(21) **Today**

Chap 6 Acid-Base and Donor-Acceptor Chemistry

Next Class (22)

Chap 6 Acid-Base and Donor-Acceptor Chemistry

(23) **Second Class from Today**

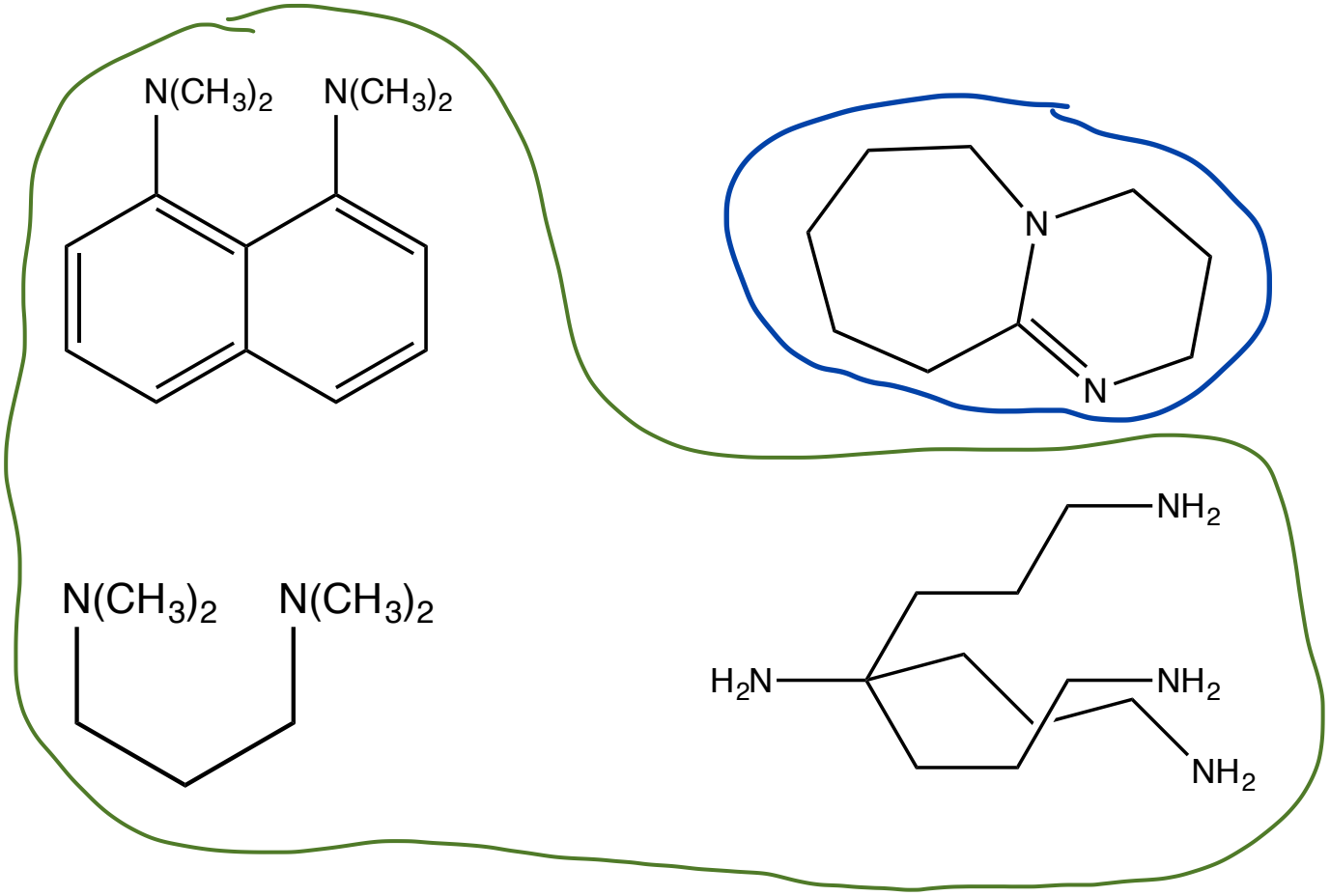
Chap 6 Acid-Base and Donor-Acceptor Chemistry

Chap 9.1 Introduction to Coordination Chemistry

Third Class from Today (24)

