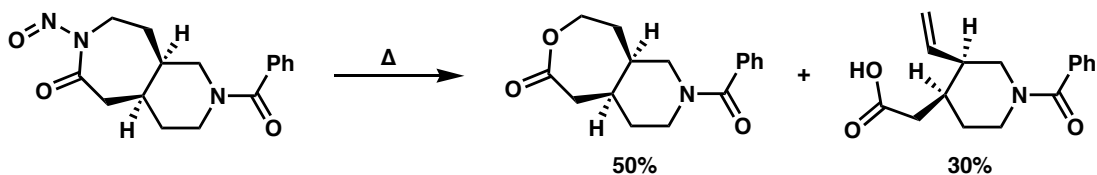


Mechanism Club 9/2/05

Questions

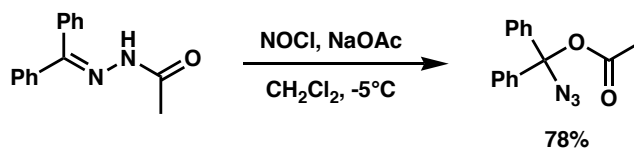
Please look at the following reactions involving *N*-nitrosoamides and try to determine a mechanism that describes the formation of each product. We hope your brainstorming will spark discussion about the mechanisms, whether or not they lead to published answers. Please do not consult any journal articles for answers.

Mechanism the First:



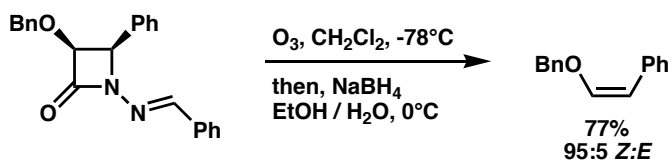
Hint: N_2 is another product.

Mechanism the Second:



Hint: An *N*-nitrosohydrazone is an intermediate.

Mechanism the Third:



Hint: Benzyl alcohol and CO_2 are also generated.