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Tetrahedron Letters

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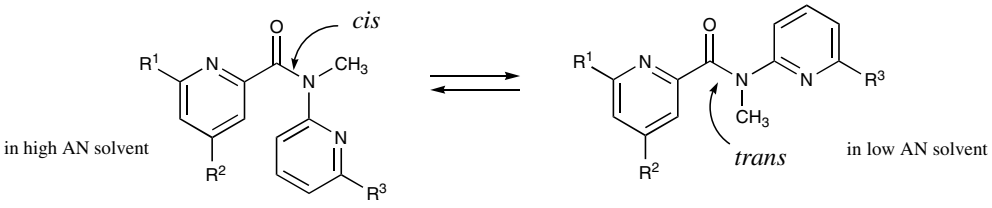
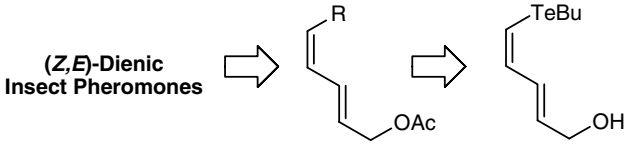
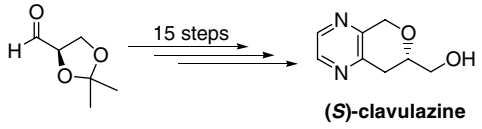
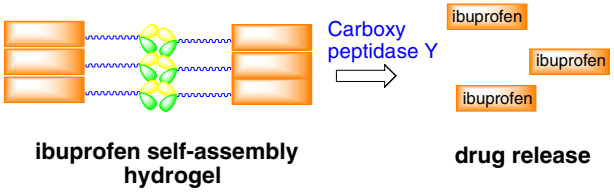
Contents

