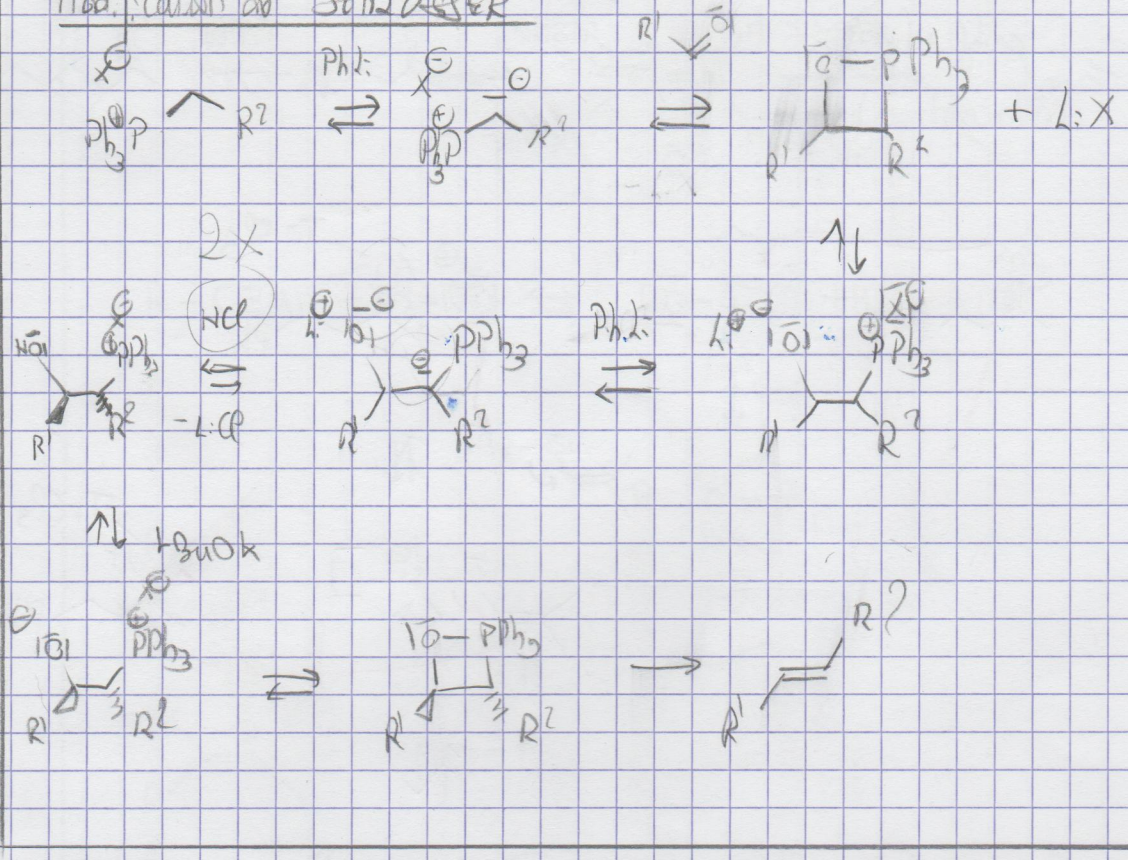
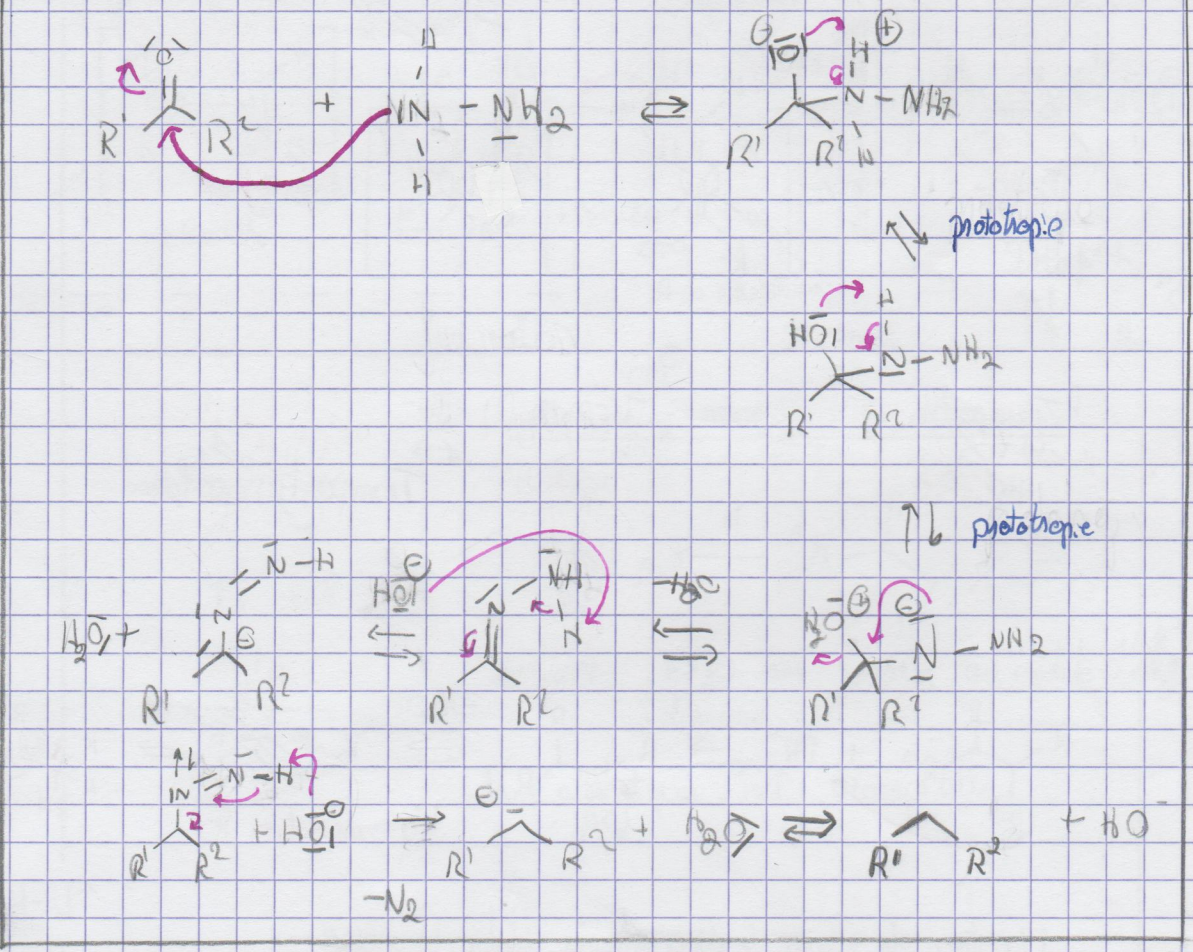
Mécanisme chimie organique

Modification de SCHLOSSER



Réaction de WOLFF - KISHNER

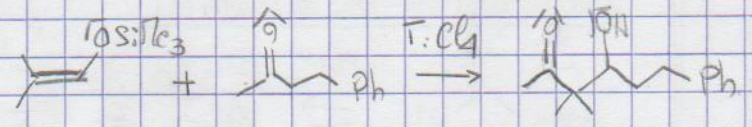
$^{\ominus}OH \equiv KOH / ROH$

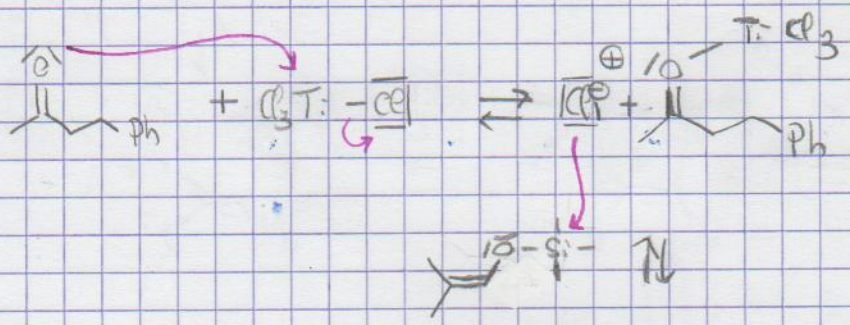


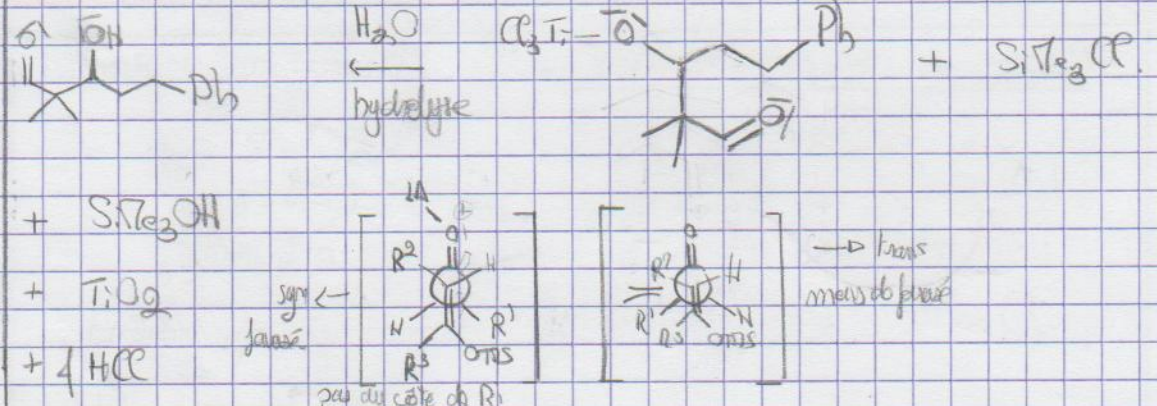
Aldolisation de MUKAIYAMA

énol silylé

sans condition basique

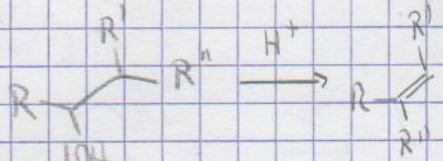


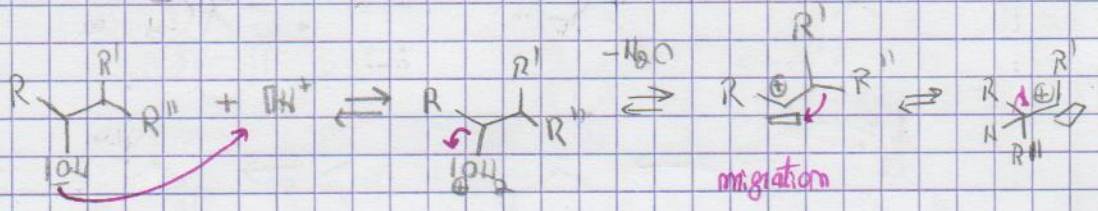




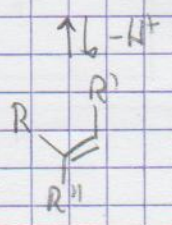
Transposition de WAGNER - MEERWEIN

Transposition pinacolique

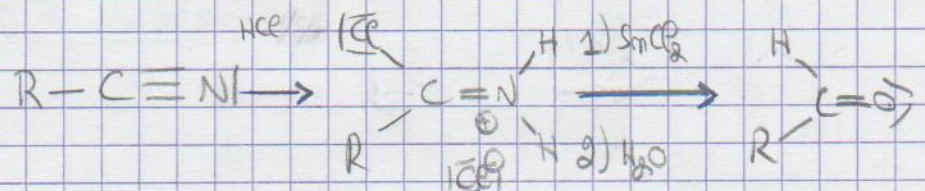


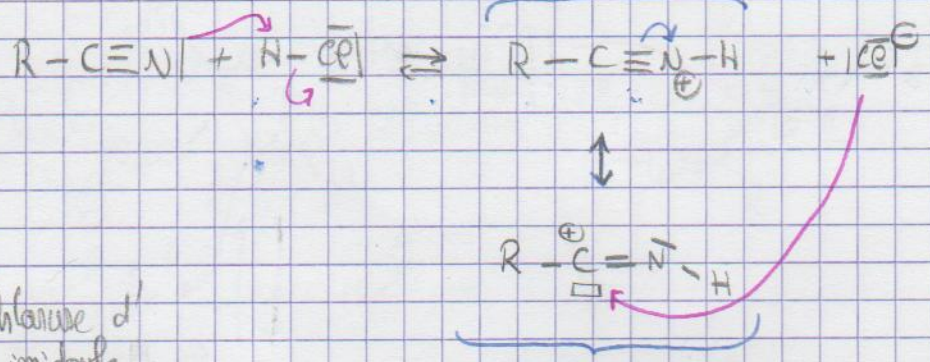


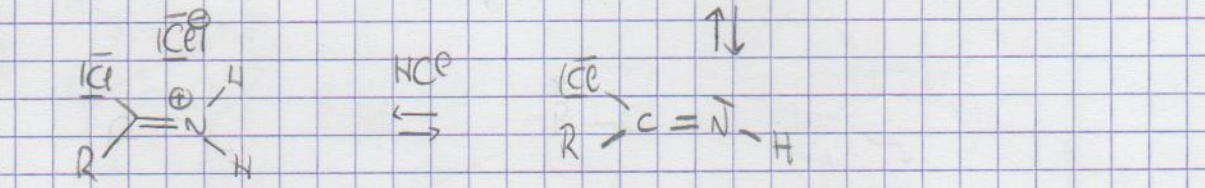
Migration du groupe le plus apte à stabiliser la charge positive



