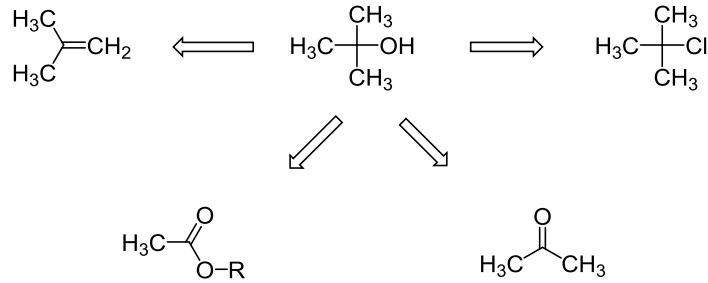
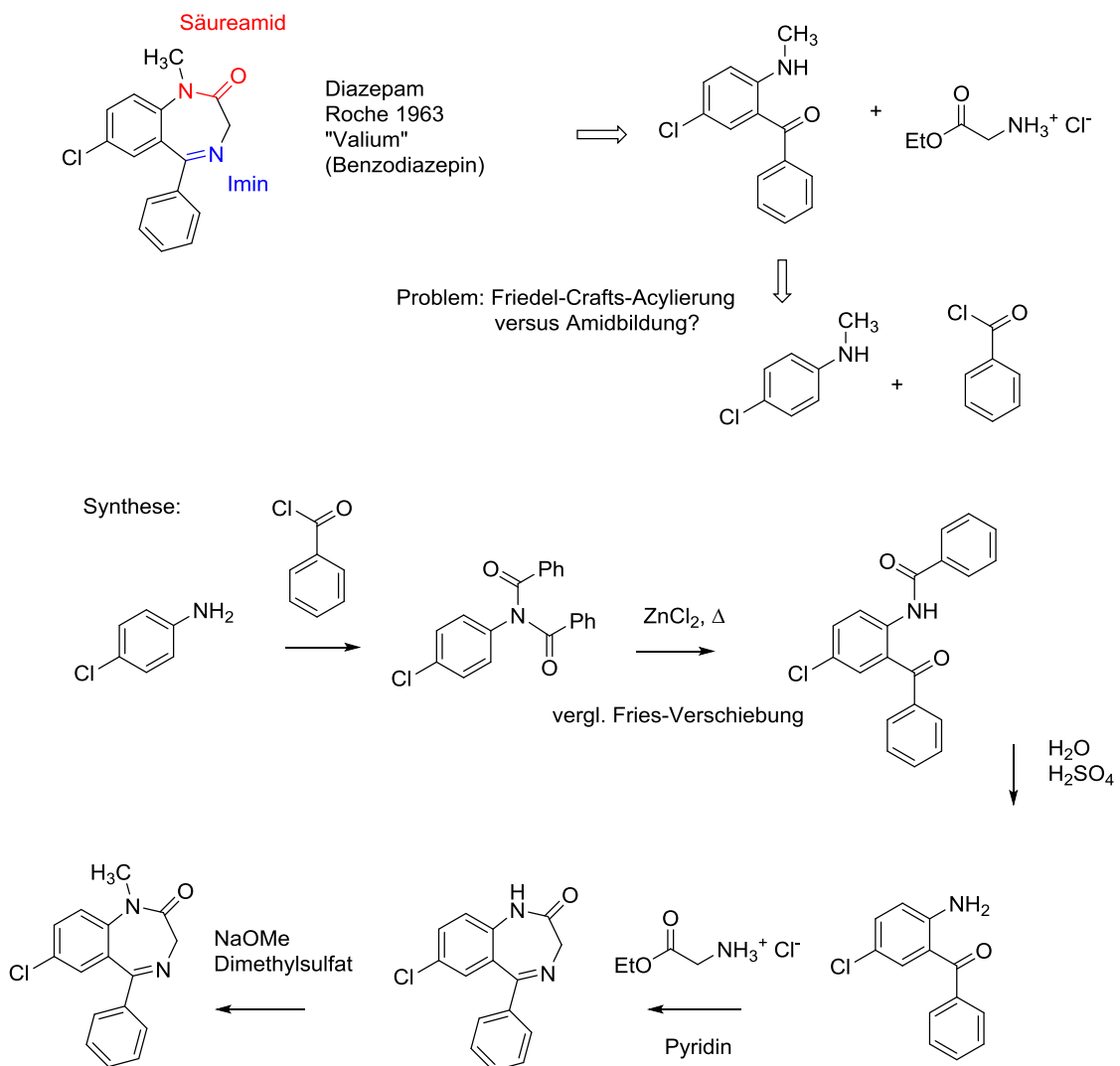


