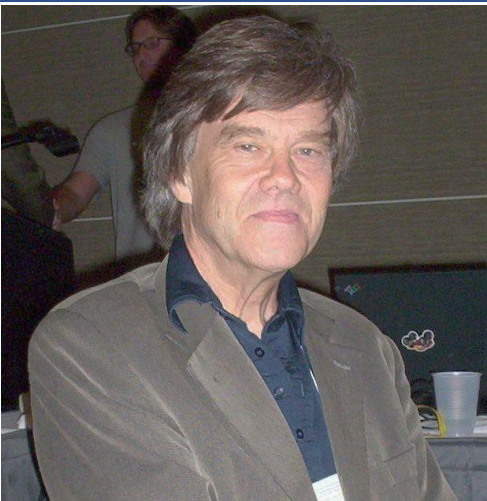
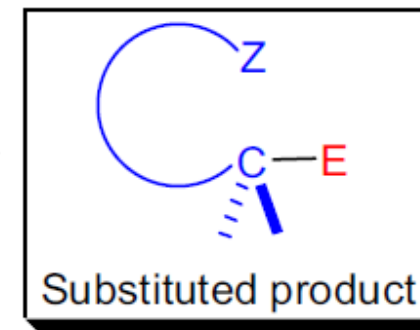
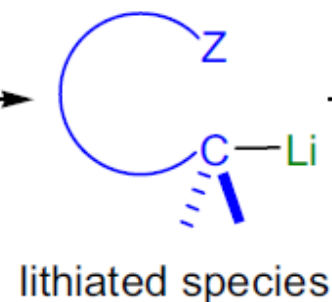
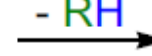
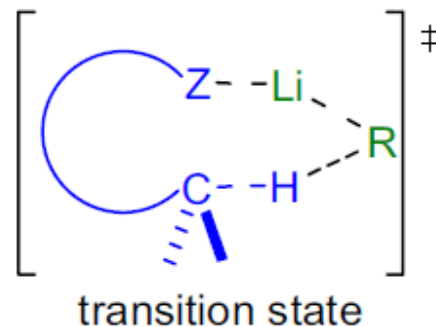
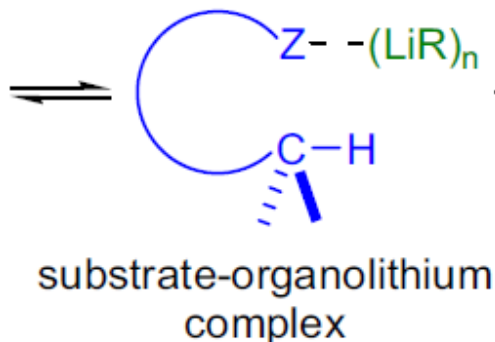
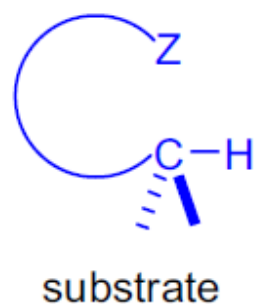
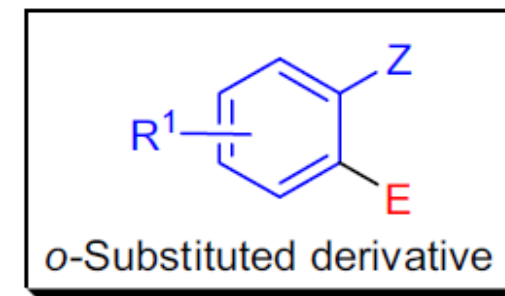
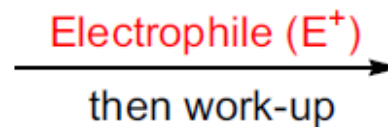
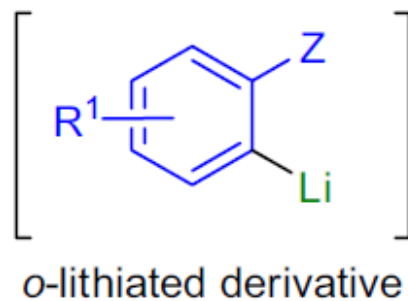
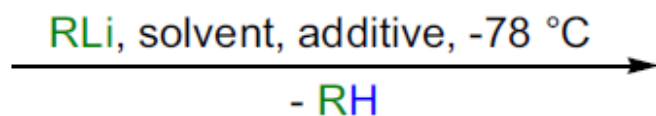
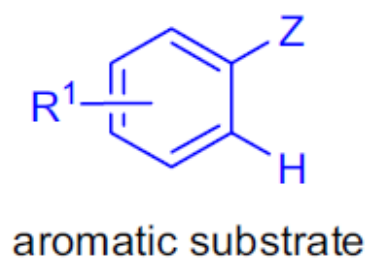


