

Suzuki-Miyaura cross coupling reaction: Recent advancements in catalysis and organic synthesis

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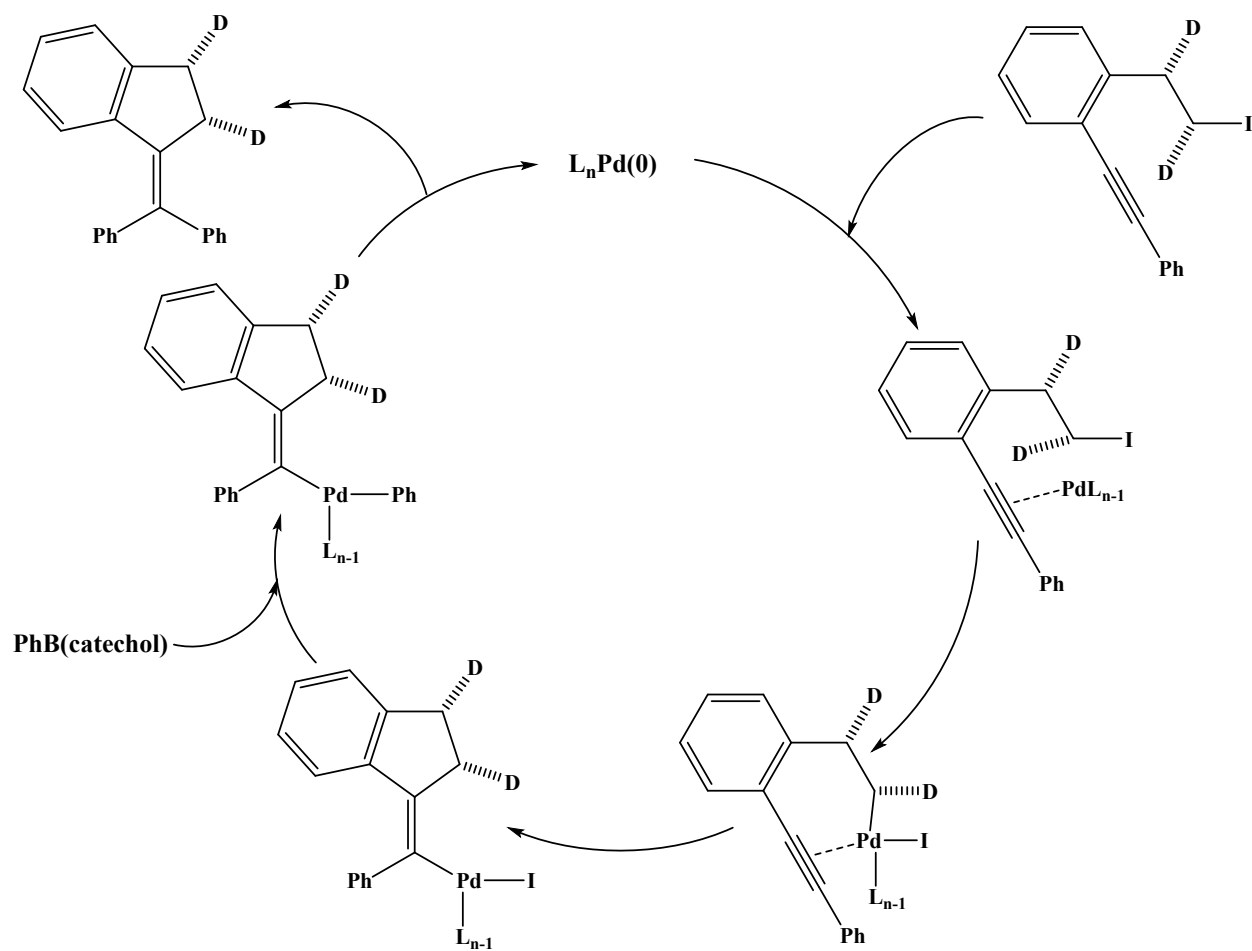
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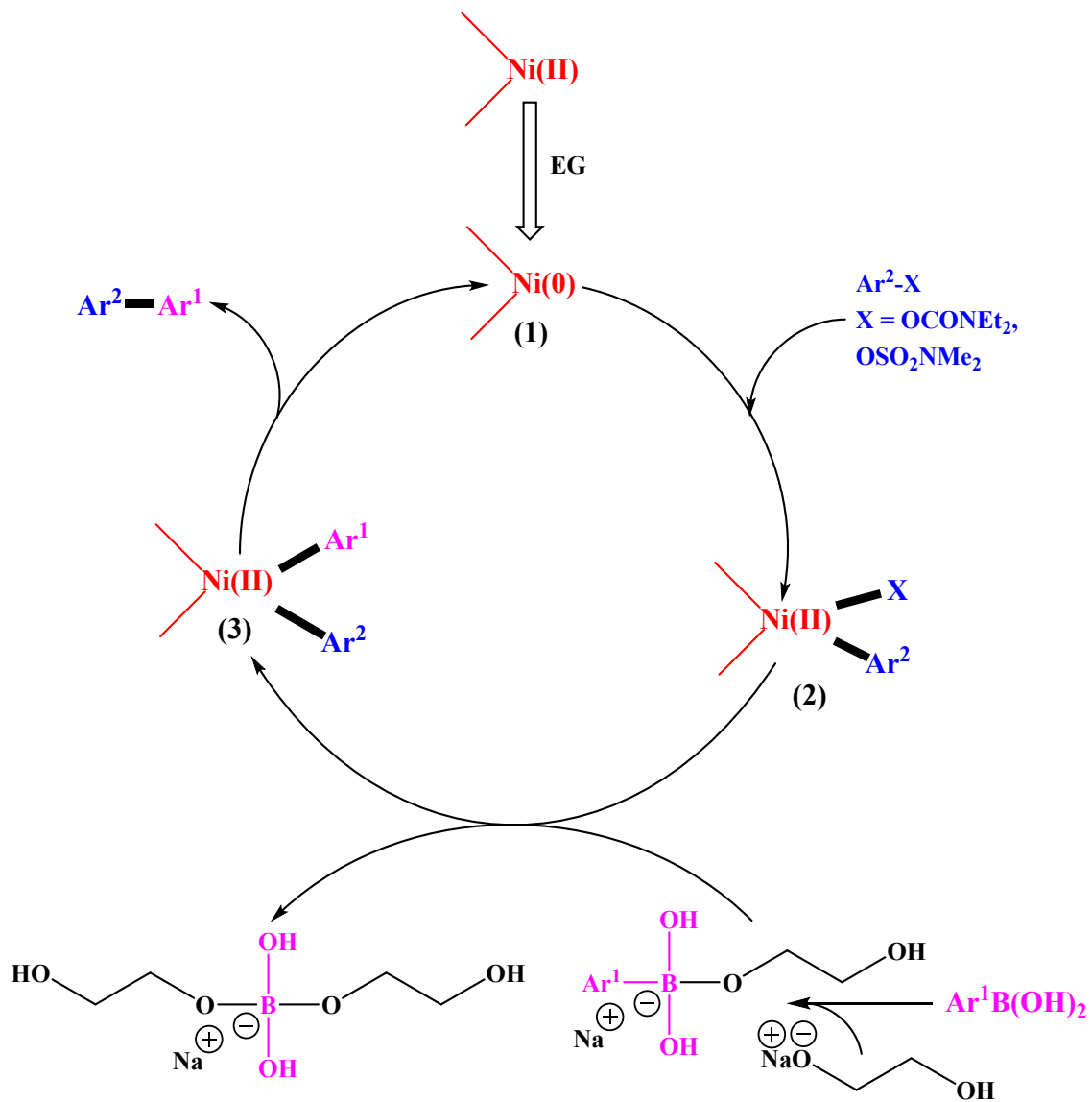
