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Tetrahedron Letters

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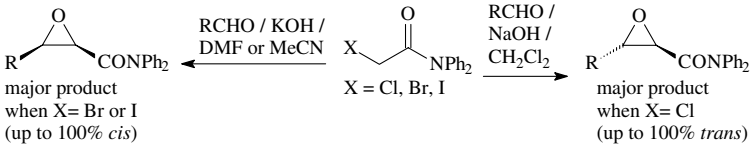
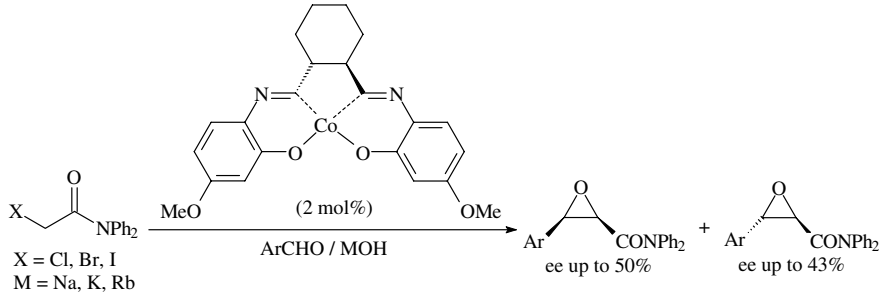
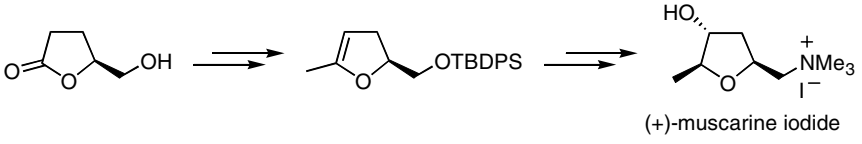
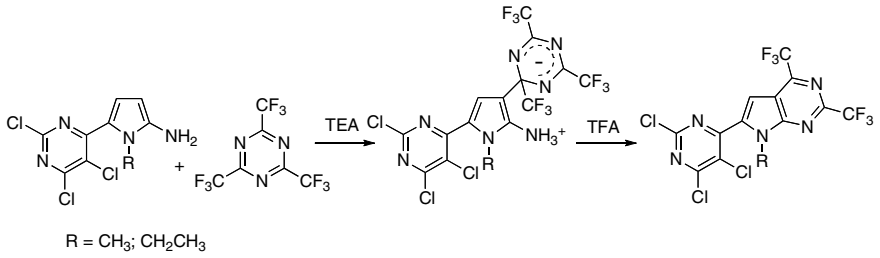
Contents

