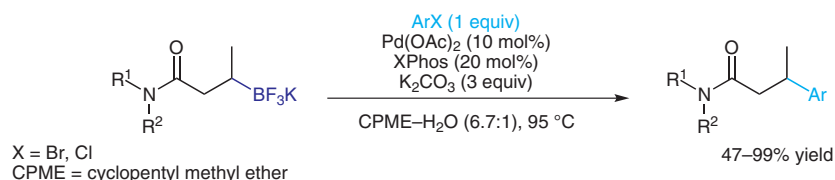
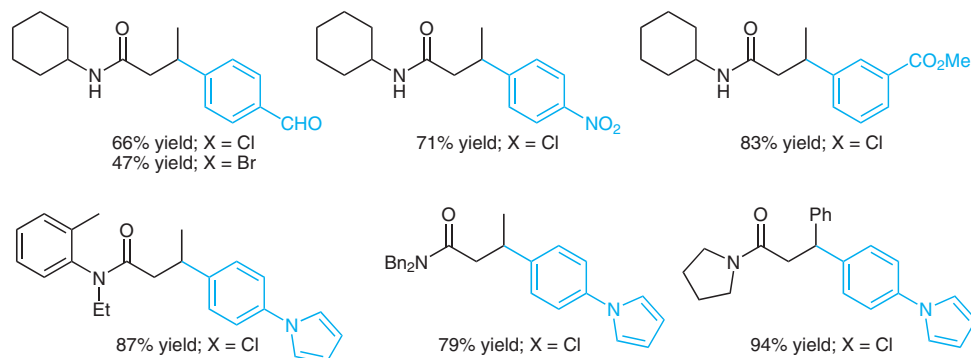


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 Stereospecific Cross-Coupling of Secondary Alkyl β -Trifluoroboratoamides
J. Am. Chem. Soc. **2010**, *132*, 17108–17110.

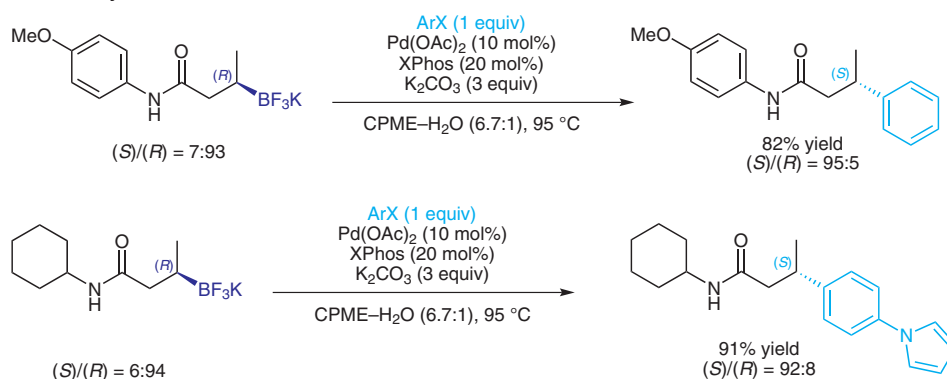
Stereospecific Cross-Coupling of Secondary Alkyl Trifluoroborates



Selected examples:



Stereochemistry:



Significance: The cross-coupling of β -trifluoroboratoamides was shown to proceed with high selectivity. Thereby, the carbonyl group of the amide moiety serves as a hemilabile ligand inhibiting the undesired β -H-elimination pathway.

Comment: This remarkable cross-coupling of enantioenriched nonbenzylic secondary alkyl boron compounds with aryl halides was shown to proceed stereospecifically with inversion of configuration. This stereochemical outcome is attributed to an intramolecular coordination of the carbonyl group to the boron.

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