
Internal Webinar

An Unsymmetrical Imino–Phosphanamidinate and Boraamidinate Ligands – An alternative for amidinate ligands

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A principal strategy in inorganic and organometallic chemistry is the design of specific ligand systems to prepare metal complexes of particular nuclearity, coordination number, geometry, and reactivity. The primary function of these ligands is to provide stereo electronic modulation that allows harnessing of specific properties from the metal complex, for example, catalytic specificity and efficiency.¹ In our ongoing work, we have developed a new unsymmetrical imino-phosphanamidinate (NPN) and bora-amidinate ligands. In the seminar, synthetic details of these ligands, coordination capability towards different metal ions and catalytic ability of the newly synthesized metal complexes will be discussed.²

References:

1. (a) C. J. Elsevier, J. Reedijk, P. H. Walton, M. D. Ward, Dalton Trans., 2003, 1869–1880.
(b) A. L. Gavrilova, B. Bosnich, Chem. Rev., 2004, 104, 349–383.
2. S. Anga, J. Acharya, and V. Chandrasekhar, J. Org. Chem., 2021, 86, 2224–2234.

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