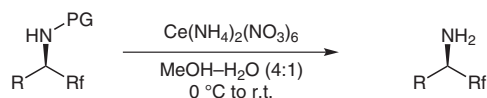
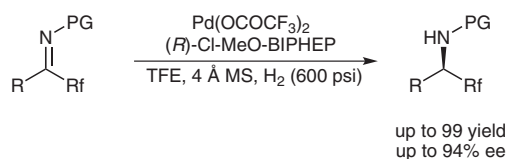
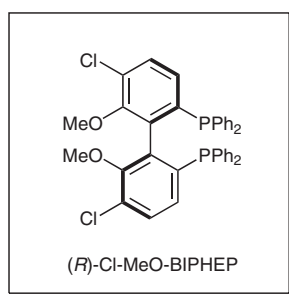


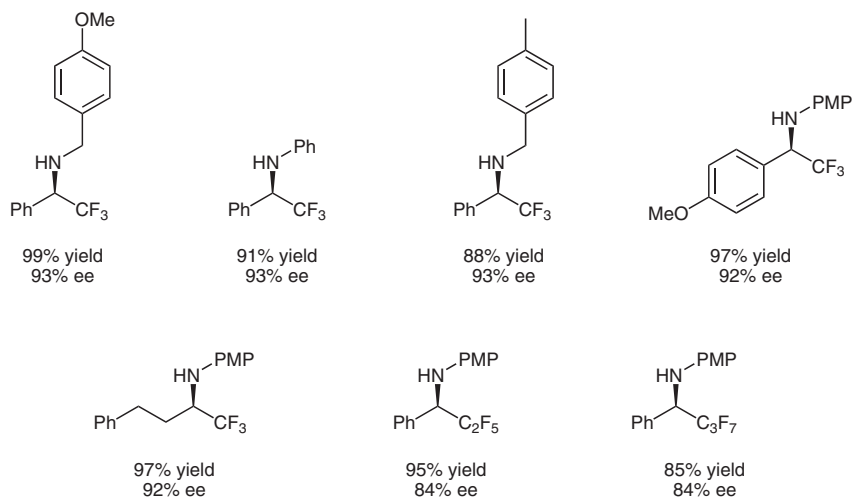
M.-W. CHEN, Y. DUAN, Q.-A. CHEN, D.-S. WANG, C.-B. YU, Y.-G. ZHOU* (DALIAN INSTITUTE OF CHEMICAL PHYSICS, P. R. OF CHINA)

Enantioselective Pd-Catalyzed Hydrogenation of Fluorinated Imines: Facile Access to Chiral Fluorinated Amines
Org. Lett. **2010**, *12*, 5075-5077.

Asymmetric Hydrogenation of Fluorinated Imines



Selected examples:



Significance: Chiral perfluoroalkyl amines are important building blocks in biologically active molecules. Previous attempts to hydrogenate simple fluorinated ketimines resulted in low conversion and enantioselectivity. In this work, the authors developed an efficient method to enantioselectively hydrogenate simple fluorinated ketimines with high yields and selectivities.

Comment: Several amine protecting groups can be tolerated during this reaction, though PMP was more often used due to its easy removal. Both aryl and alkyl groups, as well as short and long perfluoroalkyl chains can be introduced in the ketimine. All gave excellent yields and high enantioselectivities – the highest reported enantioselectivities for this type of reaction to date.

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