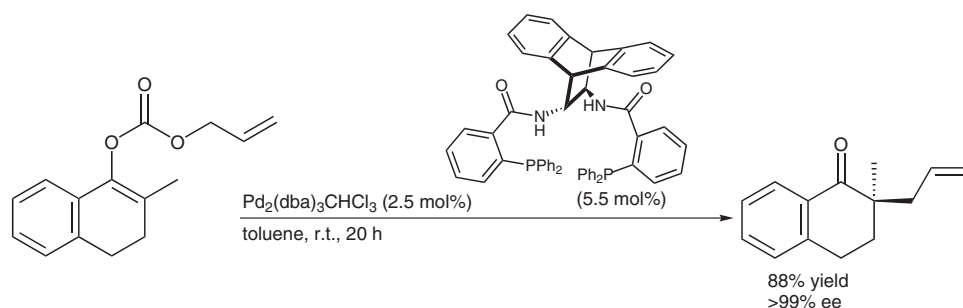


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Regio- and Enantioselective Pd-Catalyzed Allylic Alkylation of Ketones through Allyl Enol Carbonates

J. Am. Chem. Soc. **2005**, *127*, 2846-2847.

Pd-Catalyzed Allylic Alkylation of Ketones



Significance: The synthesis of α -chiral quaternary cyclohexanones has remained a challenge in organic synthesis. This report shows excellent yields with ee's over 90% for many substrates and thus is an important step for total syntheses.

Comment: Asymmetric allylation of reactive ketone enolates is a challenging issue of organic synthesis. This paper reports a method to create both tertiary and quaternary stereocenters α -to ketones, and mark an important advance in this area.

Similar results were reported last year: D. Behenna, B. M. Stoltz *J. Am. Chem. Soc.* **2004**, *126*, 15044-15055.

SYNFACTS Contributors: Hisashi Yamamoto, Matthew Boxer

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Key Words

allylic alkylation
allyl enol
carbonate
palladium