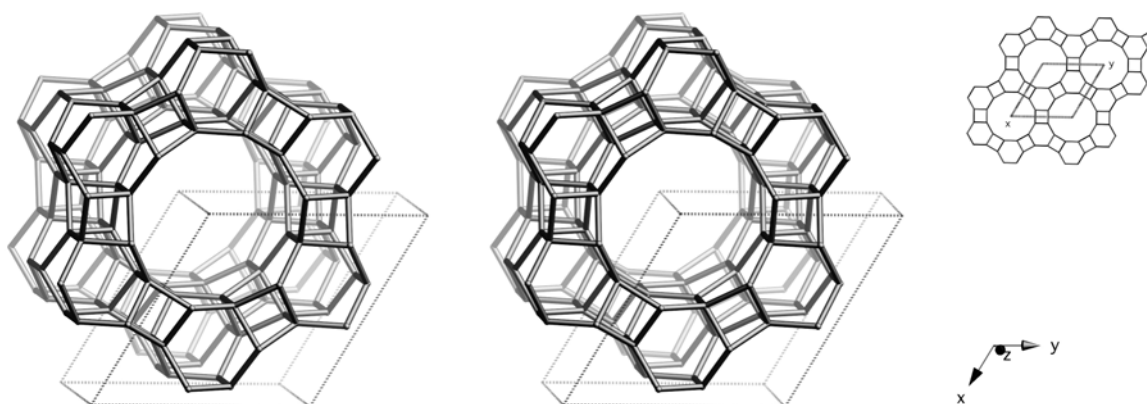


Framework Type Data



framework viewed along [001] (upper right: projection down [001])

Idealized cell data: hexagonal, $P6/mcc$, $a = 13.8\text{\AA}$, $c = 8.6\text{\AA}$

Coordination sequences and vertex symbols:

$T_1(24,1)$ 4 11 21 35 53 77 105 137 172 212

$4\cdot6_2\cdot6\cdot6_3\cdot6_2\cdot6_3$

Secondary building units: 12 or 6 or 4

Composite building units:

nsc

afi

bog

narsarsukite
chain



Materials with this framework type:

*AlPO-5⁽¹⁾

[Sn-Al-P-O]-AFI⁽²⁾

l(Ni(deta)₂)-l[Al-P-O-F]-AFI⁽³⁾

lTPAF-l[Al-P-O]-AFI⁽⁴⁾

CoAPO-5^(5,6)

CrAPO-5⁽⁷⁾

FAPO-5⁽⁸⁾

MAPO-5, M = Cd, Cu, Mo, V/Mo, Zr⁽⁹⁾

MAPO-5, M=Mg, Mn⁽¹⁰⁾

SAPO-5 and numerous compositional variants^(11,12)

SSZ-24⁽¹³⁾

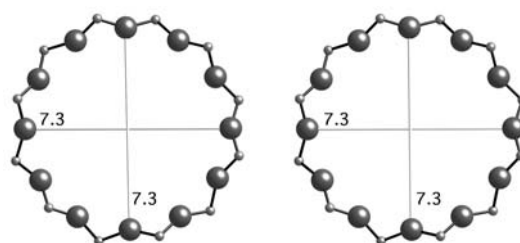
VAPO-5⁽¹⁴⁾

ZnAPO-5⁽¹⁵⁾

Type Material: AIPO-5

Type Material Data

Crystal chemical data:	$\text{[(C}_{12}\text{H}_{28}\text{N)} (\text{H}_2\text{O})_x (\text{OH})] [\text{Al}_{12}\text{P}_{12} \text{O}_{48}]$ -AFI $\text{C}_{12}\text{H}_{28}\text{N}$ = tetrapropylammonium hexagonal, $P6cc$, $a = 13.726\text{\AA}$, $c = 8.484\text{\AA}$ ⁽¹⁾
Framework density:	17.3 T/1000 \AA^3
Channels:	[001] 12 7.3 x 7.3*



12-ring viewed along [001]

References:

- (1) Bennett, J.M., Cohen, J.P., Flanigen, E.M., Pluth, J.J. and Smith, J.V. *ACS Sym. Ser.*, **218**, 109-118 (1983)
- (2) Flavell, W.R., Nicholson, D.G., Nilsen, M.H. and Ståhl, K. *J. Mater. Chem.*, **11**, 620-627 (2001)
- (3) Garcia, R., Shannon, I.J., Slawin, A.M.Z., Zhou, W., Cox, P.A. and Wright, P.A. *Microporous Mesoporous Mat.*, **58**, 91-104 (2003)
- (4) Qiu, S., Pang, W., Kessler, H. and Guth, J.L. *Zeolites*, **9**, 440-444 (1989)
- (5) Montes, C., Davis, M.E., Murray, B. and Narayana, M. *J. Phys. Chem.*, **94**, 6425-6430 (1990)
- (6) Chao, K.J., Sheu, S.P. and Sheu, H.S. *J. Chem. Soc., Faraday Trans.*, **88**, 2949-2954 (1992)
- (7) Radaev, S., Joswig, W. and Baur, W.H. *J. Mater. Chem.*, **6**, 1413-1418 (1996)
- (8) Zenonos, C., Sankar, G., Cora, F., Lewis, D.W., Pankhurst, Q.A., Catlow, C.R.A. and Thomas, J.M. *Phys Chem Chem Phys*, **4**, 5421-5429 (2002)
- (9) Kornatowski, J., Sychev, M., Finger, G., Baur W.H., Rozwadowski, M. and Zibrowius, B. *Proc. Polish-German Zeolite Colloquium*, 20-26 (1992)
- (10) Parrillo, D.J., Pereira, C., Kokotailo, G.T. and Gorte, R.J. *J. Catal.*, **138**, 377-385 (1992)
- (11) Flanigen, E.M., Lok, B.M., Patton, R.L. and Wilson, S.T. *Pure Appl. Chem.*, **58**, 1351-1358 (1986)
- (12) Flanigen, E.M., Lok, B.M., Patton, R.L. and Wilson, S.T. *Proc. 7th Int. Zeolite Conf.*, pp. 103-112 (1986)
- (13) Bialek, R., Meier, W.M., Davis, M. and Annen, M.J. *Zeolites*, **11**, 438-442 (1991)
- (14) Bedioui, F., Briot, E., Devynck, J. and Balkus, K.J. *Inorganica Chimica Acta*, **254**, 151-155 (1997)
- (15) Christensen, A.N. and Hazell, R.G. *Acta Chemica Scand.*, **53**, 403-409 (1999)