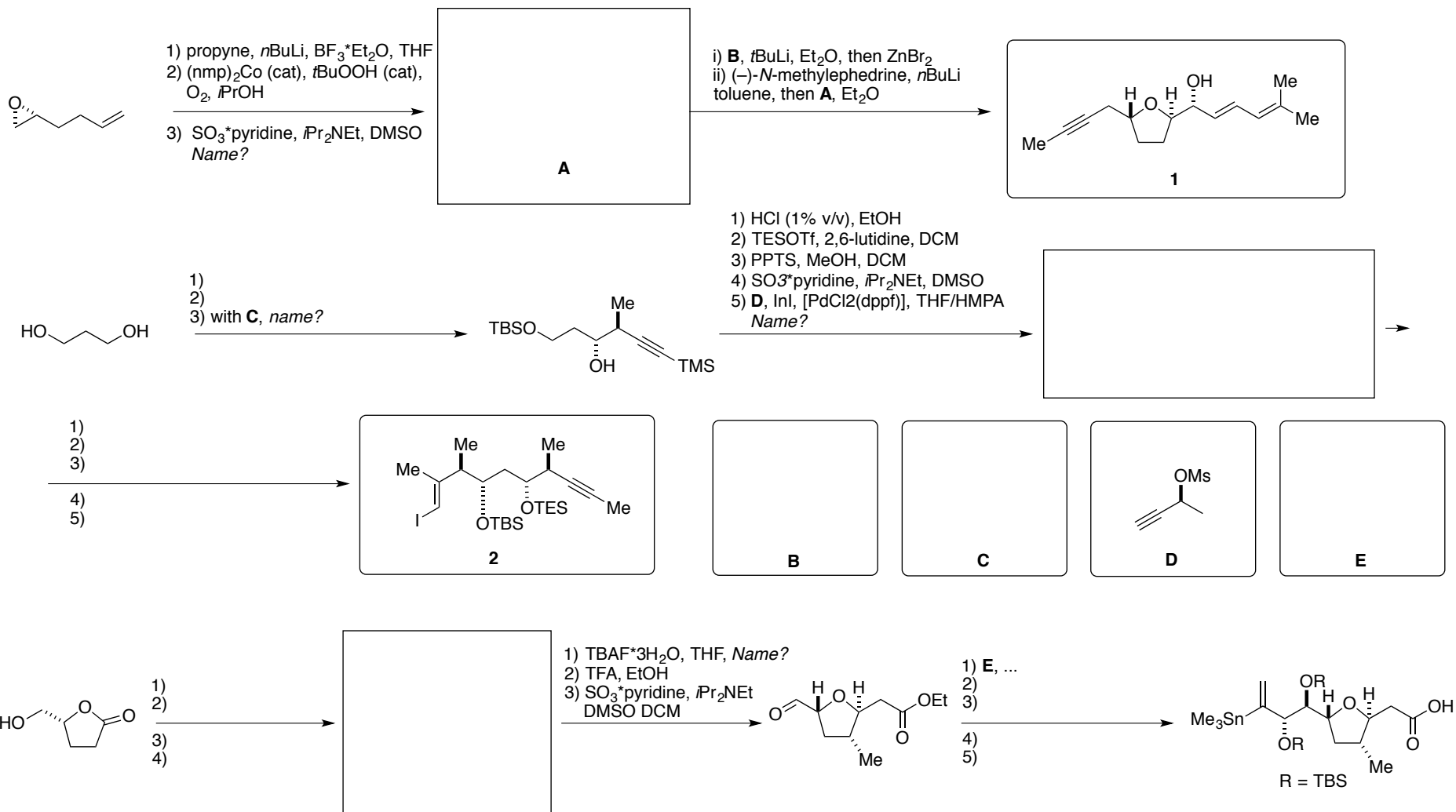


E27: Total Synthesis of Amphidinolide F

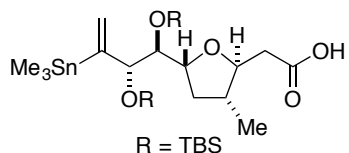


G. Valot, C. S. Regens, D. P. O'Malley, E. Godineau, H. Takikawa, A. Fürstner, *Angew. Chem. Int. Ed.* **2013**, *52*, 9534–9538.



Sparr Group Seminar
03.11.2016
Dominik Lotter

E27: Total Synthesis of Amphidinolide F



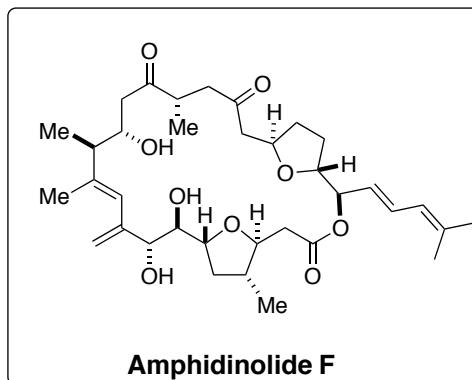
1, 2,4,6-trichlorobenzoyl chloride
Et₃N, DMAP, toluene
Name?



1) **2**, [Pd(PPh₃)₄]
Ph₂PO₂NBu₄, CuTC, DMF
Name?
2) **F**, toluene, DCM
3) PPTS; MeOH, DCM



- Isolated from the marine Dinoflagellate *Amphidinium* sp. in 1991.
- Cytotoxic activity for *murine lymphoma L1210* and human epidermoid carcinoma KB cell lines.
- Second total synthesis with 21 linear steps (34 before).



1 i) [(C₂H₄)PtCl₂]₂, Et₂O
ii) PPTS, benzene
2) TPAP, DCM
3) HF*NEt₃, Et₃N, MeCN

