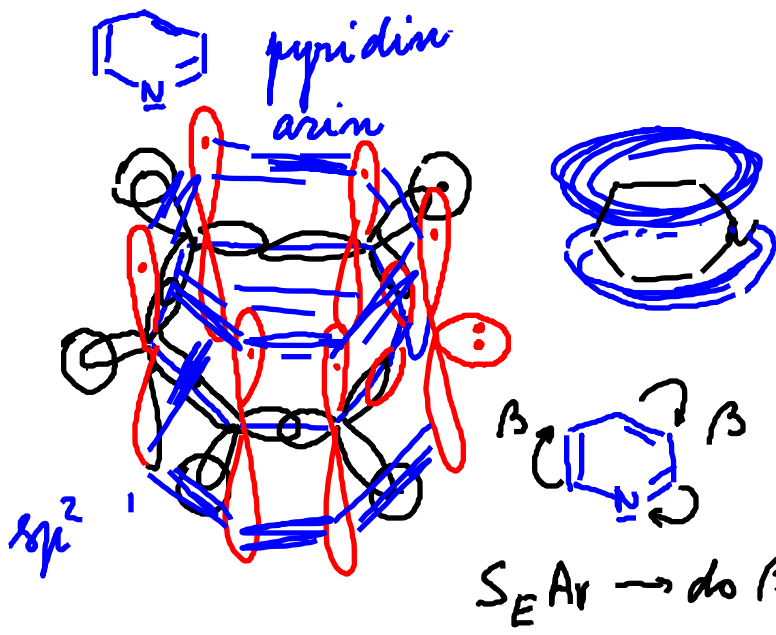


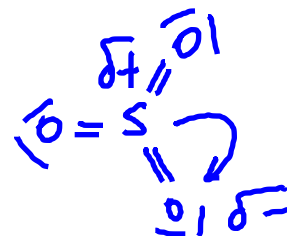
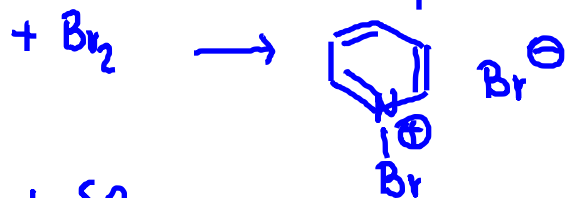
Heterocyklické sloučeniny

