FIRST-ROW TRANSITION METAL PYRIDINE / γ -PICOLINE SULFATE COMPLEXES

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The crystal structures of several first-row transition metal pyridine sulfate and transition metal γ -picoline sulfate complexes of the form [(py)_XM](SO₄) (M = Fe, Co, Ni, Cu and Zn) have been determined. Though crystals for the different metals were isolated under similar reaction conditions, many of the resulting complexes possess different metal coordination geometries (octahedral, distorted octahedral, square pyramidal, trigonal bipyramidal and tetrahedral) which form infinite one dimensional polymeric chains or dimeric frameworks of alternating metal ions and sulfato ligands. Information on the above complexes will be presented.