

Atomic Absorption Photometry

Atomic absorption photometry (also *atomic absorption spectrophotometry*, *atomic absorption spectrometry*, *atomic absorption spectroscopy*, abbreviated AAS) is an optical method used to determine the presence of metallic elements in a sample.

Principle

It uses the absorption of visible or ultraviolet light by free atoms of an element. The sample is first atomized at high temperatures, and then the light of a certain wavelength is passed through it. A **photomultiplier tube** is usually used as a detector. The method is not very widespread because of the instrumental requirements, but it is difficult to replace, for example, in the determination of trace elements such as copper or zinc.



Atomic Absorption Spectrometer

 For more information see *Atomic absorption photometry / Details*.

Sources

External links

- Štern, P.: Základy instrumentální analýzy v klinické biochemii. In Schneiderka P (Ed): Vybrané kapitoly z klinické biochemie. [online] <http://www1.lf1.cuni.cz/~kocna/biochem/text11.htm>. Cited 2010-03-09
- Atomic absorption spectroscopy (Wikipedia)
- ATOMOVÁ ABSORPČNÍ SPEKTROMETRIE on cheminfo.chemi.muni.cz website (http://cheminfo.chemi.muni.cz/chem_sekce/predmety/C7300/AAS/aas.doc)