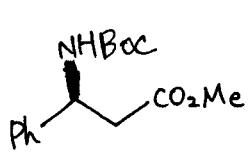
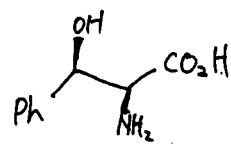


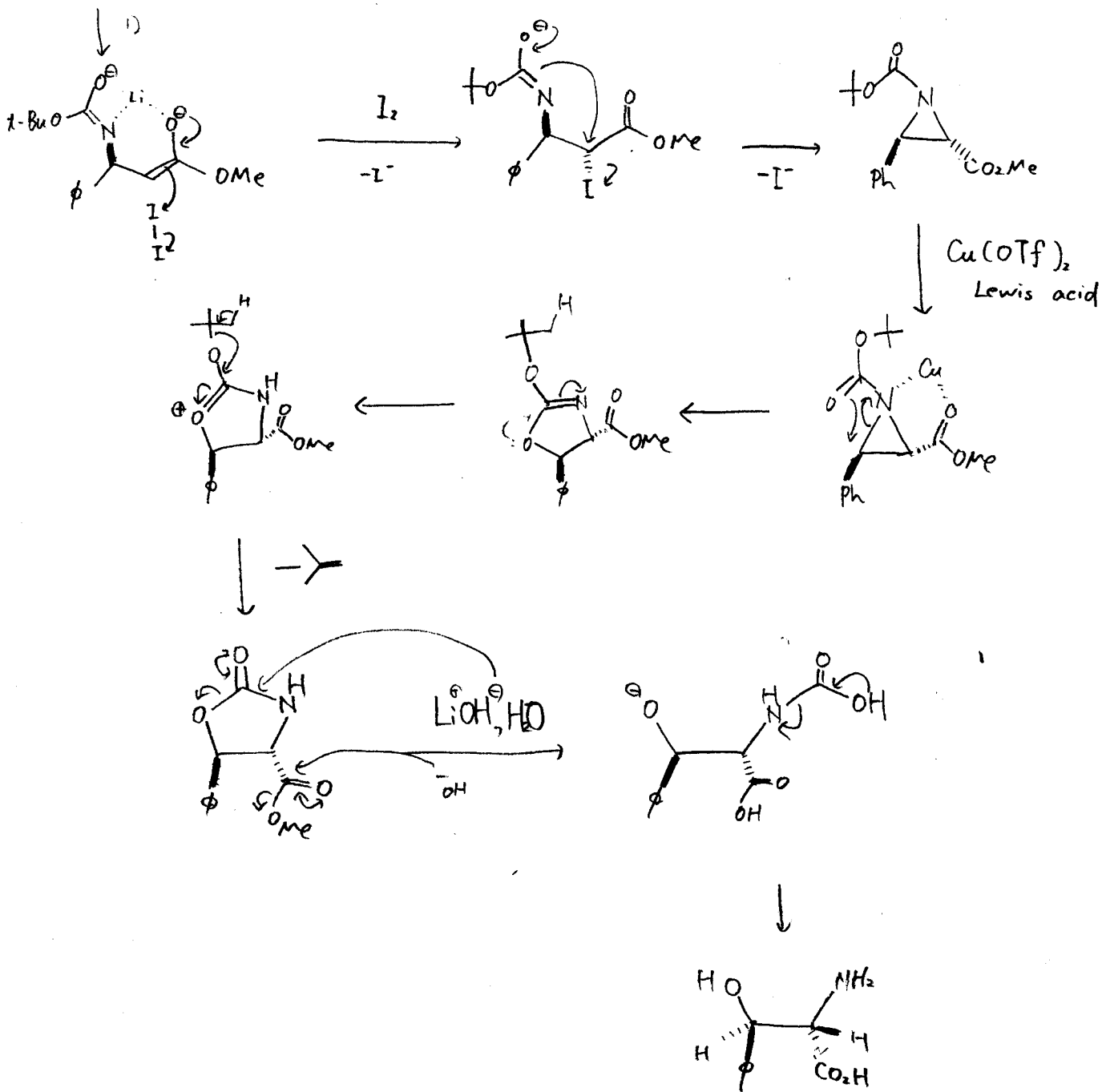
05 / 01 / 2002 1.



1) LHMDS (2.2 eq), THF; I₂
 2) Cu(OTf)₂, CH₂Cl₂
 3) LiOH, H₂O



(763)



