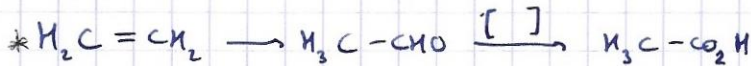
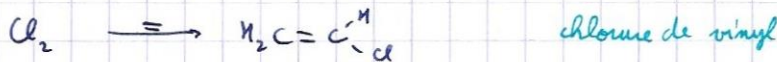
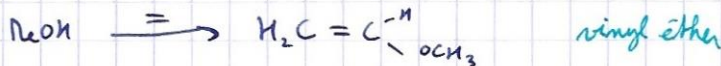
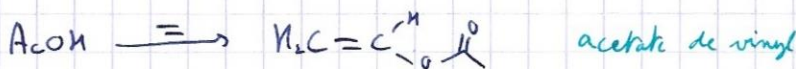
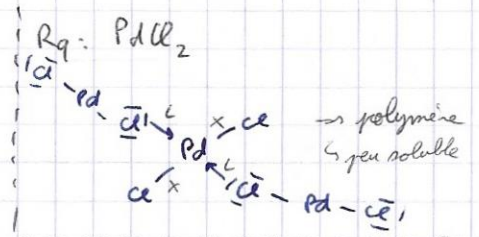
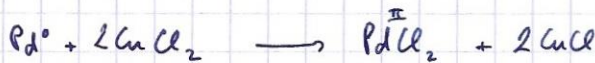
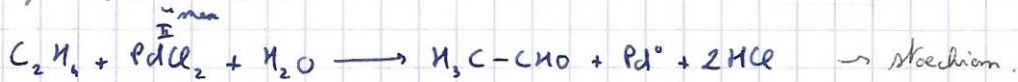


Procédés industriels → T.I. JS...

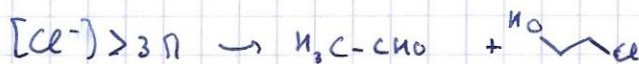
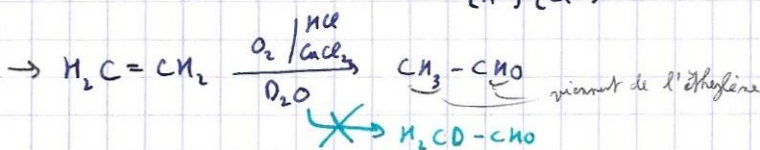
I) Procédé Wacker (1953)



