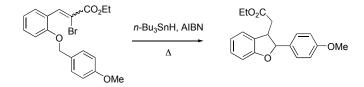
M. Movassaghi

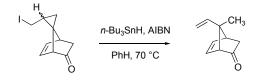
Problem Set IV

Due in class: Monday, Mar. 19th, 2007 at 12:05 pm.

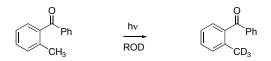
1. Provide a mechanism for the following; show arrow pushing.



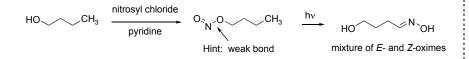
2. Provide a mechanism for the following; show arrow pushing.



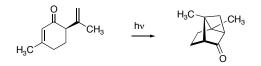
3. Provide a mechanism for the following. No deuterium incorporation was observed in the absence of light. Show arrow pushing.



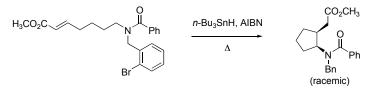
4. Provide a mechanism for the following; show arrow pushing.



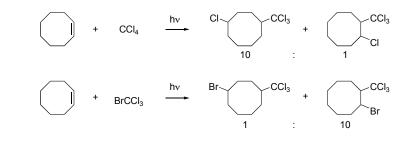
- Monday 3.12.2007
- 5. Provide a mechanism for the following; show arrow pushing.



6. Provide a mechanism for the following; show arrow pushing and account for the observed stereoselectivity.



7. Provide a mechanism for the following; show arrow pushing.



8. For the reactions presented in question 7, explain the difference in product distribution between the reactions employing CCI_4 and $BrCCI_3$.