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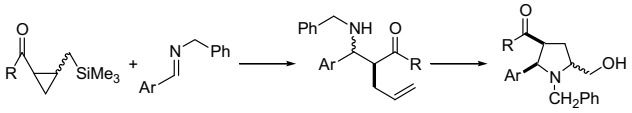
Tetrahedron Letters

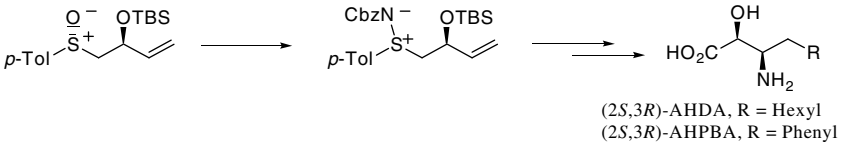
Tetrahedron Letters Vol. 49, No. 20, 2008

Contents

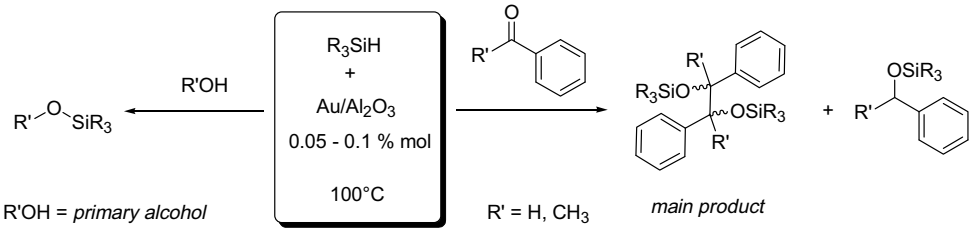
COMMUNICATIONS

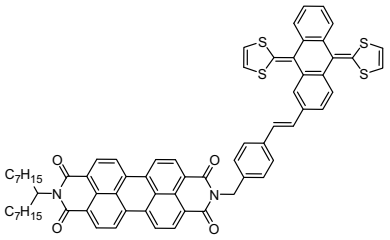


A highly diastereoselective preparation of 2,3,5-trisubstituted pyrrolidines from the imino-aldols formed via reaction of (2-trimethylsilylmethyl)cyclopropyl ketones with the benzylimines of aromatic aldehydes is described.

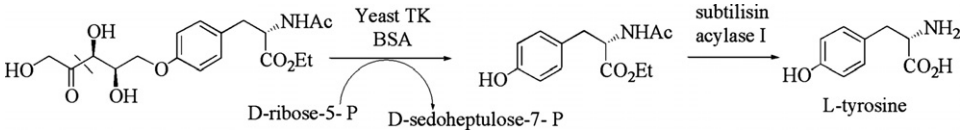


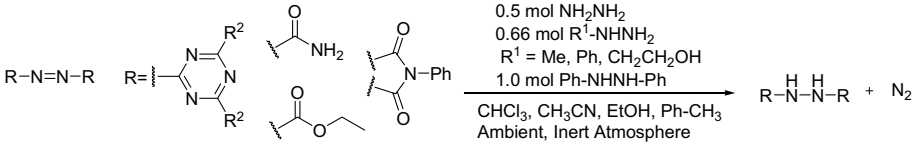
The synthesis of *N*-Cbz sulfilimines from the corresponding sulfoxide with modest stereoselectivity and their utility as intramolecular nucleophiles is demonstrated by the synthesis of AHDA and AHPBA.



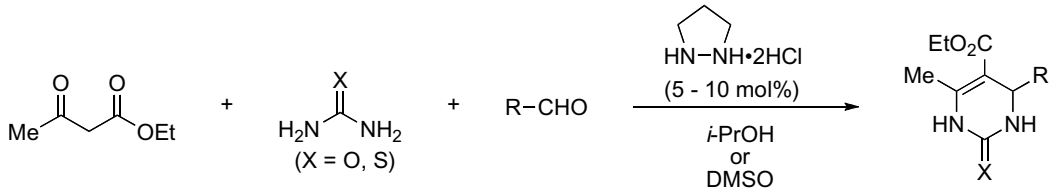


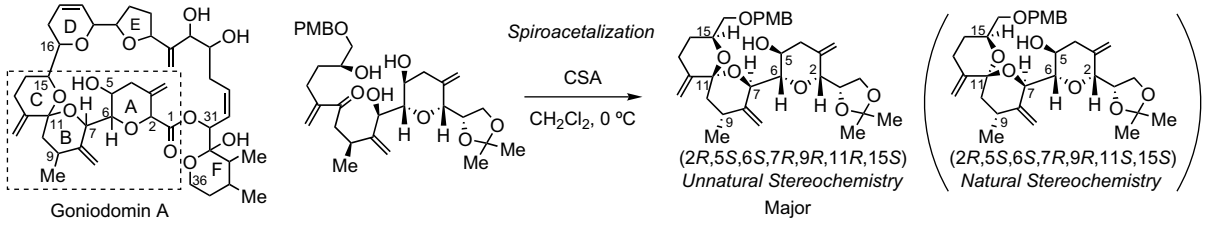
The synthesis, electrochemical and preliminar photophysical investigation of an electron donor–acceptor dyad containing perylenediimide and exTTF is described in this Letter.