Übungsaufgaben Syntheseplanung

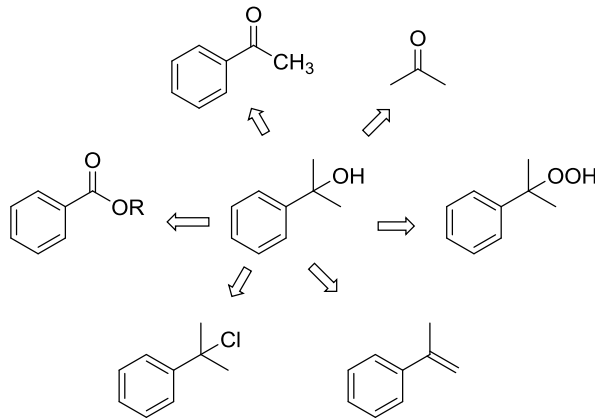
Aufgabe 1: Alkohole 1



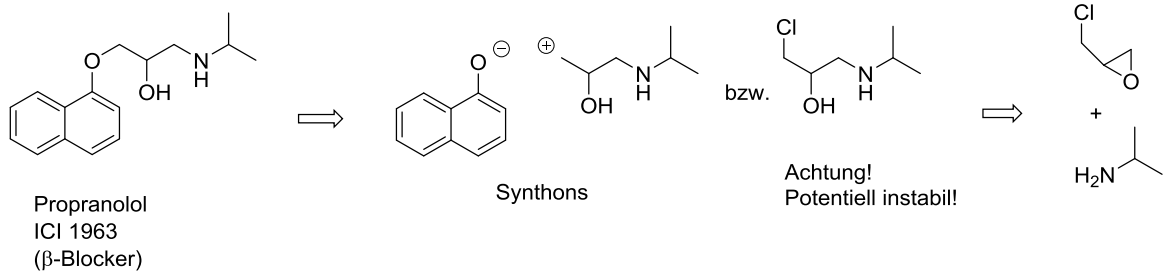
Aufgabe 2: Heterocyclen 1



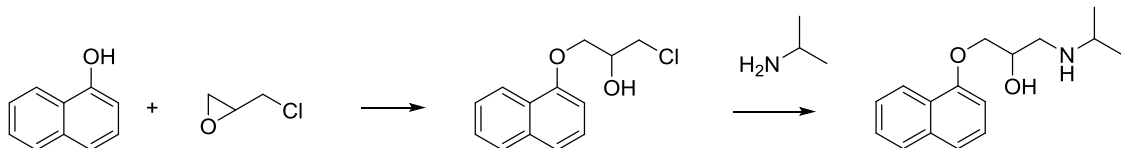
Aufgabe 3: Alkohole 2



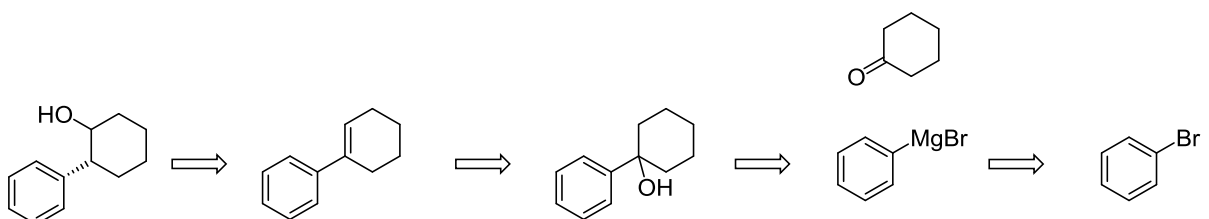
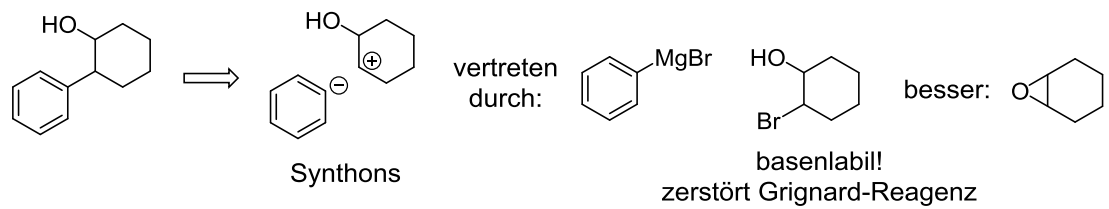
Aufgabe 4: Heterocyclen 2



