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## Spectroscopic and Structural Study of Ni(II) Dipicolinate Complex with 2-amino-4-methylpyrimidine

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**Abstract:** Nickel(II) dipicolinate complex containing 2-amino-4-methylpyrimidine (2A-4Mpy), [Ni(2A-4Mpy)(dpc) (H<sub>2</sub>O)<sub>2</sub>] · 2H<sub>2</sub>O was synthesized in solid state and its structural and spectroscopic properties were determined by XRD, IR, and UV-Vis techniques. The crystal data revealed that the Ni complex is in triclinic crystal systems with space group P-1 and Z = 2. The Ni(II) ion is bonded to dipicolinate ligand through pyridine N atom together with one O atom of each carboxylate group, 2 aqua ligands, and the N atom of 2-amino-4-methylpyrimidine, forming distorted octahedral geometry. IR and UV-Vis spectra of the complexes all agree with the observed crystal structure.

**Key Words:** Metal(II)-dipicolinate complexes, X-ray crystal structure, UV-Vis, IR.

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