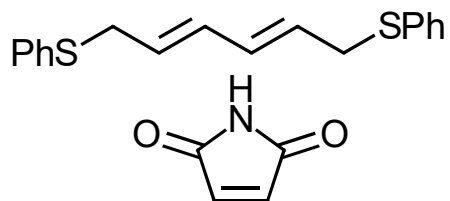


Synthesis Challenge # 54

AG Wegner

03.11.2016

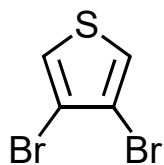


A

1-3

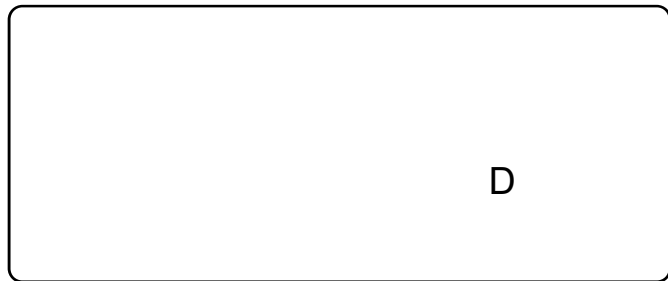


- 1) PhMe, 110°C
- 2) I, KOtBu, DMF
- 3) H₂ (300 psi), PtO₂, MeCN, THF



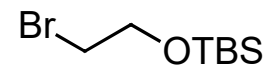
C

4-8



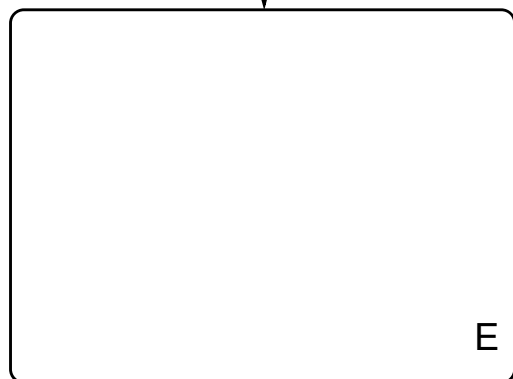
- 4) F₃CCO₃H, CH₂Cl₂
- 5) benzoquinone, AcOH, reflux
- 6) Na₂S₂O₄ (aq.), Et₂O
- 7) K₂CO₃, MeI, 18-c-6, DMF
- 8) *n*BuLi, THF/Et₂O, -98°C, then DMF

Please, provide a synthesis of **C** and **I**.



I

9-13



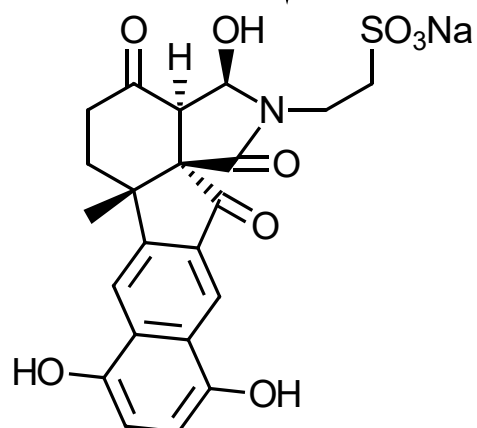
- 9) B, LiHMDS, THF, then D, -78°C
then $\text{BF}_3 \cdot \text{OEt}_2$
- 10) TESOTf, Et_3N
- 11) H_2O_2
- 12) Hünig's Base, *o*-DCB
- 13) LiBH_4 , THF

14-17



- 14) $\text{Pd}(\text{Pt-Bu}_3)_2$, $[\text{Pt-Bu}_3]\text{HBF}_4$,
 HCO_2Na
- 15) CsF
- 16) DDQ
- 17) OsO_4 , NMO, then NaIO_4

18-22



- 18) PPh_3 , DIAD, AcSH
- 19) *m*CPBA
- 20) *t*BuOK, DMF
- 21) SiO_2 , MeOH
- 22) CAN, then $\text{Na}_2\text{S}_2\text{O}_4$