

Massachusetts Institute of Technology
Organic Chemistry 5.512

April 29, 2005
Prof. Rick L. Danheiser

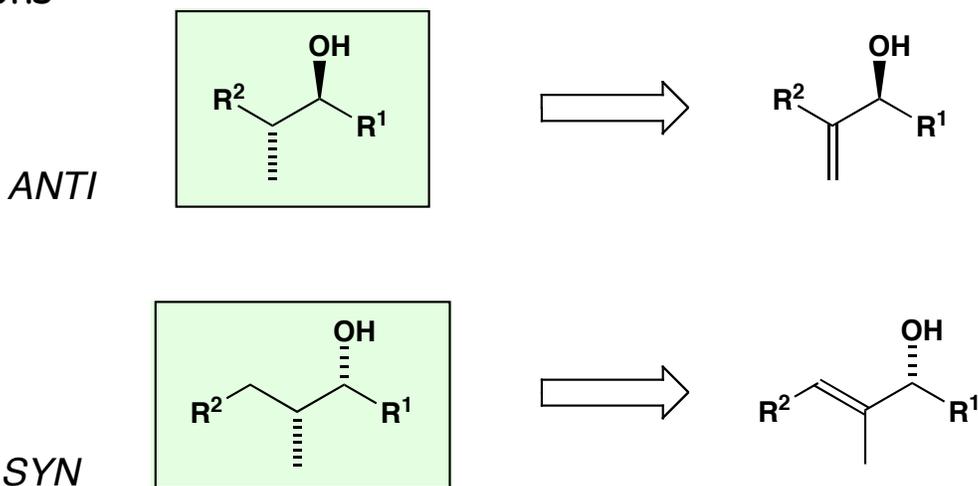
Unit 8

Stereocontrolled Reduction of Alkenes

- ★ Substrate Control: Directed Hydrogenation
- ★ Reagent Control Strategies

Substrate Control Strategies

Retrons



Reviewed in:

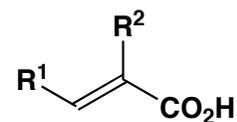
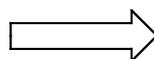
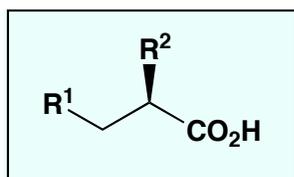
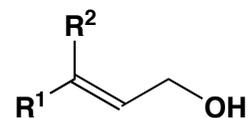
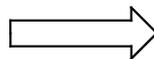
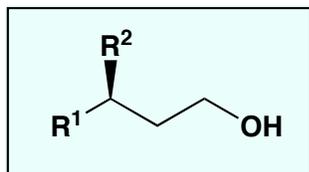
"Substrate-Directable Chemical
Reactions" Hoveyda, A.; Evans, D. A.;
Fu, G. C. *Chem. Rev.* **1993**, *93*, 1307

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Reagent Control Strategies

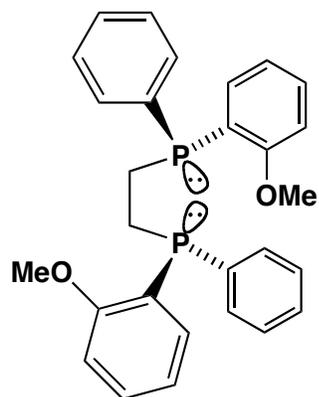
(2) Catalytic Asymmetric Hydrogenation

Representative
Retrons



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William S. Knowles



(*R,R*)-DIPAMP

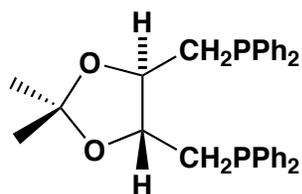
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From the Nobel Lecture
W. S. Knowles
December 8, 2001

Review on "Asymmetric Hydrogenation"

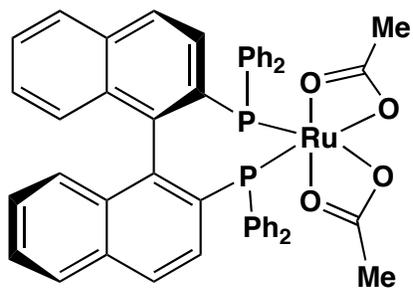
Ohkuma, T.; Kitamura, M.; Noyori, R. In *Catalytic Asymmetric Synthesis*; Ojima, I., Ed.; Wiley-VCH, 2000, pp 1-110

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(*R,R*)-DIOP

Henri Kagan



Ru[(*S*)-BINAP]

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