Сингонія	Міжплощинні віддалі $d(hkl)$
Кубічна $a=b=c$ $\alpha=\beta=\gamma=90°$	$\frac{1}{d^2}=\frac{1}{a^2}\left(h^2+k^2+l^2\right)$
Тетрагональна $a=b\neq c$ $\alpha=\beta=\gamma=90°$	$\frac{1}{d^2}=\frac{1}{a^2}\left(h^2+k^2\right)+\frac{1}{c^2}l^2$
Ортoромбічна $a\neq b\neq c$ $\alpha=\beta=\gamma=90°$	$\frac{1}{d^2}=\frac{1}{a^2}h^2+\frac{1}{b^2}k^2+\frac{1}{c^2}l^2$
Гексагональна $a=b\neq c$ $\alpha=\beta=90°$; $\gamma=120°$	$\frac{1}{d^2}=\frac{4}{3a^2}\left(h^2+hk+k^2\right)+\frac{1}{c^2}l^2$
Ромбоедрична $a=b=c$ $\alpha=\beta=\gamma<120°\neq 90°$	$\frac{1}{d^2}=\frac{1}{a^2}\left\{\frac{(1+\cos\alpha)\left[\left(h^2+k^2+l^2\right)-\left(1-tg^2\frac{1}{2}\alpha\right)(hk+kl+lh)\right]}{\left(1+\cos\alpha-2\cos^2\alpha\right)}\right\}$
Моноклінна $a\neq b\neq c$ $\alpha=\gamma=90°\neq\beta$	$\frac{1}{d^2}=\frac{1}{a^2}\left(\frac{h^2}{\sin^2\beta}\right)+\frac{1}{b^2}k^2+\frac{1}{c^2}\left(\frac{l^2}{\sin^2\beta}\right)-\frac{2hl\cos\beta}{ac\sin^2\beta}$
Триклінна $a\neq b\neq c$ $\alpha\neq\beta\neq\gamma$	$\frac{1}{d^2}=\frac{1}{V^2}\left\{S_{11}h^2+S_{22}k^2+S_{33}l^2+2S_{12}hk+2S_{23}kl+S_{31}lh\right\}$, де $V^2=a^2b^2c^2\left(1-\cos^2\alpha-\cos^2\beta-\cos^2\gamma+2\cos\alpha\cos\beta\cos\gamma\right)$ $S_{11}=b^2c^2\sin^2\alpha$ $S_{22}=a^2c^2\sin^2\beta$ $S_{33}=a^2b^2\sin^2\gamma$ $S_{12}=abc^2(\cos\alpha\cos\beta-\cos\gamma)$ $S_{23}=a^2bc(\cos\beta\cos\gamma-\cos\alpha)$ $S_{31}=ab^2c(\cos\gamma\cos\alpha-\cos\beta)$

Сингонія	Кут Ф між $(h_1k_1l_1)$ і $(h_2k_2l_2)$
Кубічна $a=b=c$ $\alpha=\beta=\gamma=90^\circ$	$\cos\Phi=\dfrac{h_1h_2+k_1k_2+l_1l_2}{\sqrt{\left(h_1^2+k_1^2+l_1^2\right)\left(h_2^2+k_2^2+l_2^2\right)}}$
Тетрагональна $a=b\neq c$ $\alpha=\beta=\gamma=90^\circ$	$\cos\Phi=\dfrac{\dfrac{1}{a^2}\left(h_1h_2+k_1k_2\right)+\dfrac{1}{c^2}l_1l_2}{\sqrt{\left[\dfrac{1}{a^2}\left(h_1^2+k_1^2\right)+\dfrac{1}{c^2}l_1^2\right]\left[\dfrac{1}{a^2}\left(h_2^2+k_2^2\right)+\dfrac{1}{c^2}l_2^1\right]}}$
Орторомбічна $a\neq b\neq c$ $\alpha=\beta=\gamma=90^\circ$	$\cos\Phi=\dfrac{\dfrac{1}{a^2}h_1h_2+\dfrac{1}{b^2}k_1k_2+\dfrac{1}{c^2}l_1l_2}{\sqrt{\left(\dfrac{1}{a^2}h_1^2+\dfrac{1}{b^2}k_1^2+\dfrac{1}{c^2}l_1^2\right)\left(\dfrac{1}{a^2}h_2^2+\dfrac{1}{b^2}k_2^2+\dfrac{1}{c^2}l_2^2\right)}}$
Гексагональна $a=b\neq c$ $\alpha=\beta=90^\circ;\ \gamma=120^\circ$	$\cos\Phi=\dfrac{h_1h_2+k_1k_2+\dfrac{1}{2}\left(h_1k_2+k_1h_2\right)+\dfrac{3}{4}\dfrac{a^2}{c^2}l_1l_2}{\sqrt{\left(h_1^2+k_1^2+h_1k_1+\dfrac{3}{4}\dfrac{a^2}{c^2}l_1^2\right)\left(h_2^2+k_2^2+h_2k_2+\dfrac{3}{4}\dfrac{a^2}{c^2}l_2^2\right)}}$
Ромбоедрична $a=b=c$ $\alpha=\beta=\gamma<120^\circ\neq 90^\circ$	При переході до гексагональних індексів можна використовувати наведену вище формулу
Моноклінна $a\neq b\neq c$ $\alpha=\gamma=90^\circ\neq\beta$	$\cos\Phi=\dfrac{\dfrac{1}{a^2}h_1h_2+\dfrac{1}{b^2}k_1k_2\sin^2\beta+\dfrac{1}{c^2}l_1l_2-\dfrac{1}{ac}\left(l_1h_1+l_2h_2\right)\cos\beta}{\sqrt{\begin{bmatrix}\left(\dfrac{1}{a^2}h_1^2+\dfrac{1}{b^2}k_1^2\sin^2\beta+\dfrac{1}{c^2}l_1^2-\dfrac{2h_1l_1}{ac}\cos\beta\right)\times\\ \times\left(\dfrac{1}{a^2}h_2^2+\dfrac{1}{b^2}k_2^2\sin^2\beta+\dfrac{1}{c^2}l_2^2-\dfrac{2h_2l_2}{ac}\cos\beta\right)\end{bmatrix}}}$
Триклінна $a\neq b\neq c$ $\alpha\neq\beta\neq\gamma$	$\cos\Phi=\dfrac{F}{A_{h_1k_1l_1}A_{h_2k_2l_2}}$, де $F=\left[\begin{array}{l}h_1h_2b^2c^2\sin^2\alpha+k_1k_2a^2c^2\sin^2\beta+l_1l_2a^2b^2\sin^2\gamma+\\ +abc^2\left(\cos\alpha\cos\beta-\cos\gamma\right)\left(k_1h_2+h_1k_2\right)+\\ +ab^2c\left(\cos\gamma\cos\alpha-\cos\beta\right)\left(h_1l_2+l_1h_2\right)+\\ +a^2bc\left(\cos\beta\cos\gamma-\cos\alpha\right)\left(k_1l_2+l_1k_2\right)\end{array}\right]$ $A_{hkl}=\sqrt{\left[\begin{array}{l}h^2b^2c^2\sin^2\alpha+k^2a^2c^2\sin^2\beta+l^2a^2b^2\sin^2\gamma+\\ +2hkabc^2\left(\cos\alpha\cos\beta-\cos\gamma\right)+\\ +2hlab^2c\left(\cos\gamma\cos\alpha-\cos\beta\right)+\\ +2kla^2bc\left(\cos\beta\cos\gamma-\cos\alpha\right)\end{array}\right]}$