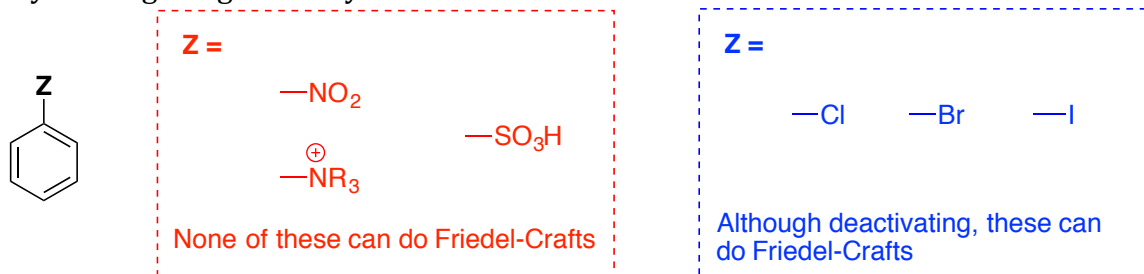


What does and doesn't work in Friedel-Crafts reactions?

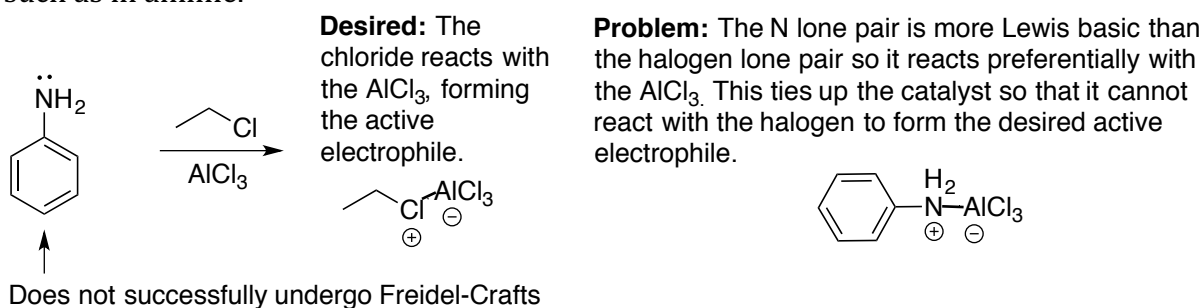
Friedel-Crafts is the most difficult aromatic substitution reaction to accomplish.

1. If your ring is significantly deactivated the Friedel-Crafts reaction will not work.

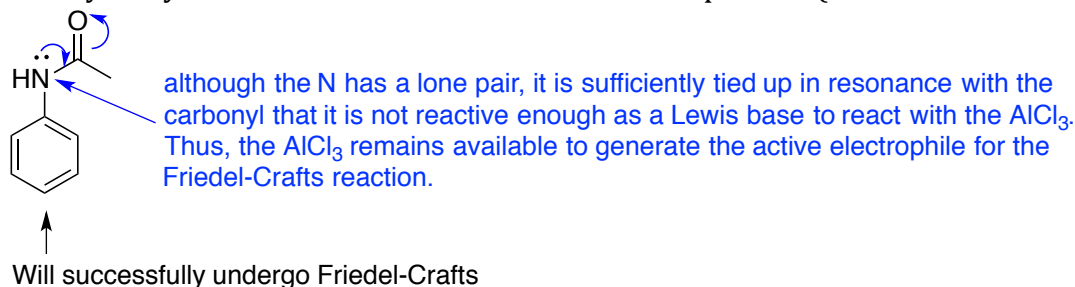


Basic Rule: most *meta*-directors cannot do Friedel-Crafts

2. Most activating groups work very well with Friedel-Crafts reactions. One exception is amines such as in aniline.



So why can you do Friedel-Crafts when an amide is present (the N still has a lone pair)?



3. Even if you do have a deactivating group, having a strong or moderate activating group on the ring will sufficiently overpower the deactivating effect, allowing a Friedel-Crafts reaction to take place.

