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Tetrahedron Letters

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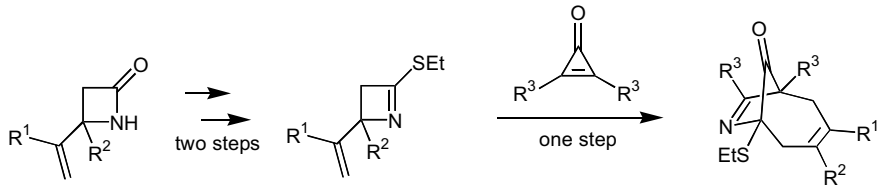
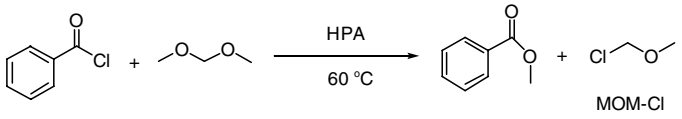
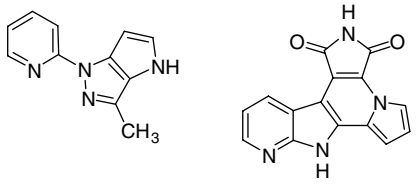
Contents

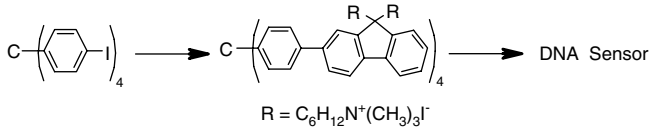
COMMUNICATIONS



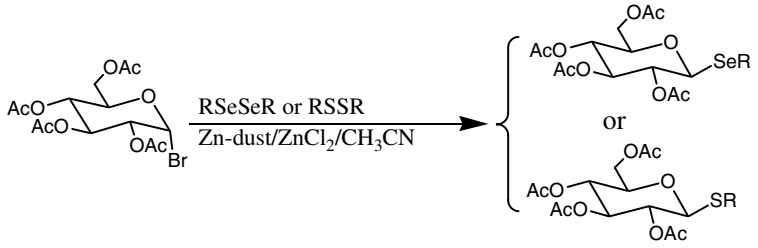


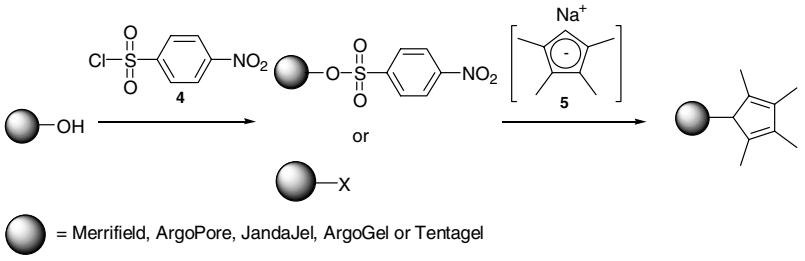
An efficient (in terms of experimental and time) synthetic procedure for chloromethyl methyl ether (MOM-Cl) is described using heteropolyacids (HPAs) as catalysts.

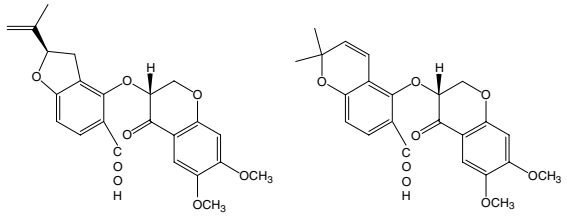




The development of a new water-soluble tetrahedral chromophore is presented here, which acts as a simple, homogeneous and sensitive platform for DNA hybridization assays.

