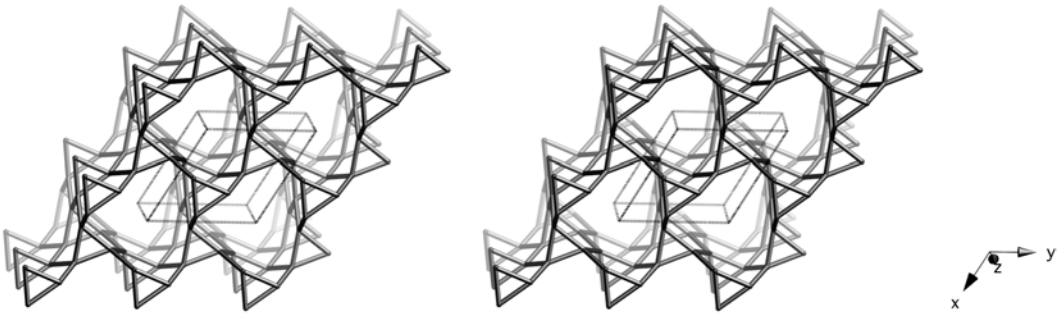
# NPO

## $P6_3/mmc$

Framework Type Data




*framework viewed along [001]*

**Idealized cell data:** hexagonal, $P6_3/mmc$, $a = 9.1$Å, $c = 5.3$Å

**Coordination sequences and vertex symbols:**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $T_1$ (6,*mm*2) | 4 | 10 | 20 | 34 | 58 | 82 | 108 | 144 | 186 | 222 | 268 | 330 | $3{\cdot}6_2{\cdot}6{\cdot}6{\cdot}6{\cdot}6$ |

**Secondary building units:** 3

**Materials with this framework type:**

*Nitridophosphate-1[(1)]

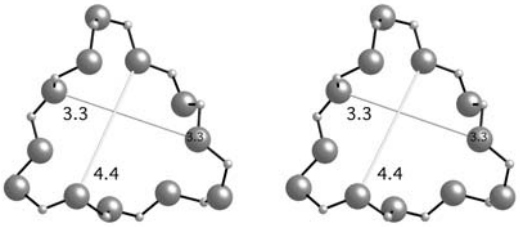
## Type Material: Nitridophosphate-1 **NPO**

Type Material Data

**Crystal chemical data:** $|Li_xH_{12-x-y+z}Cl_z|$ $[P_{12}O_yN_{24-y}]$-**NPO**
with $6 < x < 9$, $2 < y < 4$ and $2 < z < 3$
orthorhombic, $Pna2_1$, $a = 4.753$Å, $b = 14.208$Å, $c = 8.203$Å [(1)]
(Relationship to unit cell of Framework Type:
$a' = c$, $b' = a\sqrt{3}$ , $c' = b$
or, as vectors, $\mathbf{a}' = \mathbf{c}$, $\mathbf{b}' = 2\mathbf{a} + \mathbf{b}$, $\mathbf{c}' = \mathbf{b}$)

**Framework density:** 21.7 T/1000Å$^3$

**Channels:** [100] **12** 3.3 x 4.4*




*12-ring viewed along [100]*

**References:**

(1) Correll, S., Oeckler, O., Stock, N. and Schnick, W. *Angew. Chem., Int. Ed.*, **42**, 3549-3552 (2003)