A NEW CRYSTALLINE FRAMEWORK FORMED FROM 1,4-bis(4-PYRIDYLMETHYL)PIPERAZINE AND Cd(NO₃)₂: INTERPENETRATING MOLECULAR LADDERS FROM *T*-SHAPED BUILDING BLOCKS

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Coordination of a pyridine-based bridging ligand, 4-bpmp, with cadmium nitrate afforded an infinite ladder-type complex $\{[Cd(4-bpmp)_2(H_2O)Cl_2]\}_n$ (A) (4-bpmp = 1,4-bis(4-pyridylmethyl)piperazine) containing T-shaped building blocks. IR spectra, elemental analysis, and X-ray single-crystal diffraction were carried out to determine the composition and crystal structure of complex A. Inclined interpenetration of infinite ladders was observed in the solid structure. The combined work demonstrates the ability of bipyridyl coordination polymer leads to a novel metal complex with impressive structural motif.

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