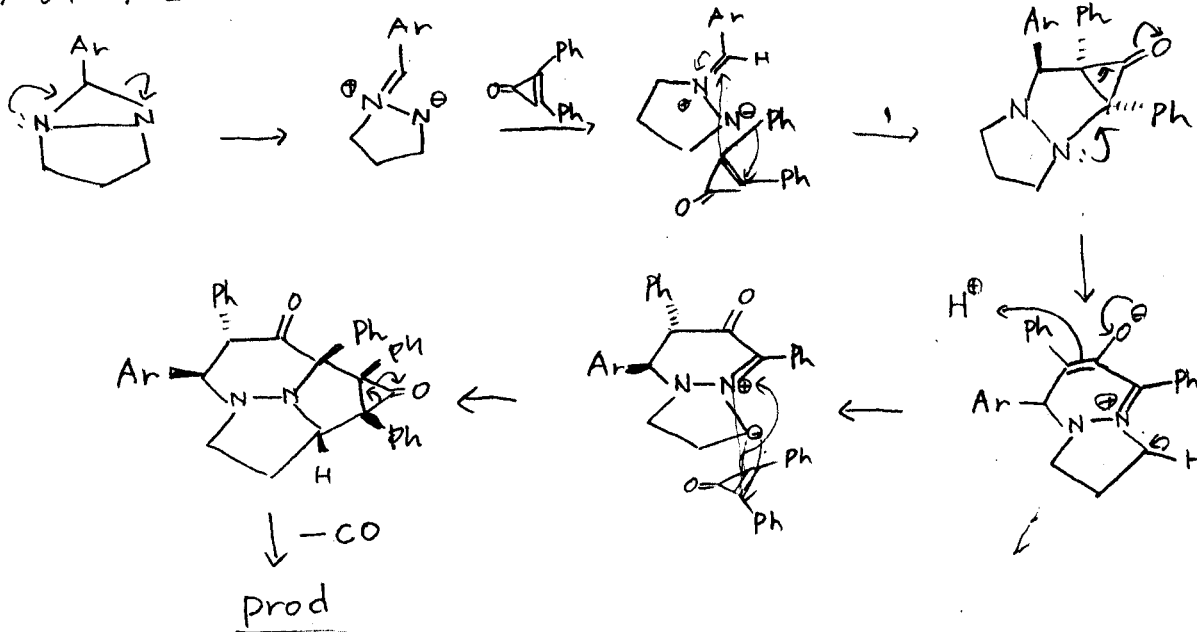
Claudia T

O.L

1999

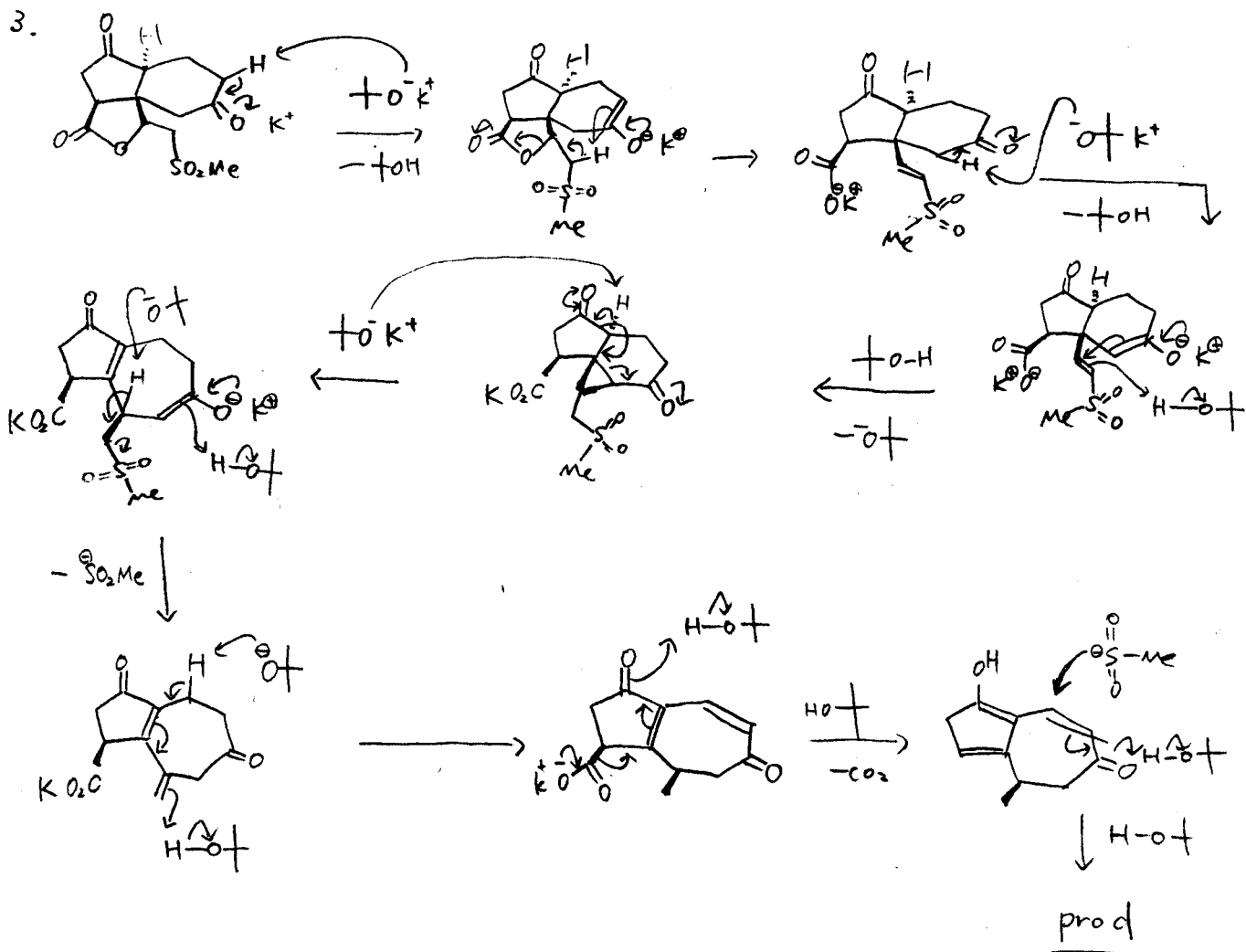
2153 - 2156

2.



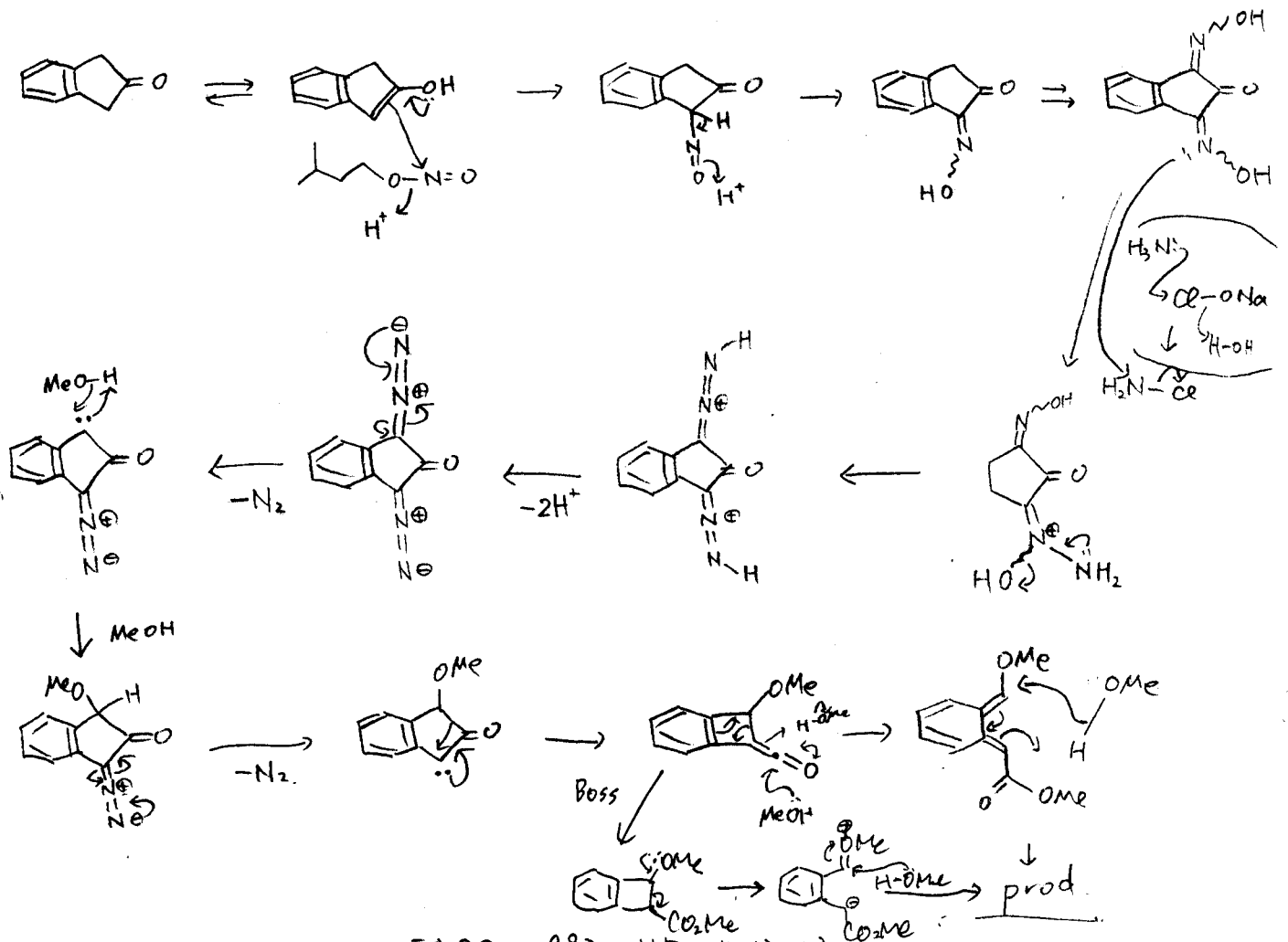
kostikov, R, R Eur. J. Org. Chem. 2002, 453-456

3.

