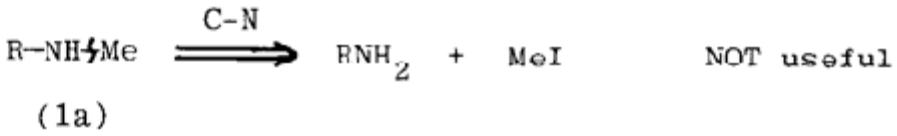
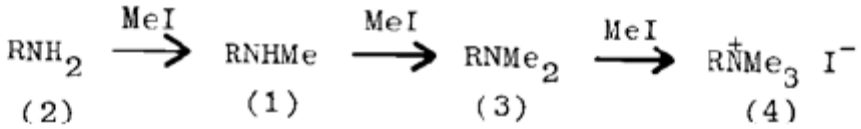
AMINE SYNTHESIS

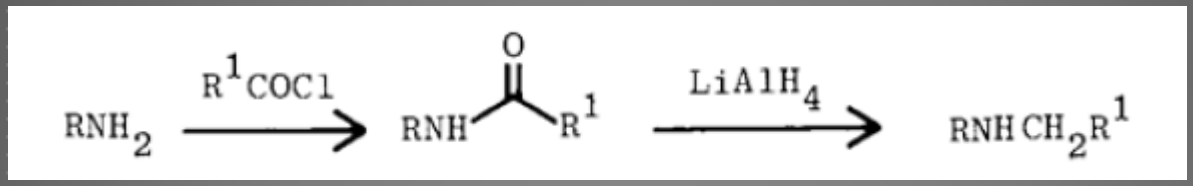
Analysis

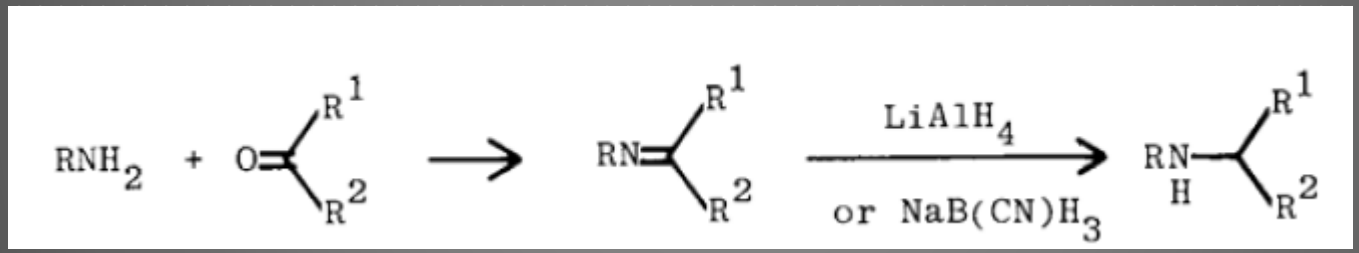


