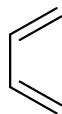
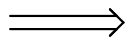
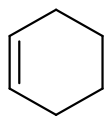




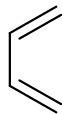
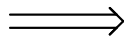
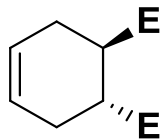
Retrosyntéza



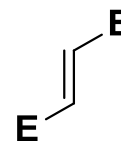
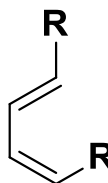
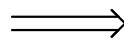
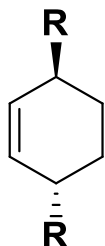
+



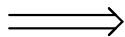
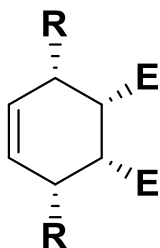
dien ... el. bohatý
dienofil ... el. deficitní

Stereochemie
dienofilu

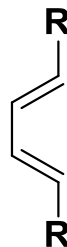
+

Stereochemie
dienu

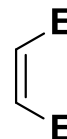
+

Stereochemie
dienofilu & dienu

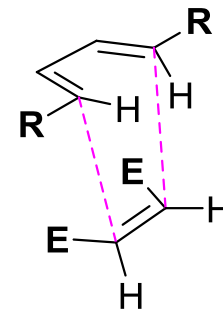
endo



+

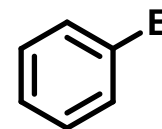
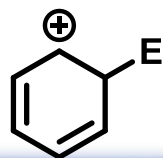