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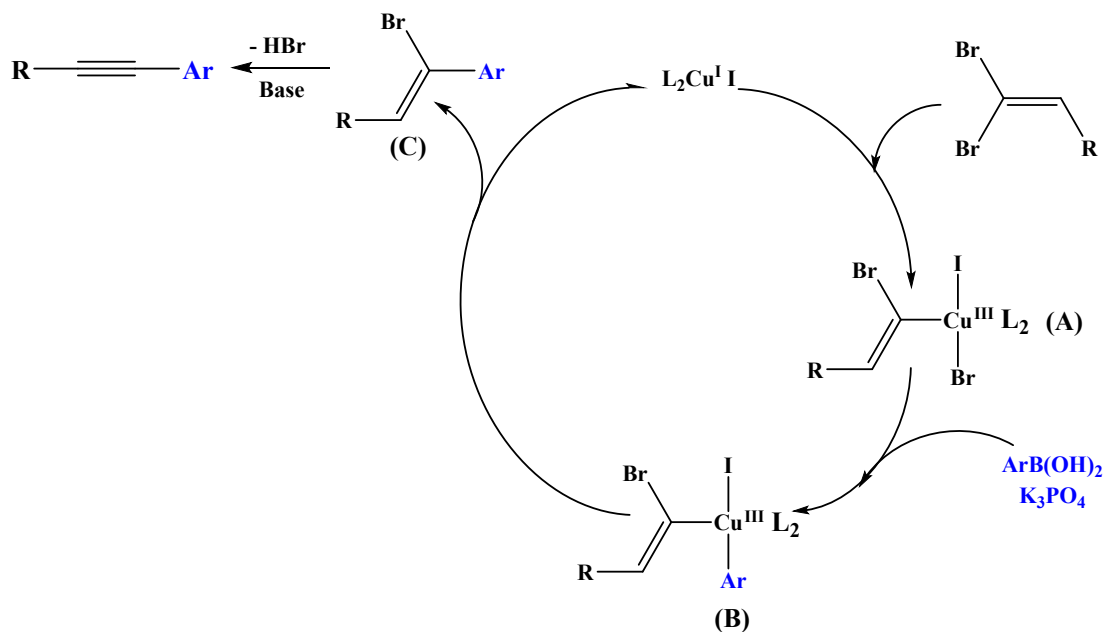
Scheme S1: Putative catalytic cycles for the alkyne/Suzuki Reaction. Reprinted (adapted) with permission from Ref. 1.



