VIBRATIONAL SPECTRAL STUDIES OF METAL(II) HALIDE COMPLEXES WITH 3-AMINOTOLUENE AND 4-AMINOTOLUENE

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The complexes of the ML_2X_2 (M: Mn^{+2}, Co^{+2}, Ni^{+2}, Cu^{+2}, Zn^{+2}, Cd^{+2}, Hg^{+2}, L: 3-aminotoluene or 4-aminotoluene and X: Cl, Br or I) form were prepared and characterised by their elemental analyses, UV-vis electronic absorption spectra, magnetic susceptibilities, FT-IR spectra and FT-Raman spectra. The observed IR and Raman bands of the complexes have been assigned. Coordination effects on the vibrational spectra of the free ligands have been investigated. The environment and symmetry around each metal atom have been determined from far region IR and Raman spectra of the complexes.

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