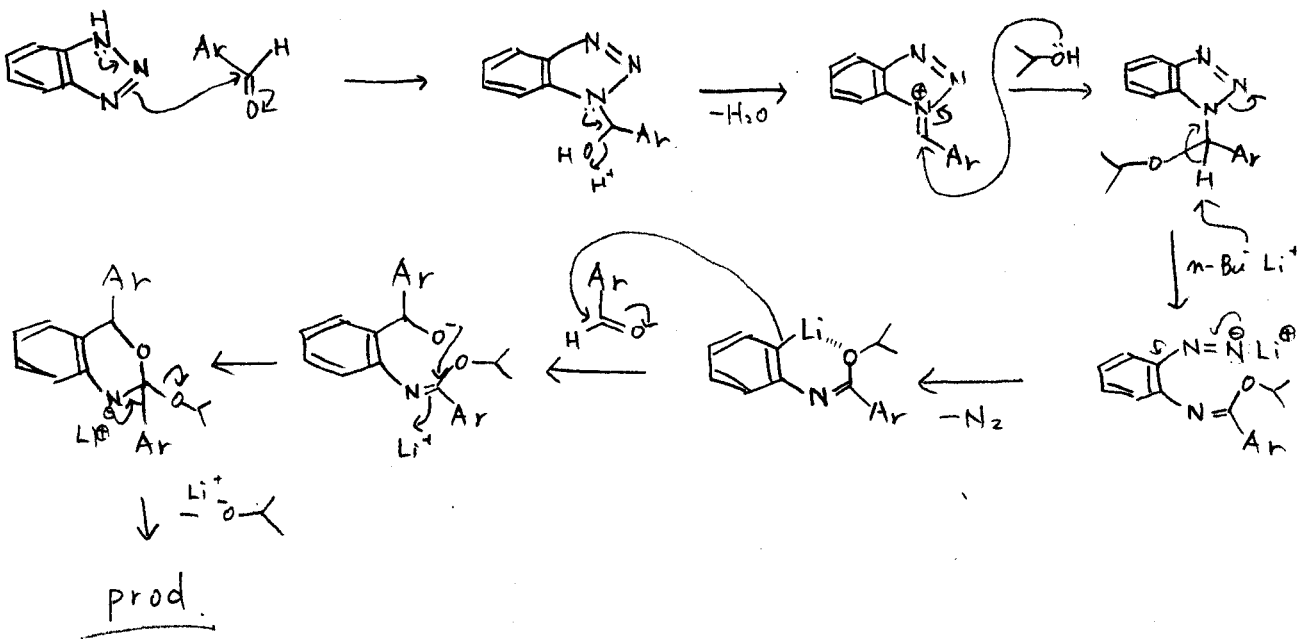


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4.



5.

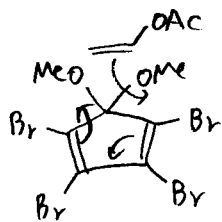
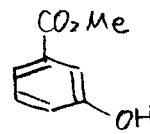


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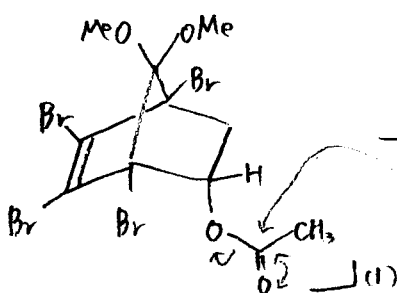


1) CH2=CH-OAc
 toluene, reflux
 2) K2CO3, MeOH

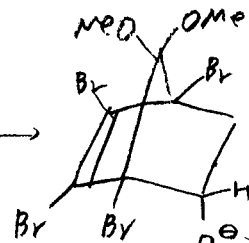
3) PDC, CH2Cl2
 4) heated, neat
 5) Bu3SnH, AIBN
 benzene - THF



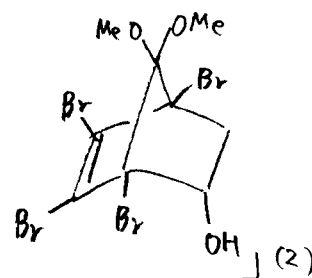
toluene, reflux



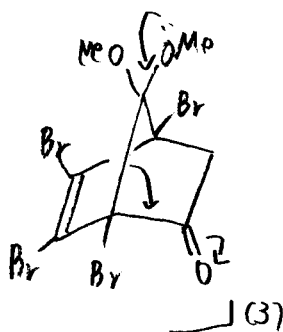
K2CO3, MeOH



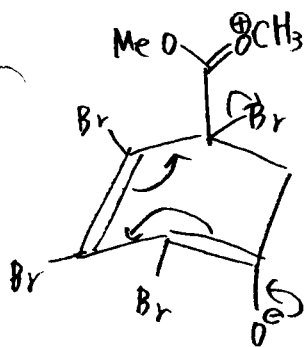
MeOH



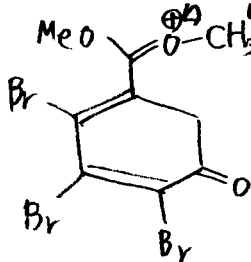
heat, neat



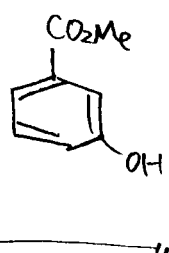
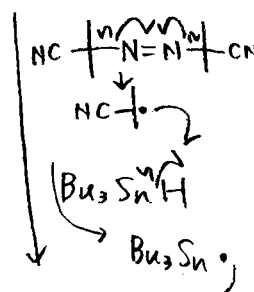
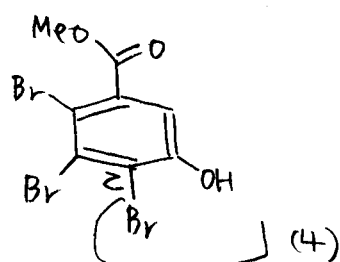
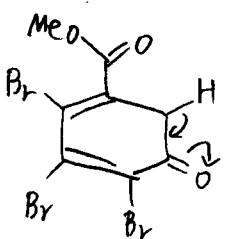
PDC, CH2Cl2



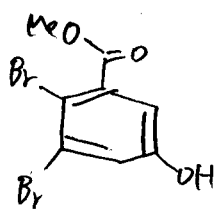
-Br[•]



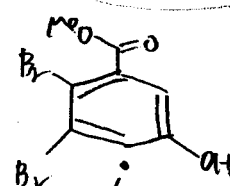
-CH₃Br

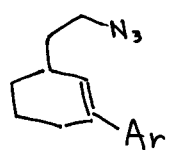


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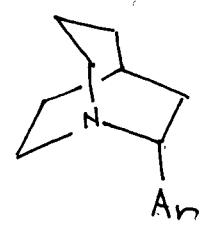
Bu3SnH
-Bu3Sn•



