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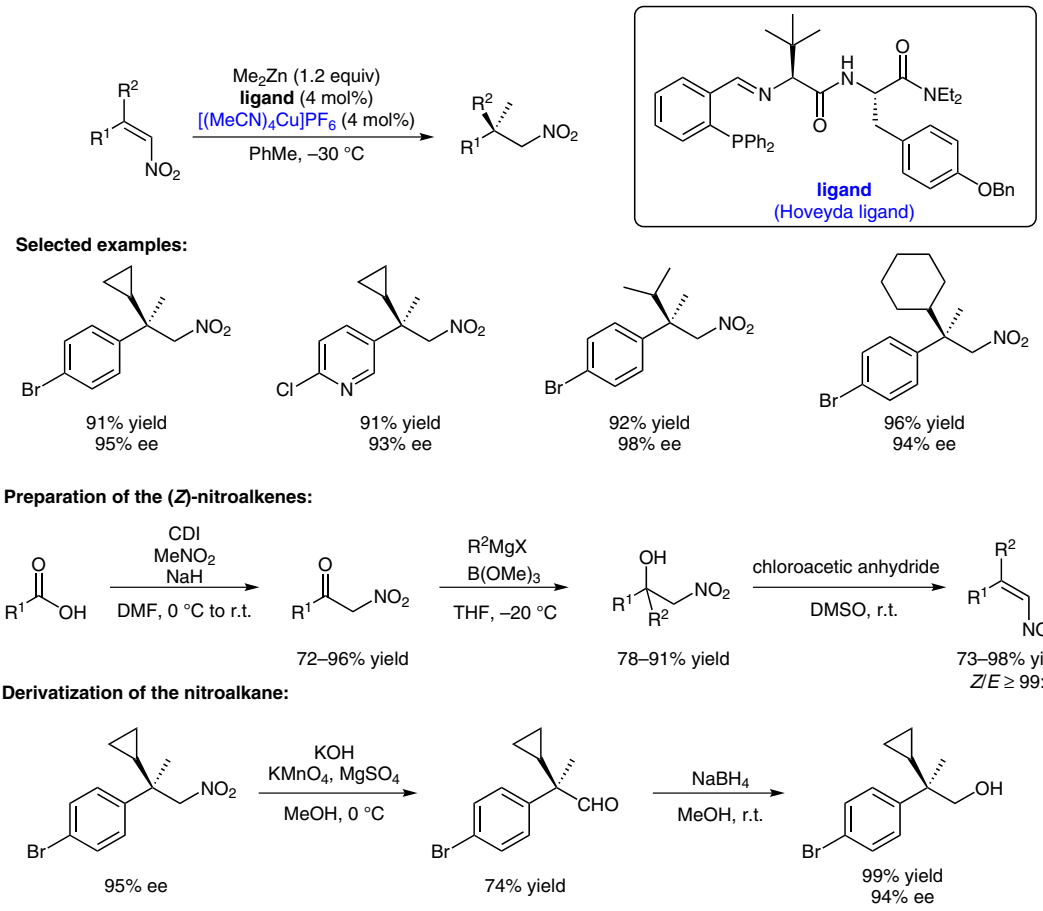
Remarkable Enhancement of Enantioselectivity in the Asymmetric Conjugate Addition of Dimethylzinc to (*Z*)-Nitroalkenes with a Catalytic $[(MeCN)_4Cu]PF_6$–Hoveyda Ligand Complex

Angew. Chem. Int. Ed. **2014**, *53*, 12153–12157.

Asymmetric Conjugate Addition of Dimethylzinc to (*Z*)-Nitroalkenes



Significance: Asymmetric conjugate addition of organometallic species to nitroalkenes can be an efficient way to access all-carbon quaternary stereocenters. Herein, the authors demonstrate that the use of $[(MeCN)_4Cu]PF_6$ plays a crucial role in the asymmetric conjugate addition of dimethylzinc to (*Z*)-nitroalkenes with the Hoveyda ligand.

Comment: With the reported conditions, the undesired nitroalkene isomerization, resulting in low enantioselectivity, has been solved. The authors also developed a practical and highly controlled method for the synthesis of (*Z*)-nitroalkenes (*Z*/*E* ratio ≥ 99:1).

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Synfacts 2015, 11(1), 0048 Published online: 15.12.2014
DOI: 10.1055/s-0034-1379750; **Reg-No.:** H15614SF