

CH-335 / IX- Exemples de rétrosynthèse

S. Gerber

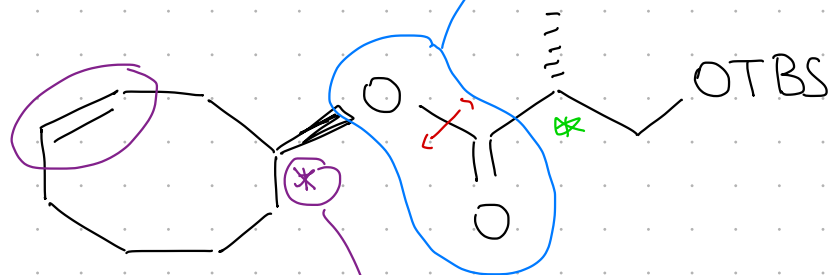
Printemps 2025



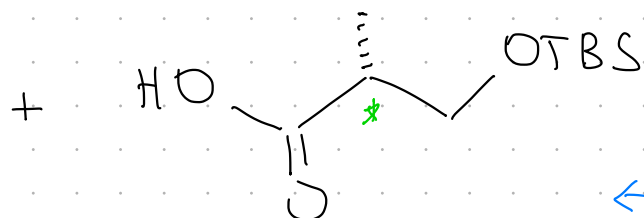
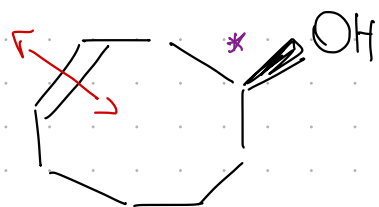
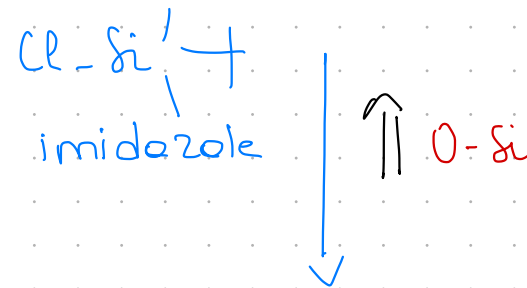
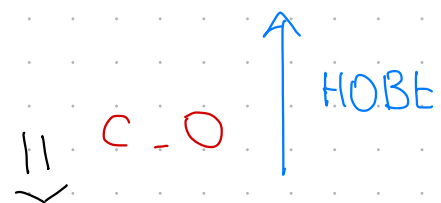
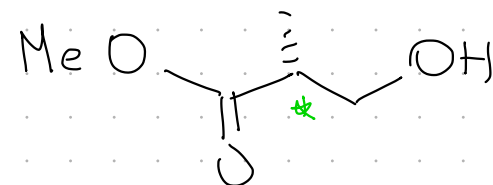
Exemple 1

ester
↳ 1^{re} disconnection

produits de départ

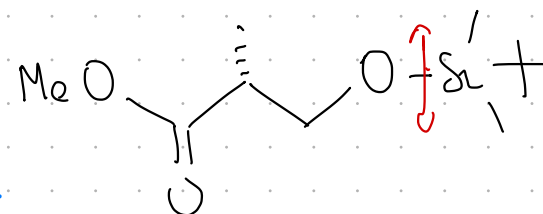


TBS: $\text{Si}^+ +$
alcool chiral
double liaison isolée
↳ methathèse



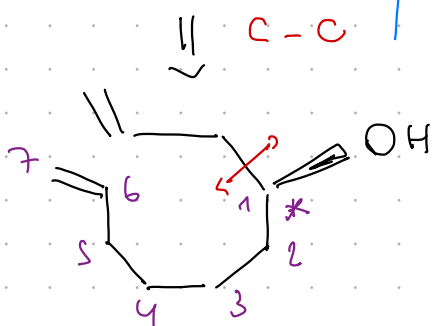
IGF

$\xrightarrow{\text{LiOH, THF}}$

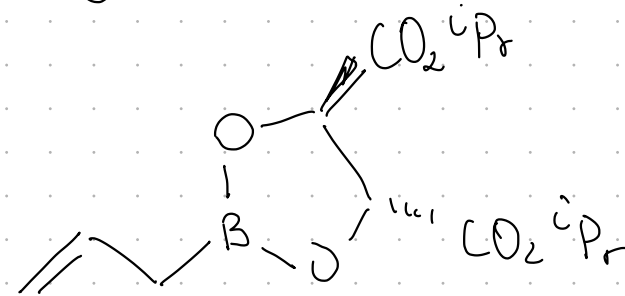
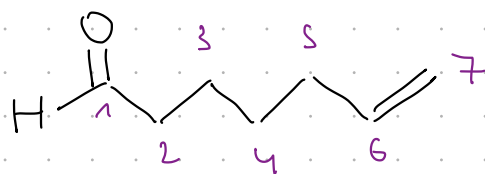


