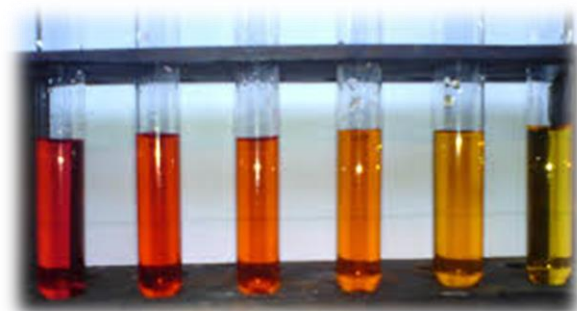
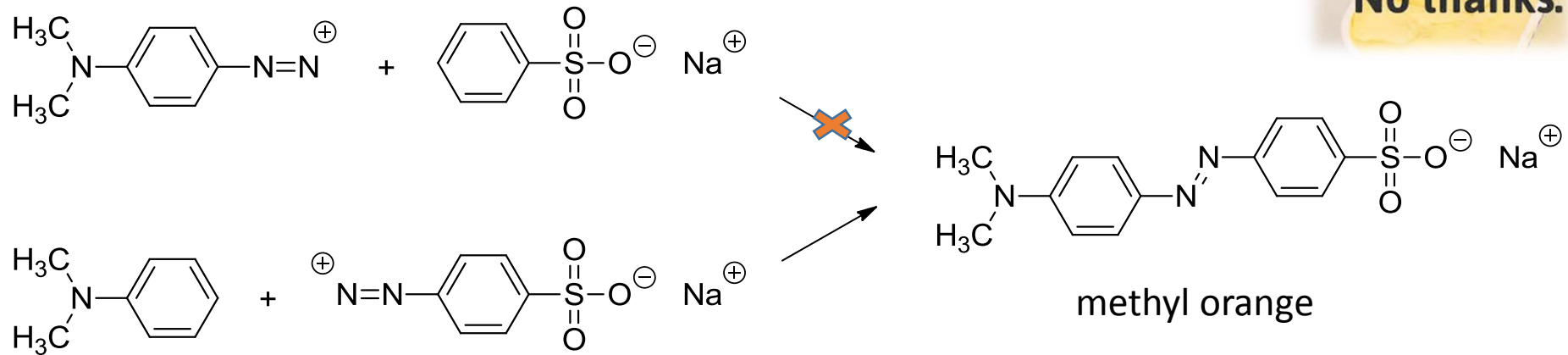
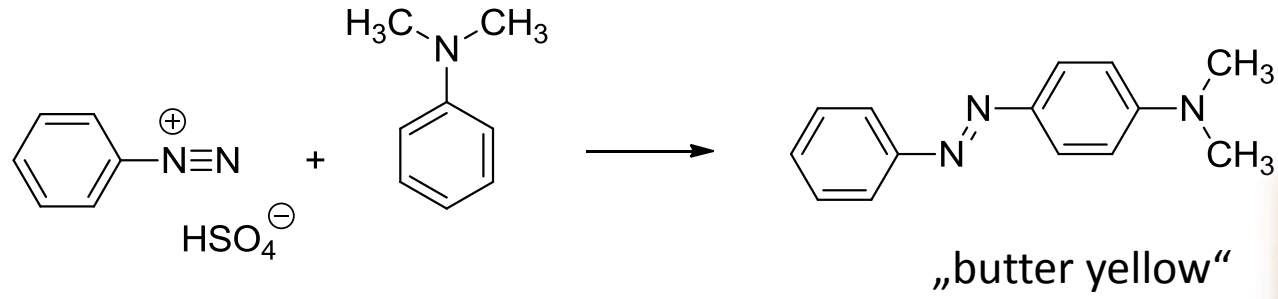