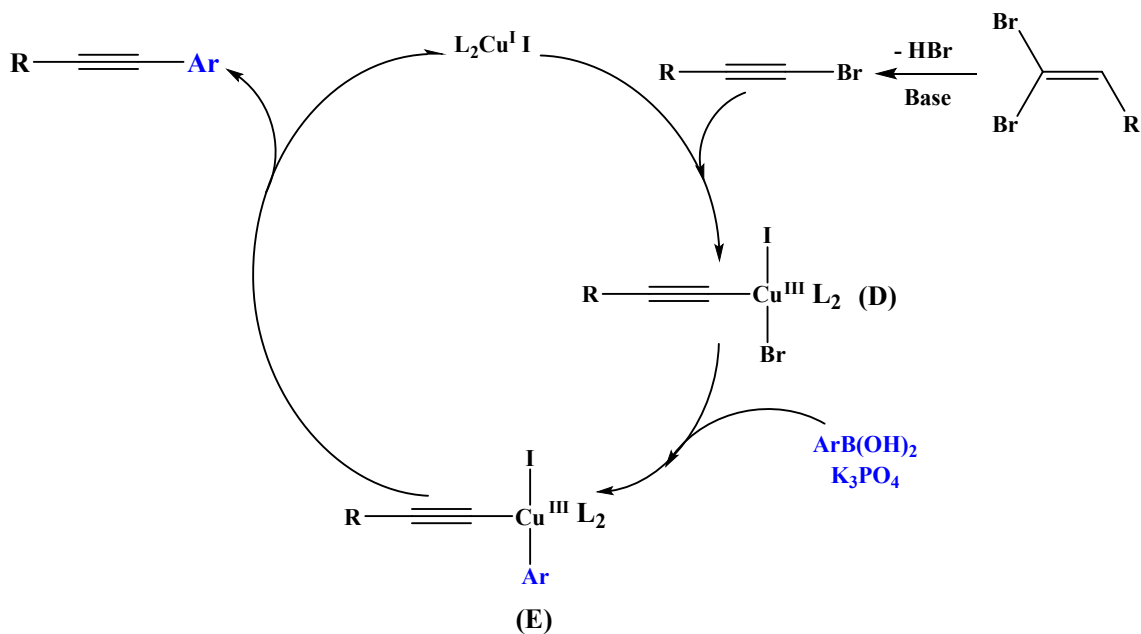
Scheme S2: Proposed Mechanism of Suzuki–Miyaura CrossCoupling of Aryl Carbamates and Aryl Sulfamates. Reprinted (adapted) with permission from Ref. 2.