# (Victor) Snieckus Directed Ortho Metallation (DOM)

1

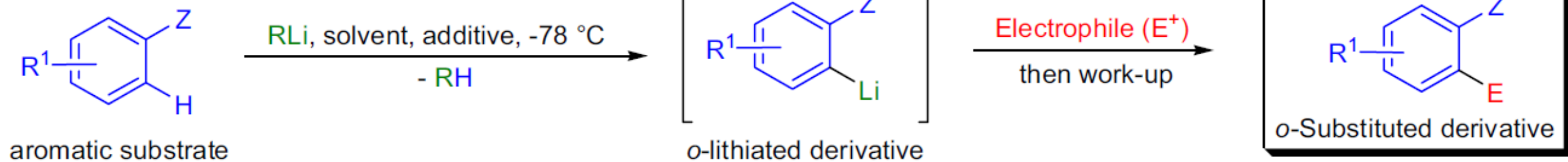


Directed ortho metallation:



# The Directing Group

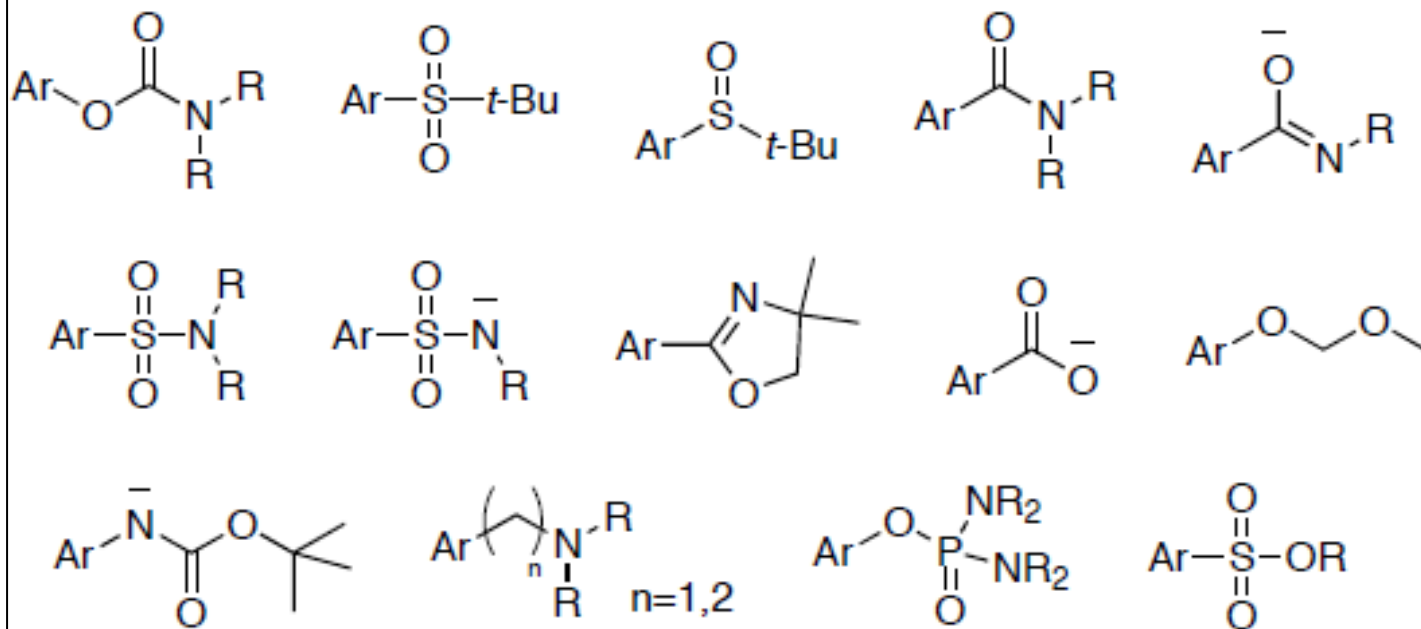
Directed ortho metalation:



## Requirements of the Directing Group

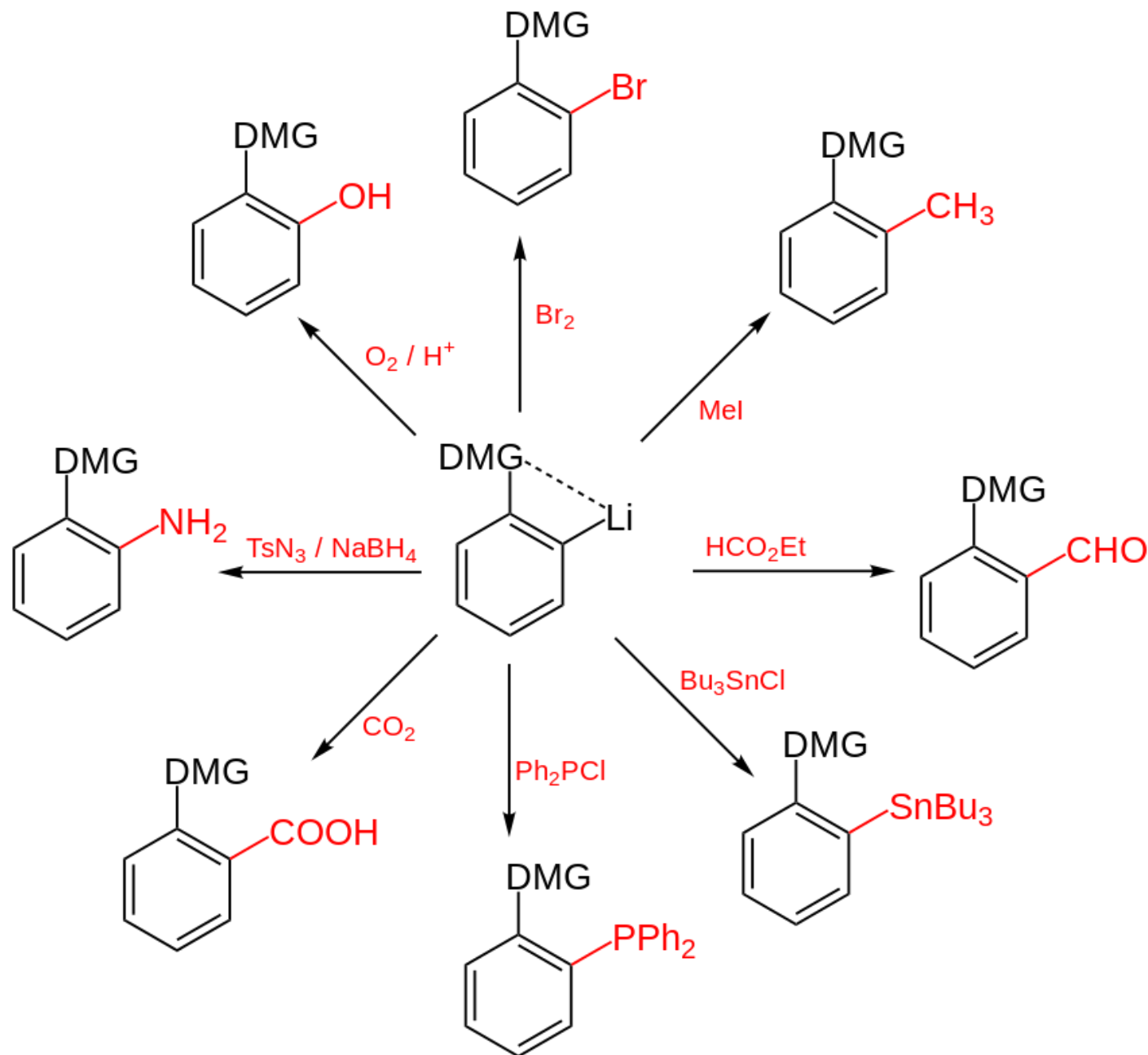
- Efficient Coordination of RLi
- Poorly electrophilic (*stable with RLi*)
- Removable/transformable

## Strong Directing Groups



\* Sterics and other substituents also play a role in the DOM

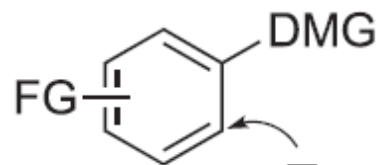
# What about the Electrophile?



