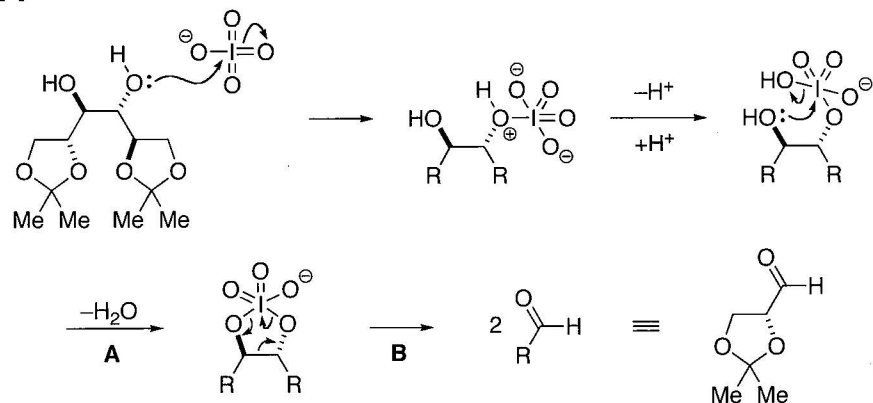


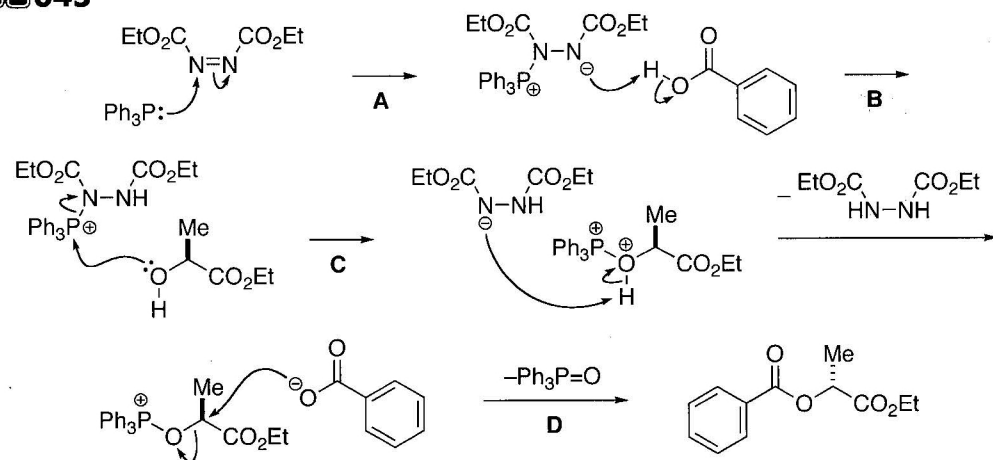
A044



Schmid, C. R.; Bryant, J. D. *Org. Synth., Coll. Vol. VIII* **1995**, 450.

A: Formation of a cyclic intermediate. **B:** Cleavage of the C-C bond to form two molecules of the aldehyde.

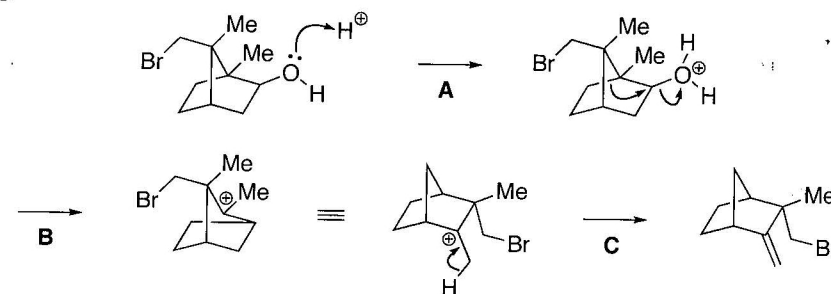
A045



Mitsunobu, O. *Synthesis* **1981**, 1.

Mitsunobu reaction. **A:** Conjugate addition of Ph_3P to DEAD to form a zwitter ion. **B:** Deprotonation of the most acidic proton in the reaction system. **C:** Attack of the alcohol to the activated reagent followed by deprotonation. **D:** Attack of the carboxylate with inversion of configuration.

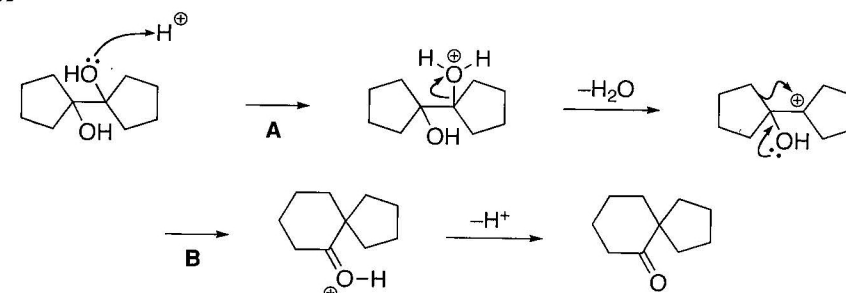
A046



Zhong, G.-F.; Schlosser, M. *Synlett* **1994**, 173.

Wagner-Meerwein rearrangement. **A:** Protonation of the alcohol. **B:** Elimination of water assisted by migration of the C-C bond to form a stable tertiary carbocation. **C:** Deprotonation to form an olefin.

A047



Walter, C. R., Jr. *J. Am. Chem. Soc.* **1952**, 74, 5185.

Pinacol rearrangement. **A:** Protonation of the alcohol followed by elimination of water to form a tertiary carbocation. **B:** 1,2-Alkyl shift helped by the oxygen lone pair of the hydroxy group.

A048