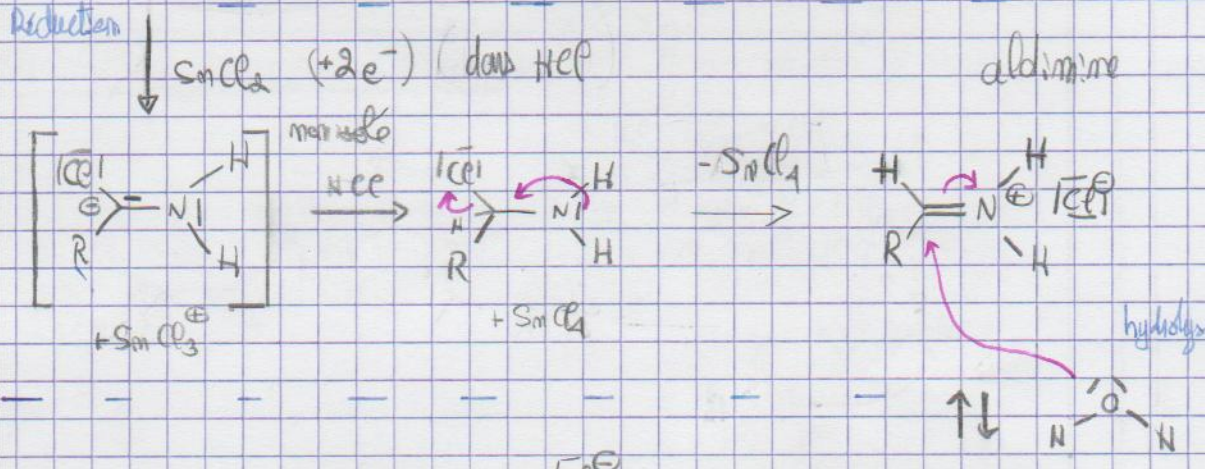
Réduction de STEPHEN

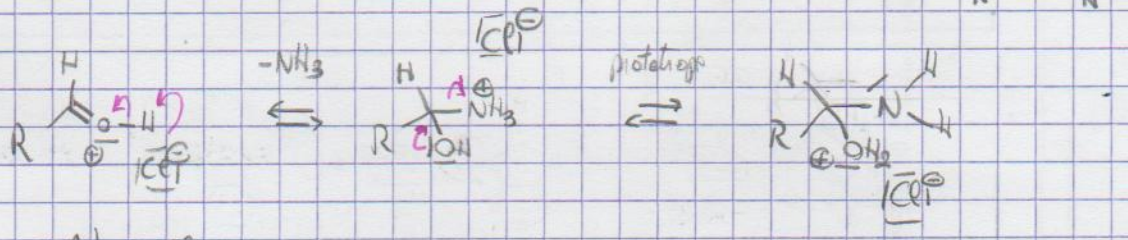


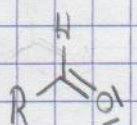




Réduction



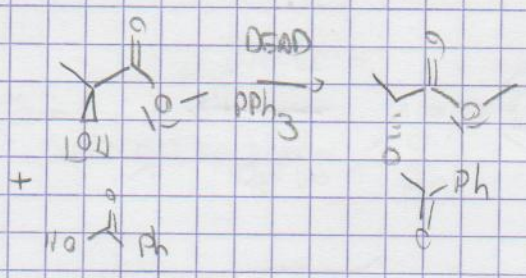




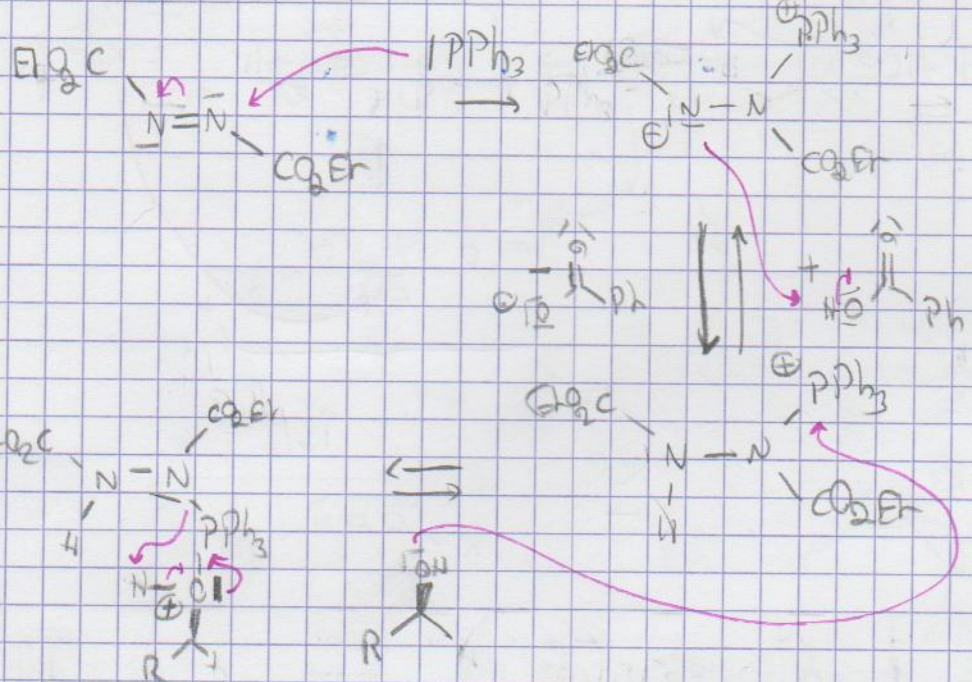
Solvant { Et_2O ou $CHCl_3$ ou acétate d'éthyle / dioxane

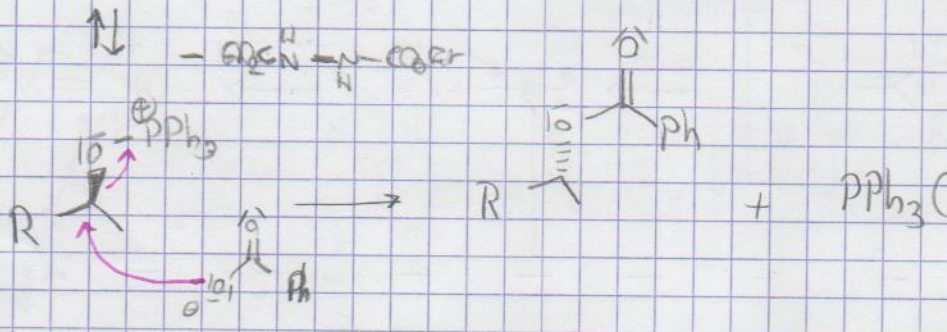
R = aliphatique ou aromatique.

Réaction de MITSUNOBU

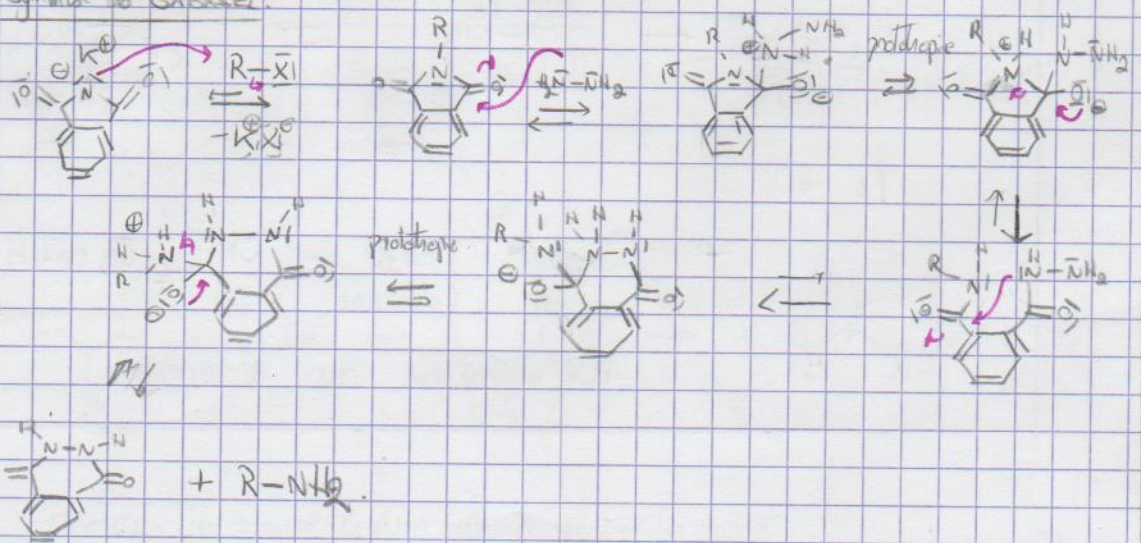


inversion de la configuration

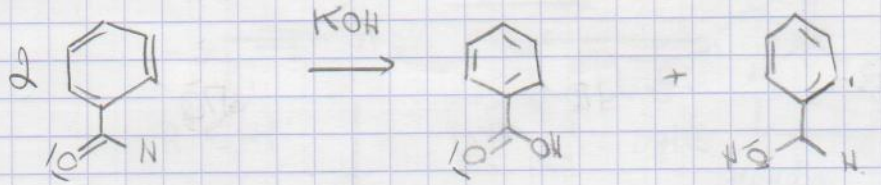




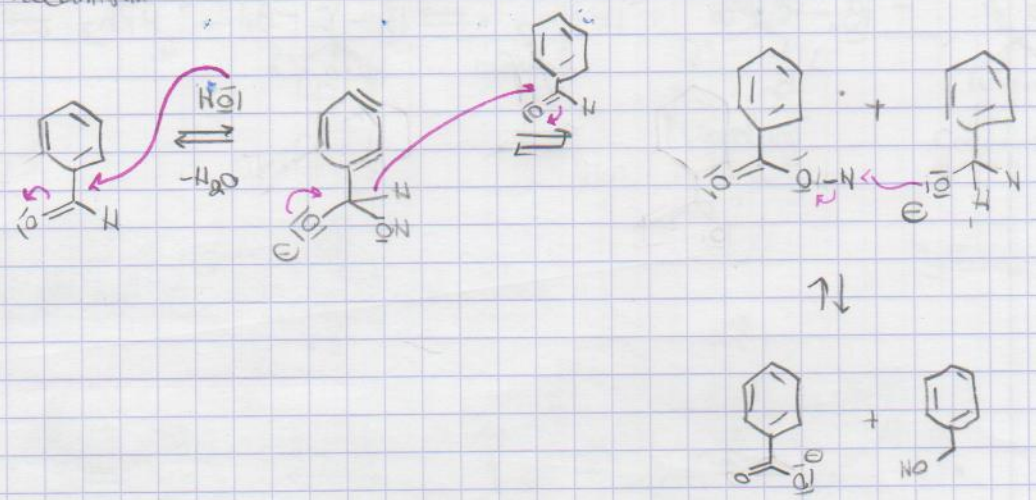
Synthèse de GABRIEL



Réaction de CANIZZARO.