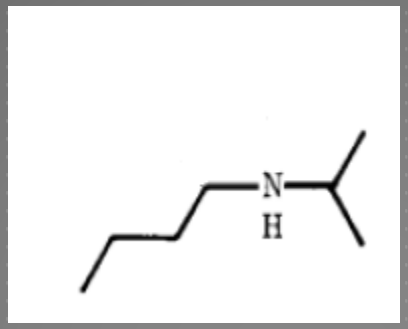
Synthesis

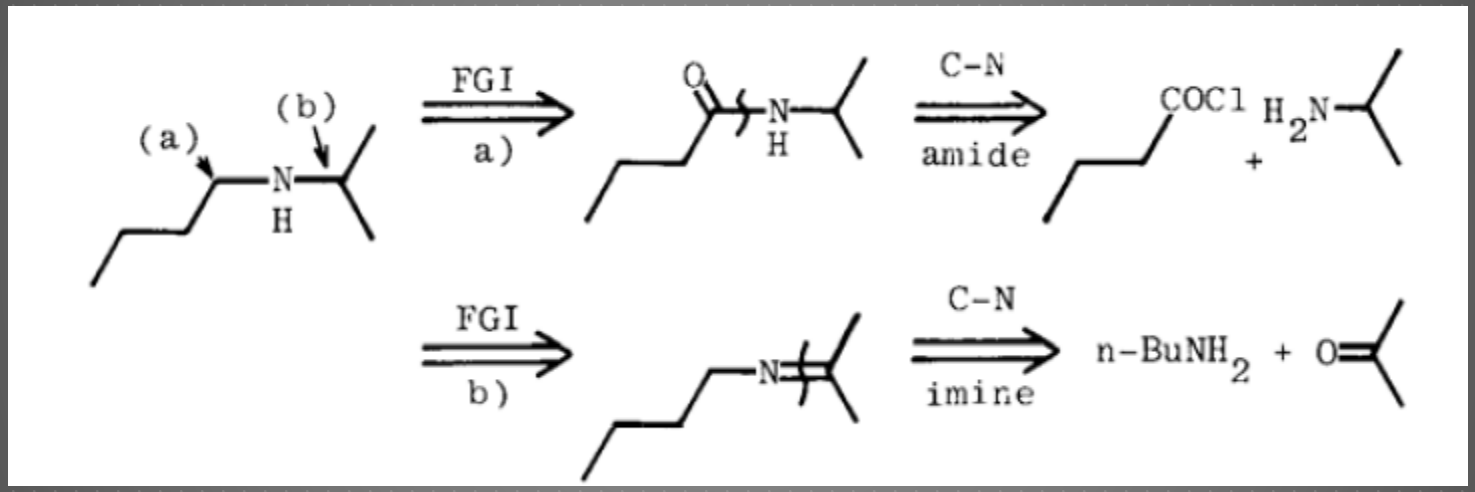


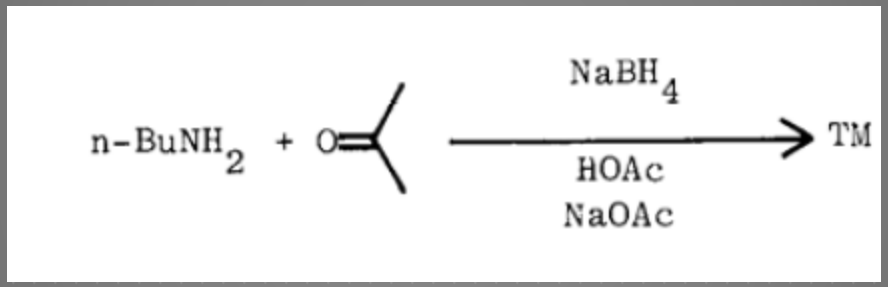
-AVOID ALKYL HALIDES
-USE ELECTROPHILES WHICH GIVE RELATIVE UNREACTIVE PRODUCTS WITH AMINES

