



Synthesis, structural and spectral studies of 5-methyl 2-furaldehyde thiosemicarbazone and its Co, Ni, Cu and Cd complexes

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Résumé en anglais	 The reaction of cobalt, nickel, copper and cadmium chlorides and bromides with 5-methylfurfural thiosemicarbazone (M5FTSC) leads to the formation of two series of new complexes: $[M(M5FTSC)_2X_2]$, $[M(M5FTSC)X_2]$. They have been characterized by spectroscopic studies (infrared, 1H NMR, and electronic spectra). The crystal structures of the free ligand M5FTSC and of the compound $[CuCl_2(M5FTSC)]$ have been determined by X-ray diffraction methods. For the Co(II), Ni(II) and Cu(II) complexes, the central atom is coordinated through the sulphur atom and the azomethine nitrogen atom whilst for the Cd(II) complexes, the coordination atoms are the sulphur and furanic oxygen atoms instead of the azomethine nitrogen.
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