Mécanisme



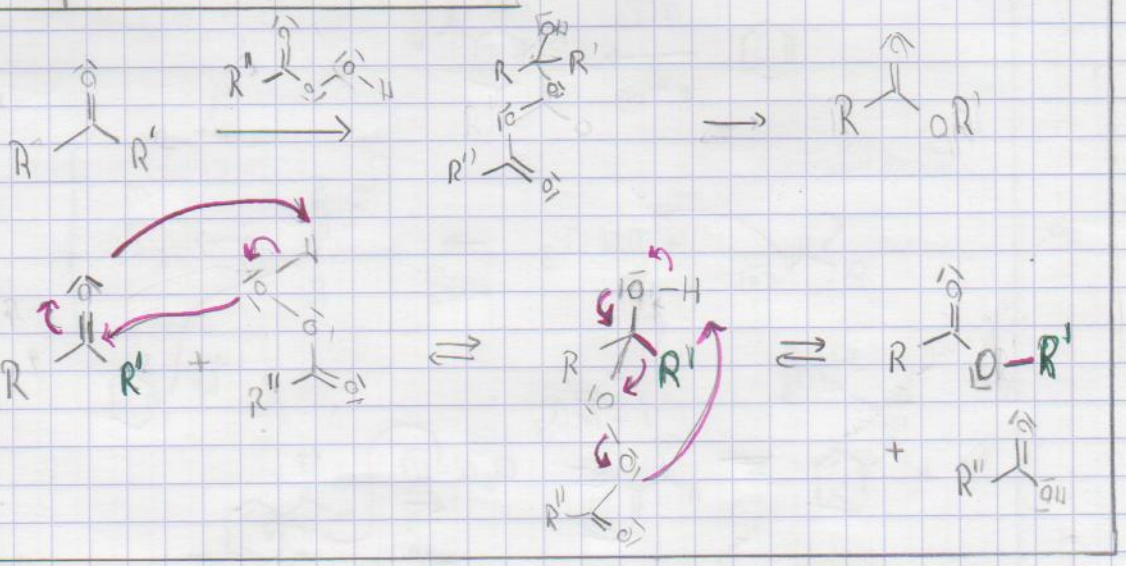
Dismutation du benzaldéhyde.

$$RCO_2H + 2H^+ + 2e^- = RCHO + H_2O \quad (1)$$

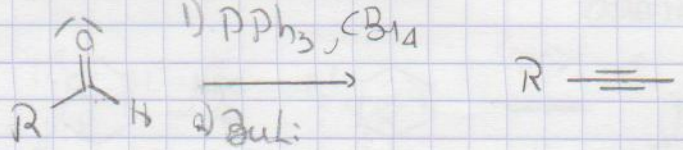
$$RCHO + 2H^+ + 2e^- = RCH_2OH \quad (2)$$

Bilan : (2) − (1) $\quad 2\,RCHO = RCO_2H + RCH_2OH$.

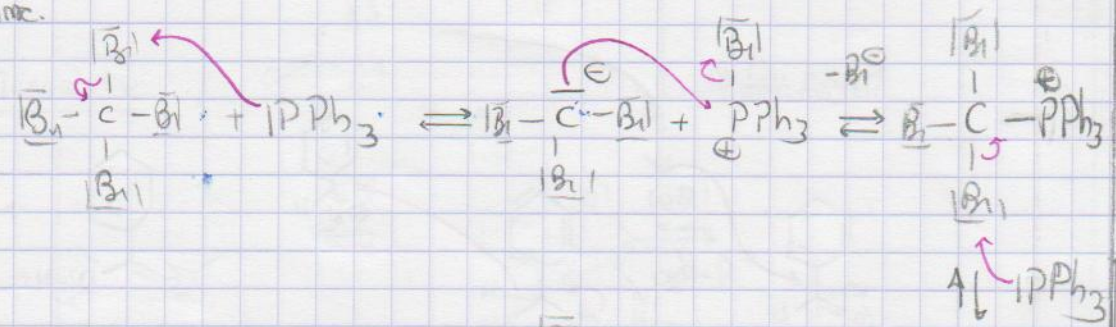
Transposition de BAEYER – VILLIGER

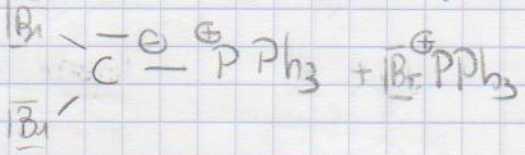


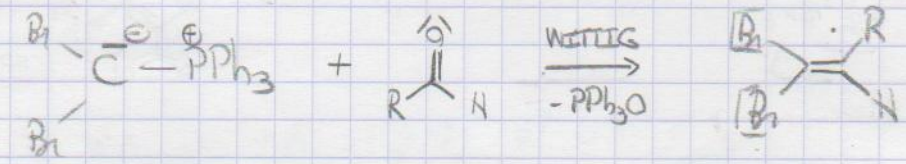
Réaction de CORREY-FUCHS

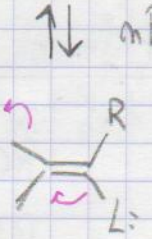


Mécanisme.

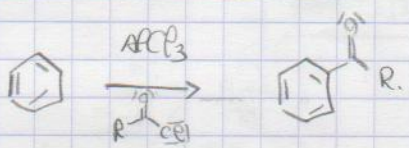




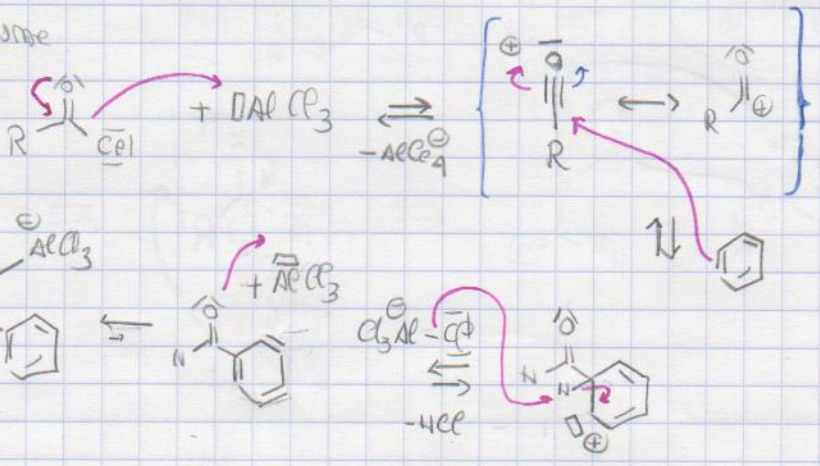




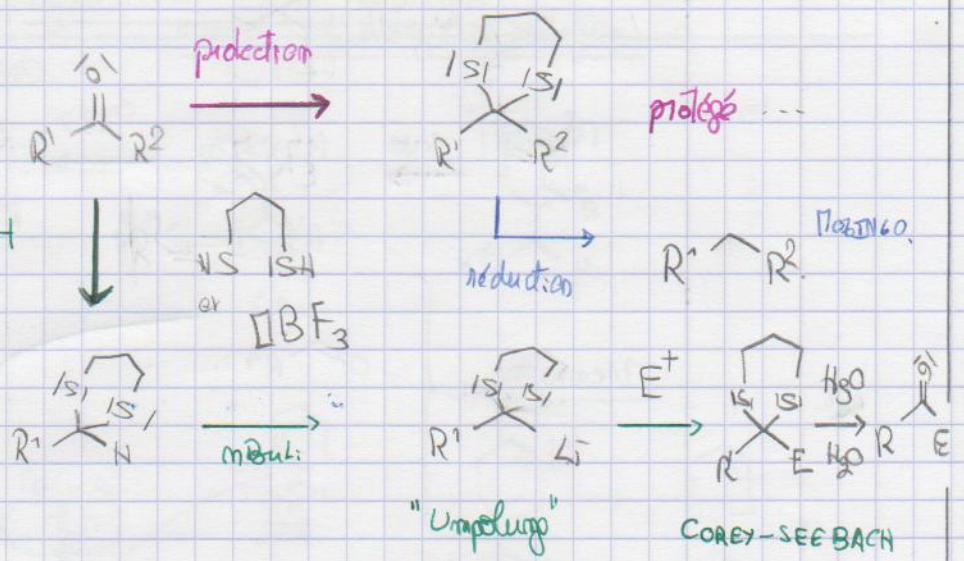
Acylation de FRIEDEL - CRAFTS.



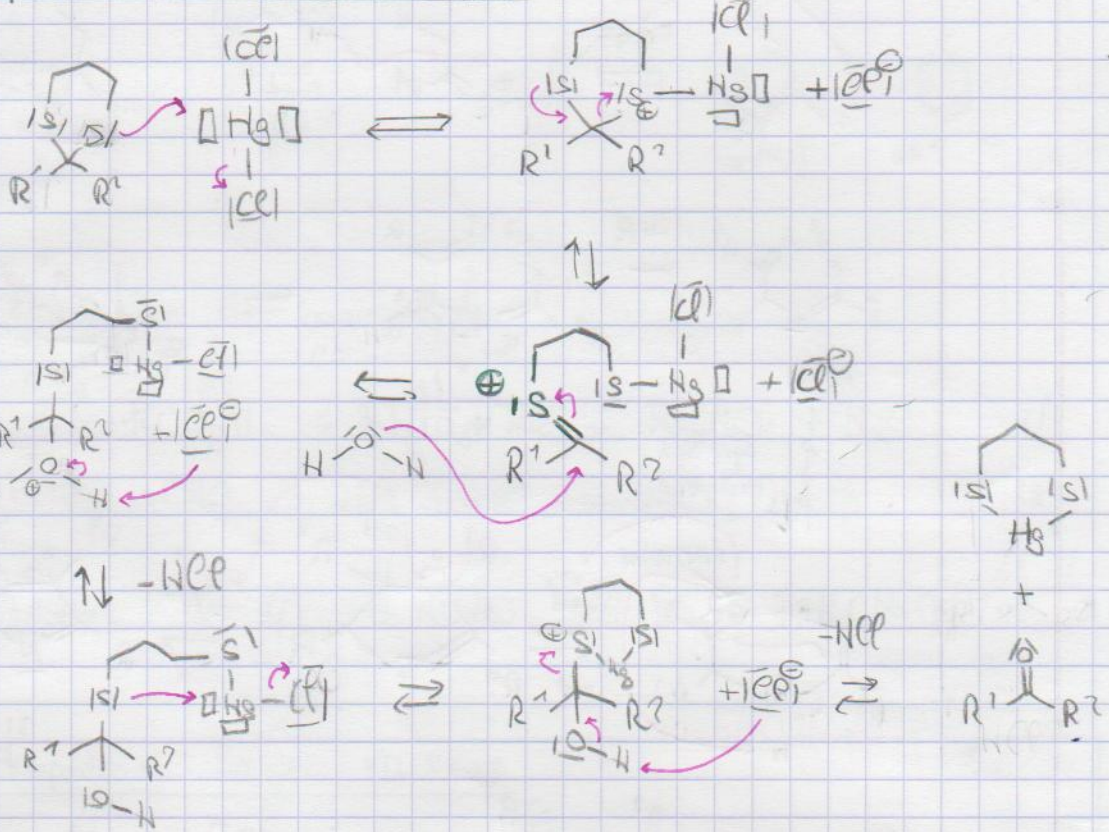
Mécanisme



Protection par un thioacétal : déprotection et autres...

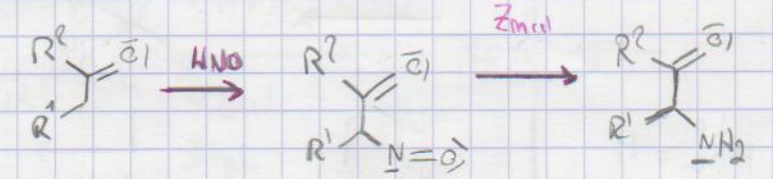


Déprotection du thioacétal en cétone :

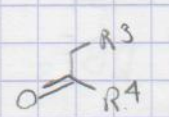


La synthèse du Pyrrole de KNORR.

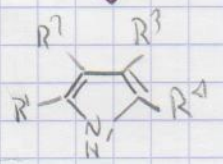
KURTZ p 244.

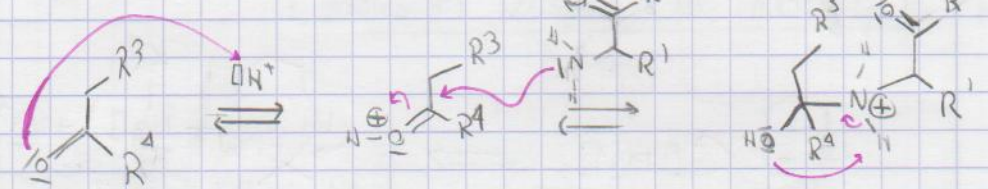


Mécanisme

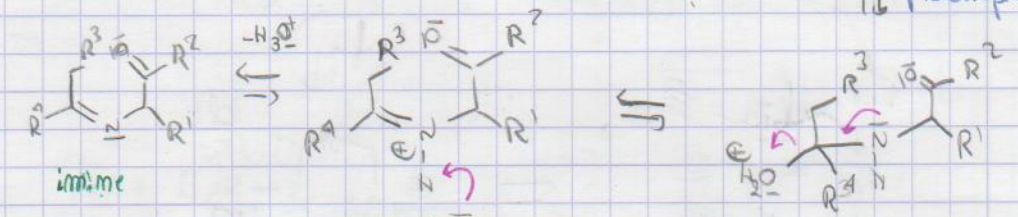


milieu acide.



