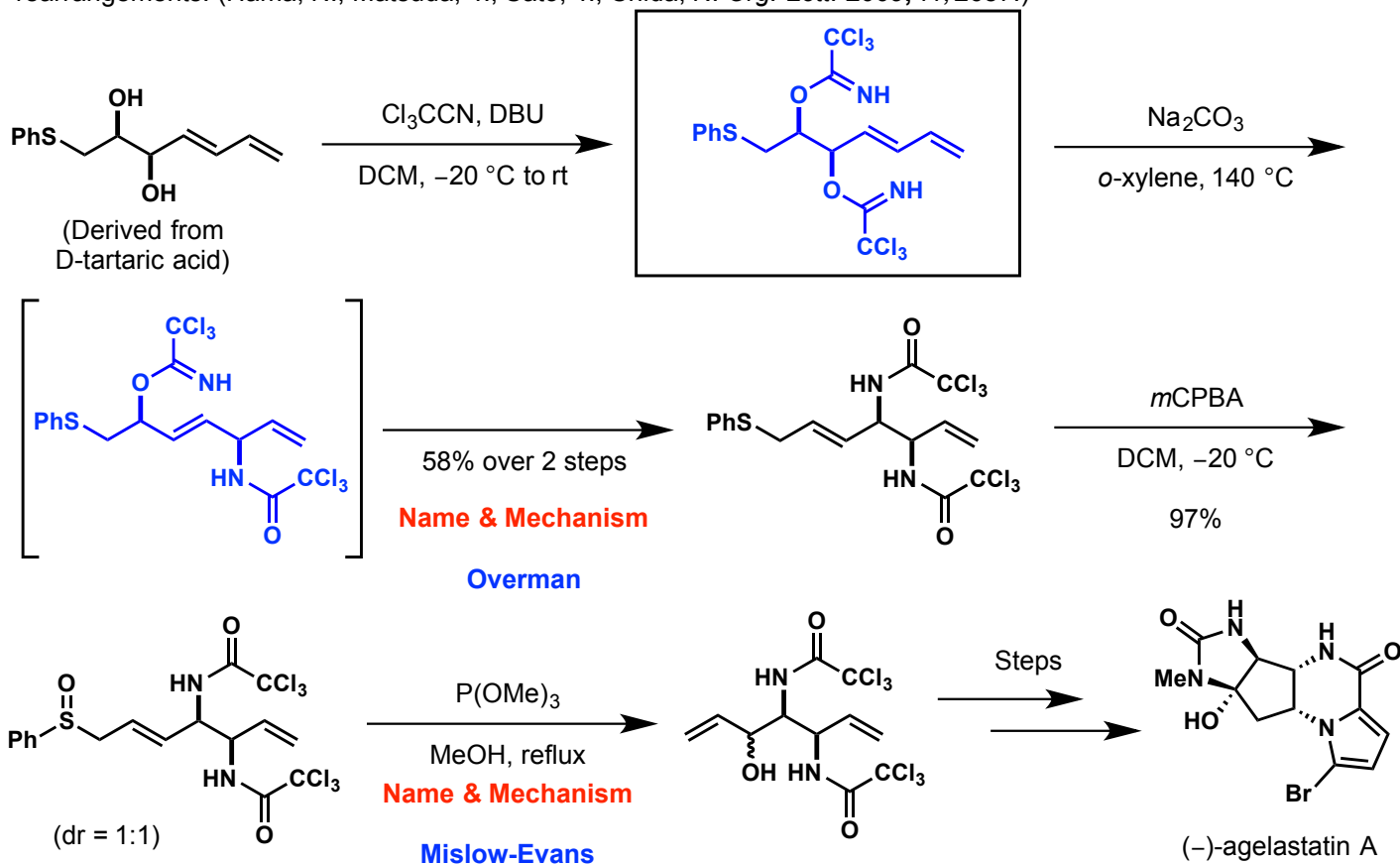
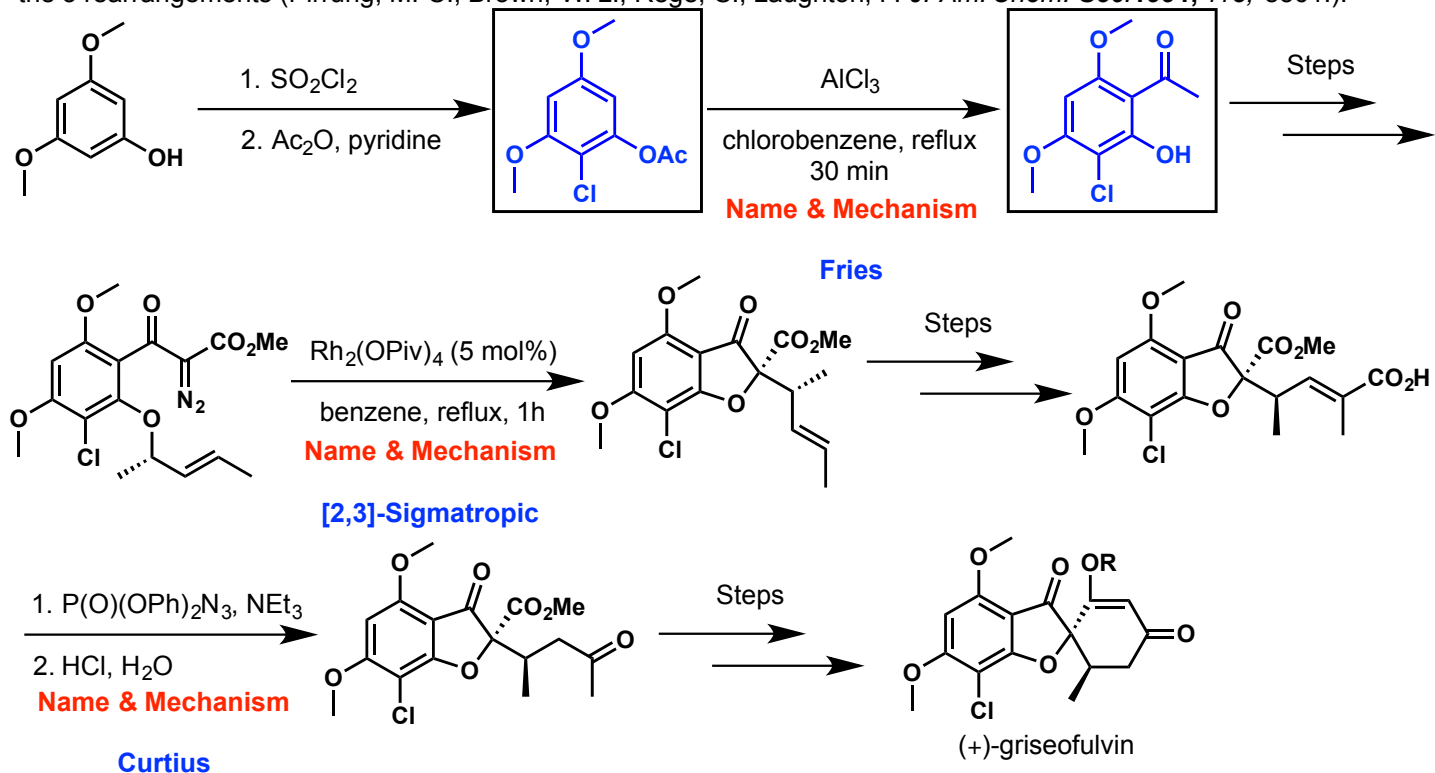


