Solvent Enhancement of Electronic Intensity in Acridine and 9-aminoacridine

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Abstract

The electronic absorption spectra of acridine and 9-aminoacridine have been studied in various fluid solutions at room temperature. The modified Onsager-Abe-Iweibo reaction field model for a spherical molecule was employed to determine the oscillator strength, f, in vapour phase. The intensity enhancements for the forbidden transition observed are ascribed to perturbation forces between the solute and solvent molecules.

Keywords: Intensity enhancement; Oscillator strength; Forbidden transition and Perturbation forces