šestičlenné heterocykly

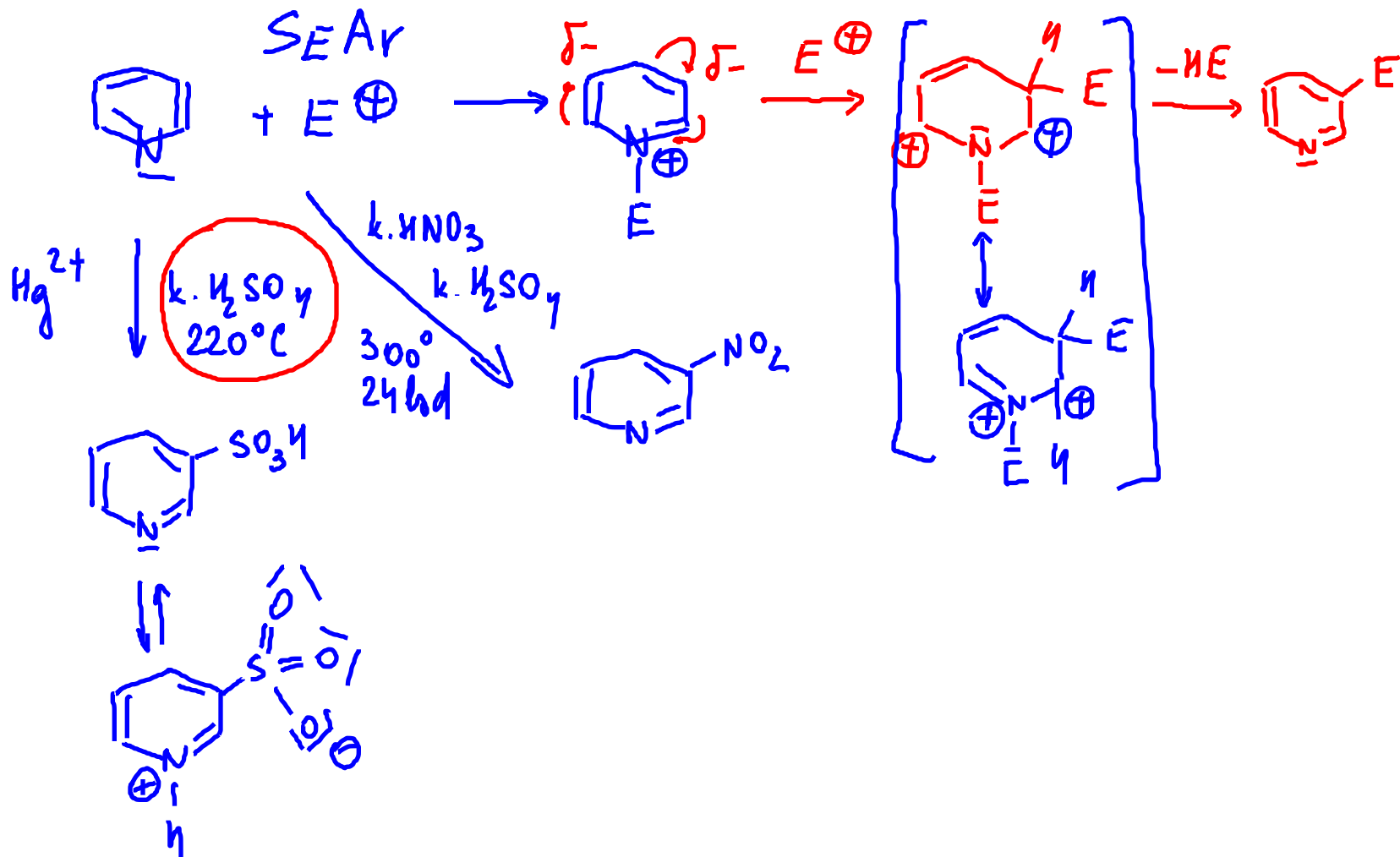
aromatické deriváty
benzoidní aromať



1. basicita $pK_b = 8,8$
2. elektrofilní arom. substituce (obtížně),
3. vstupují do $S_N Ar$

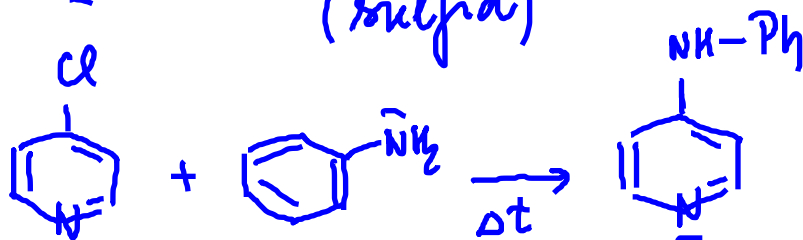
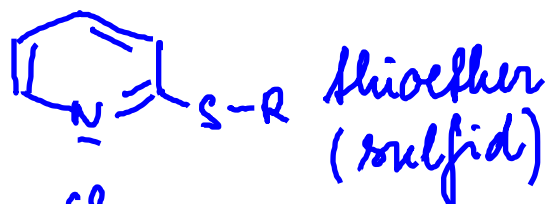
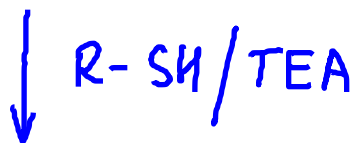
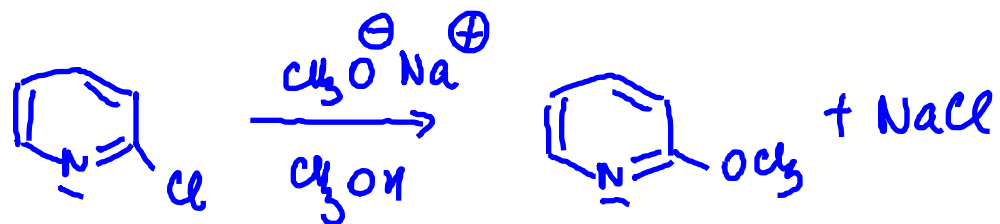


