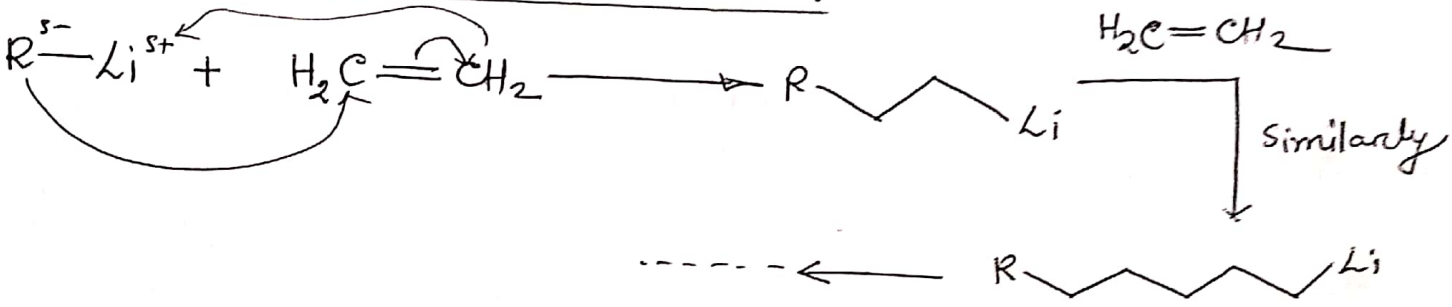
ORGANOMETALLICS

Rexn of Organolithium Compounds

Most of the reactions of Organolithium run Parallel with GR.

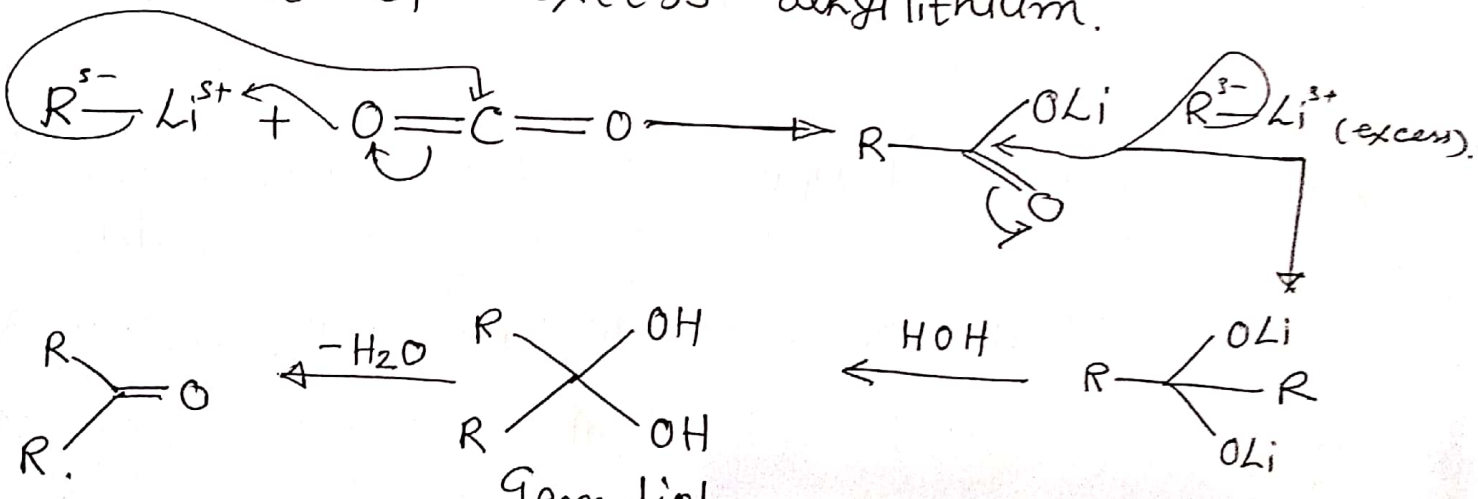
Those reactions are Given here which are slightly different from Grignard Reagent.

① Insertion into C=C bond:

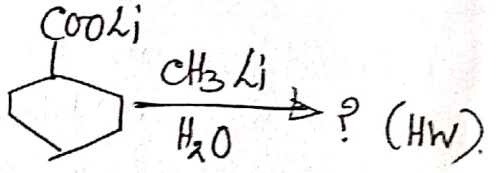


(H.W).

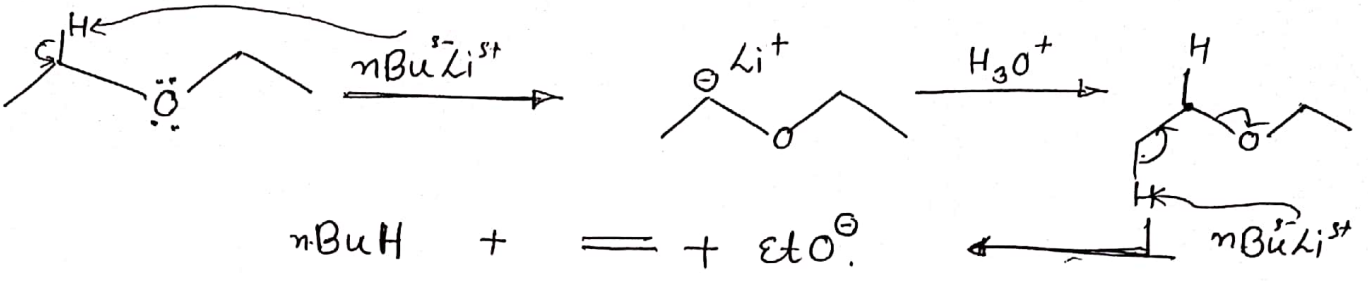
② Preparation of Ketone on rexn with CO_2 in Presence of excess alkyl lithium.



