

## LECTURE 5 - EXERCISE

**Question:** how much light is absorbed in this slab of material? What do we need to know for answering?

**Solution:**

- Temperature
- What material it is
- The bandgap ( $E_g$ ) and more specifically the absorption coefficient  $\alpha$
- The illumination spectrum as a function of the frequency of light  $\Phi(\hbar\omega)$
- The thickness of the slab
- The angle of irradiation
- The reflected light, both the primary reflection and the light that is reflected internally at the rear side of the slab

