

CHEM – 750

Advanced Organic synthesis



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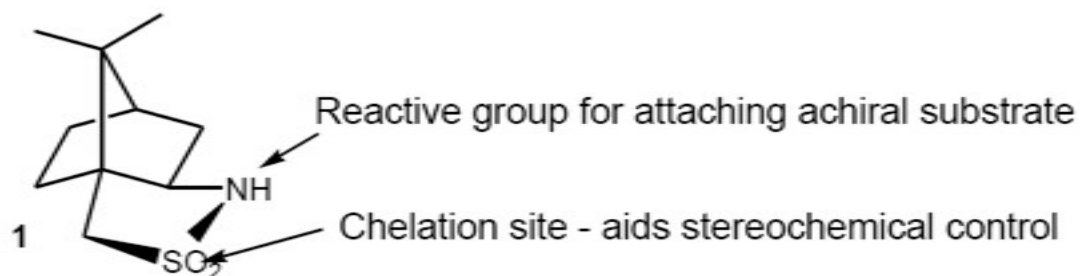
Requirements for a chiral auxiliary

- Cleavage of R-Y*-Aux* must occur under mild conditions and with no racemisation
- The auxiliary Aux* ideally should be low cost
- Both enantiomers of the auxiliary should be available
- The diastereoselective step to give R-Y*-Aux* must proceed with very good stereocontrol and should give a crystalline intermediate. Recrystallisation of RY*-Aux* generally increases the diastereomeric purity (de) and therefore gives RY* with higher ee.