Endo preference



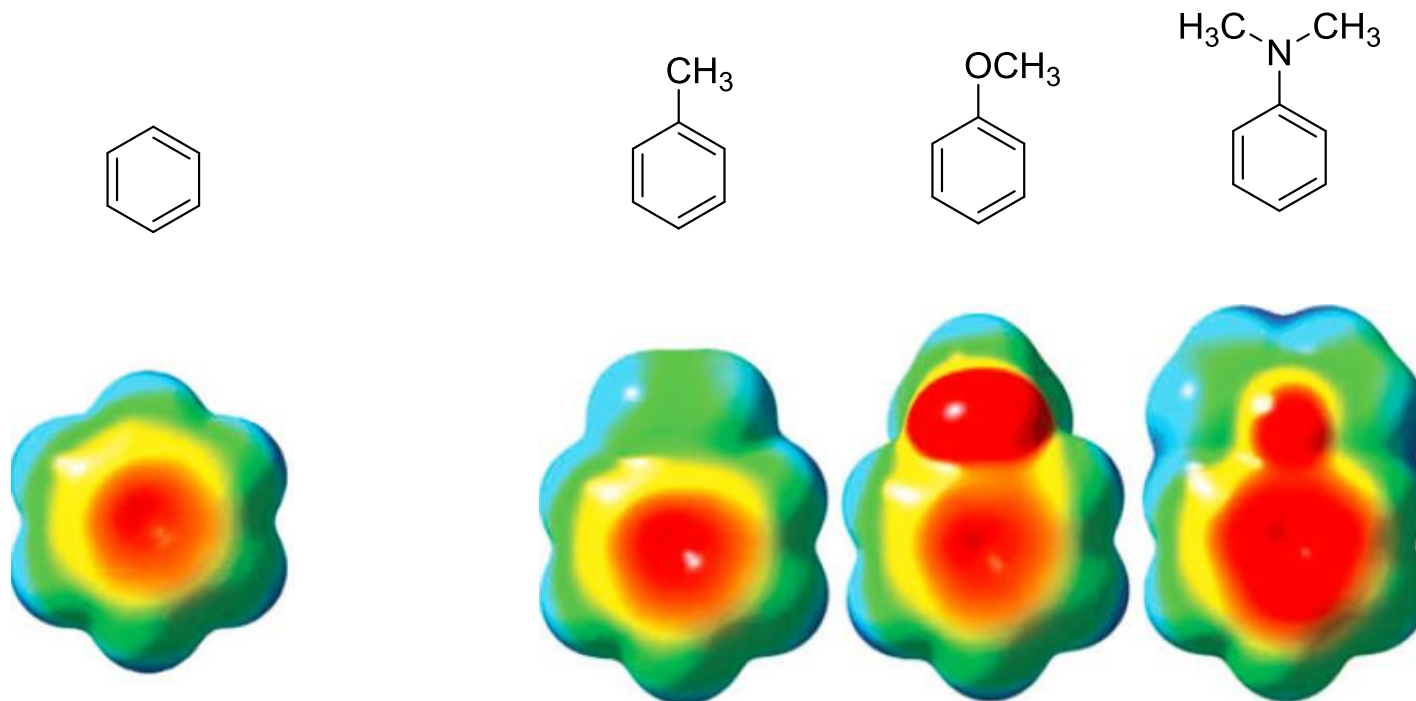


7. Areny



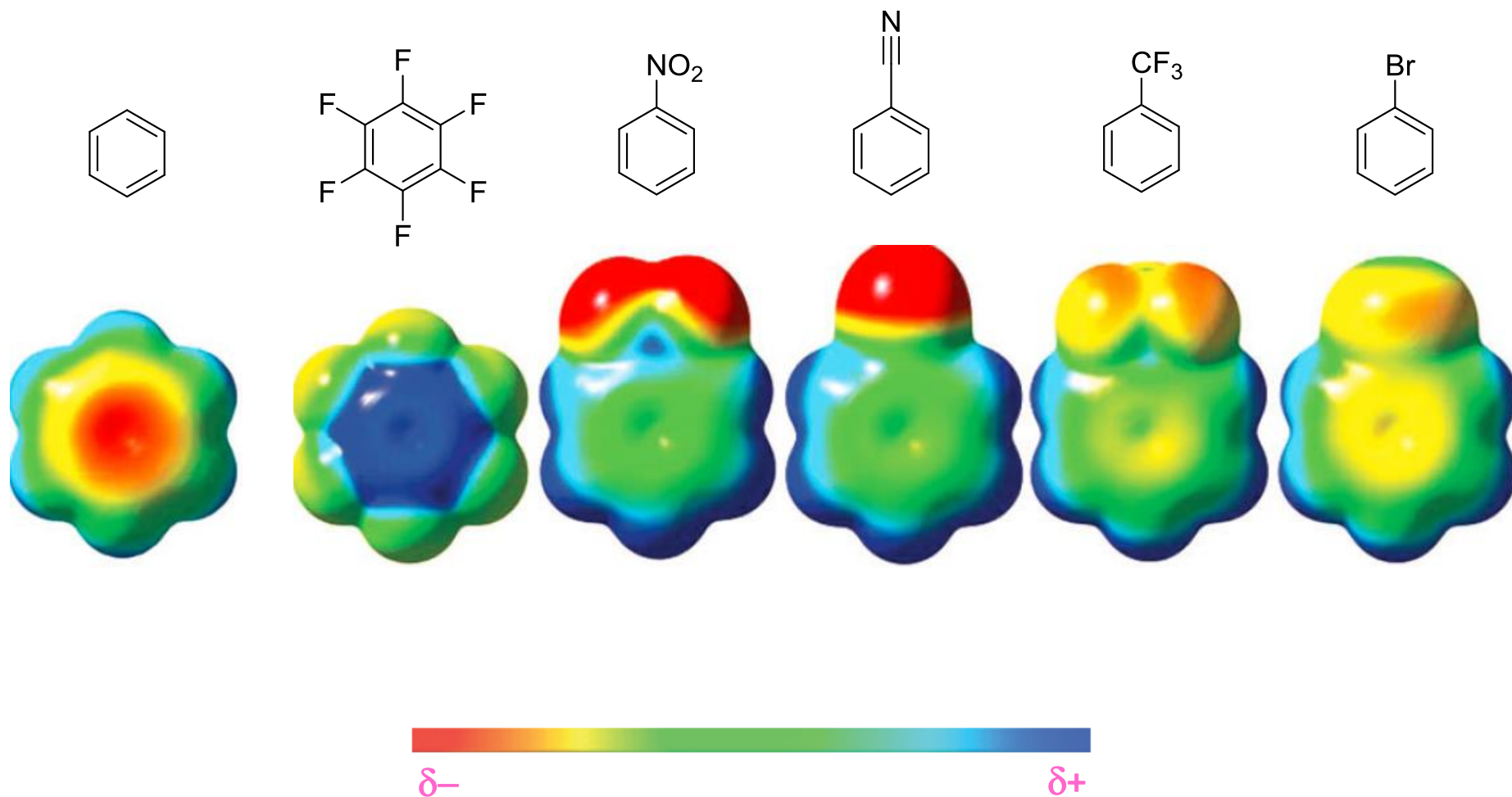


- Elektron-donorní substituenty zvyšují el. hustotu (nukleofilitu) benzenového jádra