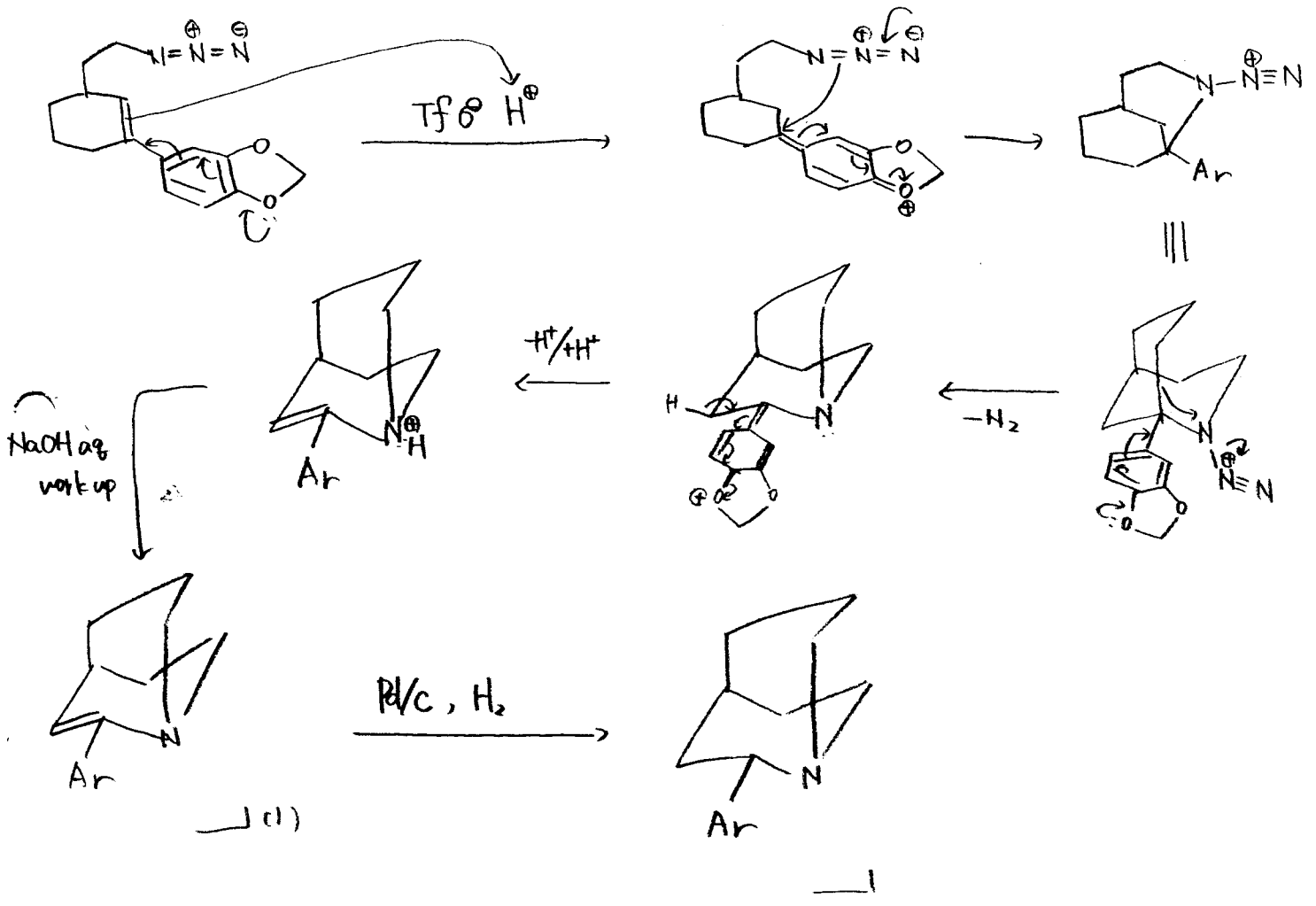


1) TfOH, benzene, 0°C;
NaOH aq (Work up)
82%

2) Pd/C, H₂ 94%

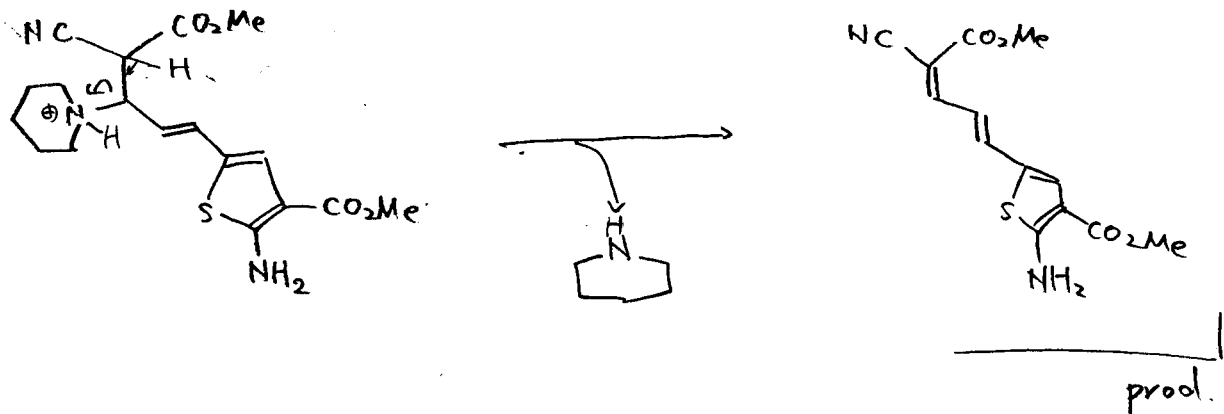
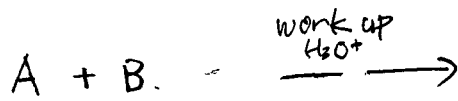
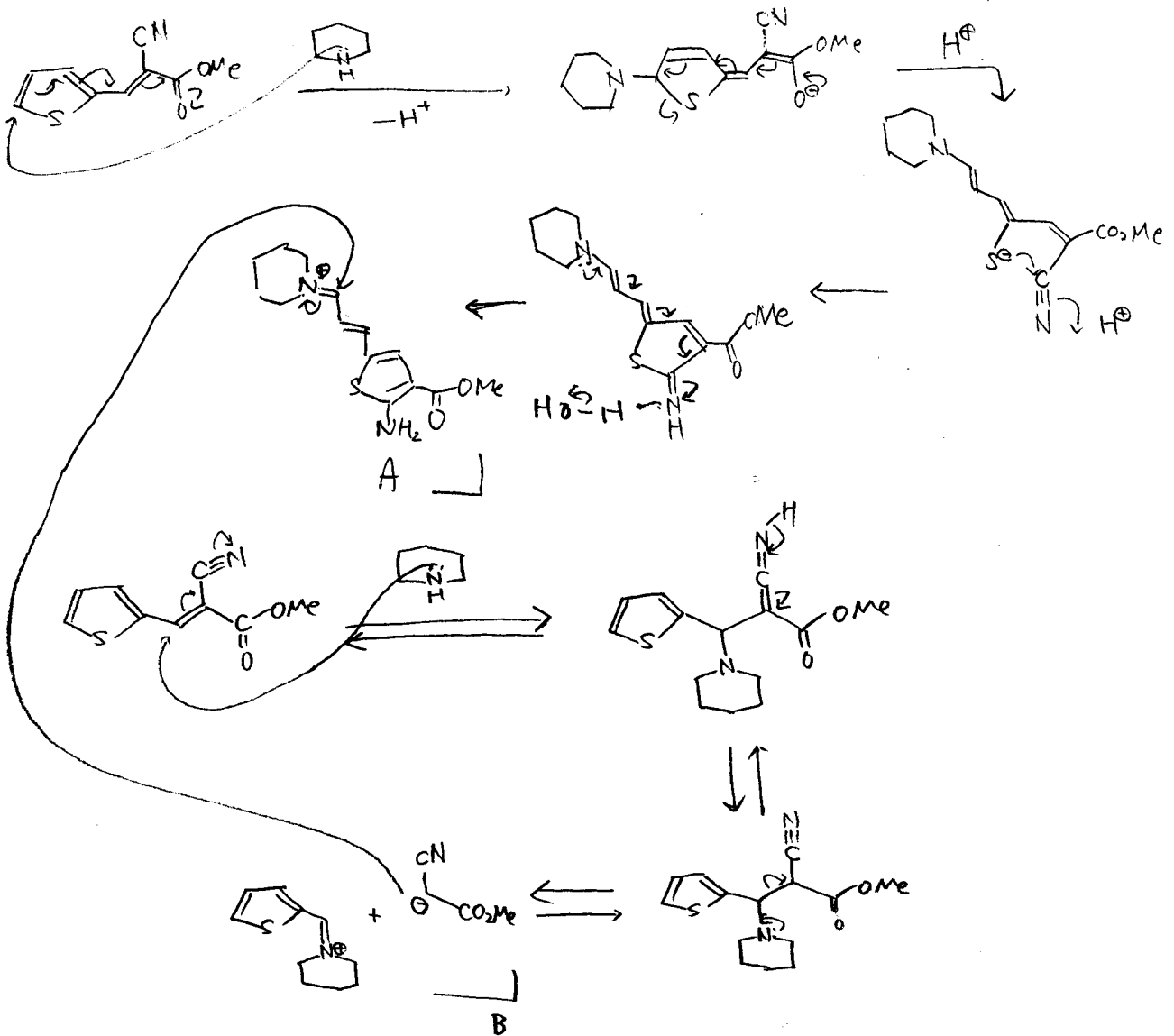
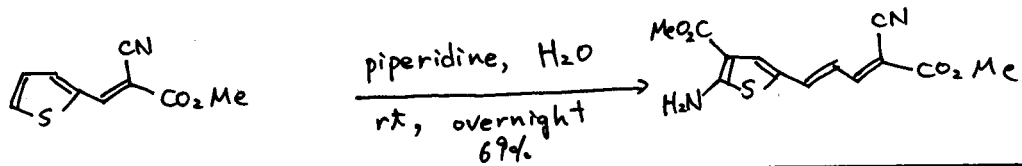


Ar = 3,4-(methylenedioxy) phenyl



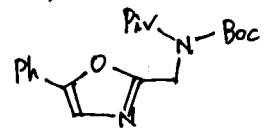
JACS 1993. 115. 10183

William H. Pearson.



