+}_{0.69}Sn_{0.09}Fe_{0.04}Mn_{0.04}Na_{0.04})_{\Sigma=2.01}(Ti_{0.89}Nb_{0.70}Ta_{0.38}Al_{0.04})_{\Sigma=2.01}O_6[O_{0.76}(OH)_{0.21}F_{0.03}]_{\Sigma=1.00}$.

Mineral Group: Pyrochlore supergroup (general formula - $A_2B_2X_6Y$); pyrochlore group ($B = Nb^{5+}$).

Occurrence: As replacement masses and in veinlets, in a granite pegmatite in a serpentinite.

Association: Columbite, niobian rutile, antimony, stokesite, cassiterite, zircon, albite.

Distribution: From Věžná, Czech Republic.

Name: For a member of the *pyrochlore* group with prefixes to indicate dominant oxygen (*oxy*) in the *Y* site and dominant calcium (*calcio*) in the *A* site. Formerly 'stibiobetafite'.

Type Material: University of Manitoba, Winnipeg (M5233); Royal Ontario Museum, Toronto, Canada (M35630).

References: (1) Černý, P., F.C. Hawthorne, J.H.G. Laflamme, and J.R. Hinthorne (1979) Stibiobetafite, a new member of the pyrochlore group from Vezná, Czechoslovakia. Can. Mineral., 17, 583-588. (2) (1981) Amer. Mineral., 66, 1278 (abs. ref. 1). (3) Atencio, D., M.B. Andrade, A.G. Christy, R. Gieré, and P.M. Kartashov (2010) The pyrochlore supergroup of minerals: nomenclature. Can. Mineral., 48, 673-698.