

Lambert-Beer law

The **Lambert-Beer law** determines absorbance, a quantity characterizing the absorption of electromagnetic radiation in a substance.

Absorbance depends on the thickness of the ***d*** layer, where the radiation is attenuated, and on the absorption coefficient ***α*** (attenuation), which depends on intensity.

$$A = \alpha \cdot d$$

We substitute Beer's law into this formula, where ***ε*** is the molar absorption coefficient and ***C*** is the molar concentration of the solution:

$$\alpha = \epsilon \cdot C$$

We thus obtain the Lambert-Beer law:

$$A = \epsilon \cdot C \cdot d$$

Links

Related Articles

- Photometry
- Beer's Law
- Absorbance
- Light Absorption

External links

- ws:Lambert-Beerův zákon
- Wikipedia. *Light Absorption* [online]. [cit. 2012-31-12]. <https://cs.wikipedia.org/wiki/Absorption_sv%C4%9Btla>.

Source

- RETURNED, Leoš – ROSINA, Joseph, et al. *Medical Biophysics*. 2010. edition. 2005. 524 pp. ISBN 978-80-247-1152-2.