- Diazoniové soli jsou elektrofilní
- Příprava diazo sloučenin

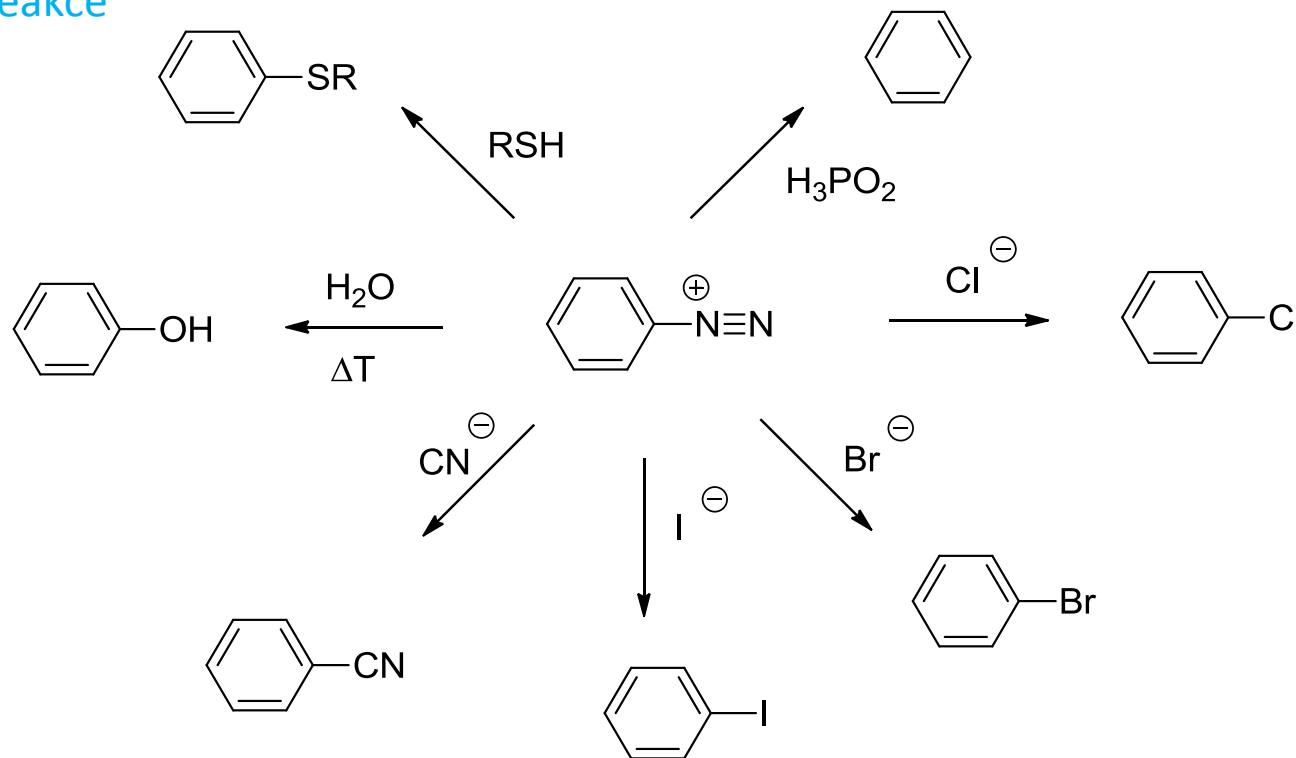


← pH

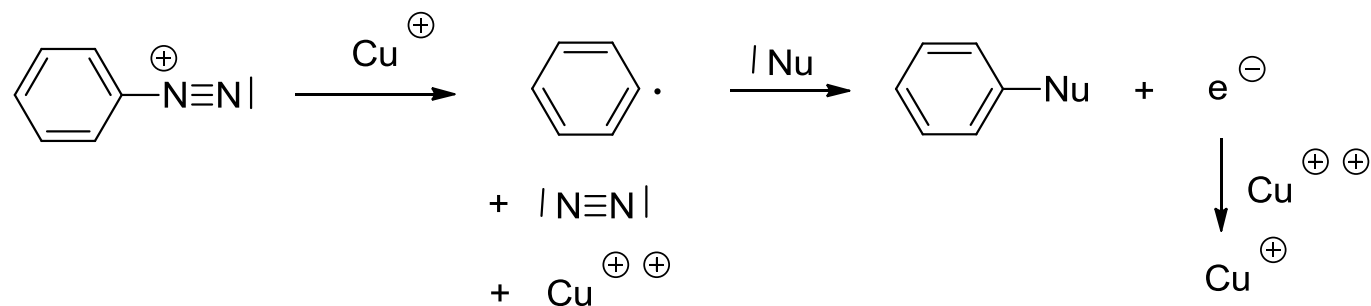




- Diazoniové soli obsahují velmi dobře odstupující skupinu – nukleofilní substituce
- Sandmeyerova reakce