# General Features and potential

4

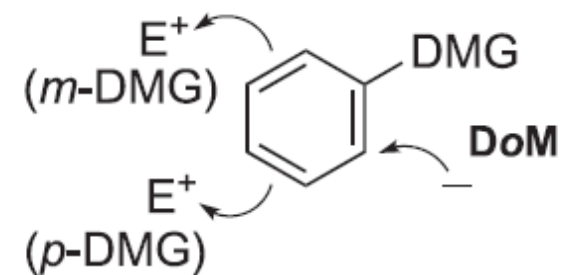
## A) Regioselective



## B) Mild Conditions

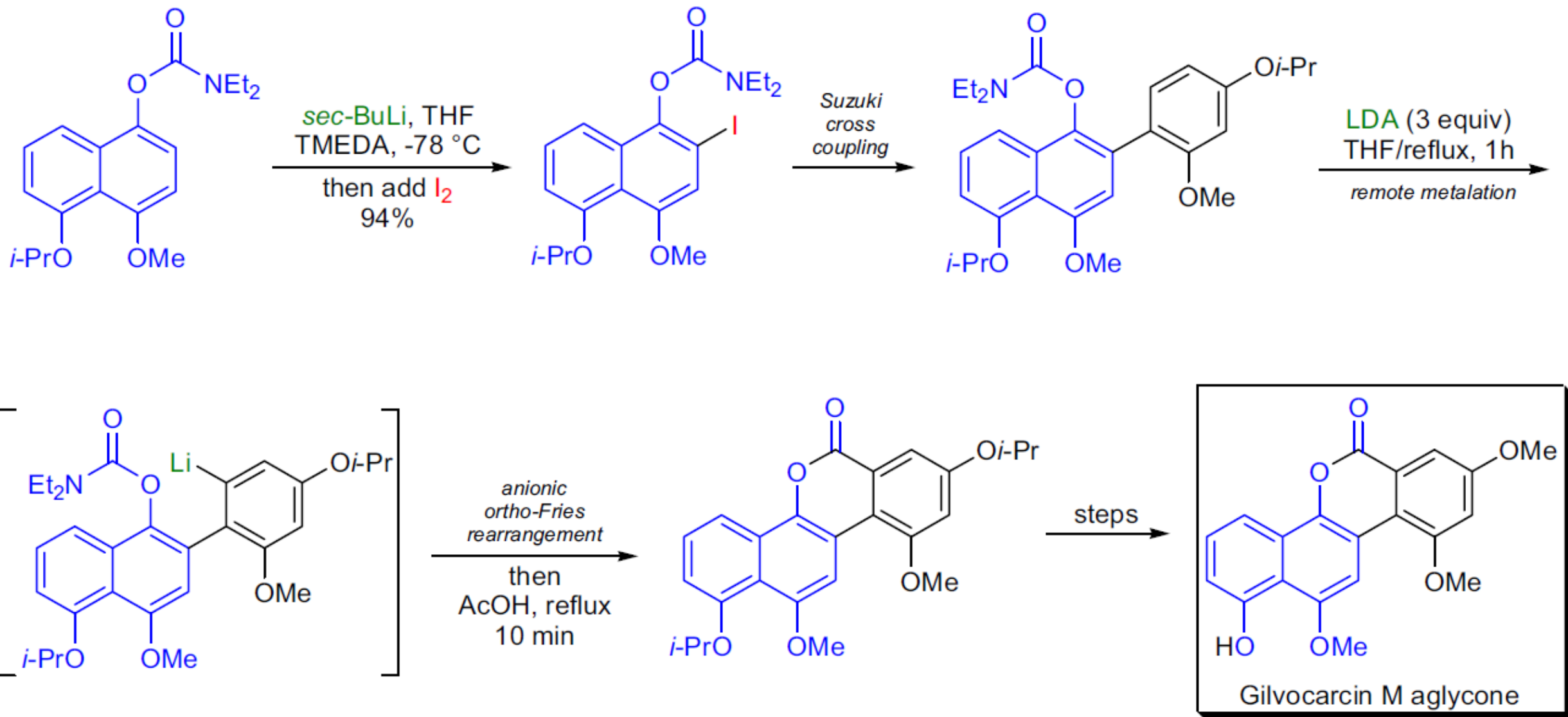
-78 °C → 0 °C → rt  
THF or Et<sub>2</sub>O or DME  
&/or other additives