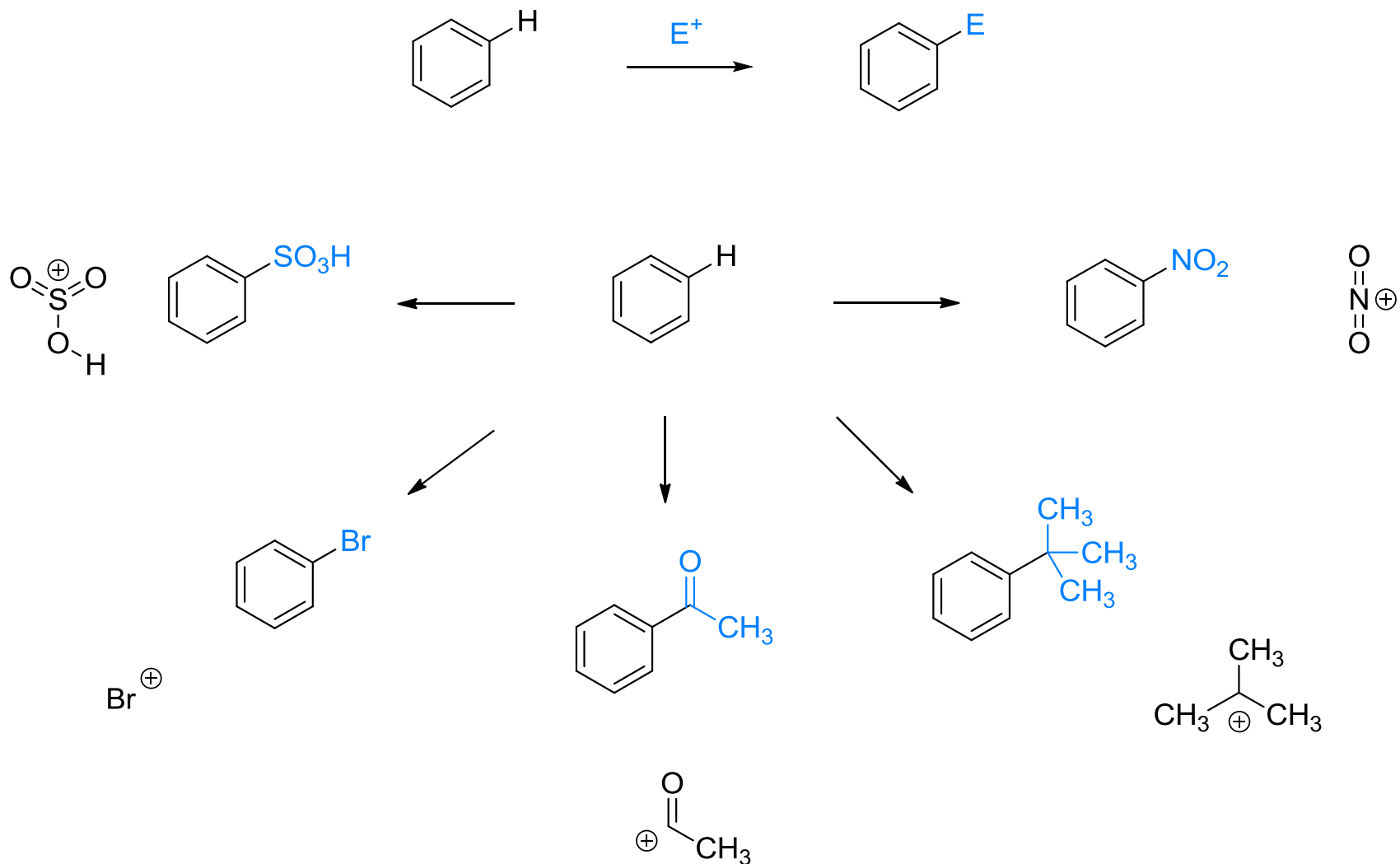


- Elektron-akceptorní substituenty snižují el. hustotu (nukleofilitu) benzenového jádra





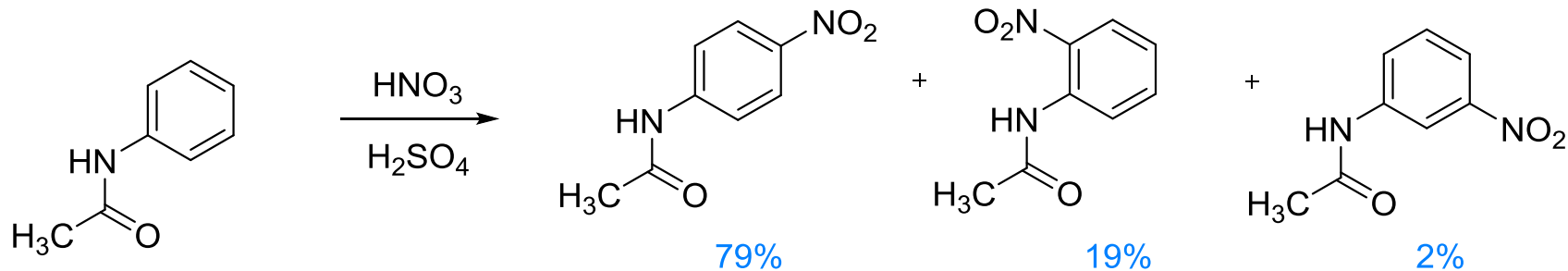
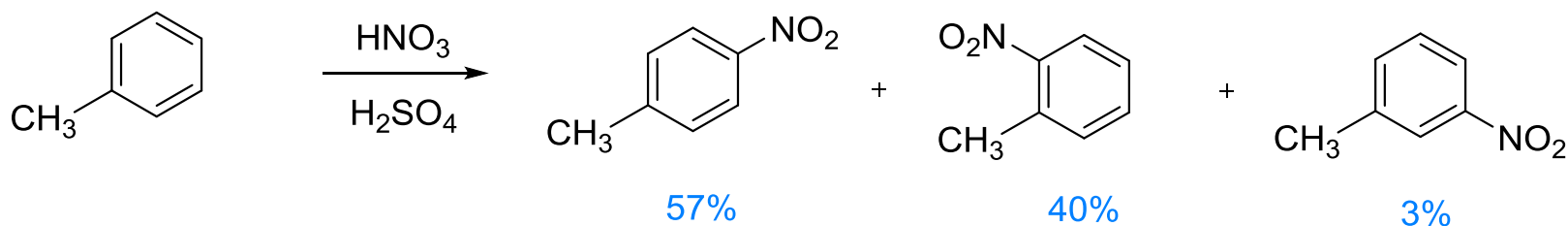
- Diversita elektrofilů



Q: Jak generovat tyto elektrofilý?

