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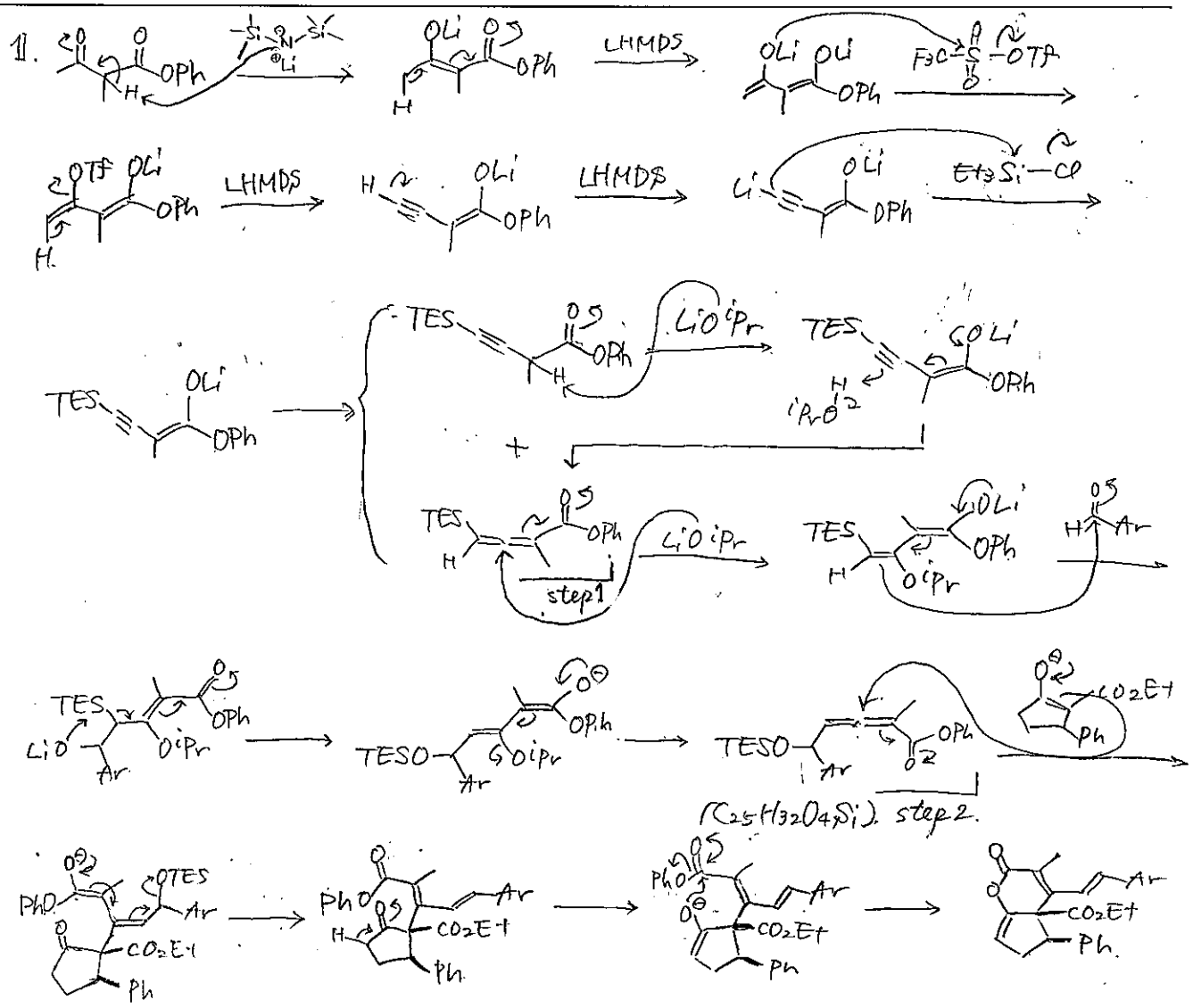

