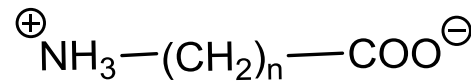
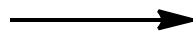
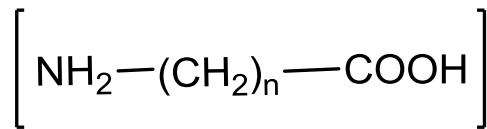


Substituční deriváty karboxylových kyselin

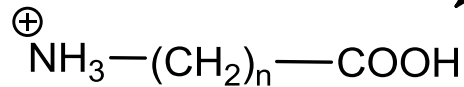
Aminokyseliny

bez ohledu na to, jak jsou daleko od sebe aminoskupina a karboxyl vázány, jsou to skupiny opačného charakteru: **kyselina a báze**, které spolu interagují

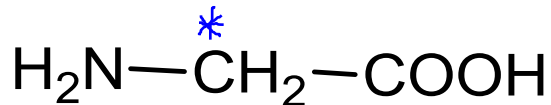
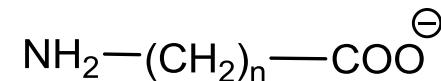


v isoelektrickém
bodě

v kyselém prostředí

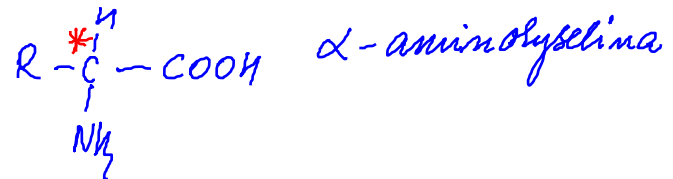


v bazickém prostředí



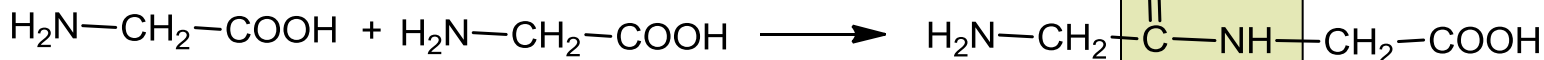
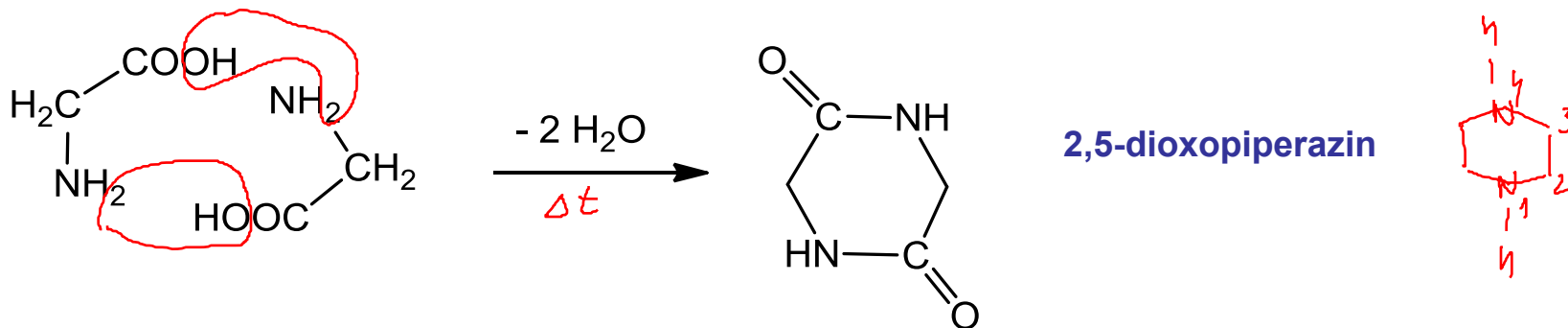
α -aminoctová kyselina
glycin I.B. = 6,1

