



Borylation, Silylation, Fluorination and Fluoroalkylation

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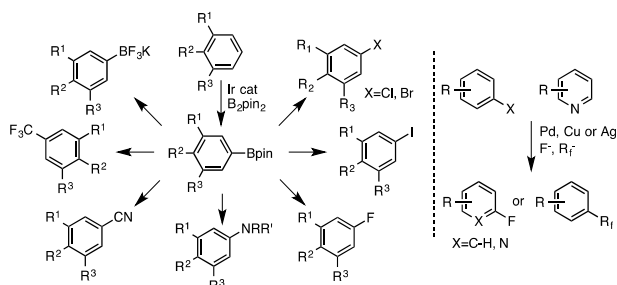
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Abstract Speech

This lecture will present a combination of methodology and underlying principles addressing the functionalization of C-H bonds of arenes and alkanes with main group reagents and the fluorination and fluoroalkylation of arenes, heteroarenes, and organic halides. The development of reactions that regioselectively convert aromatic and aliphatic C-H bonds to aryl and alkyl borane and silane derivatives will be presented, along with reactions of these main group species to form a series of functionalized products. The development of reactions of aryl and heteroaryl halides that form fluoroarenes and fluoroalkylarenes also will be presented. The relationships between C-B, C-Si, C-F and C-R_f bond-forming processes will be discussed.



REFERENCES

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