Chap 9.1 Introduction to Coordination Chemistry

$CH_3CH_2CH_2CH_2Li$

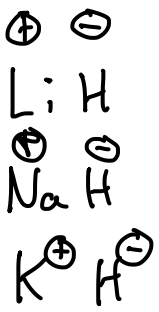


$CH_3CH_2CH_2CH_2Li$

used under an N_2 atmosphere

dissolved in hexane in a "Sureseal" TM bottle. sealed to keep out the atmosphere and when used an inert atmosphere must be maintained.

moisture in the atmosphere



a non eneg atom bears a neg charge

$LiNH_2$

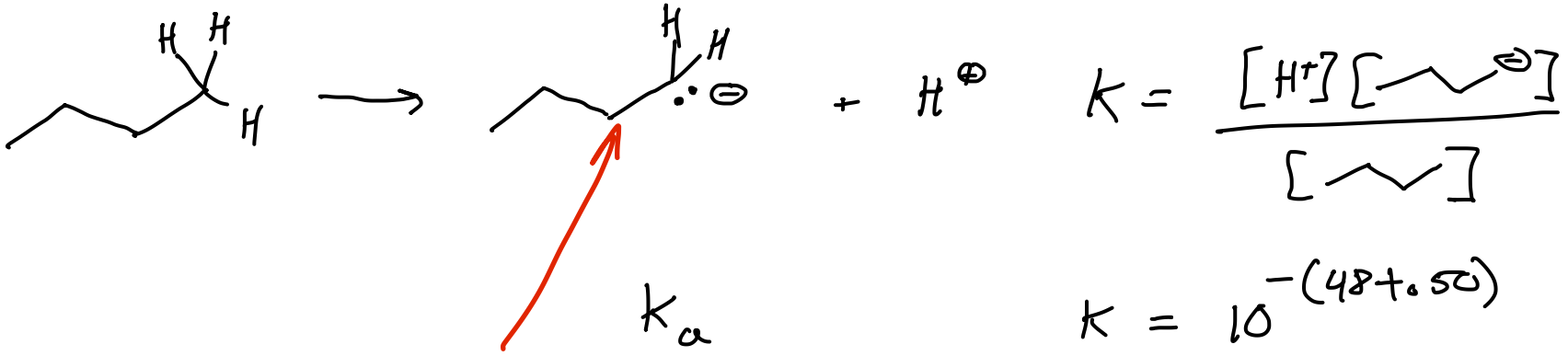
advantage 1. pk_a ~ 48-50 ... H^+ not coming off

2. It leaves ... gas bubbles off

disadvantage 1. super base ... super reactive

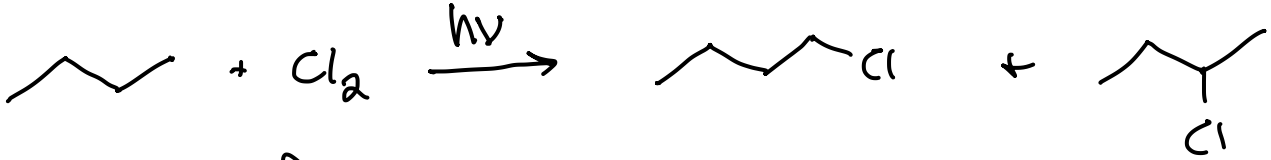
2. super flamable inert atmosphere required!

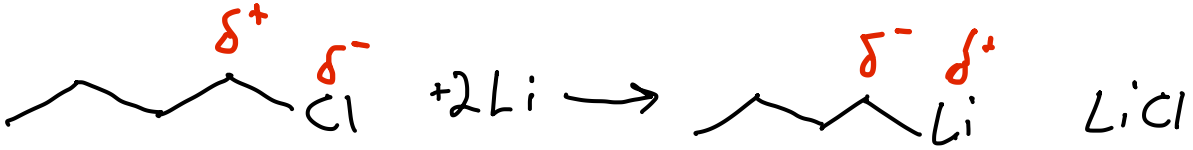
3. can act as a nucleophile

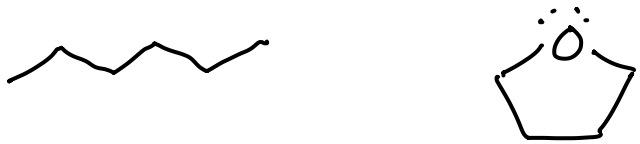


a base stronger than a $C^{\ominus}$ would be needed...

