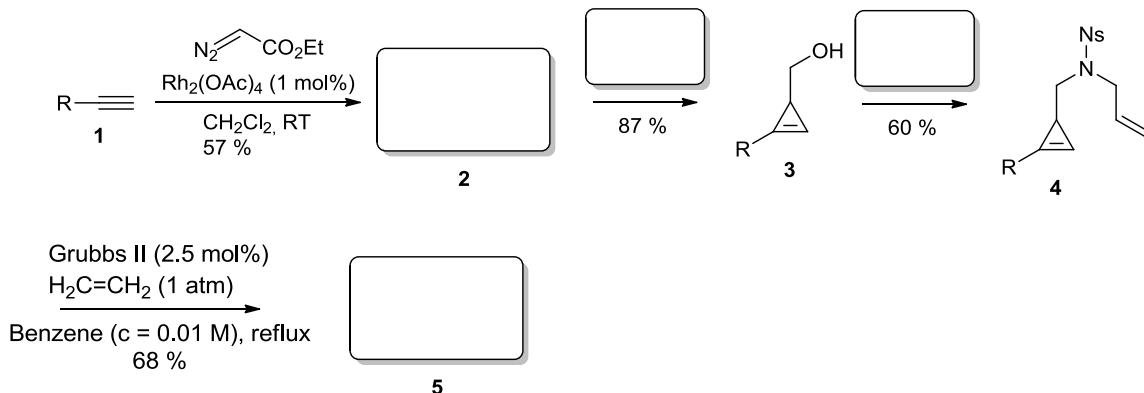


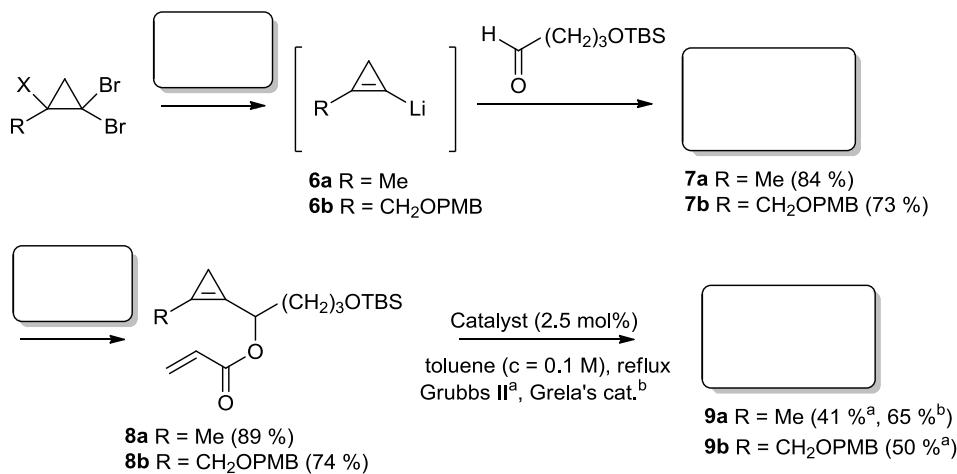
## Cyclopropenes for the Synthesis of Heterocycles

Recent studies suggested the use of disubstituted cyclopropenes as useful tools for the stereocontrolled formation of quaternary centres.<sup>[1, 2]</sup> In this paper substituted cyclopropenes **A** and cyclopropenyl alcohols and amides **B** were studied. Here are two examples of their studies:

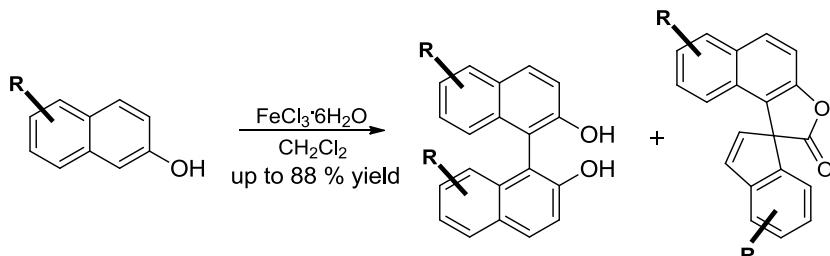
### 1) Substituted Cyclopropenes **A**



### 2) Cyclopropenyl Alcohols **B**



### 3) Here is a rather unusual synthesis of spiro-compounds:



What is the mechanism of that reaction?

Reference:

- [1] Giudici, R. E.; Hoveyda, A. H. *J. Am. Chem. Soc.* **2007**, *129*, 3824–3825.
- [2] Hoveyda, A. H.; Lombardi, P. J.; O'Brien, R. V.; Zhugralin, A. R. *J. Am. Chem. Soc.* **2009**, *131*, 8378–8379.