(A) $\xrightarrow{\text{Grubb's cat.}}$

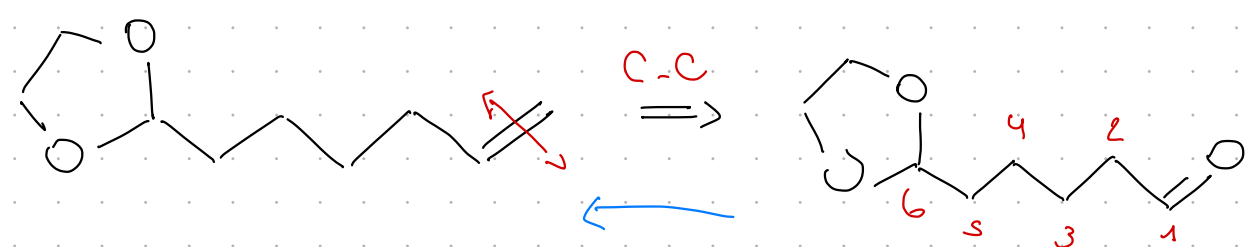
(B)



$\text{C}-\text{C}$
 $\Rightarrow$

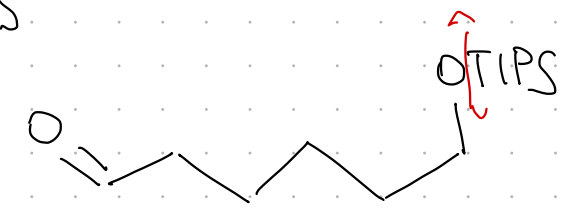


H_2O
 H^+ cat. $\uparrow$ $\Downarrow$ IGF



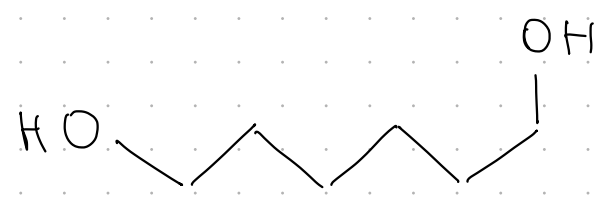
$\Downarrow$ IGF_S
1. Bu_4NF
2. Swern

PG = TIPS



$\text{HO}-\text{CH}_2-\text{CH}_2-\text{OH}$, p-TsOH cat.