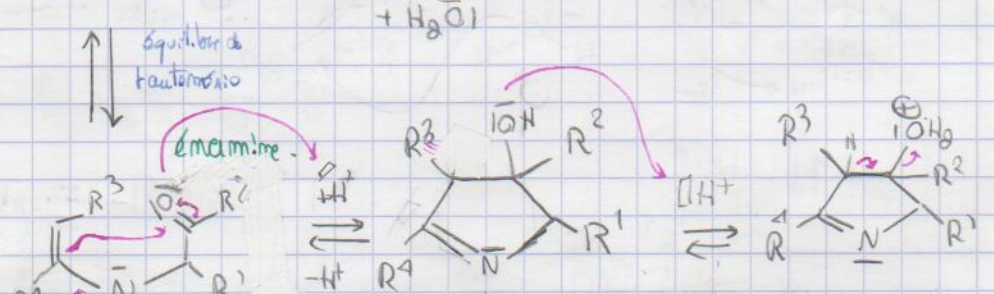


↑↓ prototropie

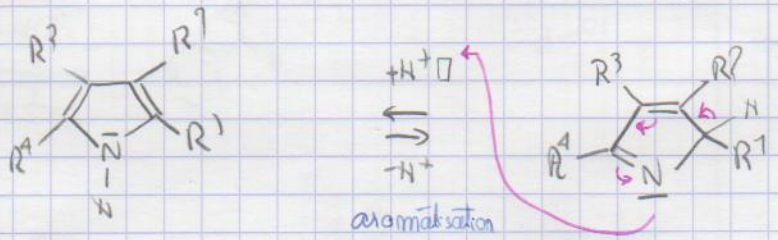


équilibre de tautomérie

énamine

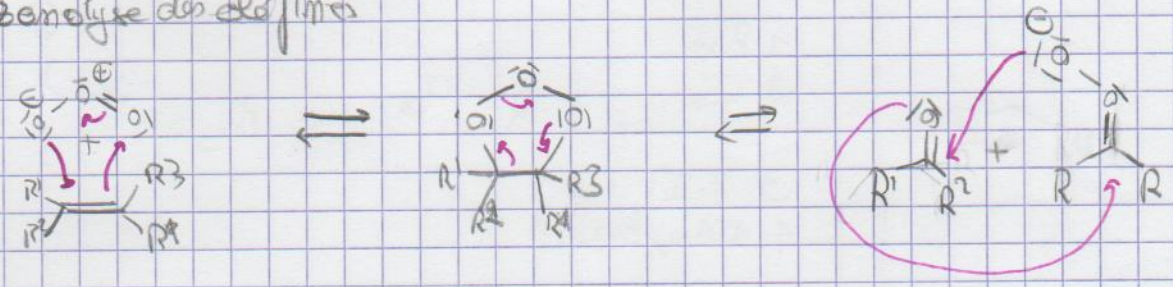


↑↓ $-H^+$, $-H_2O$.

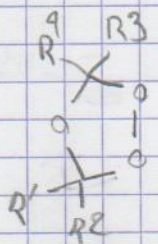


Mécanisme de chimie organique

Ozonolyse des oléfines

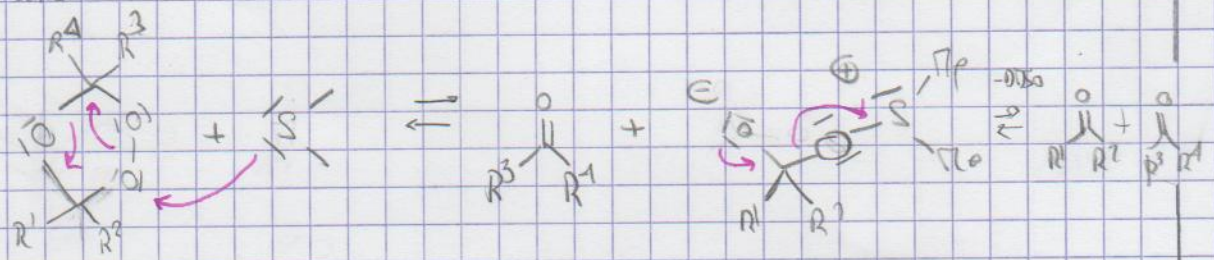


"Grande"



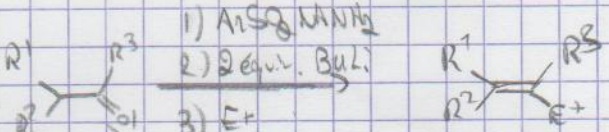
Ozonolyse ...

réductive

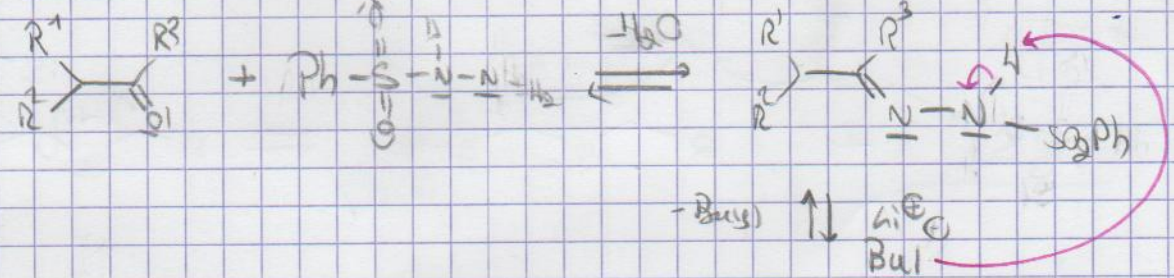


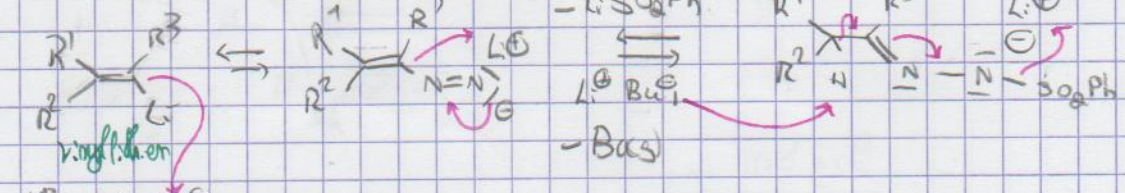
idem avec PPh_3. $\rightsquigarrow OPPh_3$

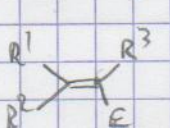
Réaction de SHAPIRO



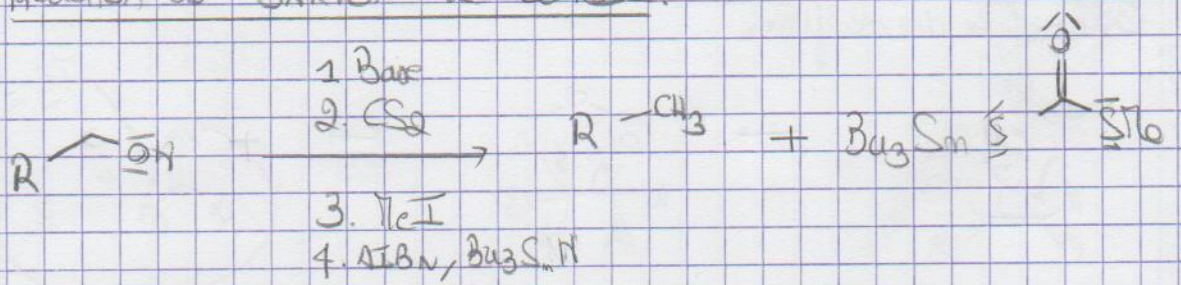
Télescopage



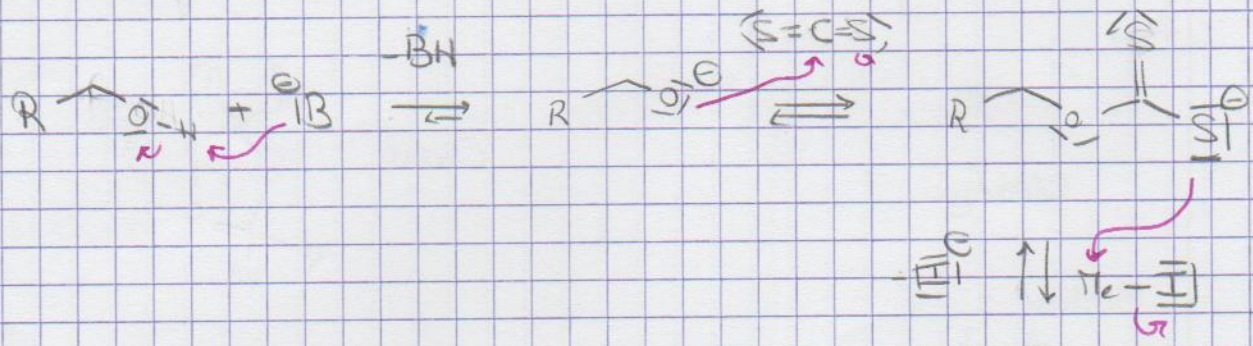




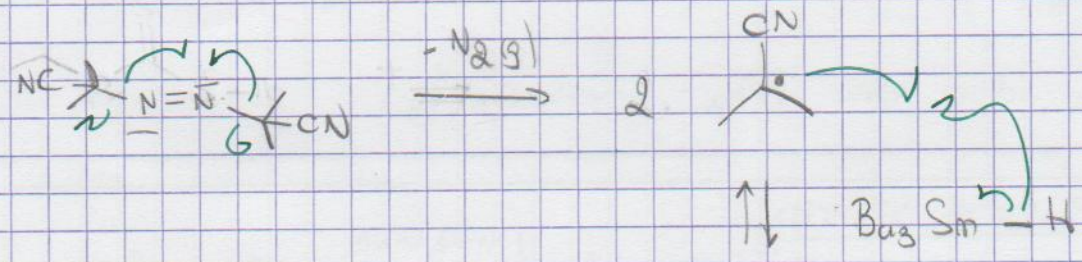
Réaction de BARTON-Mc-COMBIE

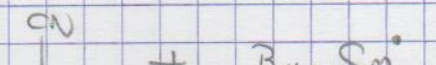


Mécanisme

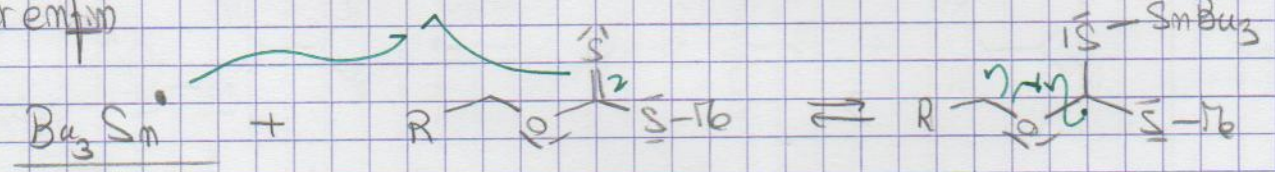


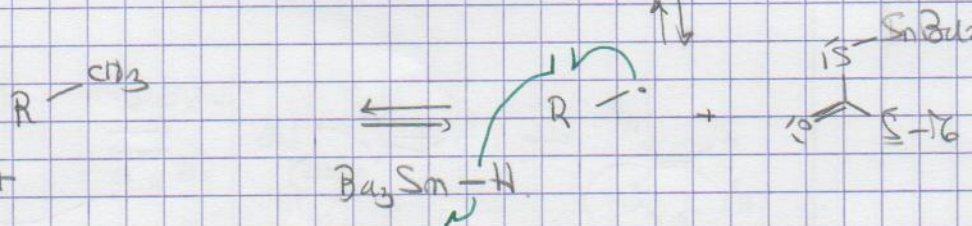
puis





et enfin



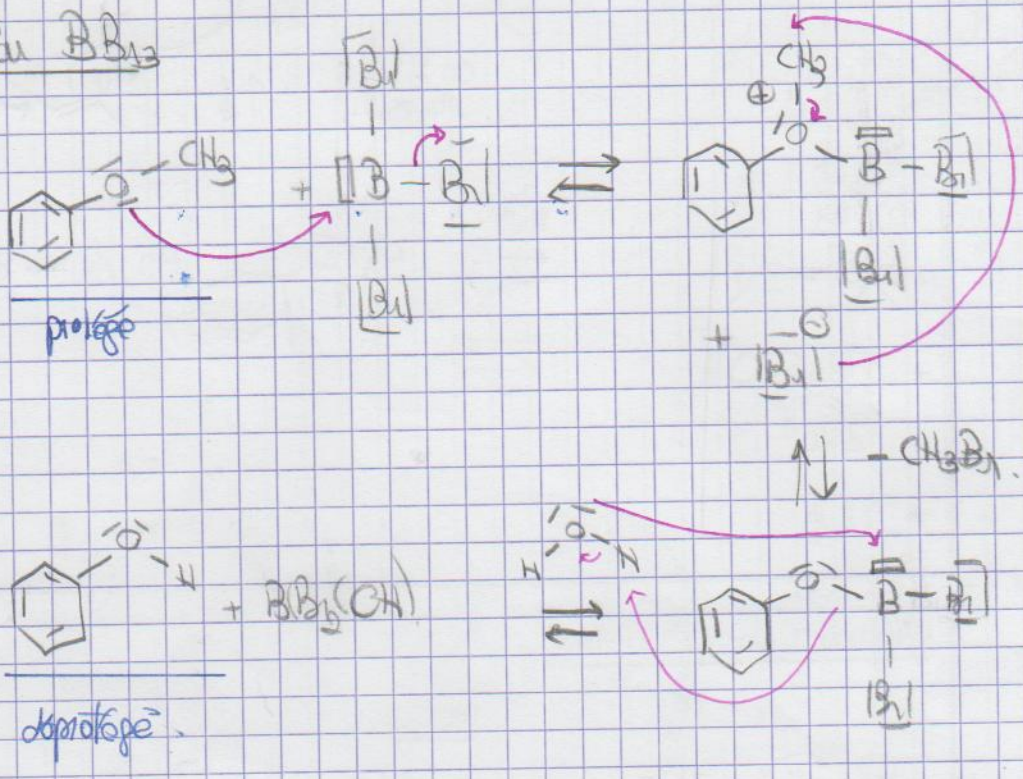


$Bu_3Sn^{\bullet}$ ...

