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Tetrahedron Letters

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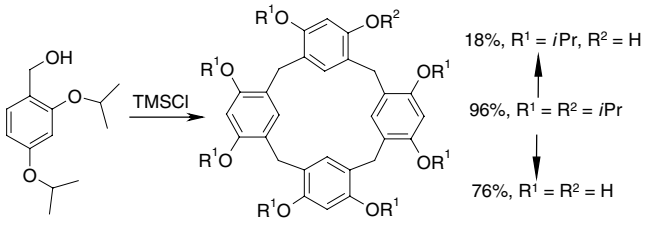
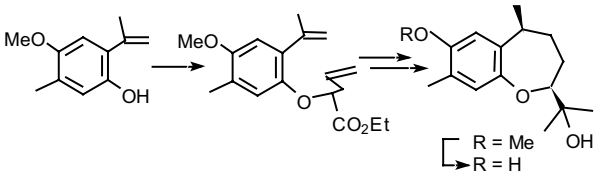
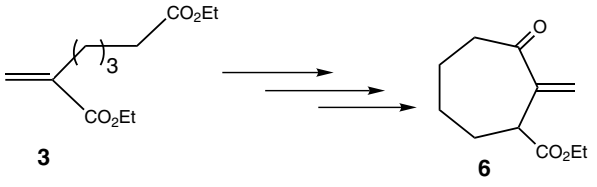
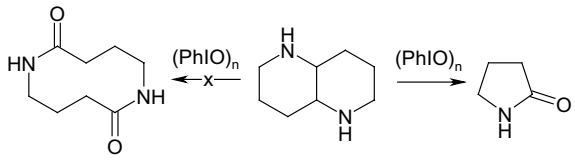
Contents

COMMUNICATIONS

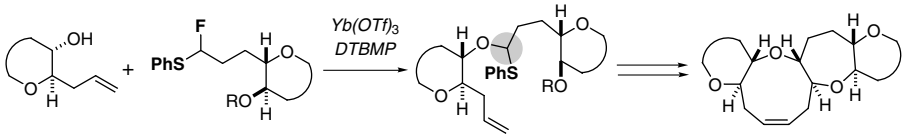


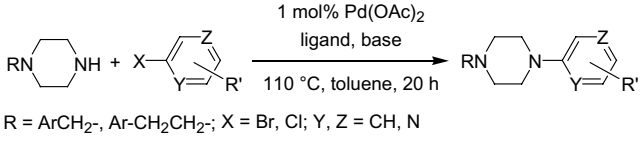




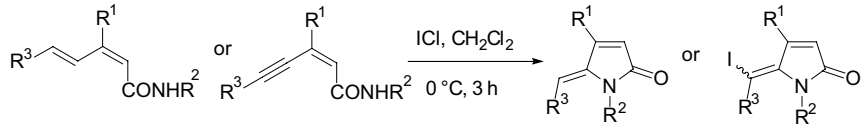


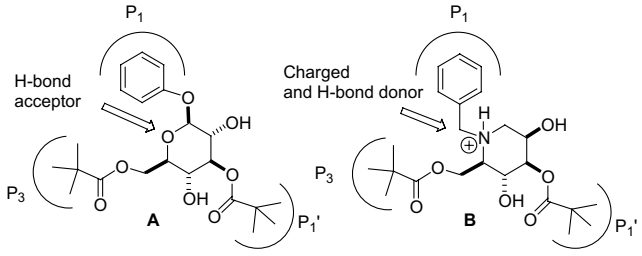
NMR data show that 2-pyrrolidinone is formed in the above reaction and not the macrocyclic bislactam.



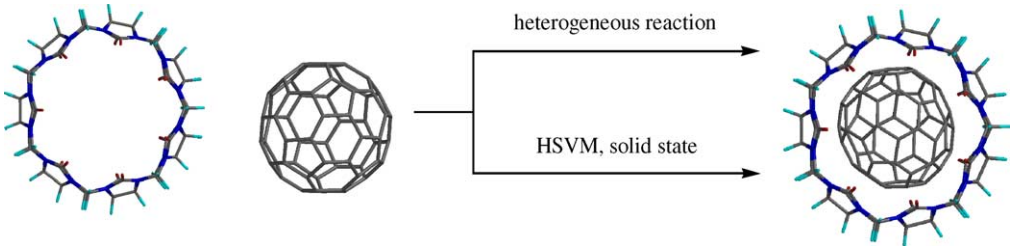


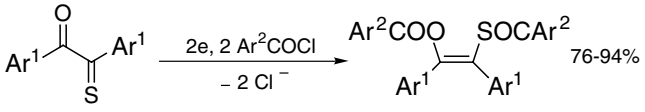
The synthesis of *N*-aryl- and *N*-heteroaryl-*N′*-(arylalkyl)piperazines using palladium-catalyzed amination reactions is presented. Applying an automated organic synthesizer a small library of potentially CNS active molecules was efficiently prepared.