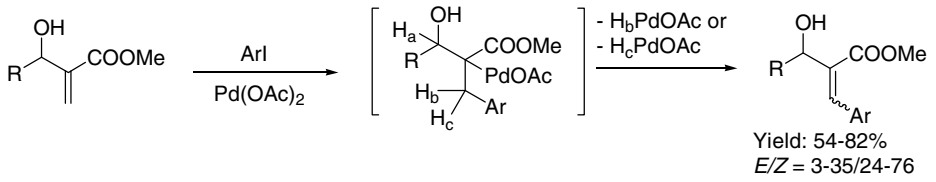


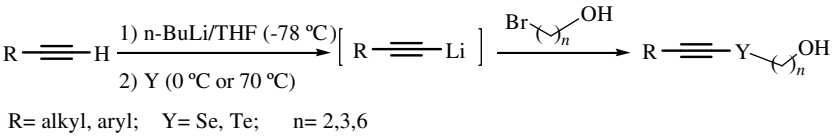


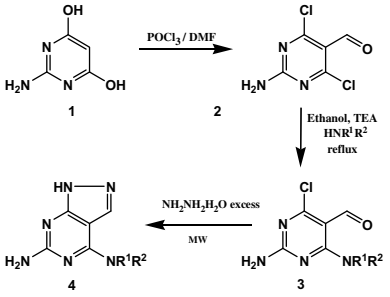
Hydrogenation of azo bonds with hydrazine, mono-substituted hydrazine, and hydrazobenzene was studied with selected diazene compounds under oxygen-free conditions. The reactions proceed rapidly and in high yield in several solvents, utilizing all N–H protons. While the reduction process is accompanied by the evolution of nitrogen gas in the case of N_2H_4, the intermediacy of diimide could not be confirmed by standard trapping experiments.

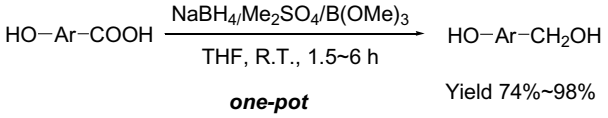


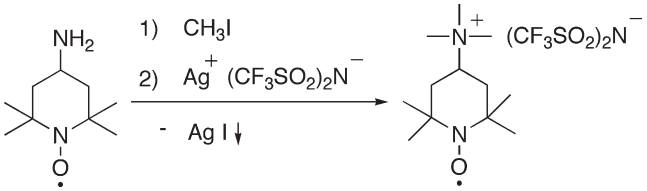




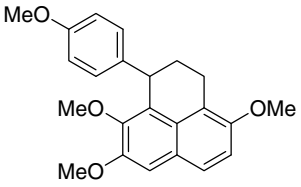




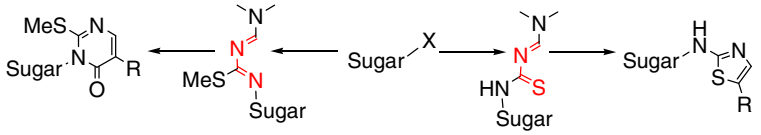


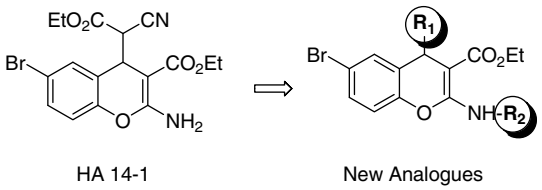


Anion metathesis of 4-trimethylammonio-2,2,6,6-tetramethylpiperidine-1-yloxyl iodide using silver salts gives the new 4-trimethylammonio-2,2,6,6-tetramethylpiperidine-1-yloxyl bis(trifluoromethylsulfonylimide) and further spin probes with tetrafluoroborate or hexafluorophosphate as anions.



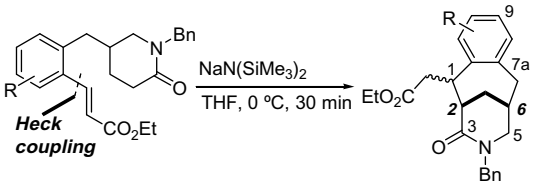
The structures of two phenylphenalenes and three dimeric phenylphenalenes have been revised by 2D-NMR spectroscopy.