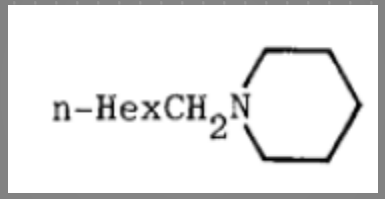




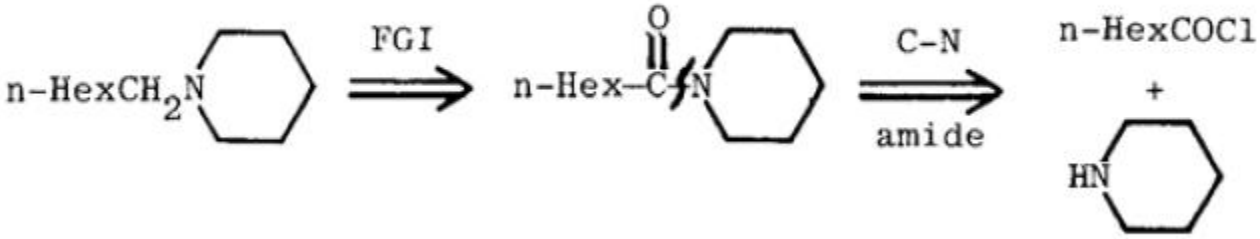

N
H


(a)
(b)
N
H
FGI
a)
O
N
H
C-N
amide
COCl
H_2N
+
FGI
b)
N
C-N
imine
n-$BuNH_2$ + O

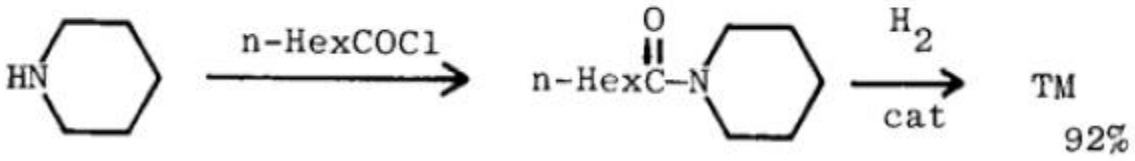

n-BuNH2
+
NaBH4
HOAc
NaOAc
TM

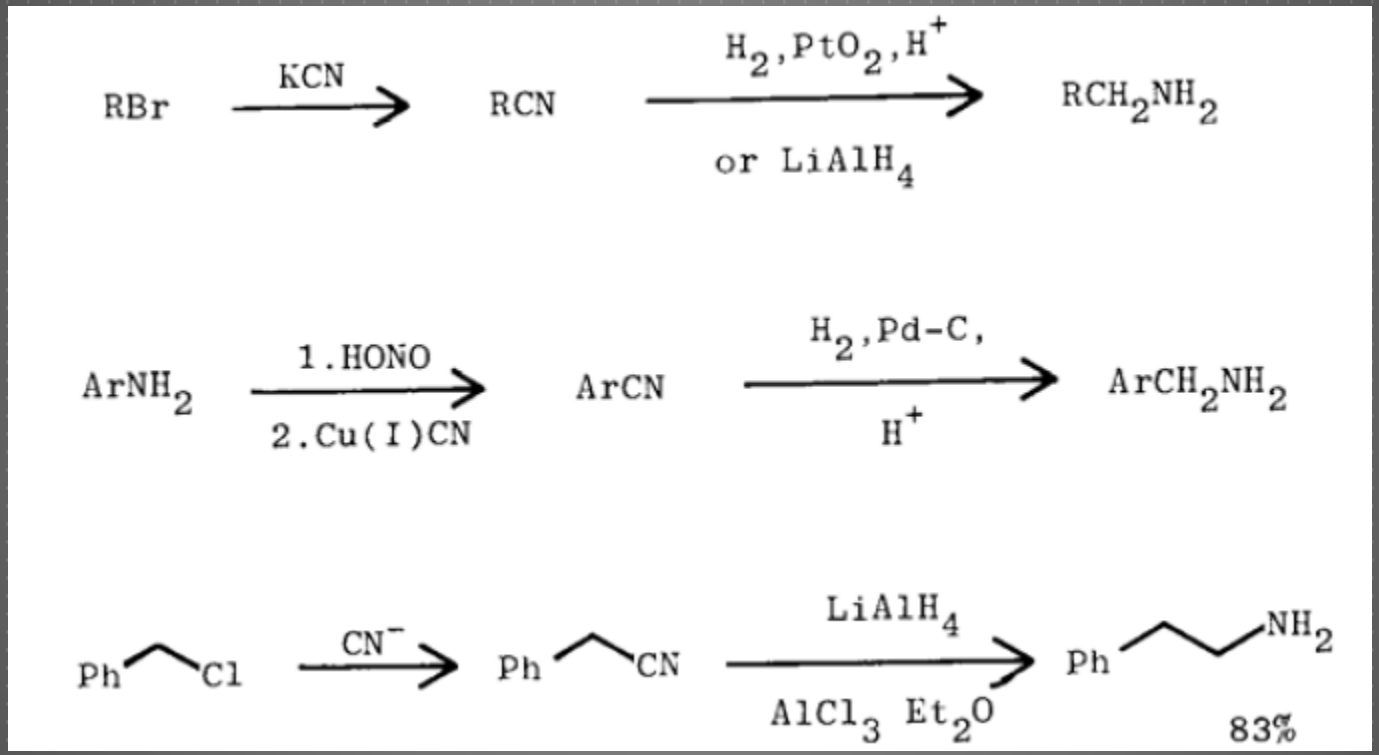

n-HexCH2N

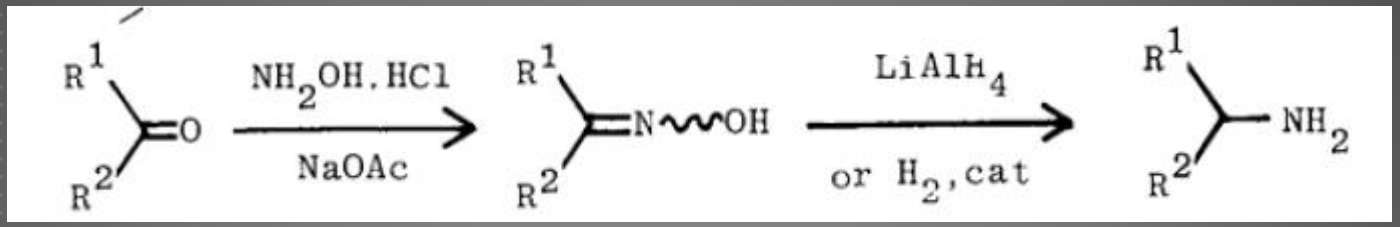
Analysis

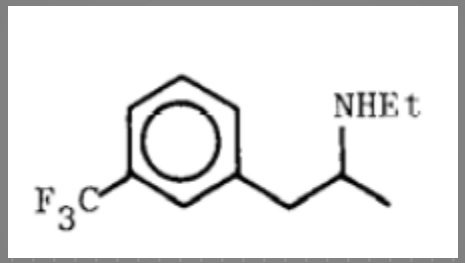