Heterocyklické sloučeniny

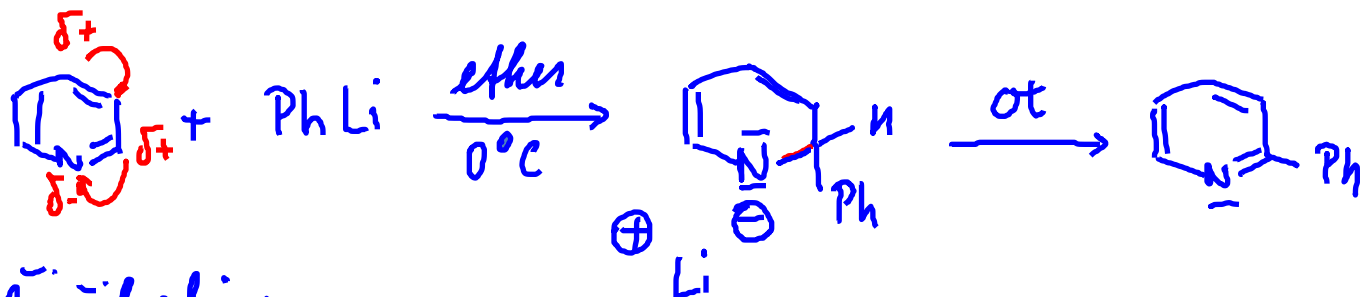


Heterocyklické sloučeniny

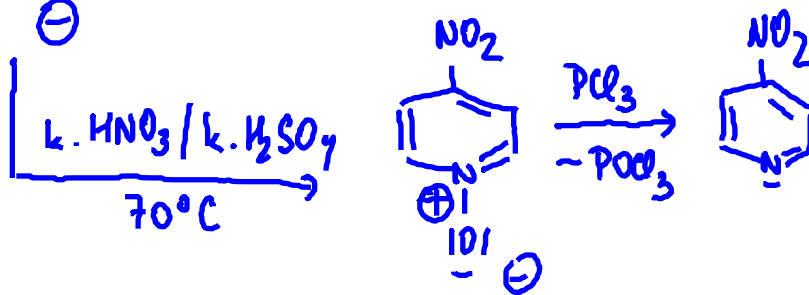
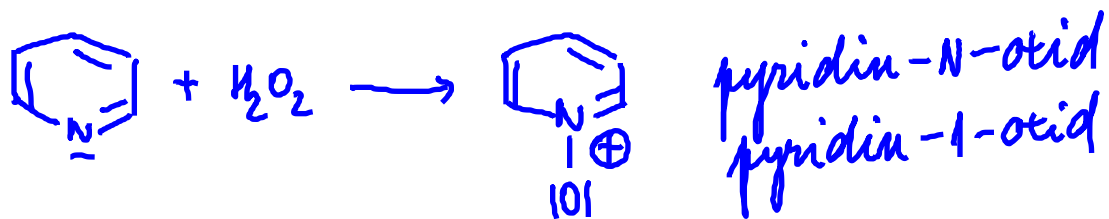
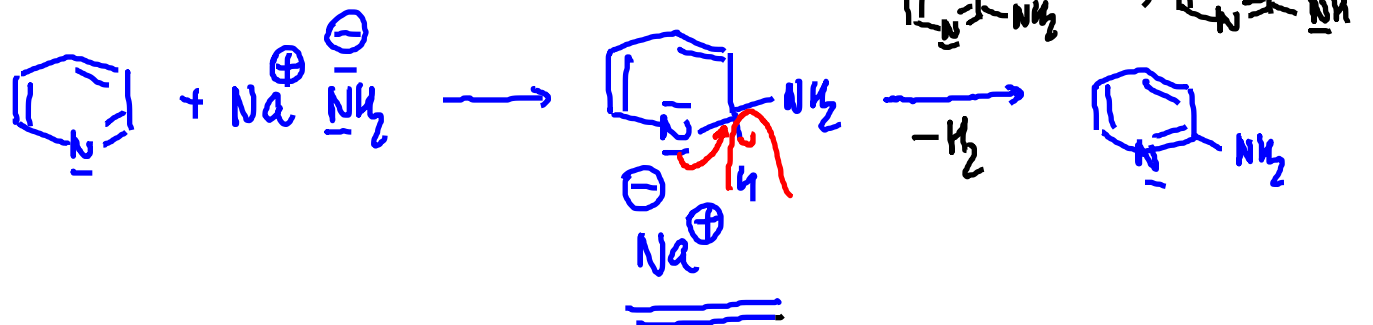
Substituce nukleofilní
s dobrou odsl. skupinou