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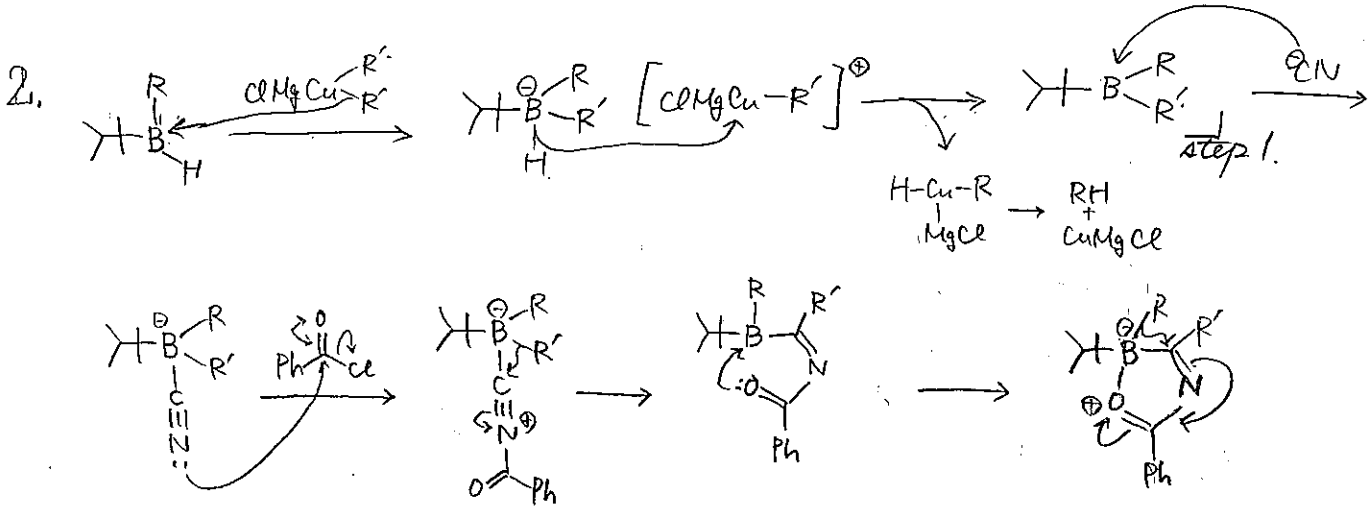