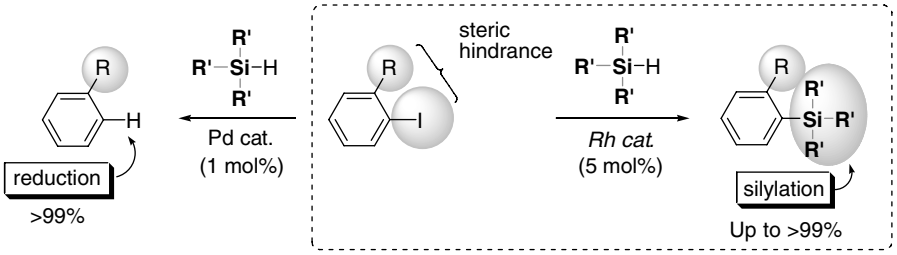
COMMUNICATIONS

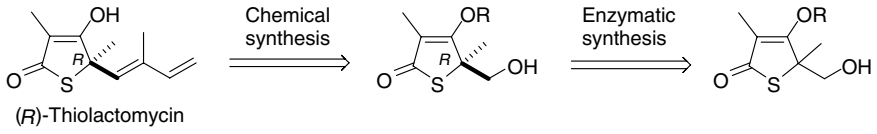




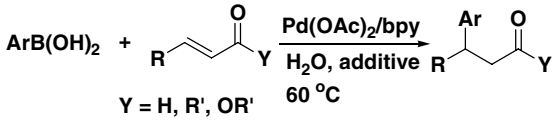


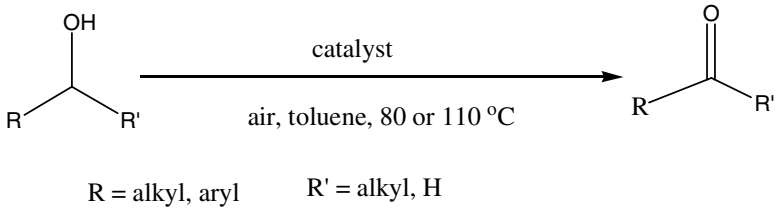




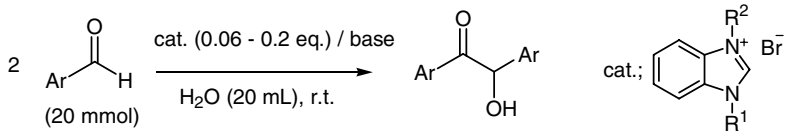


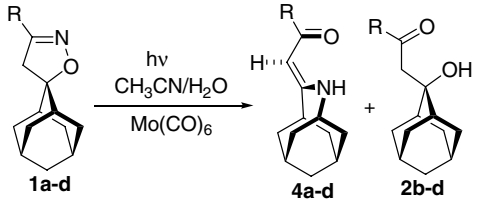
Lipase-catalyzed kinetic resolution of thiotetronic acid derivatives having a quaternary carbon was investigated. Total synthesis of (*R*)-thiolactomycin from (*R*)-alcohol was achieved in 36% yield in five steps.

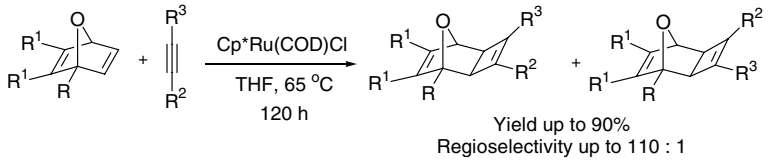


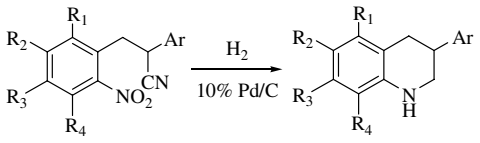


Keggin-polyoxymetalate complex $Na_{6.3}Fe_{0.9}[AlMo_{11}O_{39}]\cdot 2H_2O$ was demonstrated to be an effective solid catalyst for the selective oxidation of alcohols in the presence of air as oxidant.

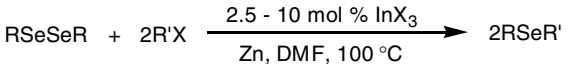


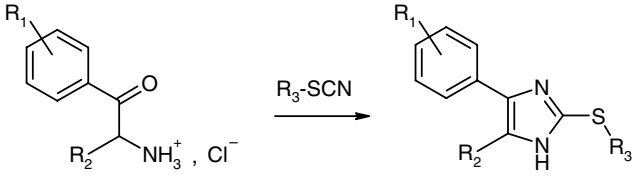




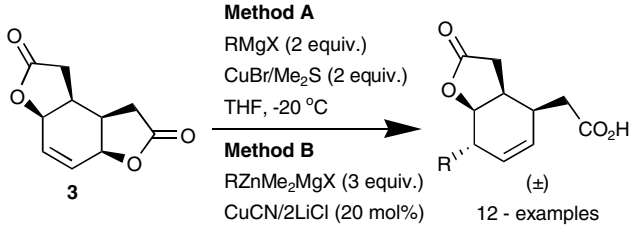


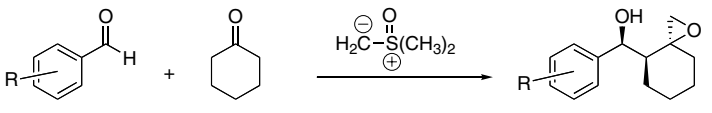
A simple and convenient procedure for the synthesis of 3-aryl-1,2,3,4-tetrahydroquinolines is reported. 3-Aryl-1,2,3,4-tetrahydroquinolines are directly obtained by reductive ring closure of 2-phenyl-3-(2-nitrophenyl)-propanenitrile derivatives in moderate to high yields.