řada aminokyselin má stereogenní centra –
existence enantiomerů



Substituční deriváty karboxylových kyselin

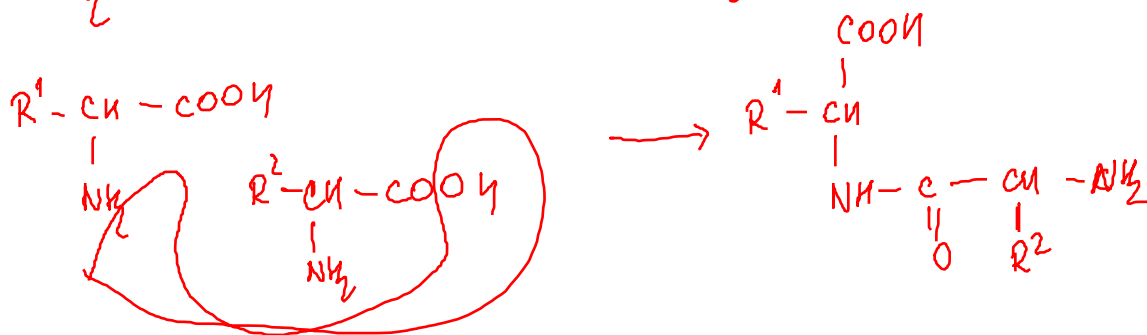
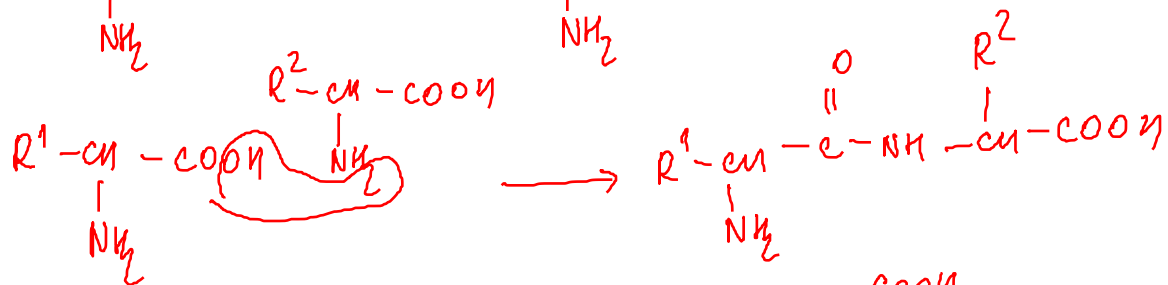
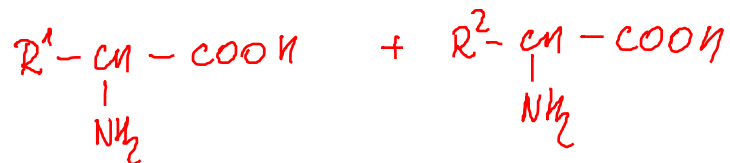
dimerizace α -aminokyselin



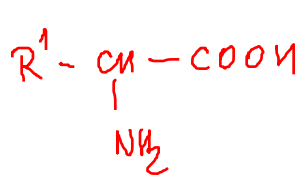
peptidická vazba

dipeptid
polypeptidy
bílkoviny

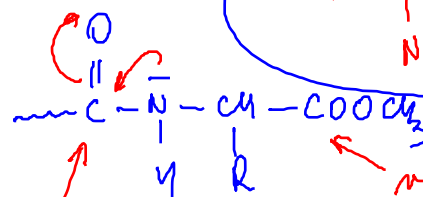
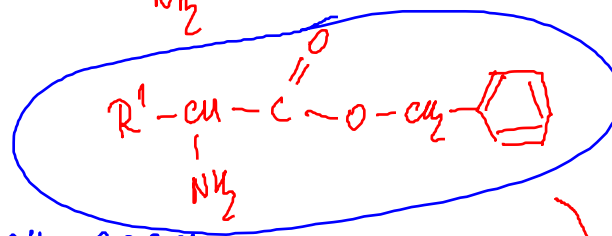
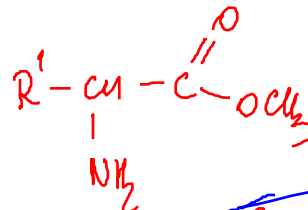
Substituční deriváty karboxylových kyselin