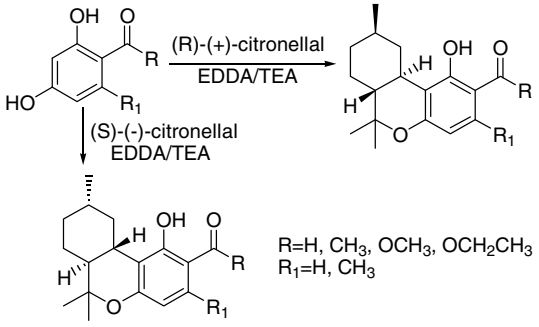


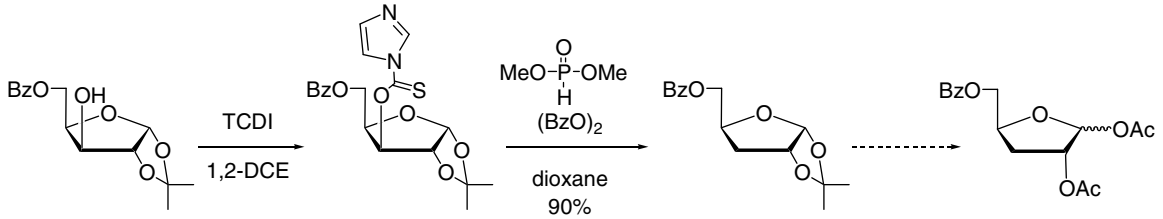
HA 14-1 New Analogues

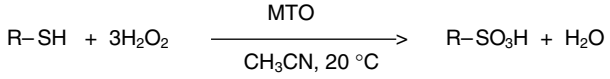
A new and versatile strategy has been developed towards HA 14-1 analogues selectively modified on position 4 and/or on the primary amine function.



A novel synthesis of 2,6-methano-4*H*-4-benzazonines is described.

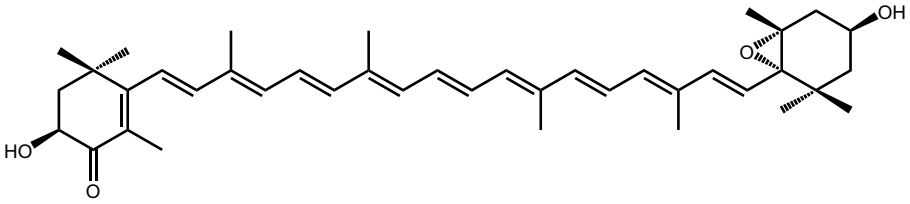


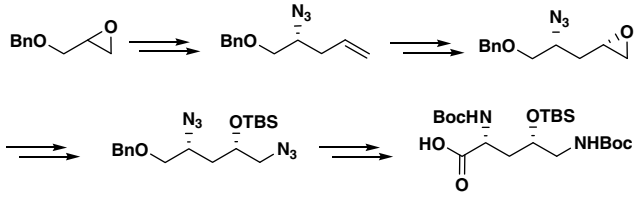


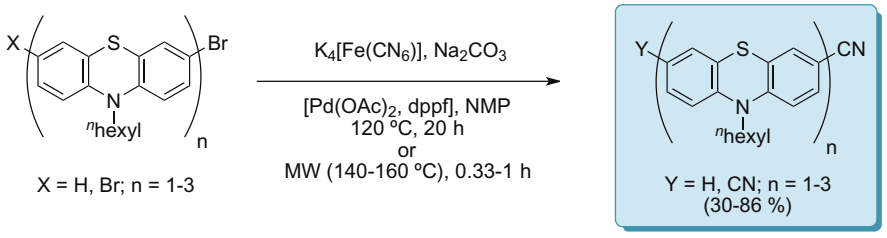


R = p-X-C_6H_4 (X = H, CH_3, OCH_3, Cl, NO_2); $C_6H_5CH_2$; 2-Naph; $C_{12}H_{25}$; $C_{18}H_{37}$.

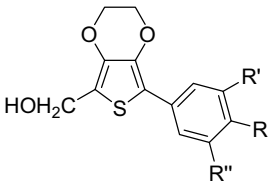
Several types of thiols were selectively oxidized to the corresponding sulfonic acids using hydrogen peroxide in the presence of catalytic amount of MTO under mild reaction conditions.