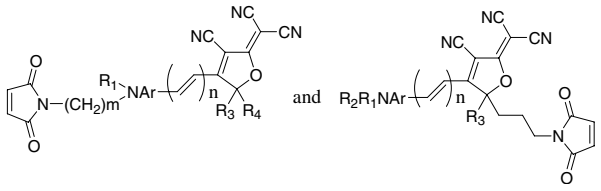




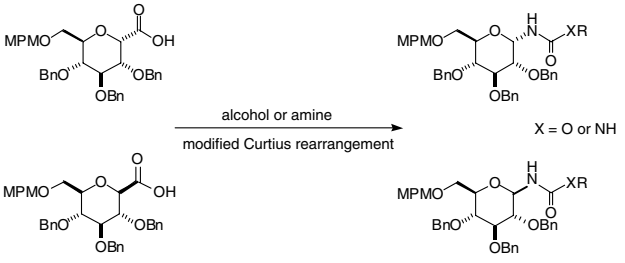
5 R_1 = e.g. 4-fluoro-, 3-trifluoromethyl- **6**
R_2 = (halogen-substituted) heteroaryl moiety
Cyclization with substituted thiocyanates. R_3 = alkyl/arylalkyl moiety

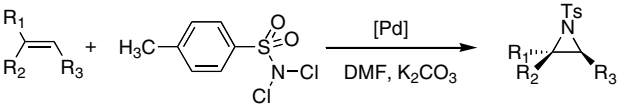




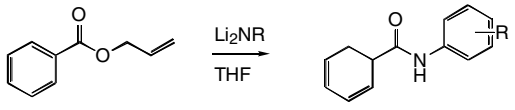


A group of dicyanodihydrofuran (DCDHF) fluorophores with maleimide functionality has been synthesized. One of the methods used is an aromatic nucleophilic substitution reaction. Another generally useful method is combination of the Mitsunobu reaction of the DCDHF-OH with protected maleimide with a subsequent retro Diels–Alder reaction.

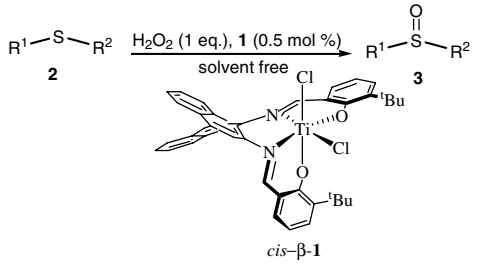


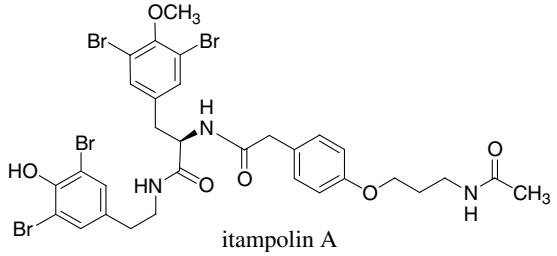


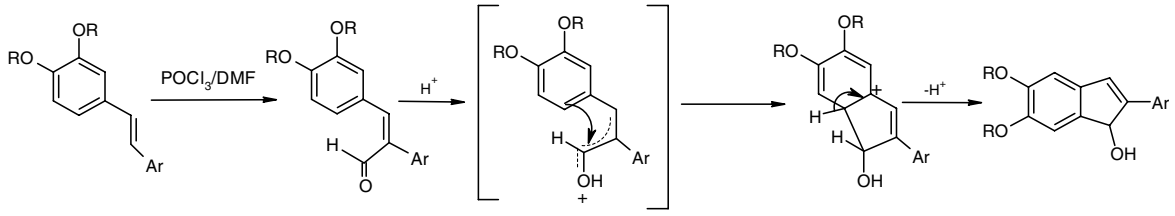
N,*N*-Dichloro-*p*-toluenesulfonamide ($TsNCl_2$) was found to be an efficient nitrogen source for the aziridination of unfunctionalized alkenes using palladium catalysts. Among the palladium salts, palladium acetate was the most effective catalyst for this reaction. A variety of alkenes were reacted at room temperature with $TsNCl_2$ to form the desired aziridines in moderate to good yields. This method can complement our previous protocol which is limited to the use of electron-deficient α,β-unsaturated alkenes.

