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Catalytic Asymmetric α -Iminol Rearrangement: New Chiral Platforms
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Zirconium/VANOL-Catalyzed Asymmetric α -Iminol Rearrangement

Significance: There has been no example of asymmetric α -iminol rearrangement so far. Herein, the authors developed an effective catalyst system, a zirconium/VANOL complex, which works well not only with α -iminols as starting material, but also with in situ generated α -iminols from an aldehyde and an aniline.

Comment: The zirconium/VANOL catalyst affords excellent yields and enantioselectivities for a broad range of substrates. Interestingly, *N*-methyl imidazole coordinated to zirconium dramatically influences the reaction. When there is a *para*-CF₃ substituent on the phenyl ring, more careful manipulations are required such as inert atmosphere and deoxygenation.

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