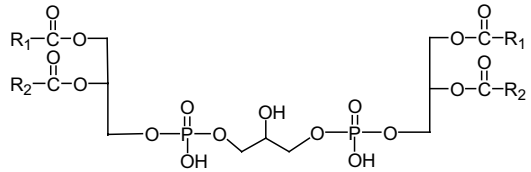




The synthesis of iminosugar derivative **B** as an analogue of HIV-1 protease inhibitor **A** is described.

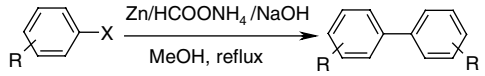




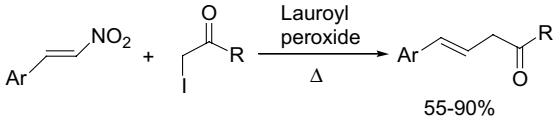


Cardiolipin

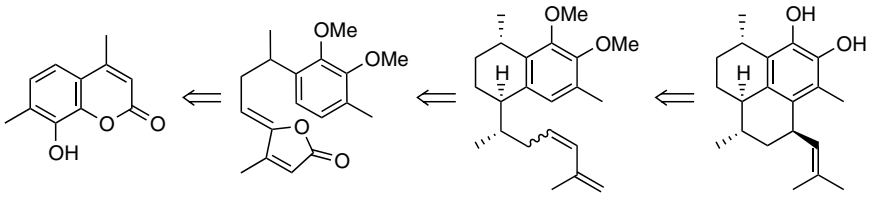
R_1, R_2= alkyl chain

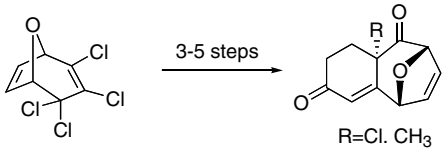


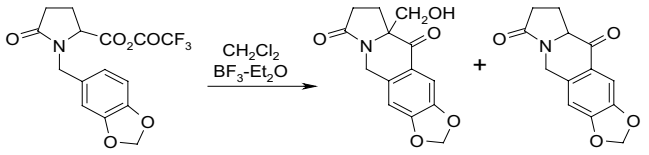
Biaryls containing either electron-donating or electron-withdrawing groups can be synthesized by the reductive homocoupling of aryl halides using commercial zinc dust and ammonium formate in methanol.



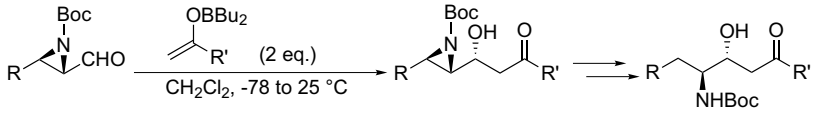
Electrophilic radical species react with β-nitrostyrenes to efficiently give products of formal substitution of the nitro group.

