Stenhuggarite $CaFe^{3+}Sb^{3+}As_2^{3+}O_7$

Crystal Data: Tetragonal. *Point Group:* $4/m\ 2/m\ 2/m$. As equant pseudo-octahedral crystals, to 3 mm, showing {100}, {211}, and {301}.

Physical Properties: *Fracture:* Conchoidal. Hardness = > 4 D(meas.) = 4.63(5) D(calc.) = 4.56

Optical Properties: Transparent to translucent. *Color:* Bright reddish orange. *Streak:* Bright yellow.
Optical Class: Uniaxial, nearly isotropic. *Absorption:* Strong. $n = > 2.0$, low birefringence.

Cell Data: *Space Group:* $I4_1/amd$. $a = 16.144(3)$ $c = 10.706(2)$ $Z = 16$

X-ray Powder Pattern: Långban, Sweden.
2.985 (10), 1.8450 (4), 2.548 (3.5), 1.5440 (3.5), 5.92 (3), 1.1963 (2.5), 8.00 (2)

Chemistry:

	(1)
As	31.3
Sb	24.5
Fe	11.0
Ca	8.1
O	[25.1]
Total	[100.0]

(1) Långban, Sweden; by electron microprobe, O by difference; corresponds to $Ca_{1.00}Fe_{0.98}Sb_{1.00}As_{2.06}O_{7.76}$.

Occurrence: Very rare in hematite ore from a metamorphosed Fe–Mn orebody.

Association: Hematite.

Distribution: From Långban, Värmland, Sweden.

Name: From the Swedish for *stonemason*, in honor of Dr. Brian Harold Mason (1917–), U.S. National Museum, Washington, D.C., USA, for his contributions to the mineralogy of the Långban deposit.

Type Material: Swedish Museum of Natural History, Stockholm, Sweden; The Natural History Museum, London, England, 1969,117; National Museum of Natural History, Washington, D.C., USA, 120066.

References: (1) Moore, P.B. (1970) Stenhuggarite, a new mineral from Långban and new data on magnussonite. Arkiv Mineral. Geol., 5(6), 55–62. (2) (1971) Amer. Mineral., 56, 636–637 (abs. ref. 1). (3) Coda, A., A. Dal Negro, C. Sabelli, and V. Tazzoli (1977) The crystal structure of stenhuggarite. Acta Cryst., 33, 1807–1811.