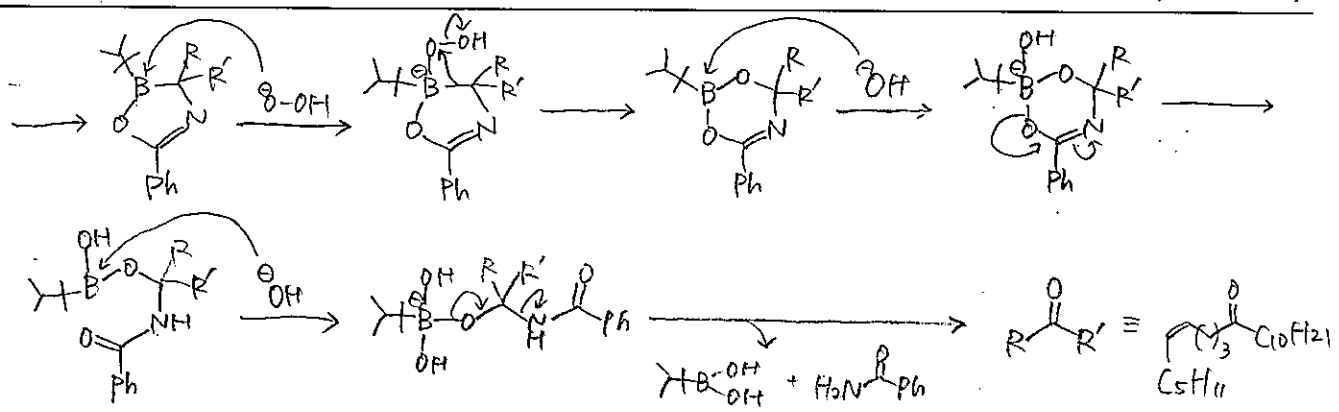

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