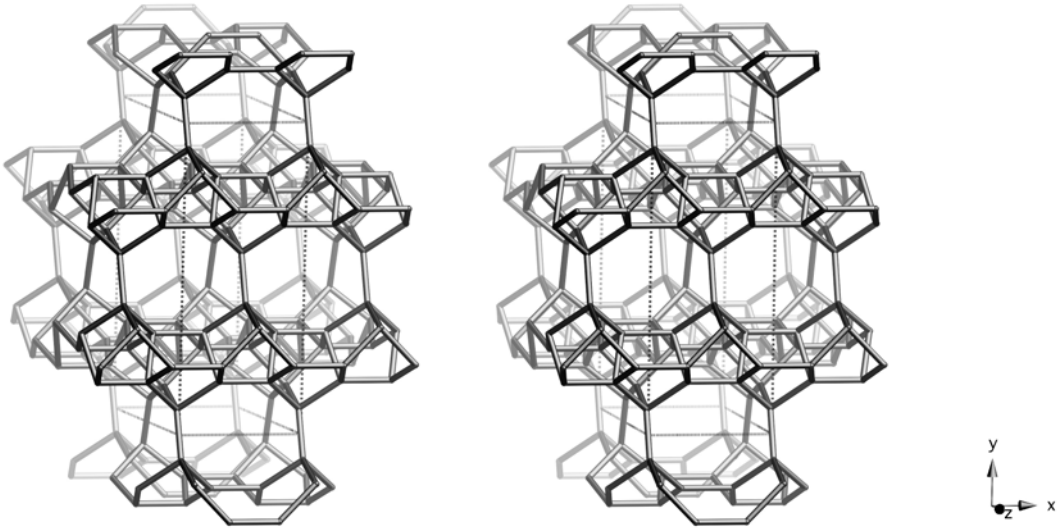
# CDO

***Cmcm***

Framework Type Data




*framework viewed along [001]*

**Idealized cell data:** orthorhombic, *Cmcm*, $a$ = 7.6Å, $b$ = 18.7Å, $c$ = 14.1Å

**Coordination sequences and vertex symbols:**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $T_1$ (16,1) | 4 | 12 | 21 | 39 | 67 | 99 | 129 | 172 | 228 | 275 | 319 | 391 | $5{\cdot}5{\cdot}5{\cdot}5_2{\cdot}5{\cdot}8$ |
| $T_2$ (8,..*m*) | 4 | 12 | 20 | 35 | 69 | 105 | 125 | 168 | 231 | 282 | 320 | 381 | $5{\cdot}5_2{\cdot}5{\cdot}5_2{\cdot}8{\cdot}*$ |
| $T_3$ (8,*m*..) | 4 | 12 | 28 | 44 | 64 | 100 | 144 | 178 | 215 | 277 | 347 | 402 | $5{\cdot}8_2{\cdot}5{\cdot}8_2{\cdot}5_2{\cdot}8_2$ |
| $T_4$ (4,*m*2*m*) | 4 | 12 | 24 | 42 | 66 | 98 | 130 | 172 | 228 | 278 | 334 | 398 | $5{\cdot}5{\cdot}5{\cdot}5{\cdot}5_2{\cdot}8_2$ |

**Secondary building units:** 5-1

**Composite building units:**

*fer*

**Materials with this framework type:**

*CDS-1[(1)]
MCM-65[(2)]
UZM-25[(3)]

## Type Material: CDS-1

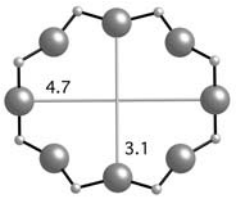
# CDO

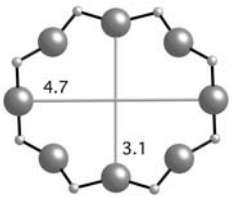
### Type Material Data

**Crystal chemical data:** **[$Si_{36}O_{72}$]-CDO**
orthorhombic, *Pnma*, *a* = 18.355Å, *b* = 13.779Å, *c* = 7.3674Å [(1)]
(Relationship to unit cell of Framework Type: *a*' = *b*, *b*' = *c*, *c*' = *a*)

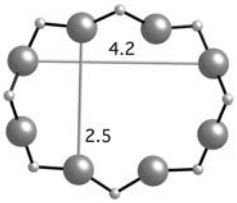
**Framework density:** 19.3 T/1000Å$^3$

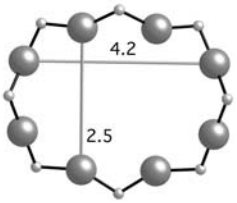
**Channels:** [010] **8** 3.1 x 4.7* ↔ [001] **8** 2.5 x 4.2*




*8-ring viewed along [010]*




*8-ring viewed along [001]*

**References:**

(1) Ikeda, T., Akiyama, Y., Oumi, Y., Kawai, A. and Mizukami, F. *Angew. Chem., Int. Ed.*, **43**, 4892-4896 (2004)
(2) Dorset, D.L. and Kennedy, G.J. *J. Phys. Chem. B*, **108**, 15216-15222 (2004)
(3) Broach, R.W. *private communication*