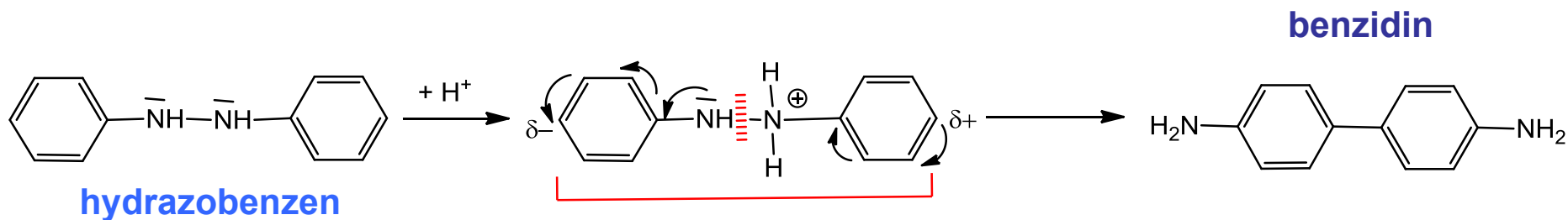
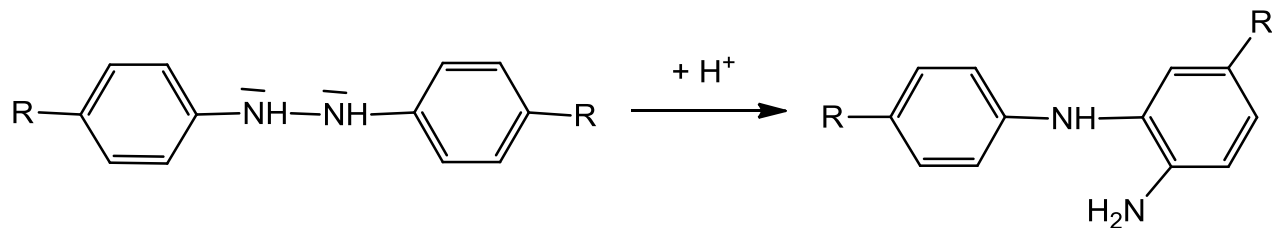


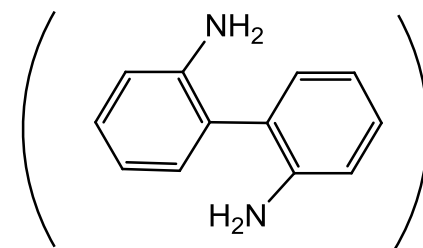
Benzidinový přesmyk



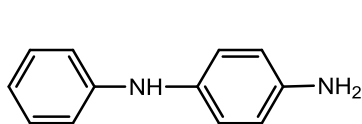
intramolekulární kysele katalyzovaný přesmyk



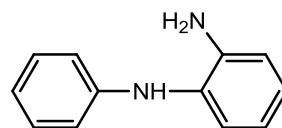
semidiny



o-benzidin

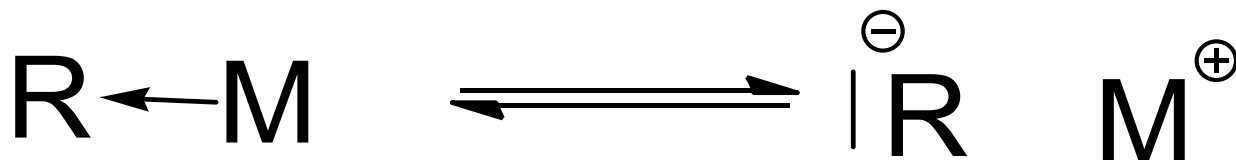


p - semidin



o - semidin

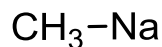
Organokovové sloučeniny



Názvosloví:

míra polarizace závisí na charakteru kovu

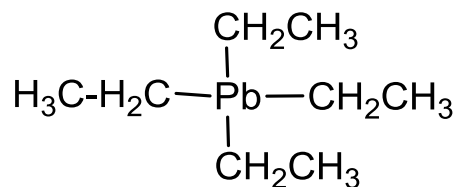
methylnatrium



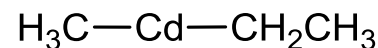
butyllithium



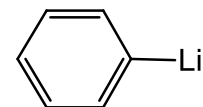
methylmagnesiumbromid



tetraethylplumbium



ethylmethylcadmium



fenyllithium

název sestává z názvu organického zbytku + latinský název kovu s koncovkou - ium

Pozn. u některých kovů lze i koncovku českou:

