Palladium-Catalyzed Anti-Markovnikov Hydroalkylation of Homoallylic Alcohols

Significance: Lin and Qing report a mild and convenient protocol for the anti-Markovnikov hydroalkylation of β,β-difluorinated homoallylic alcohols. The palladium-catalyzed reaction with alkylzinc reagents furnishes the products in good to excellent yields.

Comment: The reported protocol affords a wide range of synthetically useful gem-difluorinated compounds with good functional-group compatibility. Moreover, the results show that the transposition of CH2 into CF2 at the allylic position of homoallylic alcohols can modify the electronic and steric environment of the alkene.