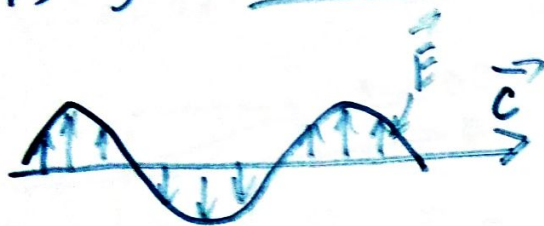
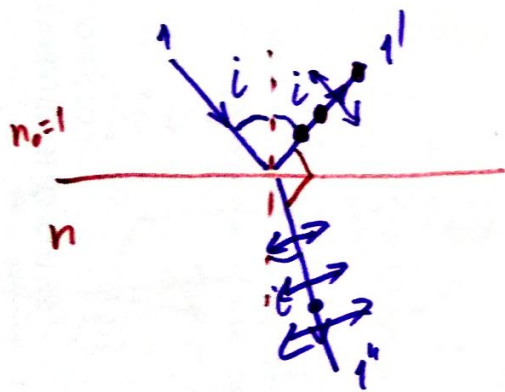
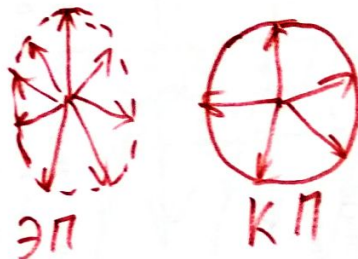


РГЗ зад. N5-24.11



поляризация.



$$\angle i' = 90^\circ \rightarrow i' + i = 90^\circ$$

$$\frac{\sin i}{\sin i'} = n, \quad \sin i' = \sin(90^\circ - i) = \cos i$$

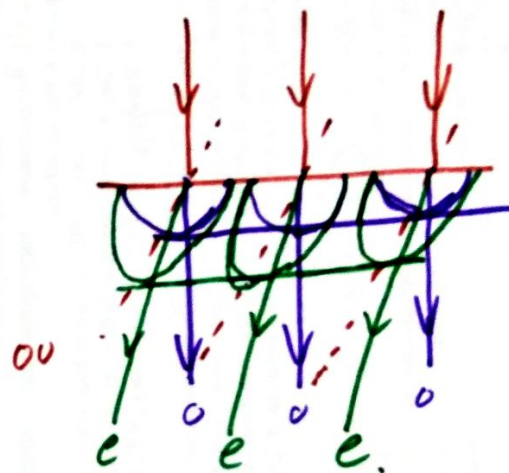
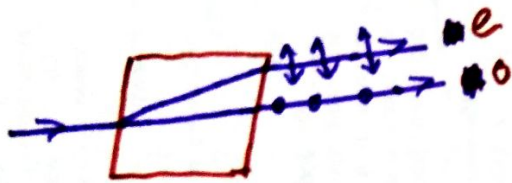
$$\frac{\sin i}{\cos i} = n \Rightarrow \underline{\underline{\tan \theta_0 = n.}}$$

Брюстер

Исландский Шпат

CaCO_3

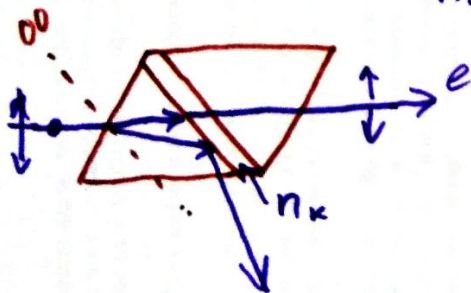
1690



$n_e > n_o$ - "+"
 $n_e < n_o$ - "-"

Николь

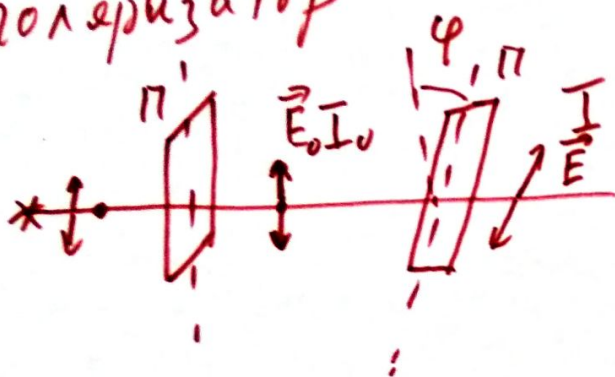
$n_o = 1,66$, $n_e = 1,51$, $n_k = 1,55$



Дихроизм
 поляризд.
 геранатит

Турмалин.

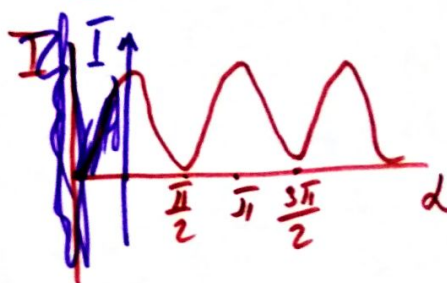
поляризатор



$$E = E_0 \cos \varphi$$

$$\boxed{I = I_0 \cos^2 \varphi}$$

Макс.



$$\varphi = \frac{\pi}{2}$$

$$I = 0$$

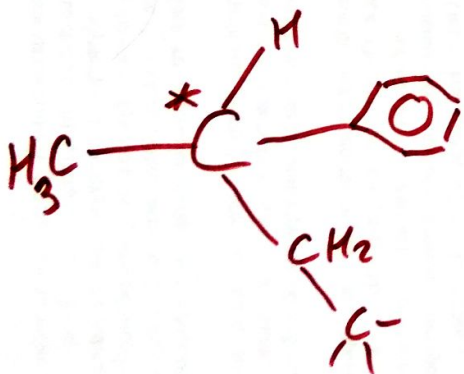


$$\varphi = [\alpha] c d$$

$[\alpha]$ -

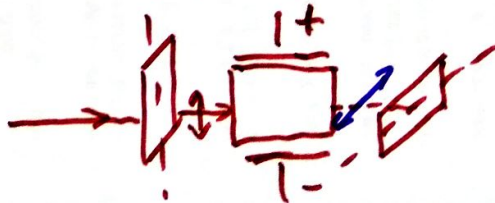
сахариметрия
поляриметр.

$$\varphi = [\alpha] d$$



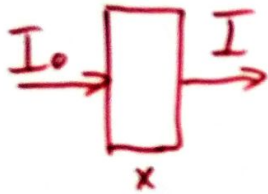
кварц SiO_2 .
хиральность

- фотоупругость.
 - эффект Керра.
- $$n_o - n_e = k E^2$$



- м/о эффект Фарадея. $n_o - n_e = k H^2$

Бугер.



$$I = I_0 e^{-\alpha x}$$

$$\alpha = \frac{1}{\lambda_e} \quad [\alpha] = \text{м}^{-1}$$

$$- \Delta \lambda = 10^{-12} \text{ м}$$

$$- 10^{-7} \text{ м}$$

$\alpha = f(\lambda)$ — спектр поглощения.

$$I_p \sim \frac{1}{\lambda^4} \quad - \text{Рэлей}$$