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Tetrahedron Letters

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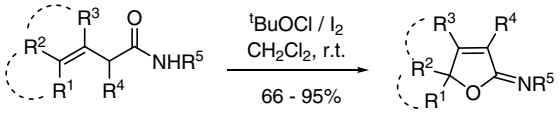
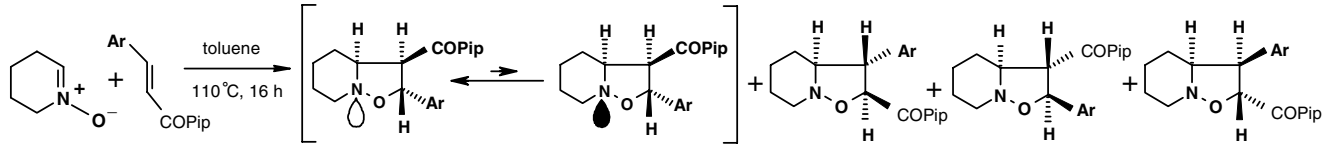
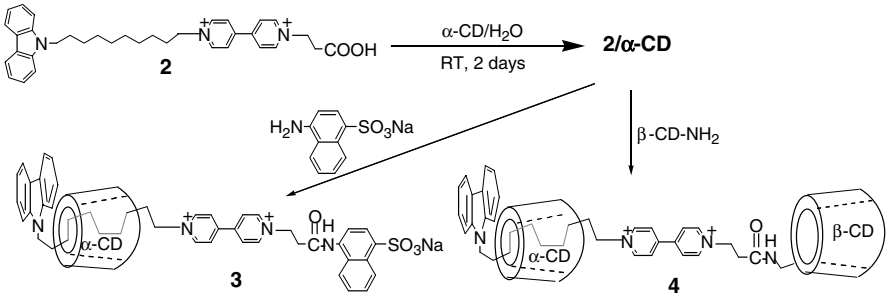
Contents

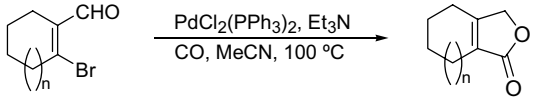
COMMUNICATIONS

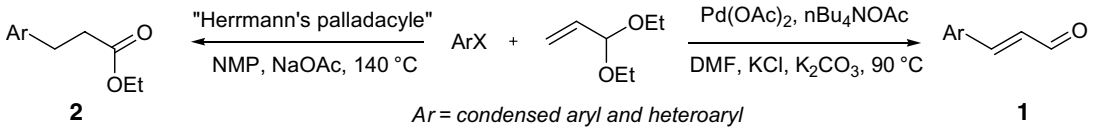


5-Endo cyclization of β,γ-unsaturated amides afforded conjugated iminolactones rather than the usual β-iodolactones.

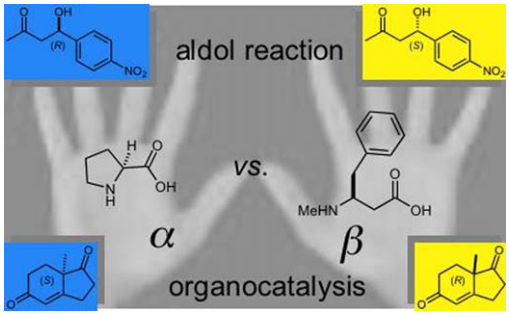


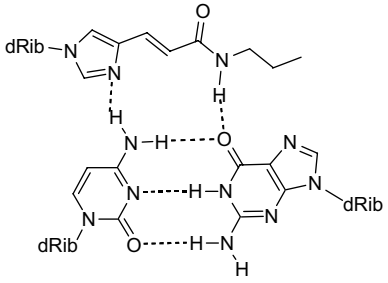


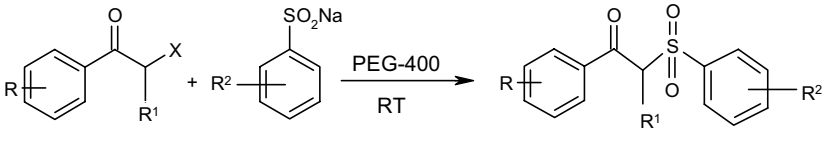




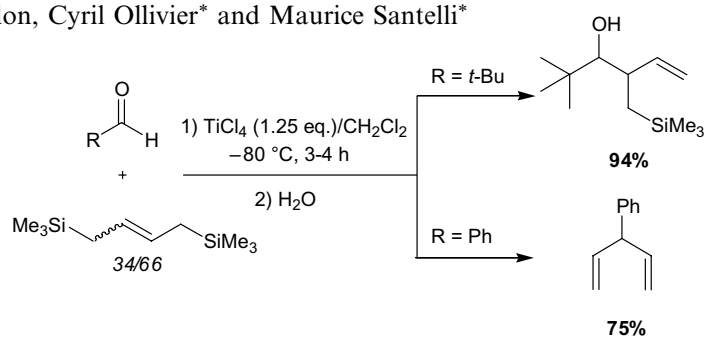
2 *Ar = condensed aryl and heteroaryl* **1**

