Intramolecular Nucleopalladation/Carbonylation of Alcohol-Tethered Alkenes

Significance: Pyran and furan rings are frequently encountered in biologically relevant molecules. Variations of this reaction reported by Semmelhack and Bodurow in 1984 have been applied in numerous natural product total syntheses.

Comment: The authors demonstrated that alkene geometry and substitution patterns play a dominant role in the selectivity for the formation of five- or six-membered rings. Additionally, no 7-endo cyclizations were observed for suitable substrates.