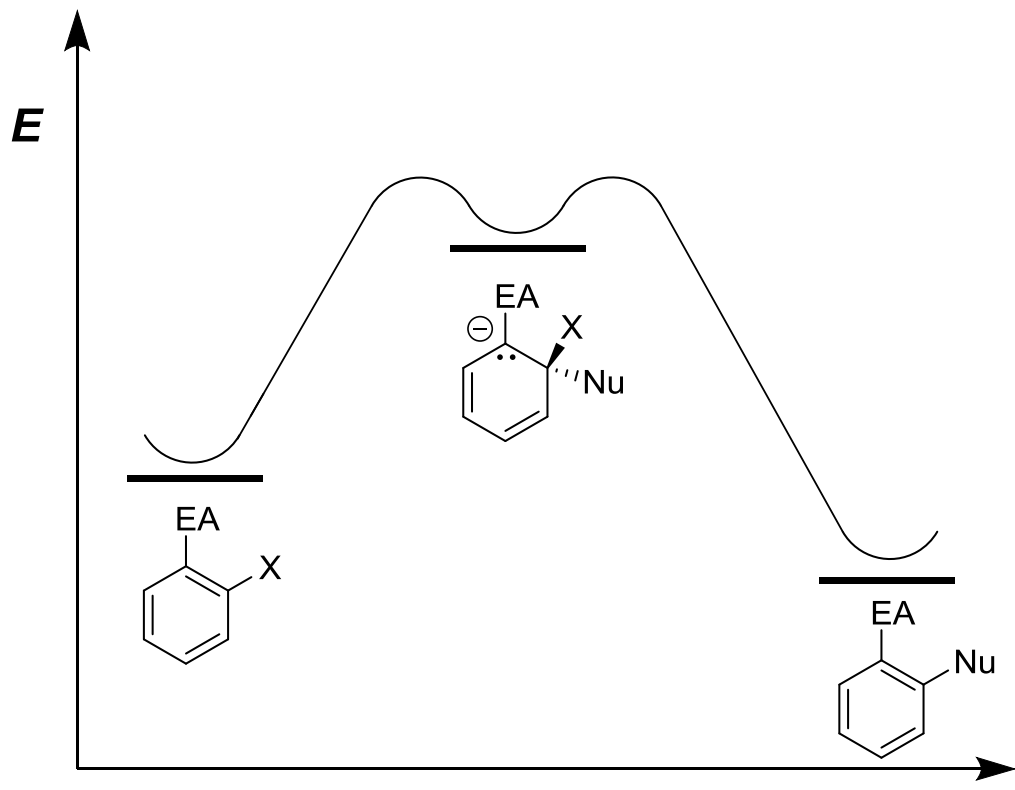
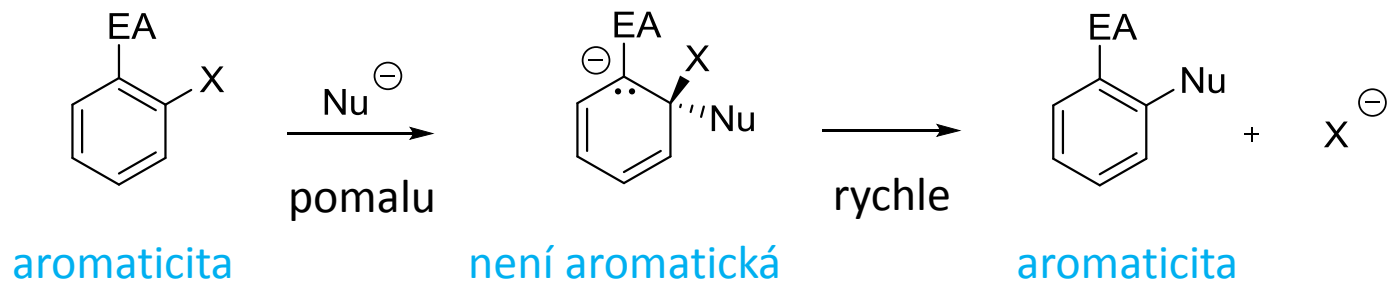


- Radikálový mechanismus; katalýza Cu^+