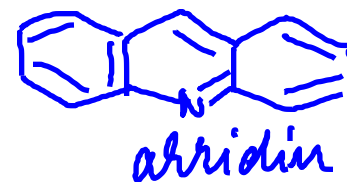
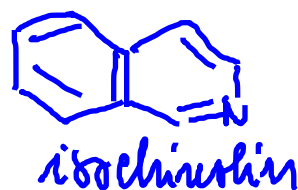
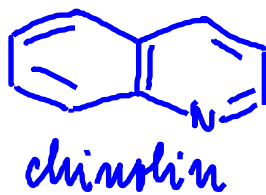
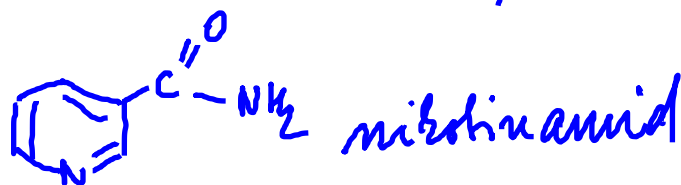
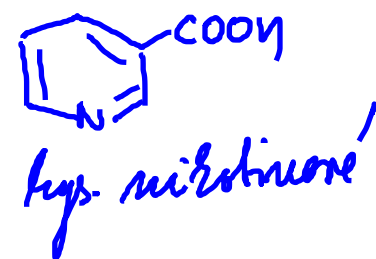
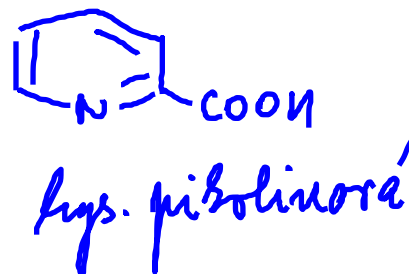
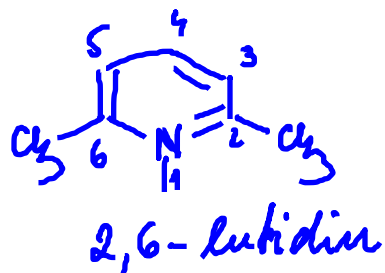
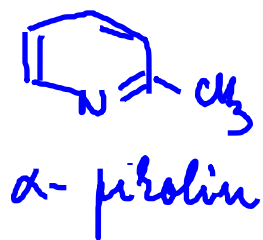
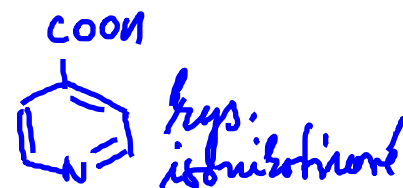
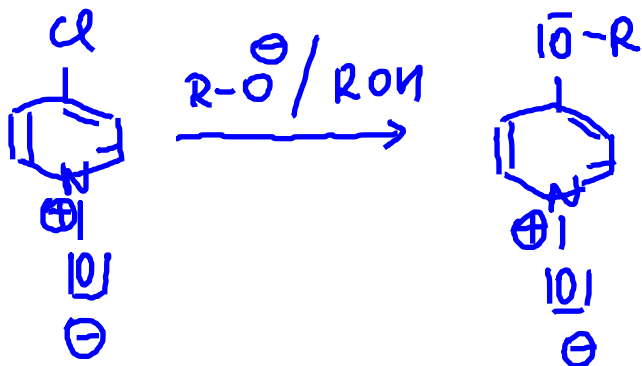
Heterocyklické sloučeniny



