

TDC Part III

Practical (Lab Work)



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TOPIC:- Spectrophotometer

Spectrophotometer

Spectrophotometer is an optical instrument used in lab for both qualitative and quantitative analysis. In this instrument, the U.V/visible light is passed through the sample and a detector is used to confirm the absorbance range. If the wavelength of the absorbing compound is known, one can do both qualitative and quantitative analysis. Now-a-days, it is very frequently used as basic laboratories experiments. Spectrophotometer comes in both single and double beam mode. Double beam is quiet common where there are two cuvette holders; one for reference and another one for the sample or test solution. Spectrophotometer works on Beer and Lambert's law principle where absorbance is directly proportional to the concentration of test compound. A simple spectrophotometer model is represented in Figure 1.3.



Figure 1.3. General spectrophotometer