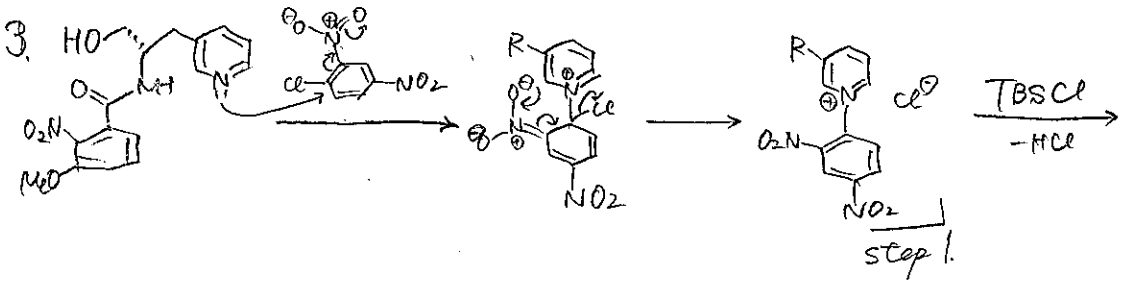
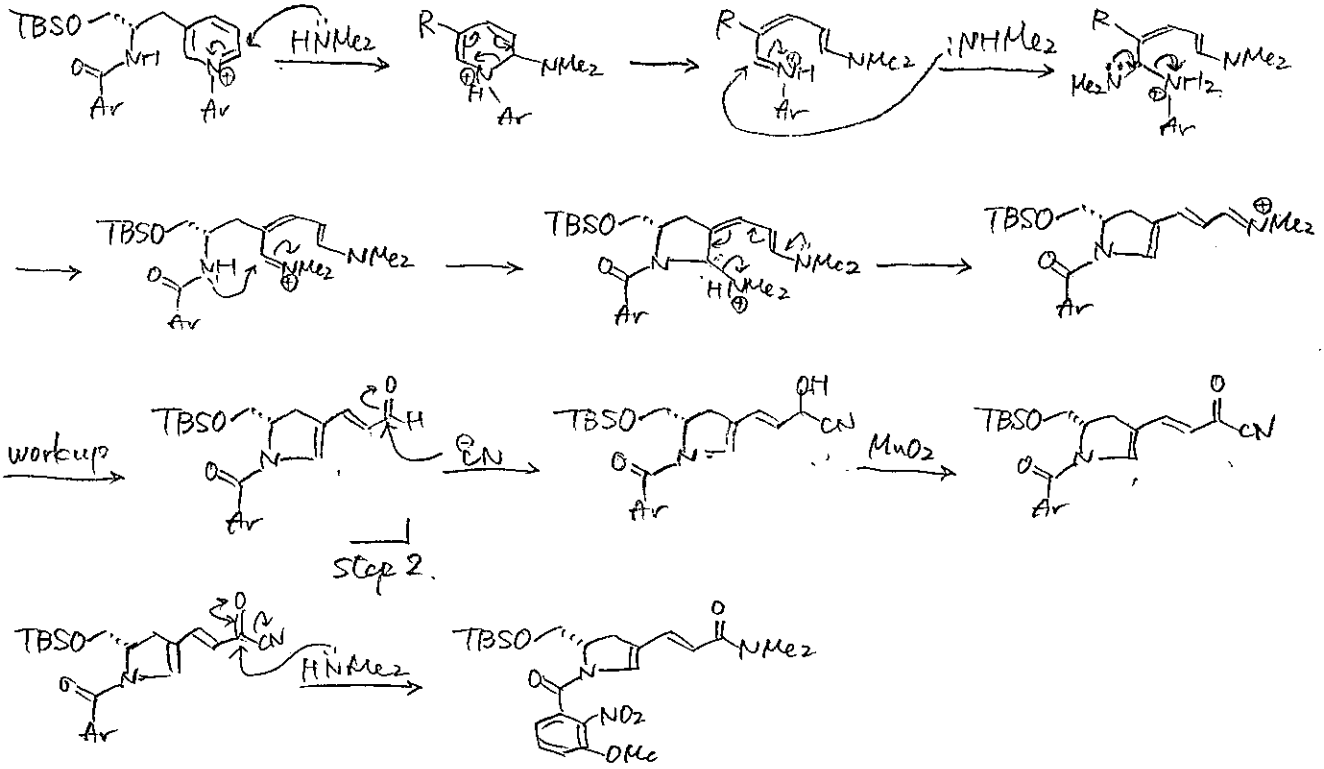
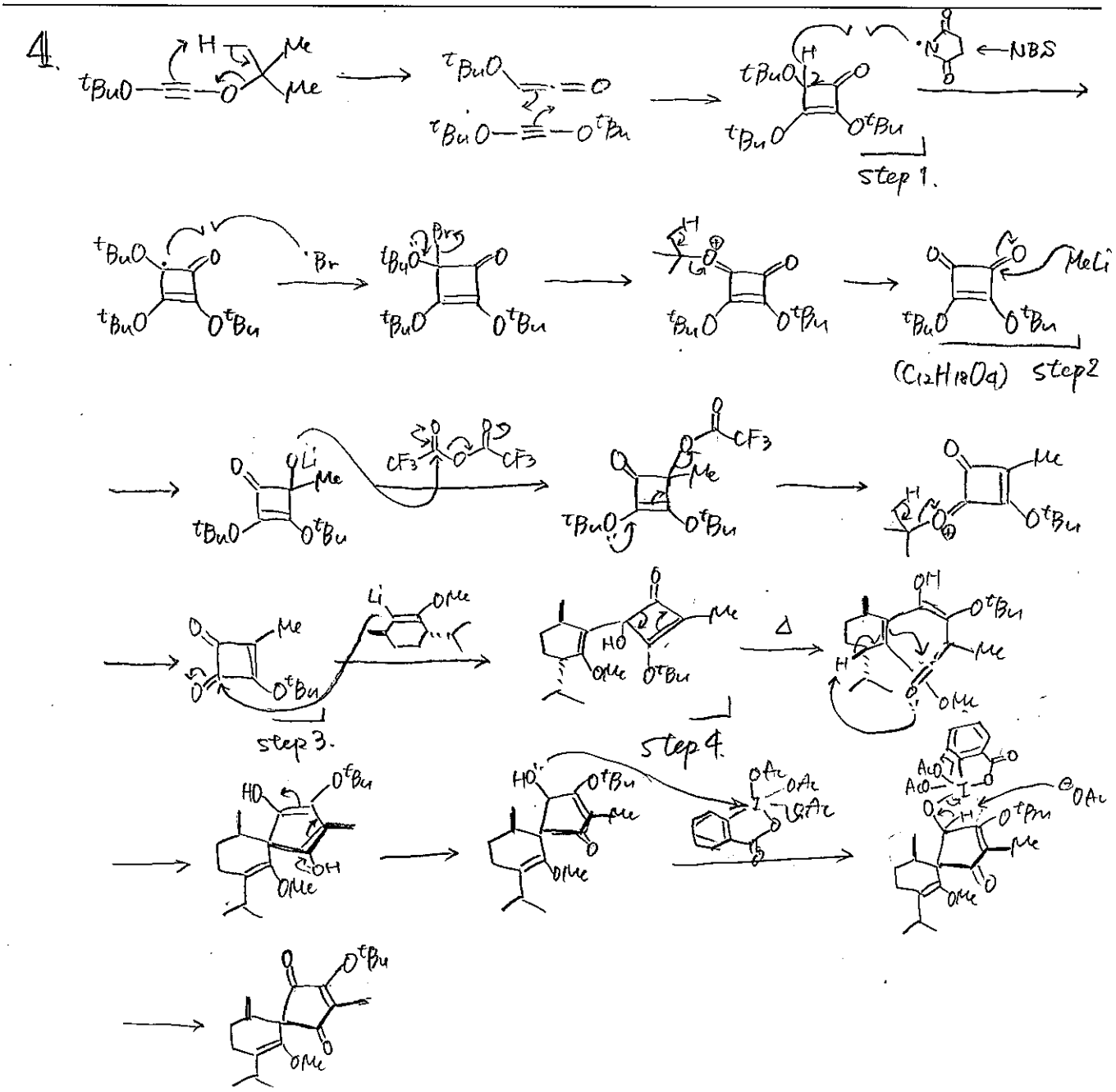


