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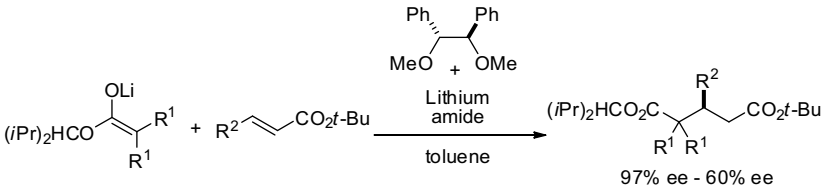
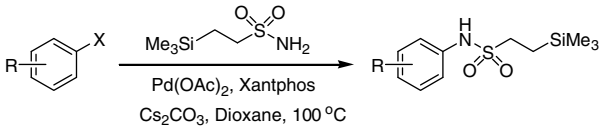
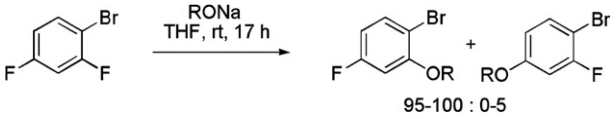
Contents

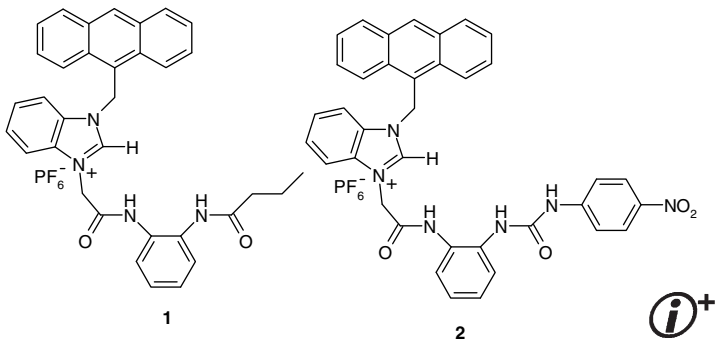
COMMUNICATIONS

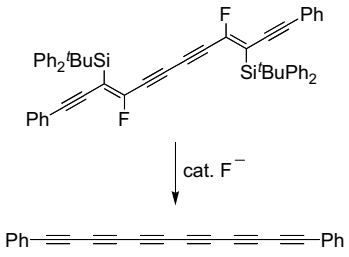


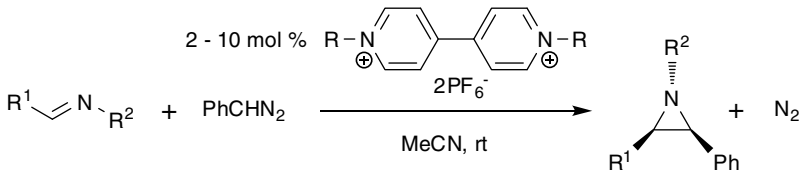


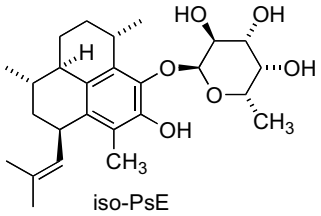


Two *ortho*-phenylenediamine-based new receptors **1** and **2** with an anthracene-coupled benzimidazolium motif have been designed and synthesized. The directed hydrogen bonds and charge–charge interactions allowed the open clefts of both **1** and **2** to bind carboxylate, fluoride and dihydrogenphosphate anions with moderate binding constant values. The binding cleft of **2** is found to be more effective than that of **1**.