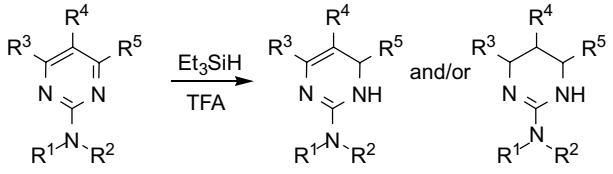


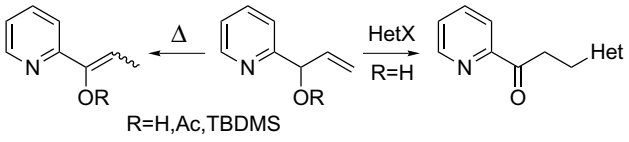


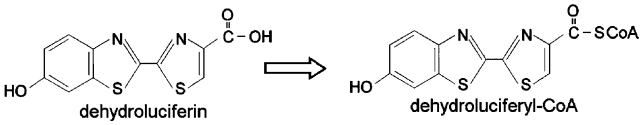


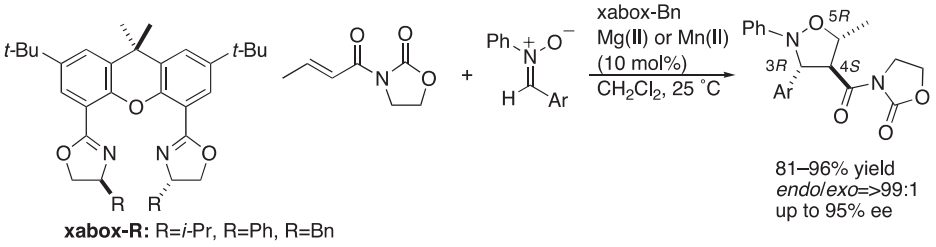
In methylene dichloride, the Friedel–Crafts cyclization of *N*-arylmethyl pyroglutamates can lead to addition of a CH_2OH group in the position α to the newly formed ketone function.

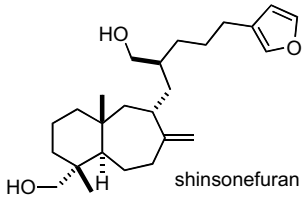


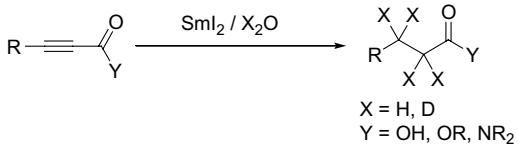


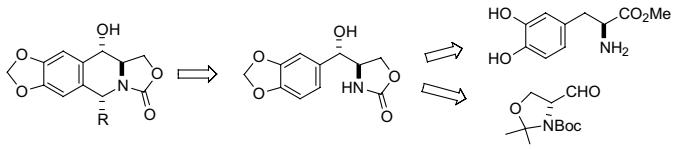




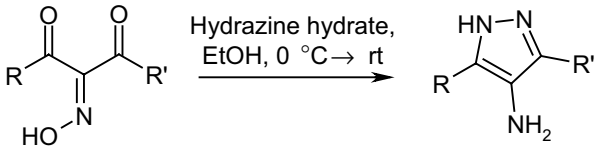


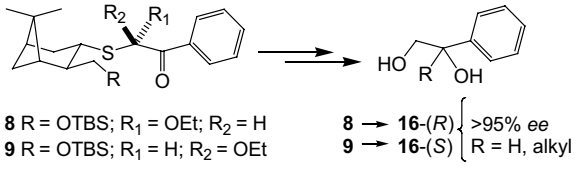


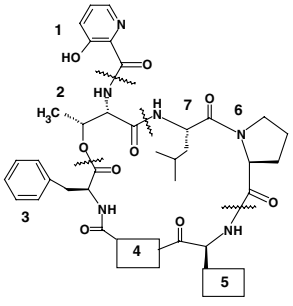


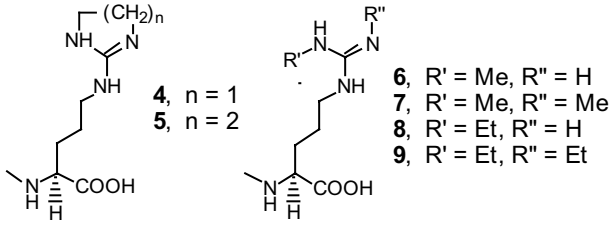


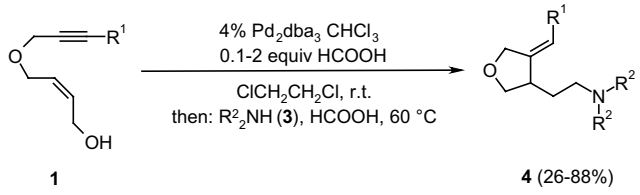
Some central intermediates useful for the synthesis of aza-analogues of the anti-cancer drug podophyllotoxin have been prepared starting from L-DOPA and (*R*)-Garner aldehyde.



