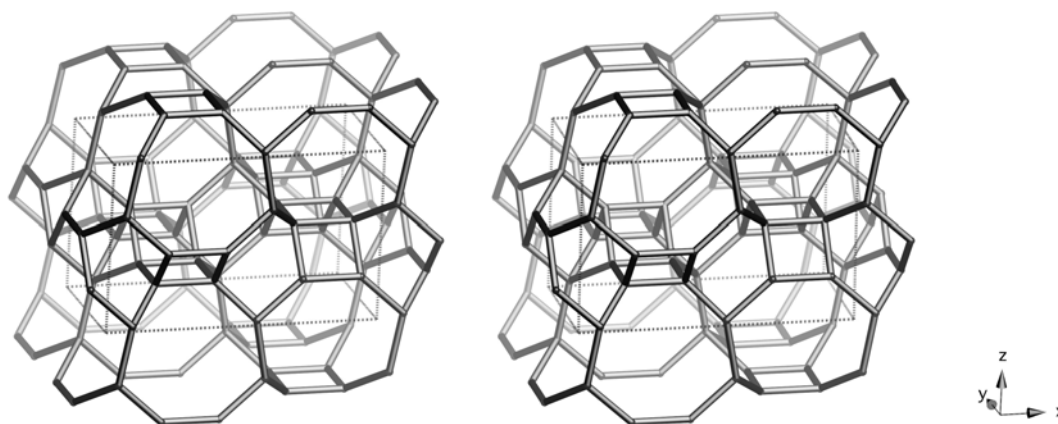


Framework Type Data



framework viewed along [010]

Idealized cell data: orthorhombic, *Pmma*, $a = 14.4\text{\AA}$, $b = 7.2\text{\AA}$, $c = 9.1\text{\AA}$

Coordination sequences and vertex symbols:

$T_1(8,1)$	4	9	18	35	57	76	96	128	172	216	252	290	$4\cdot 4\cdot 4\cdot 8_3\cdot 6_2\cdot 8_2$
$T_2(4,m.)$	4	9	19	34	52	75	99	129	172	215	250	288	$4\cdot 6_2\cdot 4\cdot 6_2\cdot 4\cdot 8_2$
$T_3(4,m.)$	4	11	22	32	49	77	109	139	163	197	250	310	$4\cdot 8_2\cdot 6_2\cdot 8_2\cdot 6_2\cdot 8_2$

Secondary building units: 4 or 4-4-

Composite building units:*dsc**sti*

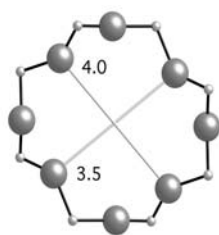
*double sawtooth
chain*

**Materials with this framework type:***UiO-28⁽¹⁾ACP-2⁽²⁾

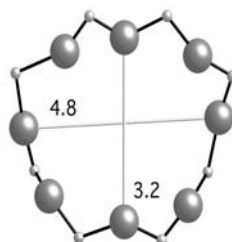
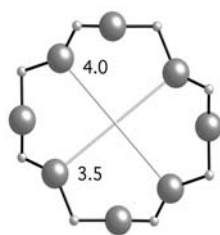
Type Material: UiO-28

Type Material Data

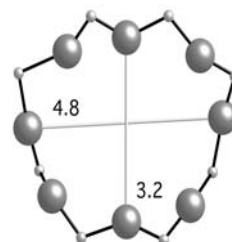
Crystal chemical data:	$I (C_4N_3H_{14})_4 (H_2O)_4 [Mg_4Al_{12}P_{16}O_{64}]$ -OWE $C_4N_3H_{13}$ = diethylenetriamine orthorhombic, $Pbcm$, $a = 9.2769\text{\AA}$, $b = 14.7984\text{\AA}$, $c = 14.6106\text{\AA}$ ⁽¹⁾ (Relationship to unit cell of Framework Type: $a' = c$, $b' = 2b$, $c' = a$)
Framework density:	16 T/1000 \AA^3
Channels:	[010] 8 3.5 x 4.0* \leftrightarrow [001] 8 3.2 x 4.8*



8-ring viewed along [010]



8-ring viewed along [001]



References:

- (1) Kongshaug, K.O., Fjellvag, H. and Lillerud, K.P. *J. Mater. Chem.*, **11**, 1242-1247 (2001)
- (2) Feng, P., Bu, X. and Stucky, G.D. *Nature*, **388**, 735-741 (1997)