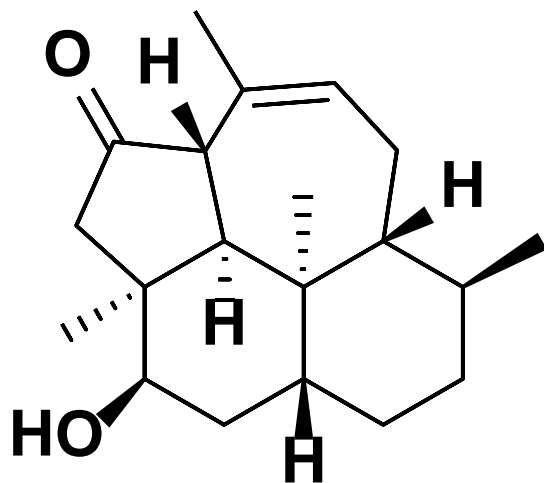


Enantioselective Total Synthesis of 3b-Hydroxy-7b-kemp-8(9)-en-6-one, a Diterpene Isolated from Higher Termites



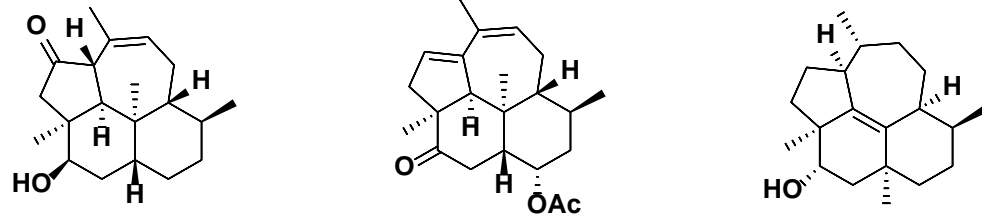
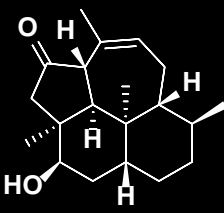
Angew. Chem. Int. Ed. **2017**, 56, 15861

Presented By: Anshu Yadav

CEM 852 Presentation

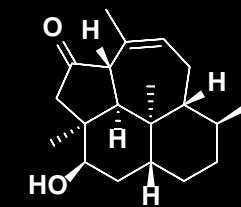
February 02, 2019

Background

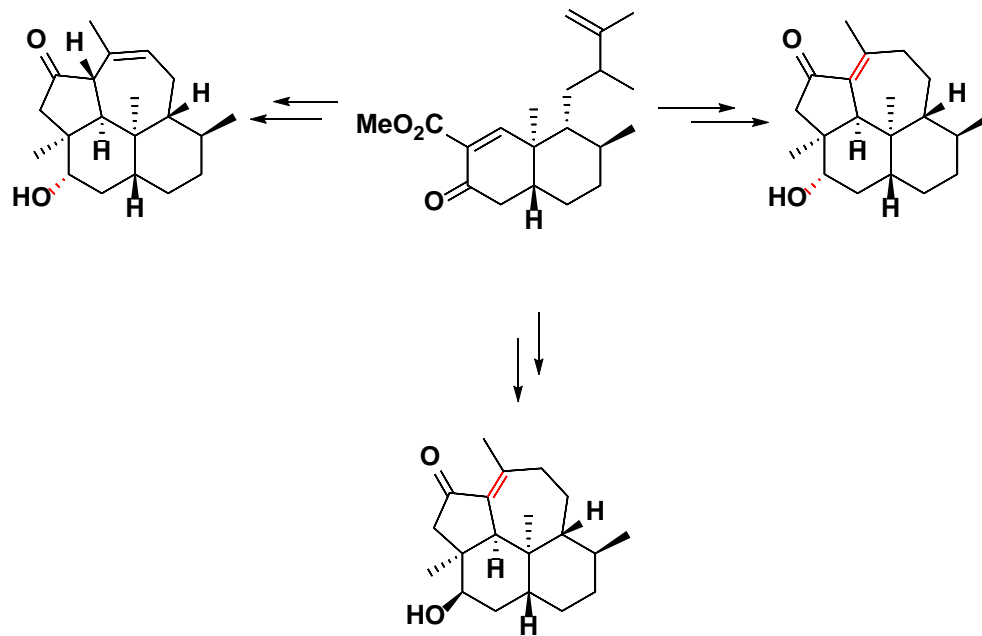


- Isolated from the soldier defence secretion of the higher termites *Nasutitermes octopolis*.
- Biological Effects – So far unknown

