

INFLUENCE OF ALIZARIN RED DYE ON SOME OPTICAL PROPERTIES OF (PVP: ZN) FILMS

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ABSTRACT

Thin films of polyvinylpyrrolidone /zinc acetate (PVP: Zn) of 1:1 doped with various concentration of alizarin red were prepared by cast method and characterized using x-ray diffraction (XRD) technique and FT-IR spectroscopy.

Optical absorption spectra of these thin films have been recorded in the wave length range (190-900)nm using UV-visible spectrophotometer.

The values of optical band gap with the variation of composition in the blend films have been found from 3.45 to 3.1eV.

Refractive index, extinction coefficient have been calculated at 500 nm wavelength in the region where the absorbance by the film is the maximum.

KEYWORDS: *Optical Properties, Polyvinylpyrrolidone & Alizarin Red Dye*

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