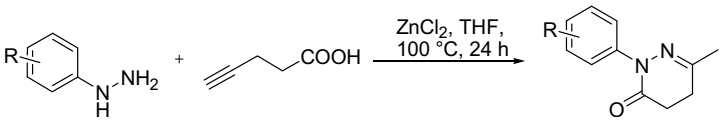




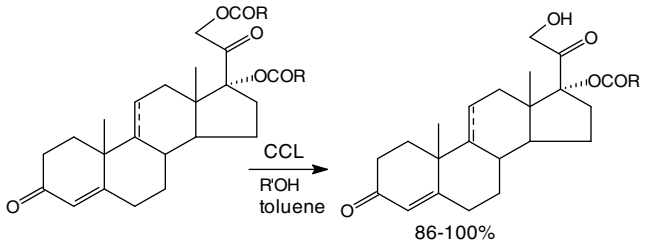


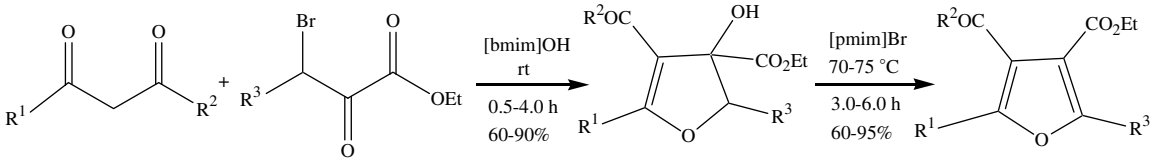


A new anti-inflammatory agent, called *iso*-PsE, is described.

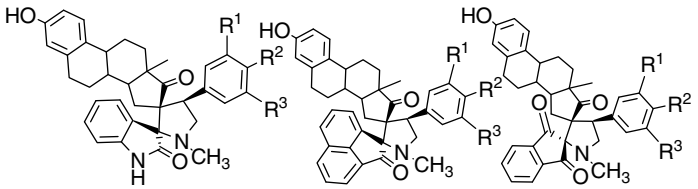


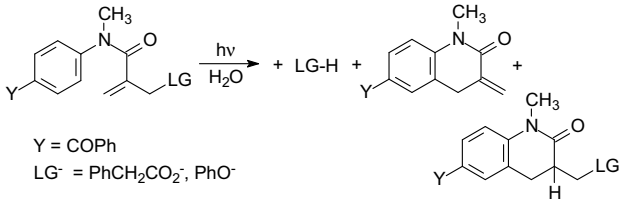
The hydrohydrazination of 4-pentynoic acid in the presence of zinc chloride gave access to different aryl-substituted 4,5-dihydro-3-pyridazinones in good yields.



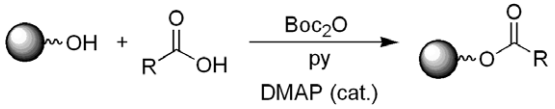


R^1 = CH_3, Et, Ph, Pr^n, etc. R^2 = CH_3, OCH_3, OEt
R^3 = H, Bu^n, CO_2Et





Y = COPh
LG^- = $PhCH_2CO_2^-$, PhO^-



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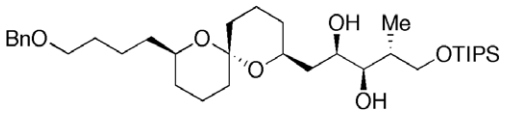
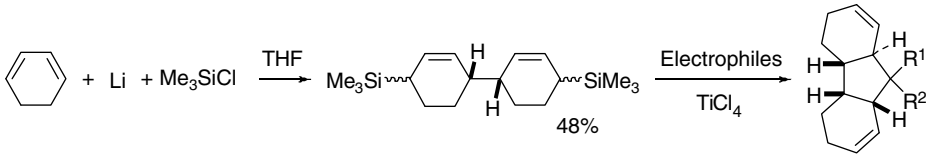
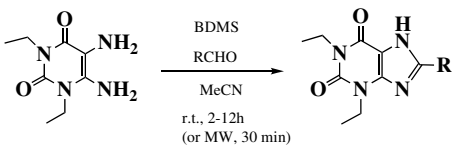
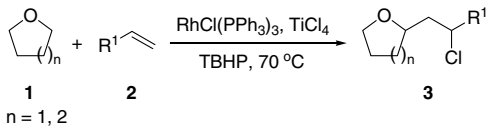