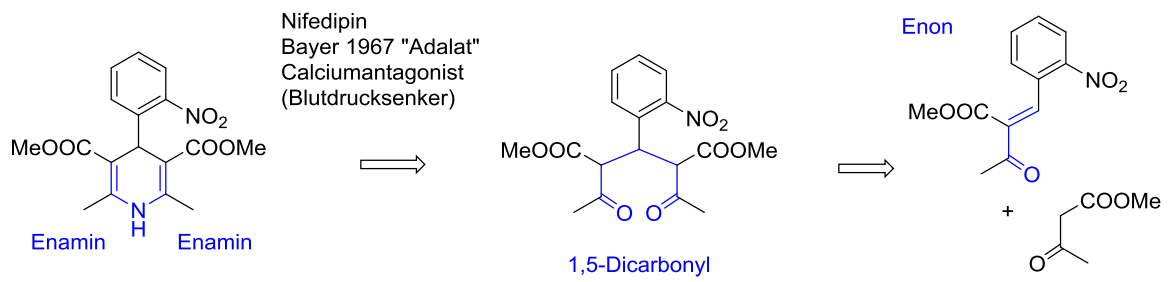
Industrielle Synthese:



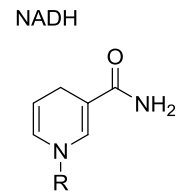
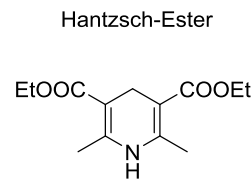
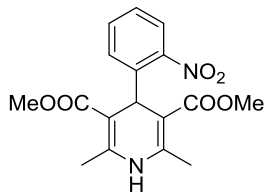
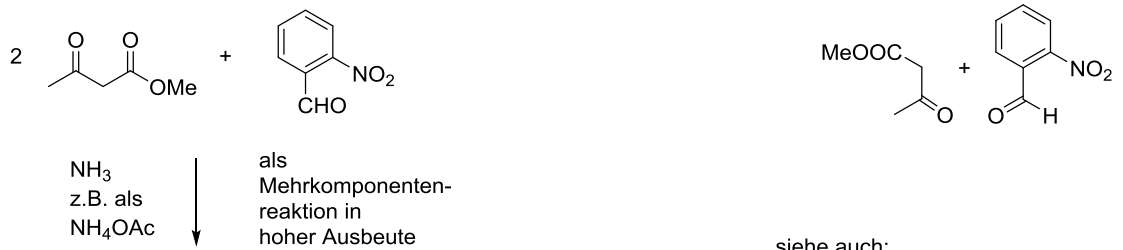
Aufgabe 5: Alkohole 3



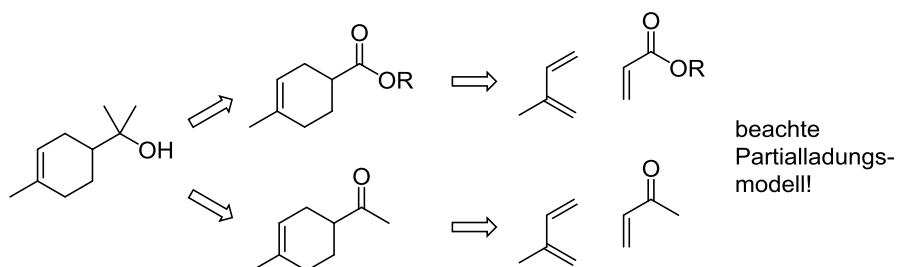
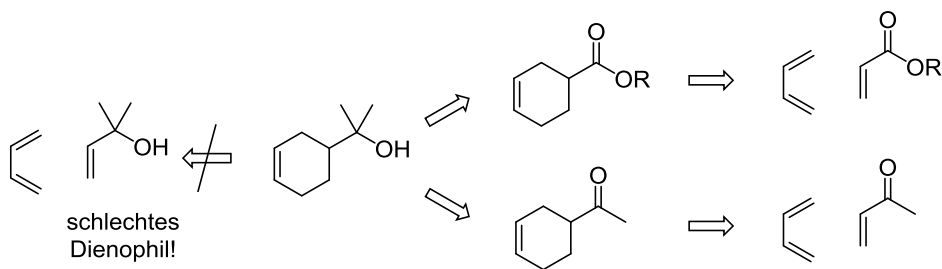
Aufgabe 6: Heterocyclen 3