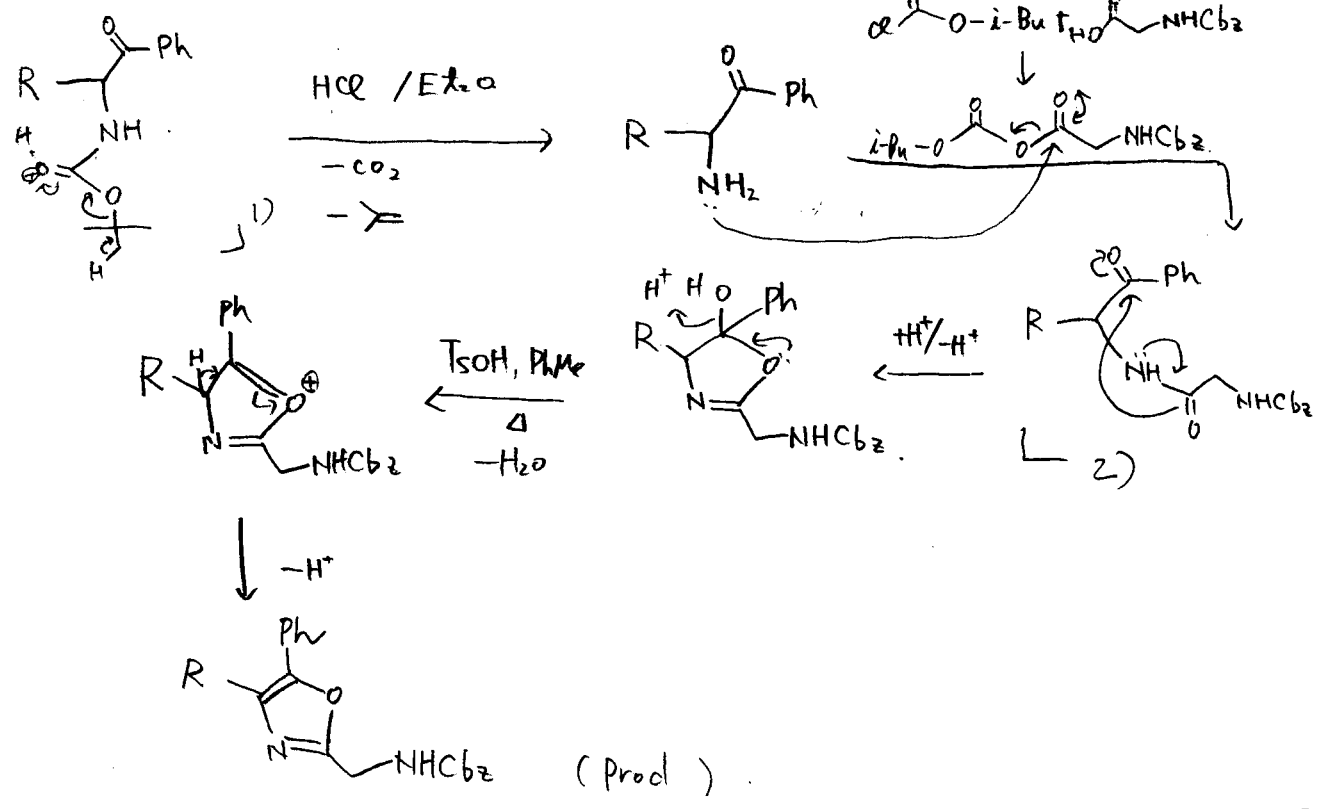
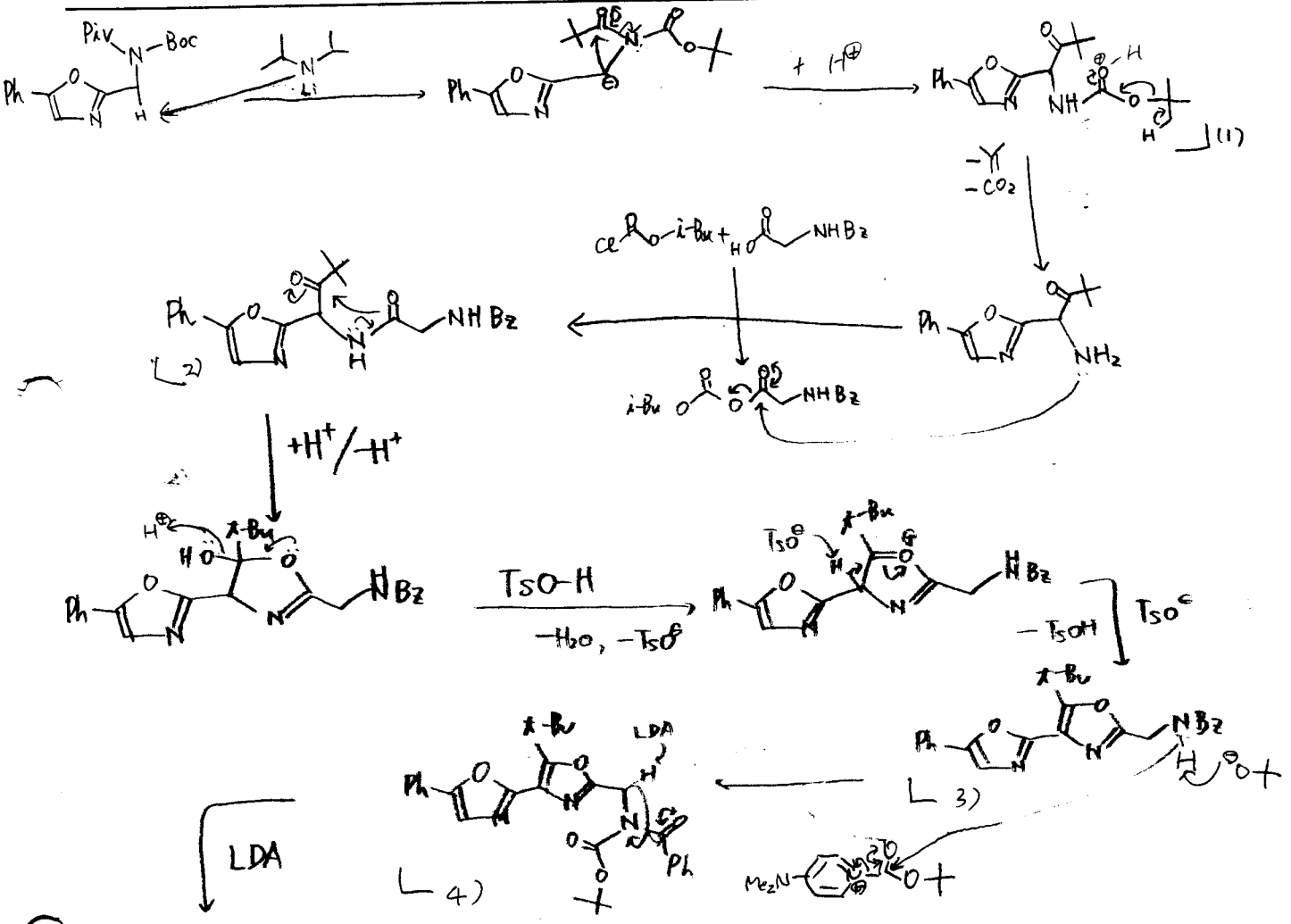
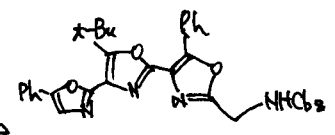
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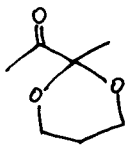
- 1) LDA, THF, -78°C
