Synthesis of iridium complexes containing both hydride and functionalized triazolylidene ligands

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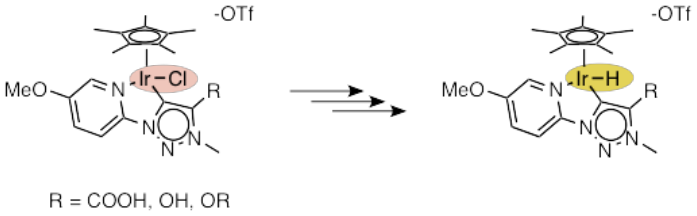
Iridium complexes with functionalized triazolylidene ligands have shown attractive performance in catalyzing oxidation reactions such as water oxidation and in mediating C–H bond activation.[1,2] On the other hand, hydride systems are considered to be the key species for enhancing such bond activation.

Here we will discuss the synthetic aspects of a new family of iridium(III) complexes containing both a hydride and a mesoionic carbene ligand as potential catalyst precursors for application in bond activation catalysis.



[1] M. D. Kärkäs , O. Verho, E. V. Johnston, B. Åkermark; *Chem. Rev.,* **2014**, 114, 11863.
[2] J. A. Woods, S. Bernhard, M. Albrecht; *Molecular Water Oxidation Catalysis*, **2014**, John Wiley & Sons, Ltd, p. 113.