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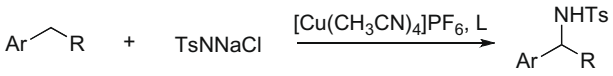
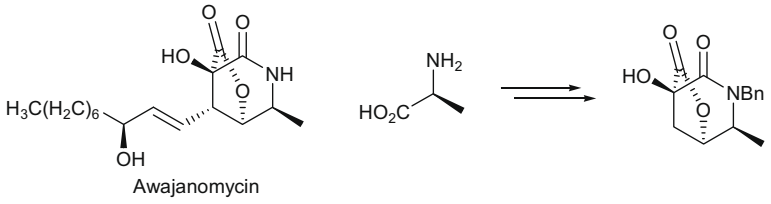
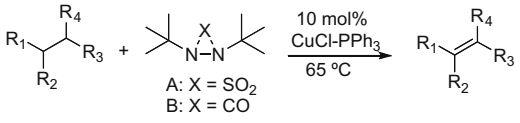
Contents

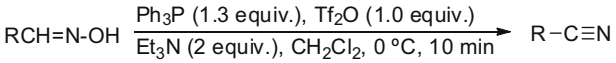
COMMUNICATIONS



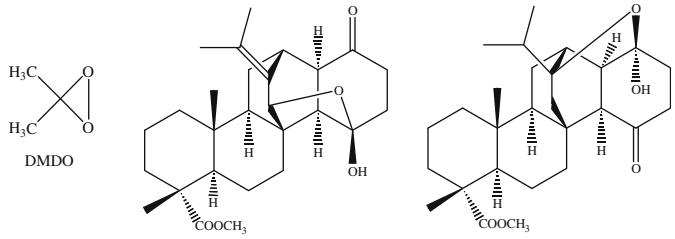


A concise enantioselective approach to the core of the marine natural product awajanomycin is described, beginning with L-alanine.

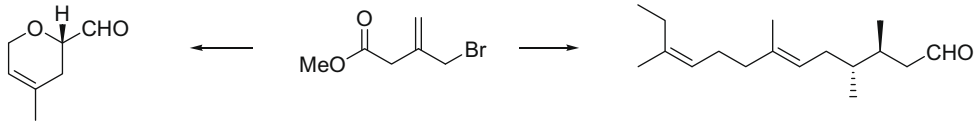


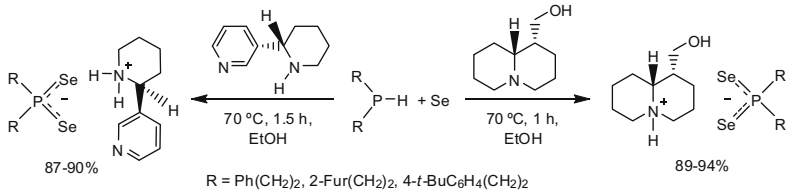


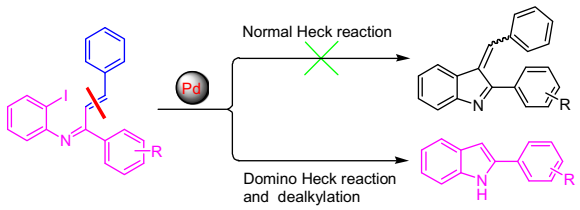
The electrophilic properties of triphenyl(trifluoromethylsulfonyloxy)phosphonium trifluoromethanesulfinate and its corresponding bis(triphenyl)oxodiphosphonium trifluoromethanesulfinate dimer system have been exploited in the development of a mild method for converting aldoximes into nitriles.

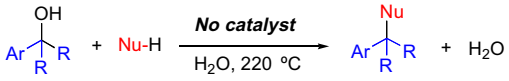


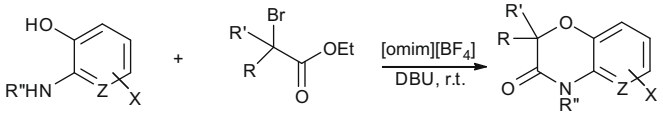
Dimethyldioxirane (DMDO) is employed under mild conditions to achieve the regioselective direct synthesis of valuable and previously inaccessible oxyfunctionalized derivatives of dihydroquinopimaric acid.