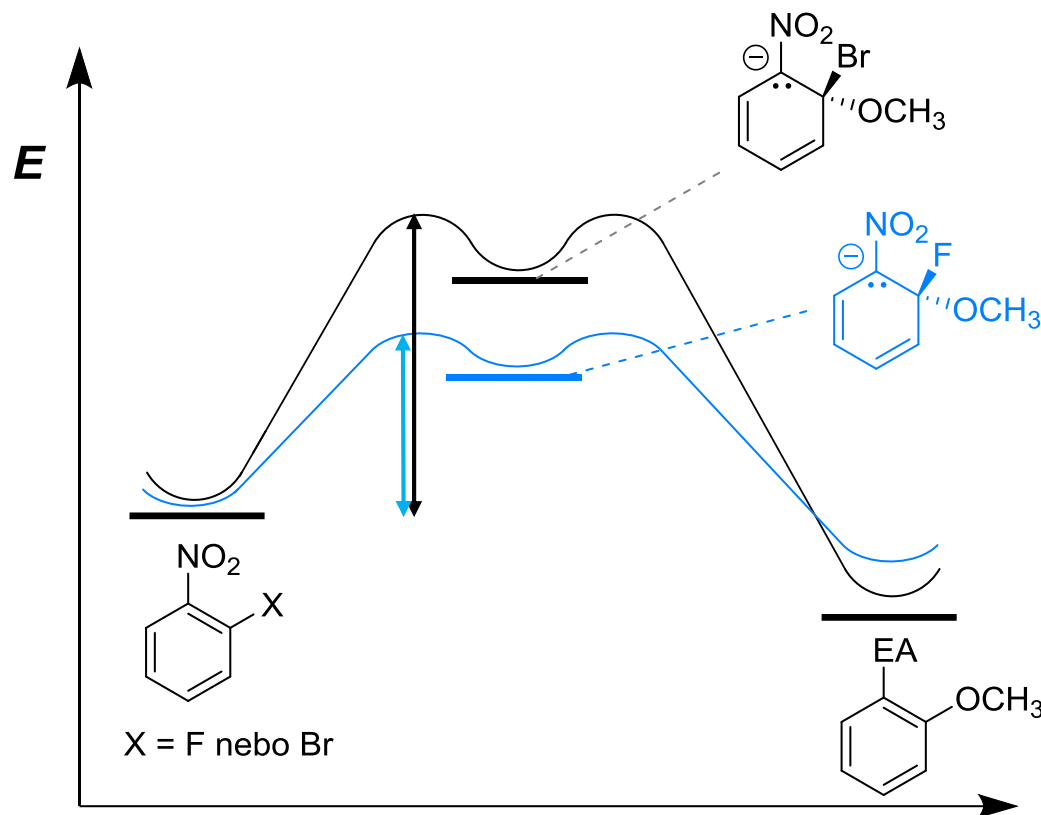
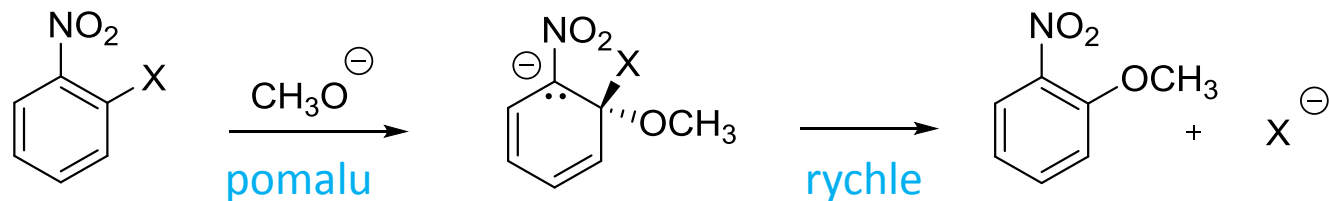
- Formální mechanismus: nukleofilní aromatická substituce