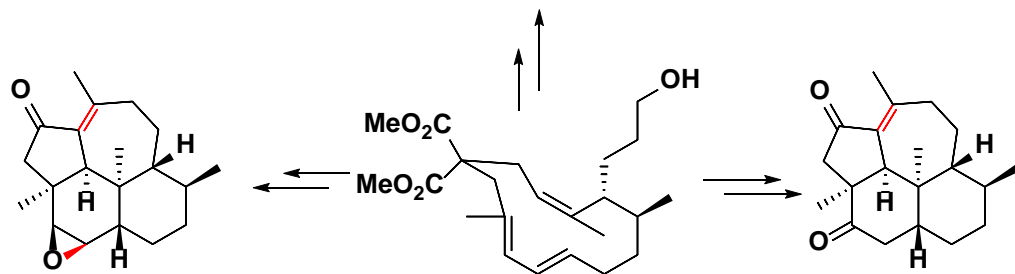
Previous Approaches



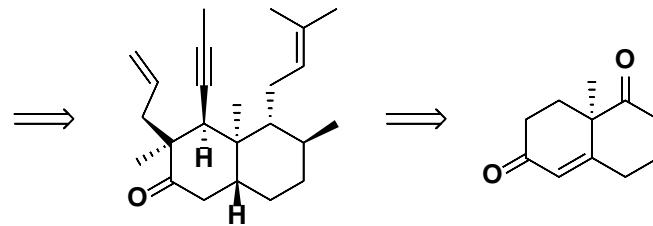
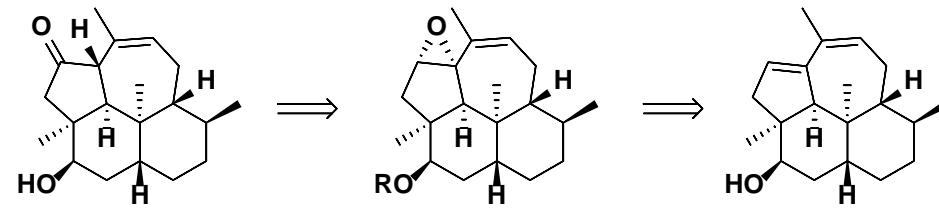
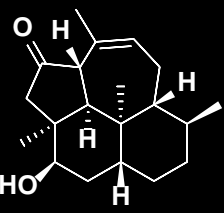
By Paquette(1992)



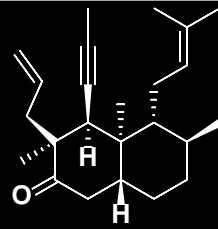
By Deslongchamps(2006)



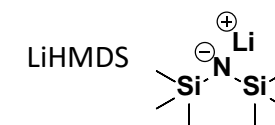
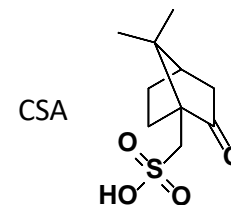
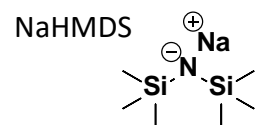
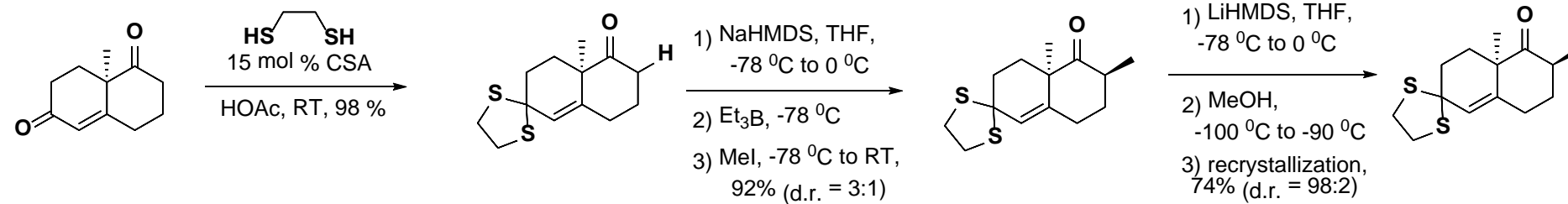
Retrosynthesis