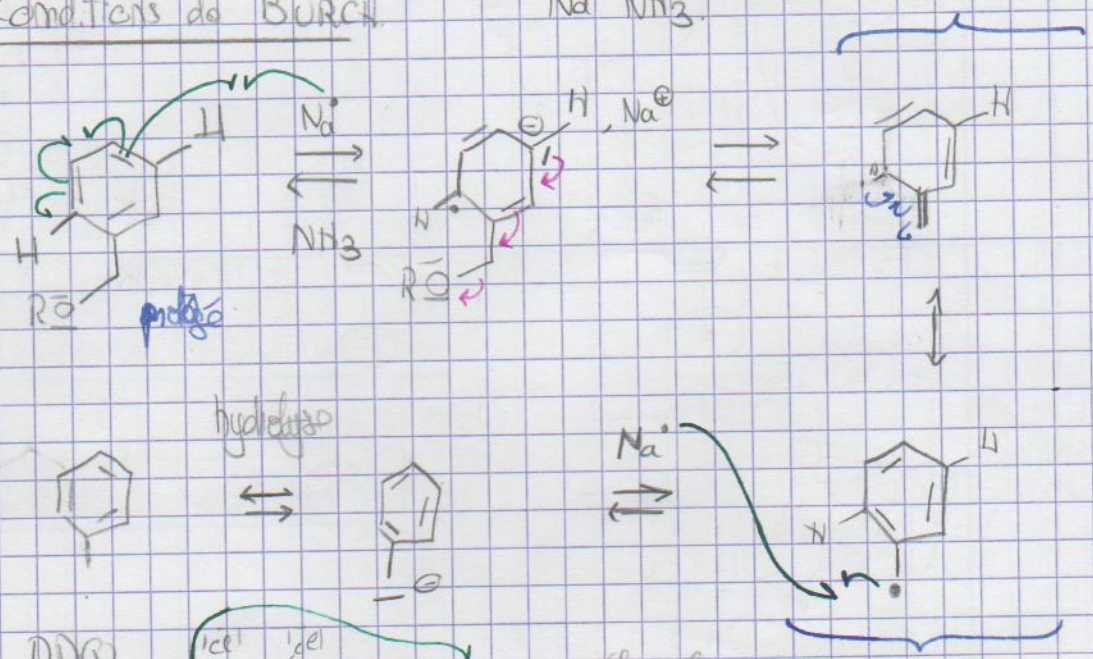
Mécanismes Organique

Déprotection éthu benzyl.eus

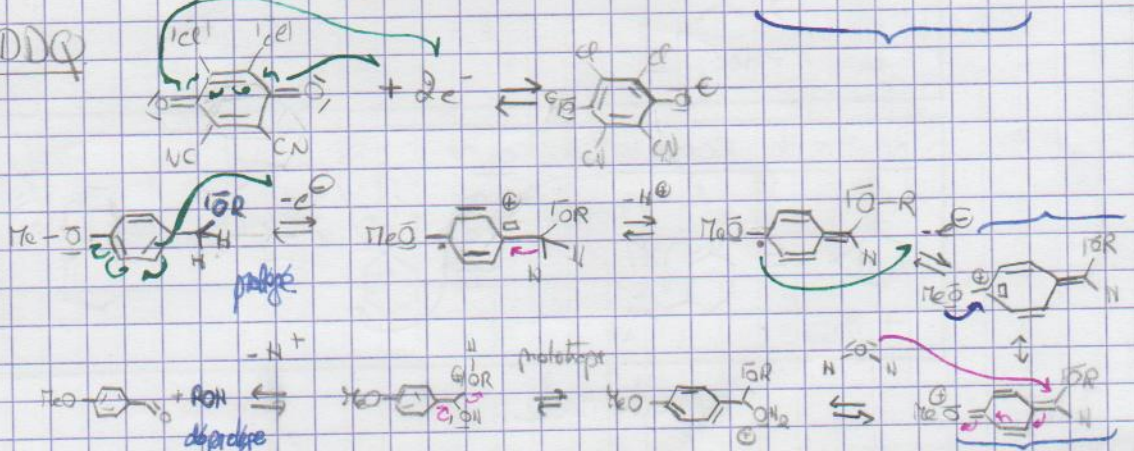
Pau BBr_3



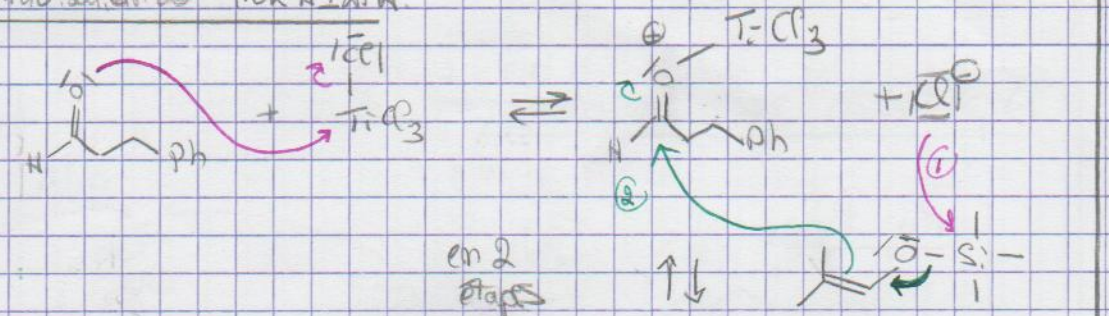
Conditions de BURCH



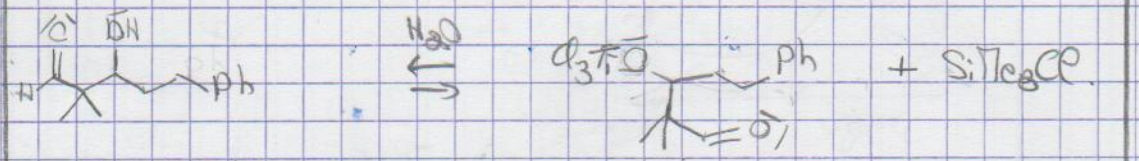
DDQ



Addition de Tsukamata



en 2 étapes

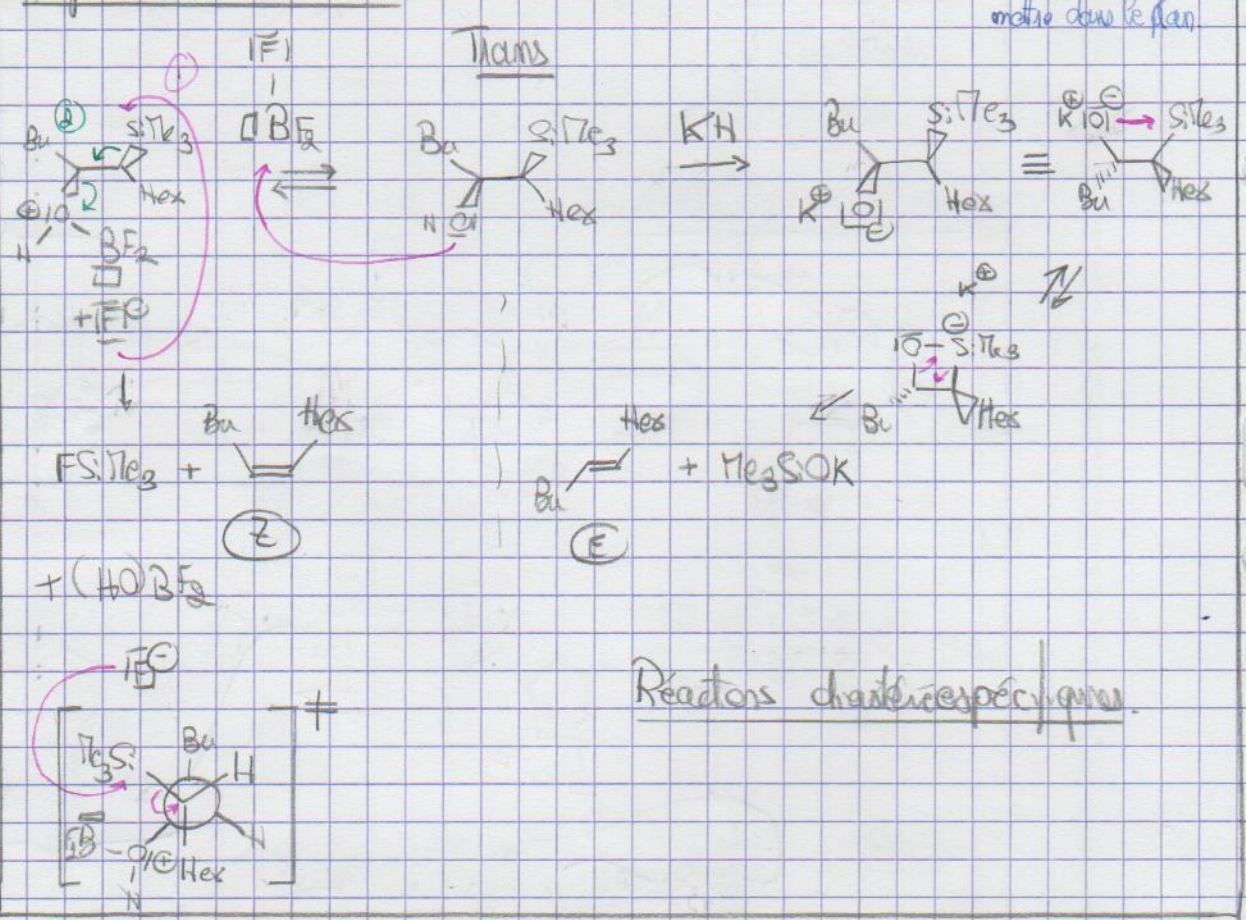


+ Me_3SiOH

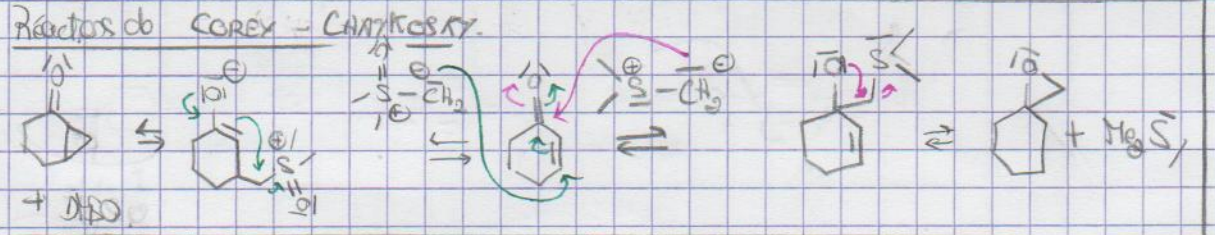
+ 4HCl

+ TiO_2.

Olefination de Peterson.



Réaction de Corey - Chaykovsky.



