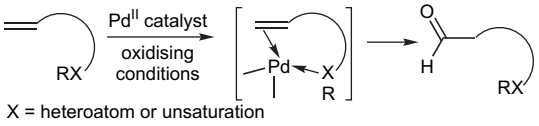
ELSEVIER

Tetrahedron

Tetrahedron Vol. 63, No. 32, 2007

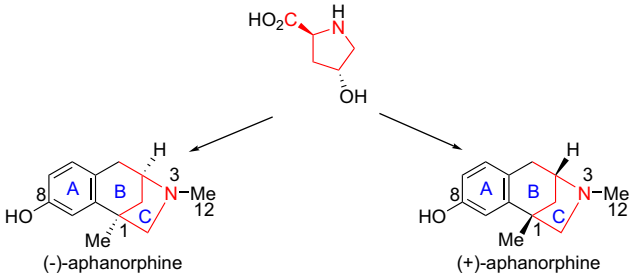
Contents

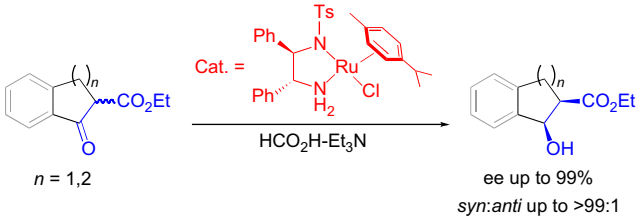
REPORT

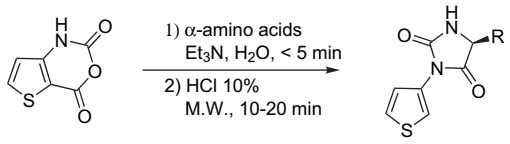


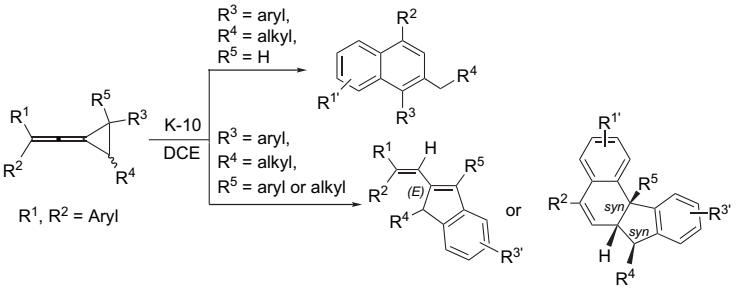
Most Pd procedures require chelation of the Pd atom by the substrate to afford selective anti-Markovnikov oxidation.

ARTICLES

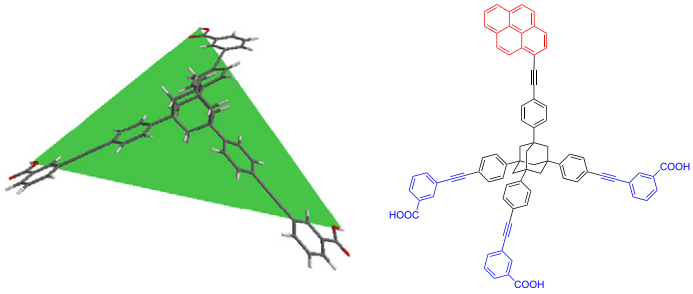




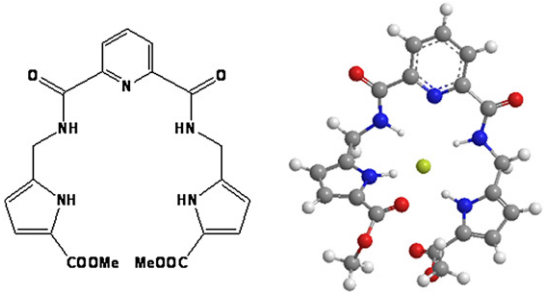


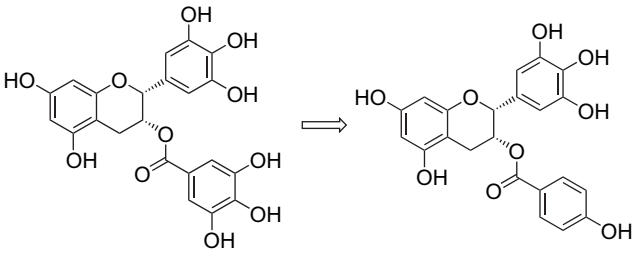


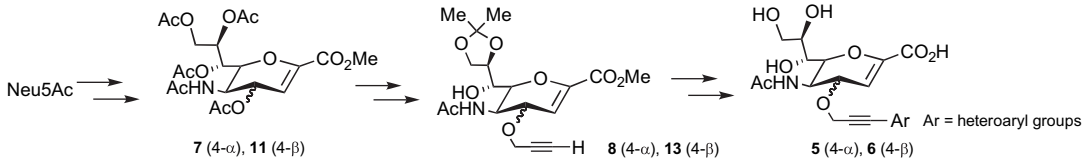
A series of naphthalene, indene, and 6a*H*-benzo[*c*]fluorene derivatives are synthesized by intramolecular rearrangement of vinylidenecyclopropanes using montmorillonite K-10 under mild reaction conditions in good to excellent yields.