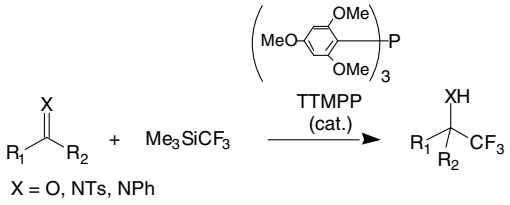




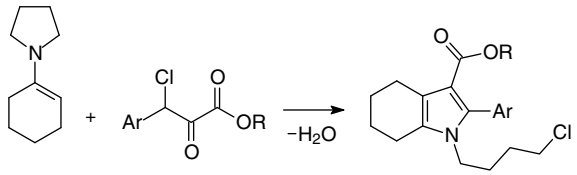
A one-pot route to 8-substituted xanthines has been developed from 5,6-diaminouracils and carboxaldehydes. The process, promoted by (bromodimethyl)sulfonium bromide, is mild and efficient and eliminates the need for oxidants. Yields are good and the process applicable to a range of substrates including a family of A_{2A} adenosine receptor antagonists. Preparation of a new analog of the antagonist KW-6002 is presented.

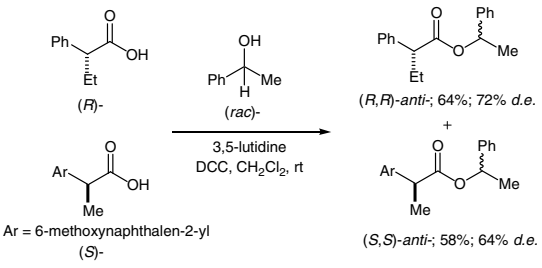


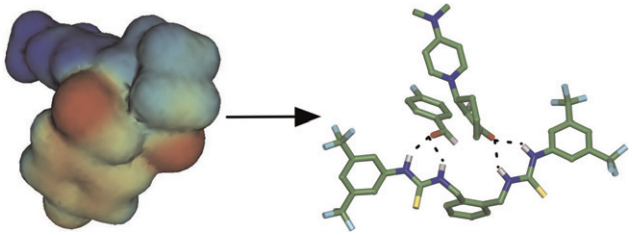
A novel coupling reaction between tetrahydrofuran and olefins is discovered, in which the consecutive C–C and C–Cl bond-forming process takes place via Rh-catalyzed/Lewis acid-promoted C–H activation. This reaction could be developed into a straightforward and effect method for rapid access to 2-(2-chloro-2-arylethyl)-tetrahydrofuran compounds.

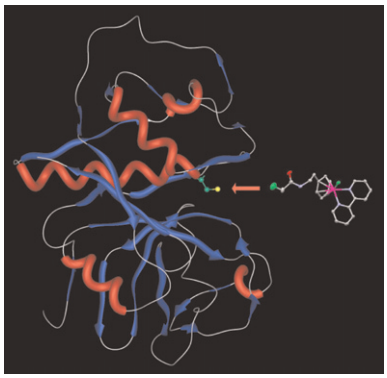


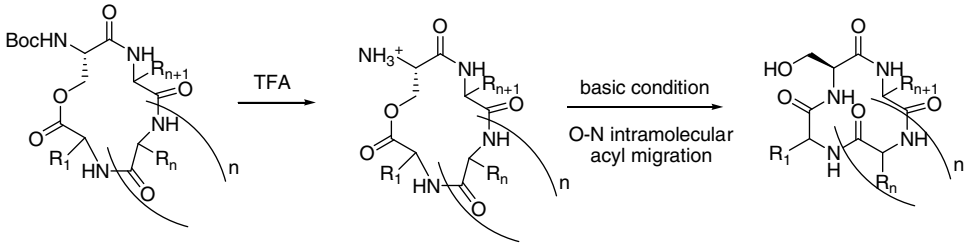
A highly basic phosphine, tris(2,4,6-trimethoxy phenyl)phosphine (TTMPP), catalyzes trifruoro-methylation using trifluoromethyltrimethylsilane to give the corresponding alcohols and amines in good to high yield.











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Supplementary data available via ScienceDirect

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