$Al[PO_4]$	*hP*108	(185) $P6_3cm - d^7c^4$

$AlPO_4$ VPI-5 [2], zeolite VFI
Structural features: AlO_4 and PO_4 tetrahedra share vertices to form a VFI-type zeolite framework with channels delimited by 18-rings parallel to [001]. See Fig. IV.34.

Poojary D.M. et al. (1992) [1]
AlO_4P
a = 1.86005, c = 0.83664 nm, c/a = 0.450, V = 2.5068 nm^3, Z = 18

site	Wyck.	sym.	*x*	*y*	*z*	occ.	atomic environment
O1	12*d*	1	0.0925	0.418	0.074		non-colinear PAl
P2	12*d*	1	0.1676	0.5008	0.018		tetrahedron O_4
O3	12*d*	1	0.1844	0.5777	0.101		non-colinear PAl
O4	12*d*	1	0.2435	0.4915	0.057		non-colinear PAl
O5	12*d*	1	0.3364	0.5114	0.344		non-colinear PAl
Al6	12*d*	1	0.3371	0.5109	0.139		tetrahedron O_4
O7	12*d*	1	0.3504	0.4262	0.081		non-colinear PAl
Al8	6*c*	..*m*	0.4177	0	0.124		tetrahedron O_4
O9	6*c*	..*m*	0.4219	0	0.321		non-colinear PAl
O10	6*c*	..*m*	0.4959	0	0.027		non-colinear PAl
P11	6*c*	..*m*	0.5734	0	0.0		tetrahedron O_4

Transformation from published data: -*x*,-*y*,-*z*; origin shift 0 0 0.186
Experimental: powder, diffractometer, X-rays, R_p = 0.091

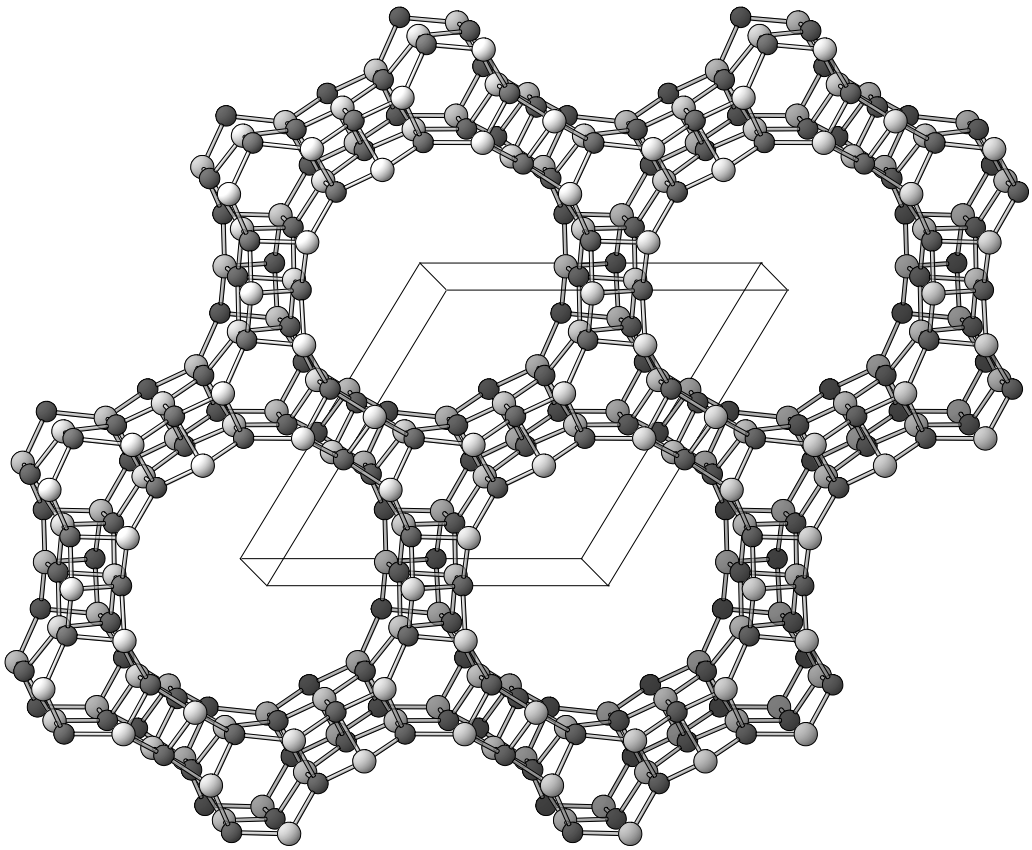

Fig. IV.34. **$AlPO_4$ VPI-5**

VFI-type framework with an ordered arrangement of Al (light) and P (dark) atoms.

References: [1] Poojary D.M., Perez J.O., Clearfield A. (1992), J. Phys. Chem. 96, 7709-7714. [2] Crowder C.E., Garces J.M., Davis M.E. (1989), Adv. X-Ray Anal. 32, 507-514.