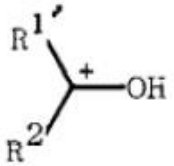
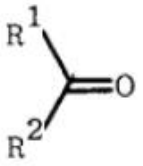
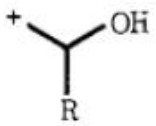
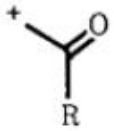
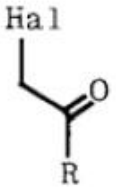
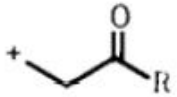
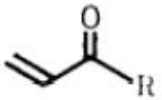
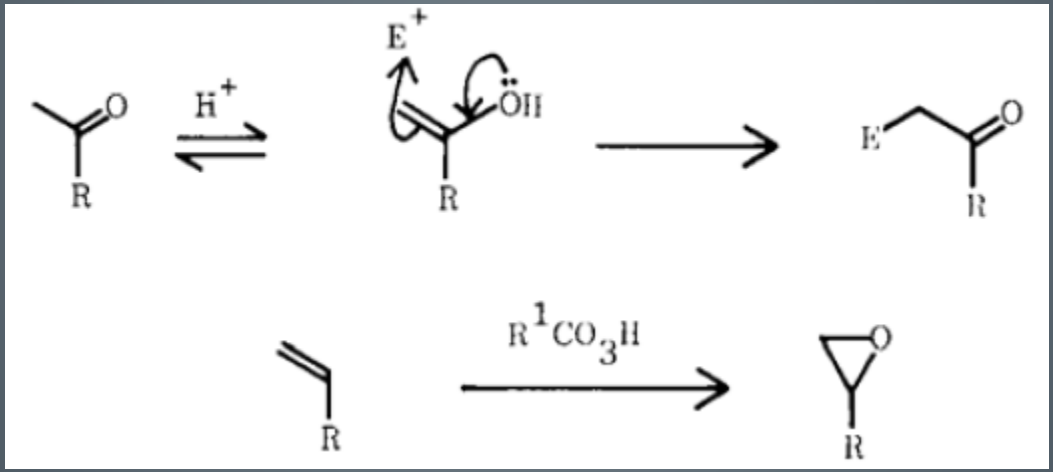
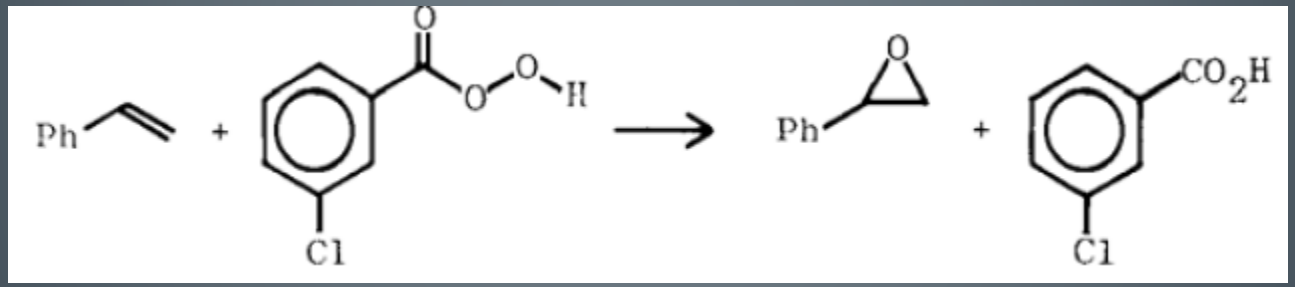
Reversal of polarity