Substituční deriváty karboxylových kyselin



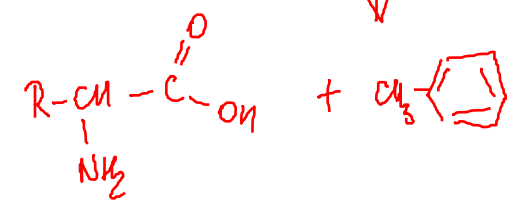
zabloudíme kyselinu tvorbou esteru
 metylester
benzylester



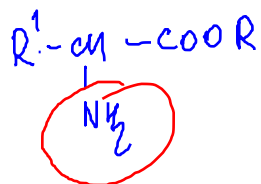
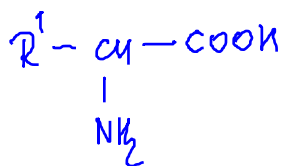
malá elektronová rezerva

větší el. rezerva

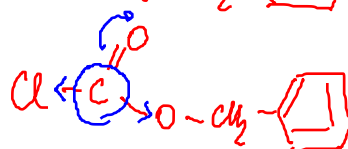
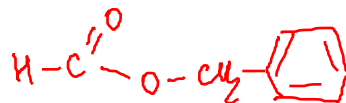
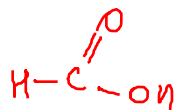
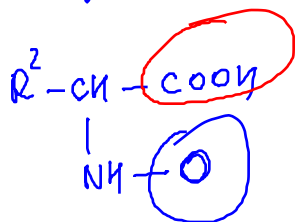
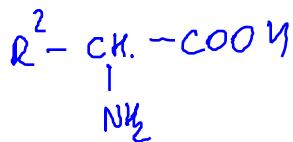
$\text{H}_2 / \text{Pd/C}$



Substituční deriváty karboxylových kyselin

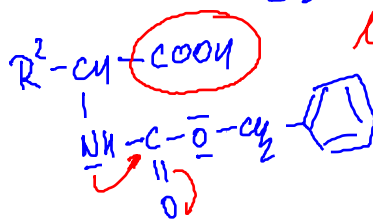
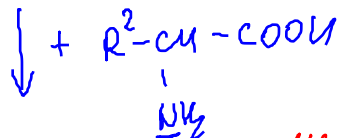


reagují nechráněné skupiny

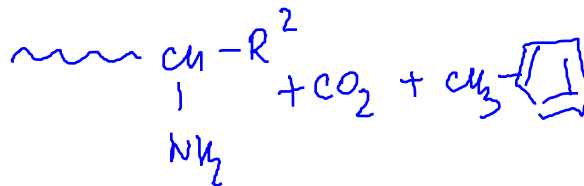
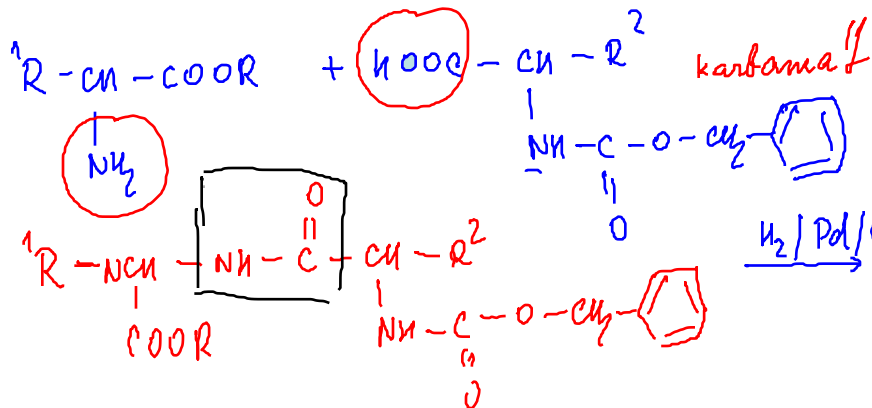