Scheme S3: Proposed mechanisms for CuI catalyzed cross-coupling of organoboronic acids with 1,1-dibromo-1-alkenes. Reprinted (adapted) with permission from Ref. 3.

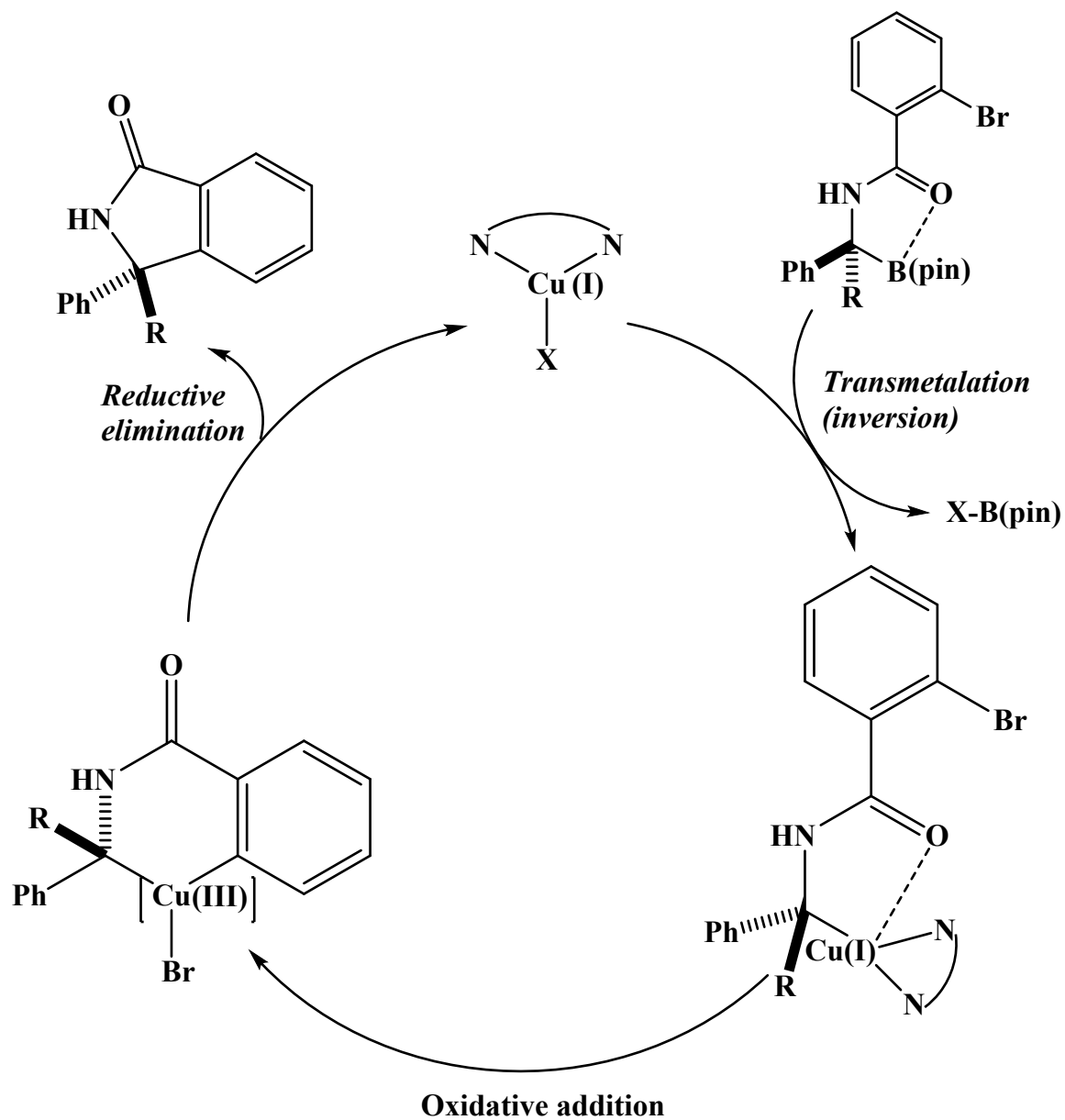


Mechanism I

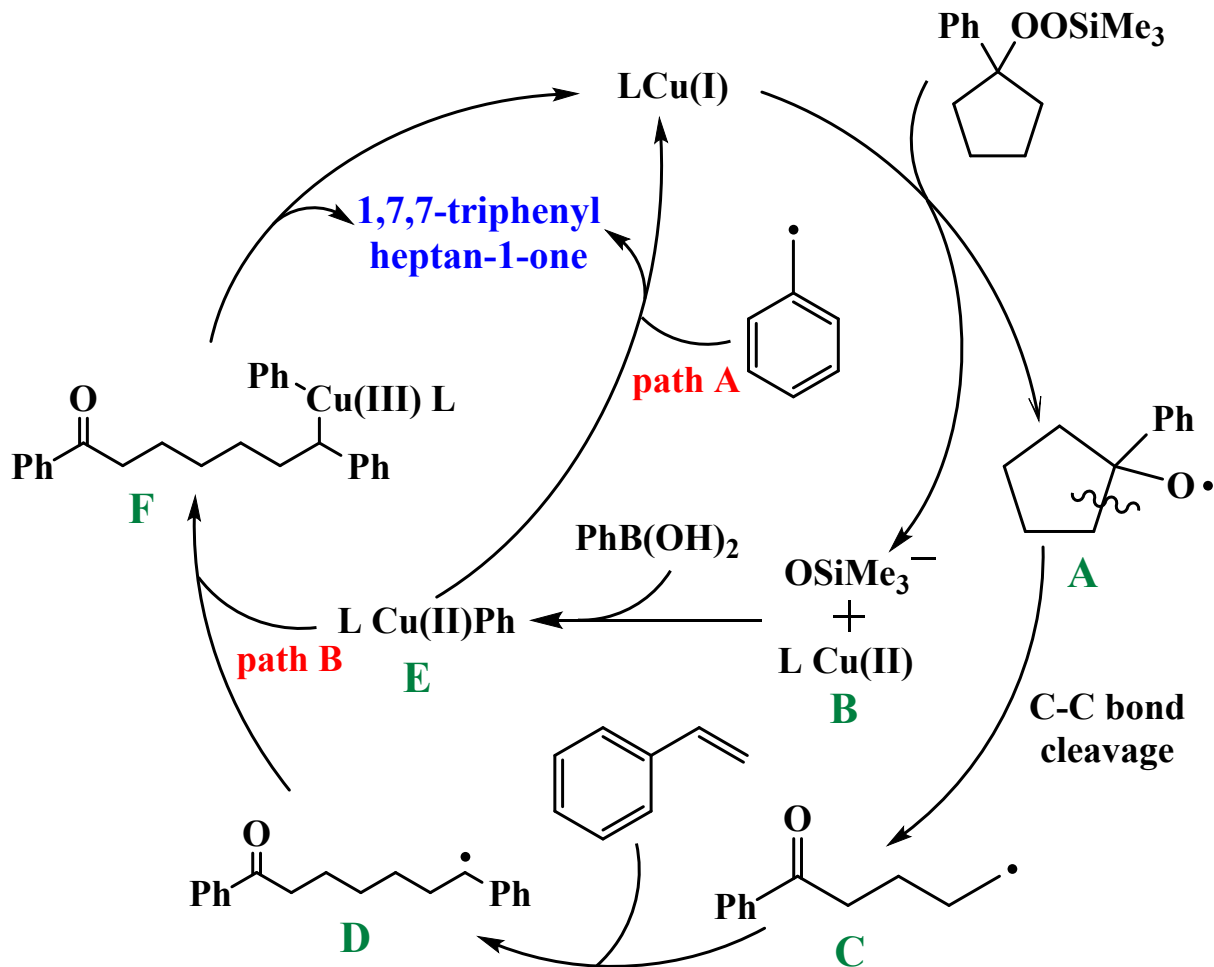


Mechanism II

