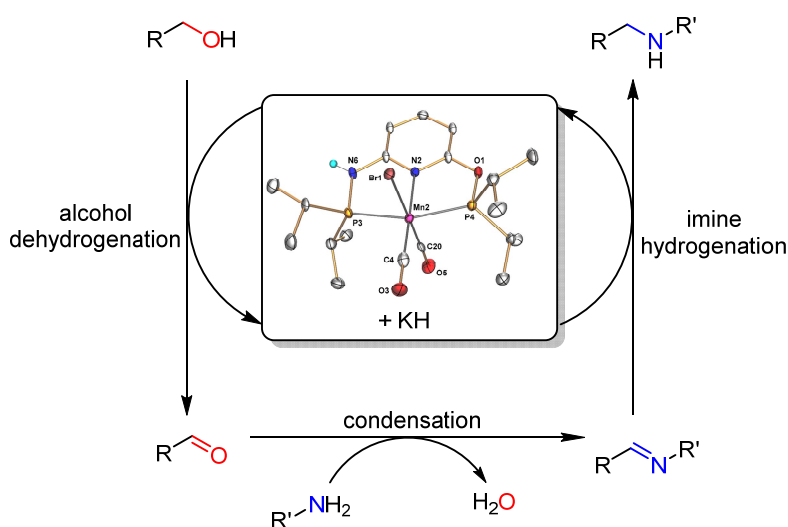


UNSYMMETRICAL Mn(I) PNNOP PINCER CATALYSTS FOR HYDROGEN BORROWING REACTIONS

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The efficient synthesis of nitrogen-containing compounds is of significant interest to academic and industrial research thanks to their biological activity and relevance as fine and specialty chemicals, agrochemicals, and pharmaceuticals. The hydrogen borrowing methodology and related processes has been widely used for their atom efficient and green synthesis, but most catalyst systems are based on precious metals, such as Ru and Ir [1]. More recently, interest has shifted to develop catalysts based on cheaper and more readily available base metals, in particular Fe, Co, and Mn [2]. The application of Mn(I) pincer catalysts in dehydrogenation and hydrogenation reactions has seen tremendous growth since the initial reports in 2016 [3,4]. Herein we disclose the synthesis of unsymmetric Mn(I) PNNOP pincer complexes and their application in hydrogen borrowing and dehydrogenative coupling processes.



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