SECTION E: PHYSICAL SCIENCES

E-01 **COMPLEXES OF NATURALLY OCCURRING LIGANDS WITH BIOLOGICALLY IMPORTANT METAL IONS. III COMPLEXES OF 1-HYDROXYXANTHONE WITH COPPER, COBALT AND NICKEL**

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The role of naturally occurring ligands in metal ion transport and storage has little been explored. We previously reported on the complexes of 8-hydroxyquinoline-4-carboxaldehyde isolated from a plant with several biologically significant metal ions. In a continuing series of investigations on the complexes of naturally occurring ligands we were interested in studying xanthones and their complex forming ability.

The present work deals with the preparation of the complexes of 1-hydroxy-xanthone with copper, nickel and cobalt. The resultant solids were characterised by metal ion analysis and infrared spectroscopy. This work may serve as a model system to understand complex formation and hence the biological significance of xanthones in plants.