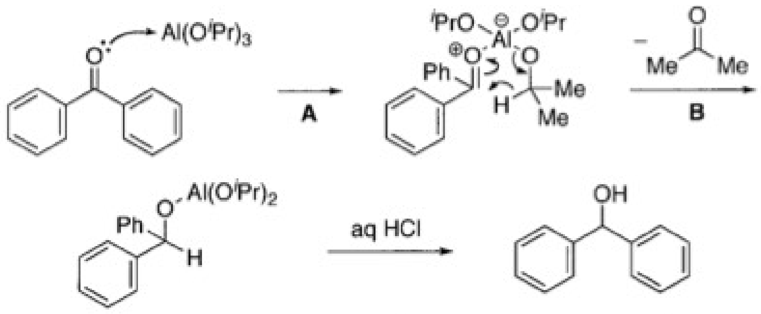
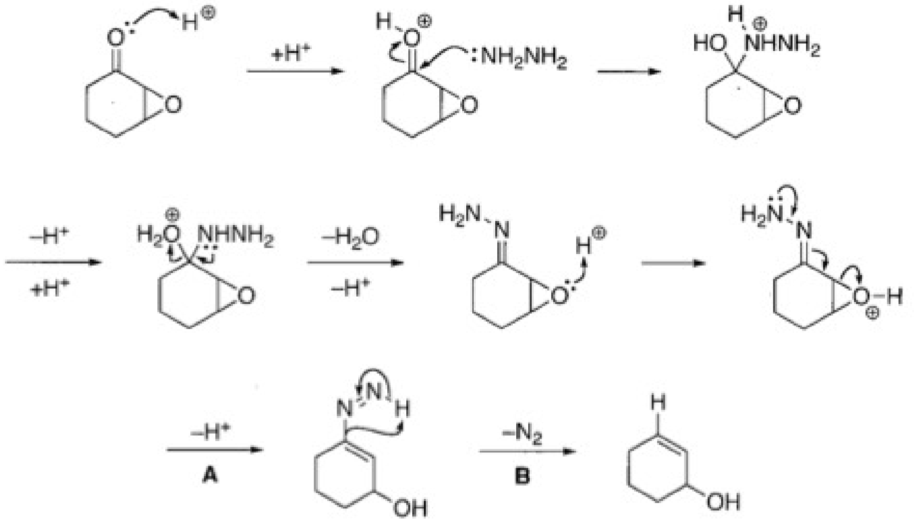
B002



Wilds, A. L. *Org. React.* **1944**, *2*, 178.

Meerwein-Ponndorf-Verley reduction. **A**: Formation of an ate complex. **B**: Hydride transfer via a six-membered transition state with formation of acetone.

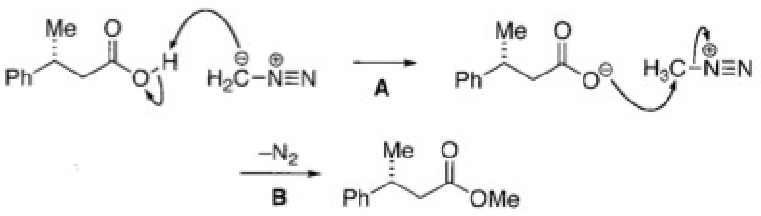
B003



Wharton, P. S.; Bohlen, D. H. *J. Org. Chem.* **1961**, *26*, 3615.

Wharton rearrangement. **A**: Cleavage of the epoxide helped by the nitrogen lone pair of the hydrazone. **B**: Loss of N_2 (an extremely good leaving group).

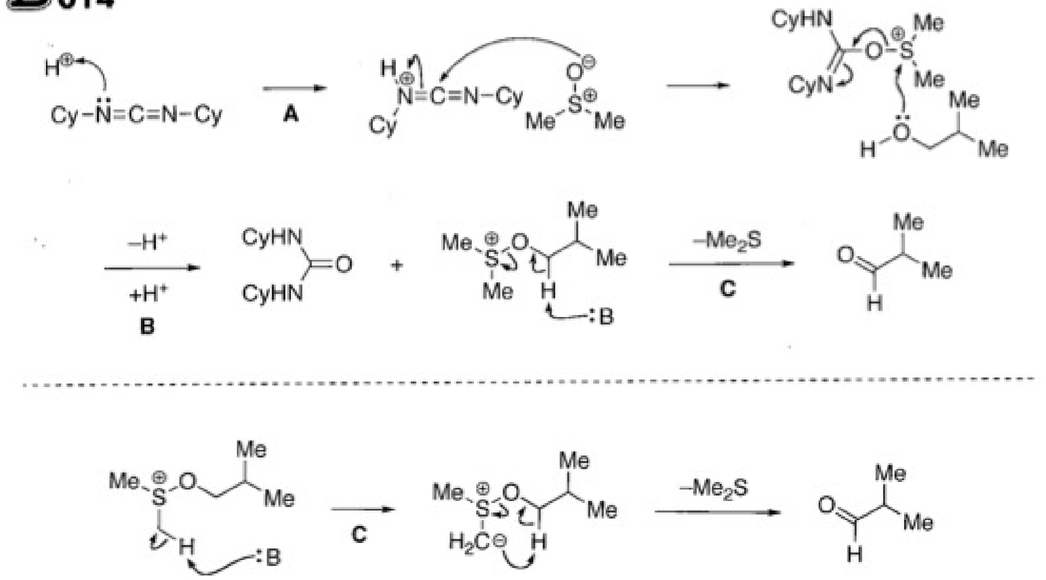
B010



Black, T. H. *Aldrichimica Acta* **1983**, *16*, 3.