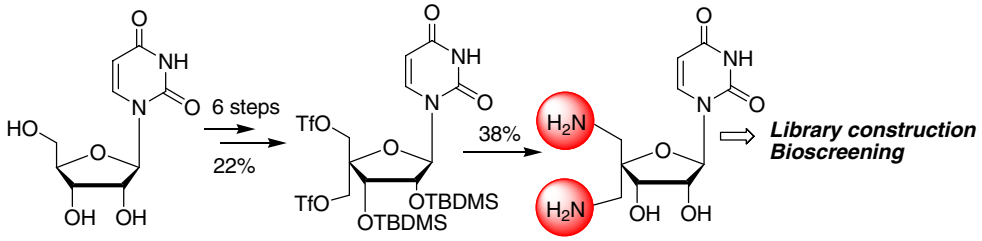
COMMUNICATIONS

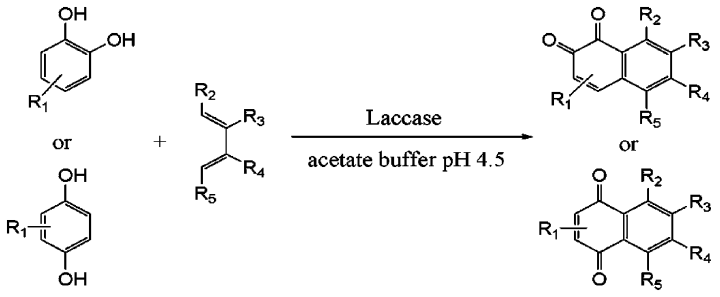


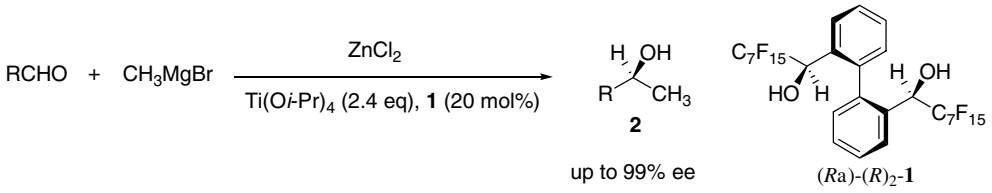


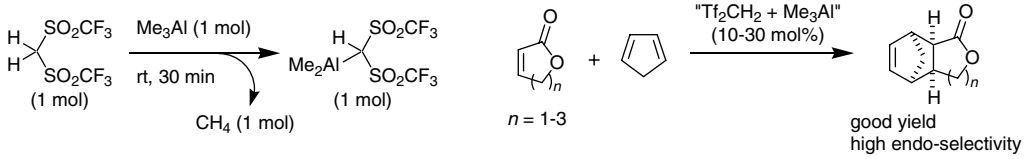


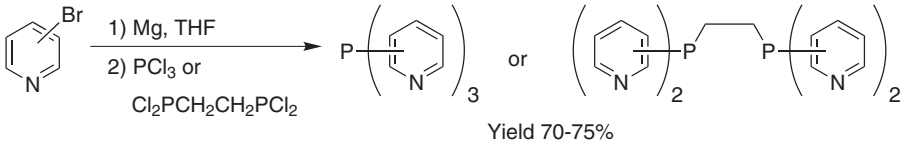


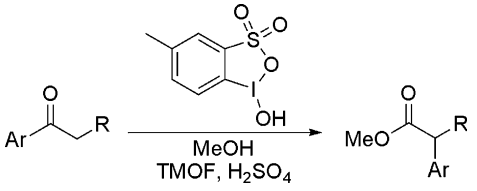




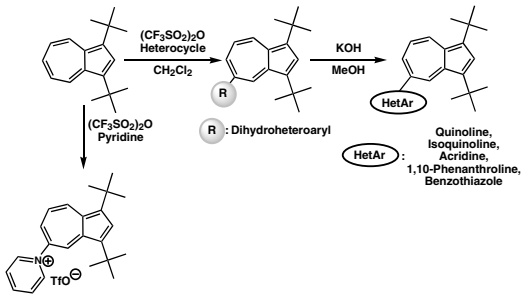


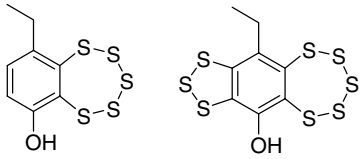




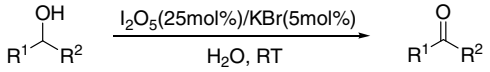


Previous methods for the conversion of arylalkanones to alkyl 2-arylesters by oxidative rearrangement utilized reagents which either produced toxic metal salts or halogenated organics as by-products. In this report, 1*H*-1-hydroxy-5-methyl-1,2,3-benziodoxathiole 3,3-dioxide (HMBI) is used to effect this useful transformation, where the reduced iodine reagent is water-soluble and readily recycled.

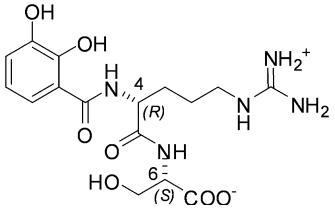




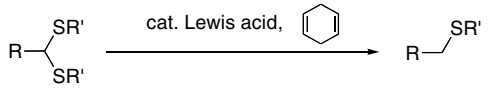
Benzopentathiepins having hydroxyl group at the neighboring of pentathiepin rings were synthesized and their alkylation reactions were studied.

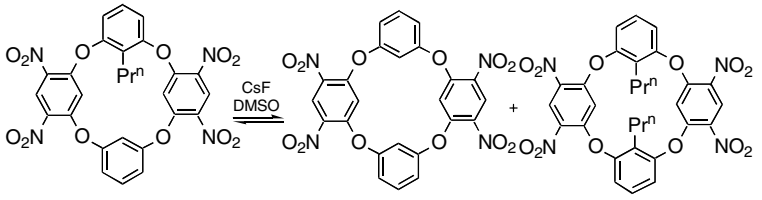


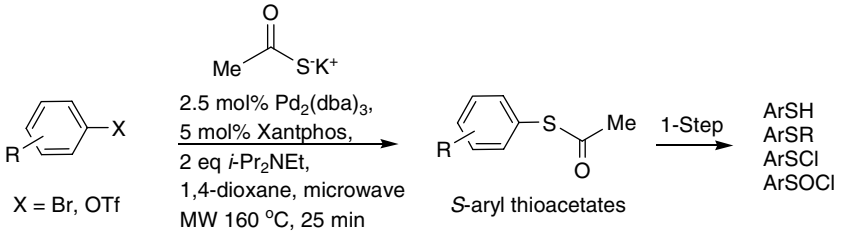
The mild and efficient nature of HIO_3 and I_2O_5 as environmentally benign, commercially available, atom efficient, and safe reagents for the oxidation of alcohols has been demonstrated. Additionally, these oxidants are highly chemoselective, and effect smooth room temperature oxidation of various electron-rich alcohols with catalytic amounts of KBr in water.

