**Synthesis and Characterization of New Zinc(II)Complexes Containing Substituted Bis(arylimino)pyridine [NNN] Ligands**

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**Abstract**

# Ligand synthesis is the most important step in the development of metal complexes which reveal unique properties and novel reactivity. Furthermore, it has been shown that change in the ligand structure can lead to a change in the chemical properties of coordination compound.1 In this regard, Schiff base 2,6-bis(arylimino)pyridine ligands have been widely studied over the last decades due to their diverse chemical properties.2The chemical structure of 2,6-bis(arylimino)pyridine ligands allows strong and stable bonding with metals and the large conjugated system helps to stabilize various oxidation states. Along these lines, we have synthesized tridentate [NNN]-type pincer based Schiff base ligands (1a-1b) with some modifications in literature method.3Zinc(II) complexeswith Schiff base ligands were synthesized by using Zn(OAc)2 as a metal precursor in the presence of ethanol as a solvent(Figure 1). The zinc(II) complexes (2a-2b) were characterized by NMR spectroscopy and IR spectroscopy.We will be utilized these complexes as catalysts for C−N bond forming reactions in future course of study.



**Figure 1**

References:

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Thrust area – Organometallics and homogenous catalysis

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