Key words

palladium

bis(imidazoline) ligands

aza-Morita–Baylis–Hillman reaction

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Enantioselective Aza-Morita–Baylis–Hillman Reactions of Acrylonitrile Catalyzed by Palladium(II) Pincer Complexes having C_2-Symmetric Chiral Bis(imidazoline) Ligands

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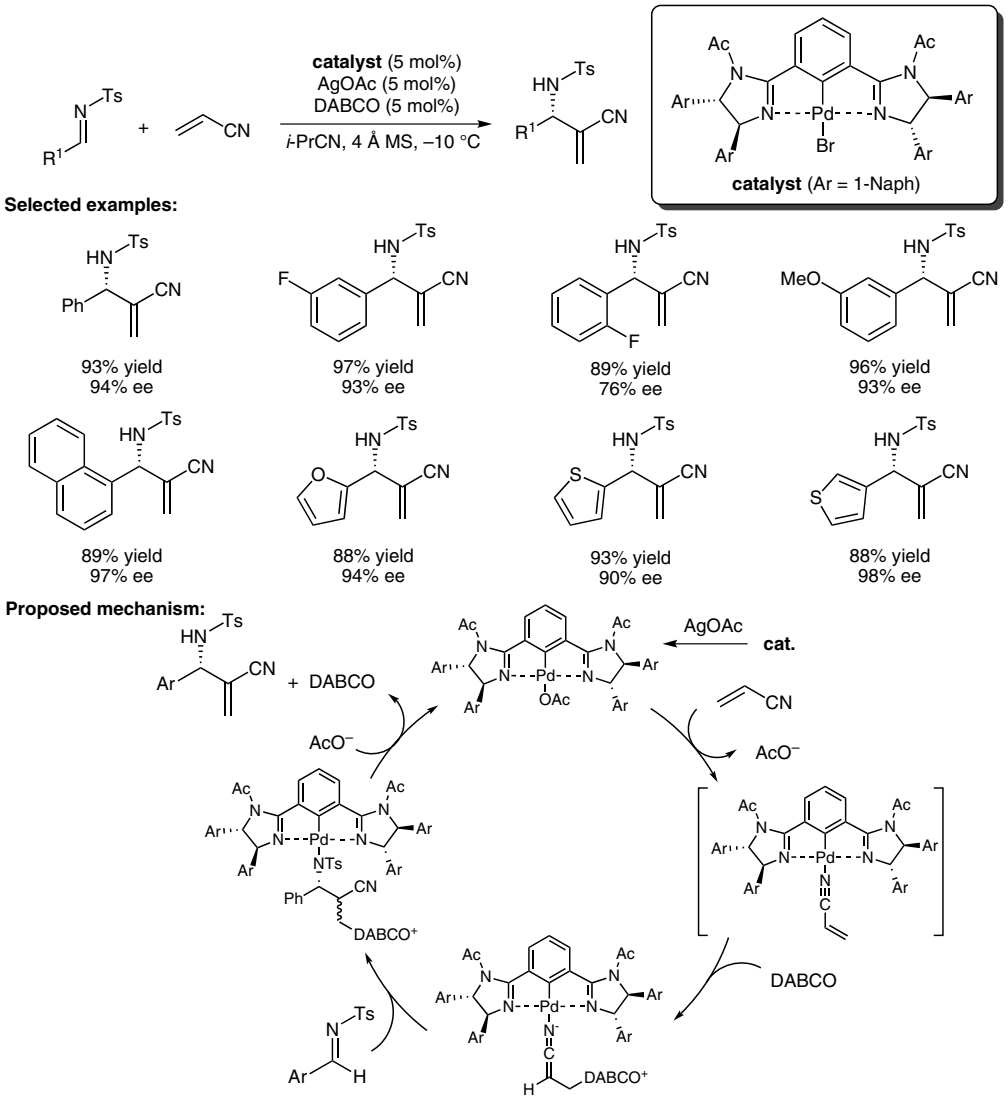
Palladium-Catalyzed Enantioselective Aza-Morita–Baylis–Hillman Reaction



Significance: This paper describes the palladium-catalyzed enantioselective aza-Morita–Baylis–Hillman reaction of acrylonitriles with imines. The bulky pincer ligand enabled the synthesis of enantioenriched α-methylene-β-aminonitriles in high yield.

Comment: The palladium–pincer complex preferably activates acrylonitrile, even in the presence of ethyl acrylate. The palladium ketenimide is a key intermediate for the asymmetric induction. The palladium complex may promote other Lewis acid catalyzed reactions.

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