- 2) HCl / Et₂O;
ClCO₂ i-Bu, NMM
N-Bz-Gly
- 3) TsOH, PhMe, Δ
- 4) Boc₂O, DMAP

- 1) LDA, THF, -78°C
- 2) HCl / Et₂O
ClCO₂ i-Bu, NMM
N-Cbz-Gly
- 3) TsOH, PhMe, Δ

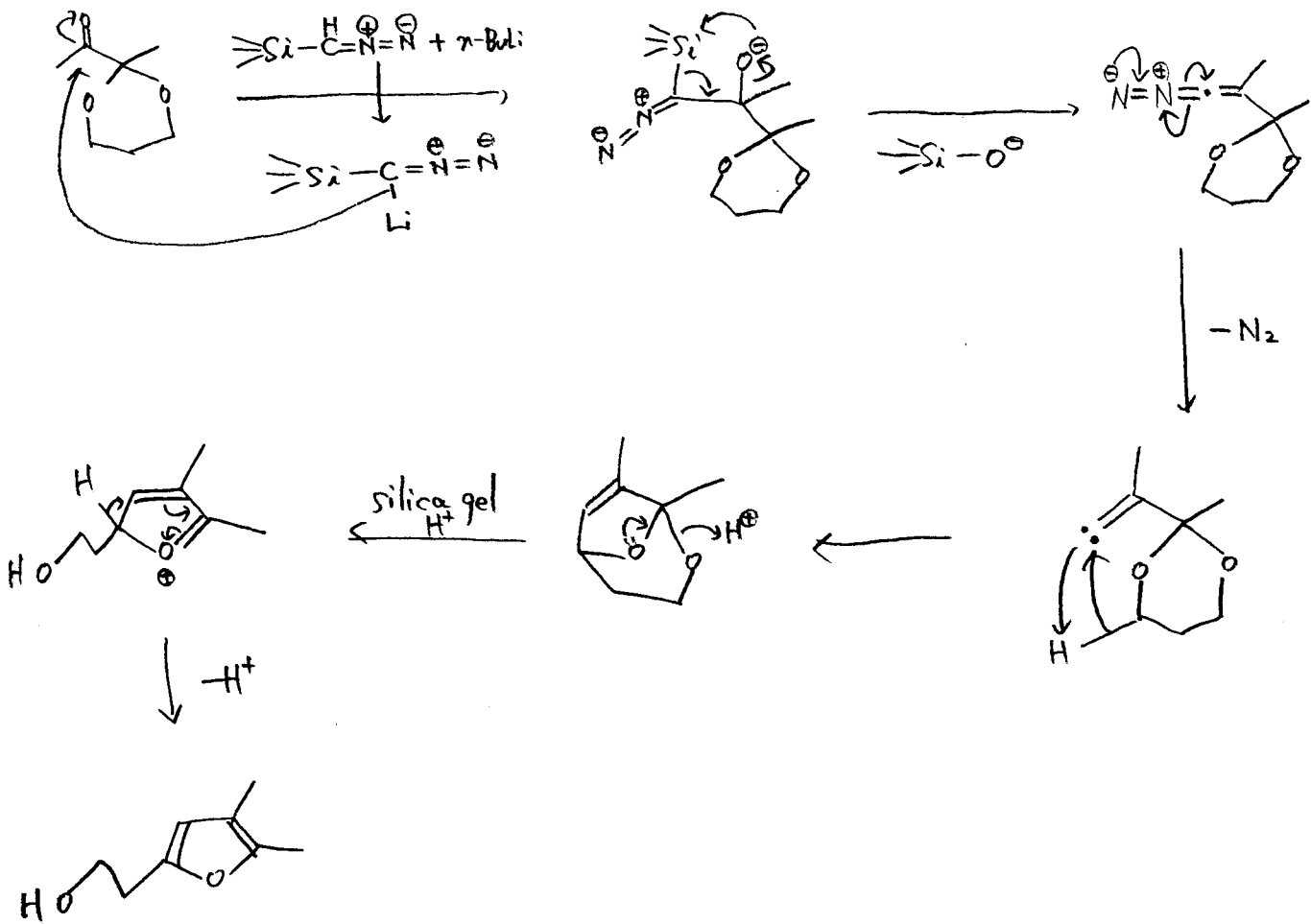
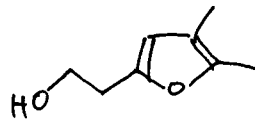


