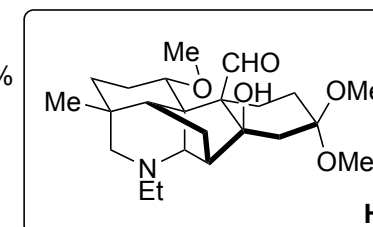
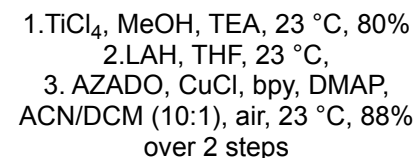
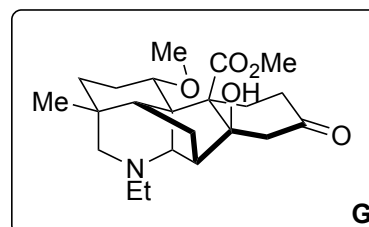
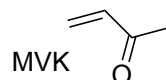
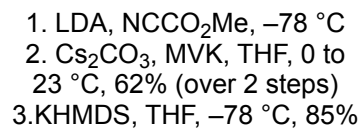
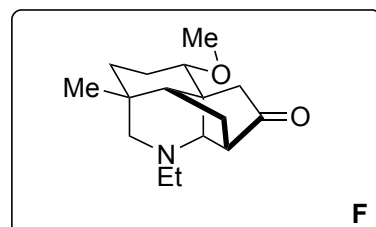
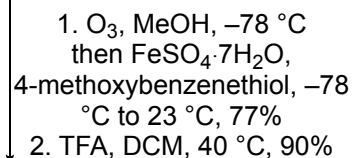
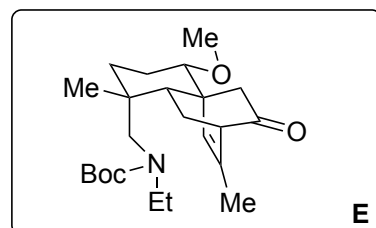
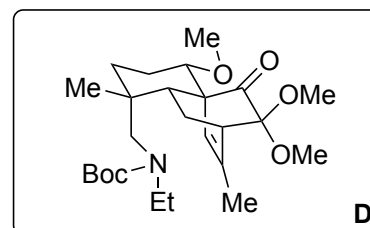
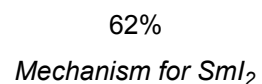
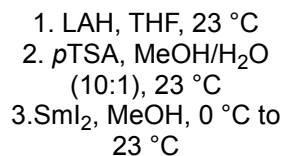
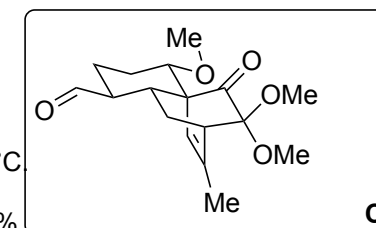
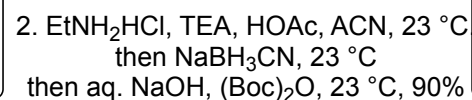
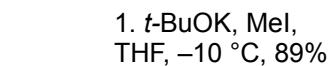
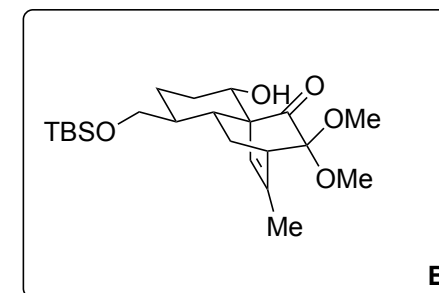
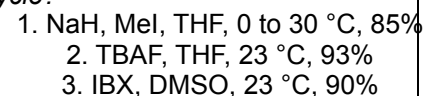
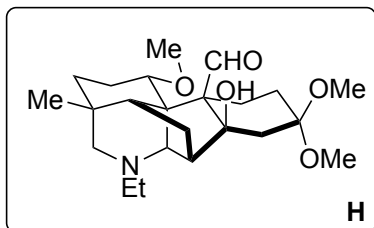
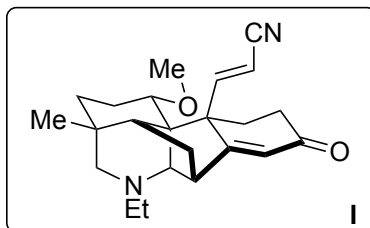


How would you recycle?

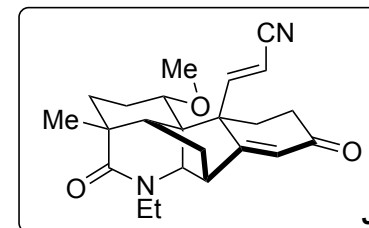




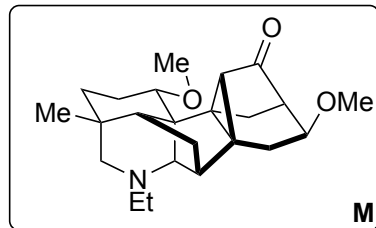
1. LDA, (EtO)<sub>2</sub>P(O)CH<sub>2</sub>CN  
THF, 23 °C to 50 °C, 93%  
2. TMSOTf, DCM, 23 °C, 92%



I<sub>2</sub>, NaHCO<sub>3</sub>, THF/H<sub>2</sub>O  
(2:1), 0 °C to 23 °C, 80%



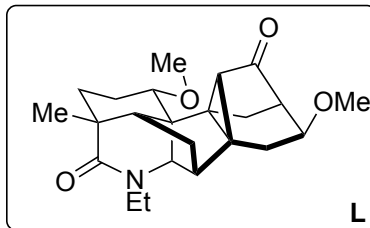
TMP, TBSOTf, THF, -78 °C,  
then mesitylene, 150 °C,  
then *p*TSA, DCM, 23 °C, 75%



Vilmoraconitine

1. LAH, THF, 70 °C  
2. AZADO, CuCl, bpy, DMAP,  
ACN/DCM (10:1), air, 23 °C  
68% over 2 steps

Vaska's catalyst/TMDS protocol  
or Rh(H)(CO)(PPh<sub>3</sub>)<sub>3</sub>/PhSiH<sub>3</sub> did  
not work



1. NaBH<sub>4</sub>, MeOH/THF (1:1),  
0 °C  
2. *t*-BuOK, MeI, THF, -20 °C  
67% over 2 steps  
3. LDA, O<sub>2</sub>, THF, -78 °C,  
then SnCl<sub>2</sub>, H<sub>2</sub>O, aq.  
Na<sub>2</sub>CO<sub>3</sub>, 23 °C, 80%