reakční koordináta



- Tvorba aniontového intermediátu je rychlost určující krok



Elektronegativita halogenů:

F ... 3.98

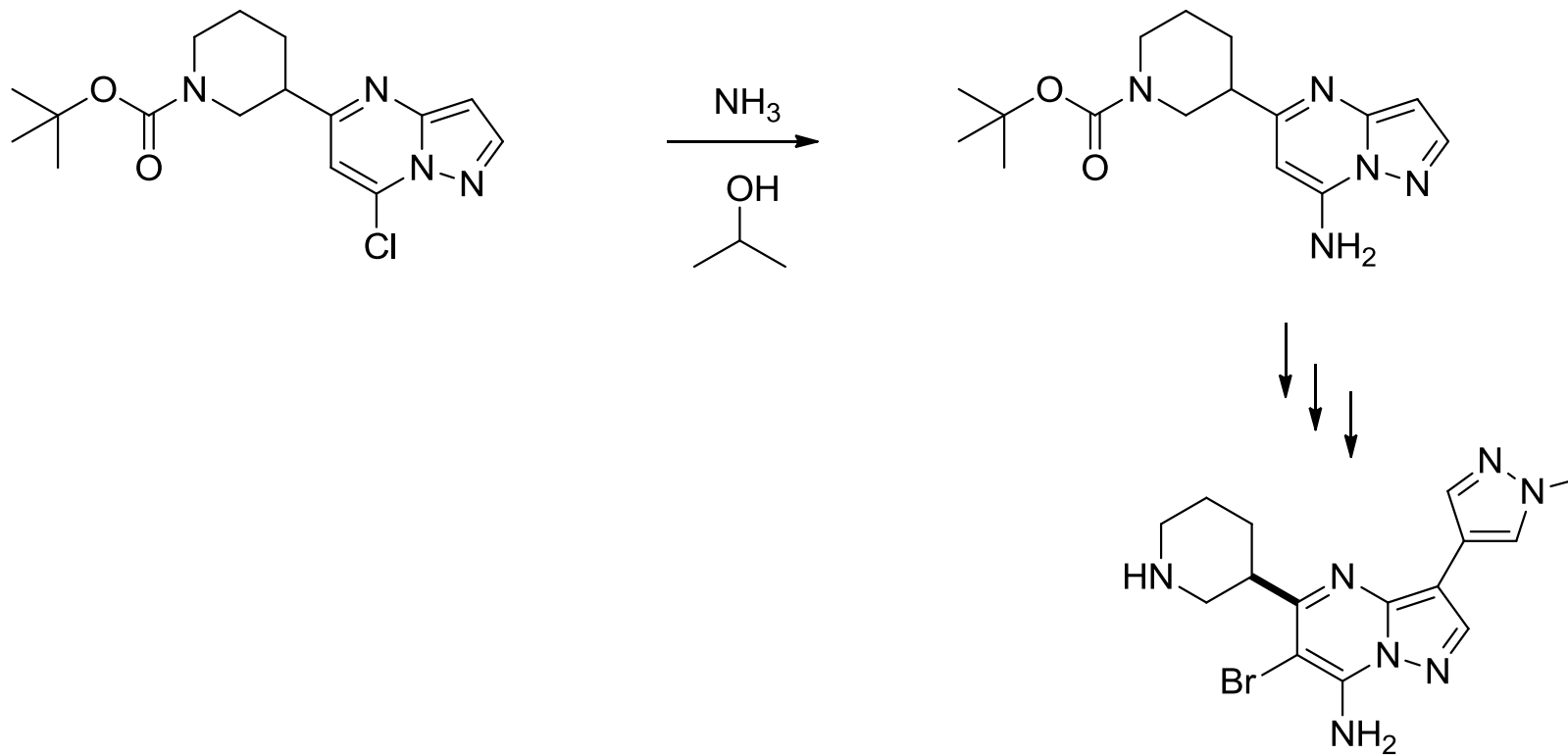
Cl ... 3.16

Br ... 2.96

I ... 2.66

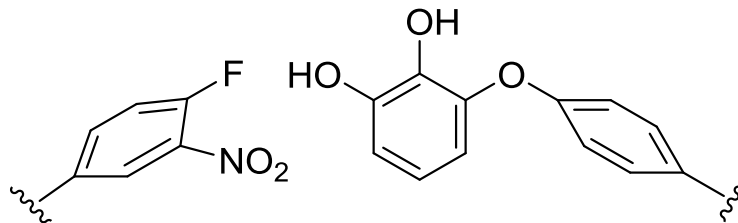


- Aplikace v medicíně



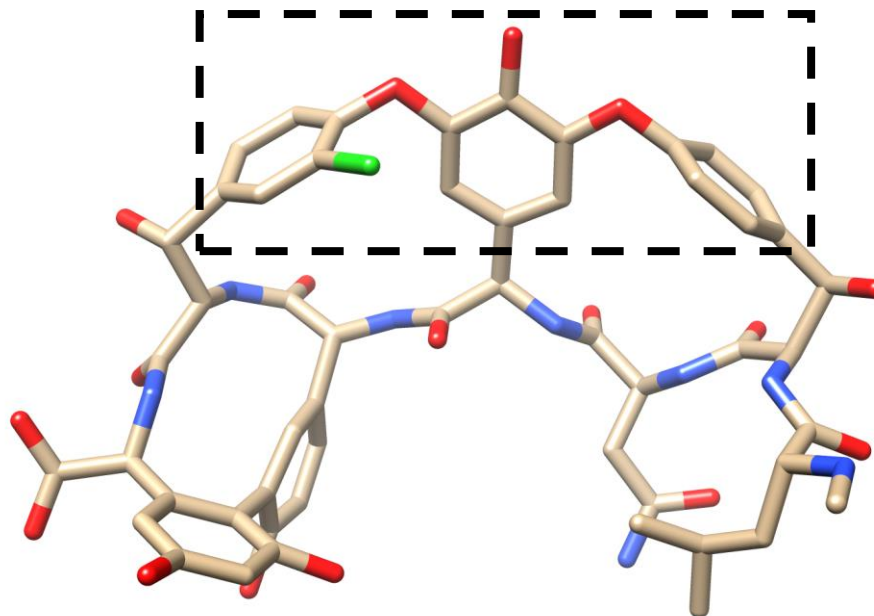
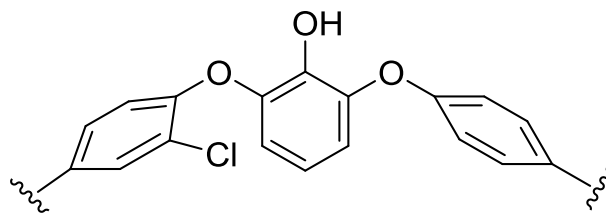
SCH900776

- Účinný a selektivní inhibitor kinázy CHK1
- Potencuje účinek některých chemoterapeutik
- Princip syntetické lethality
- Fáze II klinického testování

