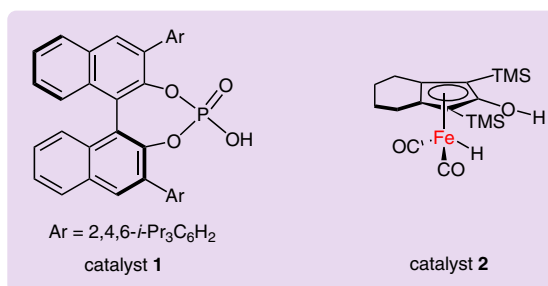
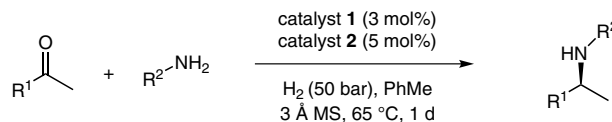
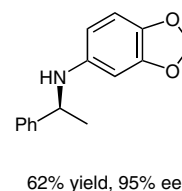
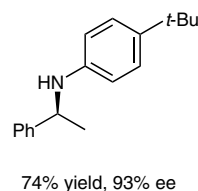
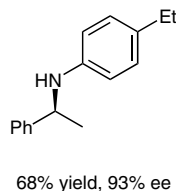
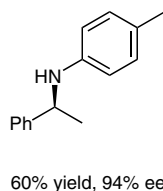
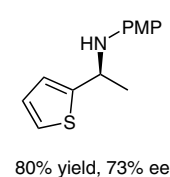
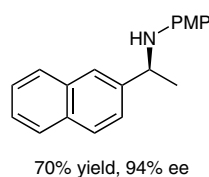
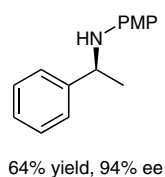
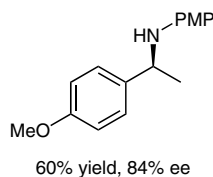


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Cooperative Catalysis with Iron and a Chiral Brønsted Acid for Asymmetric Reductive Amination of Ketones
Adv. Synth. Catal. **2014**, *356*, 3451–3455.

Asymmetric Reductive Amination of Ketones



Selected examples:



Significance: Enantiomerically pure chiral amines are very important building blocks to synthesize numerous pharmaceutical drugs as well as bioactive compounds. The authors report the first iron-catalyzed asymmetric reductive amination of ketones with anilines in the presence of hydrogen, leading to chiral amines in moderate to good yields and good to excellent enantioselectivities.

Comment: The protocol represents a more convenient, simple and practical method for the synthesis of chiral amines. Interestingly, the combination of the chiral Brønsted acid (TRIP) catalyst and the non-chiral Knölker complex enabled the reductive amination of ketones with anilines in a cooperative manner.