Category

Metal-Catalyzed Asymmetric Synthesis and Stereoselective Reactions

Key words

rhodium

bisphosphine ligands

2-pyridones

C. LI, M. KÄHNY, B. BREIT* (ALBERT-LUDWIGS-UNIVERSITÄT FREIBURG, GERMANY) Rhodium-Catalyzed Chemo-, Regio-, and Enantioselective Addition of 2-Pyridones to Terminal Allenes *Angew. Chem. Int. Ed.* **2014**, *53*, 13780–13784.

Enantioselective Rhodium-Catalyzed Allylation of 2-Pyridones

Significance: Enantioenriched N-substituted 2-pyridones are an important class of biologically active molecules. Their synthesis has been described starting from chiral electrophiles (Y.-Q. Fang et al. *J. Am. Chem. Soc.* **2010**, *132*, 15525) and chiral amines (Y. Yu et al. *J. Nat. Prod.* **2013**, *76*, 2226). The authors report a chiral allylation strategy beginning from 2-pyridones and allenes.

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Comment: Almost all substrates preferred N-allylation over O-allylation, except the 5-iodopyridone substrate. A 1:1 mixture of N/O-allylated products was observed in this case. Substitution on the allene component was also tolerated, including a tertiary alcohol. A decrease in N/O selectivity was observed for the substrate with a phthalamido group.