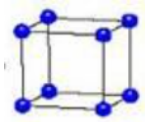
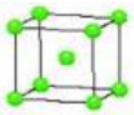
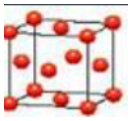
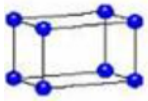
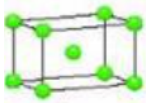
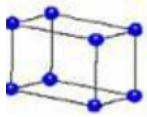
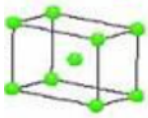
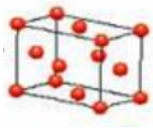
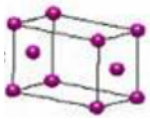
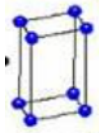
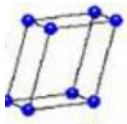
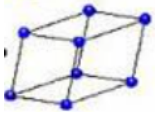
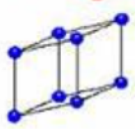
第三课：晶体结构

Wednesday, 11 September, 2019 09:57

1. 实习待办：下周三上课时间实习；
2. 结构基元：对应于一个结点的若干个质点的组合(原子、离子或分子)(不在同一个格子里)；
3. 布拉菲格子及七大晶系：

a.

\晶胞 晶系	简单格子 (P=Primitive)	体心格子 (I=Body-Centred)	面心格子 (F=Face-Centred)	底心格子 (C=Side-Centred)
立方(等轴) (Cubic) $a=b=c$ $\alpha=\beta=\gamma=90°$				N
四方(正方) (Tetragonal) $a=b\neq c$ $\alpha=\beta=\gamma=90°$			N	N
斜方(正交) (Orthorhombic) $a\neq b\neq c$ $\alpha=\beta=\gamma=90°$				
六方(六角) (Hexagonal) $a=b\neq c$ $\alpha=\beta=90°$ $\gamma=120°$		N	N	N
单斜 (Monoclinic) $a\neq b\neq c$ $\alpha=\gamma=90°$ $\beta\neq120°$		N	N	
三斜 (Triclinic) $a\neq b\neq c$ $\alpha\neq\beta\neq\gamma\neq90°$		N	N	N
三方(菱方、三角) (Trigonal) $a=b=c$ $\alpha=\beta=\gamma\neq90°$		N	N	N

4. 晶胞：
   a. 能够充分反映晶体对称性的平行六面体；
   b. 棱与棱之间通过最小单元连接；
   c. 具有最小结构
5. 晶胞参数：$a,b,c,\alpha,\beta,\gamma$；