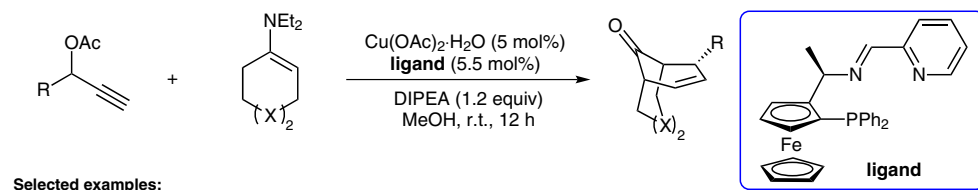


C. ZHANG, X.-H. HU, Y.-H. WANG, Z. ZHENG, J. XU, X.-P. HU* (DALIAN INSTITUTE OF CHEMICAL PHYSICS AND GRADUATE UNIVERSITY OF CHINESE ACADEMY OF SCIENCES, BEIJING, P. R. OF CHINA)

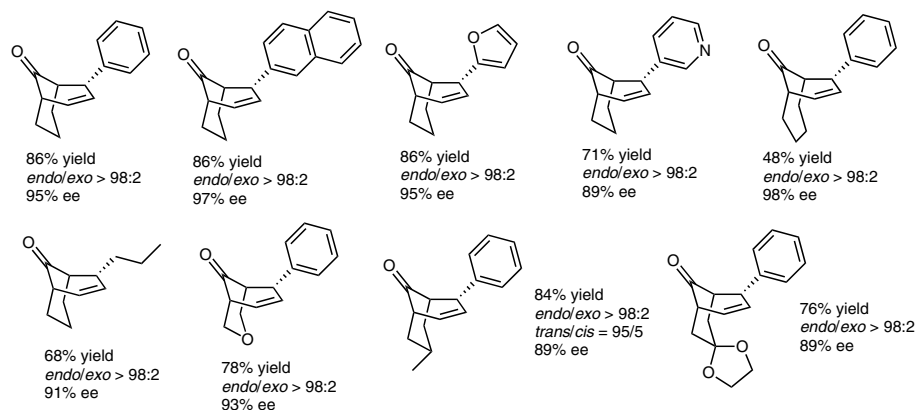
Highly Diastereo- and Enantioselective Cu-Catalyzed [3+3] Cycloaddition of Propargyl Esters with Cyclic Enamines toward Chiral Bicyclo[n.3.1] Frameworks

J. Am. Chem. Soc. **2012**, *134*, 9585–9588.

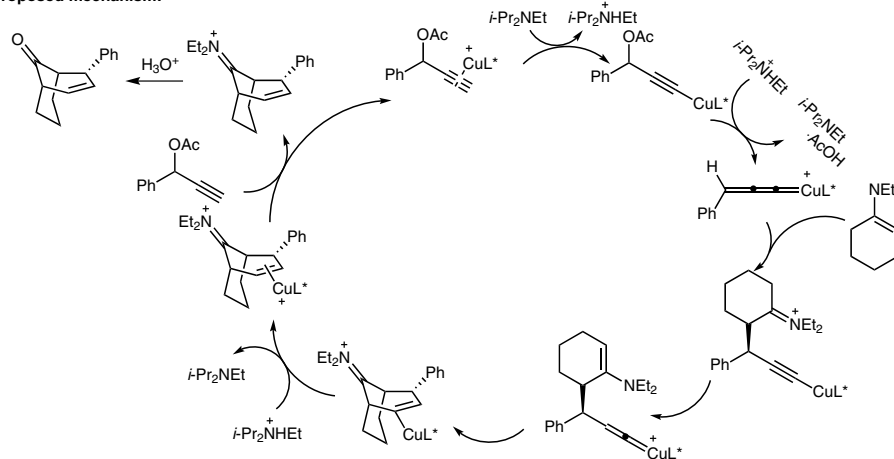
Enantioselective Cycloaddition of Propargyl Esters with Enamines



Selected examples:



Proposed mechanism:



Significance: The authors reported the first example of Cu-catalyzed asymmetric [3+3] cycloaddition of propargyl esters with cyclic enamines. The desired bicyclo[n.3.1] frameworks were obtained with high yields and stereoselectivities.

SYNFACTS Contributors: Hisashi Yamamoto, Jiajing Tan
Synfacts 2012, 8(9), 0992 Published online: 21.08.2012

DOI: 10.1055/s-0032-1317007; **Reg-No.:** H10212SF

Comment: This catalytic transformation features the utilization of copper allenylidene intermediates generated from propargyl esters as dielectrophilic C₃ synthons. Further investigations on mechanism and reaction scope are highly anticipated.