

Subiectul D. OPTICA

Nr. item	Soluție/Rezolvare
III.a.	$\nu = \frac{c}{\lambda}$ $\nu = 6 \cdot 10^{14} \text{ Hz}$
b.	$\nu_0 = \frac{c}{\lambda_0}$ $E_{cin}^{\max} = \frac{hc}{\lambda} - L \text{ sau } E_{cin}^{\max} = L \left(\frac{\lambda_0}{\lambda} - 1 \right)$ $E_{cin}^{\max} = 0,42 \text{ eV sau}$ $E_{cin}^{\max} = 0,672 \cdot 10^{-19} \text{ J}$
c.	$E_{cin}^{\max} = \frac{mv_{\max}^2}{2}$ $v_{\max} = \sqrt{\frac{2E_{cin}^{\max}}{m}}$ $v_{\max} \cong 3,9 \cdot 10^5 \text{ m/s}$
d.	$eU_{STOP} = E_{cin}^{\max}$ $U_{STOP} = 0,42 \text{ V}$