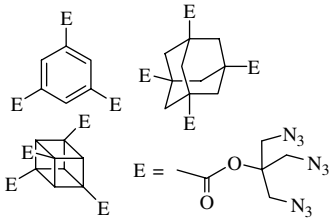


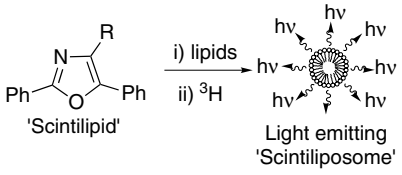




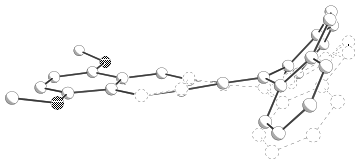


A one-pot cycloisomerization-reductive amination access to β-amino ethyl alkylidene tetrahydrofurans.

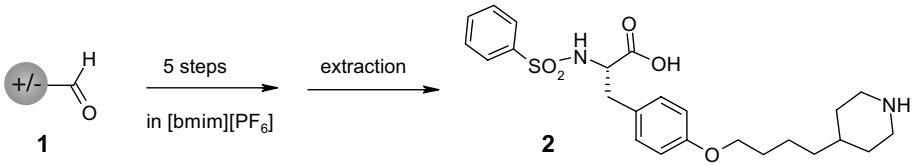


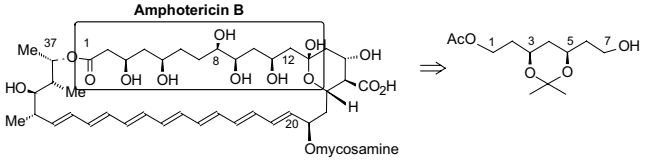


4-Functionalised-2,5-diphenyloxazole derivatives ('scintilipids') have been synthesised and evaluated for their ability to scintillate and to assemble with other lipids, into liposomes that scintillate ('scintiliposomes').

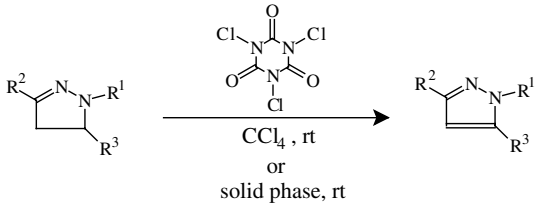


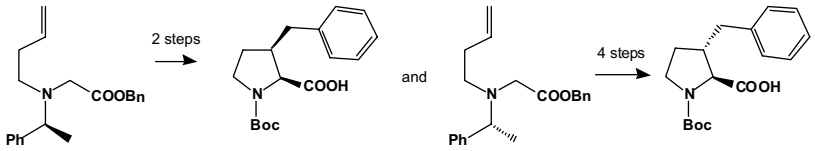
Measured and calculated dipole moments show cyclopropa[*b*]naphthalene to be a stronger donor than cycloheptatriene. Derivatives, with and without electron donating substituents in the cyclopropa rene, show the seven-membered ring to resist 8π 7C antiaromaticity by bending out of the cyclopropa rene plane to an extent dependent upon the level of electron donation.

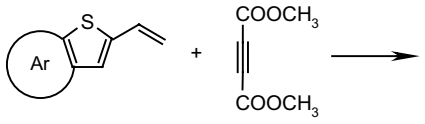




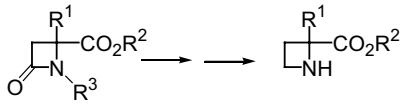
A short, highly efficient, stereoconvergent synthesis of the polyolic chain, C1–C13, of the macrolide antibiotic amphotericin B is described.

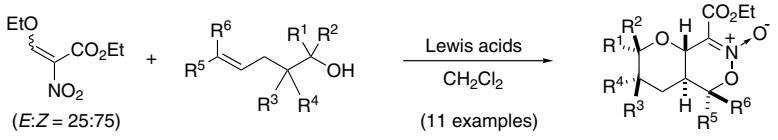


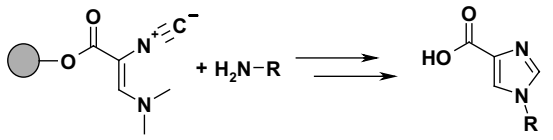




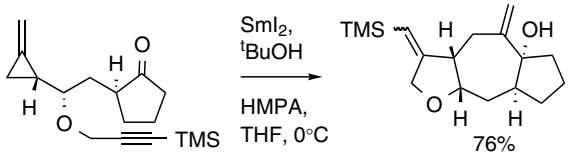
The complex course of the cycloaddition is evidence for a nonconcerted process, which leads to unexpected products.