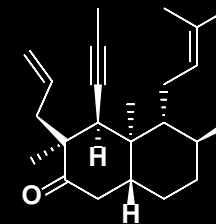
Formation of Dienyne



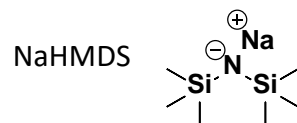
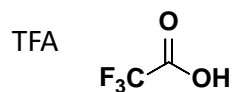
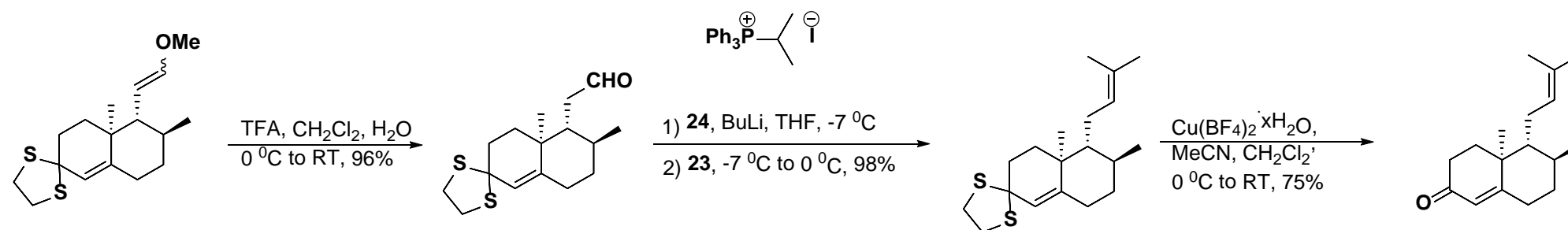
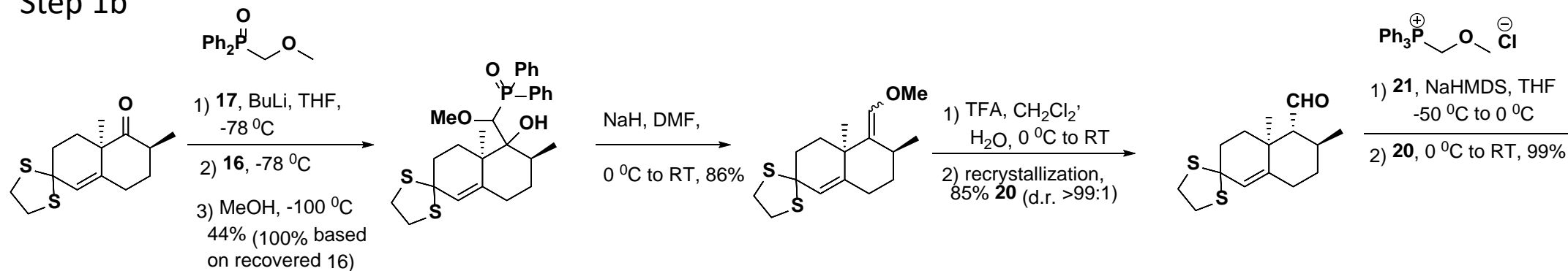
Step 1a