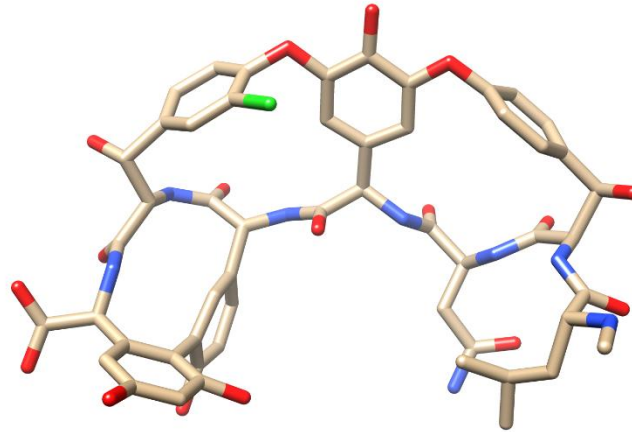


1. CsF (baze)
2. Zn, AcOH
3. NaNO₂, H⁺
4. CuCl

1. Aromatická nukleofilní substituce
2. Redukce NO₂ na NH₂
3. Tvorba diazoniové soli
4. Substituce diazoniové skupiny

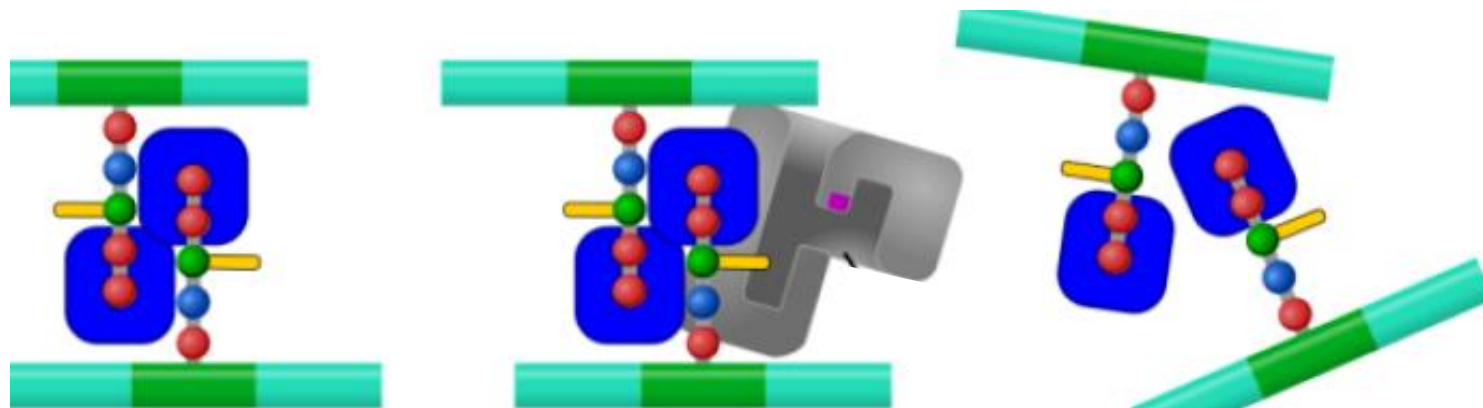


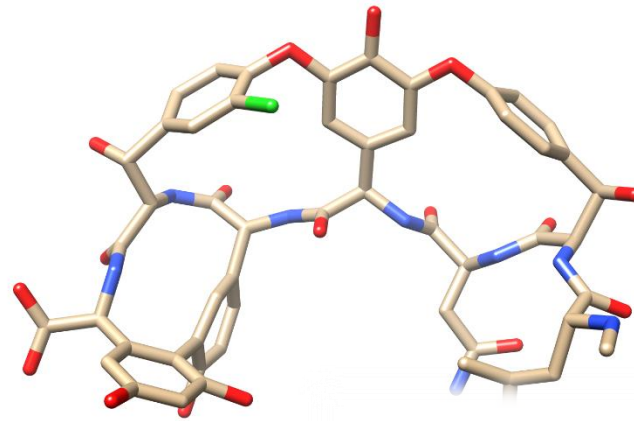
Vancomycin (aglycon)
antibiotikum



Vancomycin (aglycon)

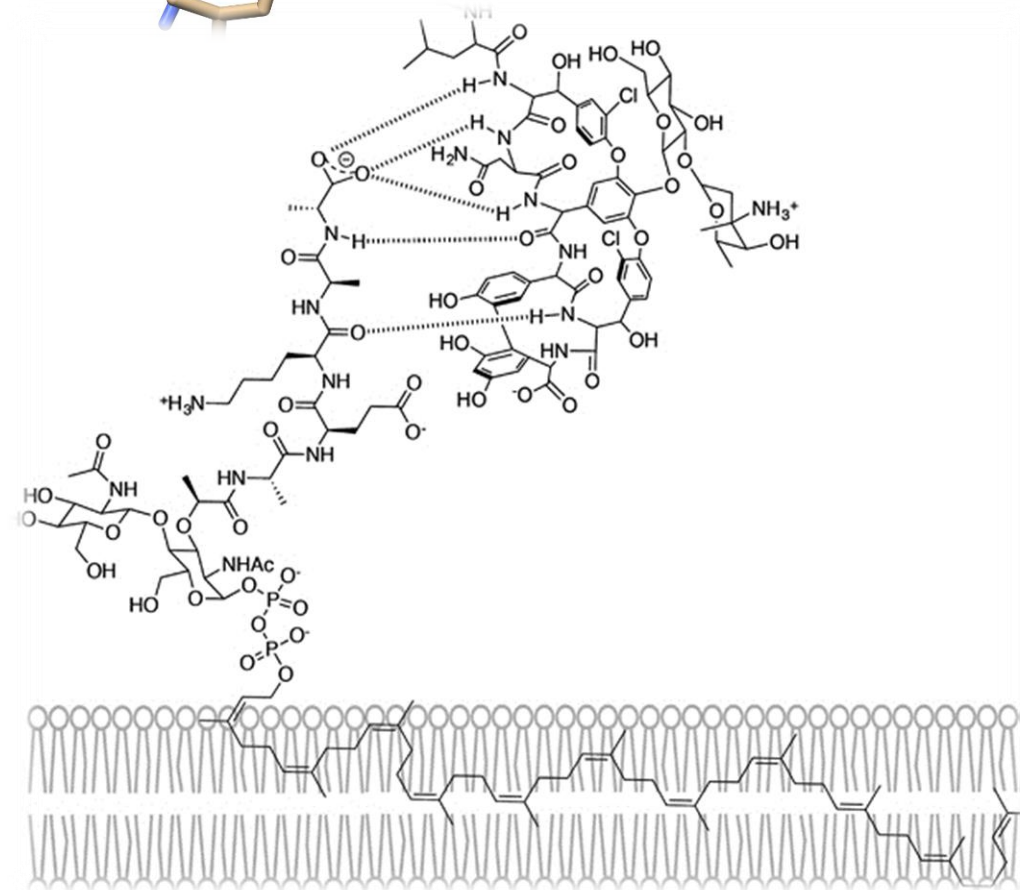
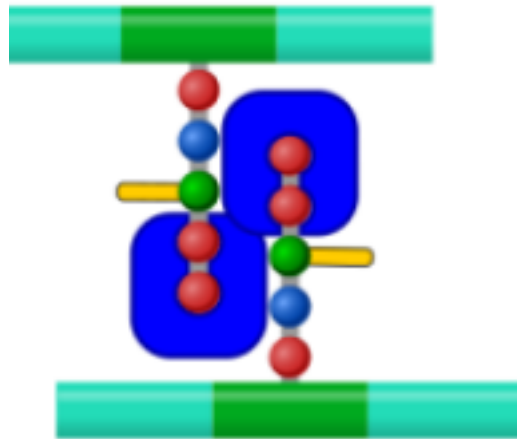
- Vancomycin blokuje přístup enzymu