Tonnage: $2,6 \times 10^6 \text{ t/an} \rightarrow 10^5 \text{ t/an en 2002}$

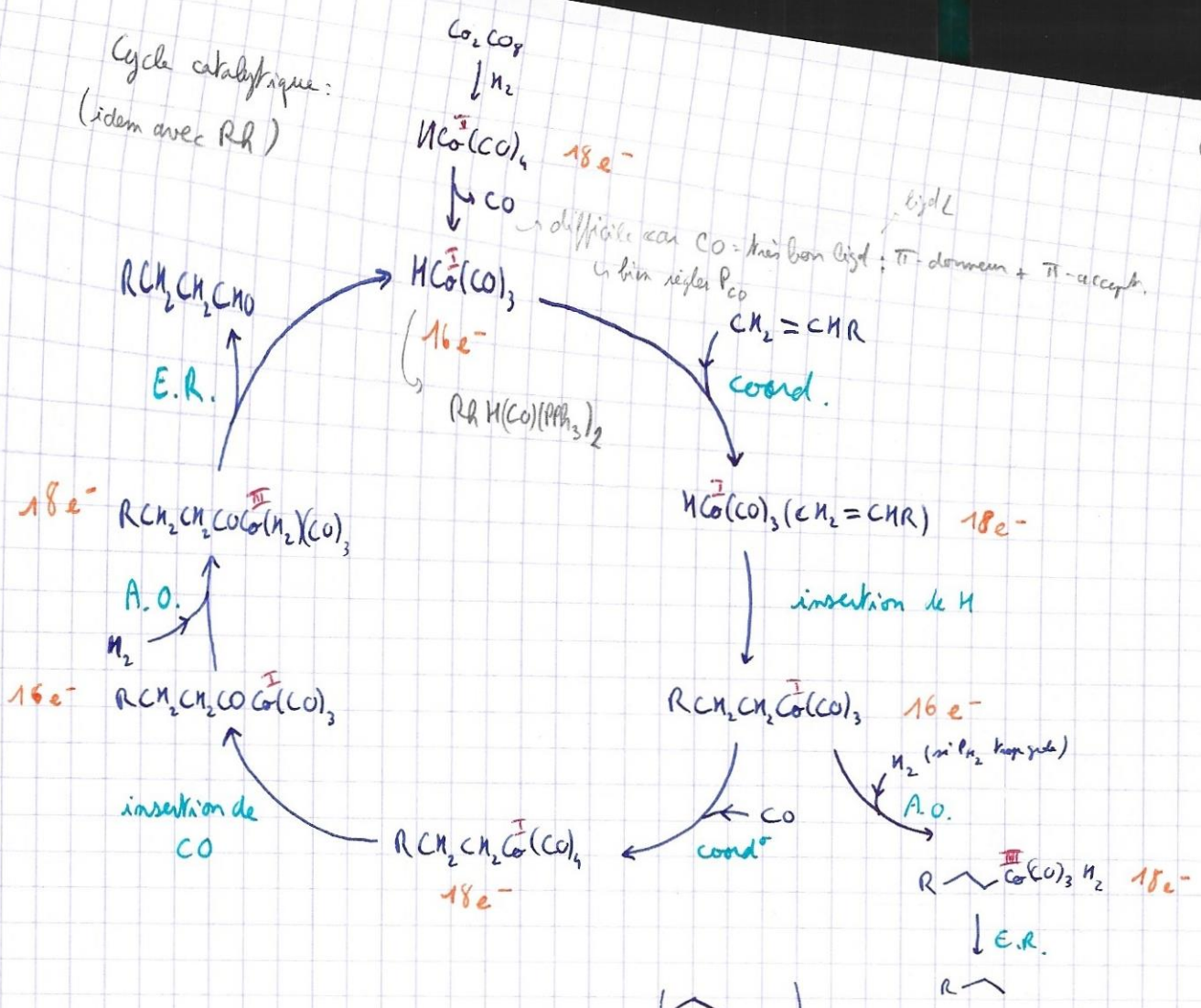


Obs: → Loi cinétique: $r = k \frac{[=] [\text{PdCl}_4^{2-}]}{[\text{H}^+] [\text{Cl}^-]^2}$

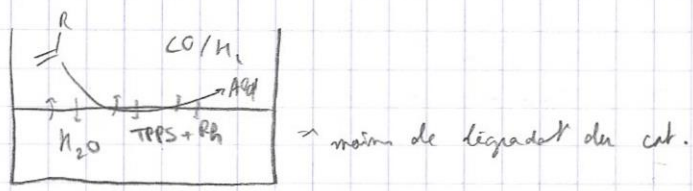


Cycle catalytique: (à recopier)

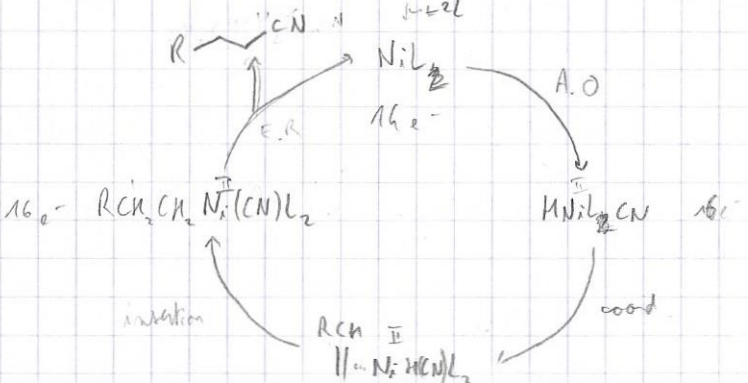
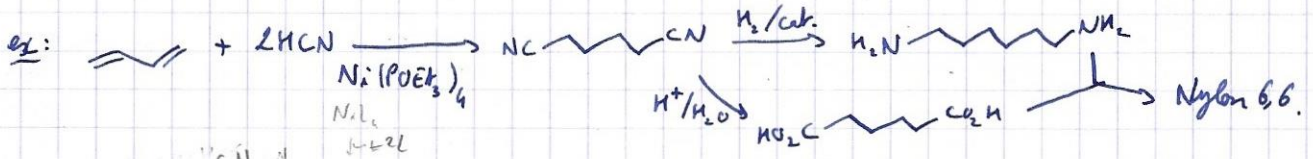
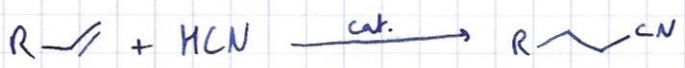
Cycle catalytique:
(idem avec Rh)