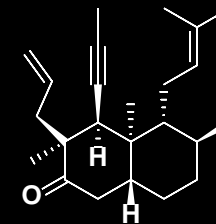
Formation of Dienyne



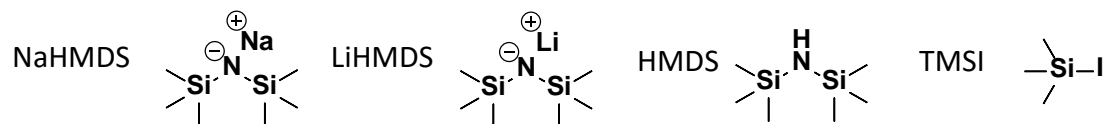
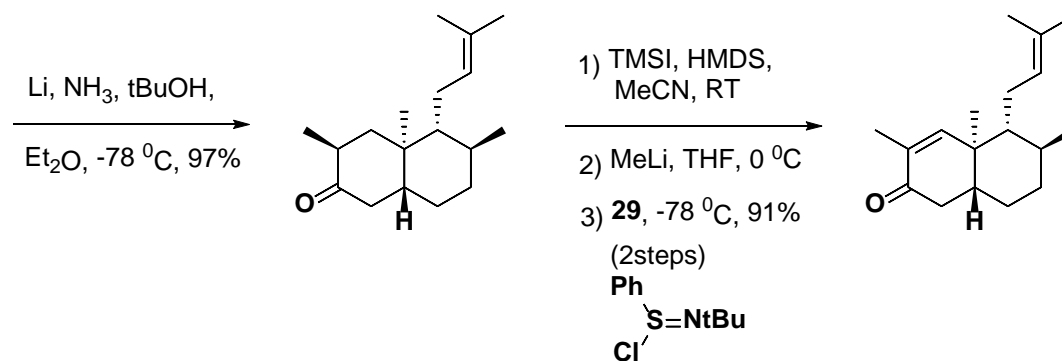
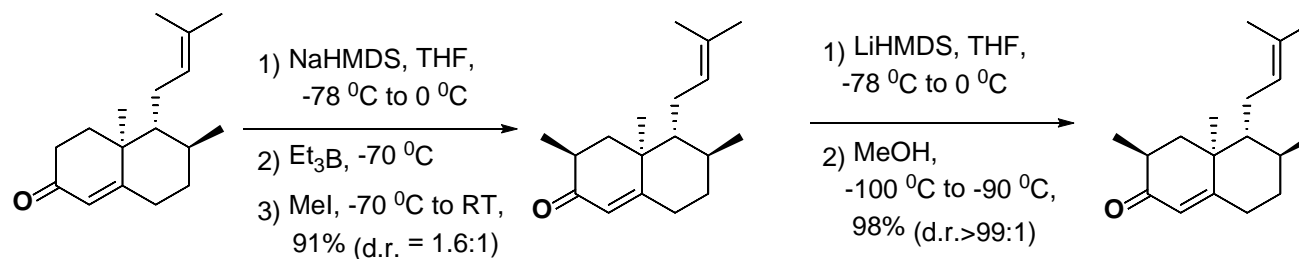
Step 1b



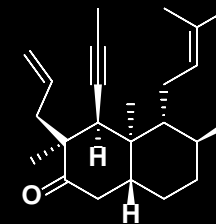
Formation of Dienyne



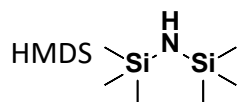
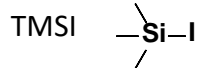
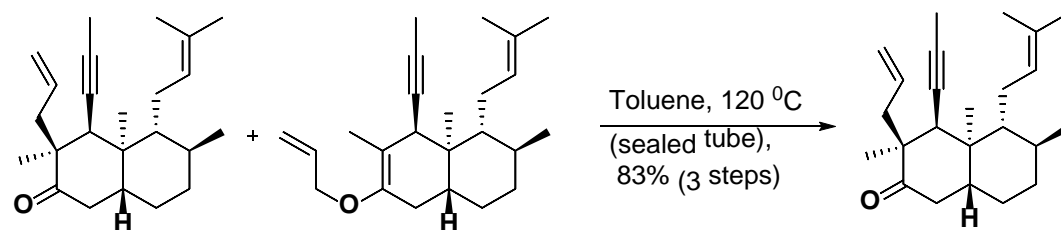
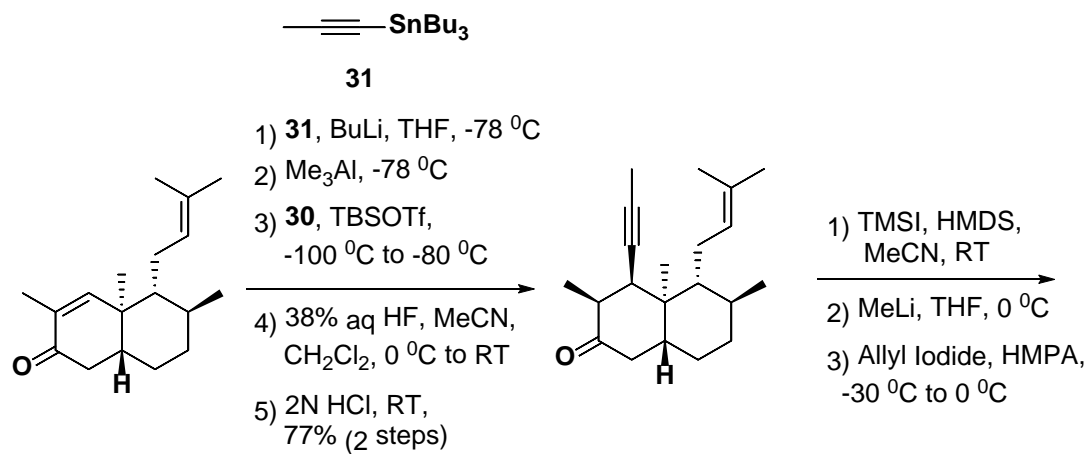
Step 1c