A: pK_a CH_3CO_2H = 4.8, CH_3N_2 = 10.2. **B**: The S_N2 reaction occurs in a solvent cage.

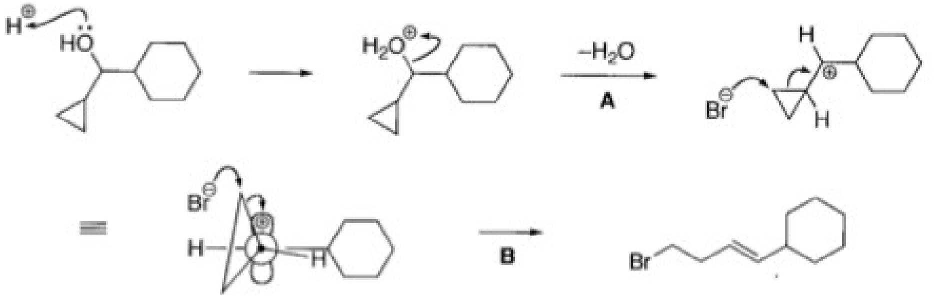
B014



Tidwell, T. T. *Org. React.* **1990**, *39*, 297.

Pfitzner-Moffatt oxidation. **A**: Activation of DCC by protonation. **B**: Nucleophilic substitution at the sulfur atom. **C**: β-Elimination of dimethyl sulfide might proceed either by 1) direct deprotonation with a base or 2) formation and collapse of a sulfur ylide.

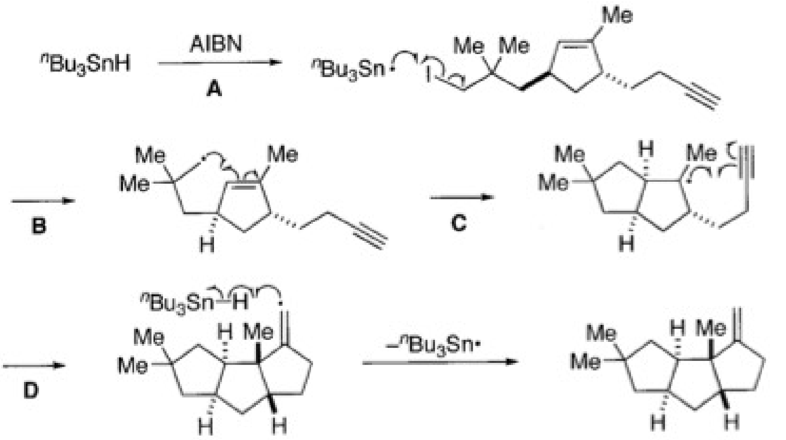
B015



Ferreri, C.; Ambrosone, M. *Syn. Commun.* **1995**, *25*, 3351.

A: Generation of a carbocation stabilized by a cyclopropyl group. **B**: Cleavage of the cyclopropane ring occurs by avoiding the steric repulsion to form the *trans*-product.

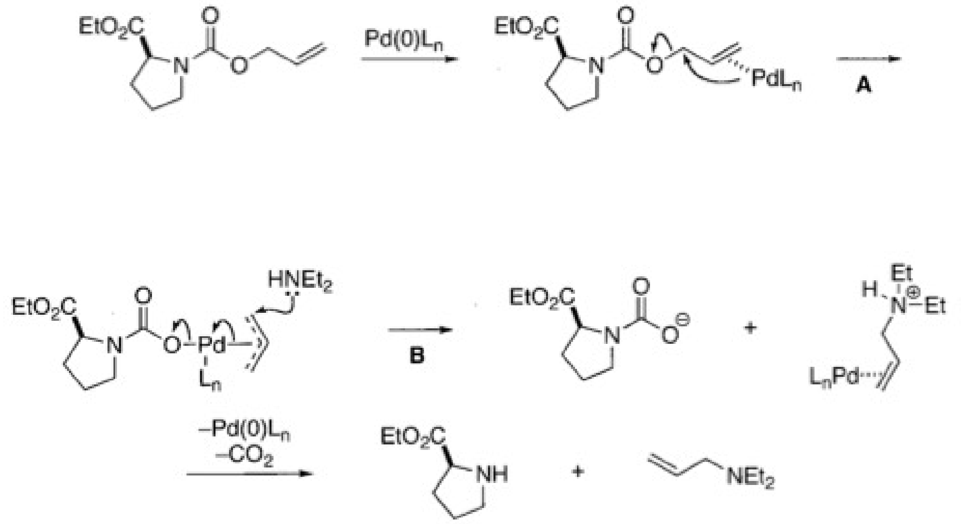
B017



Weinges, K.; Reichert, H.; Huber-Patz, U.; Irngartinger, H. *Liebigs Ann. Chem.* **1993**, 403.

A: Generation of a tin radical (ref **A050**). **B**: Attack on the iodide to initiate the radical chain reaction. **C**: 5-*exo*-trig Radical cyclization. **D**: 5-*exo*-dig Radical cyclization.

B021



Genet, J. P.; Blart, E.; Savignac, M.; Lemeune, S.; Lemaire-Audoire, S.; Bernard, J. M. *Synlett* **1993**, 680.

A: Formation of a π-allylpalladium complex. **B**: Attack of Et_2NH to the π-allylcomplex.