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Abstract: A new series of 12 complexes of oxovanadium(IV) with hydrazones of isonicotinic acid hydrazide, namely N-isonicotinamido-3',4',5'-trimethoxybenzalaldimine (INH-TMB) and N-isonicotinamido-2'-furanaldimine (INH-FUR) with the general formula VOX₂.nL (X = Cl, Br, I, NCS, NO₃, n = 1; X = ClO₄, n = 2; L = INH-TMB or INH-FUR) were synthesized and characterized on the basis of analytical, conductance, molecular weight, magnetic moment, infrared and electronic spectral data. The infrared data of the complexes reveal the bidendate nature of both ligands and coordination to carbonyl-oxygen and azomethinic-nitrogen atoms. The probable coordination number of the central metal is 5. Thermal stabilities of the complexes were studied through thermogravimetric analysis.

Key Words: Oxovanadium(IV), Hydrazones, Coordination compounds.

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