



Study of Effect of Strong Resonance Stabilized Intramolecular Hydrogen Bonding in 1-(1-hydroxy-2-naphthyl)-3-(phenyl or substituted phenyl)-prop-2-en-1-ones And on Their Complexation with Some Transition Metals Through ¹H-NMR and Electronic Spectroscopic Investigations

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ABSTRACT

Some copper (II), nickel (II) and cobalt (II) complexes of naphthalene analogues of 2'-hydroxychalcones have been synthesized and characterized. The complexes have the general formula $ML_2 \cdot XH_2O$ ($X=2$ or 0) where L is the deprotonated ligand, the naphthyl chalcone and M is the divalent metal ion. In the present study, the effect of strong resonance stabilized intramolecular hydrogen bonding in naphthalene analogues of 2'-hydroxychalcones and on their complexation with transition metals such as copper(II), nickel(II) and cobalt(II) has been studied through their ¹H-NMR and electronic spectroscopic investigations.

Keywords: ¹H-NMR spectra, electronic spectra, chalcones, complexes, absorption, intramolecular hydrogen bonding and chelates.