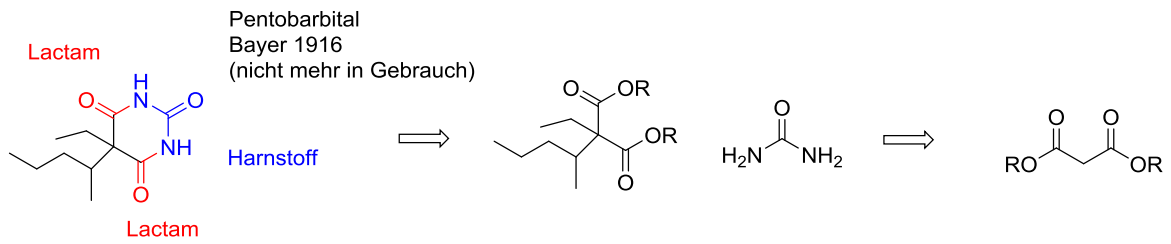
Industrielle Synthese:



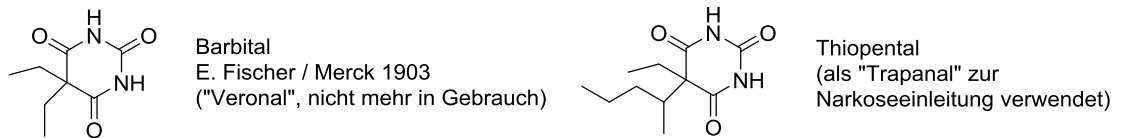
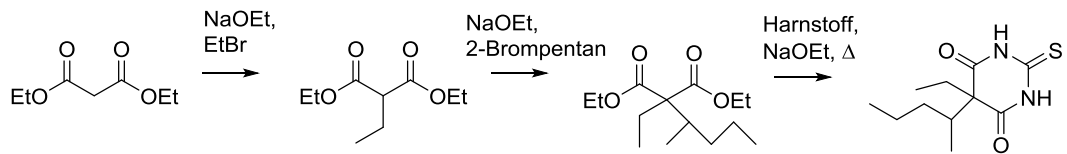
Aufgabe 7: Alkene 1