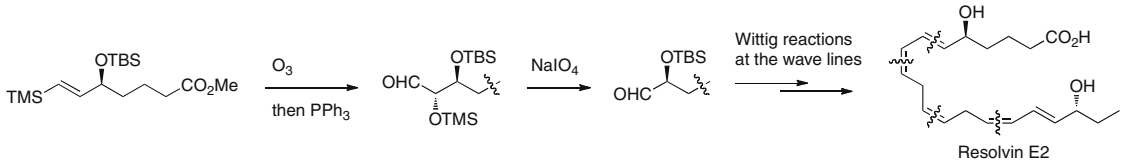


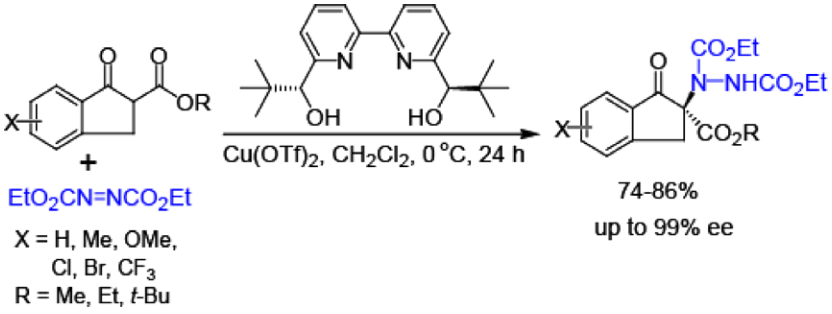


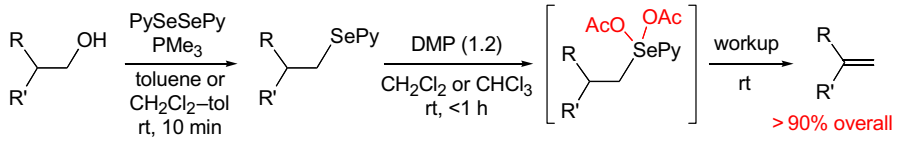


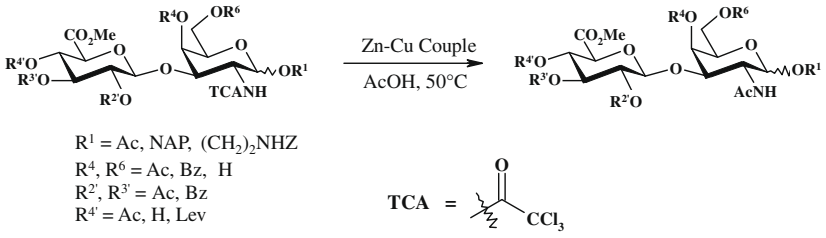




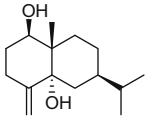






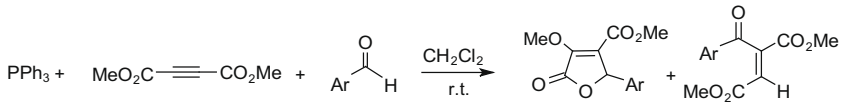


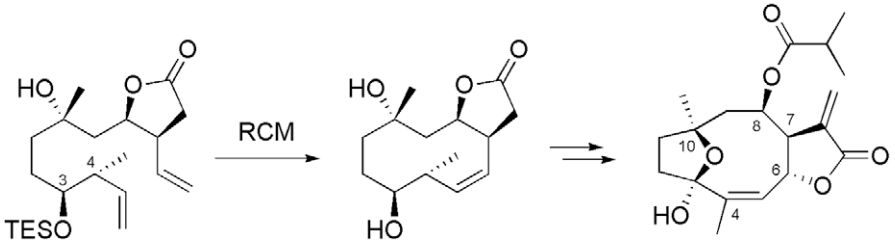
An efficient alternative for the reduction of *N*-trichloroacetyl groups in synthetic chondroitin oligosaccharide intermediates is reported.

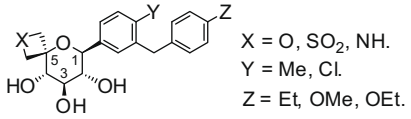


(+)-Carainterol A

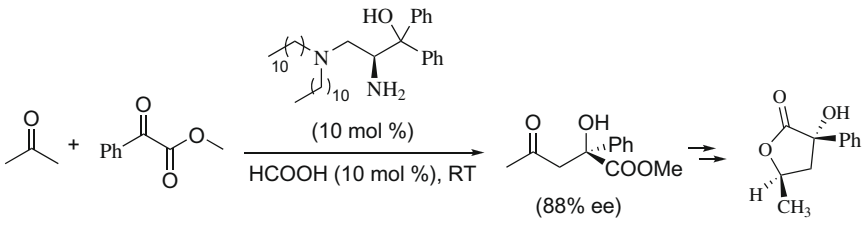
The first, stereospecific, and elegant synthesis of the natural product (+)-Carainterol A was developed by using the Robinson annulation reaction as a key step to build the eudesmane sketeton.



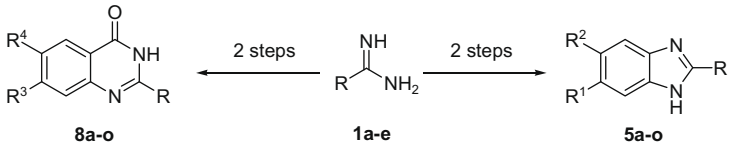




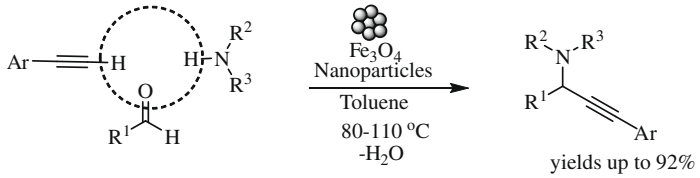
Several syntheses of C-5-spirocycle-containing C-glycosides are discussed. A multigram-scale synthesis capitalizing on a one-pot aldol-Cannizzaro sequence is described. Spiro oxetane formation using an unprotected penta-ol C-glycoside as substrate is also exemplified.