## C) E<sup>+</sup> - Ar Subst. Complement



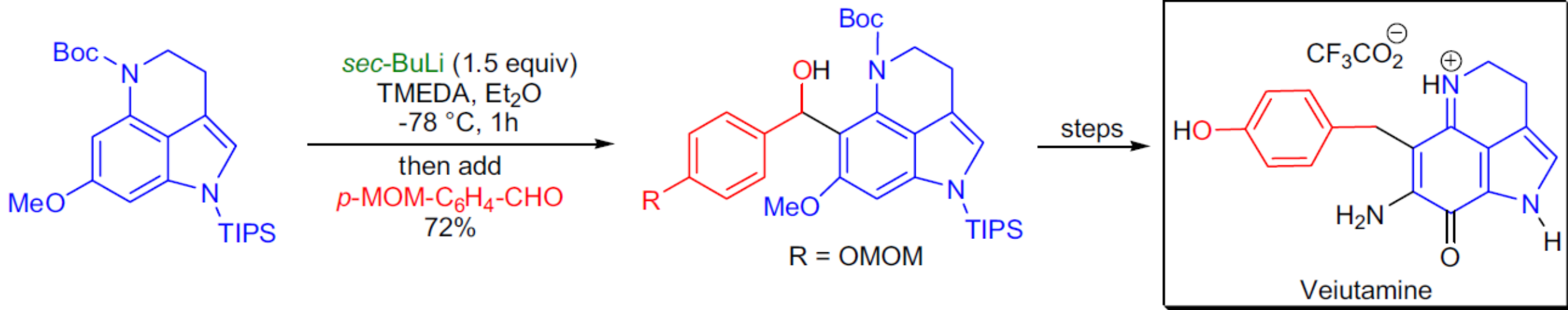
# Application in Natural Product Synthesis (1)

5

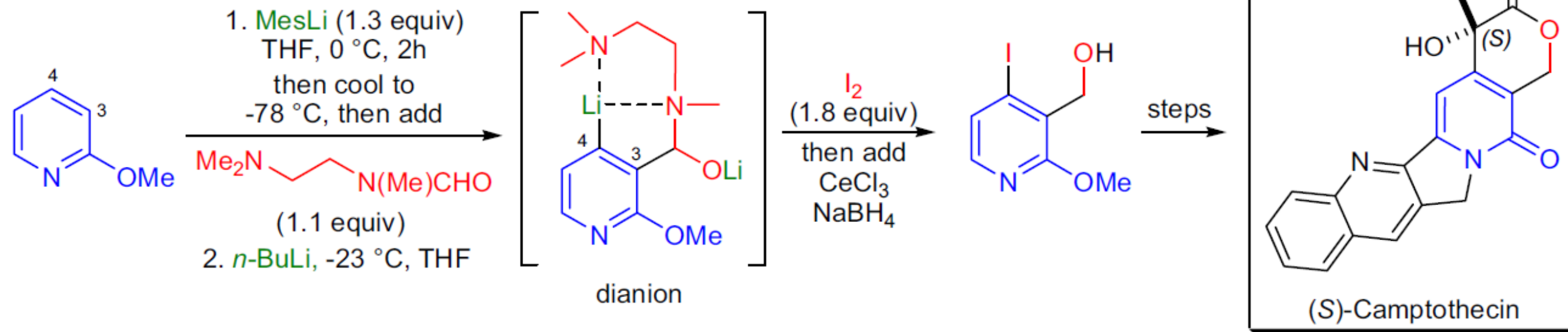


# Application in Natural Product Synthesis (2)

6



*Tetrahedron Lett.* **1999**, 40, 1713-1716



*Org. Lett.* **2001**, 3, 4255-4257