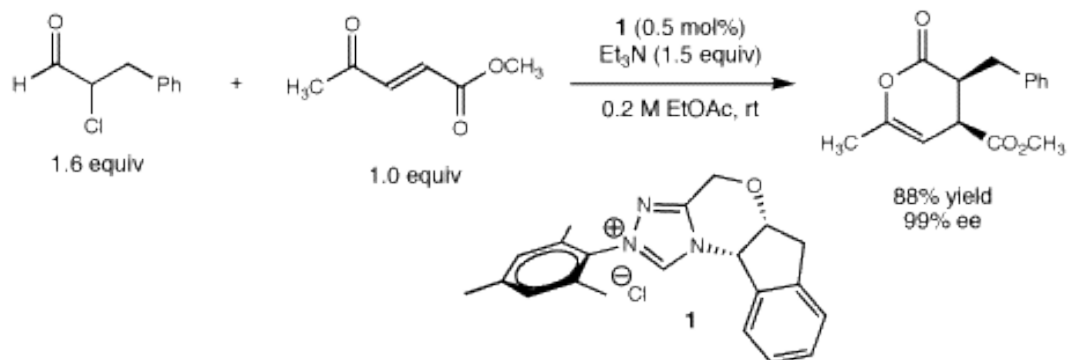


## Dr. Andreaana Group Meeting – Fun Problem Set ☺

(Credit: Dr. Evans CCB Problem Sets)

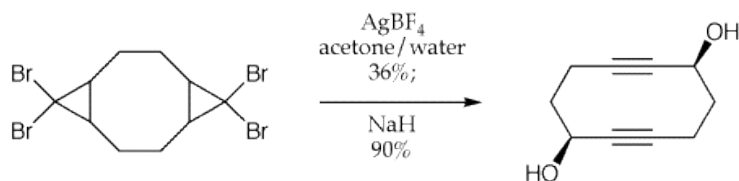
### Problem 1a

The transformation depicted below was recently reported by Bode and coworkers (*J. Am. Chem. Soc.* **2006**, *128*, 15088-15089.). Provide a mechanism for this transformation that accounts for the observed **relative stereochemistry**. The **absolute stereochemistry of the product does not need to be justified**.



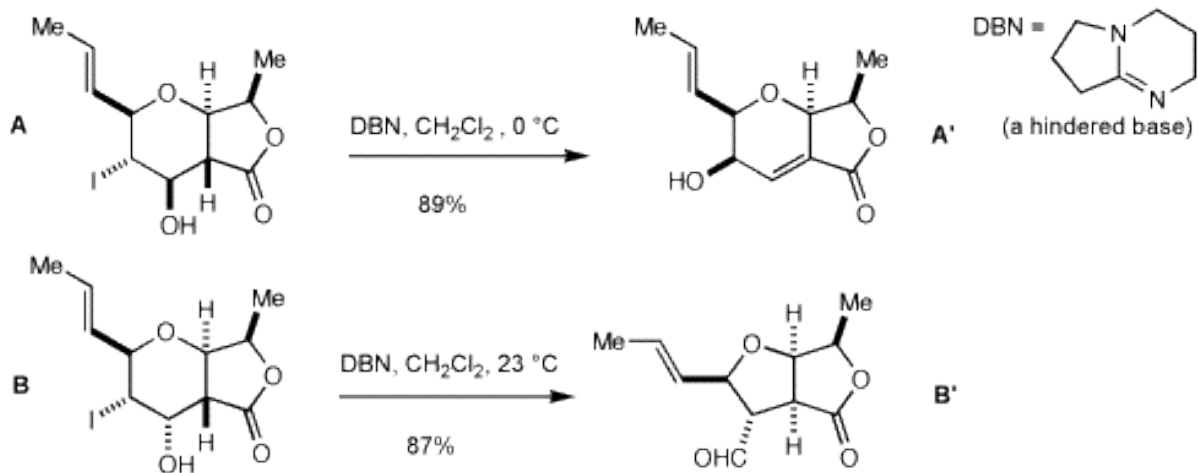
### Problem 1b

Myers and co-workers needed the following diyne for their studies of unusual conjugated hydrocarbons (*J. Org. Chem.* **2004**, *69*, 2516). Provide a mechanism for its synthesis.