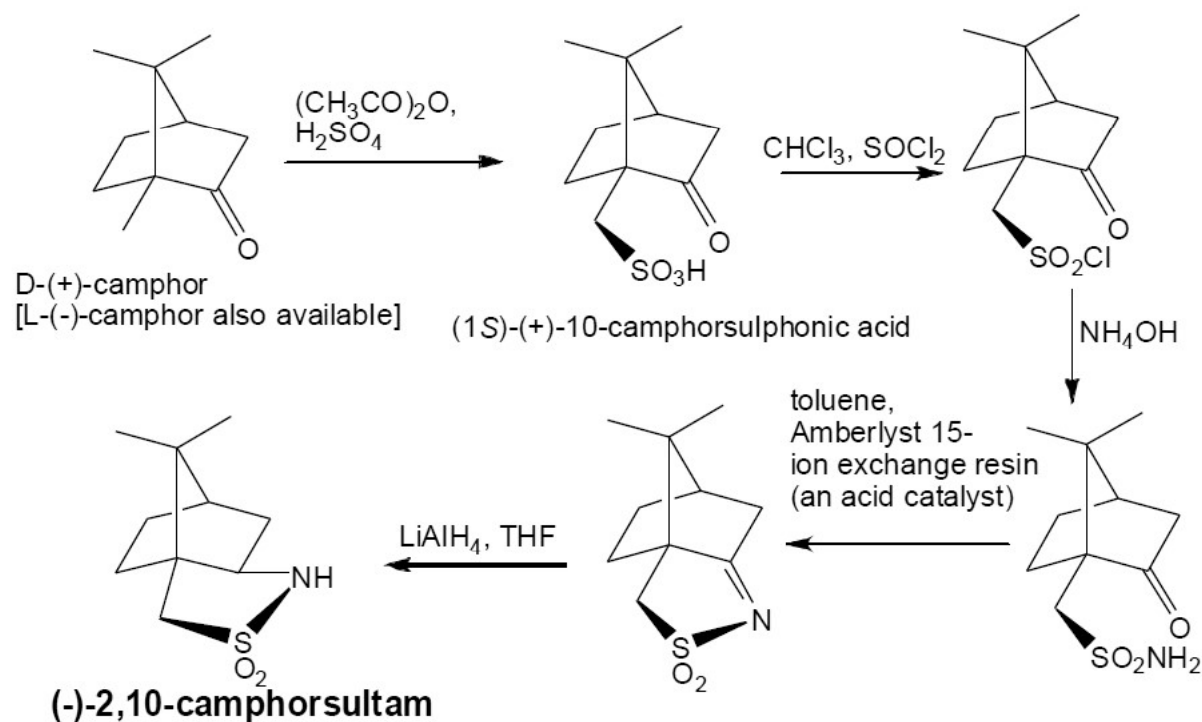


Oppolzer's Camphor Sultam

Rigid tricyclic structure

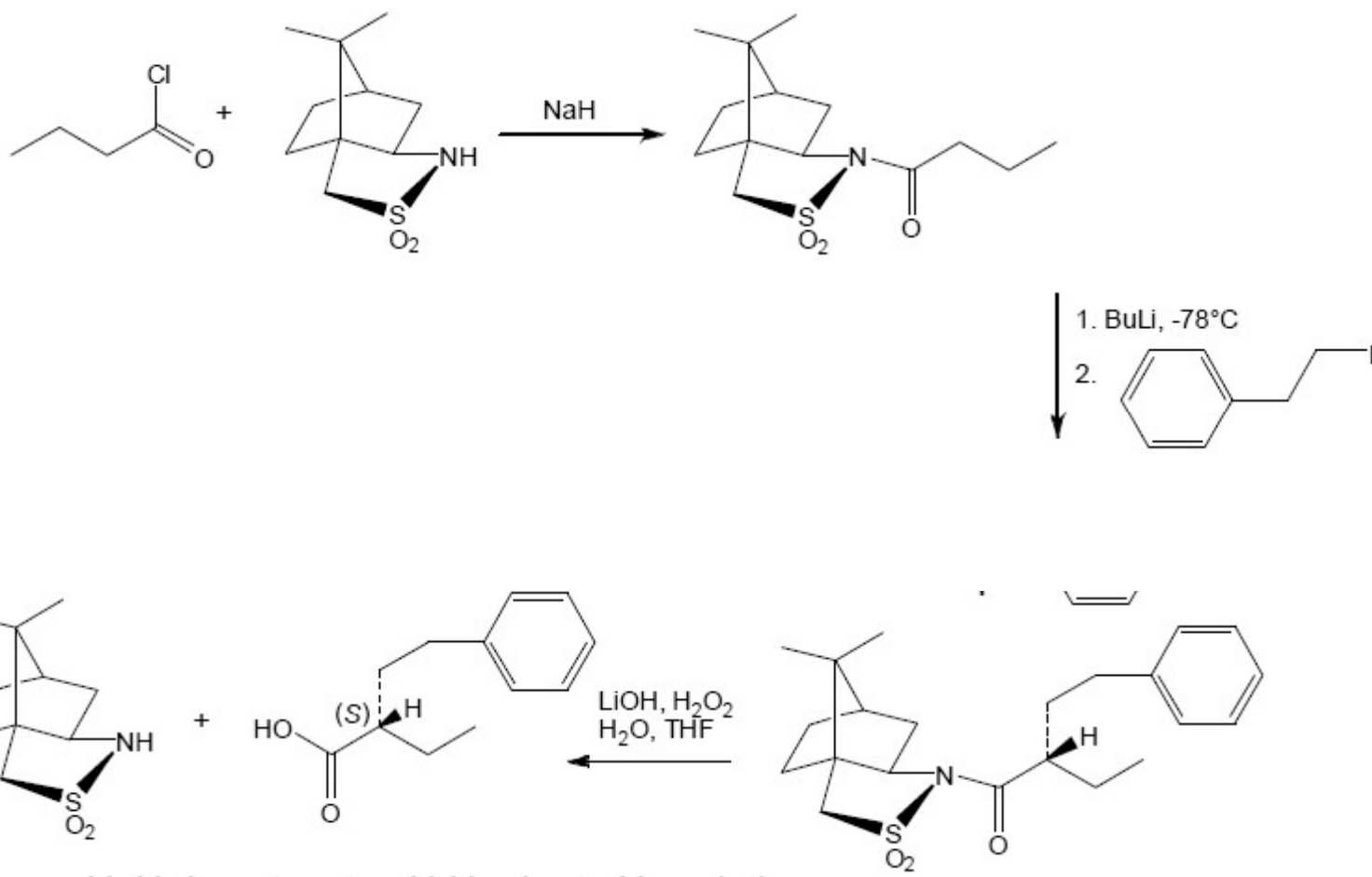


Synthetic Route





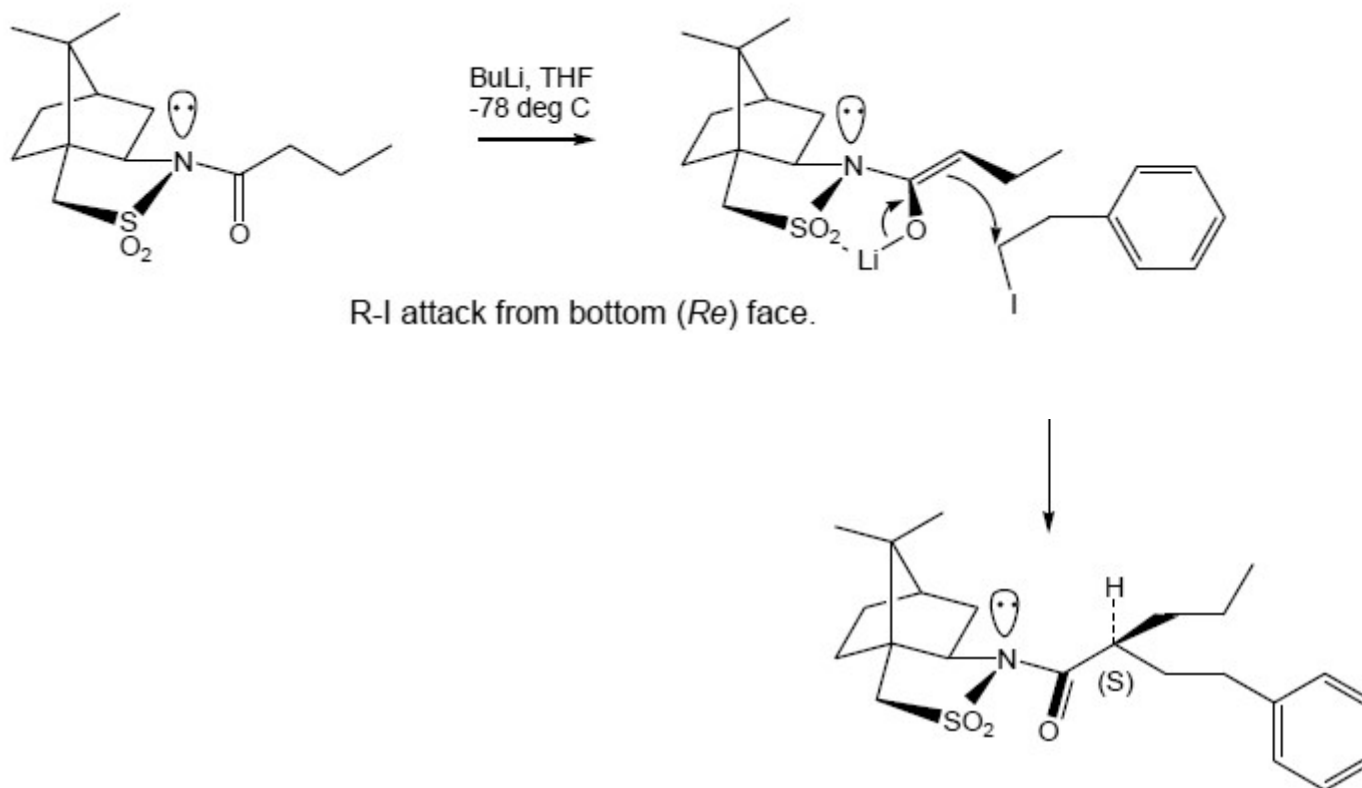
Asymmetric syntheses using Oppolzer's camphor sultam





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Diastereoselectivity





Oppolzer's Camphor Sultam

