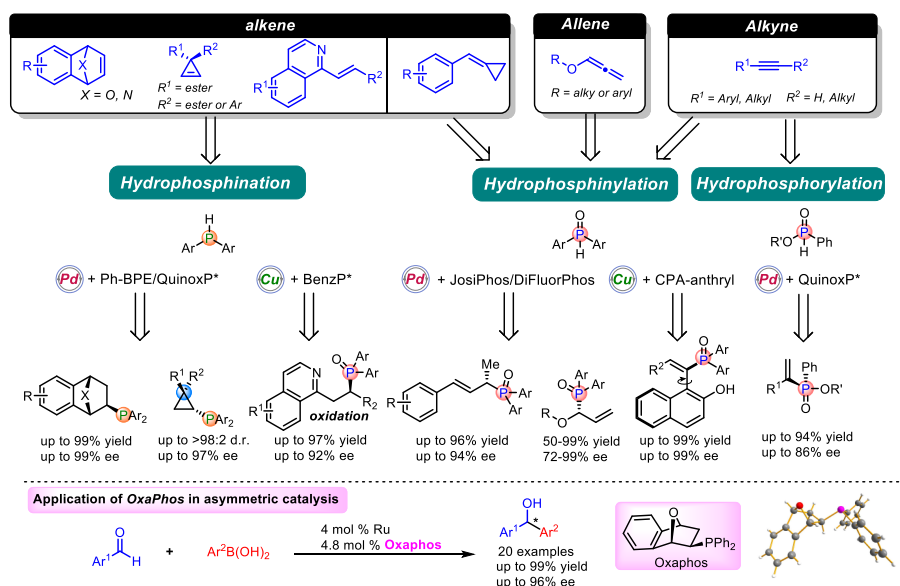


Facile Access to Chiral Phosphorus Compounds via Transition Metal-catalyzed Asymmetric Hydrophosphination

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Asymmetric catalysis is a very broad and exciting field. In spite of hundreds of chiral ligands developed, phosphine ligands are keeping their prestigious role as the most powerful and frequently-used ligands. With the exceptionally high demand of chiral phosphine ligand, it is significant to develop efficient methods for construction these chiral organophosphorus compounds. Transition metal-catalyzed asymmetric hydrophosphination is the most direct pathway for the synthesis of chiral phosphine compounds. Recently, our group developed asymmetric hydrophosphination of alkenes,¹⁻⁴ alkene⁵ and alkynes.⁶⁻⁷ These approaches allowed concise, direct, modular and unprecedented accesses to potentially valuable chiral phosphorus compounds. In addition, the easily accessible monophosphine products-Azaphos and Oxaphos were successfully used in asymmetric transformation



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Poster/talk Number