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## Fluorescence Study of p-Nitroacetophenone in Different Micellar Media

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## ABSTRACT

Fluorescence technique is an important tool for investigation of interaction between micelles and molecules. By spectroscopic studies, it has been explained that different solubilized molecule are found in different regions of micelles. The most striking feature of micelles is their ability to solubilize variety of compound in different regions. This process is expected to be most pronounced in the region of critical micellar concentration (CMC) of particular surfactant. P-Nitroacetophenone is a fluorescence aromatic compound and has pharmaceutical and analytical importance. The present study is carried out to investigate the solubilization of p-Nitroacetophenone in presence of various surfactants at their critical micellar concentration or marginally above the critical micellar concentration, employing fluorescence technique. The solublization phenomenon has also been confirmed by absorption spectral studies. Spectral parameters like, quantum yield, Stokes' shift were also calculated in micellar media at different concentration.

**Keywords:** Fluorescence, micellization, solubilization, p-Nitroacetophenone, critical micellar concentration.