radical substitution

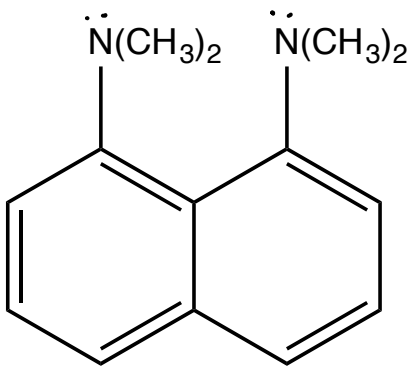


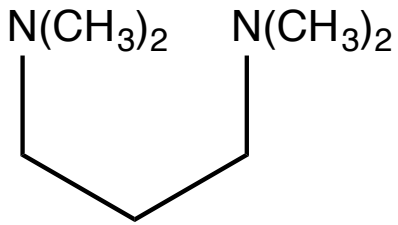


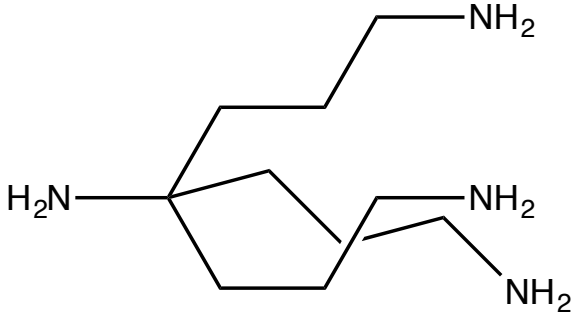


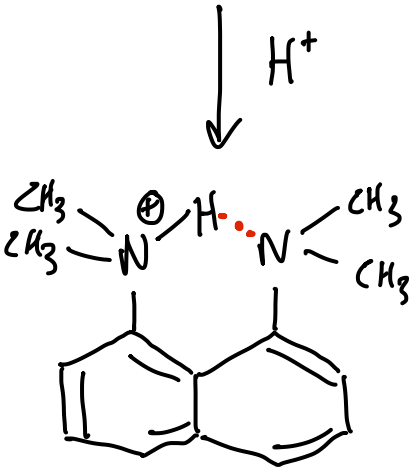
advantage

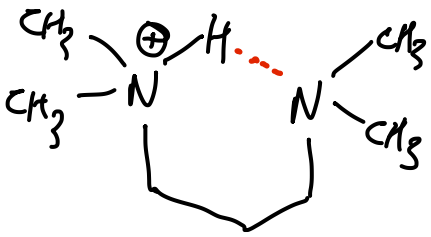
1. not creating explosive gases
2. easier to work with
3. not nucleophilic... will not for C to N bonds