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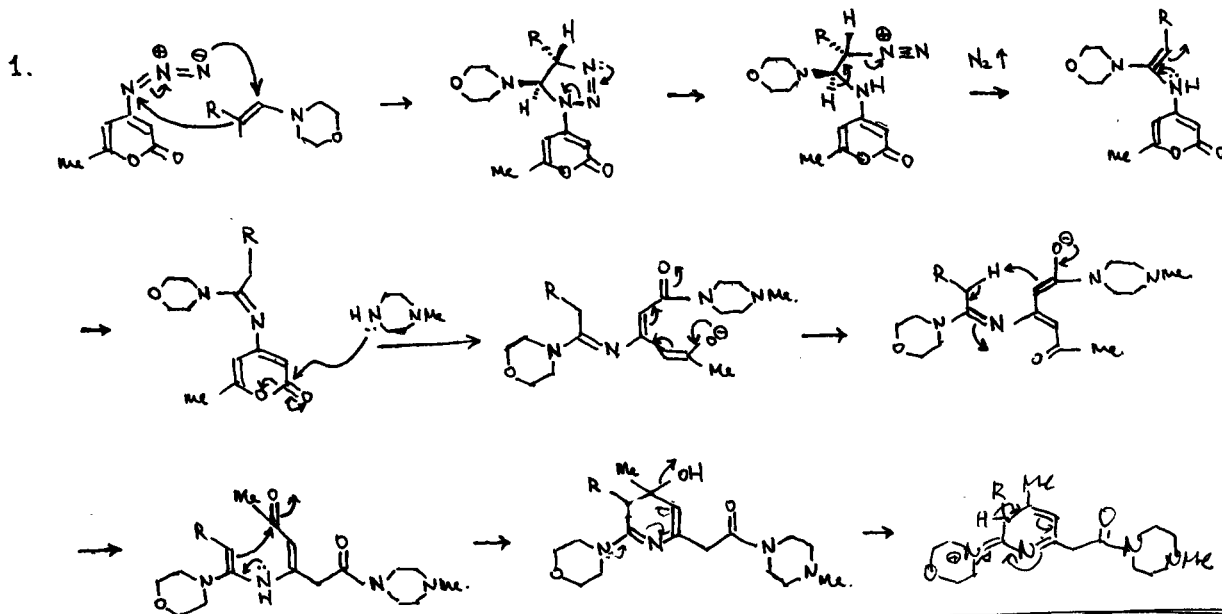


