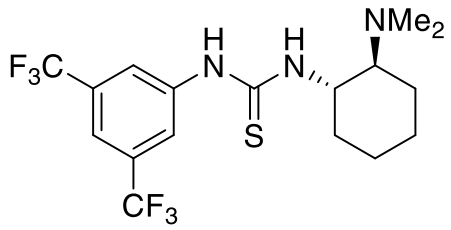
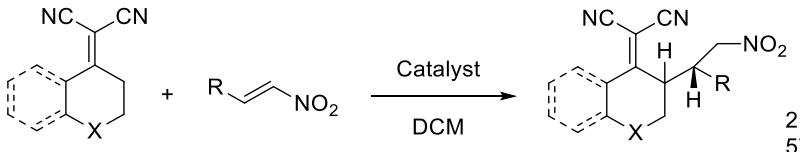
Catalog # 07-6332 1-[3,5-Bis(trifluoromethyl)phenyl]-3-[(1S,2S)-2-(dimethylamino)cyclohexyl]thiourea, 98%, (99% ee)



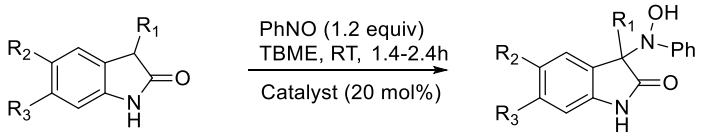
Technical Notes:

1. Michael Addition- The bifunctional chiral thiourea-tertiary amine organocatalysts have been applied to a direct asymmetric vinylogous Michael addition of α,α-dicyanoolefins to nitroolefins with 2-10 mol % catalyst loadings.
2. Oxyamination- An enantioselective α-oxyamination of unprotected 3-substituted oxindoles with nitrosobenzene catalyzed by tertiary amine-thiourea bifunctional organocatalysts has been developed and affords the corresponding 3-amino-2-oxindole derivatives in good yields and with moderate to excellent enantioselectivities.
3. Michael-Michael Cascade Reaction- A novel chiral amine thiourea catalyzed, highly enantioselective Michael-Michael cascade process serves as a “one-pot” approach to synthetically and biologically significant chiral tetrahydrothiophenes.
4. The first highly diastereo- and enantioselective organocatalytic synthesis of 2,2-disubstituted-2H-oxazol-5-ones is described.



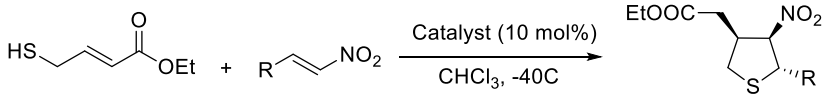
21-89% yield
57-95% e.e.

Tech Note (1)
Ref. (1)



up to 14:86 er (82% yield)
up to >99.9:0.01 er (58% yield, product fitration)

Tech Note (2)
Ref. (2)



up to 93% yield
6:1 - >30:1 d.r.
92-97% e.e.

Tech Note (3)
Ref. (3)

References:

1. *Tetrahedron,* **2007**, *63*, 5123-5128.
2. *Org. Biomol. Chem*., **2012**, *10*, 431-439.
3. *Chem. Eur. J.*, **2011**, *17*, 770-774.
4. *Chem. Eur. J.,* **2010**, *16*, 9884-9889.