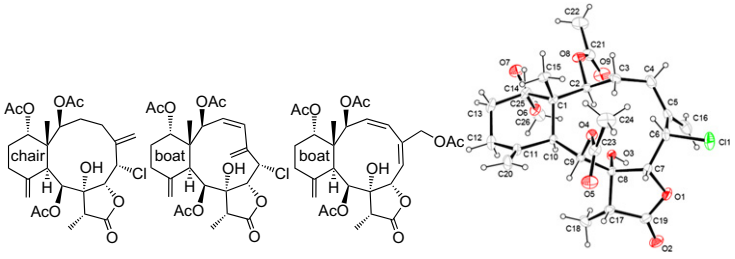


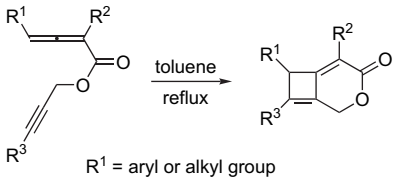
A new series of acyclic receptors (**1**–**4**) were designed for their far-ranging application in anion recognition. The experimental results indicated that these receptors formed 1:1 complexes with anionic guests through multi-hydrogen bonds. Interestingly, receptor **1** turns out to be a very good anion receptor with remarkably high preference in binding fluoride anion.

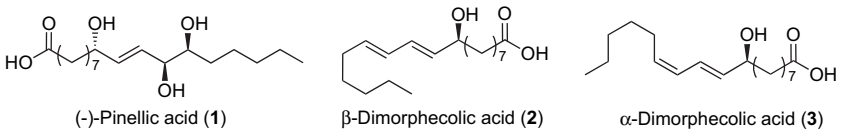




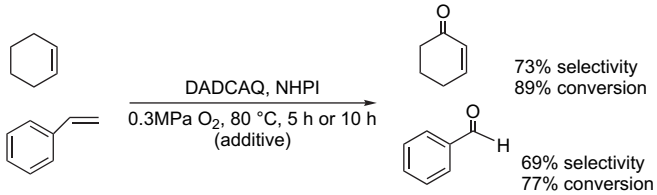


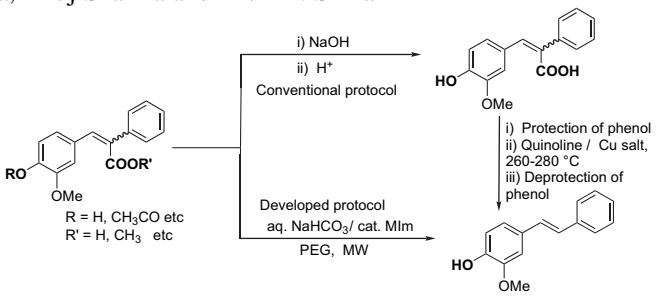


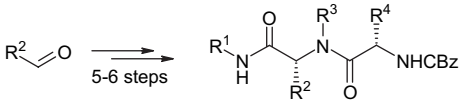




Efficient aerobic oxidations of olefins have been successfully performed under mild conditions without the need for metal catalyst. For instance, cyclohexene was oxidized with 89% conversion and 71% selectivity for 2-cyclohexen-1-one, and styrene was oxidized with 77% conversion and 69% selectivity for benzaldehyde.

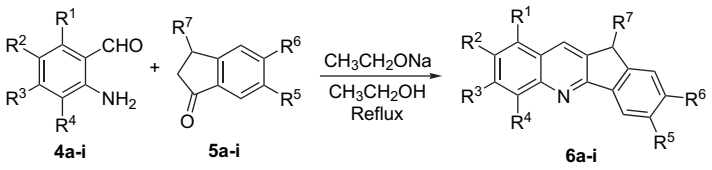




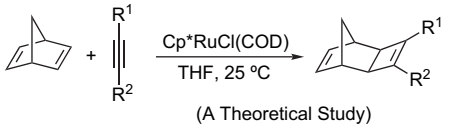


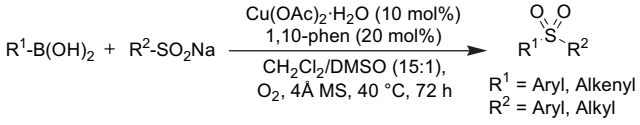
9 examples

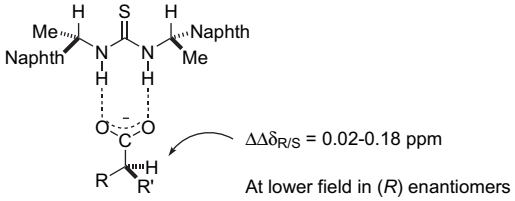
R^1 = $C_2H_5C(O)CH_2$, (4-CH_3O-C_6H_4)CH_2, $C_6H_5CH_2$
R^2 = $C_6H_5CH_2$, $(CH_3)_2CHCH_2$
R^3 = H, CH_3
R^4 = H, CH_3, $C_6H_5CH_2$