## Problem 2 (Choose A or B)

Products from the iodoetherification (**A** and **B**), when exposed to base (DBN), undergo different rearrangements. Please provide mechanisms that account for the divergent reaction pathways.

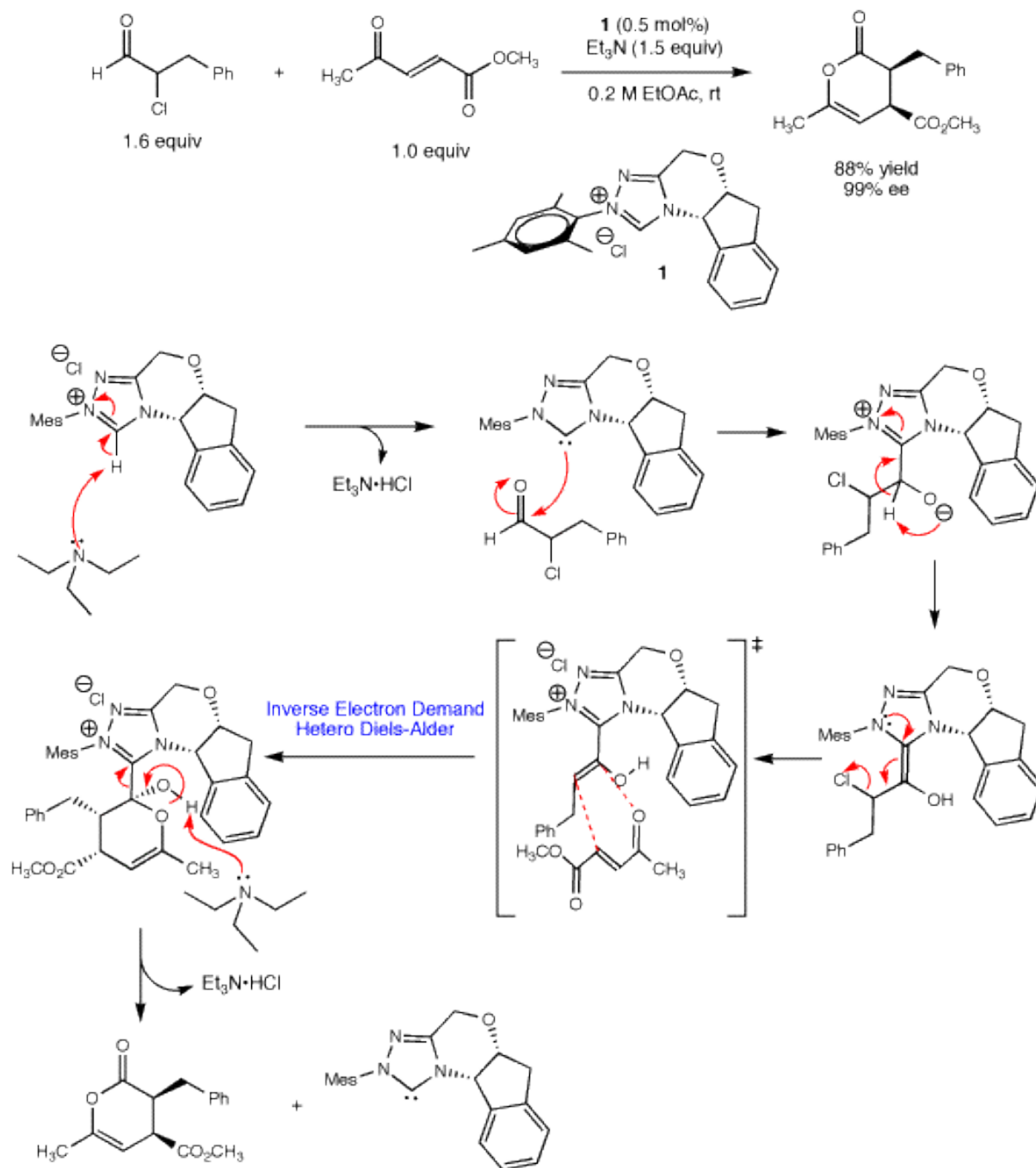


This problem is related to Problem 497

## Answer Key

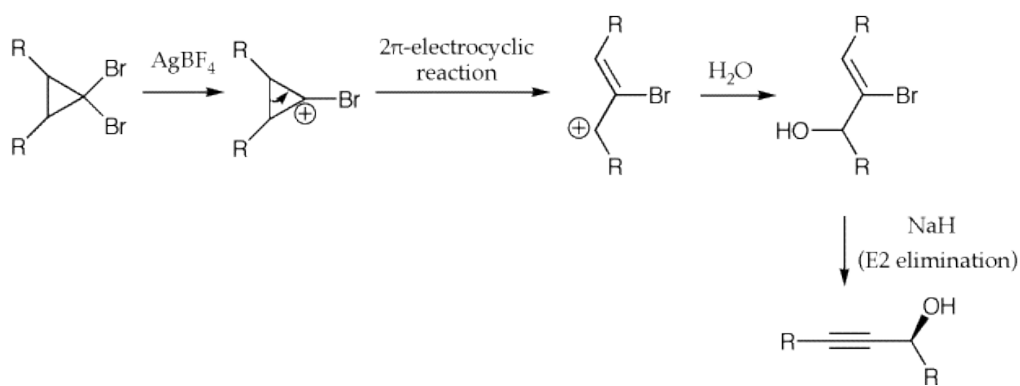
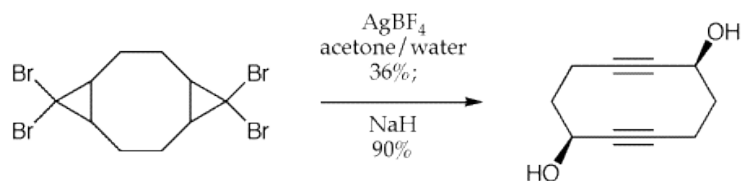
### Problem 1a

The transformation depicted below was recently reported by Bode and coworkers (*J. Am. Chem. Soc.