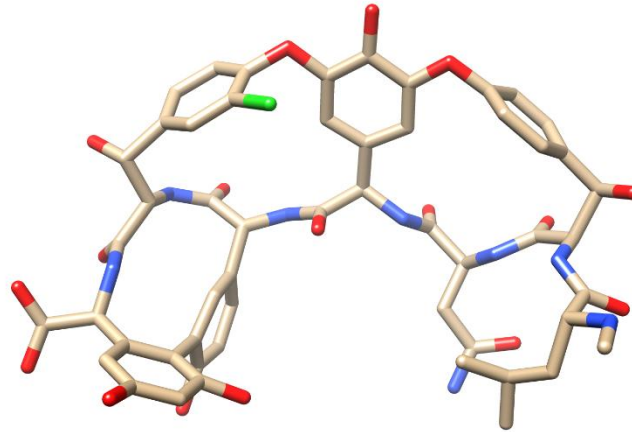




Vancomycin (aglycon)

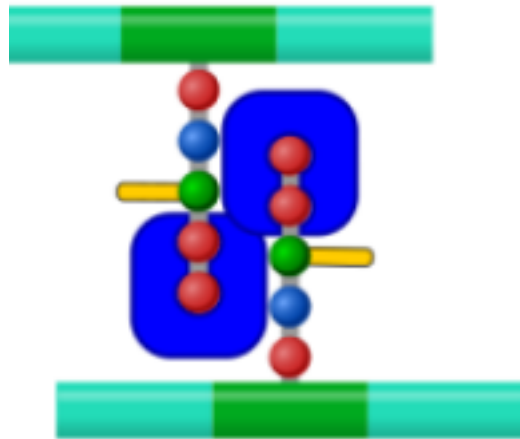
- Interakce vancomycin – peptid



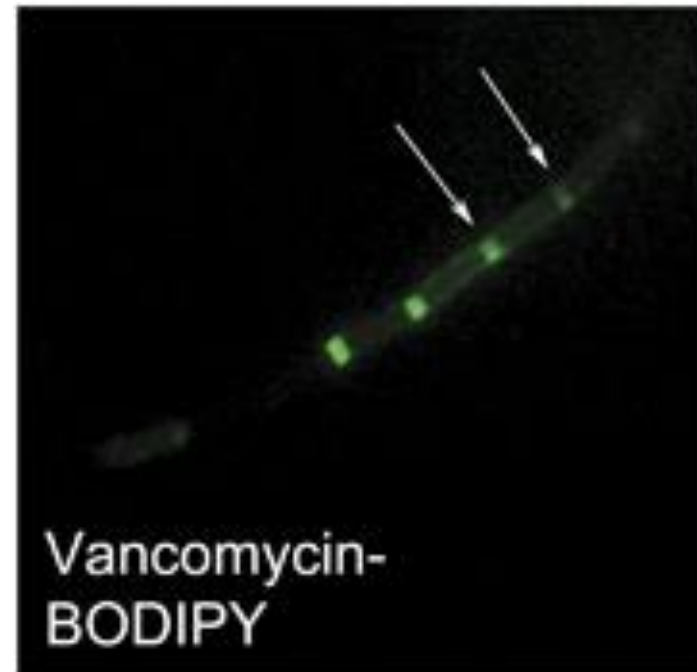


Vancomycin (aglycon)

- Interakce vancomycin – peptid



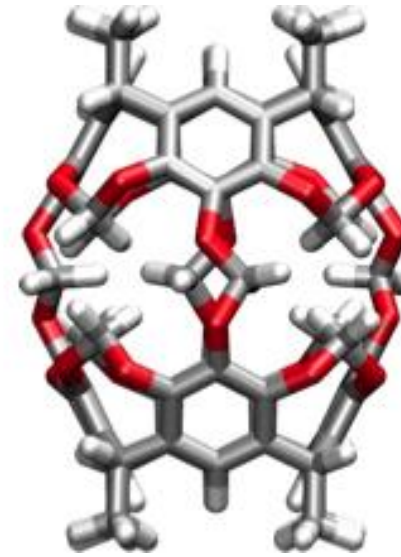
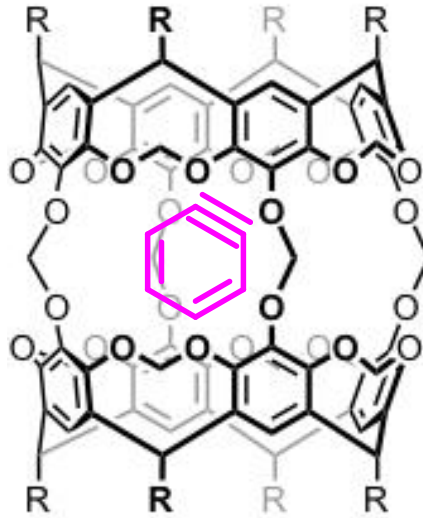
vancomycin v bakteriální membráně