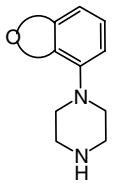


The stereochemistry of vanchrobactin, a siderophore produced by *Vibrio anguillarum* serotype O2, was elucidated by chiral capillary electrophoresis analysis and total synthesis.

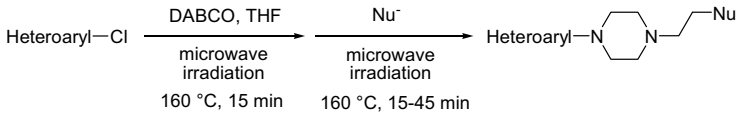


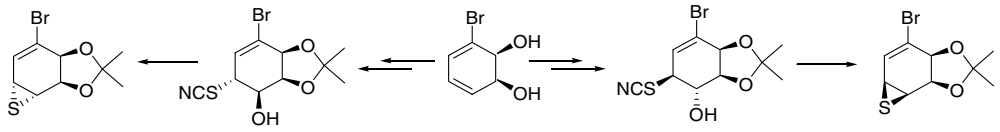




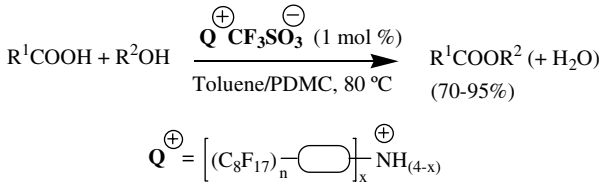


The synthesis of a series of regioisomeric chromanyl and dihydrobenzofuranyl piperazines is described.

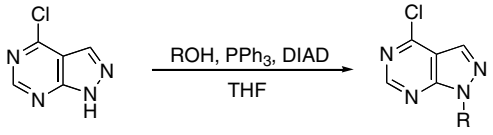


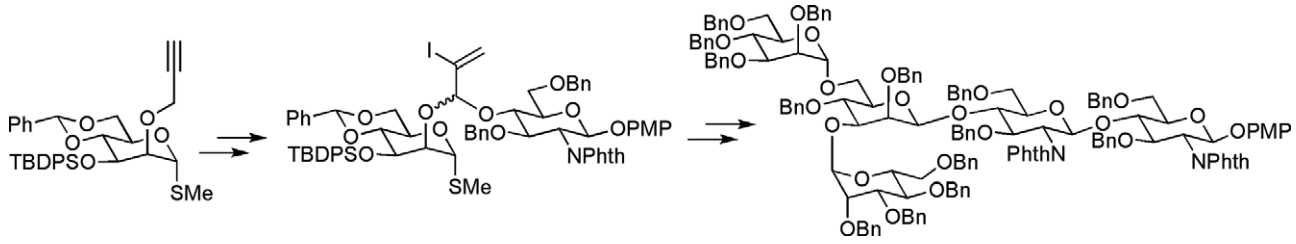


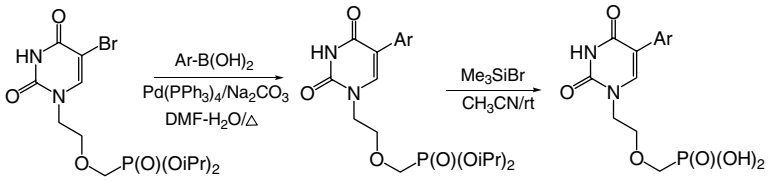
Conditions for episulfide formation in cyclohexenyl systems were optimized and applied to the construction of optically pure thiodeoxycyclitol precursors by a chemoenzymatic strategy.

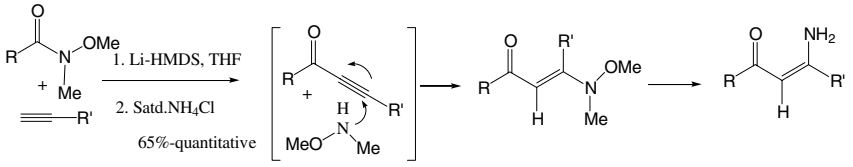


Direct esterification of carboxylic acids with equimolar amounts of alcohols can be conveniently run under mild fluorous biphasic conditions in the presence of recoverable fluorous ammonium salts.