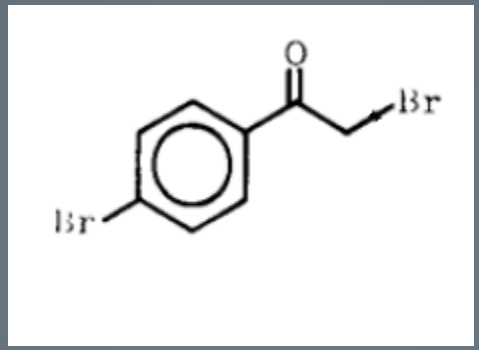
Synthons for 1,n-diX

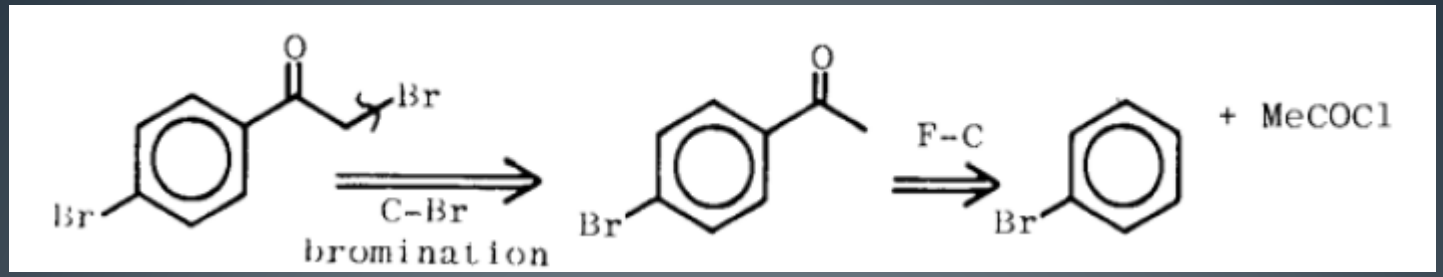
2-Group relationship	Synthon	Reagent
1,1	 (1)	
1,2	 (2)	
	 (3)	
1,3	 (4)	

