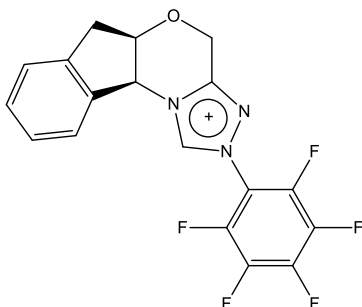
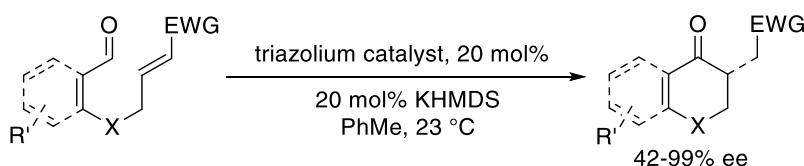


Catalog # 07-0415 (5aR,10bS)-(+)-5a,10b-Dihydro-2-(pentafluorophenyl)-4H,6H-indeno[2,1-b][1,2,4]triazolo[4,3-d][1,4]oxazinium tetrafluoroborate, min. 98%

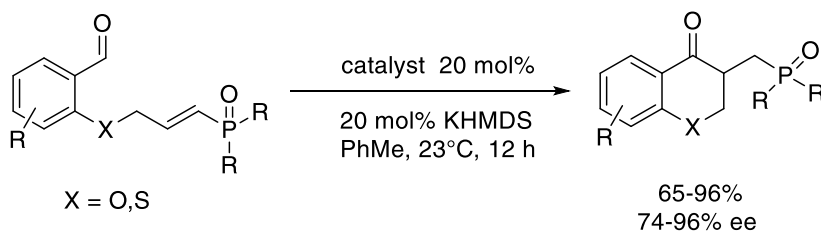


#### Technical Notes:

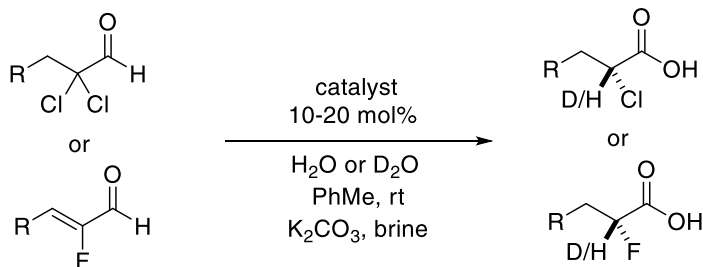
1. Scope of the asymmetric intramolecular Stetter reaction catalyzed by chiral nucleophilic triazolinyldene carbenes.
2. Catalytic asymmetric Stetter reaction onto vinyl phosphine oxide and vinyl phosphonates.
3. N-Heterocyclic carbene catalyzed asymmetric hydration: Direct synthesis of  $\alpha$ -protio and  $\alpha$ -deuterio,  $\alpha$ -chloro and  $\alpha$ -fluoro carboxylic acids.
4. Chemoselective conversion of  $\alpha$ -unbranched aldehydes to amides, esters and carboxylic acids by NHC-catalysis.
5. Extending the Stetter reaction with 1-6 acceptors.
6. N-Heterocyclic carbene-catalyzed/Lewis acid strategy for the stereoselective synthesis of spirocyclic oxindole-dihydropyranones.
7. Access to P-stereogenic phosphinates via N-heterocycle carbene-catalyzed desymmetrization of bisphenols.
8. N-Heterocyclic carbene-catalyzed intramolecular nucleophilic substitution: Enantioselective construction of all carbon quaternary stereocenters.



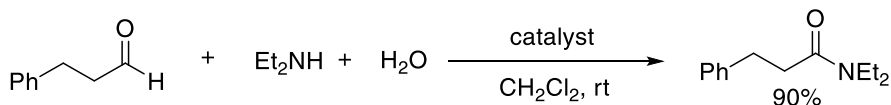
**Tech Note (1)**  
**Ref. (1)**



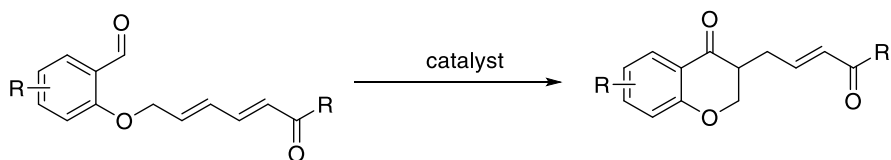
**Tech Note (2)**  
**Ref. (2)**



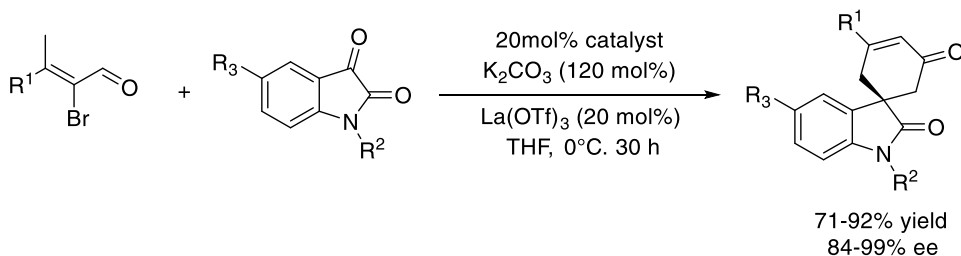
**Tech Note (3)**  
**Ref. (3)**



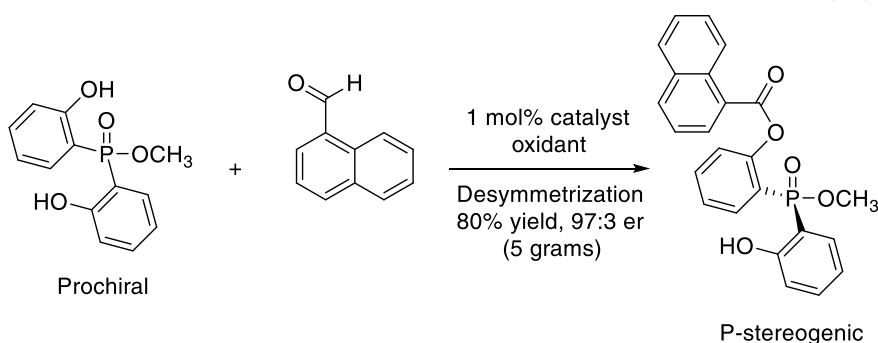
Tech Note (4)  
Ref. (4)



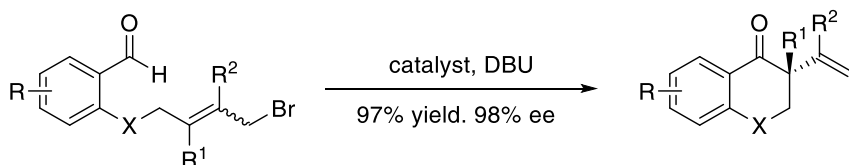
Tech Note (5)  
Ref. (5)



Tech Note (6)  
Ref. (6)



Tech Note (7)  
Ref. (7)



Tech Note (8)  
Ref. (8)

## References:

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