benzyl-chlorformiát
benzylester kys. chloroformační

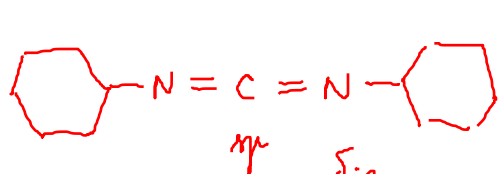
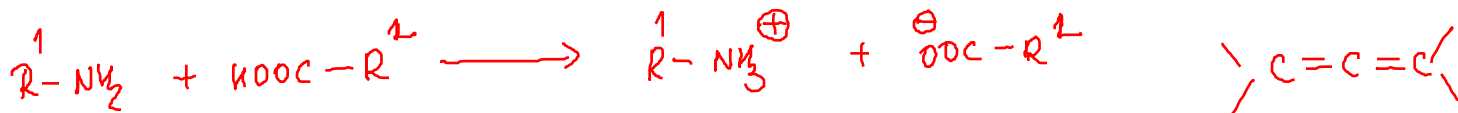
velmi citlivá na atak nukleofilu



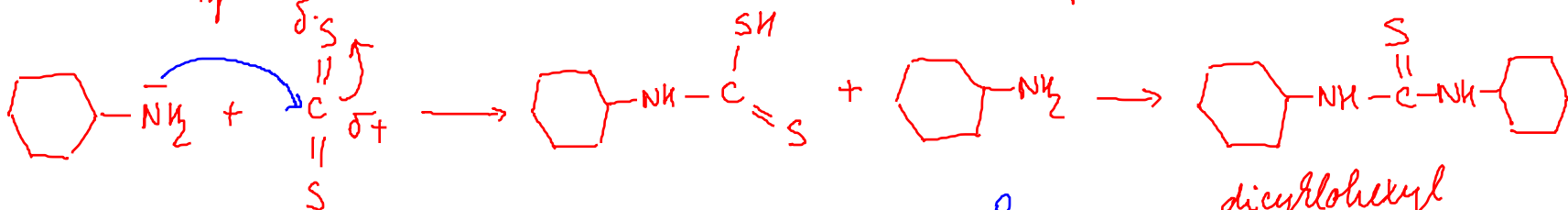
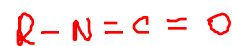
látko reagují na
nechráněné
karboxylové
skupině



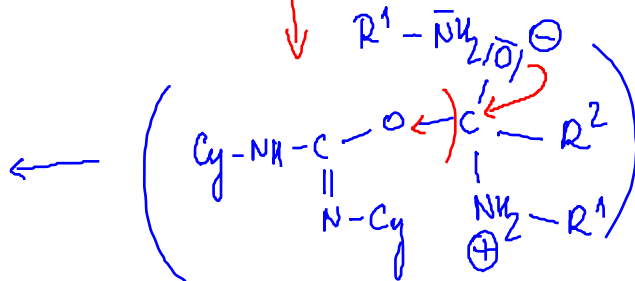
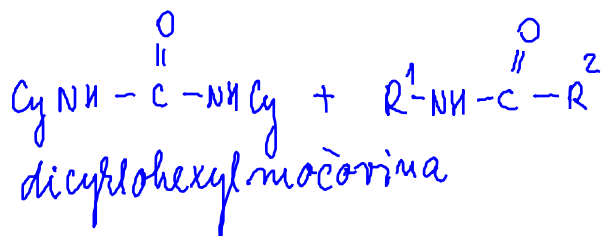
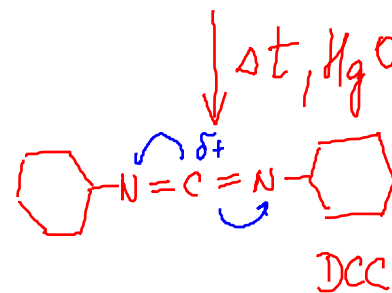
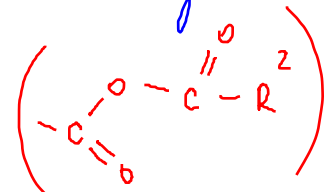
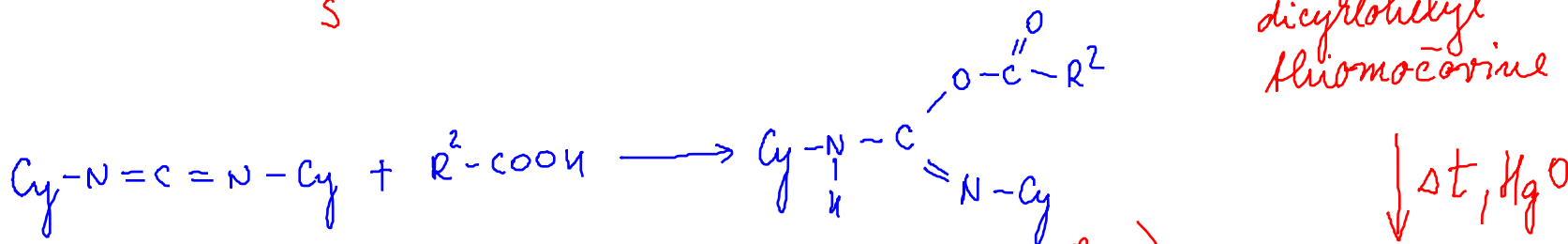
Substituční deriváty karboxylových kyselin



