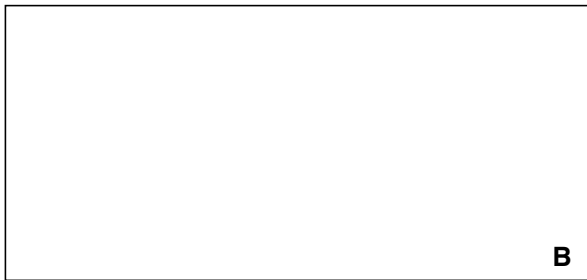
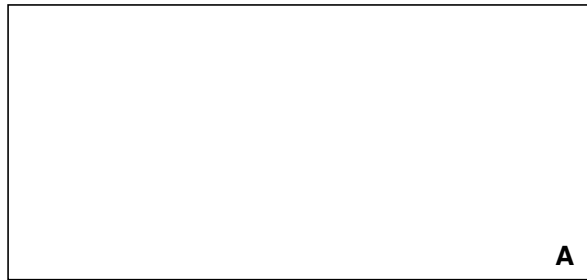
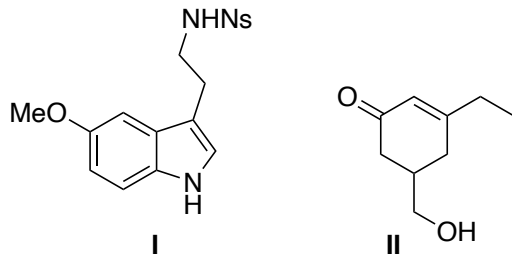


Synthesis Challenge 108

AG Wegner

04.04.2024



1) DIAD, PPh_3

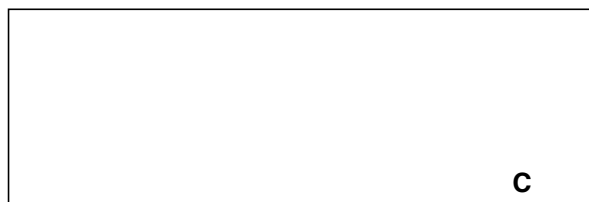
2) NaBH_4 , CeCl_3
3) Ac_2O , DMAP

Please, provide a synthesis of I and II.

DIAD = Diisopropyl azodicarboxylate

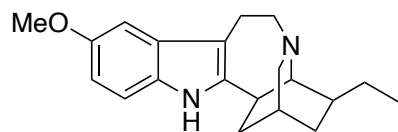
CSA = Camphor sulphonic acid

↓ 4



4) $\text{Mg}(\text{ClO}_4)_2$, CSA

↓ 5-7



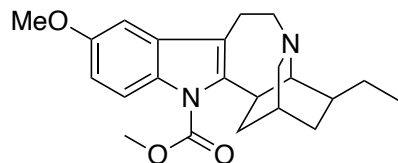
5) $\text{BH}_3 \cdot \text{SMe}_2$, NaOH, H_2O_2
6) MsCl, DMAP
7) $\text{HSCH}_2\text{CO}_2\text{H}$, DBU

D

↓ 8



8) KOtBu, O_2



9) TMSCF_2Br , NH_4OAc , then AgOAc
10) $\text{NH}_2\text{NH}_2 \cdot \text{H}_2\text{O}$, NH_4I
11) Cp_2ZrHCl

↓ 9-11

Please, provide a beautiful 3D-drawing of the final product **F**!