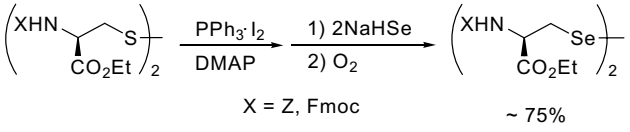


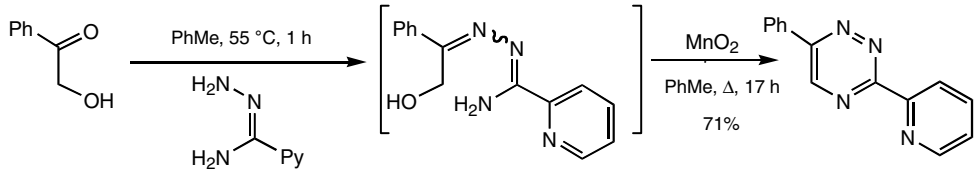


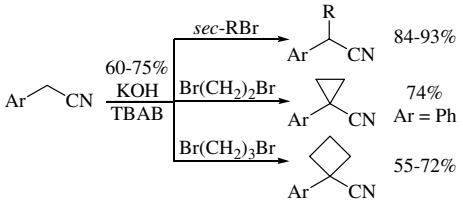


X = Cl, Br

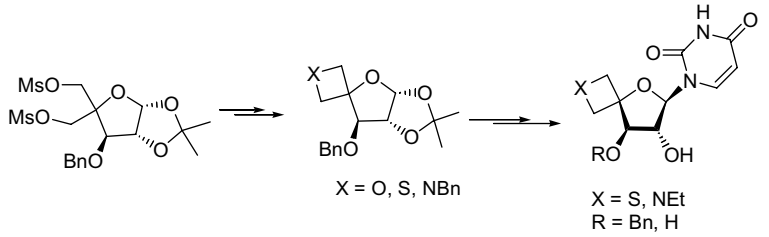


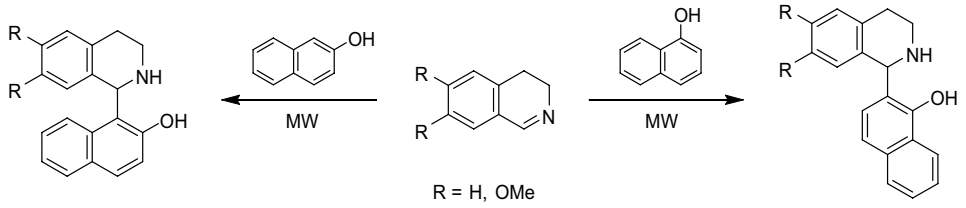


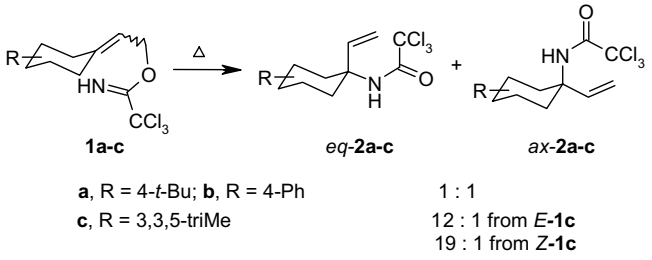


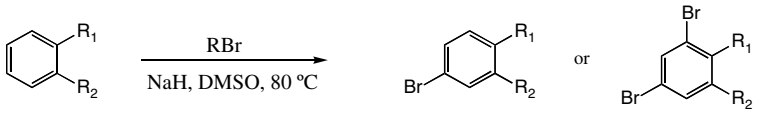


Phase transfer alkylations of phenylacetonitrile and its derivatives with the secondary bromides, 1,2-dibromoethane and 1,3-dibromopropane carried out in the presence of 60–75% aqueous KOH, instead of the typical 50% NaOH, provide substantial improvements to the overall yield and purity of products.