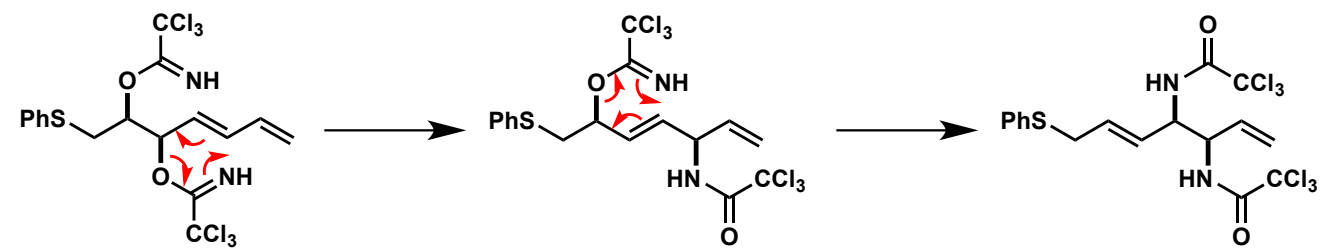
1. In 2009, the Chida group reported the synthesis of (–)-agelastatin A, using two sequential rearrangements as their key steps. Please provide the missing compound and intermediate, as well as, the names and mechanisms for the 2 rearrangements. (Hama, N.; Matsuda, T.; Sato, T.; Chida, N. *Org. Lett.* **2009**, *11*, 2687.)