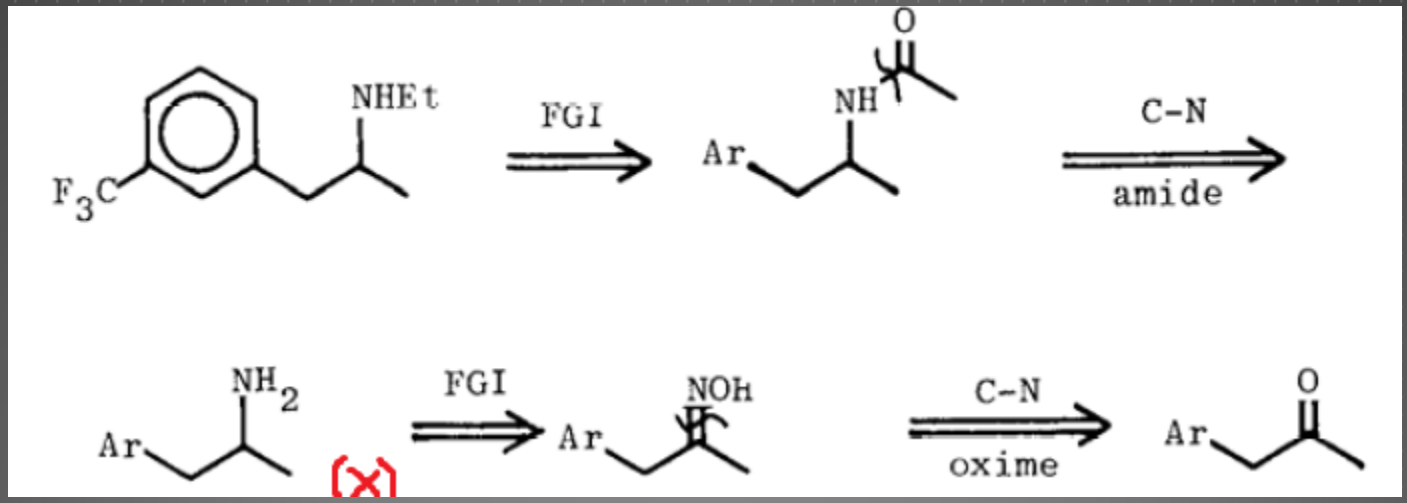
Synthesis

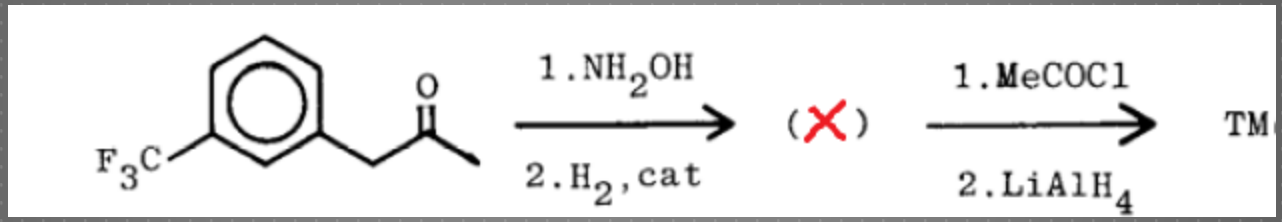


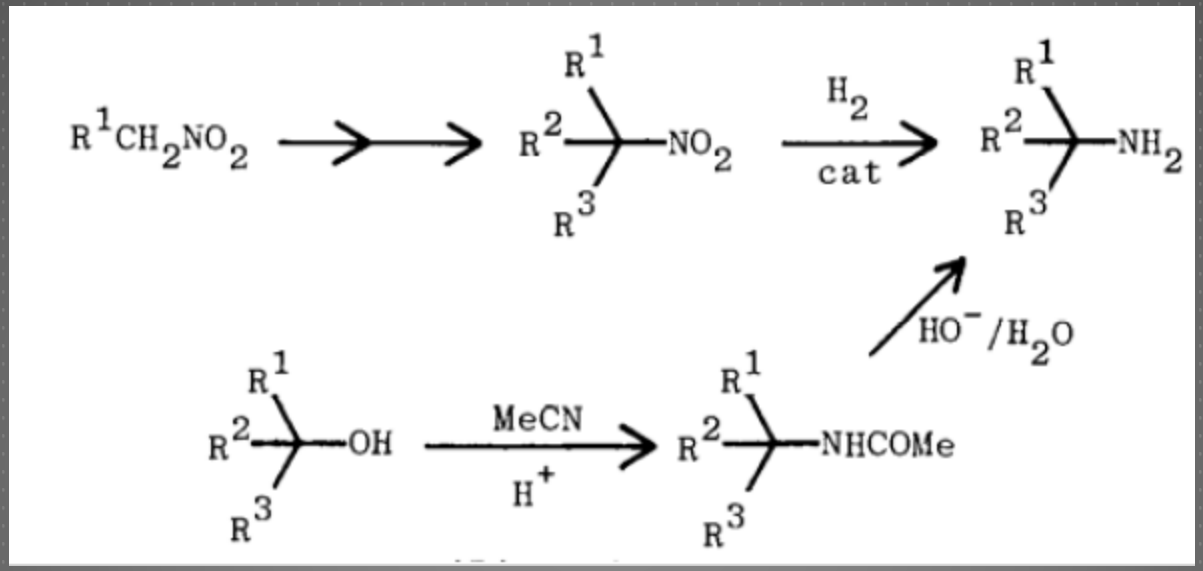

RBr
KCN
RCN
H2,PtO2,H+
or LiAlH4
RCH2NH2
ArNH2
1.HONO
2.Cu(I)CN
ArCN
H2,Pd-C,
H+
ArCH2NH2
Ph
Cl
CN−
Ph
CN
LiAlH4
AlCl3 Et2O
Ph
NH2
83%

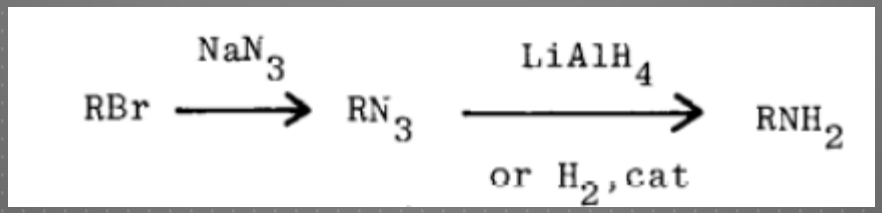

R1
R2
O
NH2OH.HCl
NaOAc
N
OH
LiAlH4
or H2,cat
NH2


NHEt
F3C

