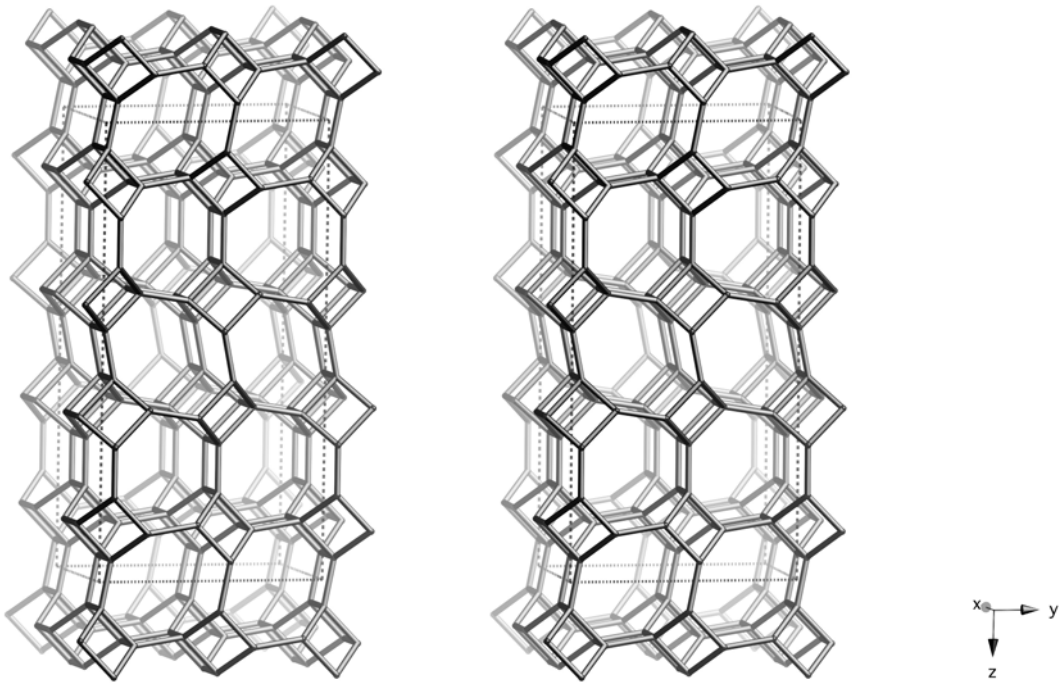
SIV *Cmcm*

Framework Type Data



framework viewed along [100]

Idealized cell data: orthorhombic, *Cmcm*, $a = 9.9$Å, $b = 14.1$Å, $c = 28.1$Å

Coordination sequences and vertex symbols:

T_1 (16,1)	4	9	18	32	49	69	93	122	156	191	229	275	$4{\cdot}4{\cdot}4{\cdot}8_2{\cdot}8{\cdot}8$
T_2 (16,1)	4	9	18	32	48	67	92	120	150	187	231	275	$4{\cdot}4{\cdot}4{\cdot}8_2{\cdot}8{\cdot}8$
T_3 (16,1)	4	9	18	32	48	68	96	126	155	191	234	277	$4{\cdot}4{\cdot}4{\cdot}8_2{\cdot}8{\cdot}8$
T_4 (16,1)	4	9	18	32	49	69	93	121	155	193	230	272	$4{\cdot}4{\cdot}4{\cdot}8_2{\cdot}8{\cdot}8$

Secondary building units: 4 or 8

Composite building units:

dcc

double crankshaft chain

gis

Materials with this framework type:

*SIZ-7[(1)]

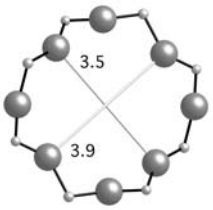
Type Material: SIZ-7 SIV

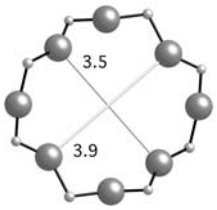
Type Material Data

Crystal chemical data: $[Co_{12.8}Al_{19.2}P_{32}O_{128}]$-**SIV**
monoclinic, *C*2/*c*
a = 10.2959Å, *b* = 14.3715Å, *c* = 28.599Å, β = 91.094° (1)

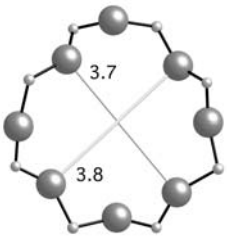
Framework density: 15.1 T/1000Å^3

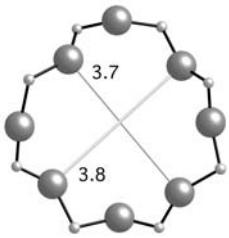
Channels: { [100] **8** (3.5 x 3.9+ **8** 3.7 x 3.8 ↔ [110] **8** 3.7 x 3.8
↔ [001] **8** 3.8 x 3.9 } ***



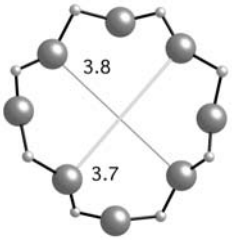


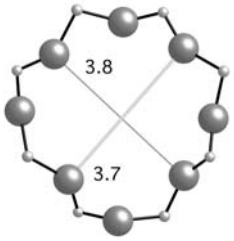
8-ring viewed along [100]



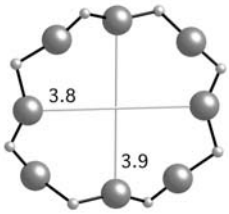


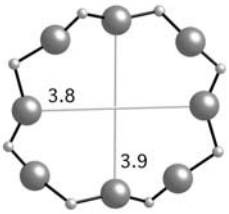
2nd 8-ring viewed along [100]





8-ring viewed along [110]





8-ring viewed along [001]

References:
(1) Parnham, E.R. and Morris, R.E. *J. Am. Chem. Soc.*, **128**, 2204-2205 (2006)