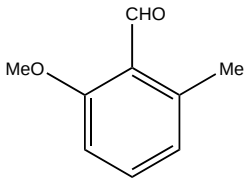
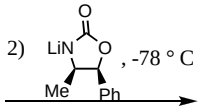
The Total Synthesis of (-)-Quinocarcin (JACS, **1993**, *115*, 10742)



1) $MeSCH_2S(O)Me$
Triton B, THF, reflux
2)$HCl.Et_2O$, reflux

A

1) t-BuCOCl, Et_3N,
THF, 0 °C
2) 

, -78 ° C

B

1) $KN(TMS)_2$, THF,
- 78 °C
2) trisyl azide; HOAc
- 78 °C -> rt

C

1) $NaBH_4$, THF-H_2O,
0 °C
2) H_2 atm, Pd/C,EtOH

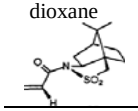
D

1) maleic anhydride
2) Ac_2O, NaOAc, 120°C
3) 5 N HCl, THF, rt

E

1) MeN_3, toluene, rt
2) hv, dioxane

F

1) hv (2537 A)
dioxane


G

1) MOMCl, DIPEA
2) NBS, $CHCl_3$, hv

H

1) Ph_3P, $CHCl_3$
2) KOtBu, $HCONMe_2$
120 °C

I

1) Raney-Ni, H_2
EtOH, 65 °C
2) LiOH, THF/H_2O

J

1) Li/NH_3, THF,
-33 °C
2) NaCN, H_2O (pH 7)

K

1) TMSCl, NaI,
AcCN

L

1) $AgNO_3$,
MeOH/H_2O