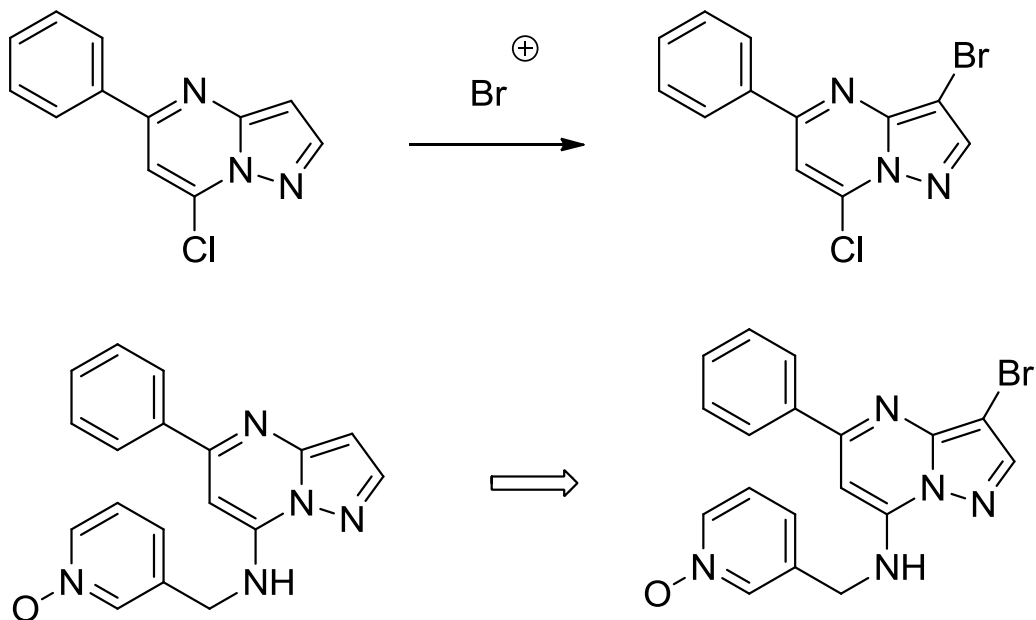


- Reálná distribuce produktů při elektrofilní aromatické substituci

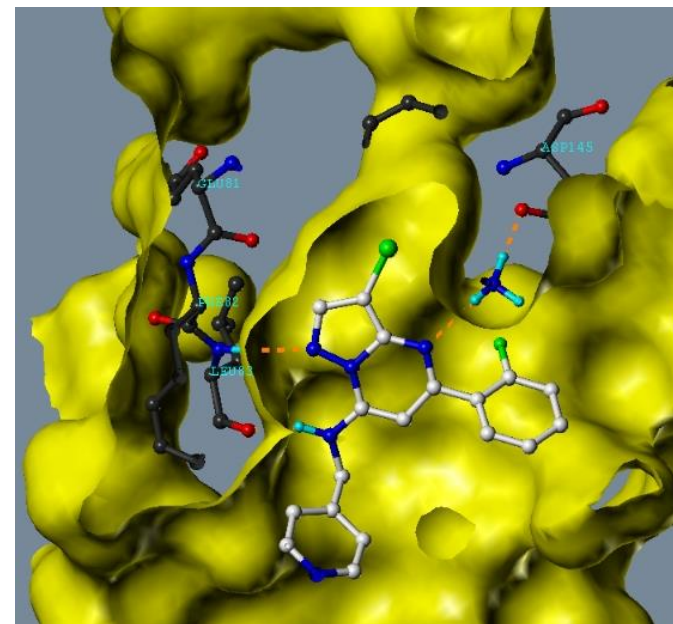
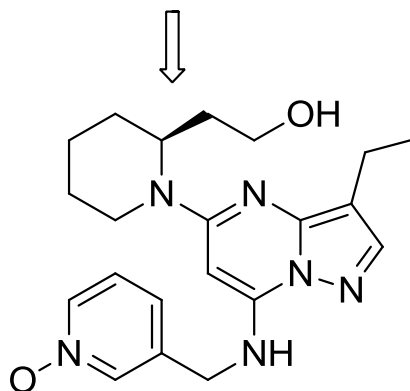




- Dramatický efekt hydrofobního substituentu na biologickou aktivitu



cca 100 x lepší inhibitor CDK2



dinaciclib

- inhibitor CDK
- protinádorové účinky
- fáze III klin. testů