čičibabim



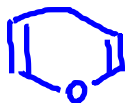
Heterocyklické sloučeniny



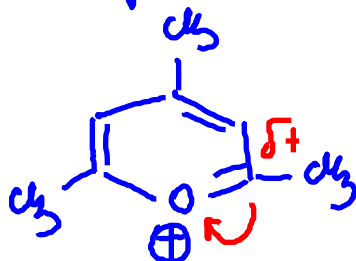
Heterocyklické sloučeniny



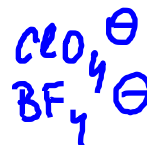
2H-pyran



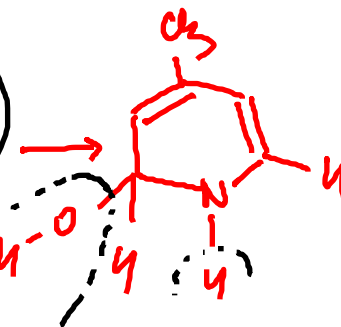
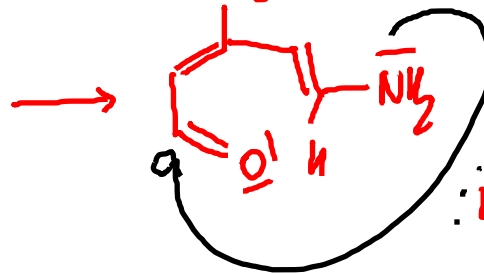
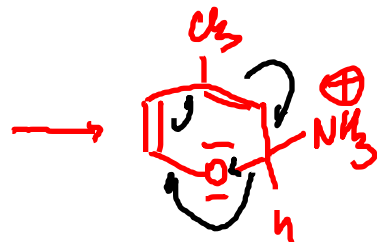
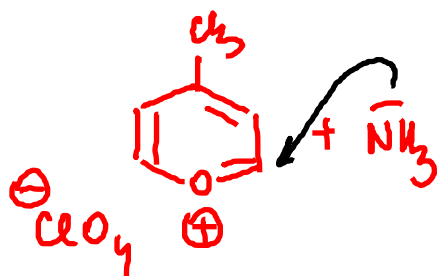
4H-pyran



X^- slabý nukleofil



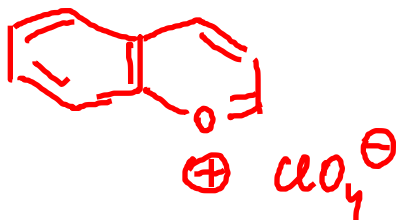
pyryliové soli



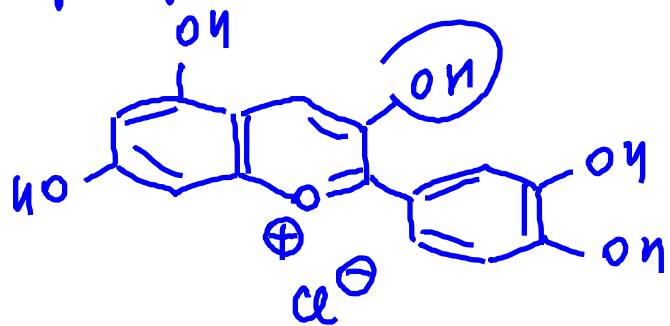
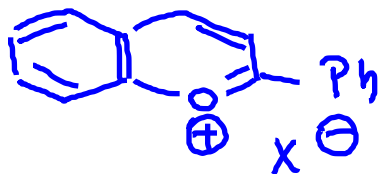
$-H_2O$