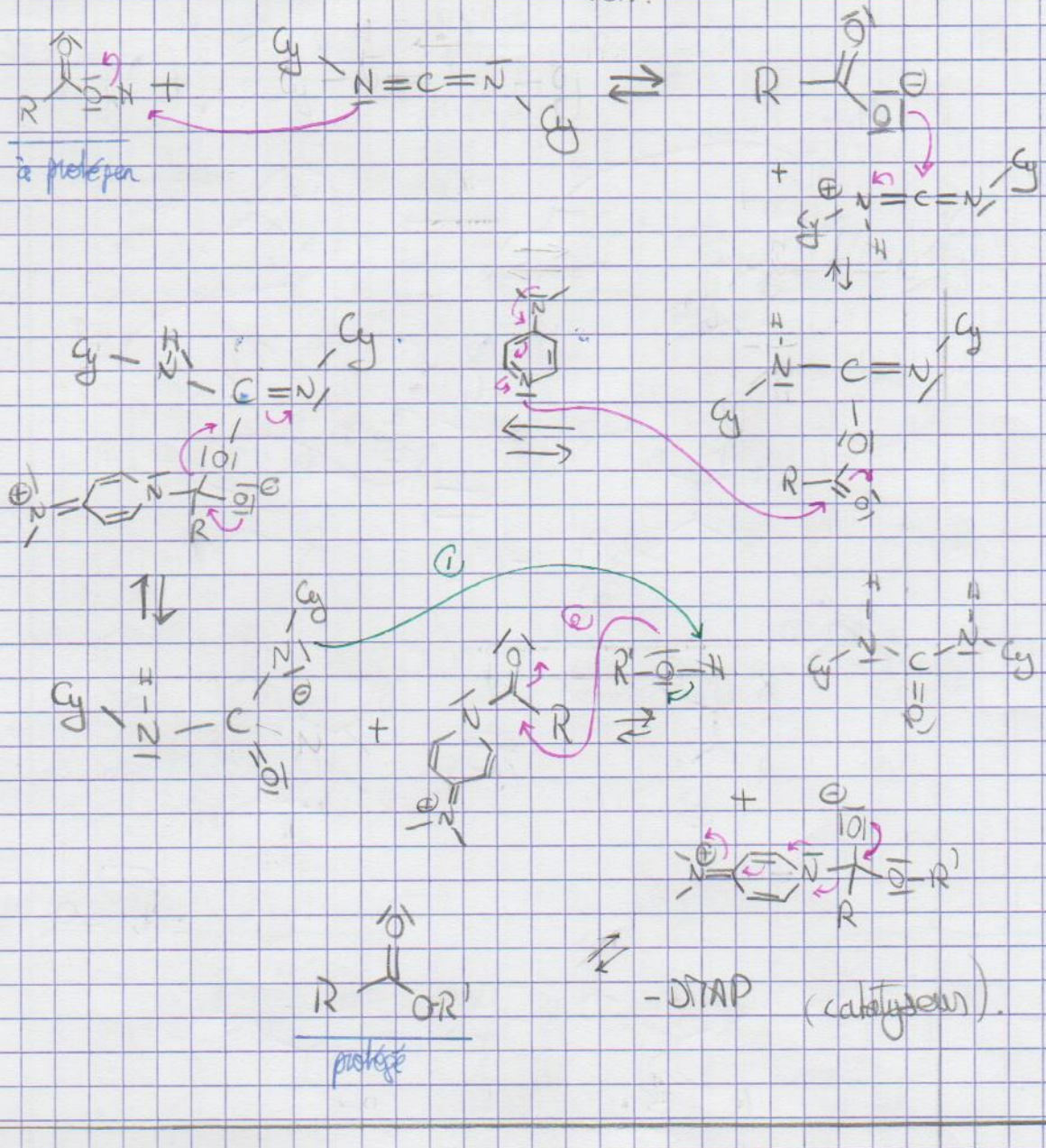
approche molle

approche dure

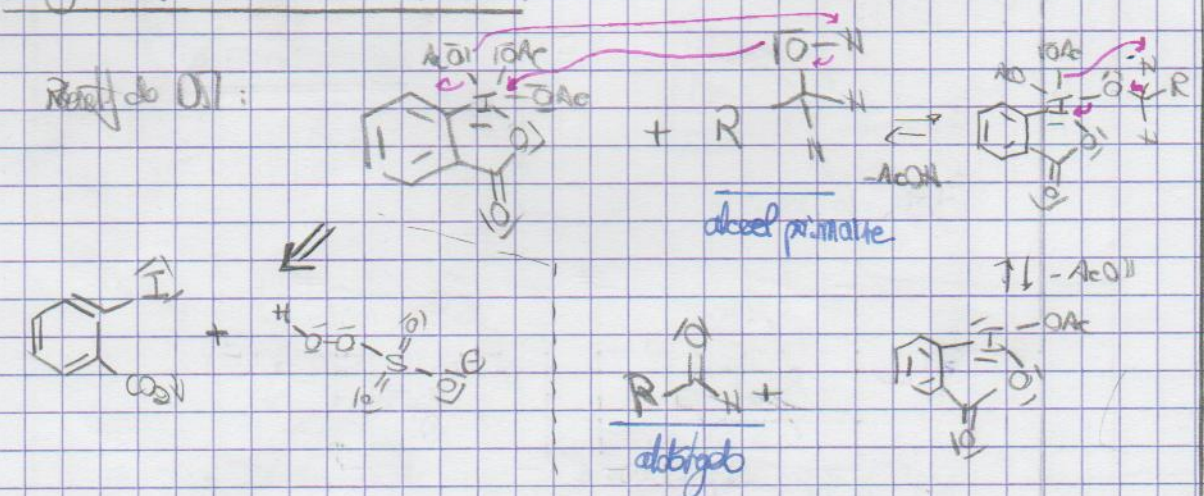
Estérification de STEGLICH.

DCC et DMAP

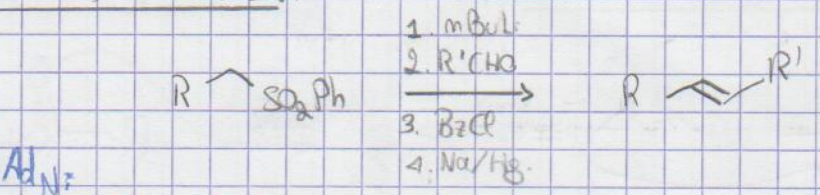
ROH.

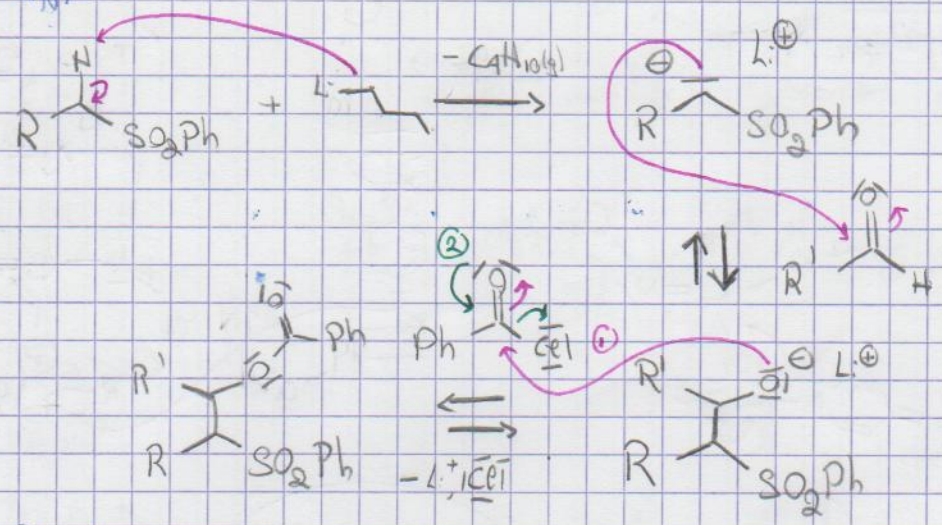


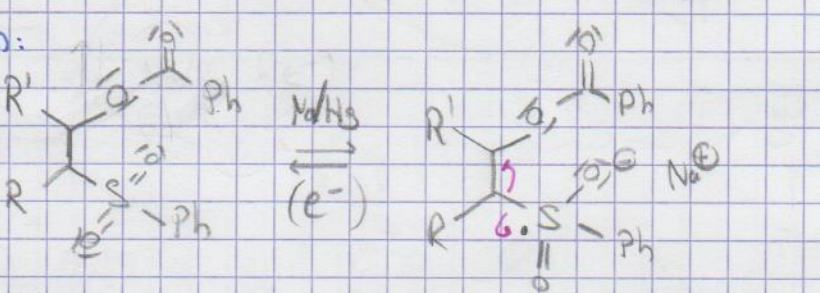
Oxydation de DESS MARTIN.



Réaction de JULIA

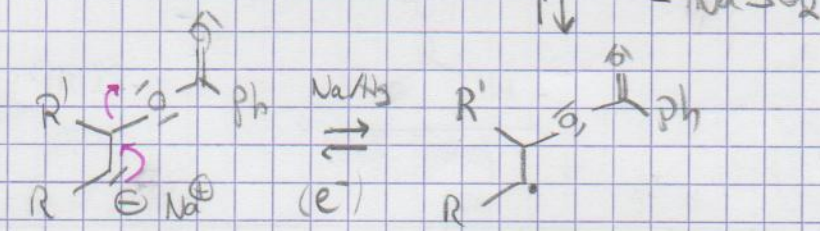




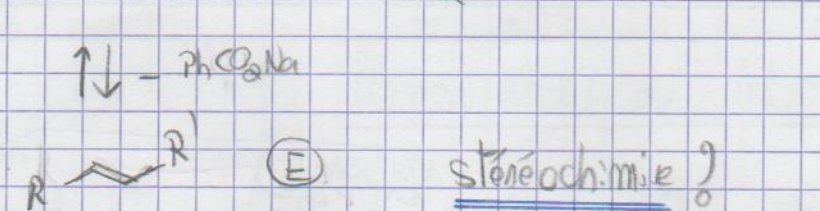


Réduction :

$- NaSO_2Ph$.

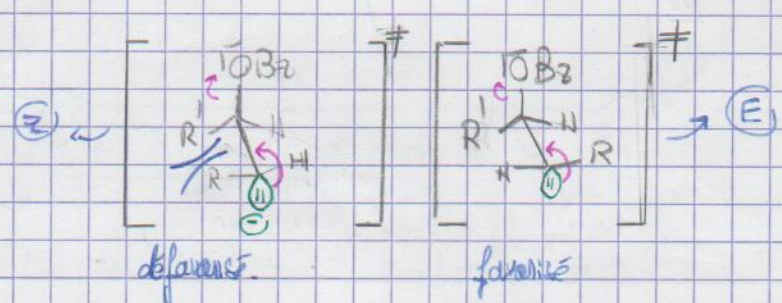


$- PhCO_2Na$



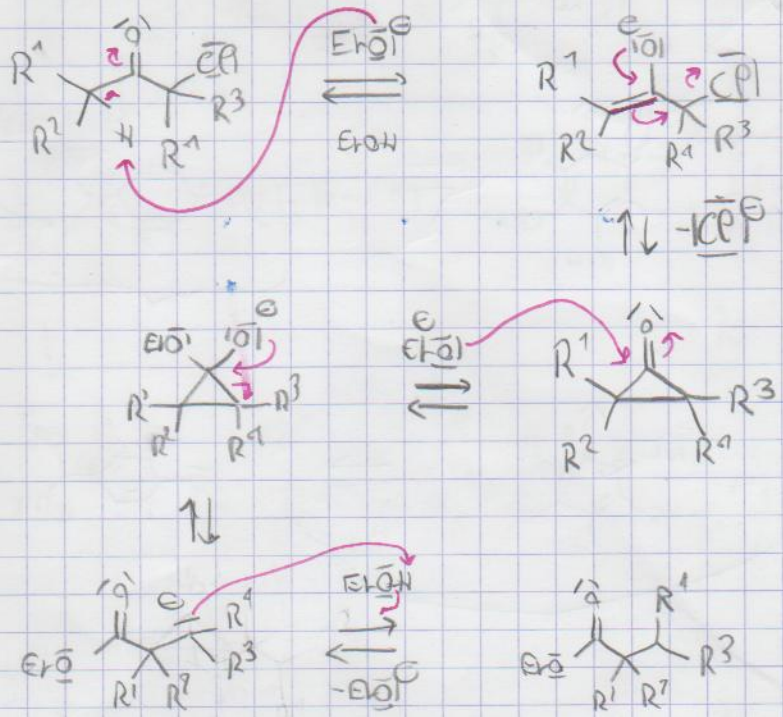
(E) Stéréochimie ?