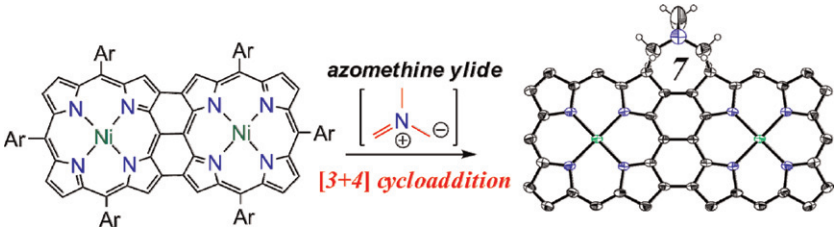


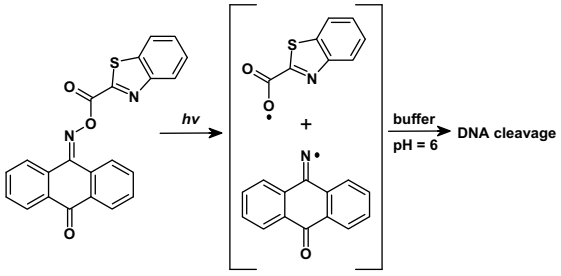


Blue to green daylight fluorescent and electroactive (oligo)phenothiazinyl nitriles can be obtained in good to very good yields via Beller cyanation either under conductive or dielectric heating.

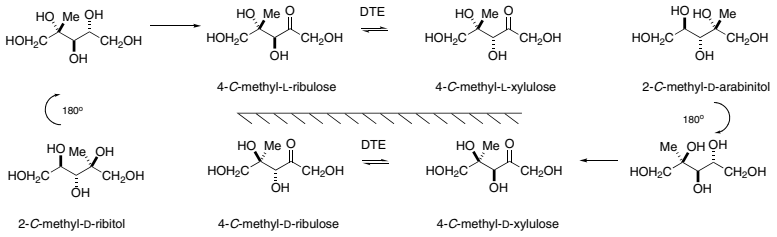


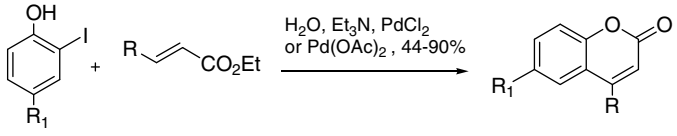
A series of new 3,4-ethylenedioxy-2-thenyl (EDOTn) derived alcohols have been synthesized and evaluated as super acid labile carboxylic acid protecting groups. All the derivatives are labile to very low concentrations of trifluoroacetic acid (0.01–0.5%).

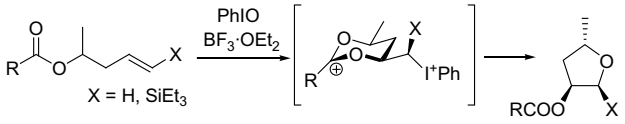


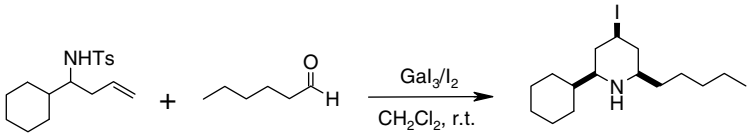


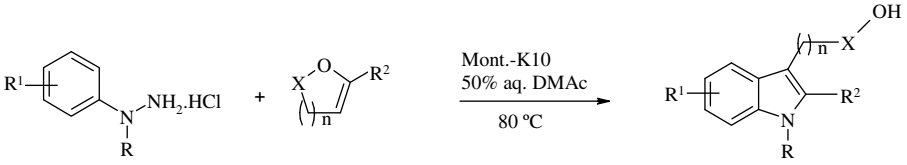
Various (heterocyclo)carbonyl mono-oxime esters of anthraquinone were synthesized, which produced radical species and exhibited ability for DNA cleavage upon UV irradiation.



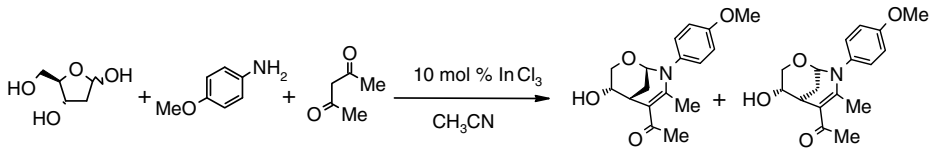








R^1 = H, CH_3, F, Cl, Br, COOH, OCH_3 n= 1,2 ; X= CH_2, C=O
R^2 = H, CH_3
(R = $PhCH_2$ when R^2 = CH_3 and X= CO, otherwise R = H)



*Corresponding author
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ISSN 0040-4039