

Subiectul D. OPTICĂ

Nr. item	Soluție/Rezolvare
III. a.	$L_{ext} = h\nu_0$ $\lambda_0 = \frac{c}{\nu_0}$ <p>Rezultat final: $\lambda_0 \cong 334,62nm$</p>
b.	$\frac{hc}{\lambda} = L_{ext} + \frac{m_e v^2}{2}$ $v = \sqrt{\frac{2\left(\frac{hc}{\lambda} - L_{ext}\right)}{m_e}}$ <p>Rezultat final: $v \cong 6,53 \cdot 10^5 \text{ m/s}$</p>
c.	$U_s = \frac{m_e v^2}{2e}$ <p>Rezultat final: $U_s \cong 1,21V$</p>
d.	$v_1 = \sqrt{\frac{2\left(\frac{hc}{\lambda_1} - L_{ext}\right)}{m_e}}$ $\frac{v_1}{v} = \sqrt{\frac{\frac{hc}{\lambda_1} - L_{ext}}{\frac{hc}{\lambda} - L_{ext}}}$ <p>Rezultat final: $\frac{v_1}{v} = 0,56$</p>