Heterocyklické sloučeniny

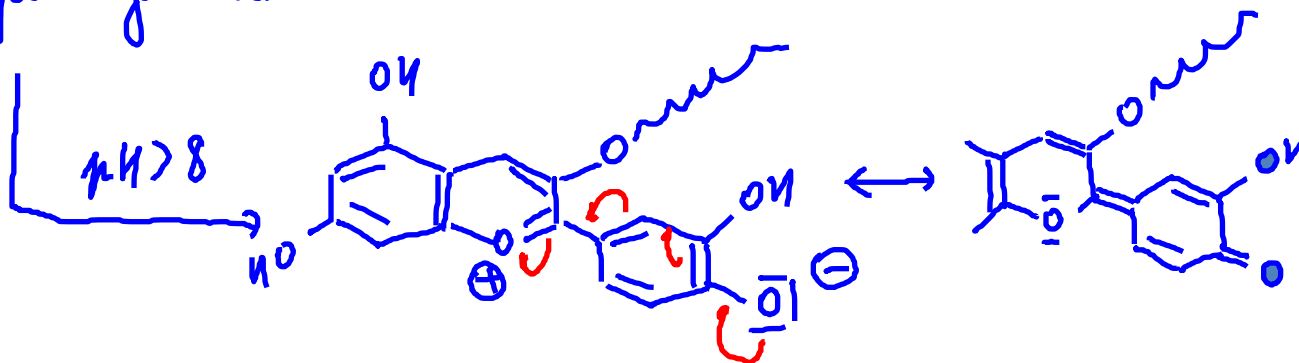


flavyliové soli



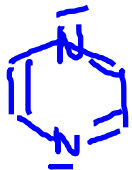
pelargonidin

antokyanaová barviva
mění barvu v závislosti na pH



Heterocyklické sloučeniny

Diaringy



pyrazin



pyrimidin

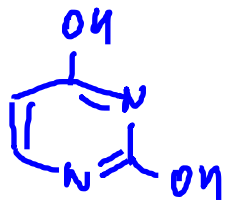


pyridazin

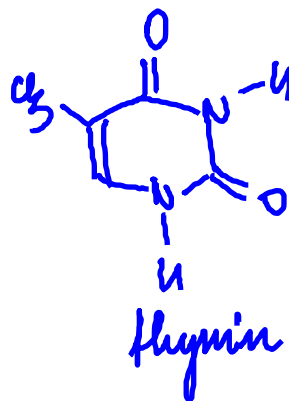
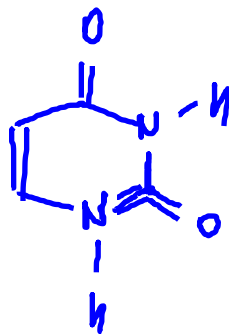
$pK_b = 13,35$

12,70

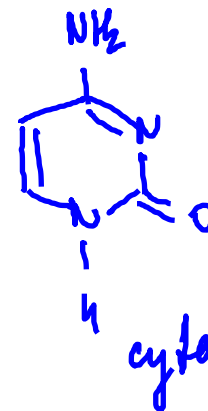
11,67



uračil



thymin

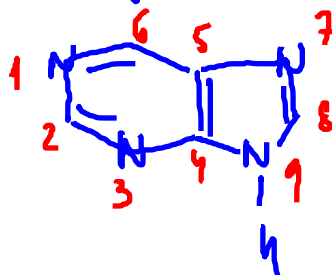


cytosin

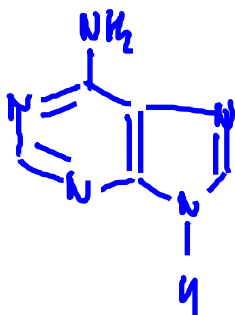
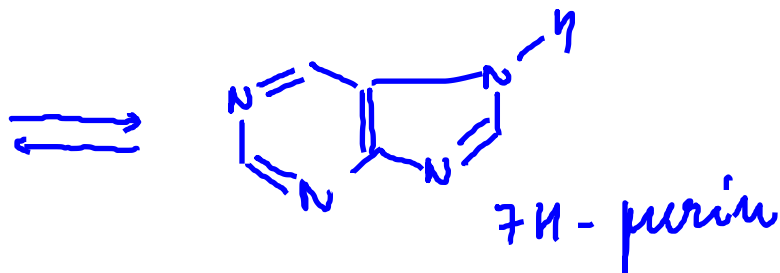
Heterocyklické sloučeniny

Kondensované heterocykly

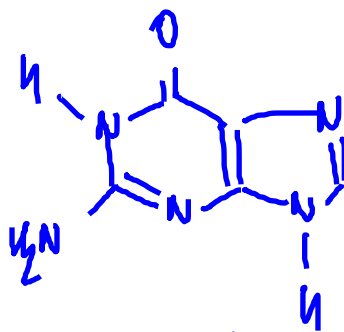
Puriny



9H-purine



adenin



guanin