$\odot$  2001 Mineral Data Publishing, version 1.2

**Crystal Data:** Hexagonal. Point Group: 6/m 2/m 2/m. In very thin hexagonal plates, with {0001} dominant, to 1 mm. Twinning: Common,  $\perp$  [0001], observable only by X-ray study.

**Physical Properties:** Tenacity: Brittle. Hardness = n.d. D(meas.) = 2.980 D(calc.) = 3.08 Fluorescess bright bluish white in SW UV.

**Optical Properties:** Semitransparent. Color: Colorless. Luster: Vitreous. Optical Class: Uniaxial (-).  $\omega = 1.567 \quad \epsilon = 1.566$ 

Cell Data: Space Group: P6/mcc. a = 10.002(2) c = 14.263(3) Z = 2

**X-ray Powder Pattern:** Kings Mountain, North Carolina, USA. 4.109 (10), 2.905 (9), 7.141 (8), 4.343 (8), 5.714 (7), 8.693 (6), 2.681 (6)

Chemistry:		(1)	(2)
	$SiO_2$	65.8	64.70
	$\overline{\text{SnO}_2}$	28.2	27.05
	$Li_2O$	3.75	4.02
	$Na_2O$	0.74	
	$\overline{K_2O}$	3.72	4.23
	Total	102.2	100.00

(1) Kings Mountain, North Carolina, USA; by electron microprobe, Li, Na, and K by flame photometry. (2)  $KLi_3Sn_2Si_{12}O_{30}$ .

Mineral Group: Milarite group.

**Occurrence:** In the late hydrothermal portions of a Li-Sn-rich pegmatite, in vugs and on flat fracture surfaces.

Association: Bavenite, pyrite, tetrawickmanite, stannian titanite, albite, quartz.

Distribution: From the Foote mine, Kings Mountain, Cleveland Co., North Carolina, USA.

Name: Honoring Dr. Kent Combs Brannock (1923–1973), Kingsport, Tennessee, USA, chemist and mineral collector.

Type Material: National Museum of Natural History, Washington, D.C., USA, 125045.

**References:** (1) White, J.S., Jr., J.E. Arem, J.A. Nelen, P.B. Leavens, and R.W. Thomssen (1973) Brannockite, a new tin mineral. Mineral. Record, 4, 73–76. (2) (1973) Amer. Mineral., 58, 1111 (abs. ref. 1). (3) Armbruster, T. and R. Oberhänsli (1988) Crystal chemistry of double-ring silicates: structures of sugilite and brannockite. Amer. Mineral., 73, 595–600.