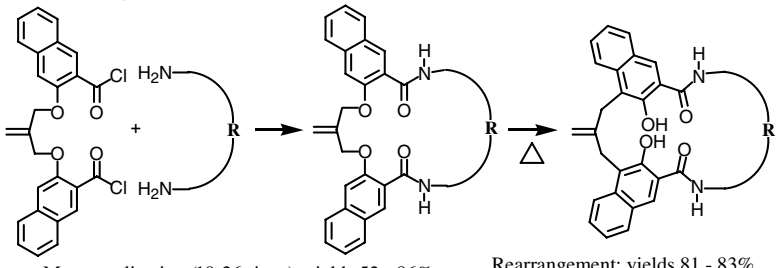




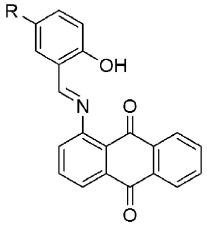




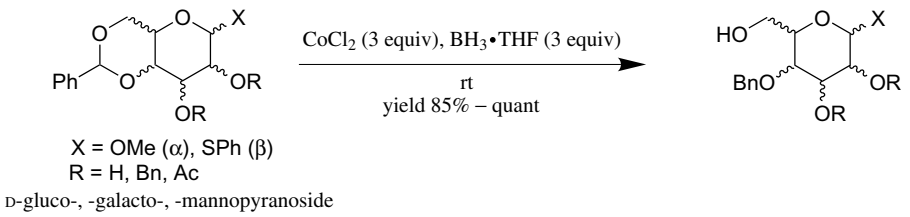
A one-pot sequential process consisting of nucleophilic substitution of the lithiated acetylides with Weinreb amides followed by a Michael reaction of the extruded *N*-methoxy-*N*-methylamine after quenching with saturated NH_4Cl, provided β-enamino (*N*-methoxy-*N*-methyl) ketones in high yield. It has been demonstrated that this method is applicable to a wide variety of such amides and acetylides. Prolonged stirring of the reaction mixture with saturated NH_4Cl generates β-enamino ketones with structural diversity.

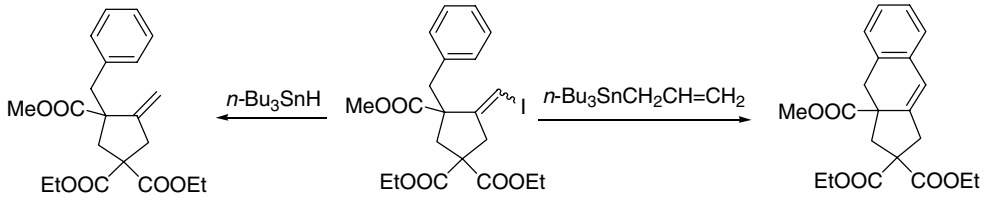


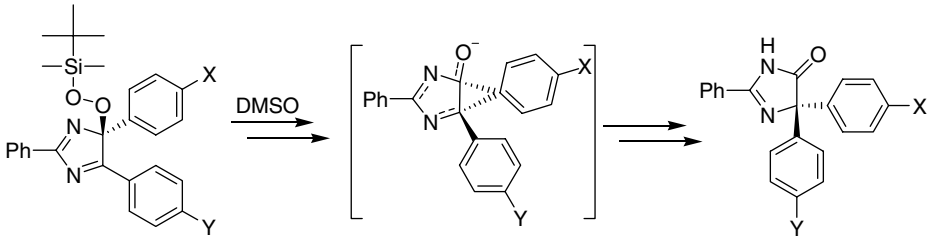
Without high dilution technique, 1:1 macrocyclization occurred in good yields.

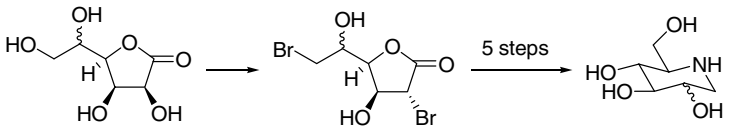


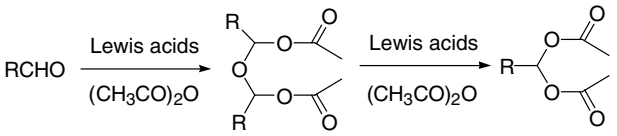
R
1 = Br
2 = Me
3 = NO_2











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