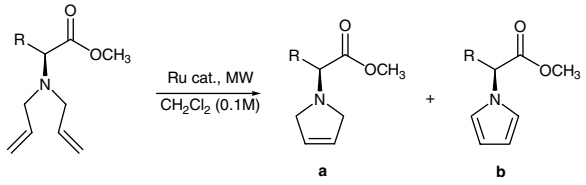


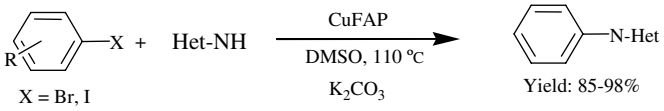


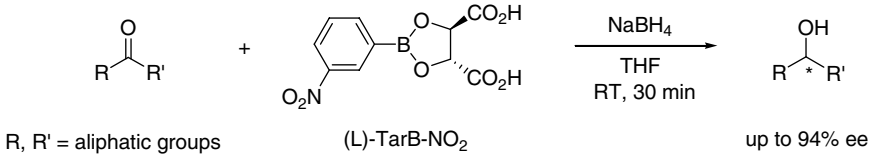


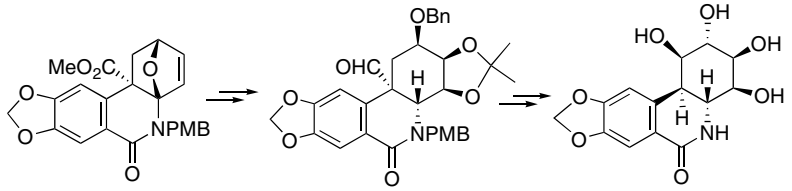


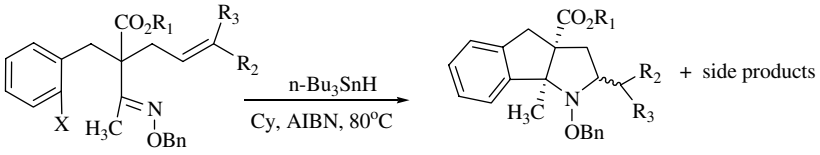
Aromatic bromination on various aromatic systems with different substitutions was performed in the presence of alkyl bromide and sodium hydride in DMSO. Mono-bromination on a wide range of substrates was achieved by selecting proper alkyl bromides and controlling its amount. Further bromination could happen with more active alkyl bromides and additional amount of bromides and sodium hydride. The yields ranged from moderate to excellent. In addition, reaction mechanism was postulated to explain our observations.





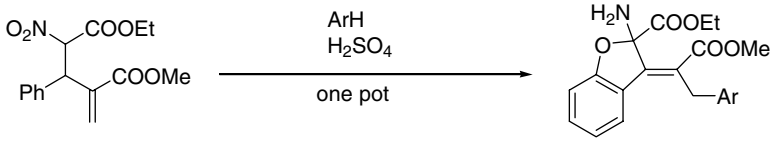


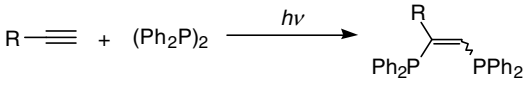


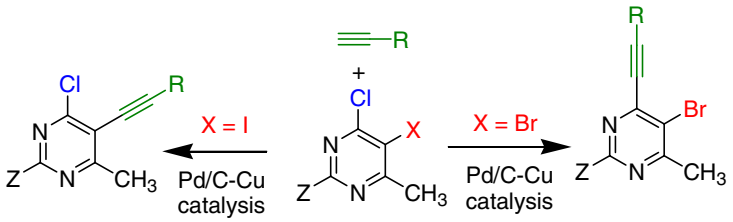


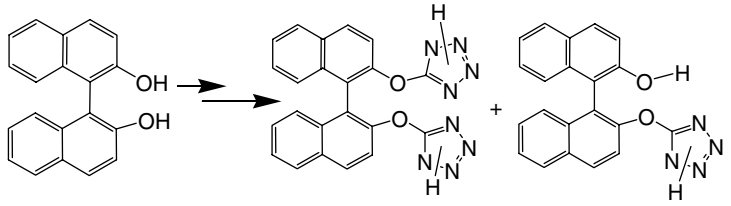
2 **5a -5f**

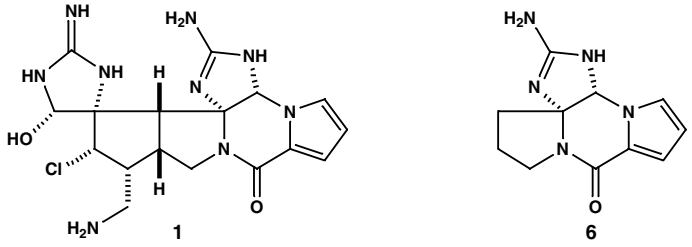
X = Br, $\mathbf{R_1}$ = Et: **2a** $R_2 = CO_2Me$, R_3 = H; **2b** R_2= CN; R_3 = H; **2d** R_2 = Ph; R_3 = H; **2e**; $R_1 = R_2$ = Me; **2f** $R_2 = R_3$ = H **X** = I, R_1 = Me: **2c** R_2 = Ph, R_3 = H