(Sn) stannan, (Pb) plumban, (Ge) german,

Organokovové sloučeniny

reaktivita organokovu závisí na charakteru kovu – jeho poloze v periodickém systému

Reaktivita:

1. Bazicita – extrémní bazicita
2. Nukleofilita

Teorie kyselin a bází:

Arhenius, Bronstead, HSAB

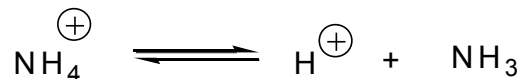
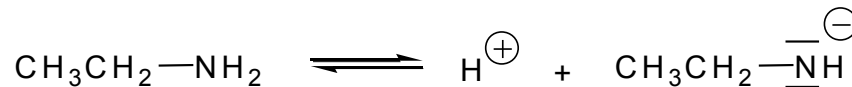
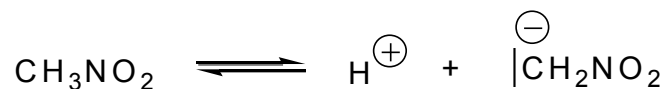
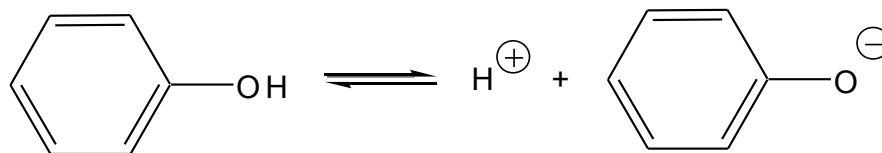
Aby se projevila kyselost látky, je třeba přítomnost nějaké báze

tzn. je třeba interakcí dvou partnerů

většinou se posuzují reakce ve vodě – tzv.

protolytické reakce

Řada reakcí probíhá i v nevodném prostředí (v nevodných rozpouštědlech) a také tam jeden partner hraje kyselinu a druhý bázi

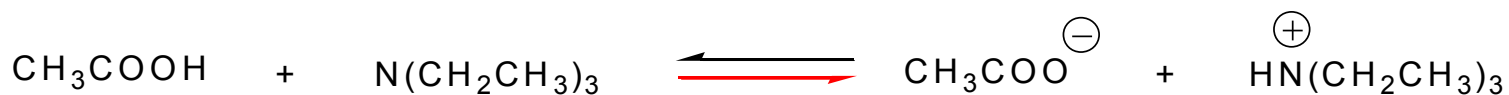


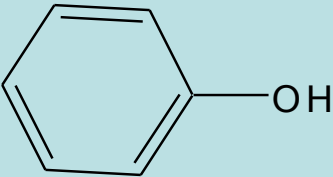
Organokovové sloučeniny

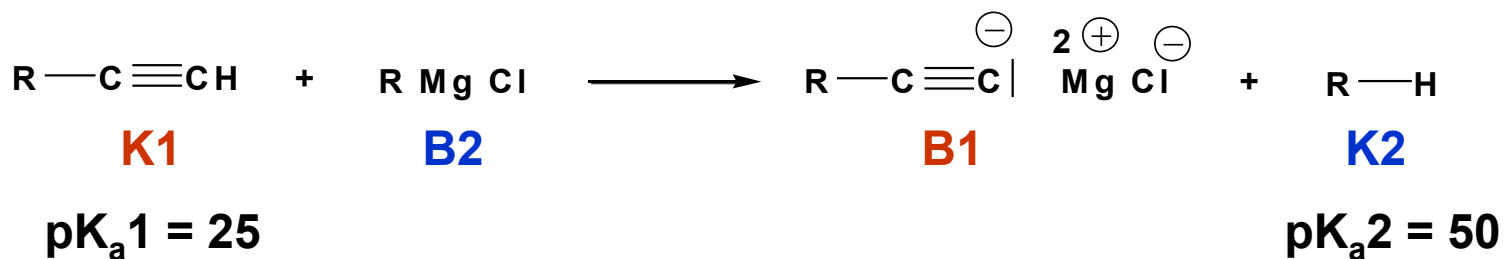
Reaktivita:

1. Bazicita – extrémní bazicita
2. Nukleofilita

RELATIVITA POJMU KYSELINA versus BÁZE



	$\text{R}-\text{C}\equiv\text{CH}$	CH_3OH	H_2O	
pK_a	25	16	15,7	10



Organokovové sloučeniny

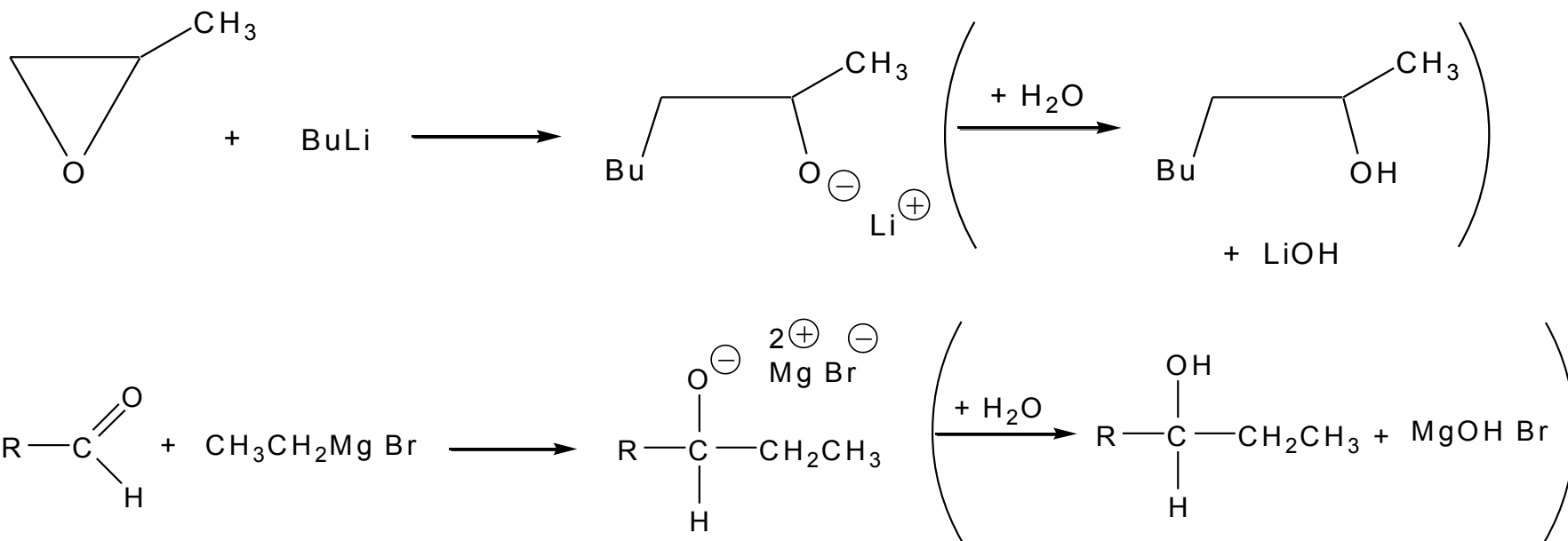
reaktivita organokovu závisí na charakteru kovu – jeho poloze v periodickém systému

Reaktivita:

1. Bazicita – extrémní bazicita
2. Nukleofilita

silný nukleofil

kde není kyselý vodík reaguje organokov jako nukleofil



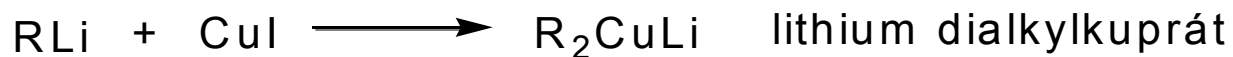
Organokovové sloučeniny

reaktivita organokovu závisí na charakteru kovu – jeho poloze v periodickém systému

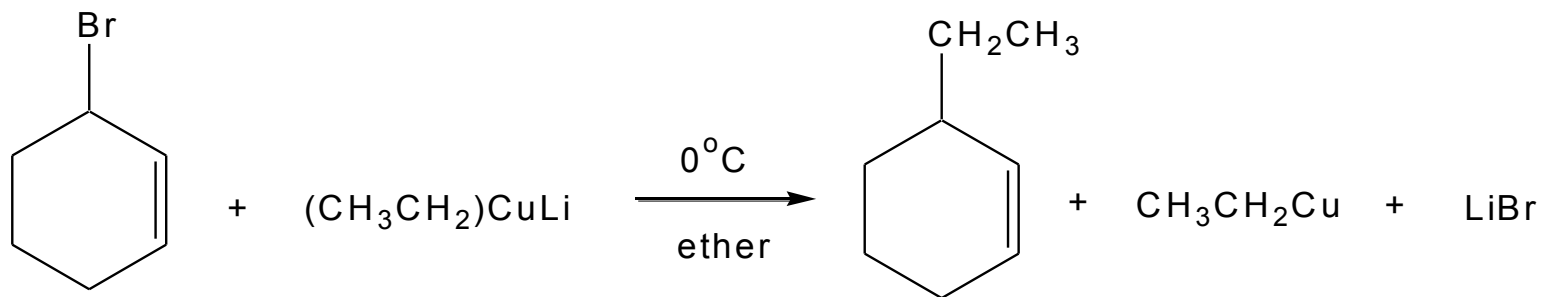
Reaktivita:

1. Bazicita – extrémní bazicita
2. Nukleofilita

snížení nukleofility – převedení
na kupráty



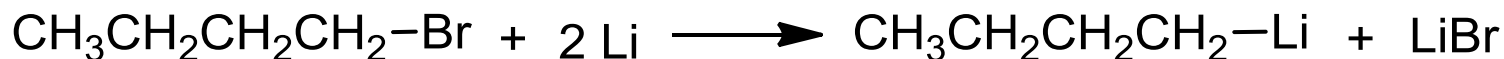
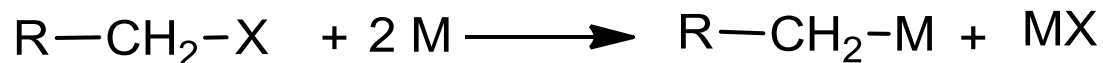
**Gilmanův
reagent**



Organokovové sloučeniny

Metody přípravy:

1. Reakcí alkyhalogenidů s kovy

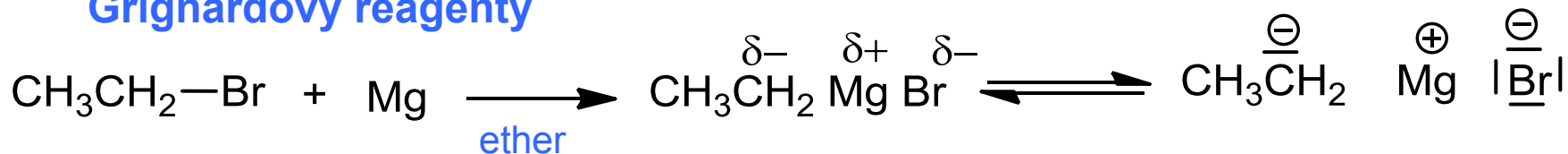


někdy i kombinované s halogeny

Reformatsky

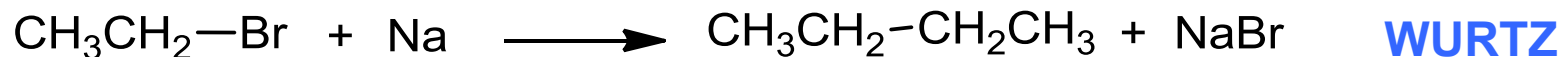


Grignardovy reagenty

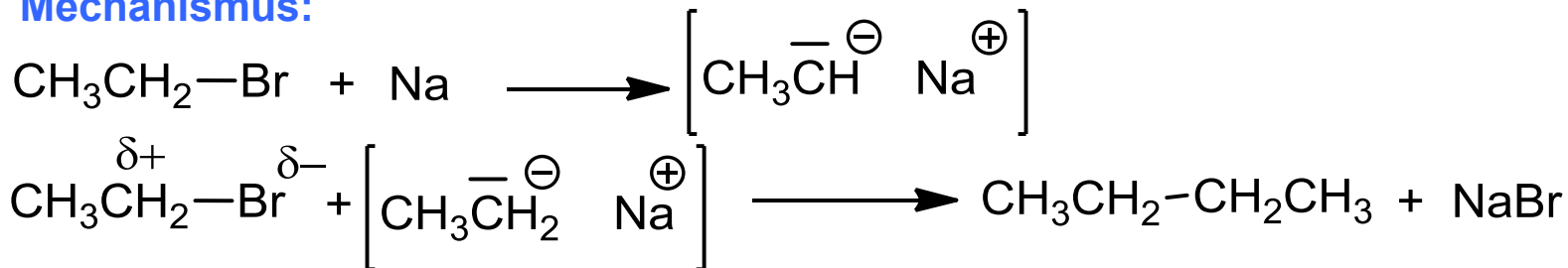


Organokovové sloučeniny

metodu nelze použít pro organokovy s Na a K



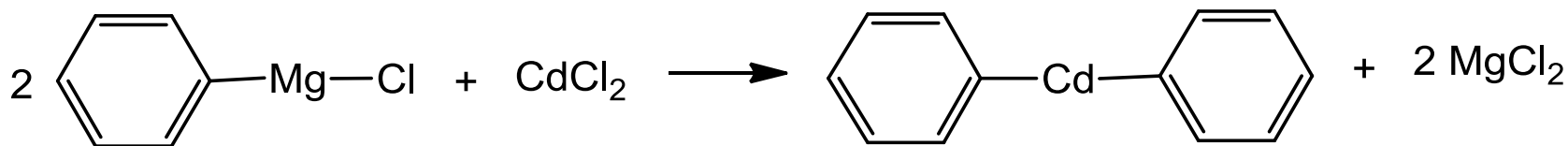
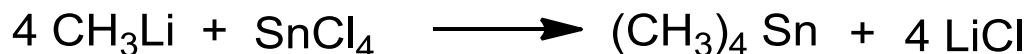
Mechanismus:



2. výměnná reakce mezi organokovovými činidly a solemi kovů

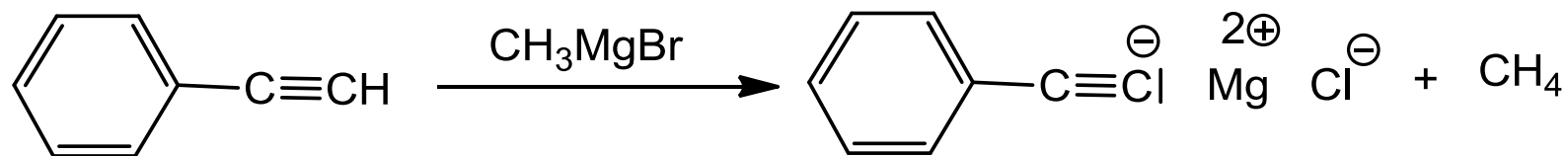
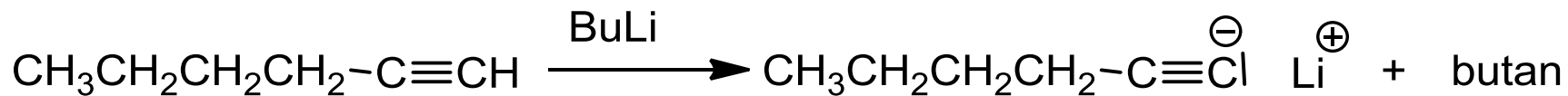


M je kov elektropozitivnější než kov M¹, X je halogen



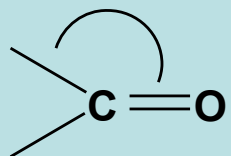
Organokovové sloučeniny

3. s využitím kyselých vodíků v molekule



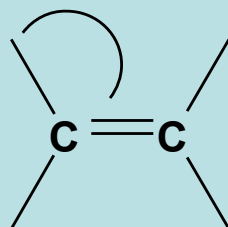
Karbonylové sloučeniny

více než 120°

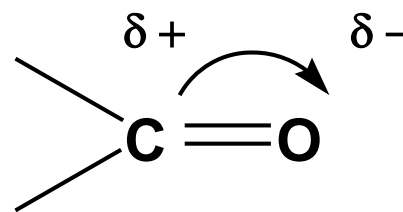


Csp^2

120°

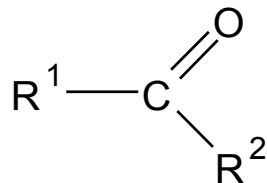
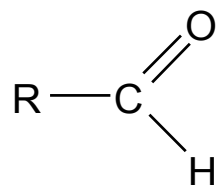