États de transition

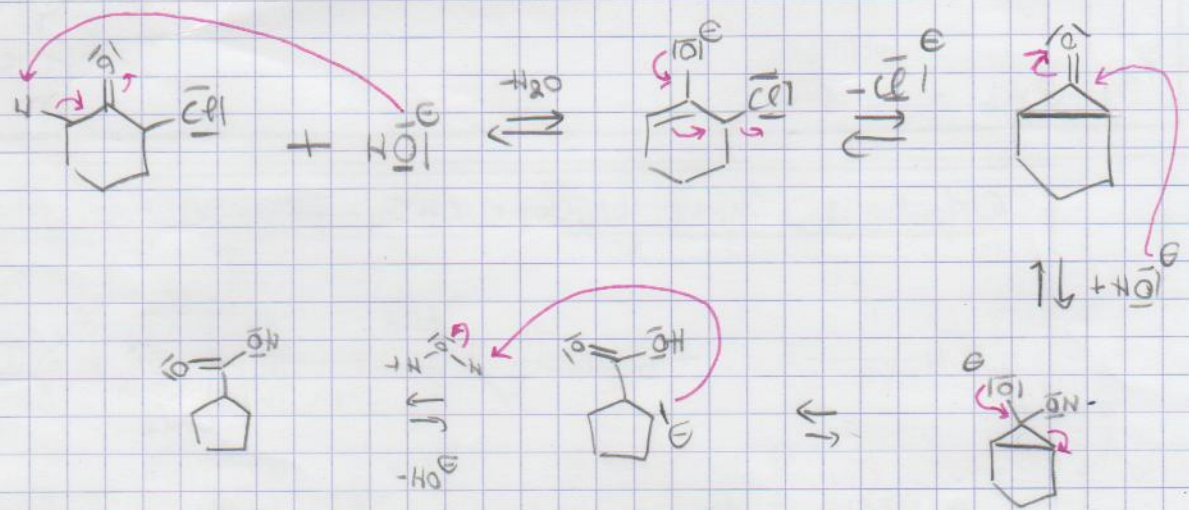


Mécanismes Chimie Organique

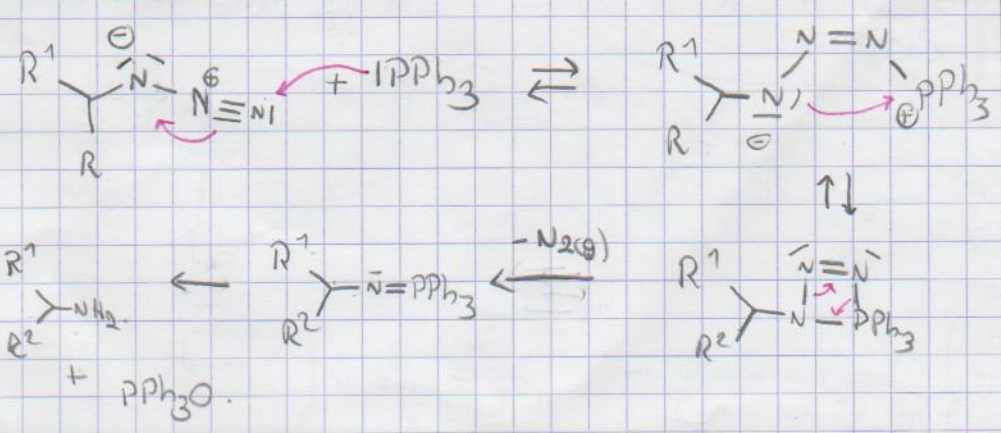
Transposition de FAVORSKII



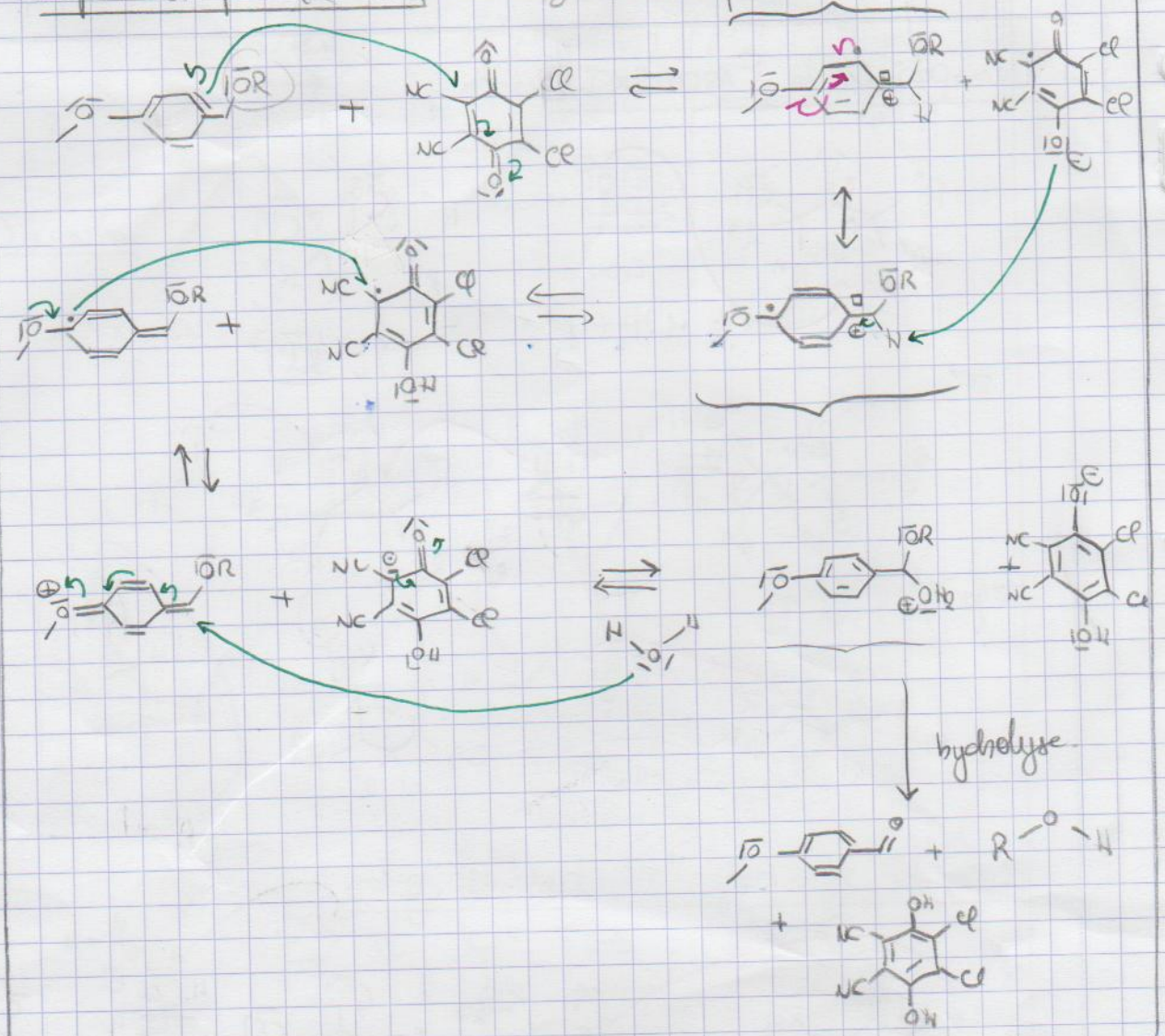
Intervient dans des "réductions" de cycle :



Réaction de STAUDINGER

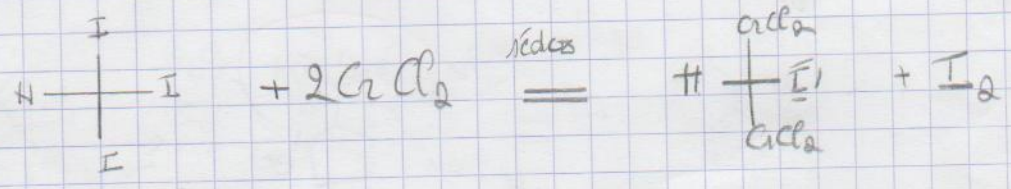


Déprotection par la DDQ (dicyanodichloroquinone)

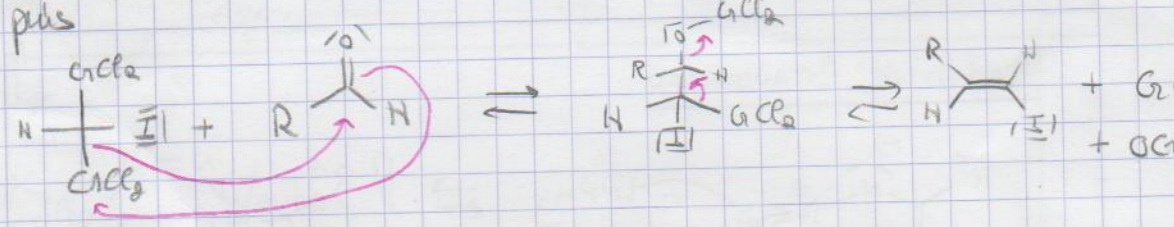


Réaction de TAKAI

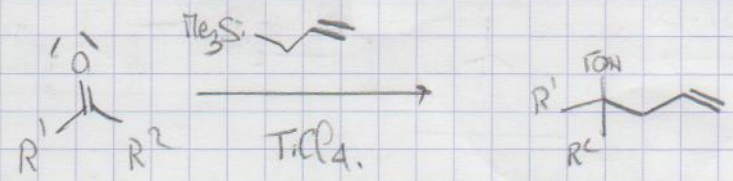
$$R\text{-}CHO + CHI_3 \xrightarrow{CrCl_2} R\text{-}CH=CHI$$



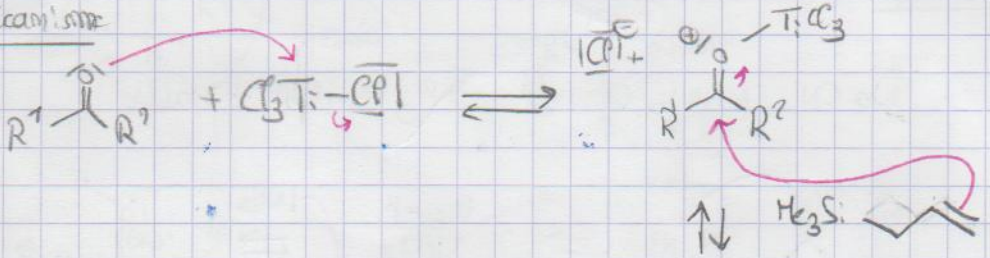
puis

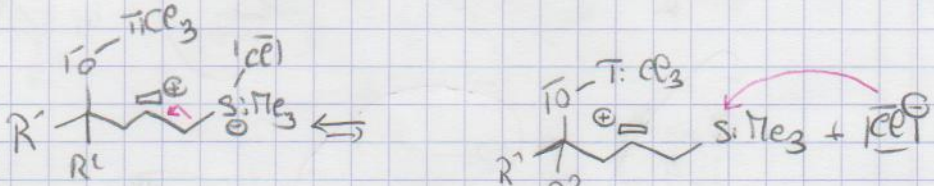


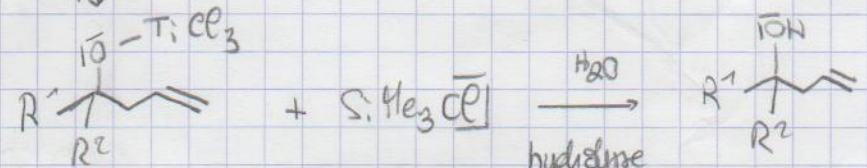
Réaction de SAKURAI

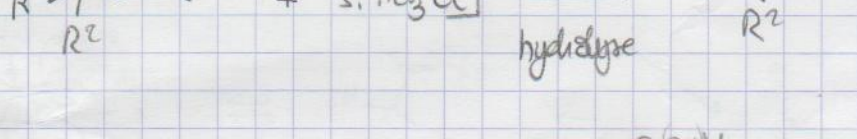


Mécanisme





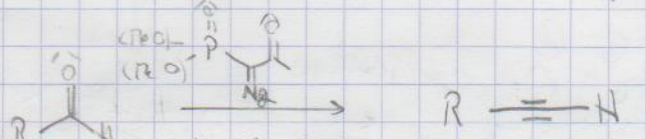




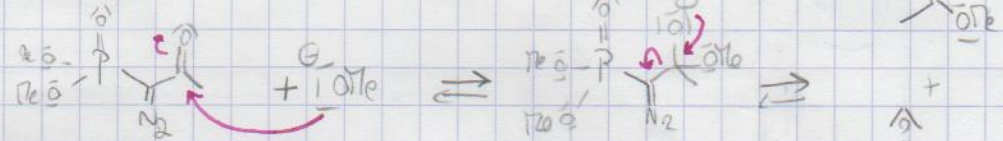
+ $Si(OH)Me_3$

+ TiO_2 + 4 HCl

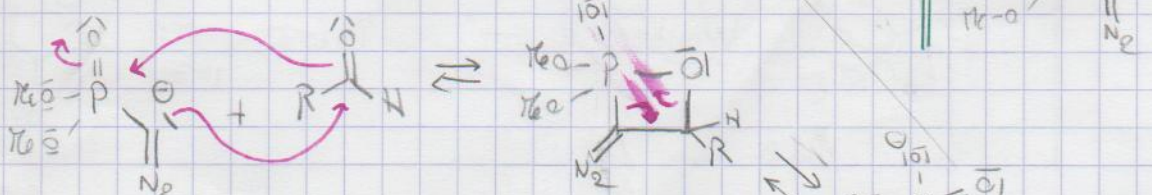
Réaction de SEYFERTH-GILBERT — modification de ONEDA-BESTMANN

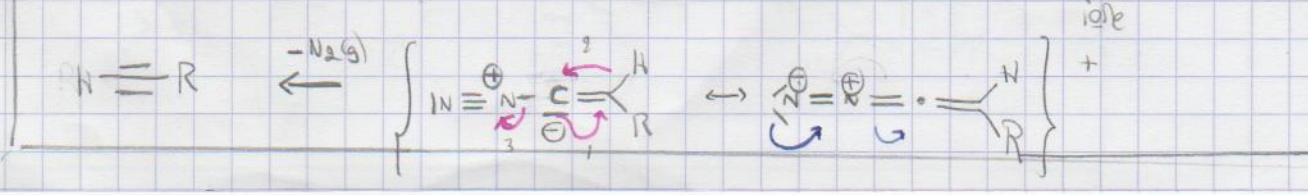


Mécanisme :