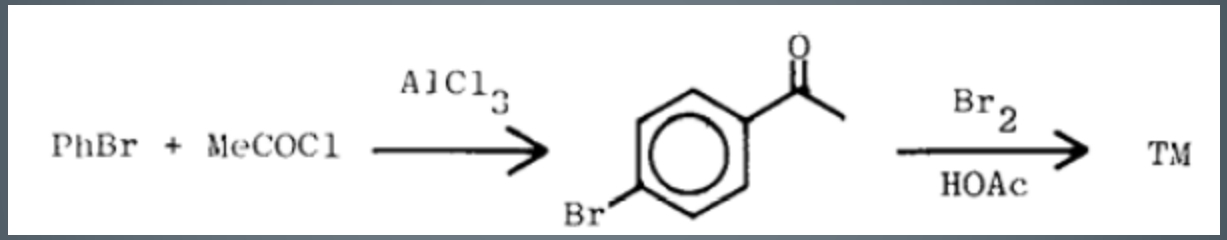

O
R
H+
E+
OH
R
E
O
R
R
R1CO3H
O
R


Ph
+
O
O
O
H
Cl
Ph
O
+
CO2H
Cl

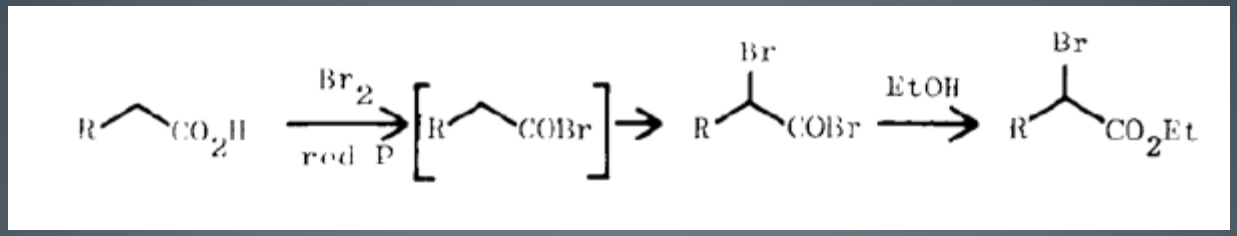
Halogenation of ketones

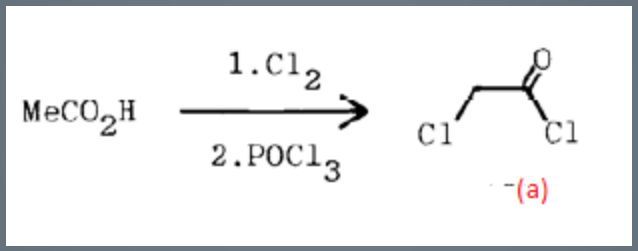

O
Br
Br


O
Br
Br
C-Br
bromination
O
Br
F-C
Br
+ MeCOCl

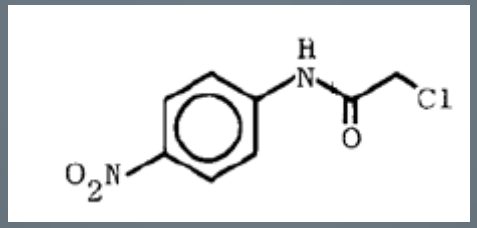

PhBr + MeCOCl
AlCl3
O
Br
Br2
HOAc
TM

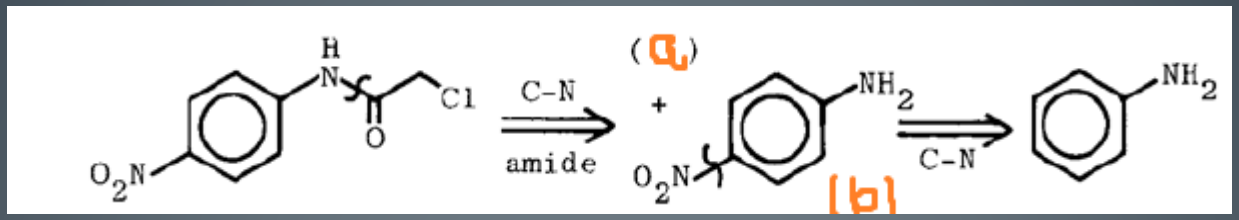
Halogenation of acids

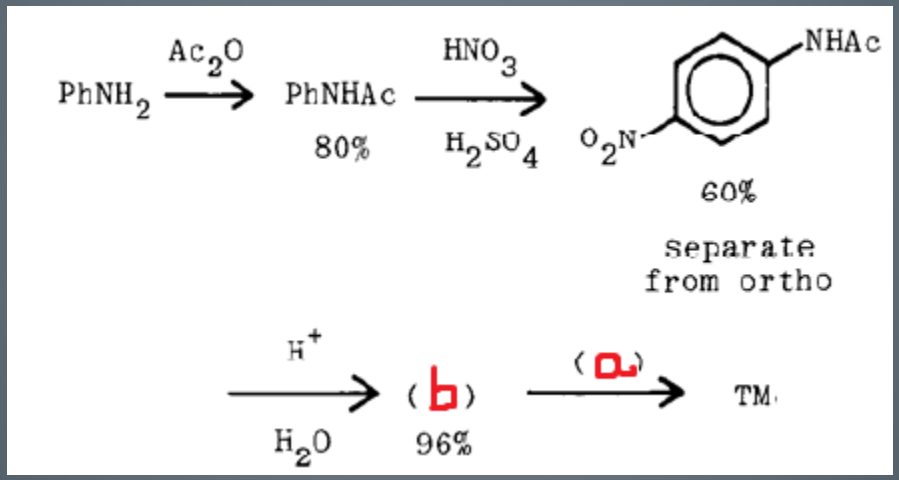

R
CO2H
Br2
red P
R
COBr
Br
R
COBr
EtOH
Br
R
CO2Et


MeCO2H
1.Cl2
2.POCl3
O
Cl
Cl

(a)


H
N
O
Cl
O2N


H
N
Cl
O
O_2N
C-N
amide
(a)
+
O_2N
NH_2
(b)
C-N
NH_2


Ac_2O
$PhNH_2$
PhNHAc
80%
HNO_3
H_2SO_4
O_2N
NHAc
60%
separate
from ortho
H^+
H_2O
(b)
96%
(a)
TM