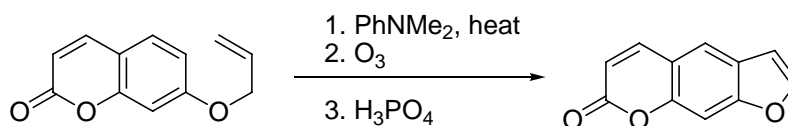


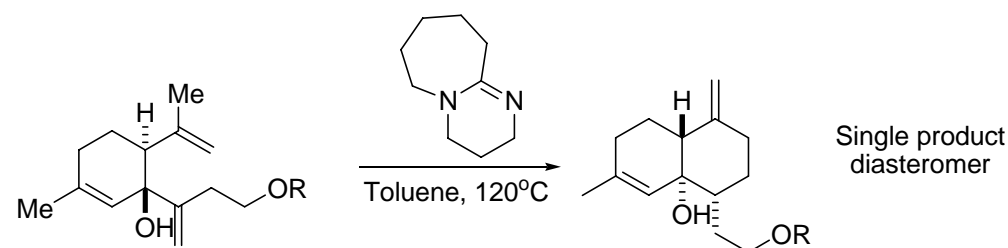
Group Meeting Problems

February 28, 2007

1. Show the mechanism for the following transformation.



2. Barriault and Deon recently reported the following transformation in conjunction with their synthesis of arteannin M (Org. Lett. 2001, 3, 1925-1927). Provide a mechanism for the illustrated thermal rearrangement(s) of A to B. Where the stereochemical issues are at stake, provide clear three-dimensional drawings to support your answer.



3. Fill in the boxes with the appropriate structures to obtain an acetyl cholinesterase inhibitor, a promising pro-drug to treat Alzheimer Disease.

