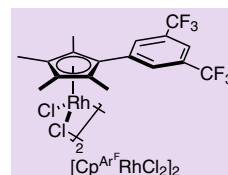
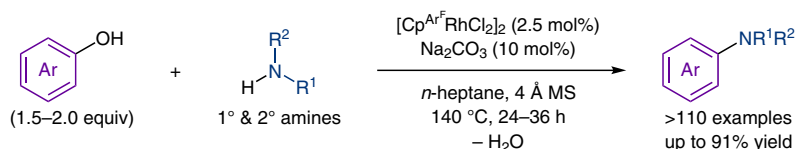


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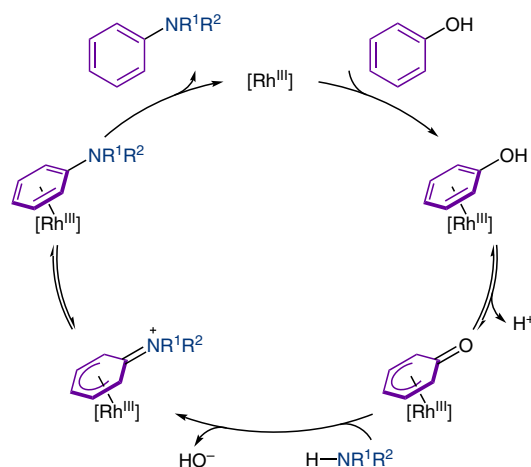
Catalytic Amination of Phenols with Amines

*J. Am. Chem. Soc.* **2022**, *144*, 1144–1151, DOI: 10.1021/jacs.1c12622.

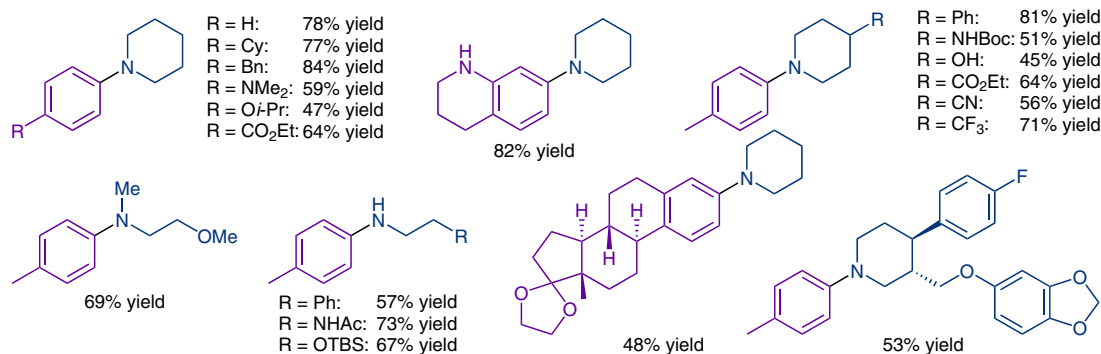
# The Direct Coupling of Phenols and Amines under Rhodium Catalysis



Proposed mechanism:



Selected examples:



**Significance:** A redox-neutral strategy for the dehydrative coupling of phenols and amines enabled by a dimeric cyclopentadienyl rhodium(III) complex is disclosed. The reaction proceeds under mild conditions, releasing water as the sole by-product. This method is also applicable to late-stage functionalization.

**Comment:** Starting from readily available primary or secondary amines and phenols, this transformation provides access to a wide range of valuable anilines in good yields. Mechanistic experiments support a keto–enol tautomerization of phenol as the key step, facilitated by  $\eta^6$ -coordination of the aryl ring by the rhodium complex.

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