## **Seminar Lectures**

## **Lecture-3**

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**Topic: UV-Vis Absorption Spectroscopy** 

Ultraviolet-visible (UV-Vis) spectroscopy is a widely used technique in many areas of science ranging from bacterial culturing, drug identification and nucleic acid purity checks and quantitation, to quality control in the beverage industry and chemical research. This topic describes how UV-Vis spectroscopy works, how to analyze the output data, the technique's strengths and limitations and some of its applications.

UV-Vis spectroscopy is an analytical technique that measures the amount of discrete wavelengths of UV or visible light that are absorbed by or transmitted through a sample in comparison to a reference or blank sample. This property is influenced by the sample composition, potentially providing information on what is in the sample and at what concentration. Since this spectroscopy technique relies on the use of light, we will start from the basics by considering the properties of light.