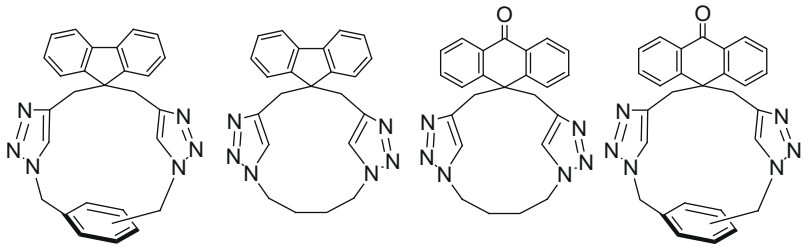
A novel primary–tertiary diamine organocatalyst-promoted enantioselective aldol reaction of acetone with α-ketoesters is described.

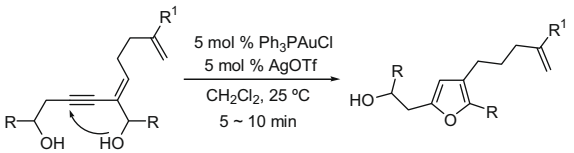


An efficient catalyst/ligand-free synthesis of benzimidazoles and quinazolinones from amidines in quantitative yields has been described.

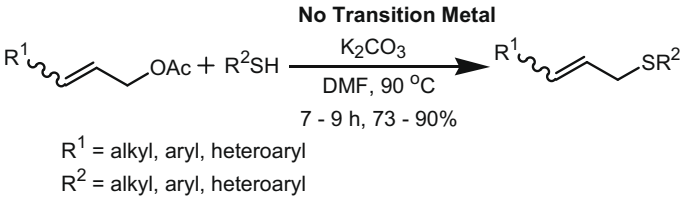


R^1 = Alkyl or Aryl R^2, R^3 = dialkyl

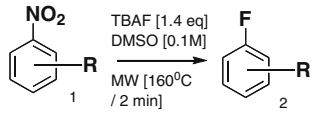




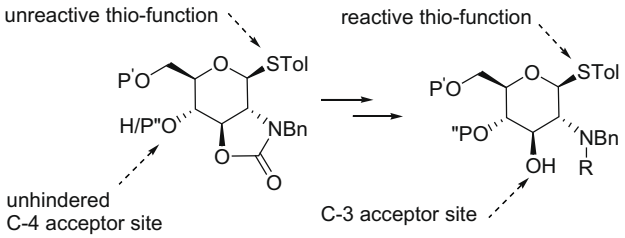
R = *n*-Pr, C_6H_{11}, Ph, 4-Cl-C_6H_4, 3-MeO-C_6H_4, 4-Me-C_6H_4 R^1 = H, Me
2,4,6-Me_3-C_6H_2, 3-HO-C_6H_4, 4-MeO_2C-C_6H_4

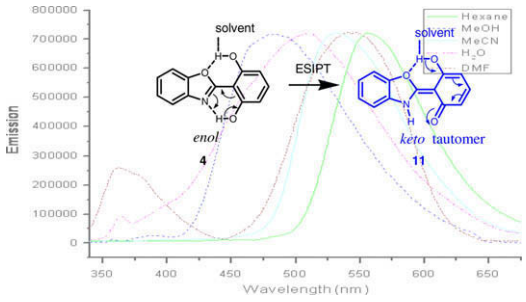


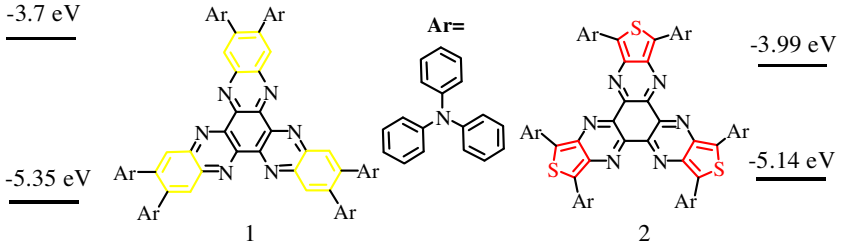
Allylic acetates have been used as allylating agents under transition metal-free condition toward an economical and sustainable regioselective S-allylation of aromatic and aliphatic thiols in the presence of potassium carbonate.



Methods for the expeditious fluorination of arenes have been investigated, using readily available fluoride sources. An optimized procedure for microwave-accelerated fluorodenitration has been developed, giving good to excellent yields in less than 10 min, rendering it practical for use in the preparation of F^{18} labeled ligands for PET imaging. Application of the method in the synthesis of CNS agents is demonstrated, and a practical method for the preparation of substrates has been identified.







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Supplementary data available via ScienceDirect

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