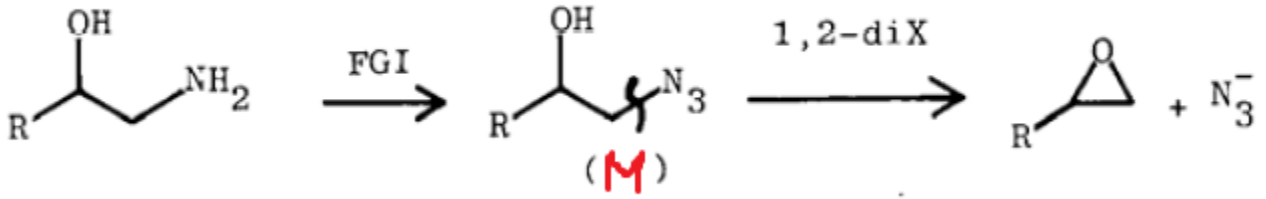

NHEt
F3C
FGI
O
NH
Ar
C-N
amide
NH2
Ar
FGI
NOH
Ar
C-N
oxime
O
Ar


O
F3C
1. NH2OH
2. H2, cat
1. MeCOCl
2. LiAlH4
TM


R1CH2NO2
R1
R2
R3
NO2
H2
cat
NH2
HO−/H2O
OH
MeCN
H+
NHCOMe


RBr
NaN3
RN3
LiAlH4
or H2, cat
RNH2

Analysis


OH
NH2
R
FGI
OH
N3
R
(M)
1,2-diX
R
+ N3−


R
NaN3
dioxan
reflux
(M)
H2,PtO2
or LiAlH4
TM

REAGENTS FOR THE SYNTHON NH_2^-

