STEREOCONVERGENT SYNTHESIS OF CHIRAL ALLYLBORONATES FROM AN *E/Z* MIXTURE OF ALLYLIC ARYL ETHERS USING A 6-NHC−CU(I) CATALYST

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A chiral 6-NHC-Cu(I) complex that provides α-substituted allylboronates using allylic aryl ether substrates will be presented. Development of an asymmetric method revealed that a 6-NHC-Cu(I) complex reacts with both the *E* and *Z* isomers to provide the same absolute configuration without showing *E-Z* isomerization. This stereoconvergent reaction occurs with high yields (*av* 86%), high S_N2' selectivity (>99:1), and high ee (*av* 94%) and exhibits wide functional-group tolerance using pure *E* or *Z* isomer or E/Z alkene mixtures. This methodology was extended in the synthesis of *syn*- and *anti*-β-substituted allylboronates in a high diastereoselectivity..