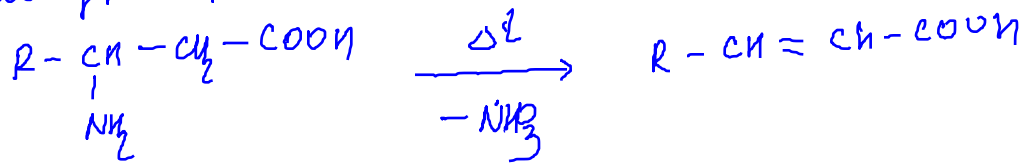
heterokumuleny
DCC



dicyklohexyl
thiomocovina



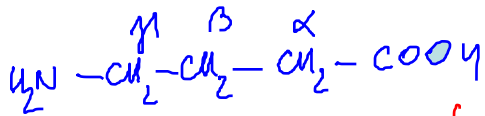
β -aminykylidy



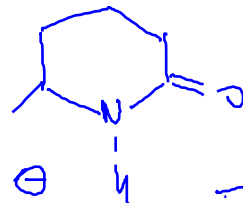
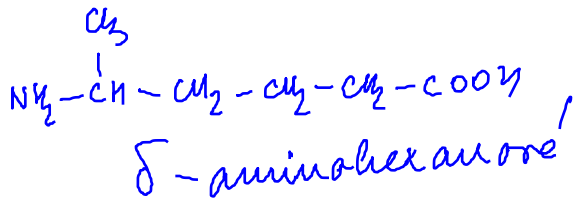
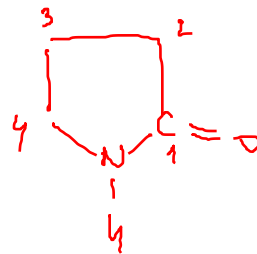
eliminaciu' α, β -menarycent na ylove' kyseliny

γ, δ -aminykylidy

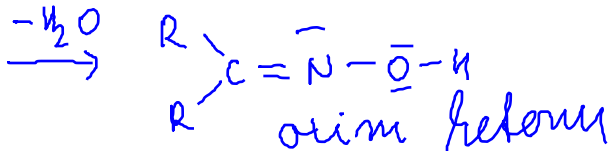
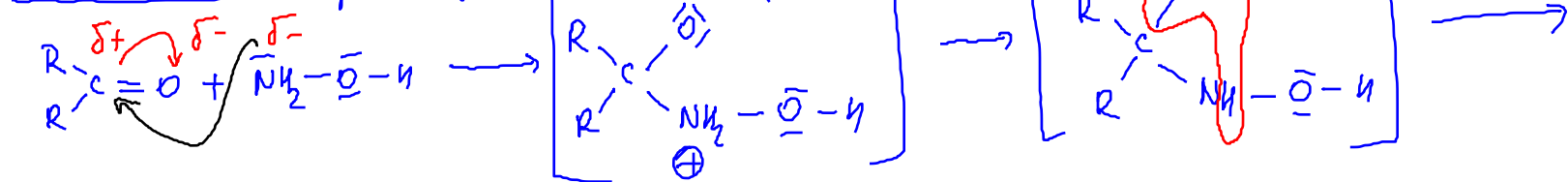
intramolekulární cyclizace \Rightarrow laktamy