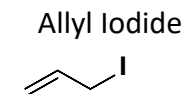
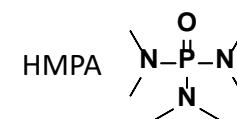
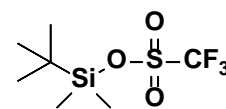
Formation of Dienyne



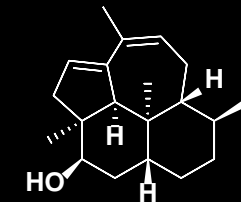
Step 1d



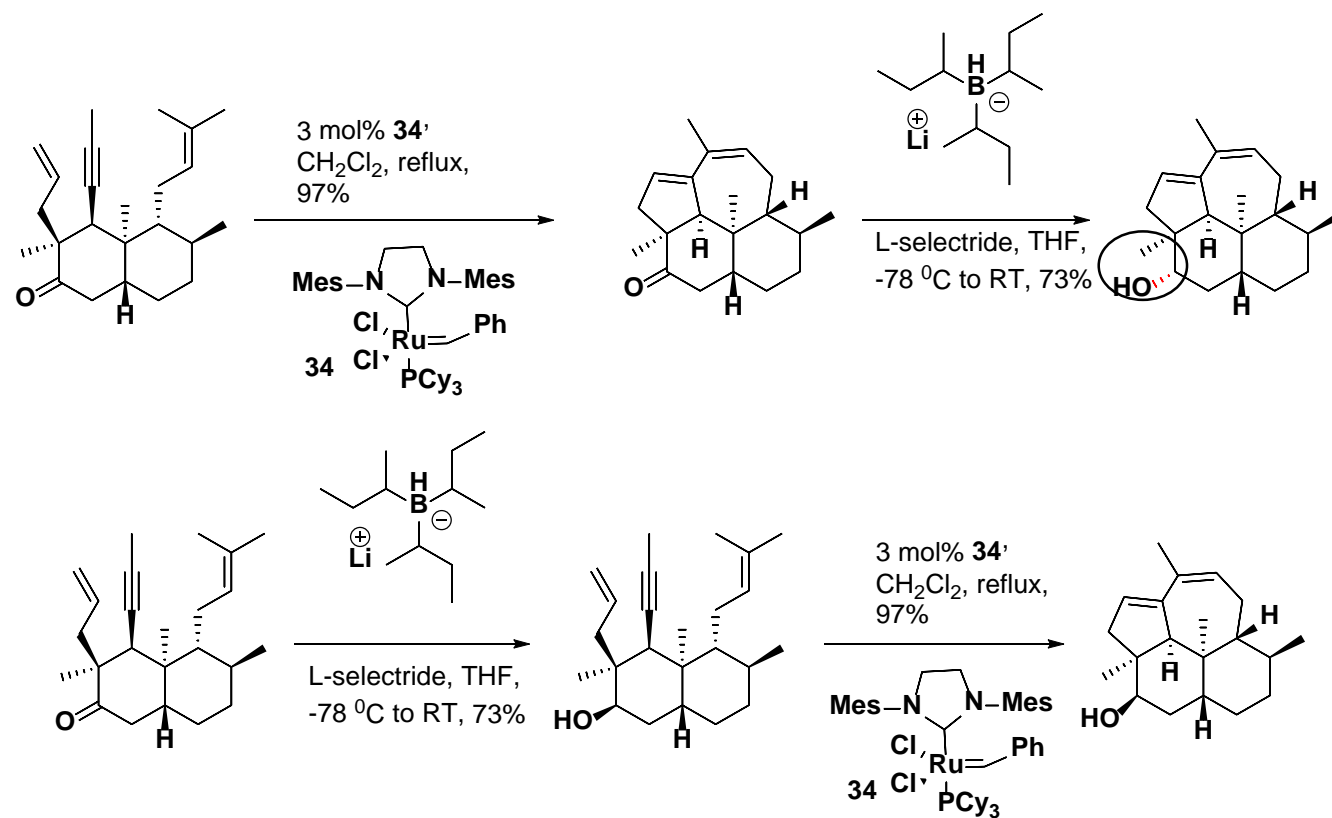
TBSOTf



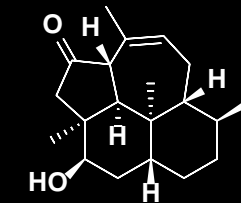
DOMINO METATHESIS



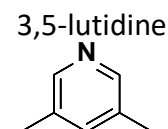
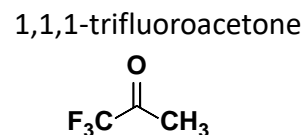