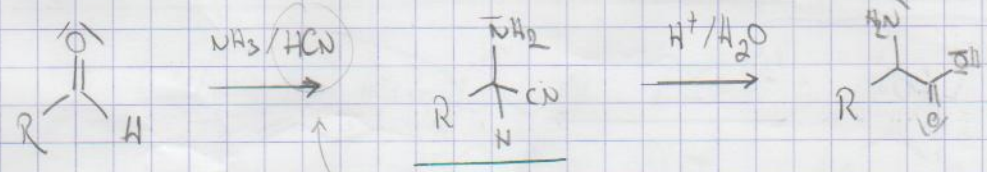


puis





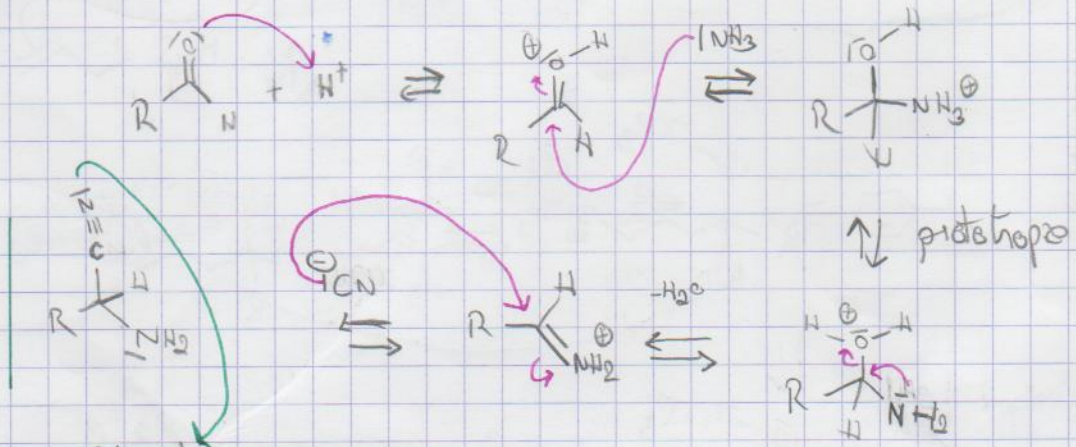
Synthèse de STRECKER

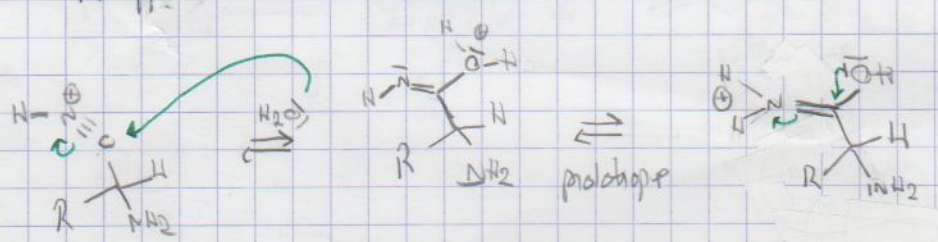


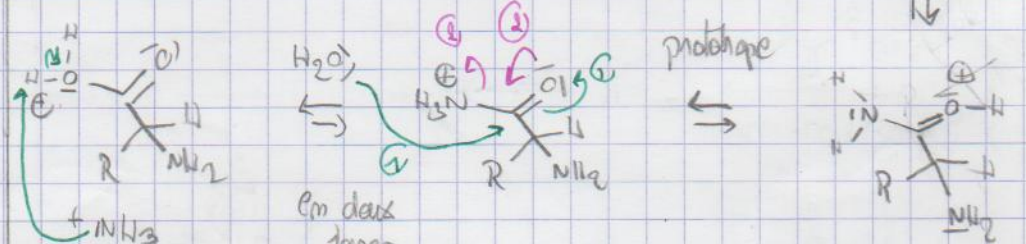
from NaCN, NH_4Cl

Mécanisme

- $NaCN + NH_4Cl \rightleftharpoons NH_3 + HCN + NaCl$



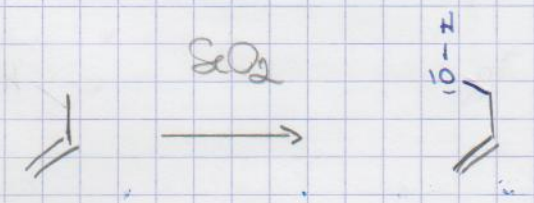




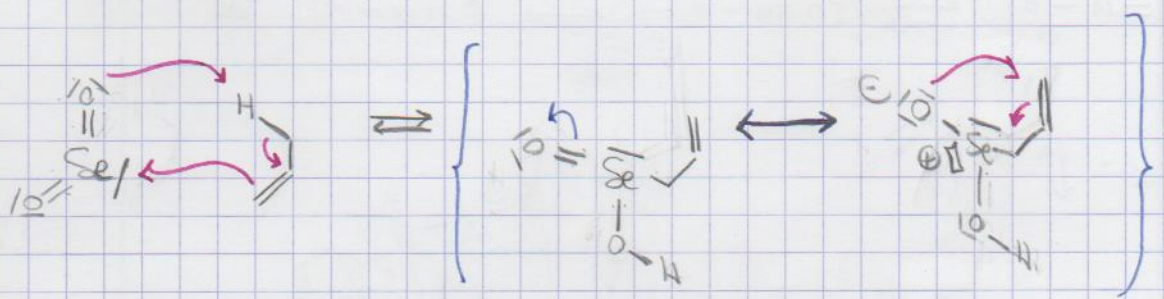
Wouhou !

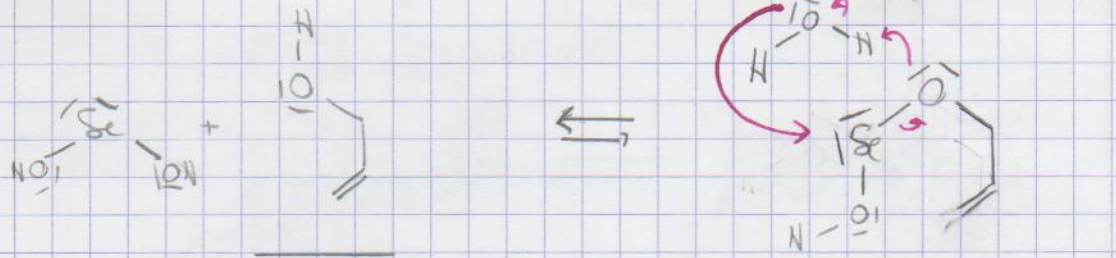
Mécanismes réactionnels

Oxydation d'une position allylique – RILEY.

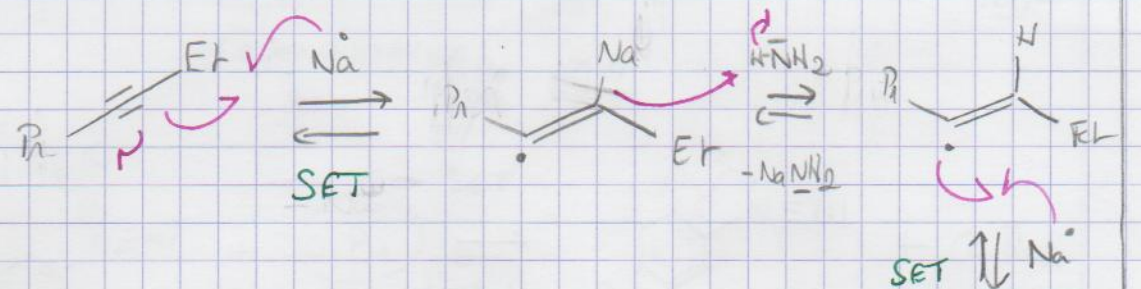


Mécanisme

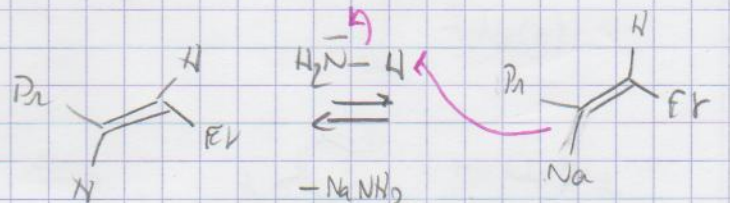




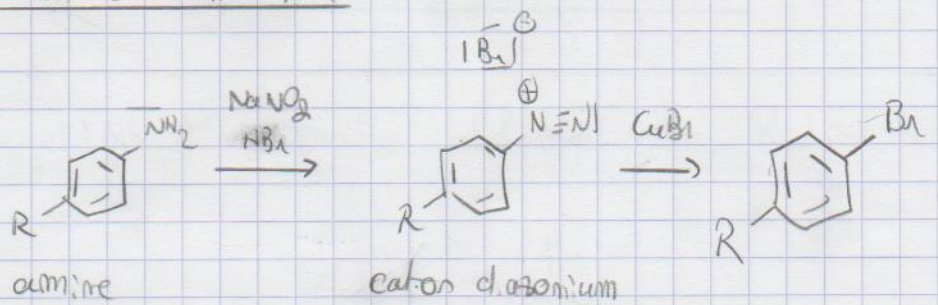
Réduction d'alcyne par sodium dissous



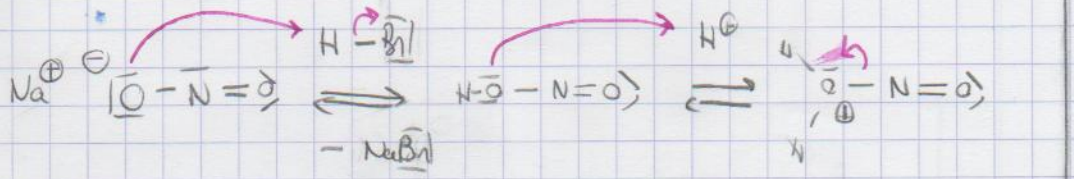
alcène E.

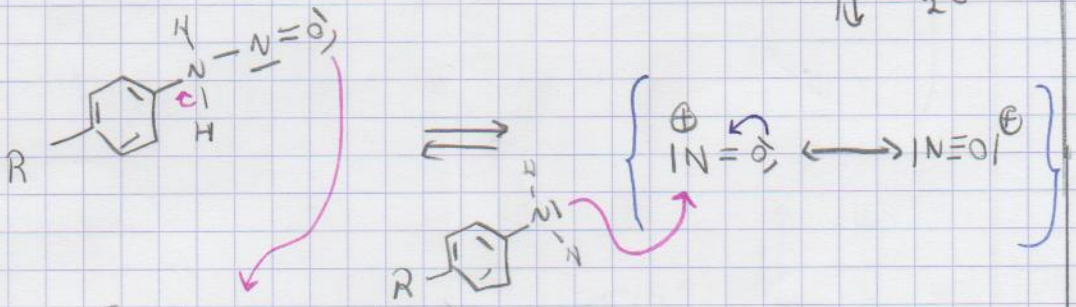


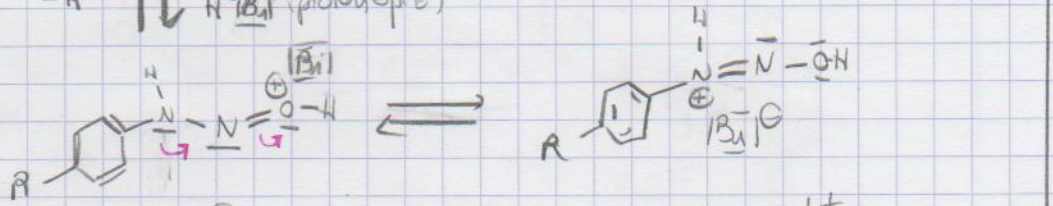
Réaction de SANDMEYER

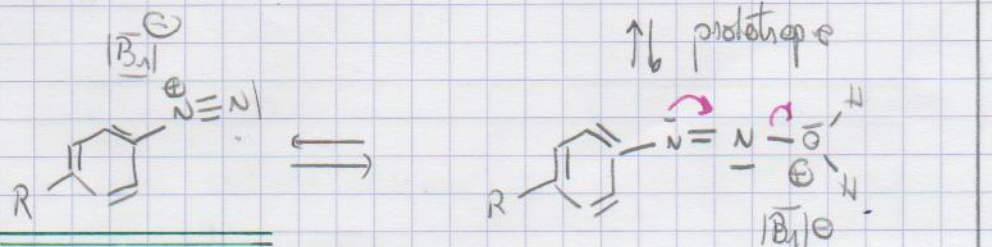


Diazotation









Cation diazonium

puis