



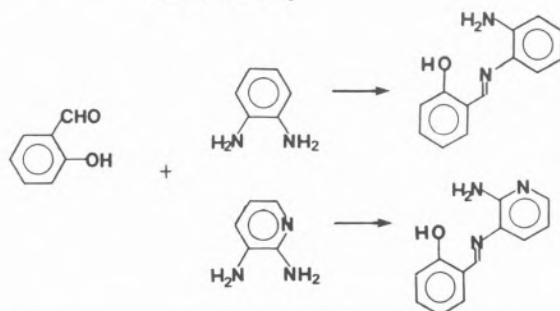
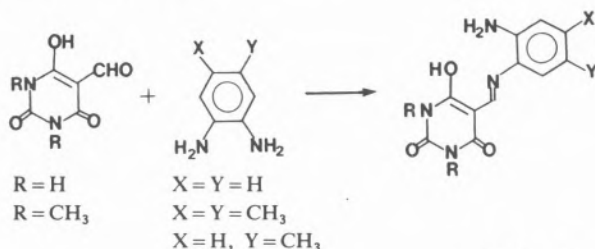
PS5.29 — TH

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SYNTHESIS OF COBALT(II) COMPLEXES WITH NON-SYMMETRIC SCHIFF BASES

As models for oxygenases, we have undertaken the synthesis of copper and cobalt complexes with Schiff bases derived from pyrimidine bases [1-3]. In order to study the influence of the aromatic ring on the half-wave potentials and on their catalytic efficiency, we have prepared non-symmetric Schiff bases with aromatic diamines. Condensation of the carbonyl function with only one end of the diamine is obtained in the presence of a tertiary amine with 5-formyl barbituric acid, 5-formyl 1,3-dimethyl barbituric acid or with salicylaldehyde.



Further condensation of these half-units with various aromatic hydroxy aldehydes leads to non-symmetric Schiff bases.

The corresponding cobalt(II) complexes have been prepared and studied by usual spectroscopic methods. Their ability to catalyse the oxidation of phenols will be described.

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COORDINATION CHEMISTRY OF IRON BIS-PYRIDOXAL ISONICOTINOYL HYDRAZONE: STEREOCHEMICAL AND ELECTRO-CHEMICAL CONSIDERATIONS

Isoniazid can interact with the body pyridoxal to form pyridoxal isonicotinoyl hydrazone (PIH) shown to be an efficient iron chelator which can deplete the body of iron and cause an anemia («pyridoxine-responsive anemia»). It was identified recently as a promising candidate for removal of toxic accumulation of iron from the body when given orally [1]. This is an advantage over desferrioxamine (desferal) a drug in current use being administered by injection.

We report the synthesis and the X-ray crystal structure of a 2:1 PIH:Fe(III) complex which emerged from a neutral aqueous solution