Kimrobinsonite $(Ta, Nb)(OH)_3(O, CO_3)$

Crystal Data: Cubic. *Point Group:* n.d. In masses of cryptocrystalline individuals.

Physical Properties: *Tenacity:* Friable. Hardness = Soft. VHN = 70 (20 g load). D(meas.) = n.d. D(calc.) = 6.865

Optical Properties: Semitransparent. *Color:* White. *Streak:* White. *Luster:* Dull chalky. *Optical Class:* Isotropic. n = [2.23] (by rule of Gladstone and Dale).

Cell Data: *Space Group:* n.d. $a = 3.812(1)$ Z = 1

X-ray Powder Pattern: Mt. Holland, Western Australia.
3.808 (10), 2.696 (7), 1.702 (5), 1.555 (4), 1.907 (3), 2.202 (2), 1.270 (2)

Chemistry:

	(1)
Nb_2O_5	6.6
Ta_2O_5	78.5
Sb_2O_3	0.7
FeO	0.4
Na_2O	0.7
H_2O	[8.9]
CO_2	[4.2]
Total	[100.0]

(1) Mt. Holland, Western Australia; by electron microprobe, H_2O 5.9% and CO_2 2.8% by CHN microanalysis on a somewhat impure sample, recalculated to 100% for analytical shortfall of volatiles; then corresponding to $(Ta_{0.82}Nb_{0.11}Na_{0.05}Fe_{0.01}Sb_{0.01})_{\Sigma=1.00}(OH)_{2.27}[O_{1.02}(CO_3)_{0.22}]_{\Sigma=1.24}$.

Occurrence: The weathering product of an undetermined Ta–Sb pegmatite mineral.

Association: Cesstibtantite, manganotantalite, antimonian microlite.

Distribution: From near Mt. Holland, Western Australia.

Name: Honors Kim Robinson (1951–), Australian geologist of Perth, Australia, who discovered the specimen in which the mineral occurs.

Type Material: Western Australian Museum, Perth, M.59.1991; Museum Victoria, Melbourne, Australia, M37922; The Natural History Museum, London, England, 1986,250; National School of Mines, Paris, France; National Museum of Natural History, Washington, D.C., USA, 163342.

References: (1) Nickel, E.H. and B.W. Robinson (1985) Kimrobinsonite, a new tantalum mineral from Western Australia, and its association with cesstibtantite. Can. Mineral., 23, 573–576. (2) (1987) Amer. Mineral., 72, 1024 (abs. ref. 1).