Csp^2

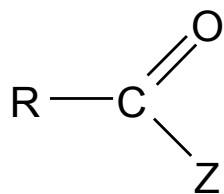
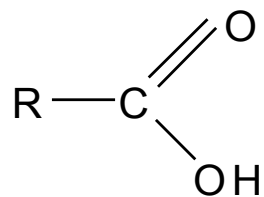


Nu

E

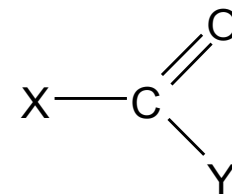
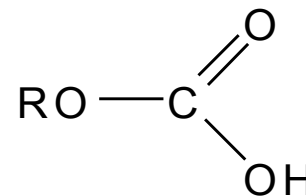
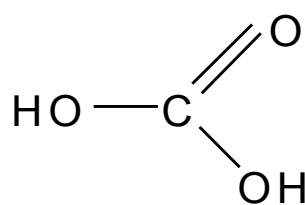


1. aldehydy, ketony

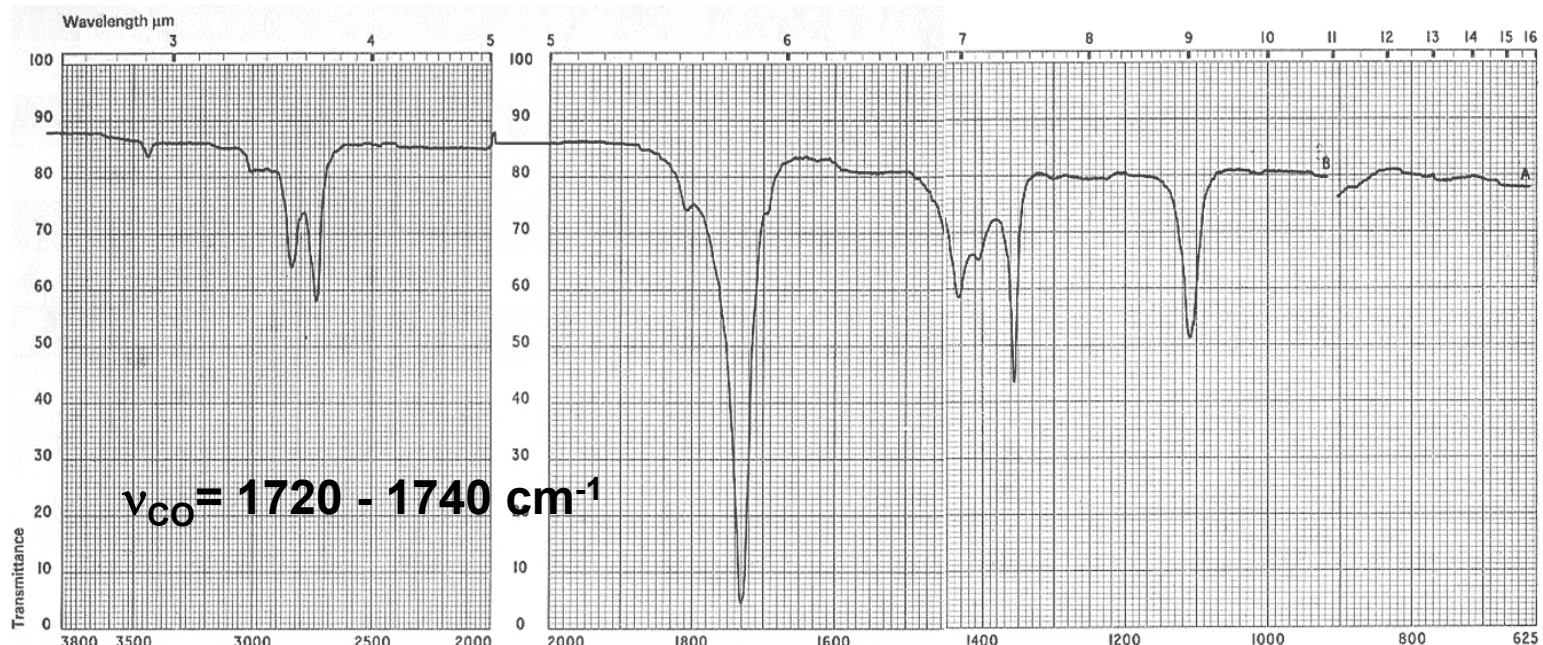


2. karboxylové kyseliny a funkční deriváty

3. deriváty kys. uhličitě

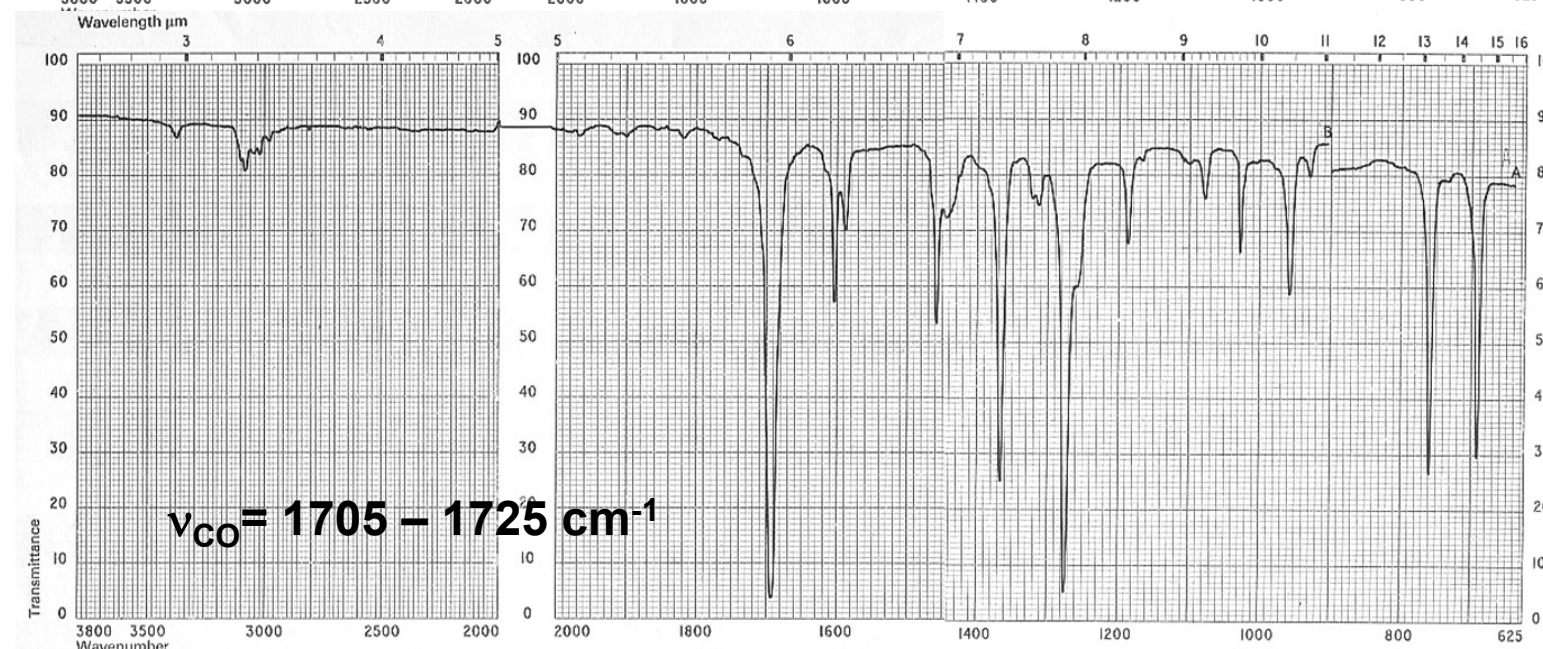


Karboňové sloučeniny




17

Sample	ACETALDEHYDE A. 2% CS ₂ SOLUTION B. 2% CCL ₄ SOLUTION
Formula	CH ₃ CHO
Phase	LIQUID
Thickness	A. 0.12 m.m. B. 0.15 m.m.
Reference	A. CS ₂ , B. CCL ₄
Operator	
Date	



24

Sample	ACETOPHENONE A. 2% CS ₂ SOLUTION B. 2% CCL ₄ SOLUTION
Formula	COCH ₃ 
Phase	LIQUID
Thickness	A. 0.12 m.m. B. 0.15 m.m.
Reference	A. CS ₂ , B. CCL ₄
Operator	
Date	

Karbonylové sloučeniny

NÁZVOSLOVÍ