SECTION E

E-26

MICELLAR EFFECTS ON ACID-BASE EQUILIBRA AS STUDIED BY FLUORESCENT pH INDICATORS

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The pK_a values of a series of fluorescent pH indicators[1] have been measured *via* fluorescent intensity-pH profiles in the presence of sodium lauryl sulphate micelles and compared with those values obtained in micelle-free aqueous solution. The relationships have been analyzed in terms of a simple thermodynamic cycle which shows that relatively hydrophobic organic ions can enter a micelle of opposite charge in preference to being hydrated in bulk water. This view that a micelle, unlike a simple hydrocarbon phase, can be accessible to organic ions has currently gained experimental support from others[2].

References

1. de Silva, A. P., Rupasinghe, R. A. D. D. *and* Peiris, S. L. A. (1982). *Proc. Sri Lanka Ass. Advnl. Sci.*, 38 (1), 68.
2. Whitten, D. G. *et al.* (1982), *Tetrahedron.*, **38**, 2455.