step 1.



step 2.

4.



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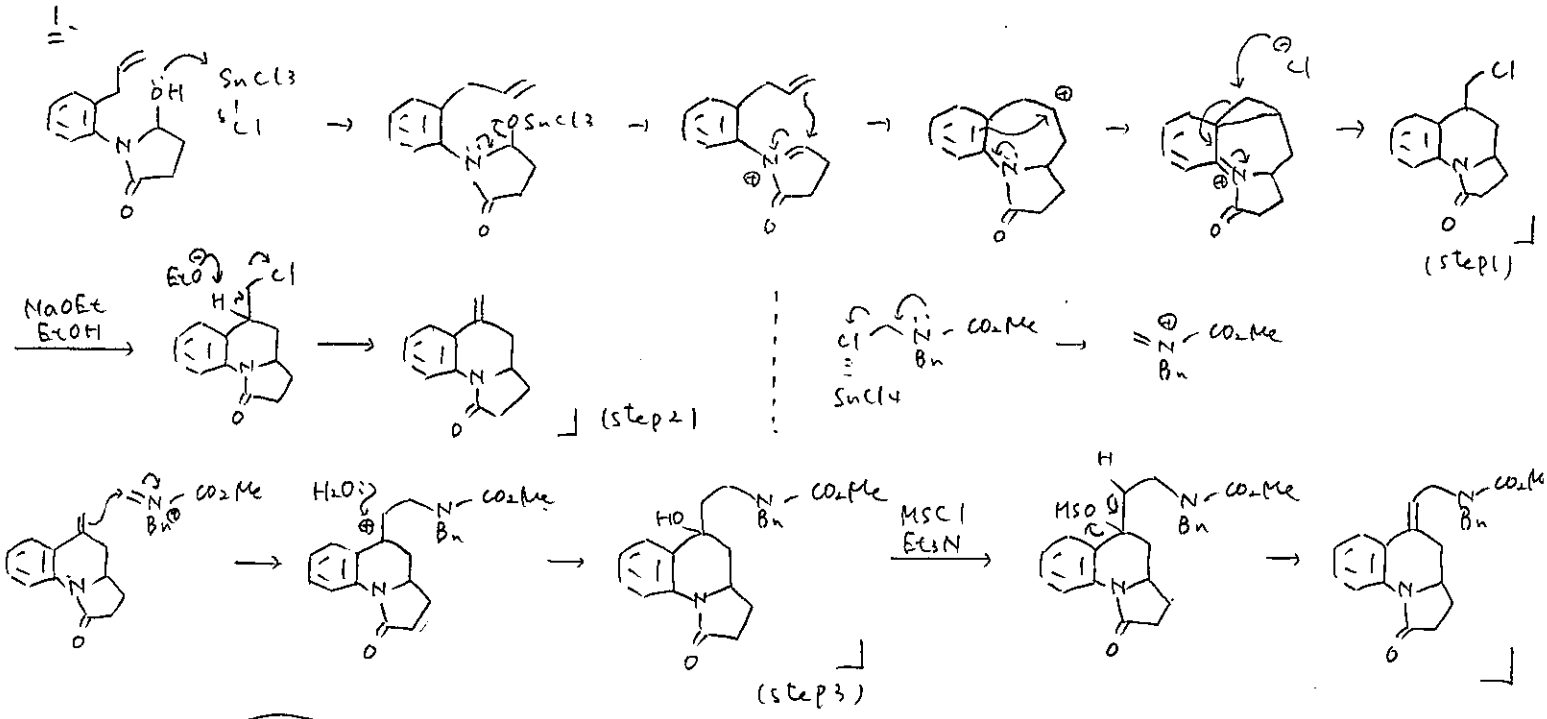
