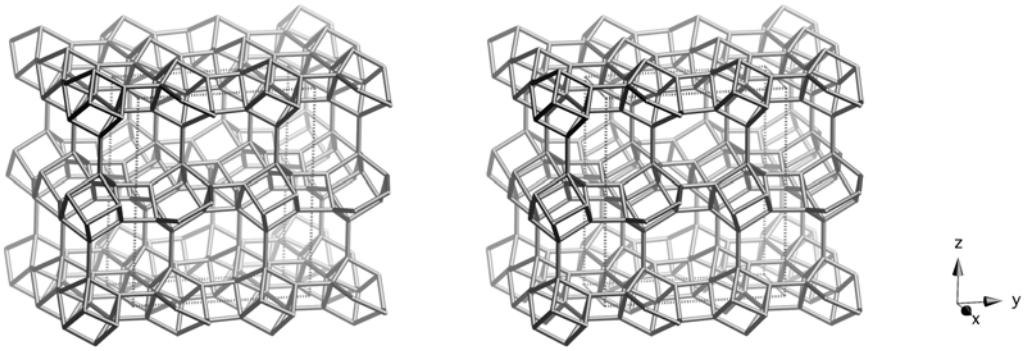
# ZON

***Pbcm***

Framework Type Data




*framework viewed along [100]*

**Idealized cell data:** orthorhombic, *Pbcm*, $a$ = 6.9Å, $b$ = 14.9Å, $c$ = 17.2Å

**Coordination sequences and vertex symbols:**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| $T_1$ (8,1) | 4 | 10 | 21 | 34 | 47 | 72 | 108 | 136 | 162 | 200 | $4{\cdot}8{\cdot}4{\cdot}8_2{\cdot}6_3{\cdot}8$ |
| $T_2$ (8,1) | 4 | 9 | 19 | 33 | 53 | 78 | 100 | 126 | 166 | 213 | $4{\cdot}4{\cdot}4{\cdot}8{\cdot}6{\cdot}6_3$ |
| $T_3$ (8,1) | 4 | 10 | 18 | 33 | 57 | 77 | 95 | 129 | 172 | 209 | $4{\cdot}6{\cdot}4{\cdot}6{\cdot}6{\cdot}8$ |
| $T_4$ (8,1) | 4 | 9 | 17 | 32 | 53 | 74 | 98 | 128 | 165 | 208 | $4{\cdot}6{\cdot}4{\cdot}6_2{\cdot}4{\cdot}8$ |

**Secondary building units:** 6-2 or 4-4- or 4

**Composite building units:**

*sti*

**Materials with this framework type:**

*ZAPO-M1[1]
GaPO-DAB-2[2,3]
UiO-7[4,5]

## Type Material: ZAPO-M1

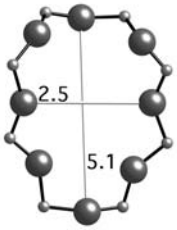
# ZON

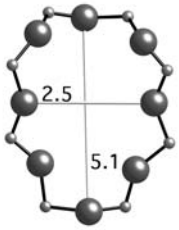
### Type Material Data

**Crystal chemical data:** $|(C_4H_{12}N)_8|\ [Zn_8Al_{24}P_{32}\ O_{128}]$-**ZON**
$C_4H_{12}N$ = tetramethylammonium
orthorhombic, *Pbca*, $a$ = 14.226Å, $b$ = 15.117Å, $c$ = 17.557Å [(1)]
(Relationship to unit cell of Framework Type: $a' = 2a$, $b' = b$, $c' = c$)

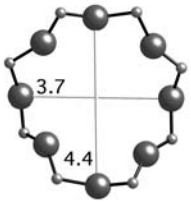
**Framework density:** 17 T/1000Å$^3$

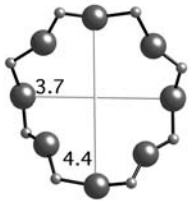
**Channels:** [100] **8** 2.5 x 5.1* ↔ [010] **8** 3.7 x 4.4*




*8-ring viewed along [100]*




*8-ring viewed along [010]*

**References:**

(1) Marler, B., Patarin, J. and Sierra, L. *Microporous Materials*, **5**, 151-159 (1995)
(2) Schott-Darie, C., Kessler, H., Soulard, M., Gramlich, V. and Benazzi, E. *Stud. Surf. Sci. Catal.*, **84**, 101-108 (1994)
(3) Meden, A., Grosse-Kunstleve, R.W., Baerlocher, Ch. and McCusker, L.B. *Z. Kristallogr.*, **212**, 801-807 (1997)
(4) Akporiaye, D.E., Fjellvag, H., Halvorsen, E.N., Hustveit, J., Karlsson, A. and Lillerud, K.P. *Chem. Commun.*, 601-602 (1996)
(5) Akporiaye, D.E., Fjellvag, H., Halvorsen, E.N., Hustveit, J., Karlsson, A. and Lillerud, K.P. *J. Phys. Chem.*, **100**, 16641-16646 (1996)