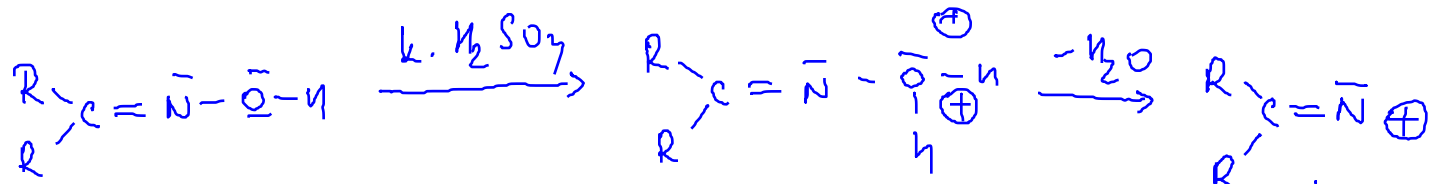


γ -aminykylidy lysine

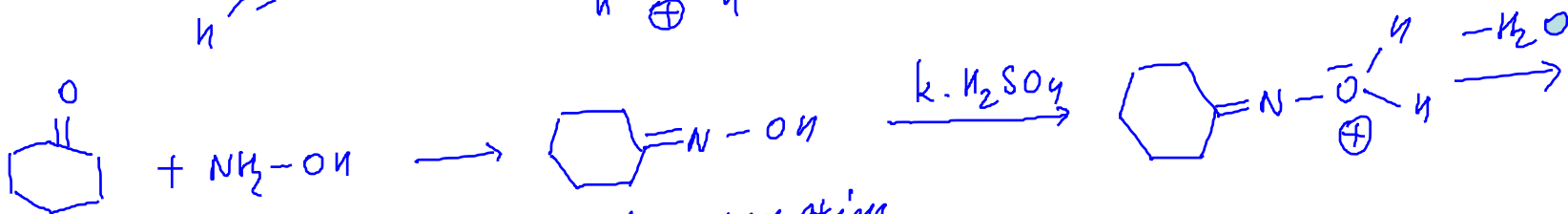
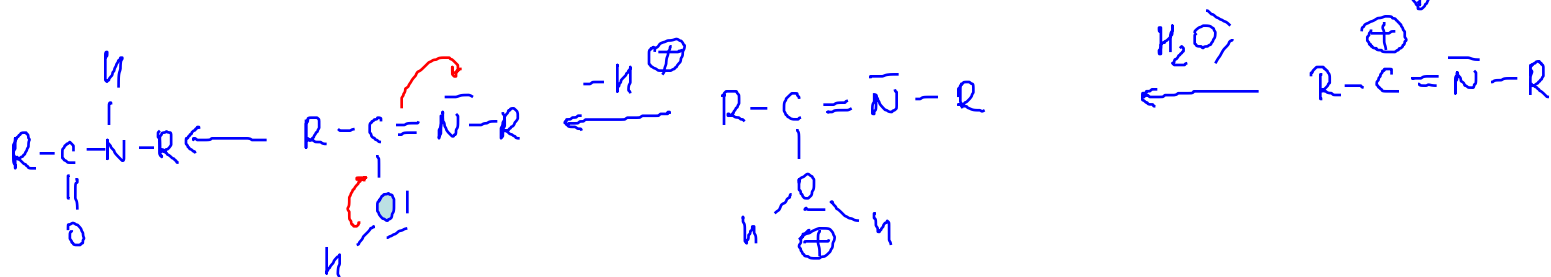