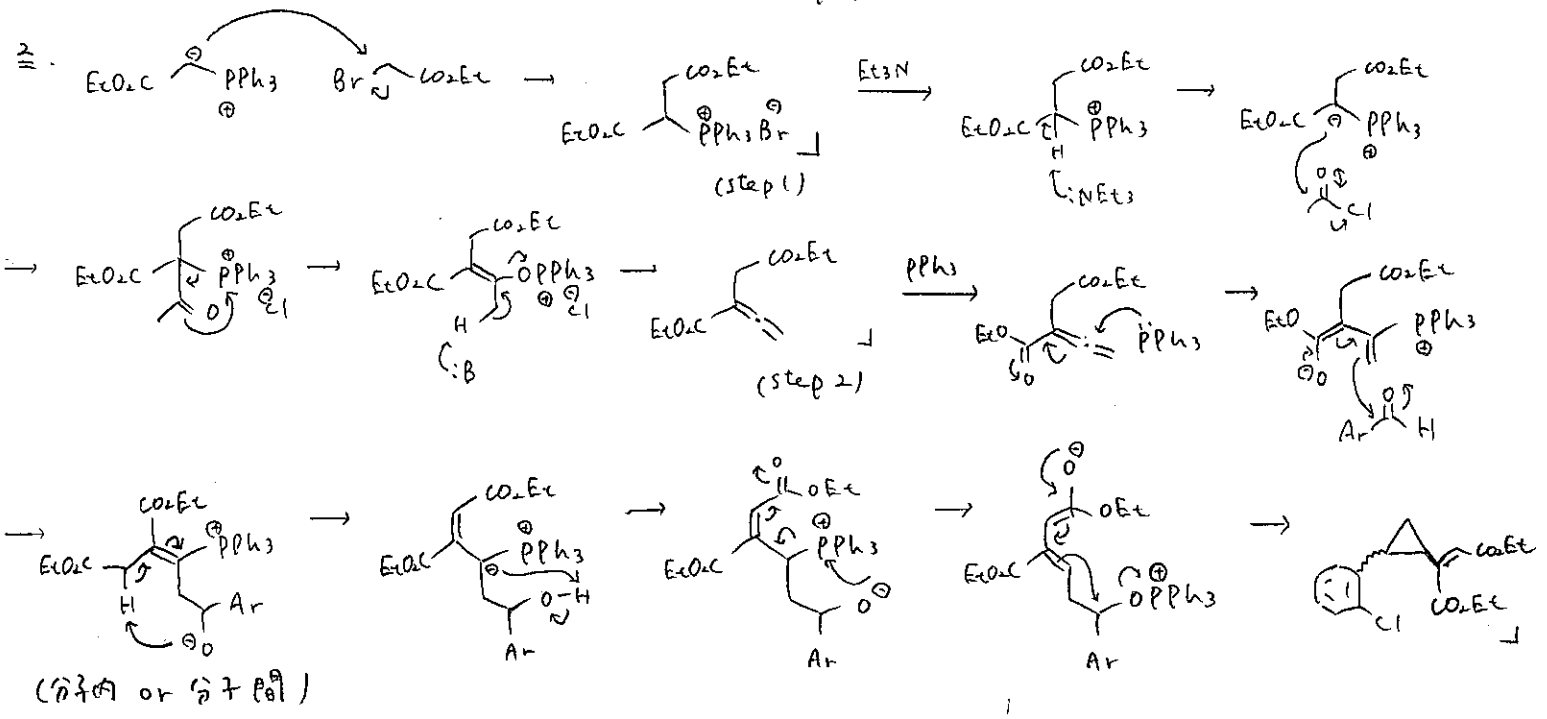
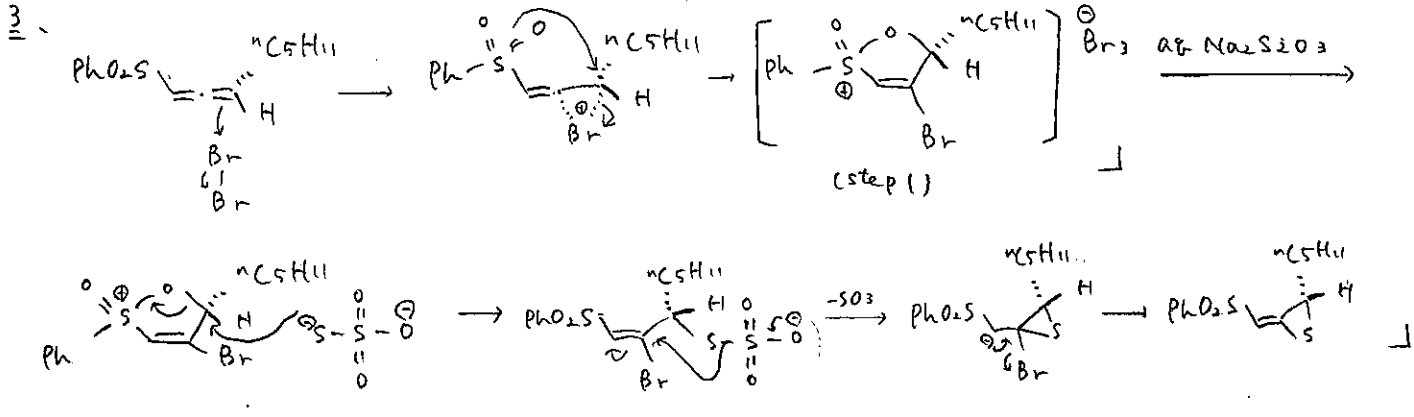
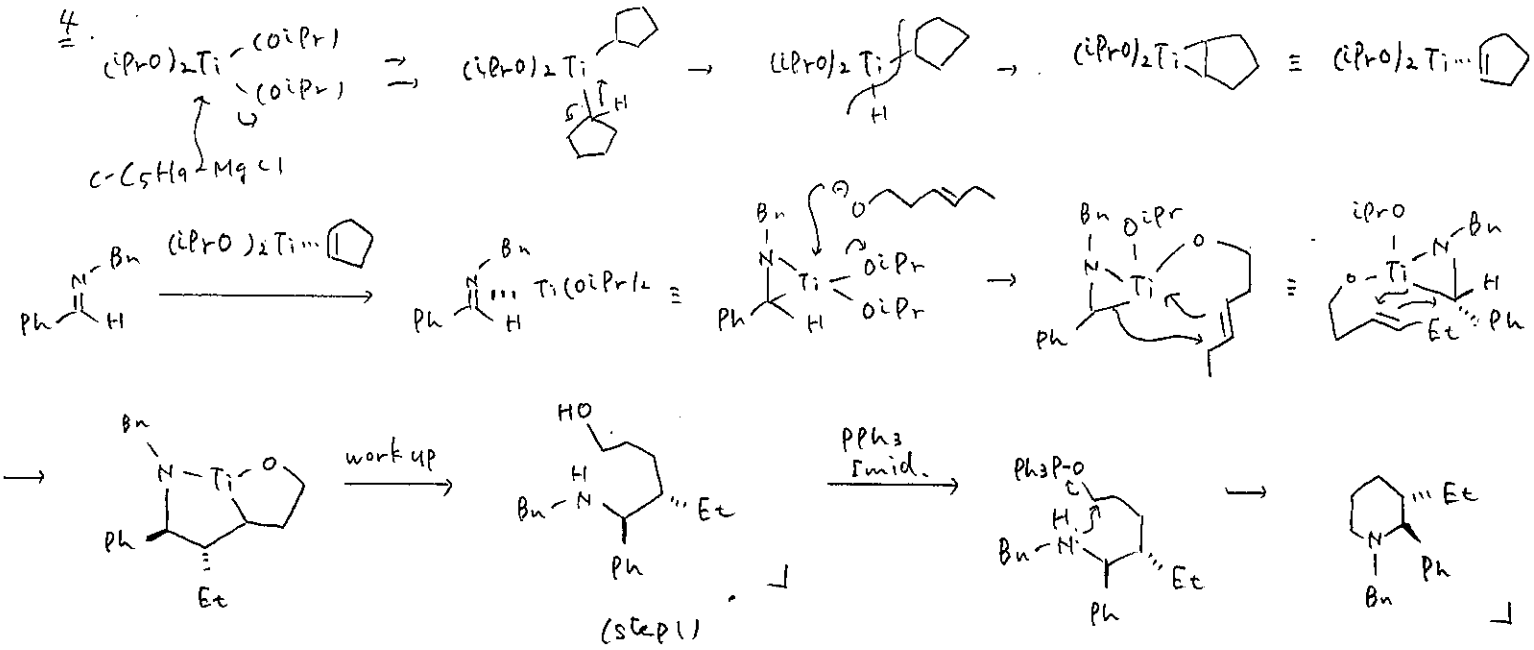

SnCl3
(step1)
NaOEt
EtOH
(step2)
SnCl4
MSCl
Et3N
(step3)

2.


(step1)
Et3N
(step2)
PPh3
(分子内 or 分子間)

3.


(step1)
aq. Na2S2O3
-SO3

4.