TMSCHN₂, n-BuLi
DME, hexane;
silica gel

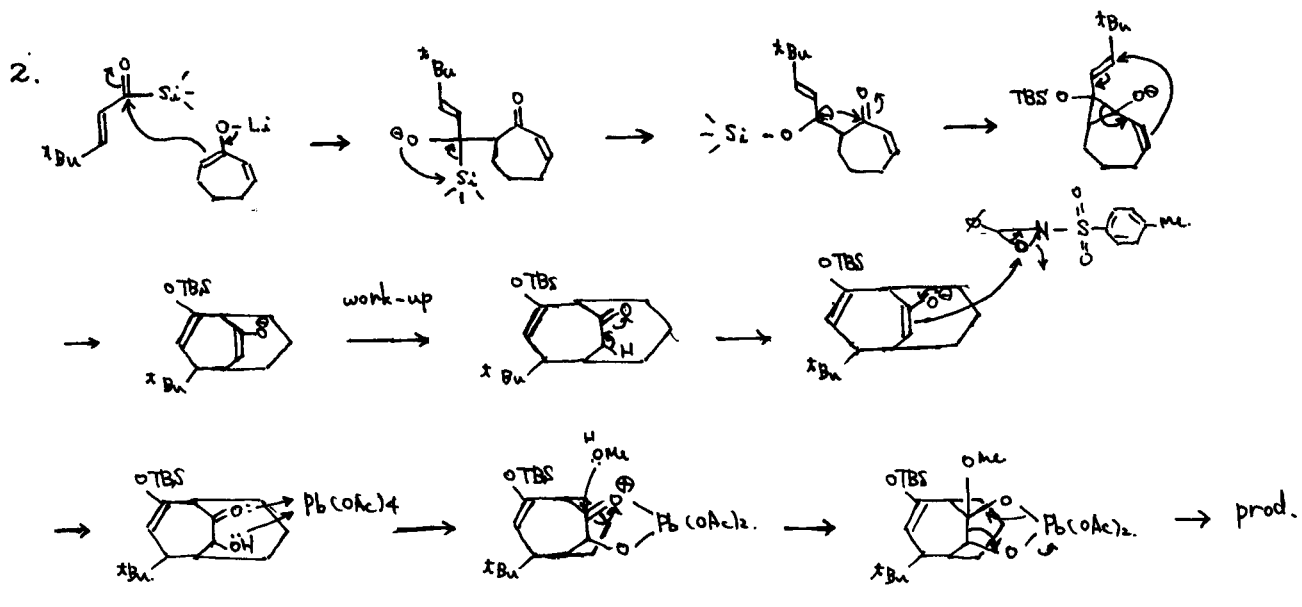


TL. 39 (1998) 5273 - 5276

Martin wills

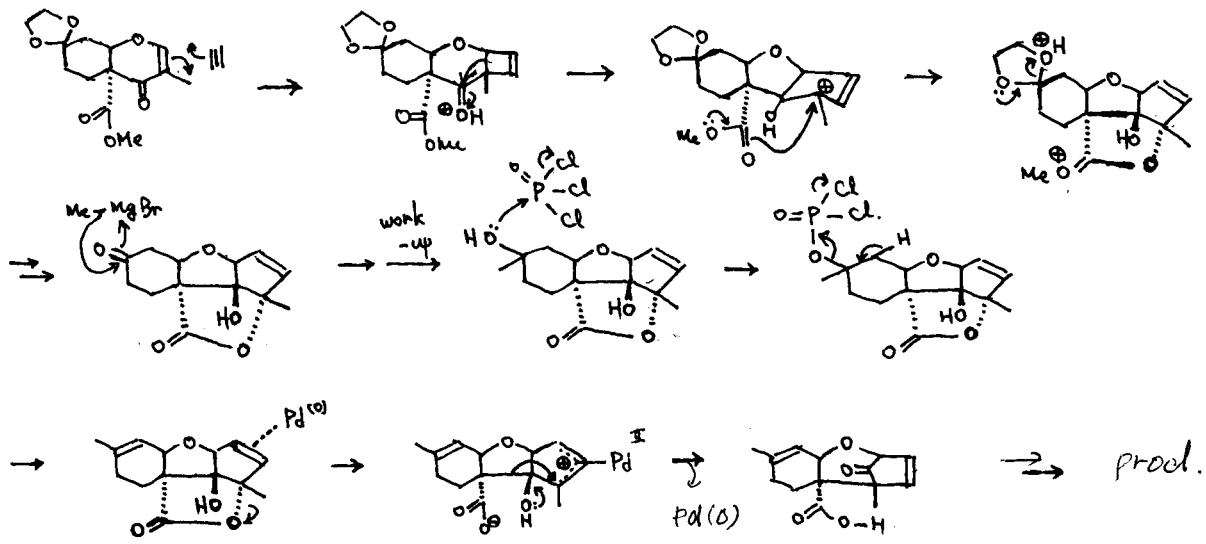


Tetrahedron 58 (2002) 1213
Pasqualina Trimarco



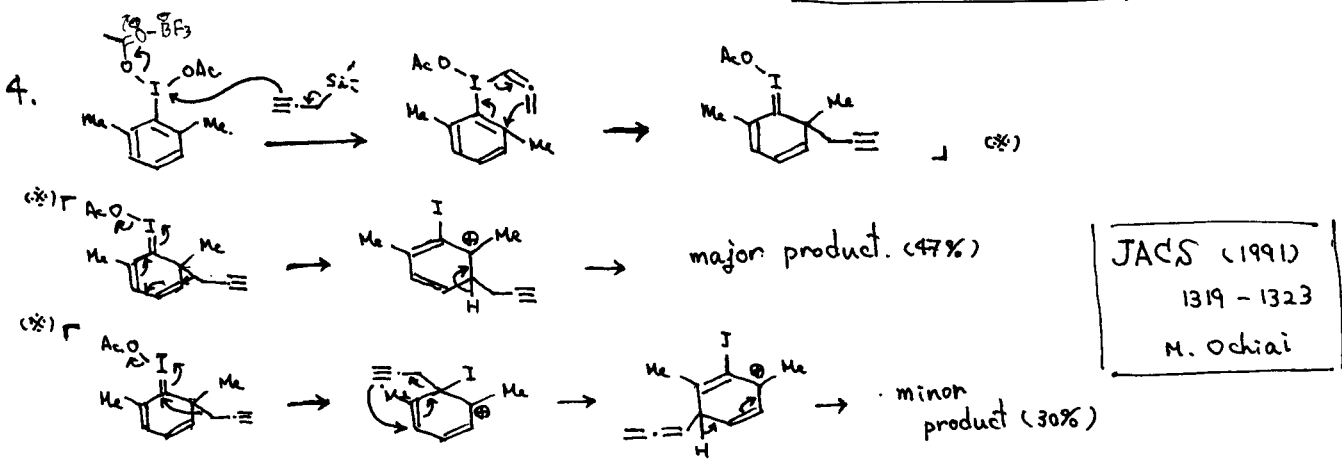
Org. Lett. (2002) 1031 - 1033
Kei Takada

3.



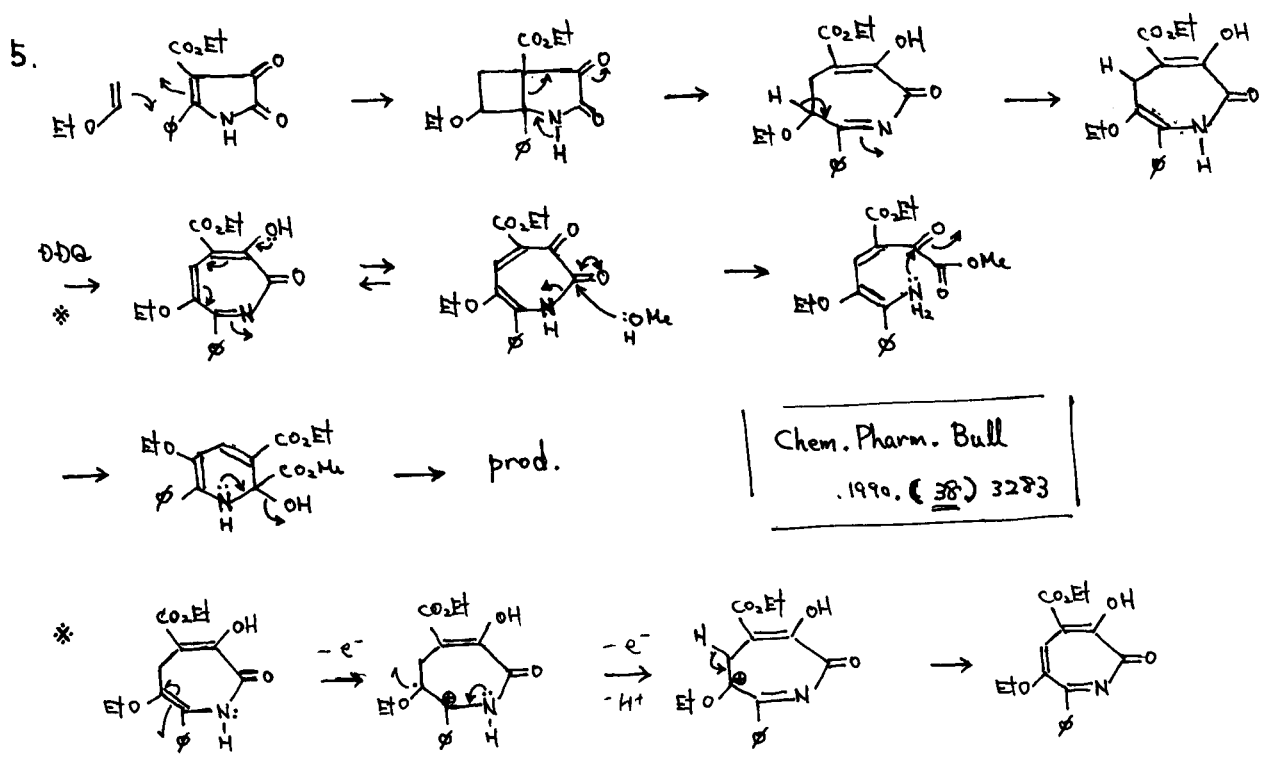
Synthesis (1998) 619
James D. White

4.



JACS (1991)
1319 - 1323
M. Ochiai

5.



Chem. Pharm. Bull
.1990. (38) 3283