

$\mu 6_5$

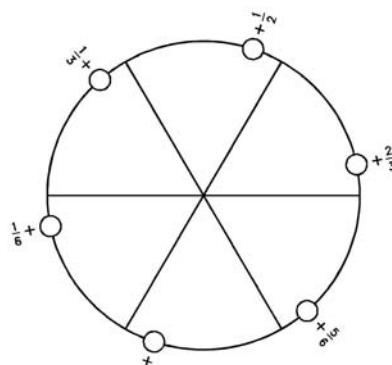
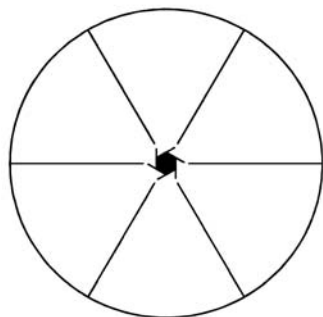
6

Hexagonal

No. 58

$\mu 6_5$

Patterson symmetry  $\mu 6/m$



**Origin** on  $6_5$

**Asymmetric unit**  $0 \leq z \leq \frac{1}{6}$

**Symmetry operations**

- |   |  |  |
|---|--|--|
| (1) 1<br>(1 0,0,0)  | (2) $3^+(\frac{2}{3})$ 0,0,z<br>( $3_z$  0,0, $\frac{2}{3}$ )      | (3) $3^-(\frac{1}{3})$ 0,0,z<br>( $3_z^{-1}$  0,0, $\frac{1}{3}$ ) |
| (4) $2(\frac{1}{2})$ 0,0,z<br>( $2_z$  0,0, $\frac{1}{2}$ ) | (5) $6^-(\frac{1}{6})$ 0,0,z<br>( $6_z^{-1}$  0,0, $\frac{1}{6}$ ) | (6) $6^+(\frac{5}{6})$ 0,0,z<br>( $6_z$  0,0, $\frac{5}{6}$ )      |

**Generators selected** (1);  $t(0,0,1)$ ; (2); (4)

**Positions**

Multiplicity, Wyckoff letter, Site symmetry	Coordinates			Reflection conditions
				General:
6 <i>a</i> 1	(1) $x, y, z$	(2) $\bar{y}, x - y, z + \frac{2}{3}$	(3) $\bar{x} + y, \bar{x}, z + \frac{1}{3}$	$l : l = 6n$
	(4) $\bar{x}, \bar{y}, z + \frac{1}{2}$	(5) $y, \bar{x} + y, z + \frac{1}{6}$	(6) $x - y, x, z + \frac{5}{6}$	

**Symmetry of special projections**

Along [001] 6	Along [100] $\mu 11g$	Along [210] $\mu 11g$
Origin at 0, 0, z	$\mathbf{a}' = \mathbf{c}$ Origin at $x, 0, 0$	$\mathbf{a}' = \mathbf{c}$ Origin at $x, \frac{1}{2}x, 0$

**Maximal non-isotypic non-enantiomorphic subgroups**

**I** [2]  $\mu 3_2$  (44) 1; 2; 3  
 [3]  $\mu 112_1$  (9) 1; 4

**IIa** none

**IIb** none

**Maximal isotypic subgroups and enantiomorphic subgroups of lowest index**

**IIc** [5]  $\mu 6_1$  ( $\mathbf{c}' = 5\mathbf{c}$ ) (54); [7]  $\mu 6_5$  ( $\mathbf{c}' = 7\mathbf{c}$ ) (58)

**Minimal non-isotypic non-enantiomorphic supergroups**

**I** [2]  $\mu 6_5 22$  (67)

**II** [2]  $\mu 6_4$  ( $\mathbf{c}' = \frac{1}{2}\mathbf{c}$ ) (57); [3]  $\mu 6_3$  ( $\mathbf{c}' = \frac{1}{3}\mathbf{c}$ ) (56)