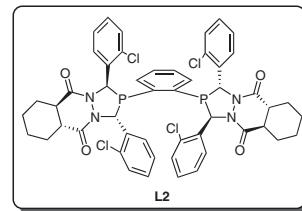
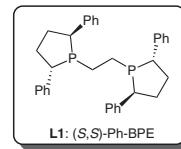
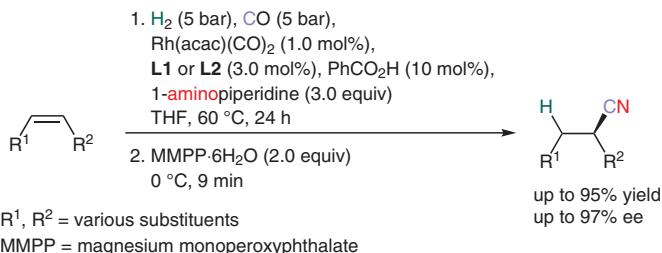


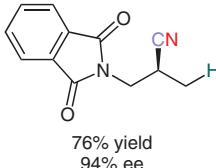
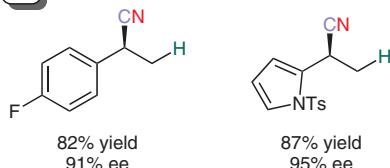
# HCN-Free Hydrocyanation of Alkenes

Conditions A:

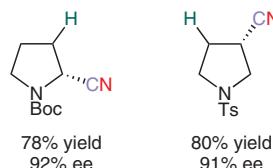


Selected examples:

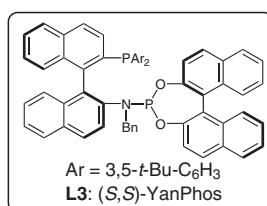
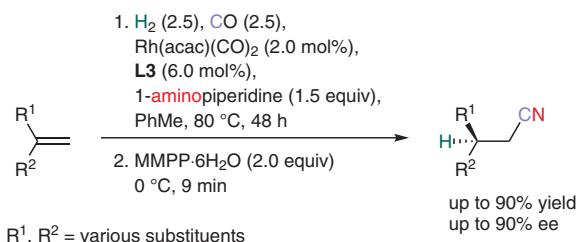
**L1**



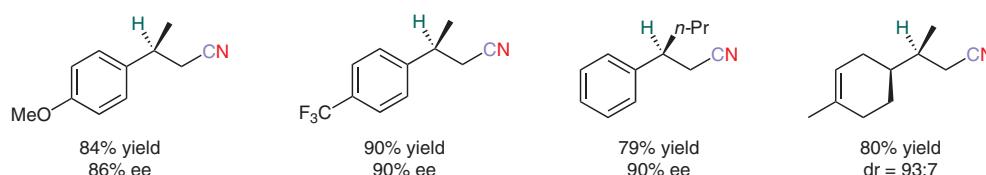
**L2**



Conditions B:



Selected examples:



**Significance:** The authors developed an asymmetric rhodium-catalyzed HCN-free formal hydrocyanation of various functionalized 1,2- and 1,1-disubstituted alkenes. Depended on the alkene, various chiral ligands are necessary to afford the corresponding chiral products in high enantioselectivities.

**Comment:** The formal asymmetric hydrocyanation proceeds via an asymmetric hydroformylation and subsequent acid-catalyzed imine formation with 1-amino piperidine. An aza-Cope elimination induced by addition of MMPP affords the corresponding chiral nitrile.