



INTRODUCTION AND APPLICATIONS TO UV VISIBLE SPECTROPHOTOMETRY

Nivrutti S. Adhau, Rohit N. Tekade, Rohan V. Burghate

P.R. Patil, Institute of Pharmacy, Talegaon (SP), Dist- Wardha 442202.

ABSTRACT:

Ultraviolet visible spectroscopy or ultraviolet visible spectrophotometry (UV-Vis or UV/Vis) refers to absorption spectroscopy or reflectance spectroscopy in the ultraviolet - visible spectral region. This means it uses light in the visible and adjacent ranges. The absorption or reflectance in the visible range directly affects the perceived colour of the chemicals involved. In this region of the electromagnetic spectrum, atoms and the molecules undergo electronic transitions. Absorption spectroscopy is complimentary to fluorescence spectroscopy, in that fluorescence deals with the transitions from the excited state to the ground state, while absorption measures transitions from the ground state to the excited state. Absorption spectrophotometry in the ultraviolet and visible region is considered to be one of the oldest physical method for quantitative analysis and structural elucidation. Wavelength of UV spectroscopy is 400-200 nm and wavelength of Visible spectroscopy 800-400 nm.

KEY WORDS: U.V. Visible spectroscopy, Absorption, Fluorescence.

Corresponding Author: Nivrutti S. Adhau
Email: nivruttiadhau253@gmail.com

Indian Research Journal of Pharmacy and Science; 19(2018)1750;
Journal Home Page: <https://www.irjps.in>