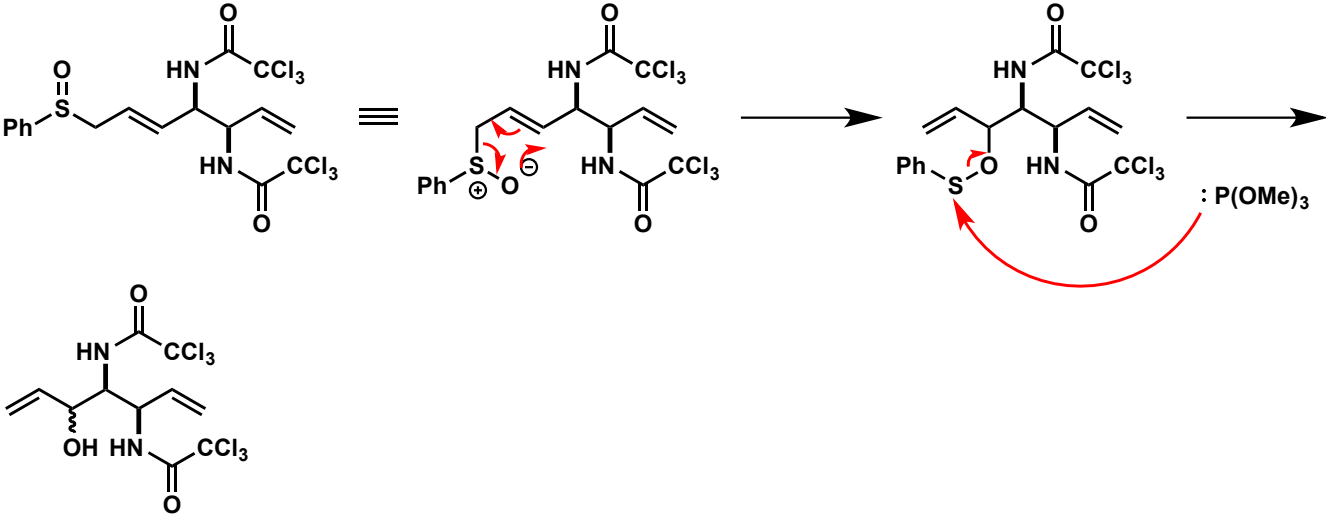
2. In 1991, the Pirrung group reported the synthesis of (+)-griseofulvin. Their synthesis contains three rearrangements, with one serving as their key step. Please provide the missing compounds, as well as, the names and mechanisms for the 3 rearrangements (Pirrung, M. C.; Brown, W. L.; Rege, S.; Laughton, P. J. *Am. Chem. Soc.* **1991**, *113*, 8561.).



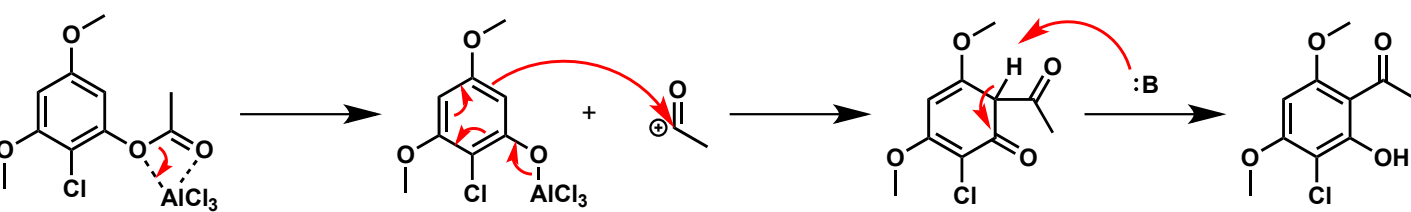
Overman:



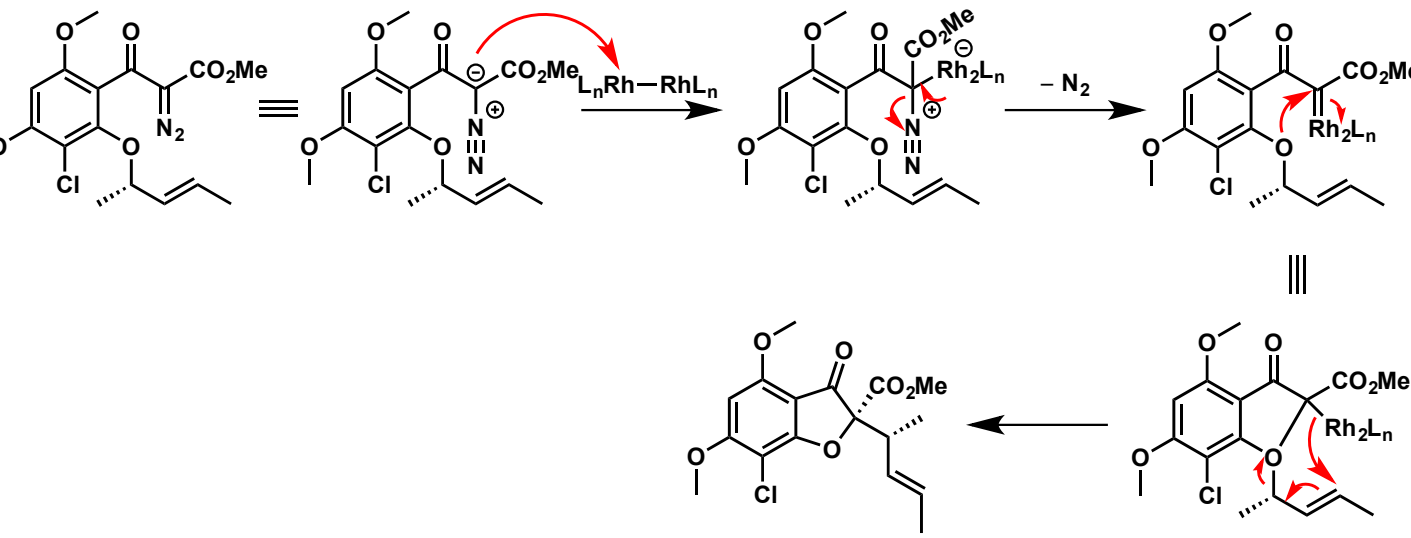
Mislow-Evans:



Fries:



[2,3-Sigmatropic]:



Curtius:

