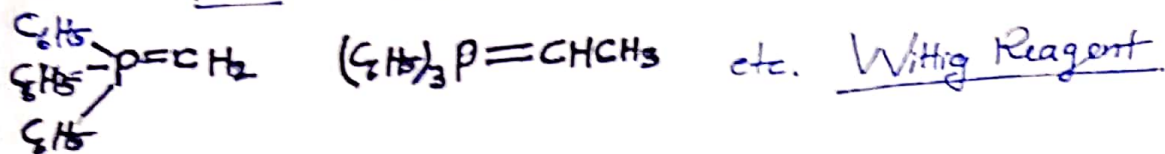
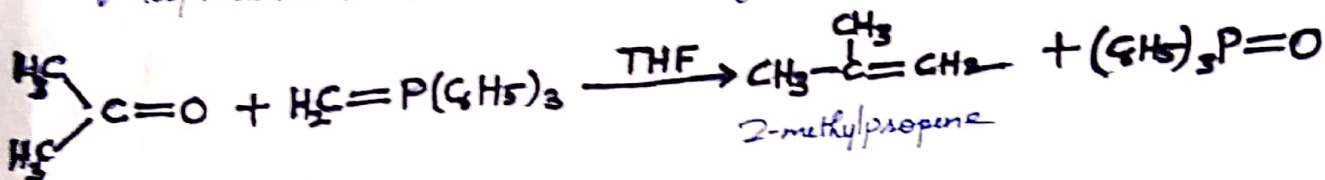


WITTIG REACTION

Phosphorus ylide \Rightarrow alkylidene phosphoranes $(C_6H_5)_3P=CRR'$

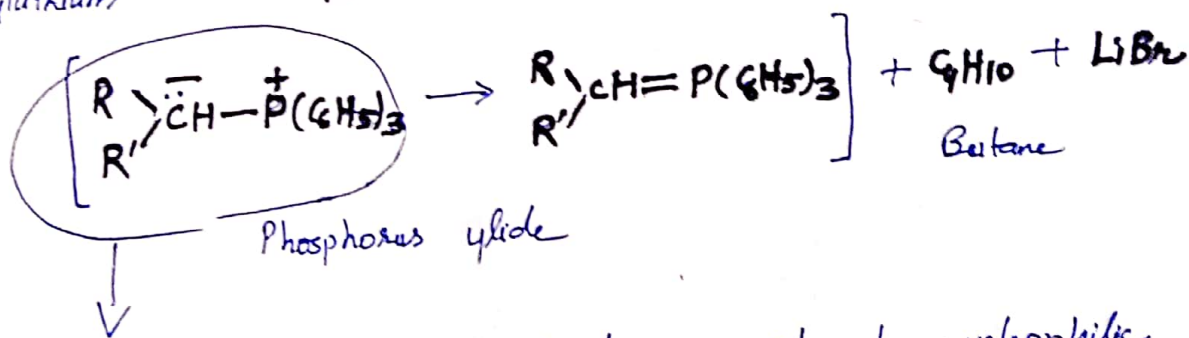
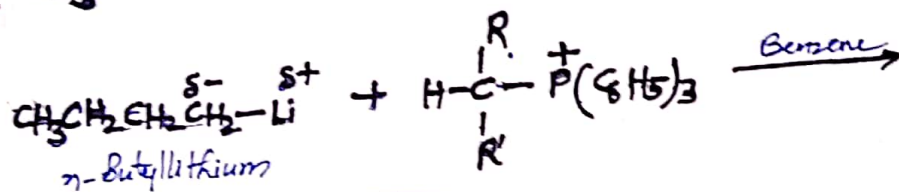
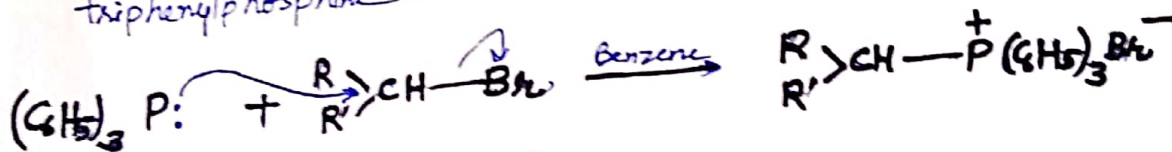


Ald/Ketone reacts with ylide, gives substituted alkene



\Rightarrow What is Wittig reagent / phosphorus ylide?

Molecule bearing no overall charge, has a -vely charged C bonded to a +vely charged heteroatom (N, P, S) prepared by reaction of alkyl halide or allyl halide with triphenylphosphine and then treatment with a strong base



carbanion character \rightarrow C atom is strongly nucleophilic
 \downarrow
 attacks $>C=O$ of ald/Ketone