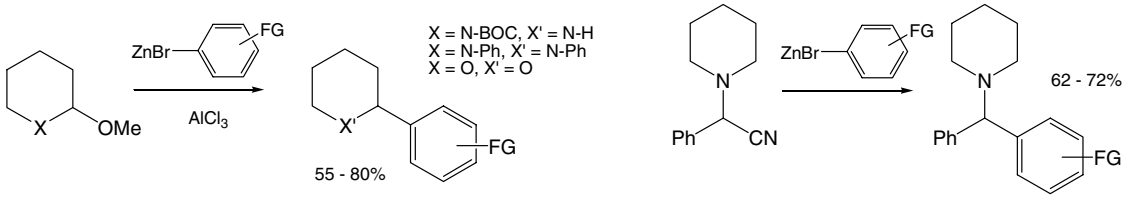


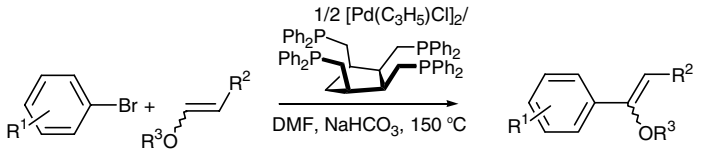




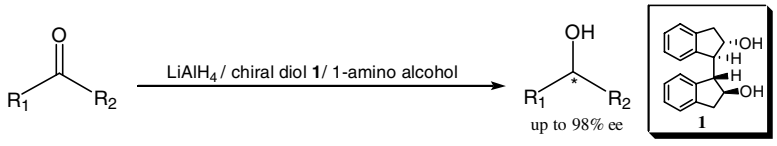
(-)-Rotoic acid (-)-Deguoic acid

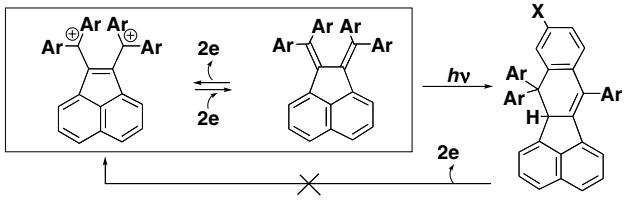
The chemical study of *Lonchocarpus nicou* roots benzene extract afforded the new (−)-rotoic acid and (−)-deguoic acid. Biogenetically, these natural products are probably located between the parent rotenoids rotenone and deguelin, respectively, and the corresponding free tubaic acids.

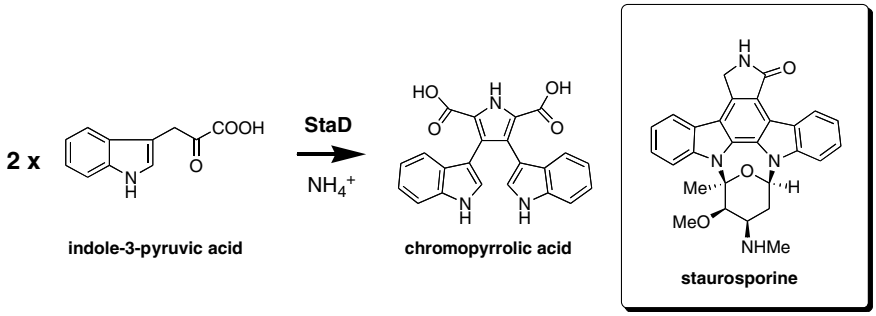


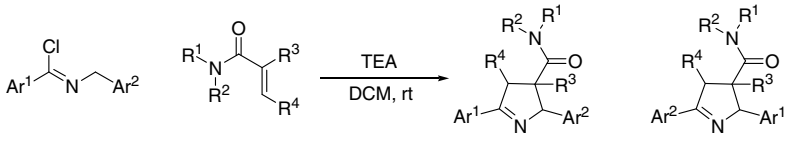


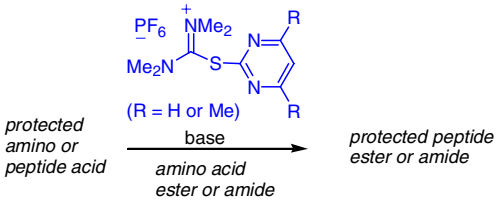
R^1 = CHO, COMe, CF_3, F, Me, *i*Pr, *t*Bu, Me, OMe
R^2 = Ph, CN, CO_2Me
R^3 = Me, Et

