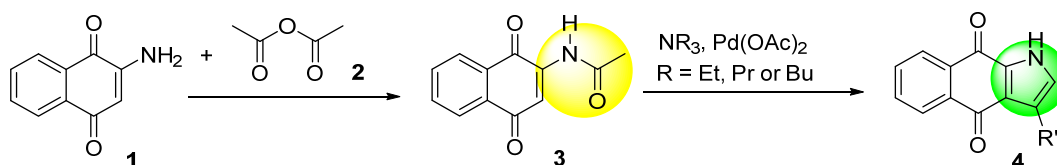


AMIDO-GROUPS AS REMOVABLE DIRECTING GROUPS IN PALLADIUM CATALYZED CARBON-HYDROGEN BOND FUNCTIONALIZATION OF BENZOQUINONE DERIVATIVES

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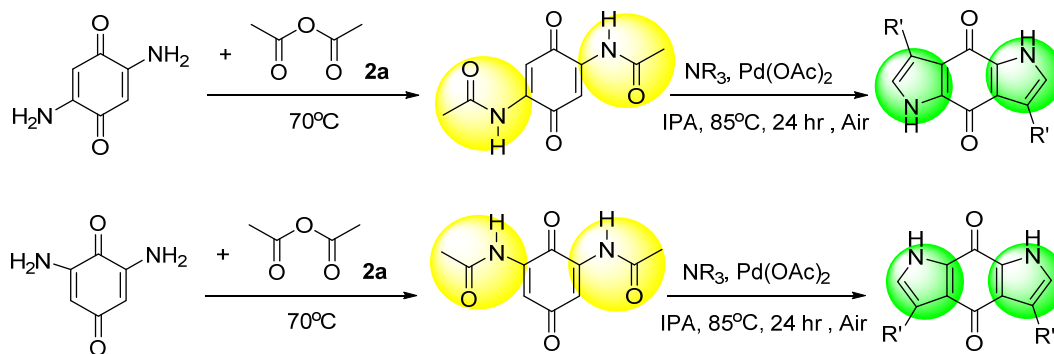
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Our previous works have revealed a new and interesting pathway for the making of pyrrole ring in the product, **4**, from the reaction of **3** with tertiary amines (Scheme 1).^[1] The presence of amido-substituent in **3** as directing group is crucial to the formation of **4**. Another crucial factor is the application of tertiary amine, which acts as a reactant and base as well.



Scheme 1. The formation of pyrrole ring in the product, **4**, via palladium-catalyzed reaction of **3**

Cyclization on both sides of the di-substituted benzoquinone is expected as shown below (Scheme 2). More works and interesting results will be presented.



Scheme 2

[1] (a) Chen, S.-W.; Hong, F.-E, *ChemistrySelect*, **2017**, 2, 10232-10238; (b) You, Q.; Zhang, X. *Org. Lett.* **2015**, 17, 3410-3413.