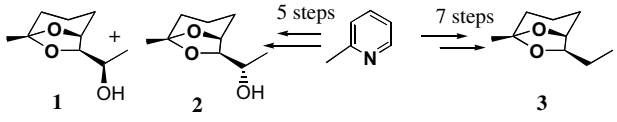


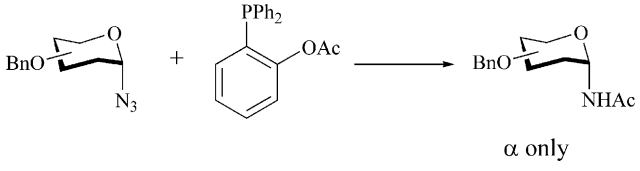


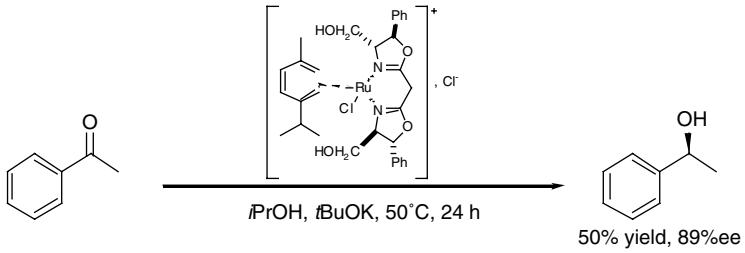


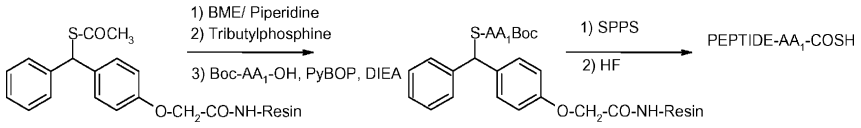
The novel 3-*N*,*N*-(dimethylamino)isocyanoacrylate-Wang-resin is used for the synthesis of imidazole-4-carboxylic acids. The syntheses are performed in a microwave reactor with reaction times of only 15 min at 220 °C in the solvent dimethoxyethane.



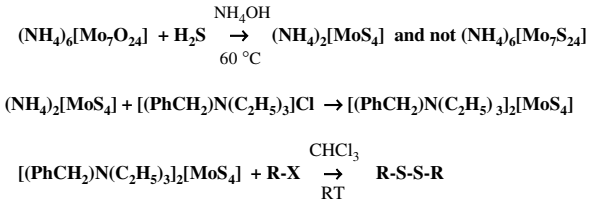


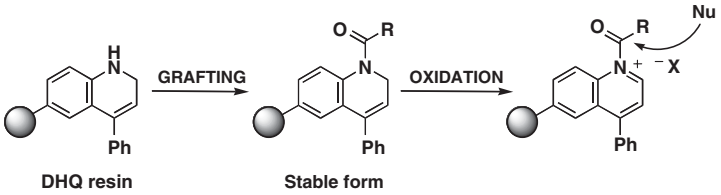




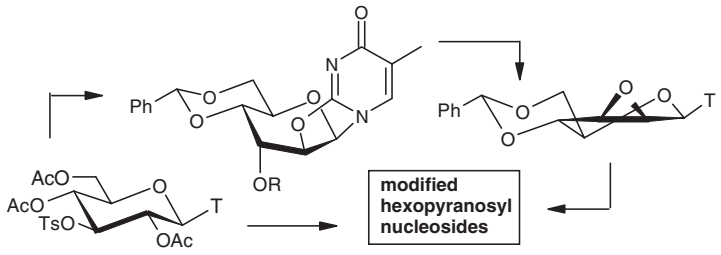


The hypothesis and the conclusions of previous ^{17}O NMR studies on the detection of both oxygens of the carboxylic group of Boc-[^{17}O]Tyr(2,6-diClBzl)-OH in DMSO-d_6 solution (V. Tsikaris et al. *Tetrahedron Lett.* **2000**, *41*, 8651–8654) are reconsidered. The appearance of two discrete resonances in the ^{17}O NMR spectrum in DMSO-d_6 of this protected amino acid is attributed to a strong hydrogen bonding of the COOH group with the solvent DMSO, which effectively reduces the proton exchange rate.





A new oxidatively activatable safety-catch linker was developed for solid-phase chemistry using a two-step process starting from Merrifield resin. Once acylated, the resulting amide is stable and can only be cleaved after selective oxidation.



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*Corresponding author
ⓘ+ Supplementary data available via ScienceDirect

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