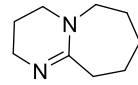
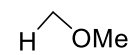


10 to 11: C-2 Base-



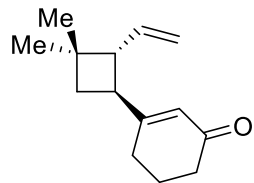
11 to ()-12: Carbonyl Protection

11 to ()-12: Methyl Orthoformate as a H₂O Scavenger

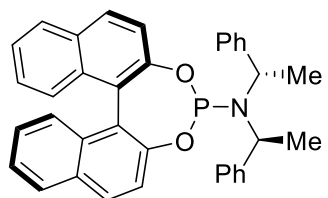
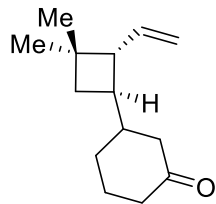


11 to ()-12: Amide Reduction

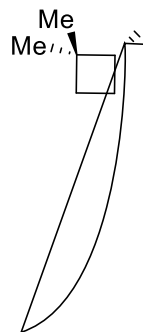


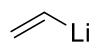


(+)-12

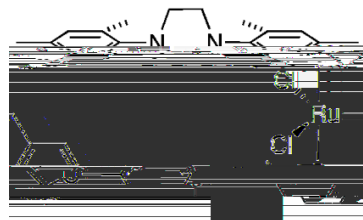
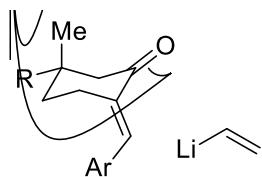


L1



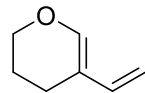
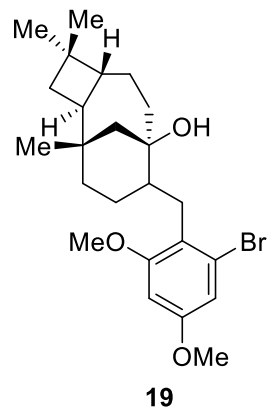


18 to 3: Ring-

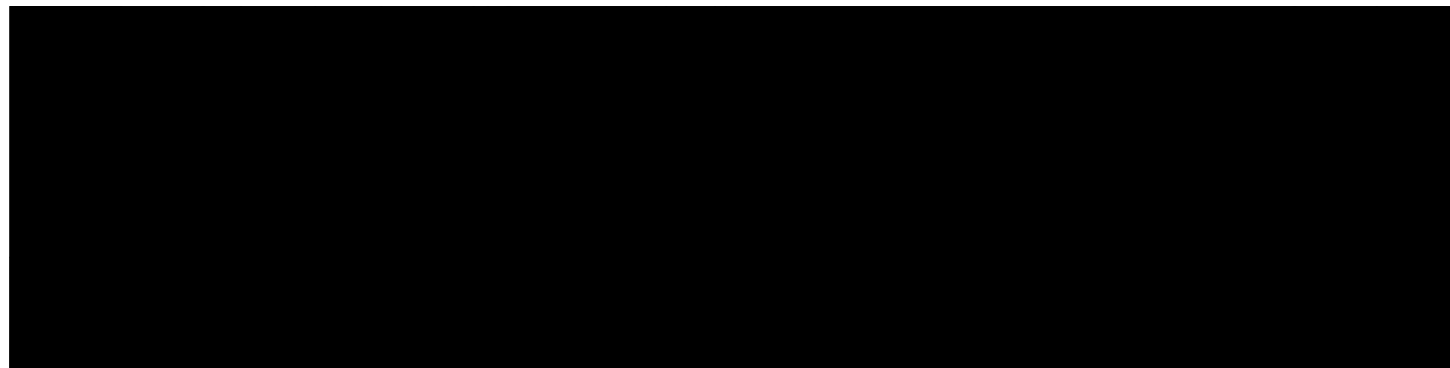


Addition of 1,4-BQ prevents olefin isomerization: Grubbs et al.

2005, , 17160.



20 to 21: Cuprate Addition





21 to 1: Demethylation





21 to 1: Rieche Formylation