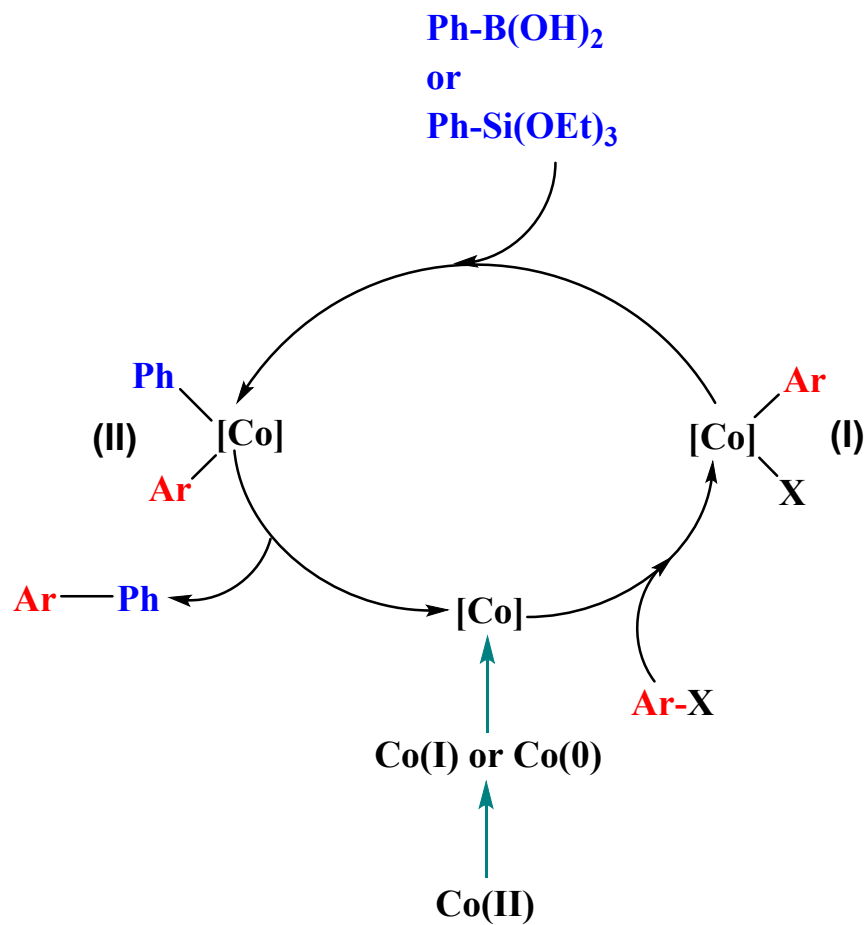
Scheme S4: Plausible mechanism for the synthesis of isoindolinones. Reprinted (adapted) with permission from Ref. 4.



