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Cobalt (II) complex of (3-Amino-5-[E-(4-ethylbenzaldehyde)4-methyl-2-phenylcyclopentanone]: Synthesis, characterization and photocatalytic studies

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Abstract: Cobalt(II) complex of 3-Amino-5-[E-(4-ethylbenzaldehyde)4-methyl-2-phenylcyclopentanone] was synthesized and characterized using various spectroscopic techniques. The rate of photocatalytic degradation of methylene blue using prepared metal complexes was carried out under UV light. The complex shows appreciably degraded the methylene blue for 40 mg and further increase dosage the activity reducing. The generation of the hydroxyl radical is responsible for the degradation of dye. The dye has been successfully degraded 61.6% in the presence of cobalt complex.

Key words : Metal complexes, methylene blue, photo catalysis.

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