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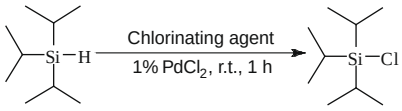
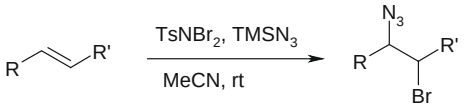
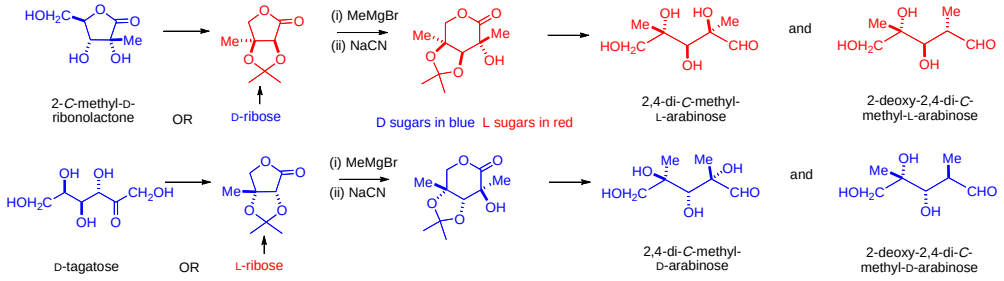
Contents

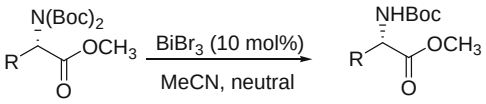


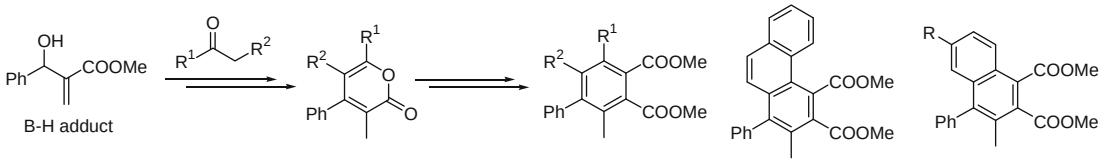
A new and efficient method is disclosed for the transformation of hydrosilanes into chlorosilanes in excellent yields under mild conditions using hexachloroethane as the chlorinating agent and palladium(II) chloride as the catalyst.

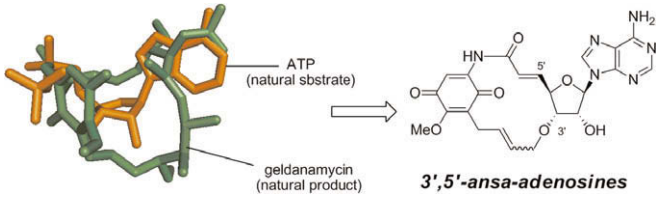


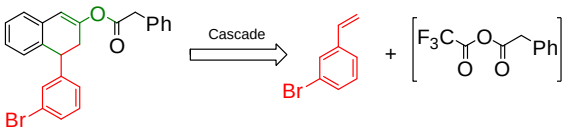
R = Aryl, H
R' = Aryl, alkyl, COR, COOR



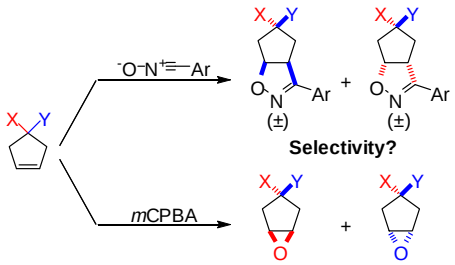




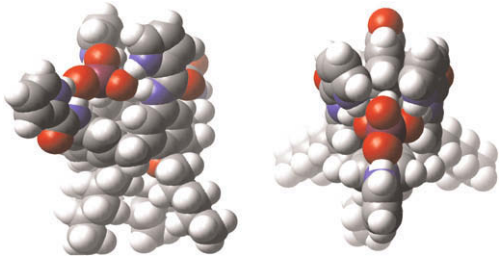


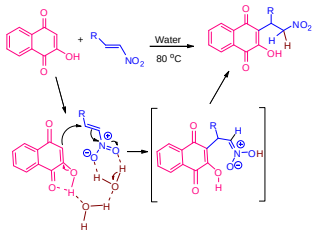


Mixed trifluoroacetyl phenylacetyl anhydride and 3-halostyrenes (fluoro, chloro, and bromo), or vinylcycloalkanes (cyclohexyl and cyclooctyl), undergo cascade Friedel–Crafts cycli-acylalkylation, enolization, and O-acylation for 4-substituted tetralen-2-ol phenylacetates, in good yields.

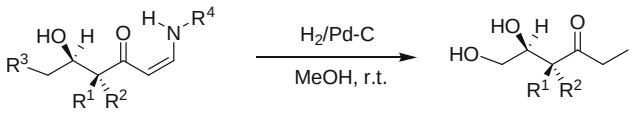


An unexpected facial selectivity trend in the nitrile oxide cycloaddition and *m*CPBA epoxidation reactions of 4,4-disubstituted cyclopentenes is reported.



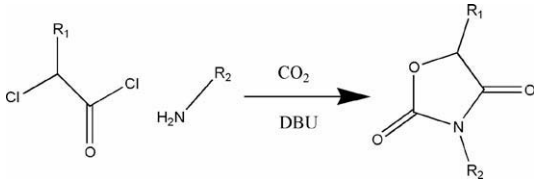


C-Alkylation of 2-hydroxy-1,4-naphthoquinone to various nitroolefins was achieved under catalyst-free employing 'on water' conditions. The mechanism for the formation can be explained on the basis of dual activation of nitroalkene and 2-hydroxy-1,4-naphthoquinones via hydrogen bonding. Simple reaction conditions, high yields of the products, and environmentally benign medium are attractive features of this method.

