

Abstract

Two new hexadentate ligands, N, N', N'', N'''-tetrakis-(4-pyridylmethyl)-1,4-diaminobutane (4-pytpbn) and N,N''-bis-(2-pyridylmethyl)-N',N'''-bis-(4-pyridylmethyl)-1,4-diaminobutane (2,4-pytpbn) have been synthesized and structurally characterized. Complexes of 4-pytpbn of the $2+ 2+$ - -general formula $[M(4-pytpbn)X_2]$, where M = Co (1, 2, 5), Cd (3), Cu (4); X = NO₃, Cl, - 2+ 2+ 2+ 2+ 2- 2- 2-ClO₄, and $[M_2A_2(4-pytpbn)]$, where M = Zn (6), Cd (7) and Ni (8, 9), A = adc, fum, succ²⁻, have been synthesized. All these complexes have been characterized by elemental analysis, FTIR spectroscopy, thermogravimetric analysis and powder X-ray diffractometry. Single crystal X-ray analysis of the ligands and preliminary results of 1 and 2 that establish the presence of expected pores in these are also reported.