Beckmannova přeměna

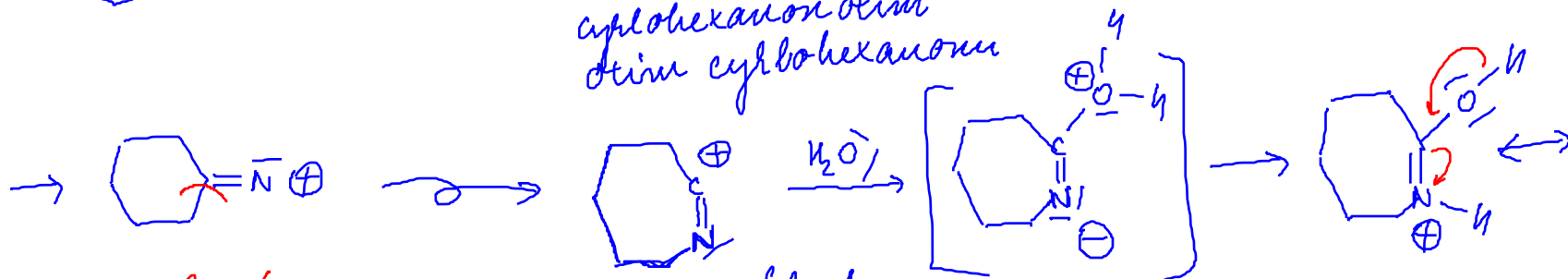




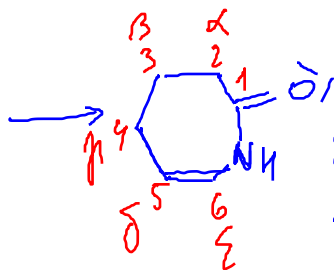
Beckmannio přetvz



cyclohexanon oxim
oxim cyclohexanonu

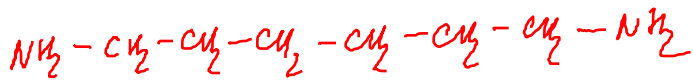


7 čluný kruh



ε-kaprolaktam
laktam kys. kapronové

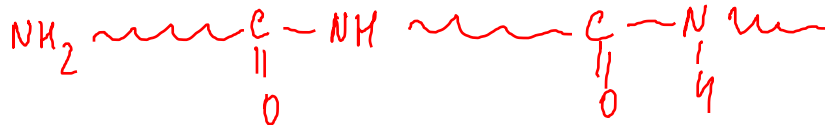
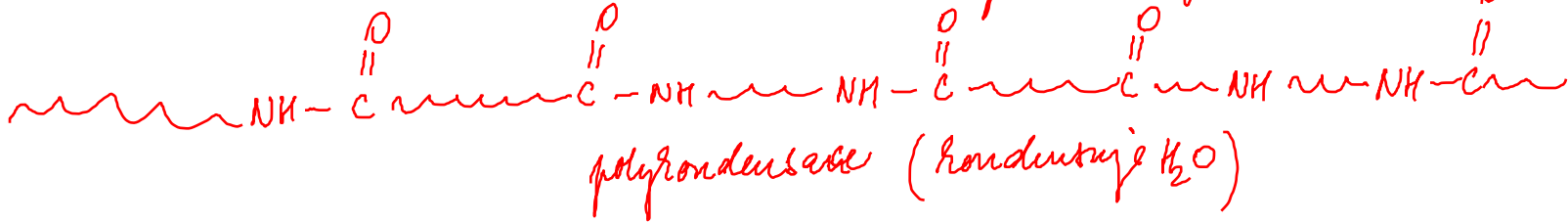
$\text{NH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{COOH}$
ε-aminokapronové



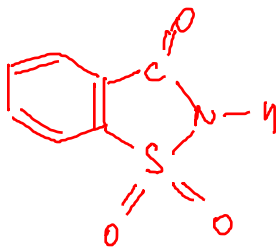
diamin



dicarboxylowa kys.

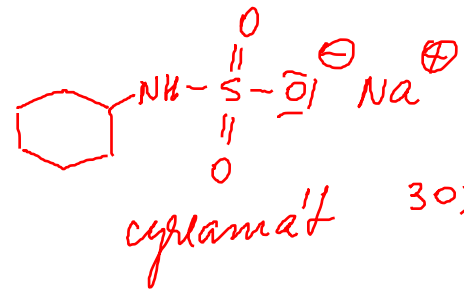
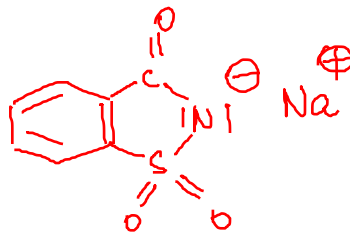


Amilá sledidla



seharin

500x



cyclamát 30x

ASPARTAM dipeptid 160x (L)-aspartyl - (L)-fenylalanin metylester