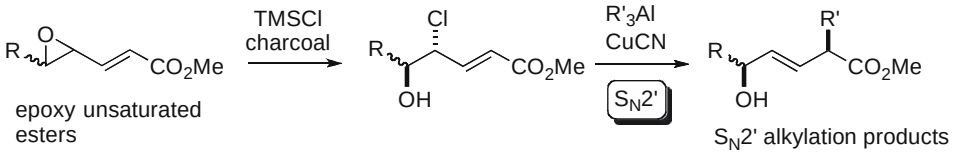


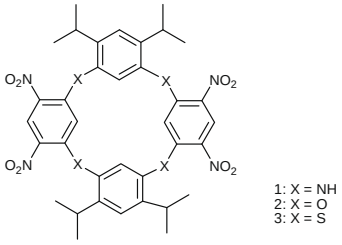
R^1, R^2, R^3 = H, OMe, OBn
R^4 = Bn, *n*-Bu

R^1, R^2 = H or OH

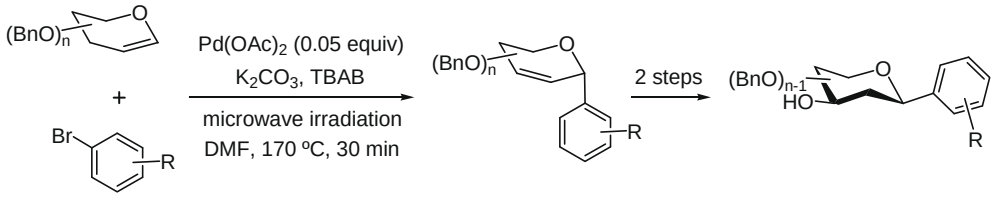


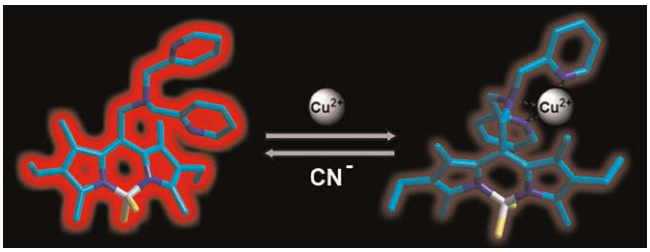
Diazabicyclo[5.4.0]undecene (DBU) reacts with carbon dioxide and N-substituted-2-chloroacetoamides in a very simple one-step procedure, to give the corresponding 3-substituted oxazolidin-2,4-diones in excellent yields.

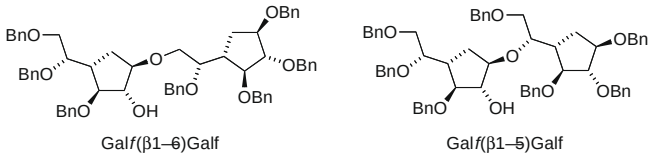


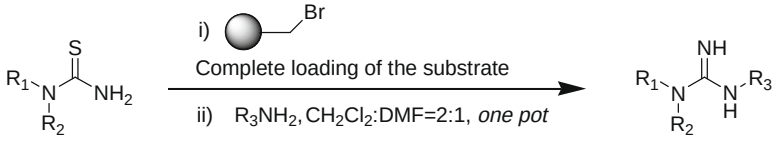


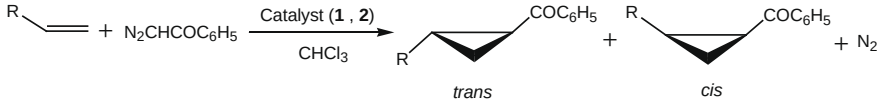
The free energies of activation ($\Delta G^{\#}_{298}$) of the macrocyclic inversion were determined by VT NMR spectroscopy.

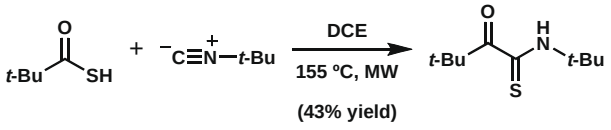


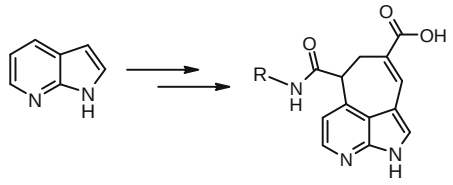




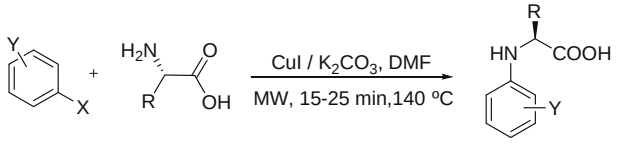




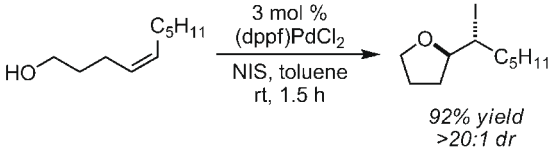




In this Letter a multistep synthesis of a functionalized tricyclic scaffold containing the 7-azaindole core is described.



We have developed an efficient method for the preparation of enantiopure *N*-aryl-α-amino acids via copper-catalyzed N-arylation of α-amino acids and aryl halides under microwave irradiation. This protocol only needs less than 30 min to obtain the products, which are far superior to those obtained under conventional heating.



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Supplementary data available via ScienceDirect

COVER

The first synthesis of free sugars with two carbon branches on a monosaccharide –still soluble in water.
Tetrahedron Letters **2009**, 50, 5088–5093.

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