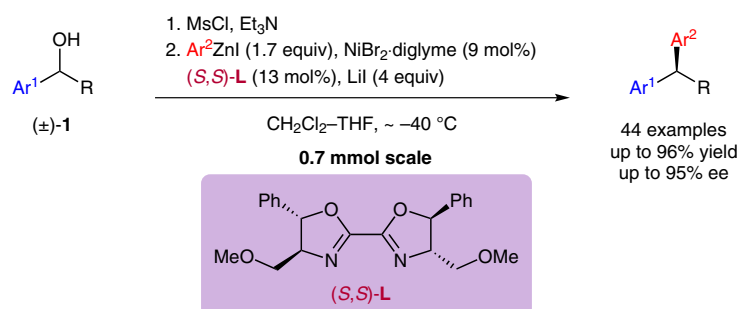


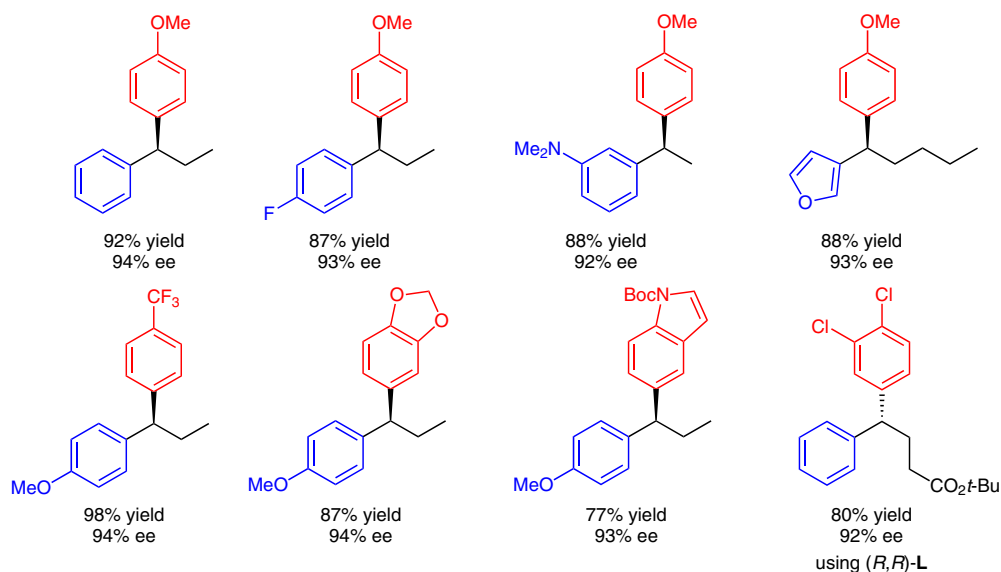
H.-Q. DO, E. R. R. CHANDRASHEKAR, G. C. FU* (CALIFORNIA INSTITUTE OF TECHNOLOGY, PASADENA AND MASSACHUSETTS INSTITUTE OF TECHNOLOGY, CAMBRIDGE, USA)

Nickel/Bis(oxazoline)-Catalyzed Asymmetric Negishi Arylations of Racemic Secondary Benzylic Electrophiles to Generate Enantioenriched 1,1-Diarylalkanes
J. Am. Chem. Soc. **2013**, *135*, 16288–16291.

Arylation of Racemic Secondary Benzylic Electrophiles by Nickel Catalysis



Selected examples:



Significance: The 1,1-diarylalkane motif is found in a number of the top-selling pharmaceuticals. Therefore, the development of stereoselective methods to access this motif is a worthwhile pursuit. The authors report a two-step stereoconvergent synthesis of 1,1-diarylalkanes starting from racemic benzylic alcohols, which proceeds in excellent yields and with excellent enantioselectivities.

Comment: A previous report by the same group disclosed a nickel-catalyzed enantioconvergent Negishi arylation of propargylic carbonates that was not applicable to the use of racemic benzylic carbonates (*J. Am. Chem. Soc.* **2012**, *134*, 2966). The current method generates a benzylic mesylate in situ. The authors propose that the lithium iodide additive transforms the mesylate into an alkyl iodide, which can then participate in the Negishi cross-coupling.

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