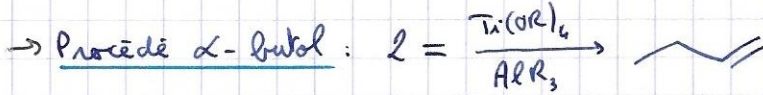
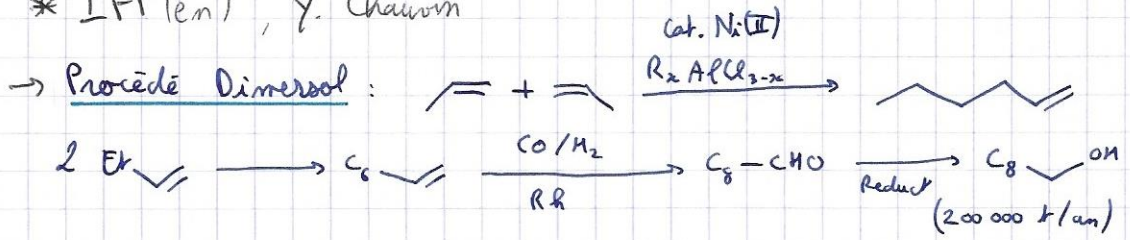
Procédé Solway: $RH + TPPS$: $TPPS = P \left(\text{C}_6\text{H}_4\text{SO}_3\text{H} \right)_3 \rightarrow$ polaire, soluble de l'eau



IV) Hydrocyanation



* IFP(en), Y. Chauvin

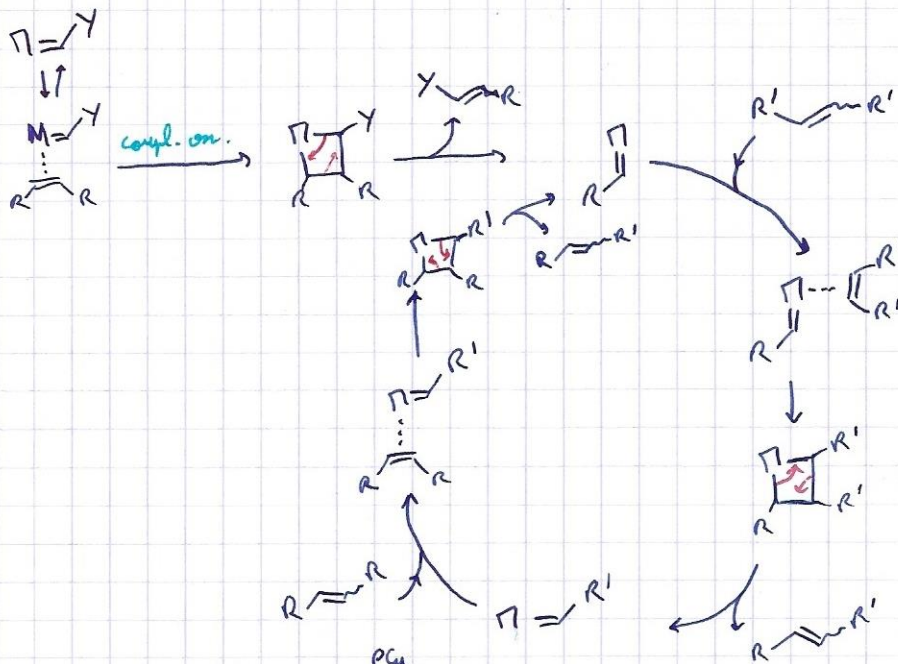
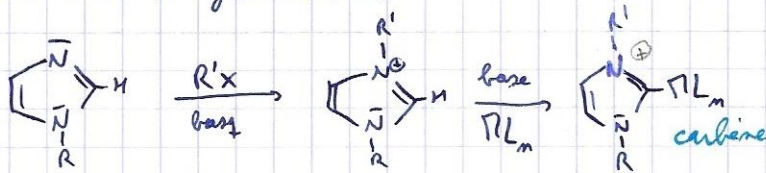


VI) Métathèse des oléfines: (PN 2005) (faites aussi sur alcynes)



Métallocarbène: $\pi=\text{C}=\text{R}$

Format d'un N-cyclocarbène:



Que réact \Rightarrow réversibles