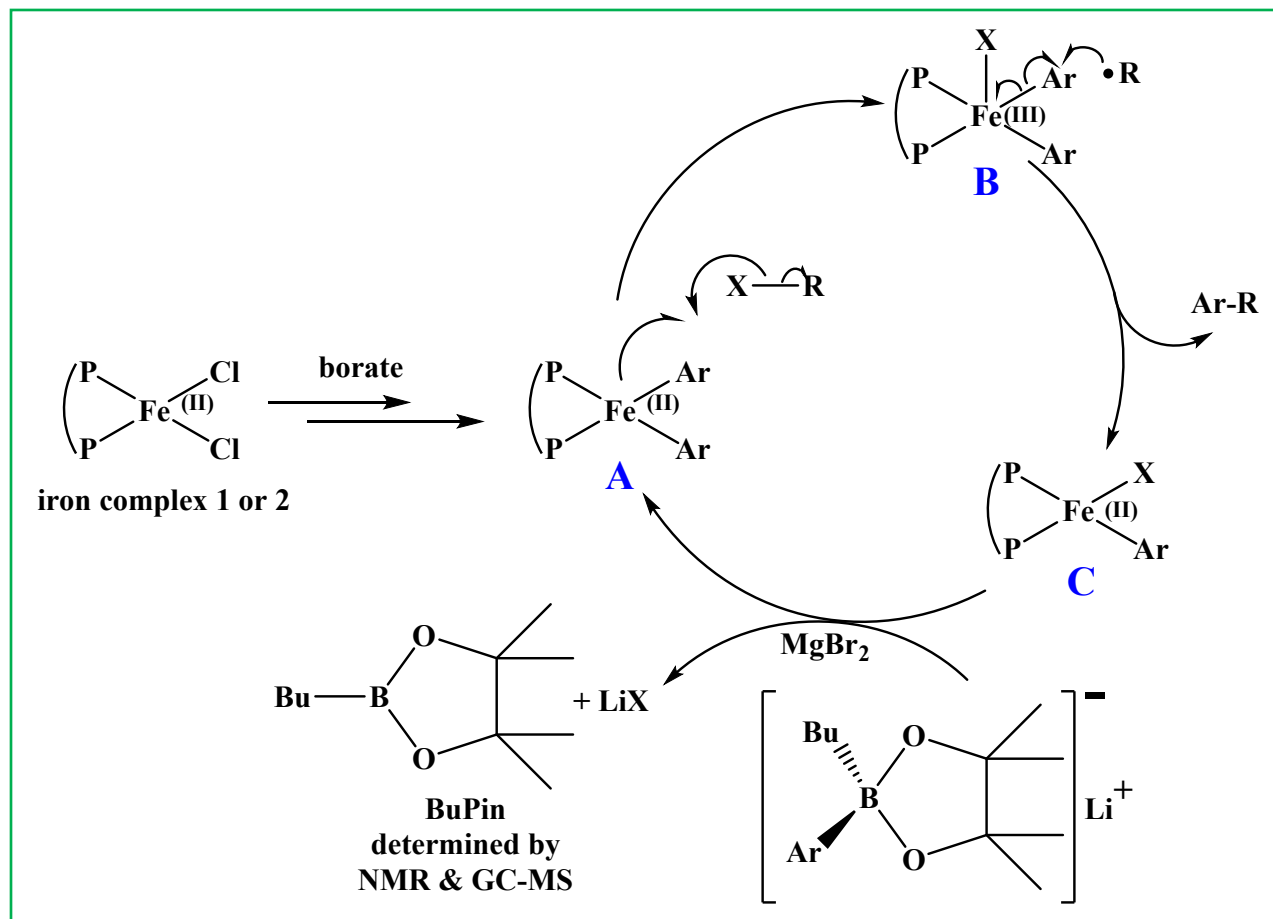
Scheme S5: Plausible mechanism for alkylarylation of vinylarenes with arylboronic acids and cycloalkylsilyl peroxides. Reprinted (adapted) with permission from Ref. 5.



Scheme S6: Plausible mechanism for Co catalyzed SMCR of aryl halide and phenylboronic acid, Reprinted (adapted) with permission from Ref. 6.



Scheme S7: Iron(II) chloride-diphosphine complex catalyzed SMCR of lithium arylborates react and primary and secondary alkyl halides, Reprinted (adapted) with permission from Ref. 7.



References:

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