



Analytical, Spectral And Structural Elucidation of The Complexes of Co(II), Ni(II), Cu(II) and Zn(II) With Furil-Bis-(2-Aminothiophenol)

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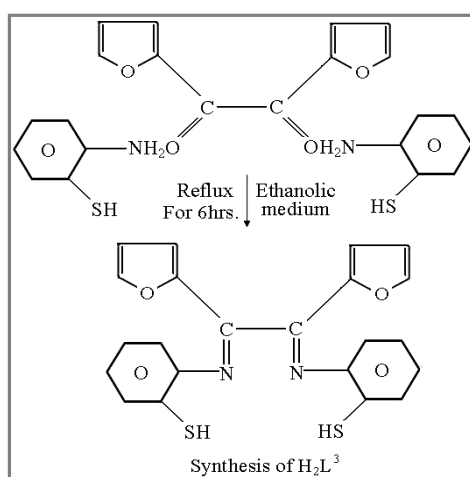
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ABSTRACT

Binuclear complexes of Co(II), Ni(II), Cu(II) and Zn(II) with Furil-bis-2-aminothiophenol (Schiff base) ligand have been synthesized and characterized on the basis of molar mass, elemental analysis, IR as well as electronic spectral studies, molar conductance and magnetic susceptibility measurement. On the basis of above physicochemical and spectrometric measurements it is proposed that the compounds act in a bi-dentate manner. Such complexes have varieties of useful pharmaceutical activities and many of them gained wide acceptance in clinical practices. The resulting complexes have been tested for their antifungal activity against various organisms. Complexes, excepting that of Zn(II), are colored. Electronic spectra and magnetic susceptibility study proposes octahedral geometry of the complexes.

Graphical Abstract



Synthesis of furil-bis-2-aminothiophenol.

Keywords: Binuclear complexes, Furil-bis-(2-aminothiophenol), Diketones, Octahedral).