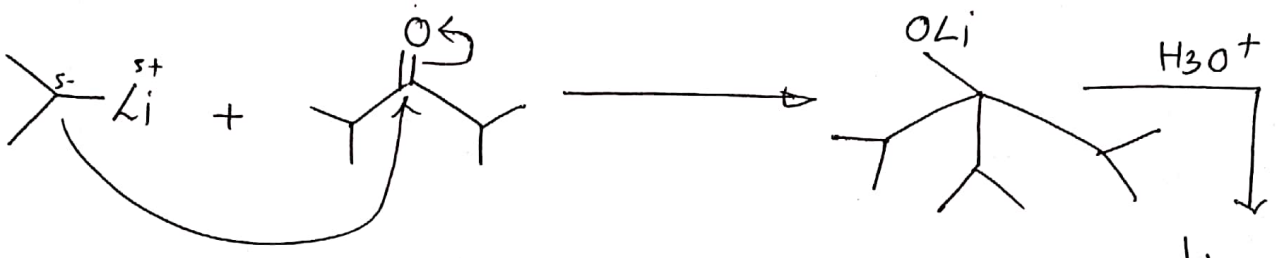
③ $RLi + CO_2 \xrightarrow{\text{then } H_3O^+}$? (HW).
(1eqv).

④ 

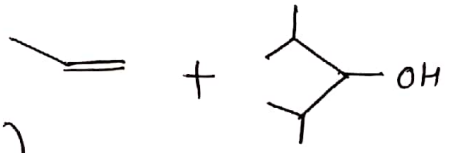
(5). Unlike GR, RLi attacks ether via metallation πexn.

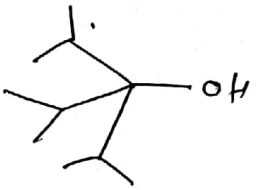


(6)



RMgBr form alkene. in this πexn and Products were



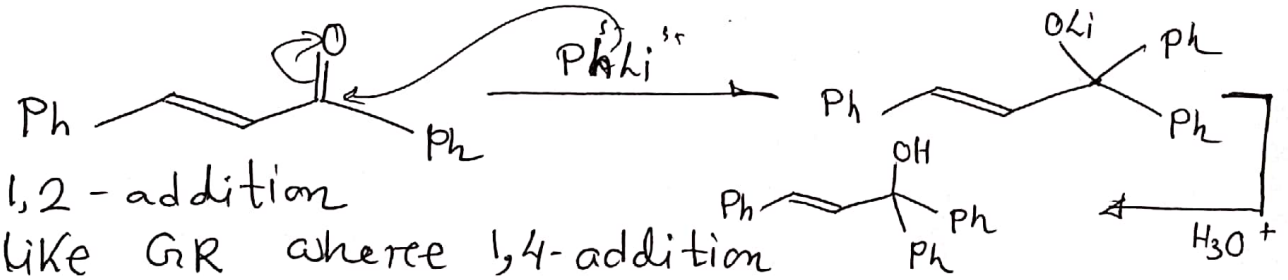


Tris-isoPropyl Carbinol

(Abnormal π-exn)

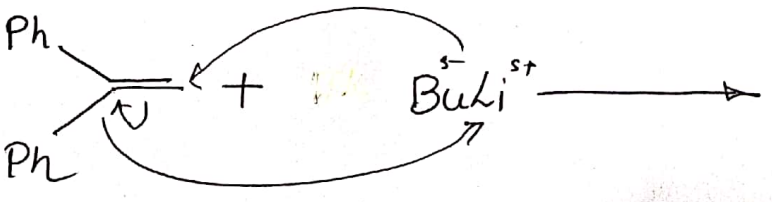
But here 1,2- addition occurs because of high reactivity of organolithium compound.

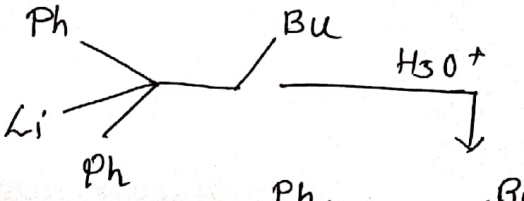
(7)

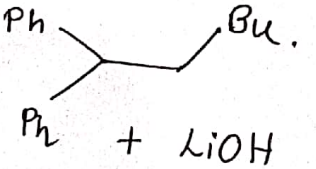


(1,2 - addition unlike GR where 1,4-addition Product was major).

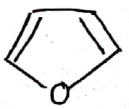
(8)







+ LiOH

(9)  + nBuLi ⟶ ? $\xrightarrow[H_3O^+]{CO_2}$? (H.W).