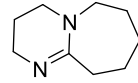


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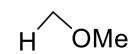
10 to 11: C-2 Base-



11 to ( )-12: Carbonyl Protection

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11 to ( )-12: Methyl Orthoformate as a H<sub>2</sub>O Scavenger

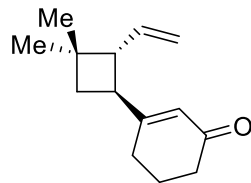


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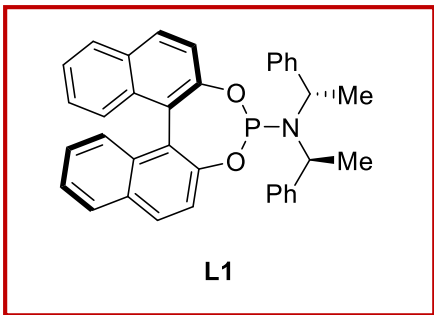
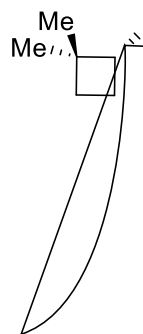
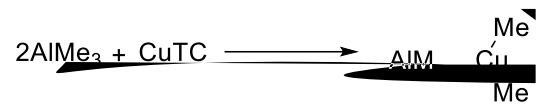
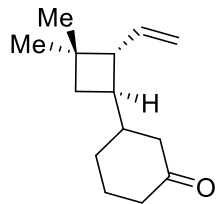
11 to ( )-12: Amide Reduction



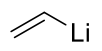




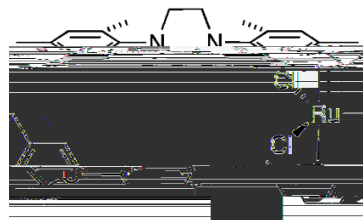
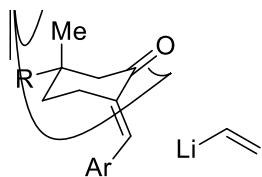
**(+)-12**







18 to 3: Ring-

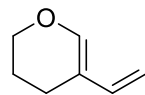
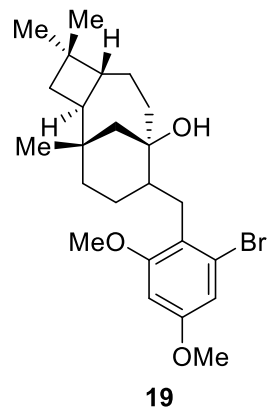


Addition of 1,4-BQ prevents olefin isomerization: Grubbs et al.

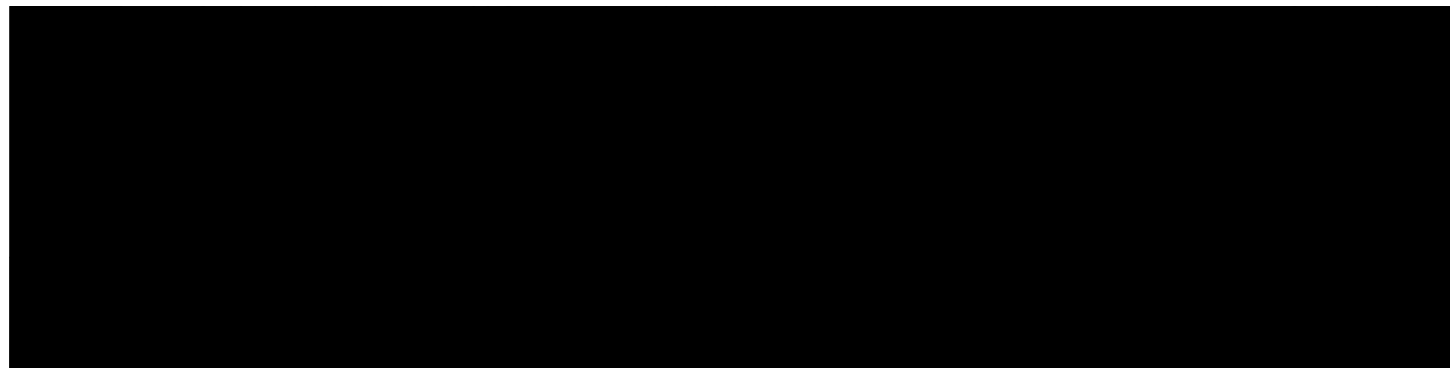
2005, , 17160.







20 to 21: Cuprate Addition





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21 to 1: Demethylation





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21 to 1: Rieche Formylation

