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VISCOSITY, UV AND FTIR STUDY OF TERNARY MIXTURES OF DCFC, DMSO AND ALKANOLS AT 303·15 K TEMPERATURE WITH SYNTHESIS AND CHARACTERIZATION OF DCFC

Sunil G Wagh[1], Vaman R Mandwade[2] & Walmik B Shirsath[3]

[1, 2]Associate Professor, Department of Chemistry, M. G. V's Samajshree Prashantdada Hiray Arts, Science & Commerce College, (Affiliated to Savitribai Phule Pune University, Pune) Nampur, Tal-Baglan, Nasik (M. S.), India

[3]Associate Professor, Department of Chemistry, Karm A. M. Patil Arts, Commerce and Kai, Annasaheb N. K. Patil Science Senior College, (Affiliated to North Maharashtra University, Jalgaon) Pimpalner, Dhule, India

ABSTRACT

In this work, we report a combined experimental viscosity, UV and FTIR of ternary mixtures of 6, 8-dichloro-3-formylchromone (DCFC)+ dimethyl sulfoxide (DMSO) + tertiary butyl alcohol (TBA) and 6, 8-dichloro-3-formylchromone (DCFC)+ dimethyl sulfoxide (DMSO) + ethyl alcohol (ET) at 303.15 K as well as synthesis and characterization of DCFC. Viscosity data over the entire composition range have been used to compute percentage (%) of alkanols. For DCFC + TBA + DMSO, minimum viscosity is about 90 % while maximum at 0 % and for DCFC + ET + DMSO; minimum viscosity is observed at 20 % while maximum at 100 %. FTIR study implies that υOH and υS=O for both mixtures are minimum at 90 % and maximum at 10 % indicating interaction becomes strong as the % of alkanols increases.

KEYWORDS: *Viscosity, UV, FTIR, MS, NMR*

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