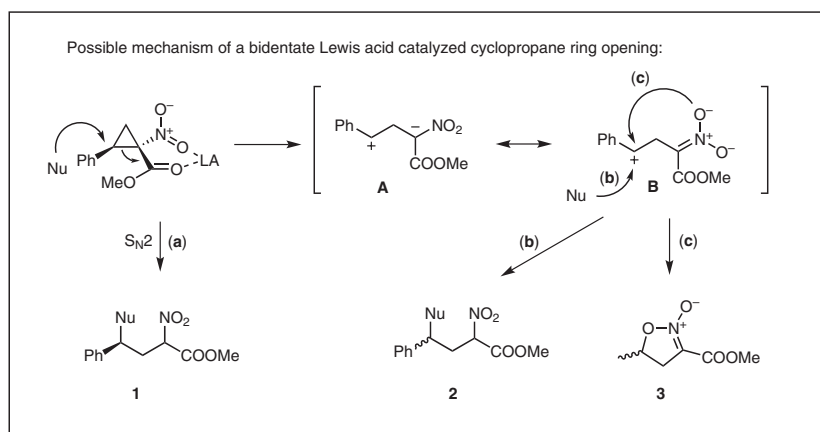
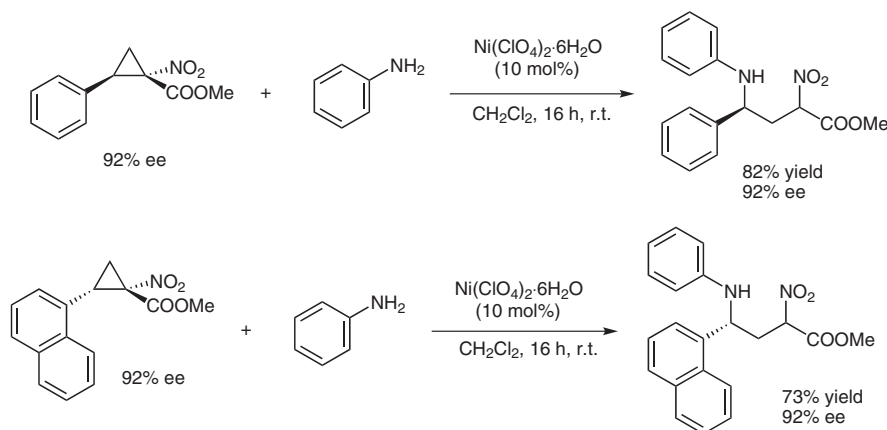


Mild Lewis Acid Catalyzed Ring Opening of Nitro-Cyclopropanes



Significance: Charette's group has recently reported highly efficient methods for the preparation of racemic and enantio-enriched 1-nitro-cyclopropane-carbonyls (*Org. Lett.* **2003**, *5*, 2327; *J. Am. Chem. Soc.* **2005**, *127*, 18014). This account represents a further extension of their studies on the utility of those activated cyclopropanes. The method described here provides access to chiral nitro compounds under mild conditions without the erosion of the chirality in the starting molecules.

Comment: One of the most interesting points of this report is the effect of the relative strength of Lewis acid on the product distribution of the reaction. More specifically, highly Lewis acidic mono- and bidentate catalysts (Al, Sn, B) provide racemic cyclic (**3**) and acyclic products (**2**) (via pathways **b** and **c**). In contrast, mild Lewis acids like Ni(II) lead to highly enantio-enriched products (**1**), circumventing the formation of zwitterionic species (**A** and **B**) giving racemic products.