Enantioselective Functionalization of Internal Alkenes

Category

Metal-Catalyzed
Asymmetric
Synthesis and
Stereoselective
Reactions

Key words

antimony catalysis

allylic oxidation

hetero-ene reaction

Synfact
of the month

Selected examples:

Transformation of product:

Significance: The authors developed an enantioselective introduction of electrophilic oxidants into internal alkenes by using a hetero-ene reaction. A Lewis-acid-assisted Brønsted-acid system enables this transformation with high selectivity.

Comment: The utility of this transformation was demonstrated by the derivatization of the products to give various valuable chiral compounds. A reaction mechanism is proposed on the basis of mechanistic experiments.

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