

UV-Vis Spectroscopy

Ultra Violet Visible Spectroscopy (UV-Vis) is an important tool for analysis of compounds that absorb visible or ultraviolet light. Examples of ultraviolet absorbers include aromatic compounds (benzene, toluene, naphthalene), phenols (many of which are antioxidants that are natural or manmade), organic acids, etc. These are compounds that are not visibly colored. Colored compounds will have absorbance in the visible region of the spectrum. The absorbance of light is used to identify and quantify compounds in products and can be a very sensitive probe.

In our laboratory we use a Cary 300 Bio UV-Visible spectrometer that covers the range from 190 nm to 900 nm--see figure below. This spectrometer has an extended absorbance range that allows one to measure strong absorption bands.

Picture of Cary 300 UV-Visible Spectrometer