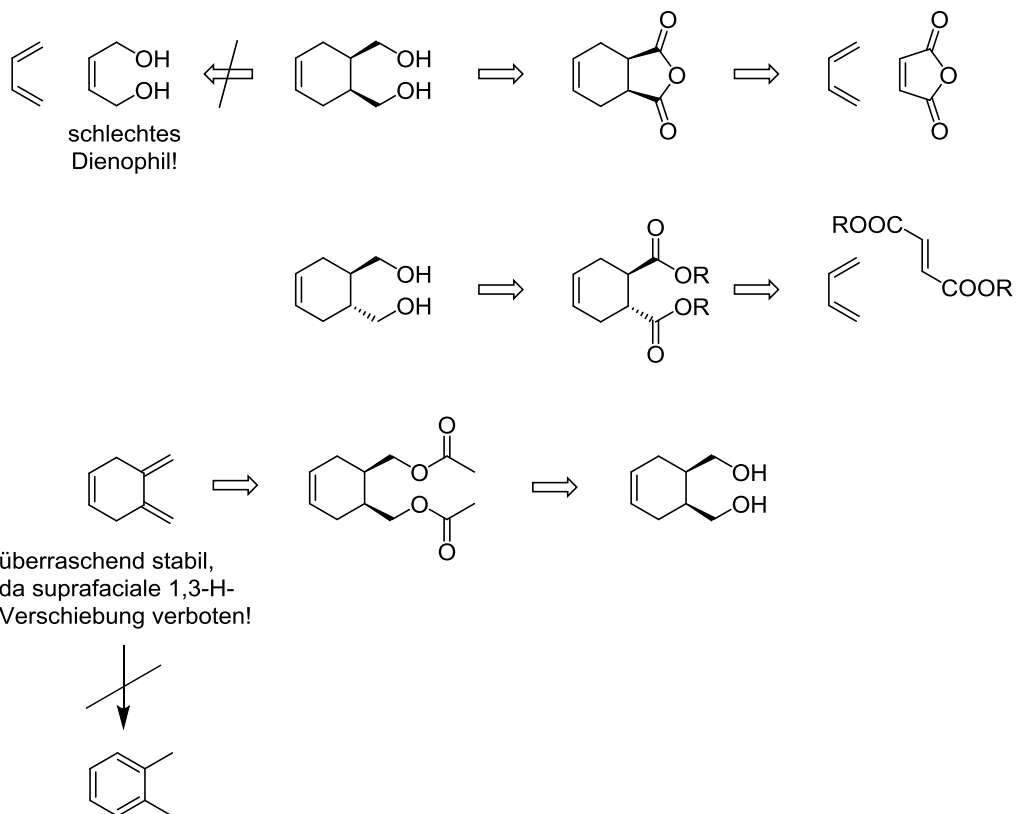
Aufgabe 8: Heterocyklen 4



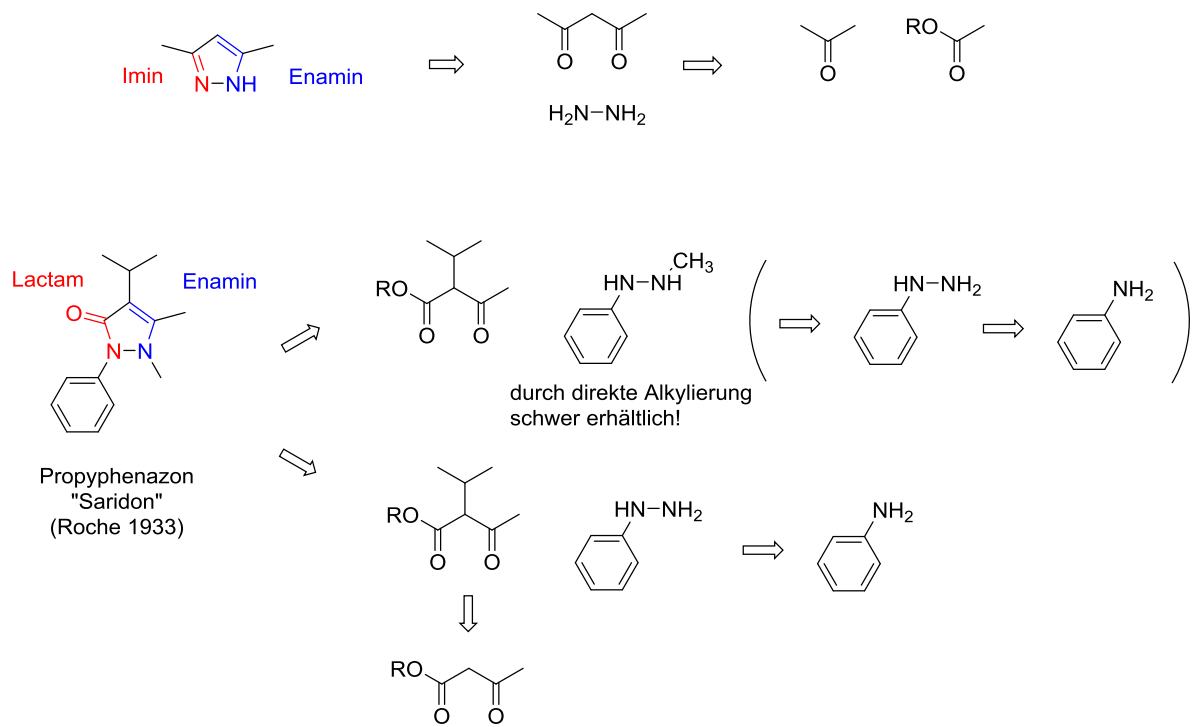
Industrielle Synthese:



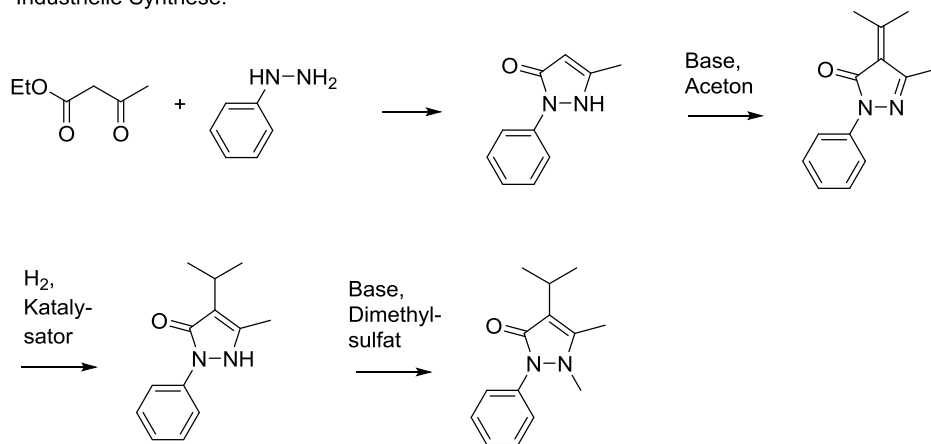
Aufgabe 9: Alkene 2



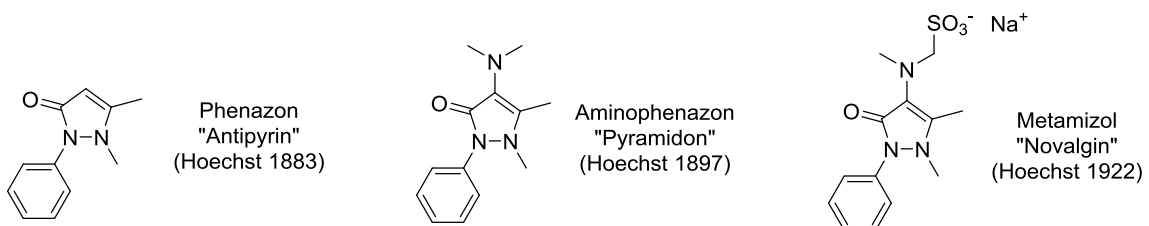
Aufgabe 10: Heterocyklen 5



Industrielle Synthese:

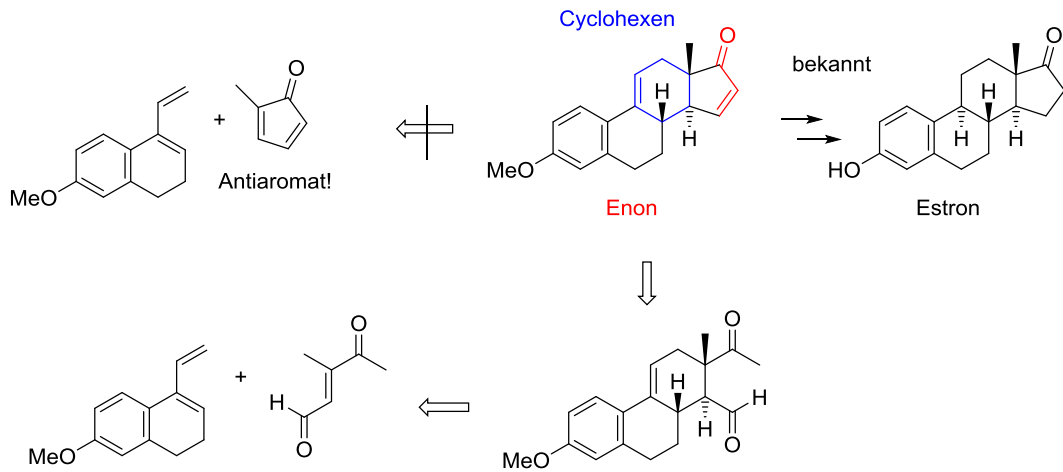


Vorläufersubstanzen:



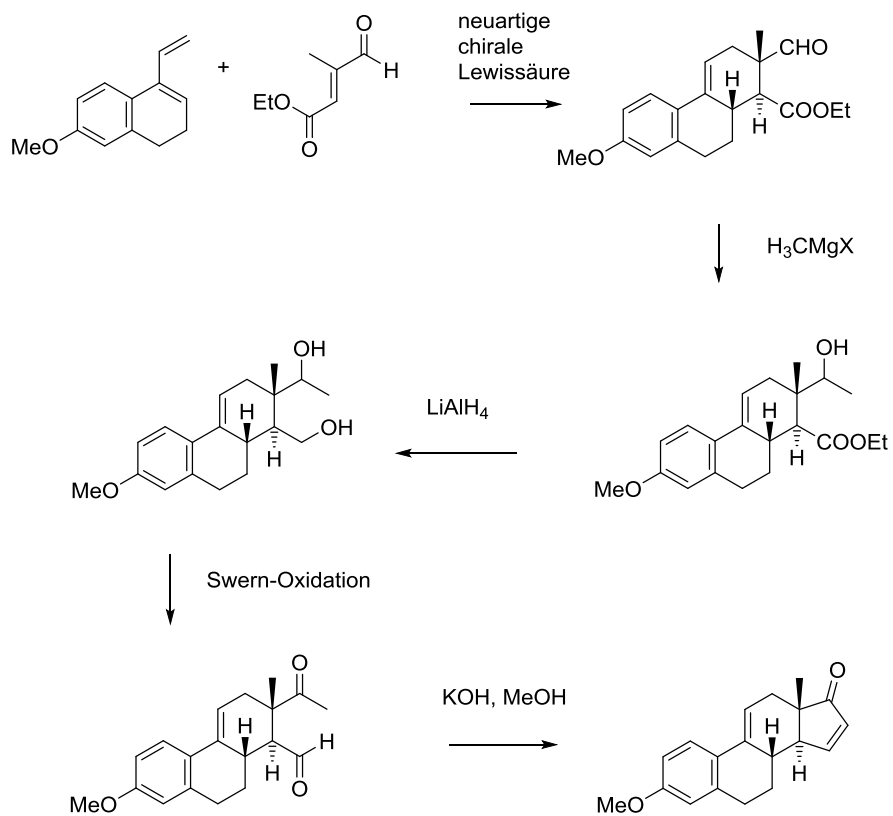
Aufgabe 12: Ketone 2

Estronsynthese nach E.J. Corey:

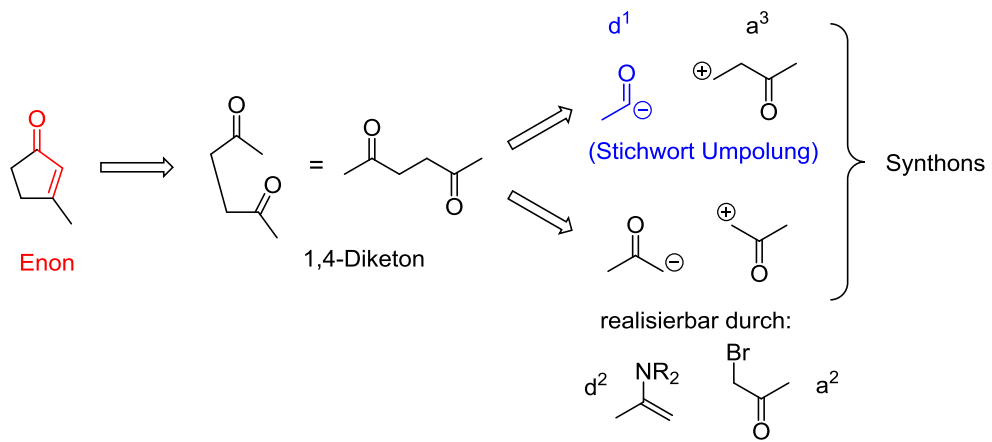


ergäbe wahrscheinlich das falsche Konstitutionsisomer, siehe Partialladungmodell der Diels-Alder-Reaktion

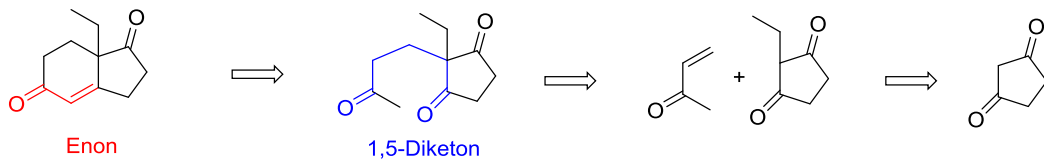
Erfolgreiche Synthese:



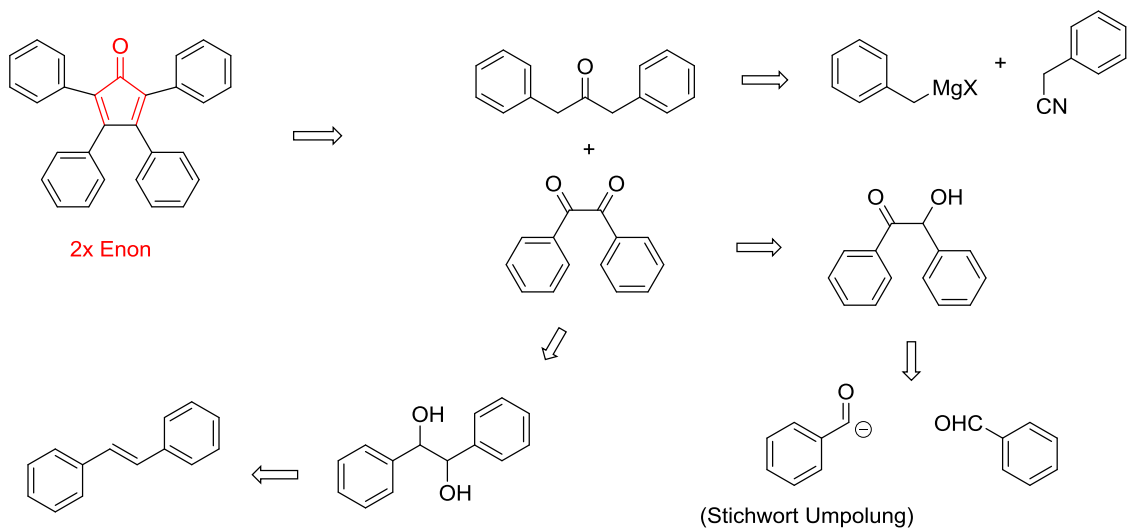
Aufgabe 15: Ketone 5



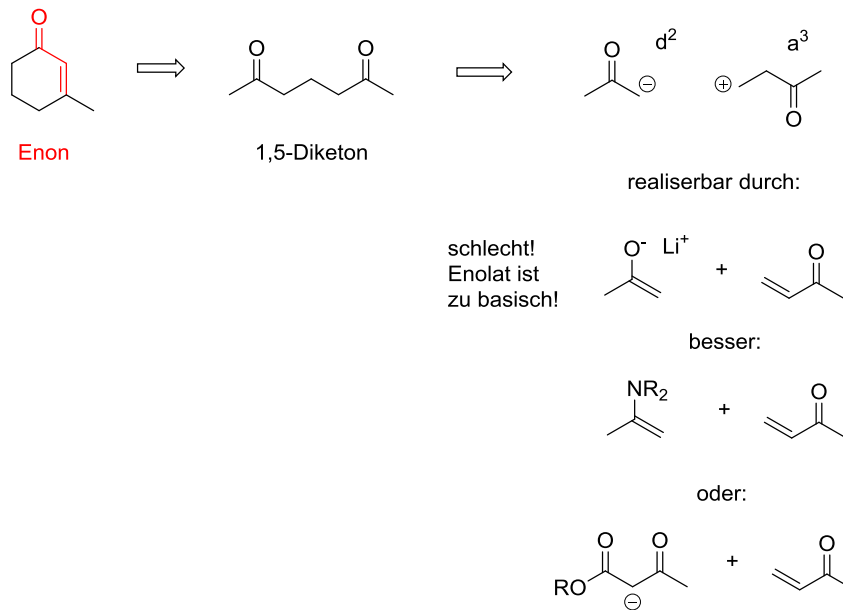
Aufgabe 16: Ketone 6



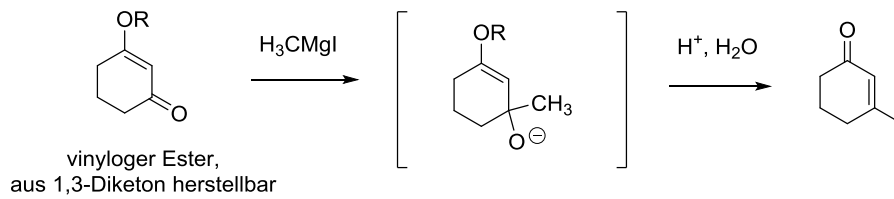
Aufgabe 17: Ketone 7



Aufgabe 18: Ketone 8



Alternativer Syntheseweg, auch für das Fünfring-Enon:



Durch systematische Retrosynthese nicht leicht zu finden!
 Daher: Stets Datenbanken konsultieren! (SciFinder, Reaxys)