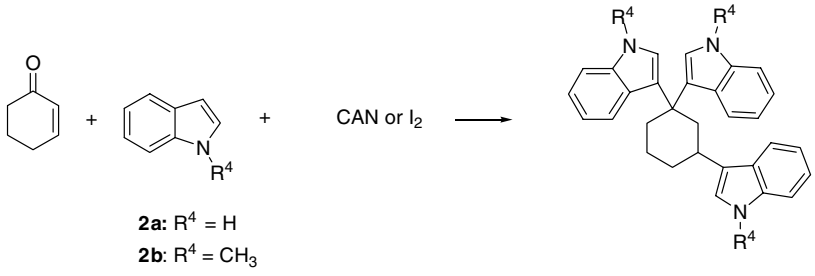


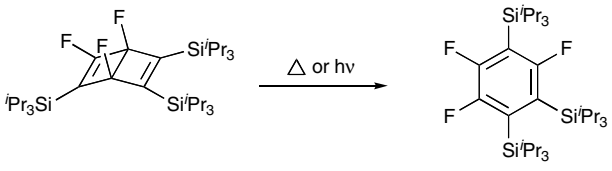


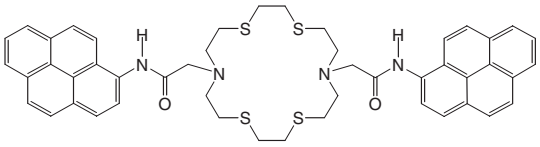












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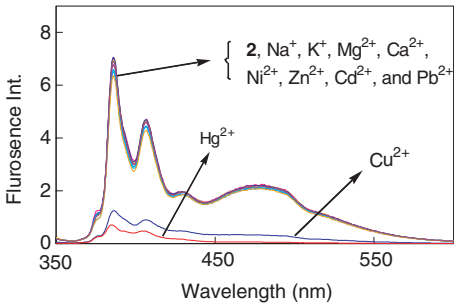
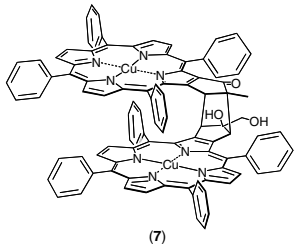
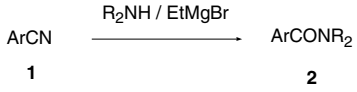




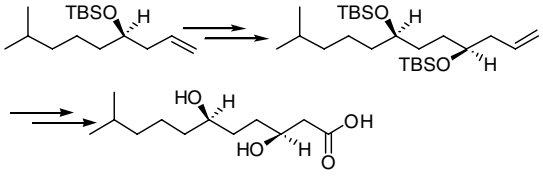
(7)

Self-sensitized photo-oxygenation of an *exo*-methylenepropanoporphyrin affords a high yield of an oxygenated coplanar bis-porphyrin (**7**).

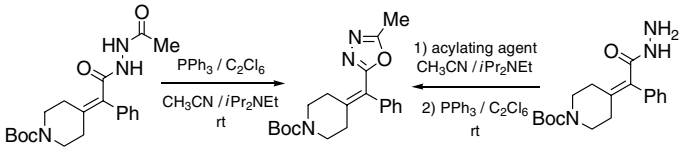


1 **2**

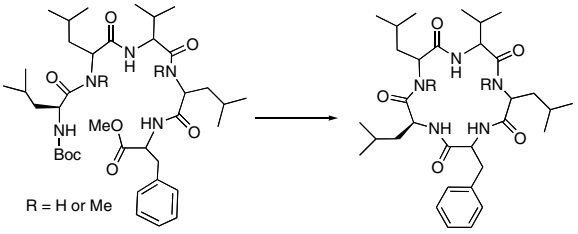
Arylnitriles react with magnesium amides to produce carboxamides in excellent yield. The method was applied for the preparation of the insect repellent DEET™.