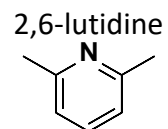
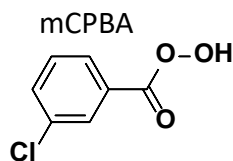
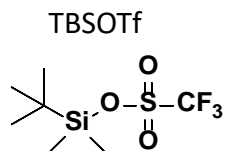
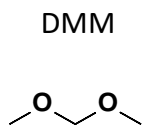
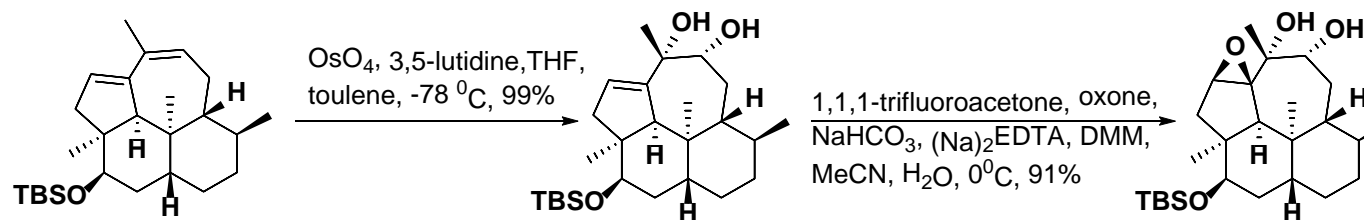
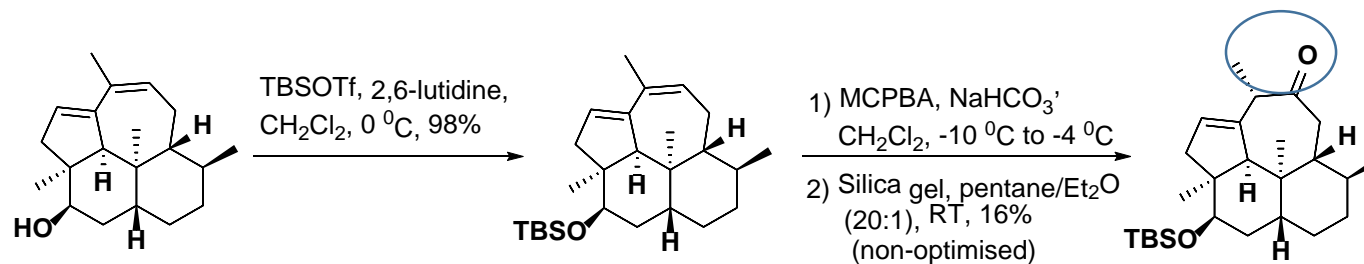
Step 2



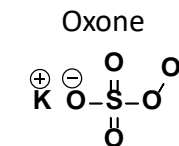
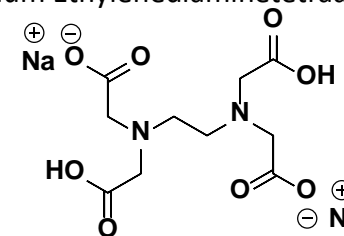
Way to Sulpha-Michael Addition