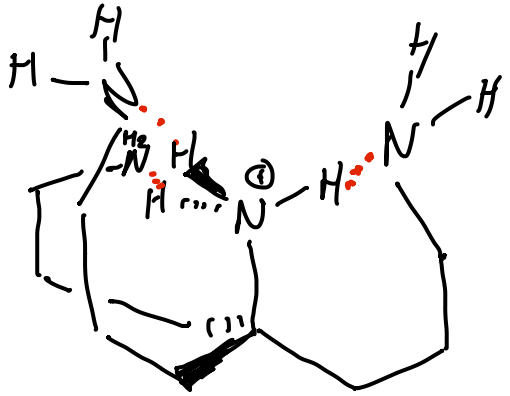




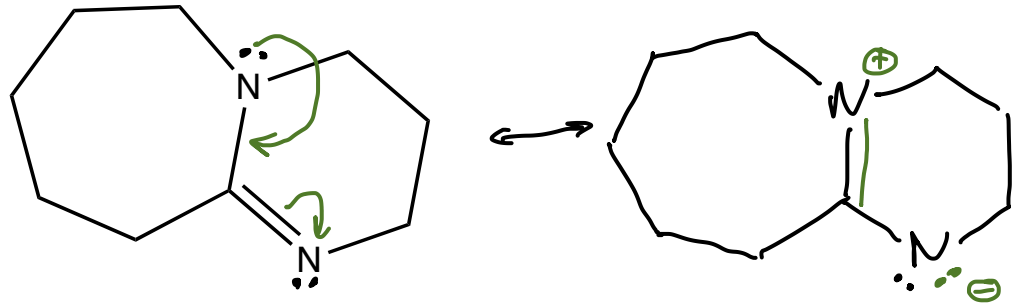


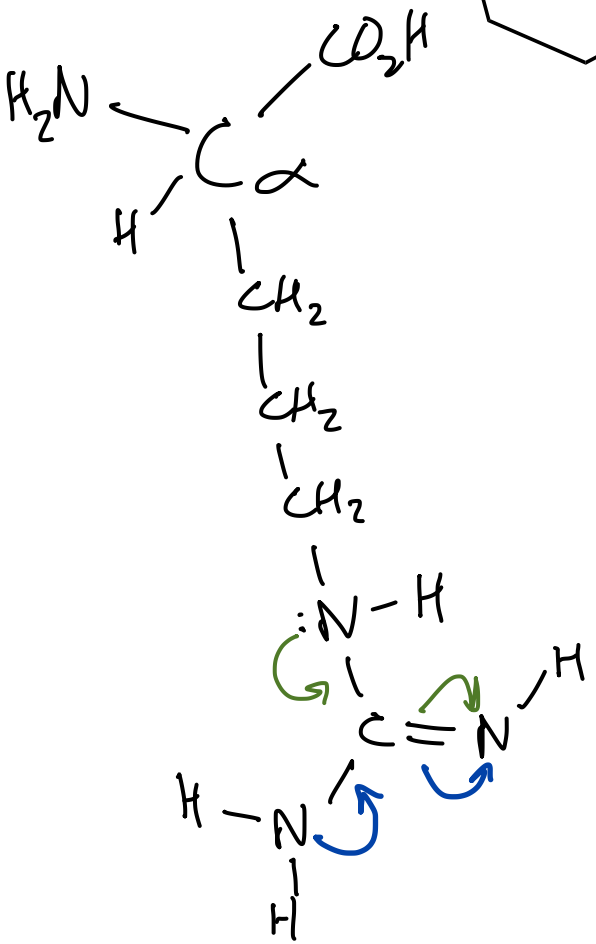






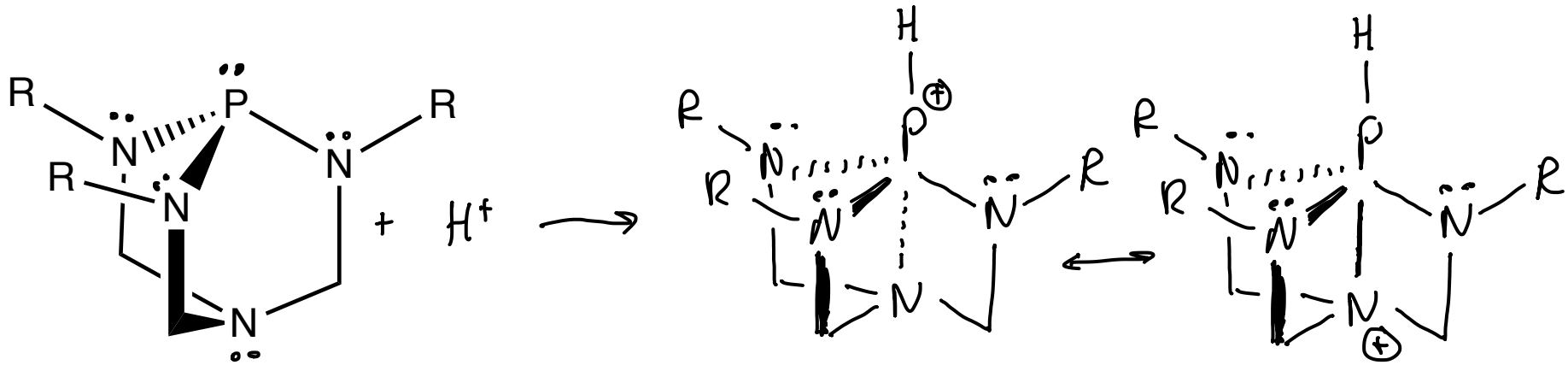
cooperative binding of H^+ by 2 or more N atoms





arginine

super base because N's e⁻'s are delocalized into π bond and make the bottom N more e⁻ rich.



R = organic variable

e^- density on N atoms helps to stabilize the ⊕ on P by inductively donating e^- density and by having the P atom accept e^- density from the N at the bottom