* **2006**, *128*, 15088-15089.). Provide a mechanism for this transformation that accounts for the observed **relative stereochemistry**. The **absolute stereochemistry of the product does not need to be justified**.



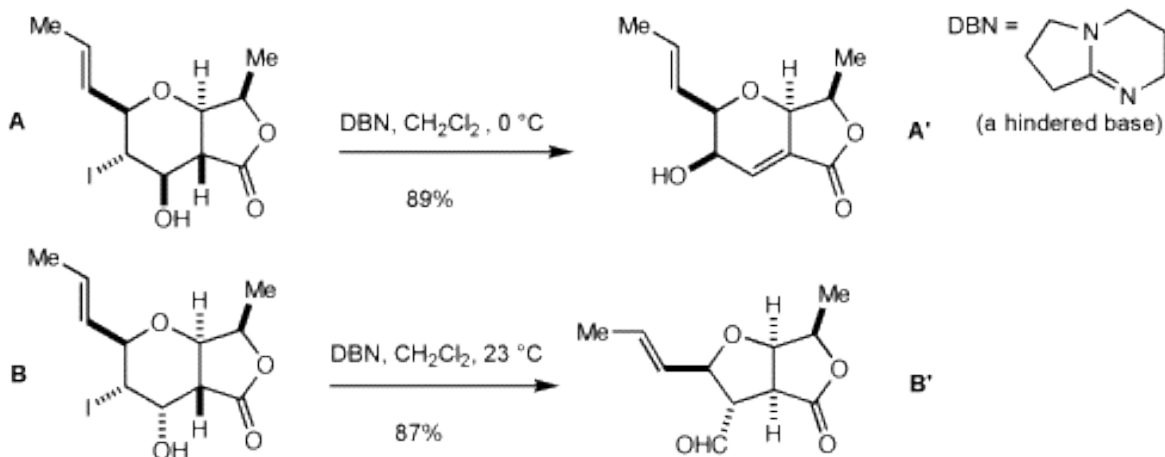
## Problem 1b

Myers and co-workers needed the following diyne for their studies of unusual conjugated hydrocarbons (*J. Org. Chem.* **2004**, *69*, 2516). Provide a mechanism for its synthesis.



