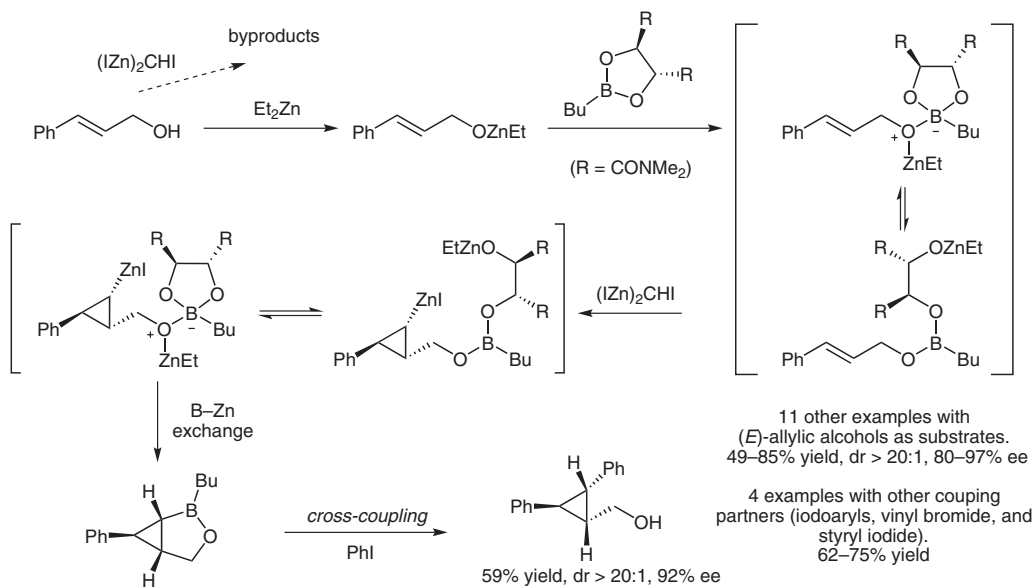
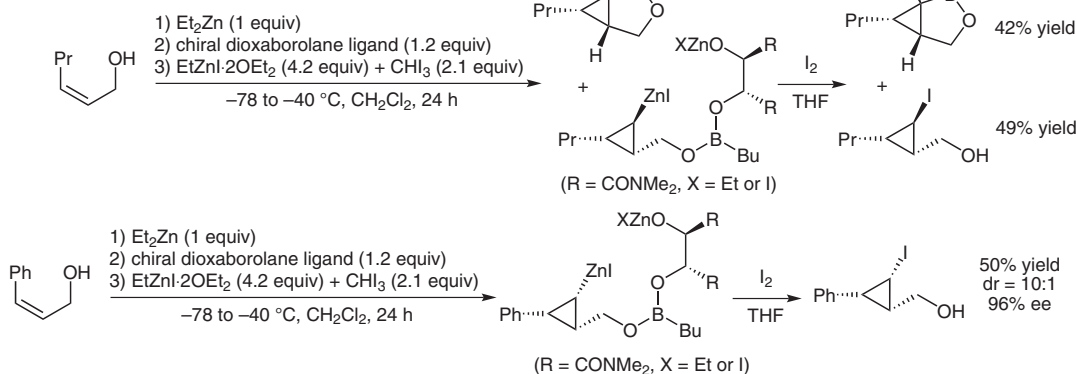


Asymmetric Cyclopropanation with *gem*-Dizinc Reagents



Reactions with (*Z*)-substrates:



Significance: Previously, the authors reported the diastereoselective cyclopropanation of allylic alcohols with *gem*-dizinc carbenoids (*J. Am. Chem. Soc.* **2005**, *127*, 13140). In this paper, they managed to obtain highly enantioenriched 1,2,3-trisubstituted cyclopropanes. In the aid of a dizinc reagent and a chiral dioxaborolane reagent the cyclopropyl boronate intermediate is generated and could be used in the following cross-couplings.

Comment: This method is a very good way to synthesize highly functionalized cyclopropane compounds. Besides the excellent enantioselectivities, it also provides high diastereoselectivities, because the boronate generated as an intermediate has to be *cis*-configured. However, for steric reasons, the diastereoselectivity of this reaction is quite low when a (*Z*)-allylic alcohol was used.