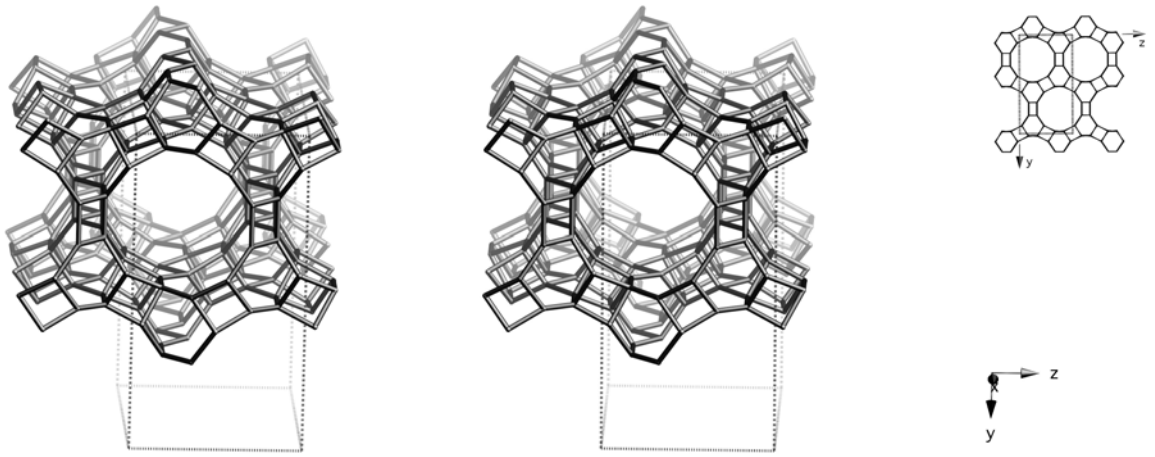
BOG

Imma

Framework Type Data



framework viewed along [100] (upper right: projection down [100])

Idealized cell data: orthorhombic, *Imma*, $a = 20.0$Å, $b = 23.6$Å, $c = 12.7$Å

Coordination sequences and vertex symbols:

T_1 (16,1)	4	10	19	32	51	74	101	129	158	199	$4{\cdot}5{\cdot}4{\cdot}6{\cdot}5{\cdot}12_2$
T_2 (16,1)	4	10	20	32	48	74	104	131	159	195	$4{\cdot}5{\cdot}4{\cdot}6_2{\cdot}10{\cdot}12$
T_3 (16,1)	4	11	19	34	50	71	98	133	162	195	$4{\cdot}5_2{\cdot}5{\cdot}6{\cdot}5{\cdot}10_3$
T_4 (16,1)	4	11	21	32	49	74	101	128	162	200	$4{\cdot}10_5{\cdot}5{\cdot}6_3{\cdot}5{\cdot}6_3$
T_5 (16,1)	4	11	20	31	53	76	97	126	168	199	$4{\cdot}5{\cdot}5{\cdot}6_2{\cdot}5{\cdot}10$
T_6 (16,1)	4	11	18	31	52	75	100	126	158	206	$4{\cdot}5{\cdot}5{\cdot}6{\cdot}5{\cdot}6_2$

Secondary building units: 6 or 5-1 or 4

Composite building units:

bre *bog* *cas*

Materials with this framework type:

*Boggsite[1]

Dehyd. boggsite[2]

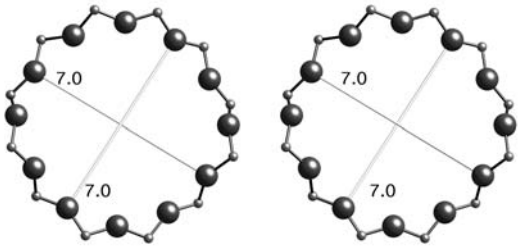
Type Material: Boggsite **BOG**

Type Material Data

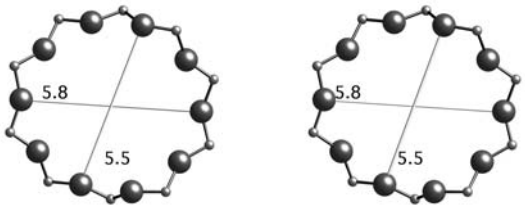
Crystal chemical data: $|Ca_7Na_4\ (H_2O)_{74}|\ [Al_{18}Si_{78}O_{192}]$-**BOG**
orthorhombic, *Imma*, a = 20.236Å, b = 23.798Å, c = 12.798Å [(1)]

Framework density: 15.6 T/1000Å^3

Channels: [100] **12** 7.0 x 7.0* ↔ [010] **10** 5.5 x 5.8*



12-ring viewed along [100]



10-ring viewed along [010]

References:

(1) Pluth, J.J. and Smith, J.V. *Am. Mineral.*, **75**, 501-507 (1990)
(2) Zanardi, S., Cruciani, G., Alberti, A. and Galli, E. *Am. Mineral.*, **89**, 1033-1042 (2004)