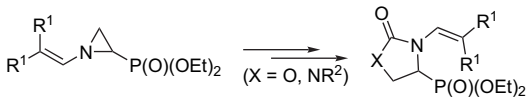


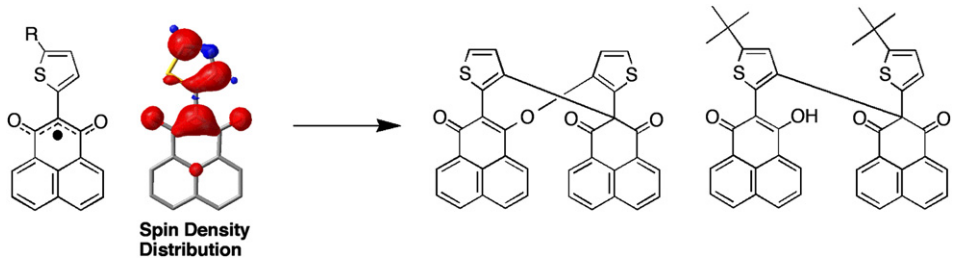
A rapid and efficient method for the synthesis of various poly-substituted quinolines has been developed via the Friedländer condensation of 2-aminoarylaldehyde with a carbonyl compound containing a reactive α-methylene group in the presence of sodium ethoxide (10 mol %). The new tetrahydroacridine derivatives and 11*H*-indeno[1,2-*b*]quinolines were synthesized in high yield with sodium ethoxide as a catalyst via the Friedländer reaction. The conditions of reaction were discussed and the possible reaction mechanism was proposed.

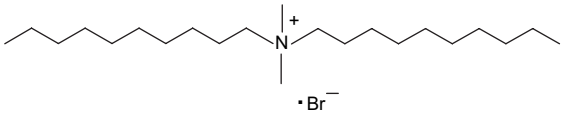




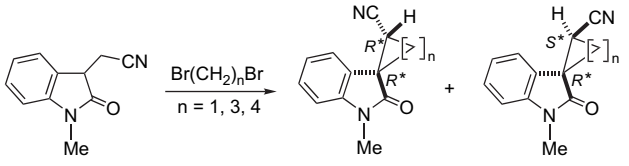


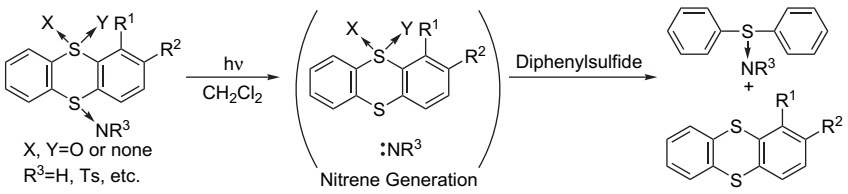


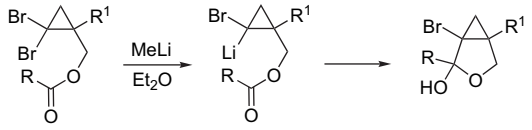


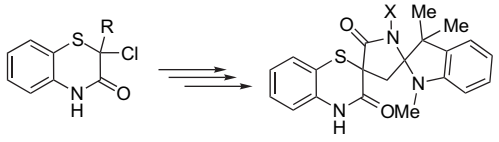


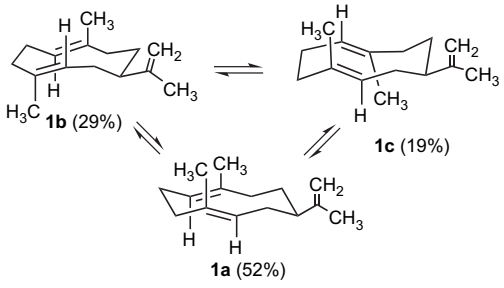
Didecyldimethylammonium bromide (DDAB) is proposed as a multipurpose phase-transfer catalyst. This high potent quaternary ammonium salt is demonstrated as a highly stable catalyst under thermal and alkaline conditions, which performs better than standard phase-transfer catalysts.











OTHER CONTENT

*Corresponding author
Supplementary data available via ScienceDirect

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