

Study of the Properties of laser Beam Propagation through the (Reactive Red) dye

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Abstract : In this work, the properties of the laser beam were studied by using optical system that consists of the (He- Ne) laser ($\lambda = 632.8\text{nm}$, $p=1.04\text{mw}$) and solid state laser beam (422nm), $P=14.64\text{mw}$, the parameter of LASER beam (spot, profile distribution, intensity) in the (Reactive Red dye) with concentration $10^{-9}\text{mole.L}^{-1}$ were studied at different distance. Measurement was obtained by using a CCD camera. Absorption spectrum of the dye was measured by using The Ultraviolet –Visible Spectrometer. Absorption coefficient value for Reactive Red was calculated in the two cases.

Key words : reactive red; He- Ne laser; solid state laser.

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