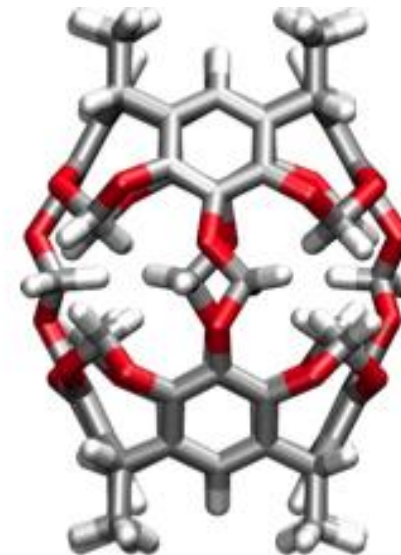
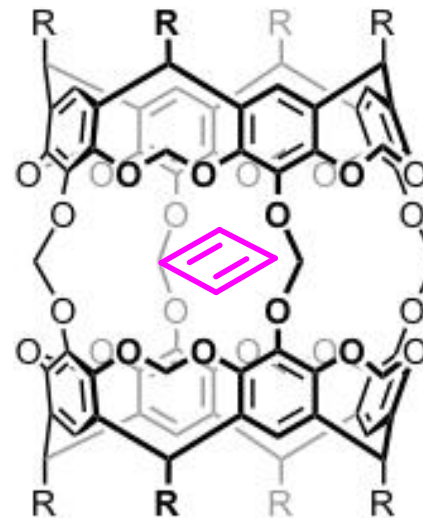
- Studium reaktivních molekul

benzyn



R. Wartmuth *Angew. Chem. Int. Ed. Engl.* 1997, 36, 1347.

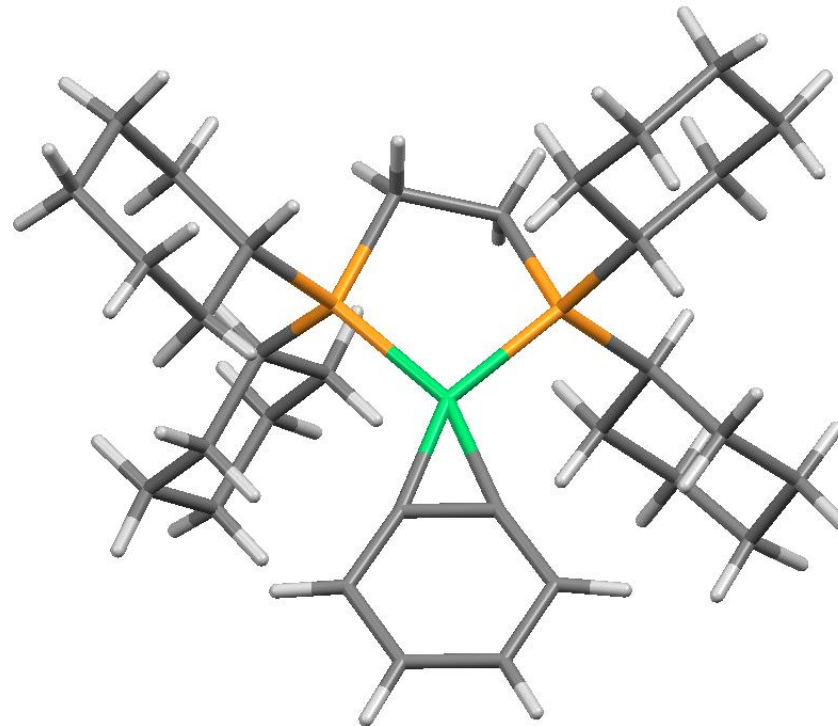
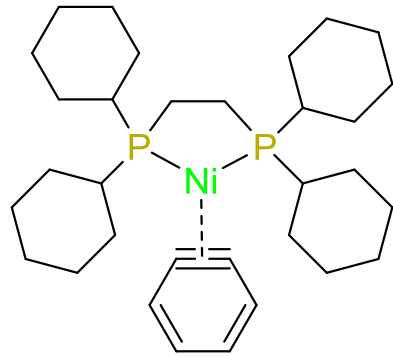
cyklobutadien
(4N => anti-aromaticita)



D. J. Cram et al. *Angew. Chem. Int. Ed. Engl.* 1991, 8, 1024.



- Krystalová struktura komplexu benzynu



Bennet, M. A. et al. *Organometallics*, 1985, 4, 1992

