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Spectrofluorimetric Study of 3-Amino Pyridine in Micellar Media

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Abstract — This study focuses on the spectrofluorimetric behaviour of a medicinally and analytically important molecule, 3-amino pyridine in various surfactant solutions. The relatively weak fluorescence of 3-amino pyridine is significantly enhanced in micellar media of nonionic surfactants. The influence of the surfactant structures, concentrations and working experimental conditions on the fluorescence spectra of 3-amino pyridine (3-AP) was thoroughly evaluated and discussed. The solubilizing action of the surfactant has been supplemented by the theoretically calculated spectral parameters like empirical fluorescence coefficient, quantum yield, molar extinction coefficient and Stokes' shift. An attempt has been made to provide a unique format for the analytical and medicinal application of 3-amino pyridine based on micellization process.

Keywords : *Solubilization, Micellar media, Fluorescence, 3-amino pyridine.*