1. $\text{Cl}-\text{Si}(\text{iPr})_3$ leg
imidazole, 0°C
2. Swern

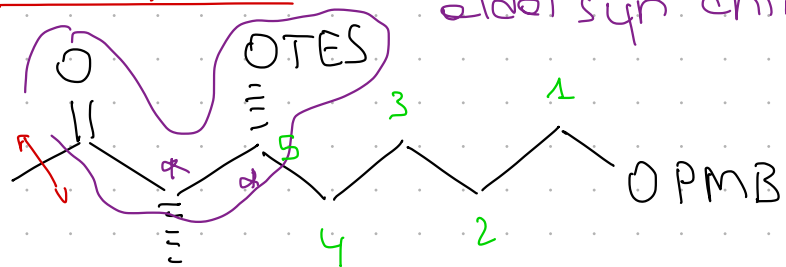


Exemple 2

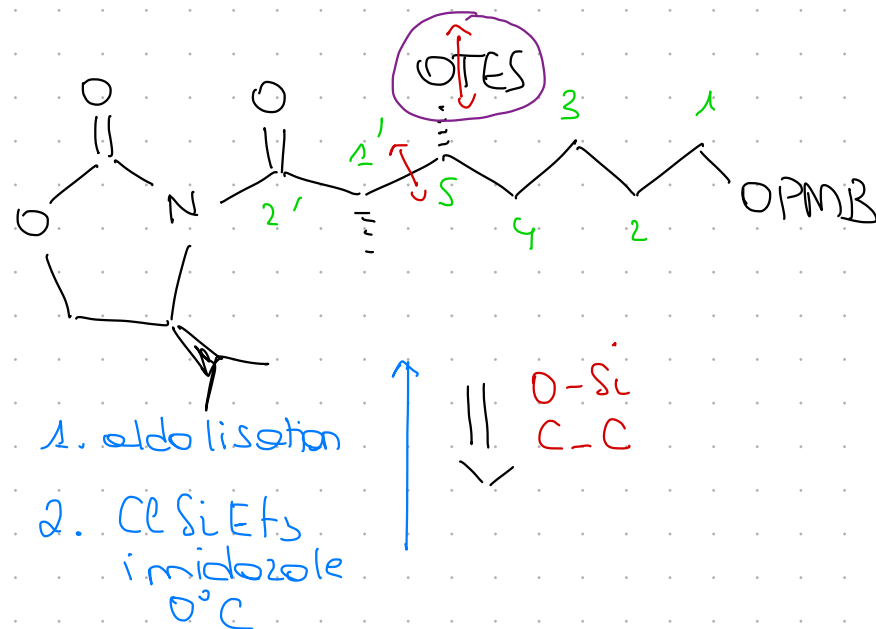
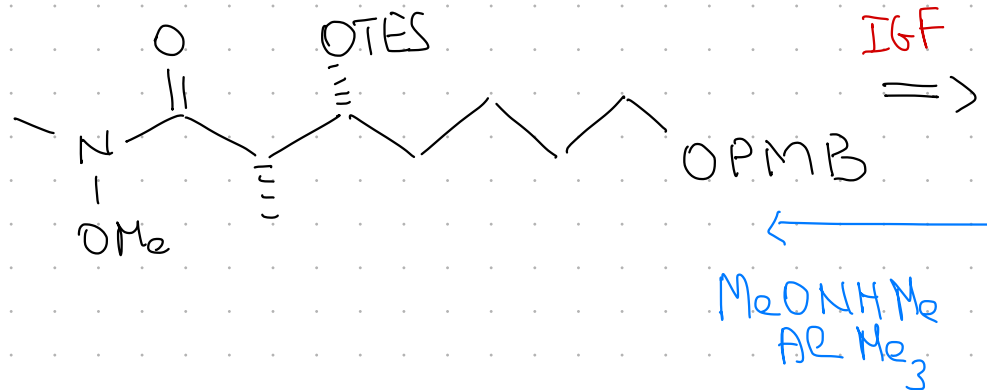
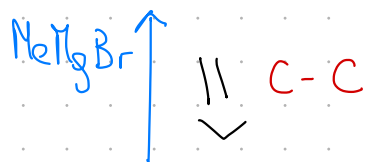
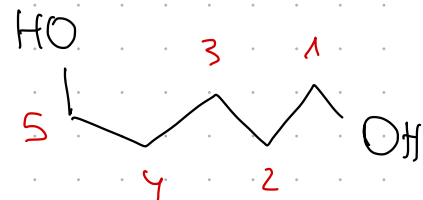
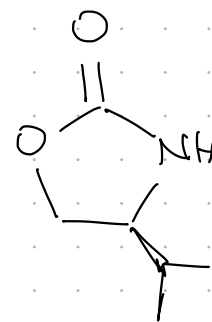
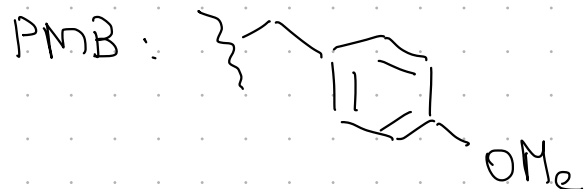
aldol syn chiral

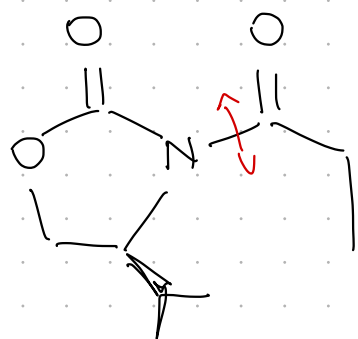
aldolisation
stereoselective

Produits de départ 13

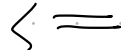


TES: SiEt_3

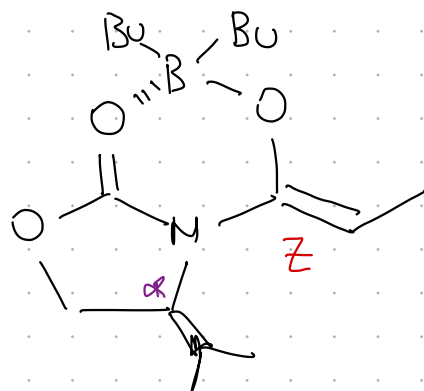
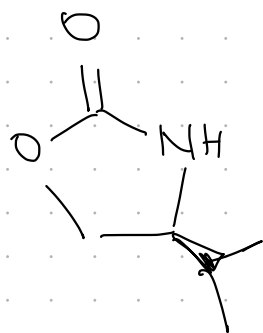
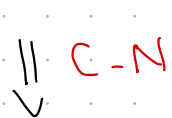




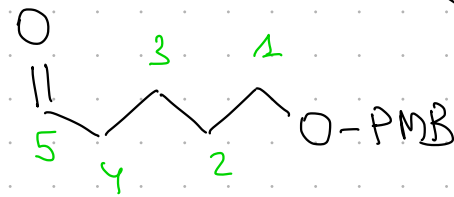
IGF



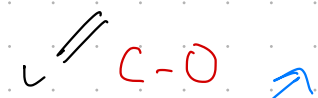
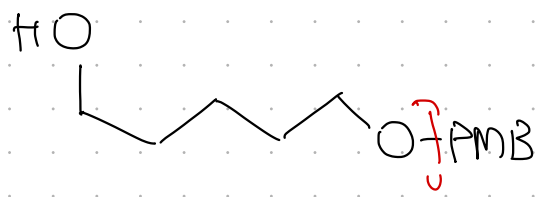
1. Bu₂BOTf
NEt₃



+



Swern $\uparrow \downarrow$ IGF



1. NaH 1 eq 0°C

2. PMB-Cl 1 eq
0°C