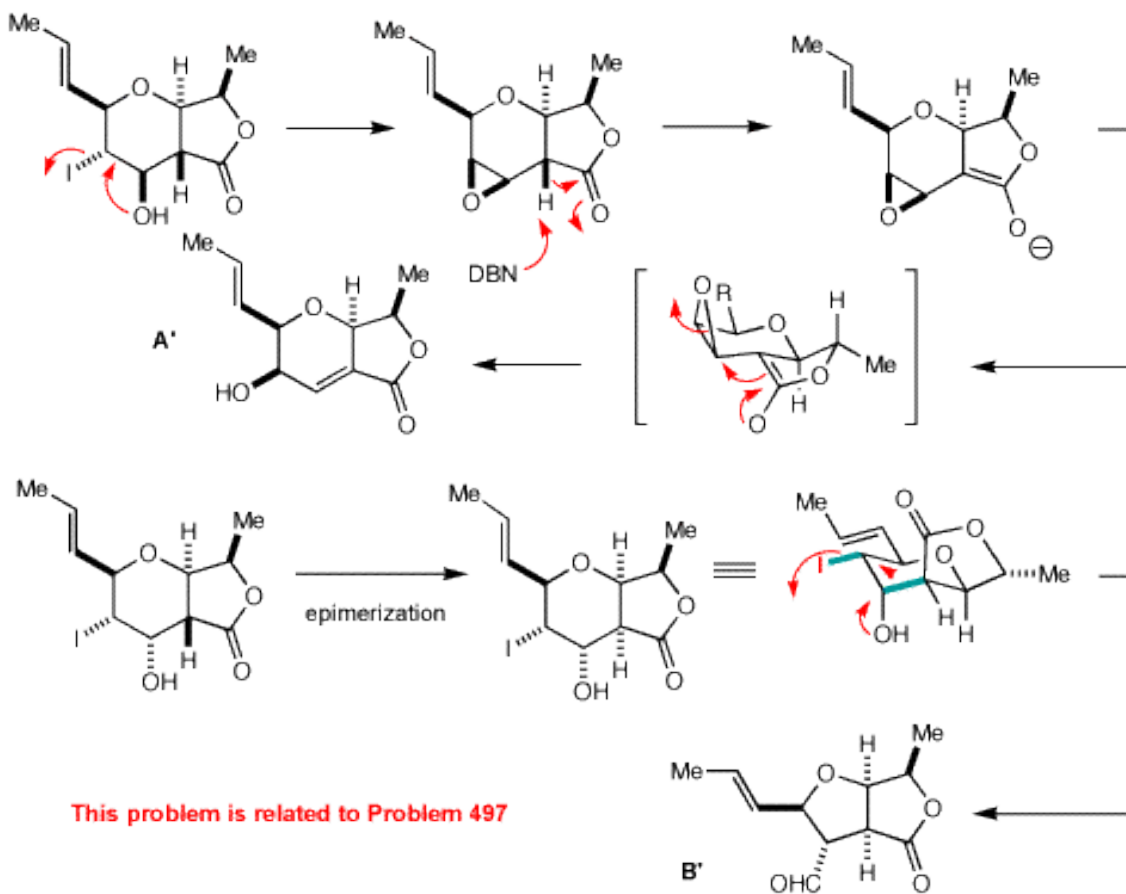
## Problem 2

Products from the iodoetherification (**A** and **B**), when exposed to base (DBN), undergo different rearrangements. Please provide mechanisms that account for the divergent reaction pathways.



Your Answer

Snider, *JOC*, **2004**, 5517.  
 Snider, *Org. Lett.* **2003**, 451-454



This problem is related to Problem 497