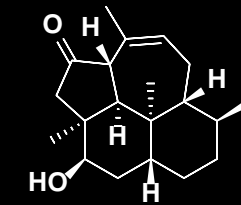
Step 3



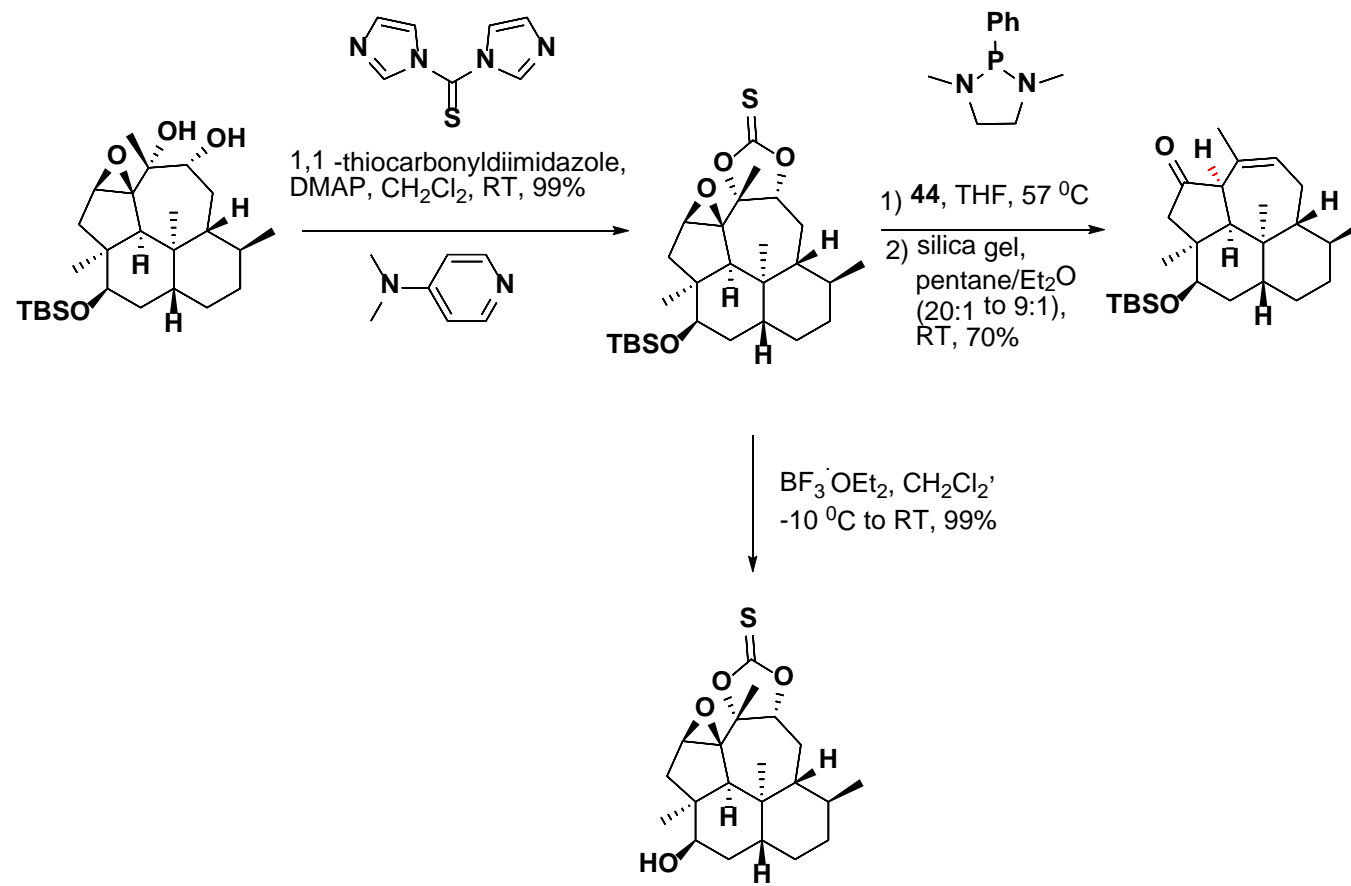
Sodium Ethylenediaminetetraacetate



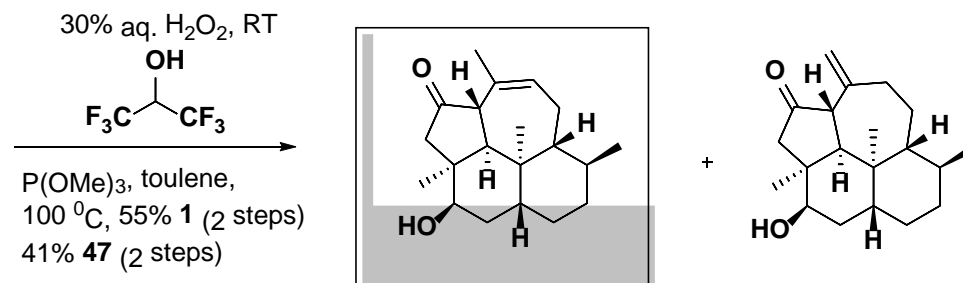
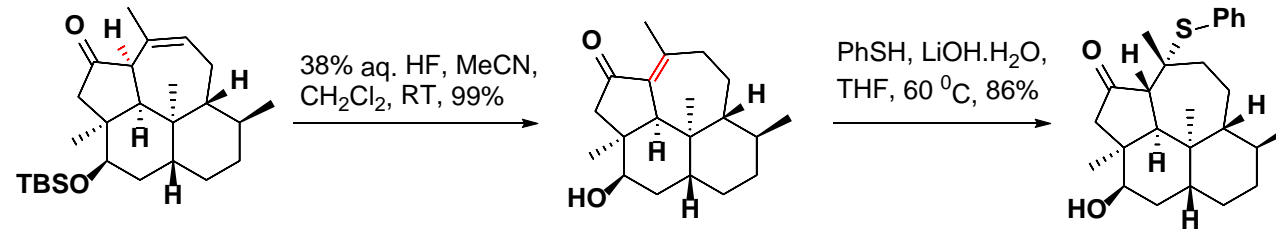
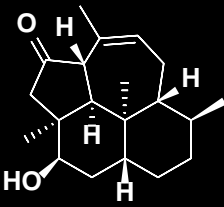
Way to Sulpha-Michael Addition

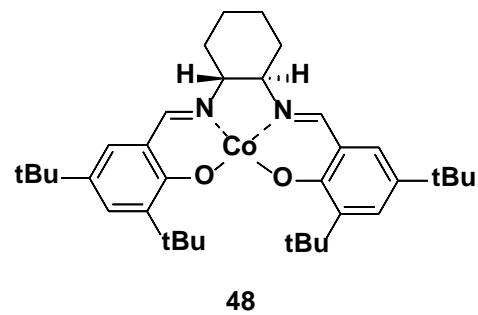
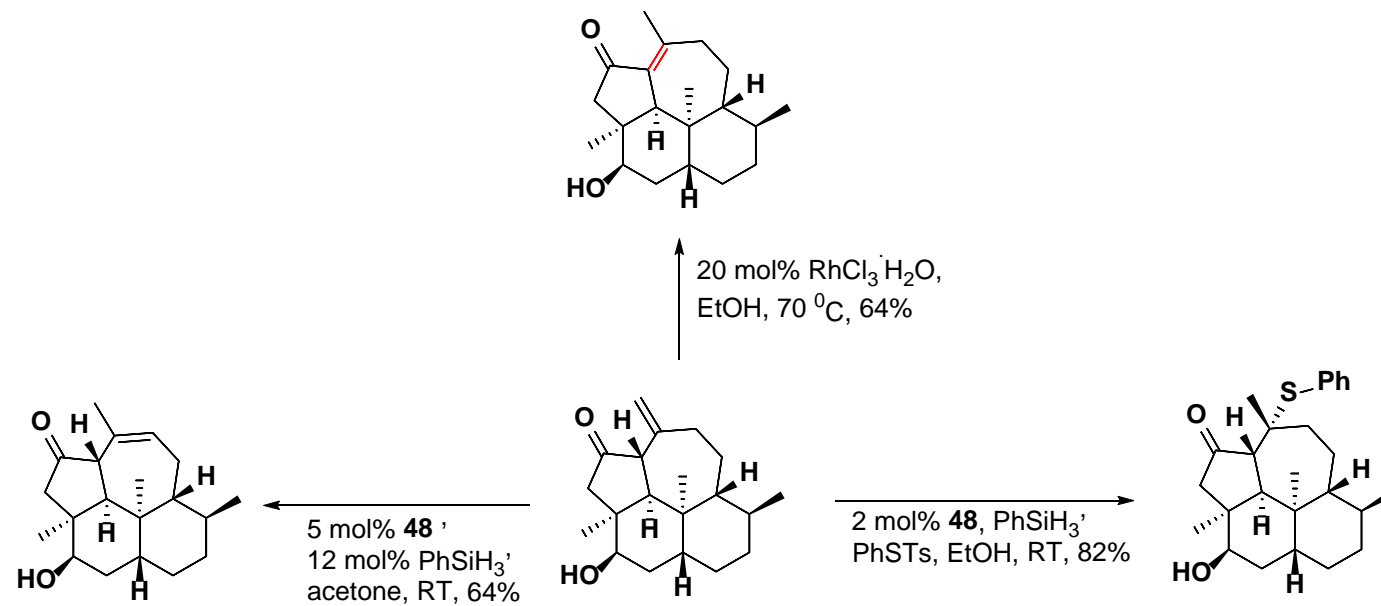


Step 3



Sulpha-Michael Addition , Final Step





THANK YOU