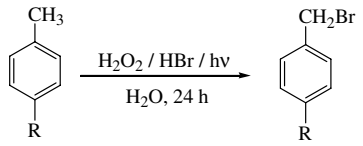


The aminolysis of unactivated esters with bislithium aryl amides is reported.

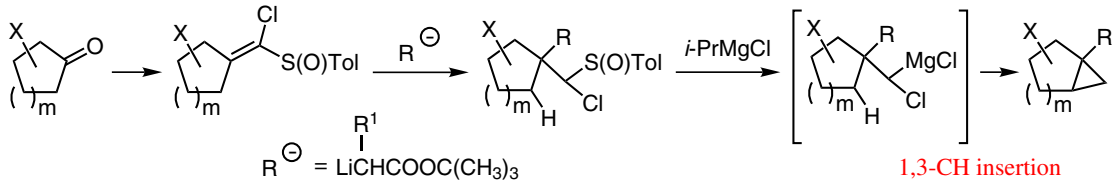


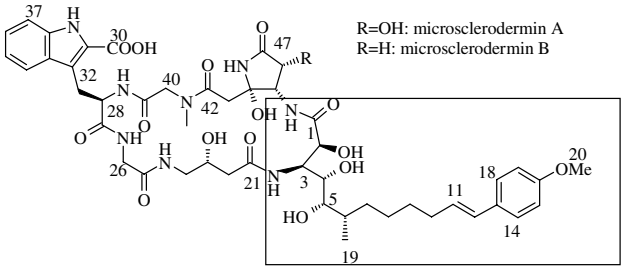




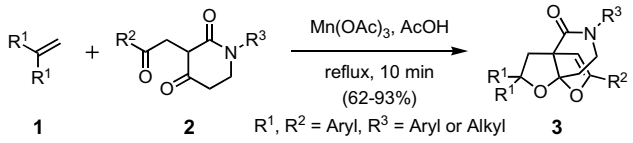


H_2O_2/HBr in pure water, in the presence of 40 W incandescent light bulb irradiation as an initiator of the radical chain process provides a simple and efficient haloperoxidase-like system for benzylic bromination.

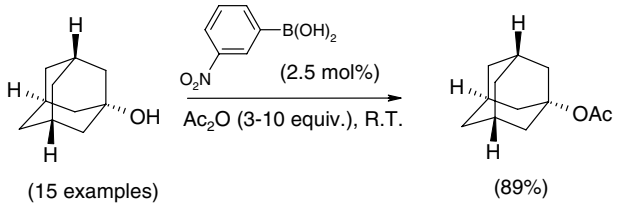


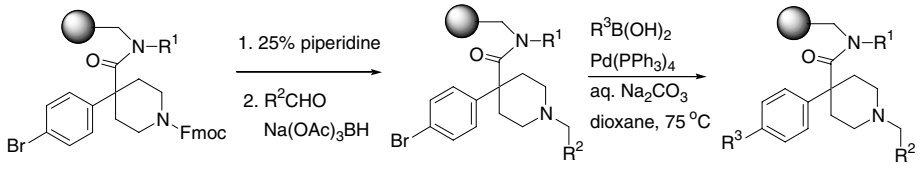


An enantioselective route for synthesis of the C1–C20 skeleton segment of microsclerodermins A and B is described.



The Mn(III)-based oxidative cyclization of 1,1-diarylethenes **1** with piperidinediones **2** gave propellanes **3** in high yields.





A novel solid-phase synthesis of 4-biaryl-piperidine-4-carboxamides has been developed using FDMP resin with a carboxamide as the anchor point. With this approach, three points of diversity were incorporated into a GPCR-directed scaffold.

OTHER CONTENTS

*Corresponding author
ⓘ+ Supplementary data available via ScienceDirect

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