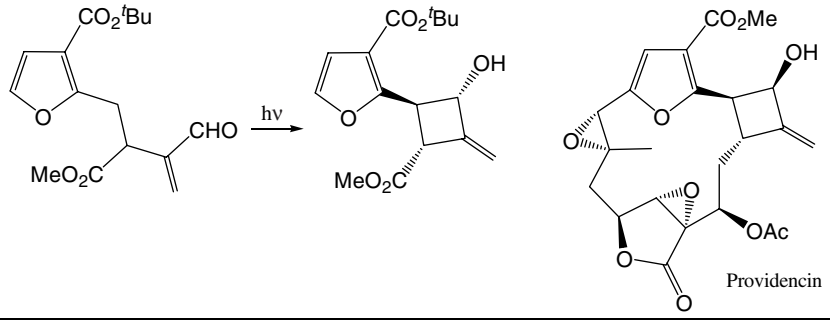


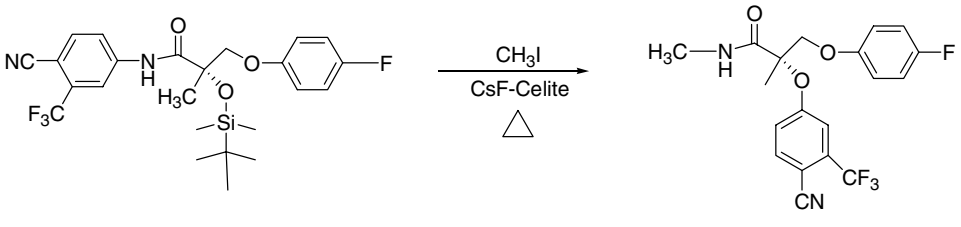




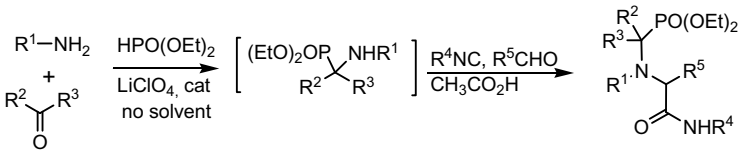




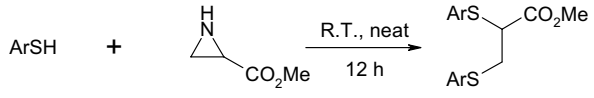


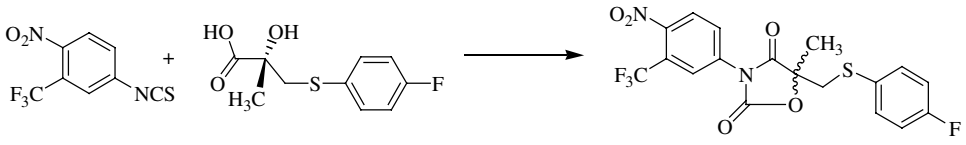


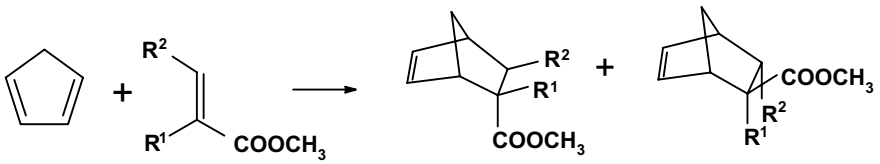
A novel 1,4-N→O migration of disubstituted phenyl ring in the presence of CsF and TBAF was observed.



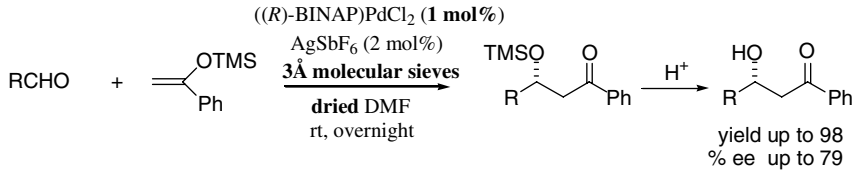
A one-pot preparation of amidophosphonates via a new Mannich/Ugi two-step procedure under solvent free conditions.







The *endo*/*exo* ratio for a simple Diels–Alder reaction carried out in water has been used to argue that hydrophobic effects can dominate the geometries of the transition states.



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*Corresponding author
ⓘ+ Supplementary data available via ScienceDirect

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