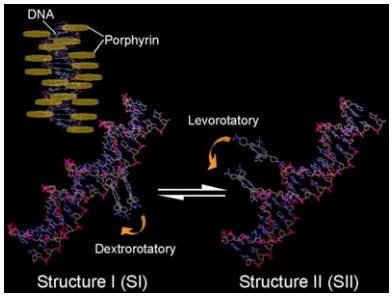
The first total synthesis of (3*S*,6*R*)-3,6-dihydroxy-10-methylundecanoic acid was accomplished from commercially available 1-bromo-3-methylbutane in 11 steps and 25.8% overall yield. The key steps were asymmetric allylic alkylations via allyldiisopinocampheylborane and hydroboration–oxidation.

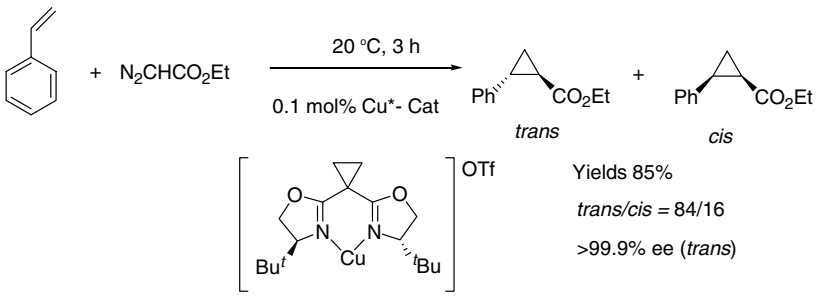


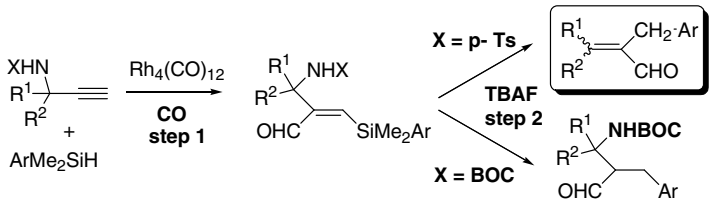
A general and mild synthesis of tetrasubstituted alkenyl-1,3,4-oxadiazoles is presented. A wide variety of sensitive functional groups are tolerated and a one-pot procedure is also demonstrated.

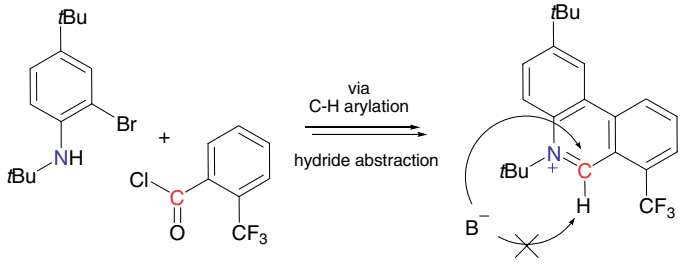


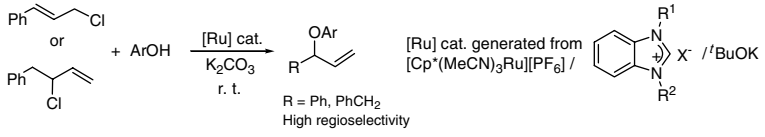
Porphyrin aggregation with optical rotation inversion on a fixed DNA scaffold: This letter describes a new TMAP–DNA complex that is stabilized by both ionic bonds and stacking of π conjugates (structure I). Changes in the ionic conditions induced free inversion of the optical rotation of the TMAP–DNA complex without any change in the DNA structure (structure II).

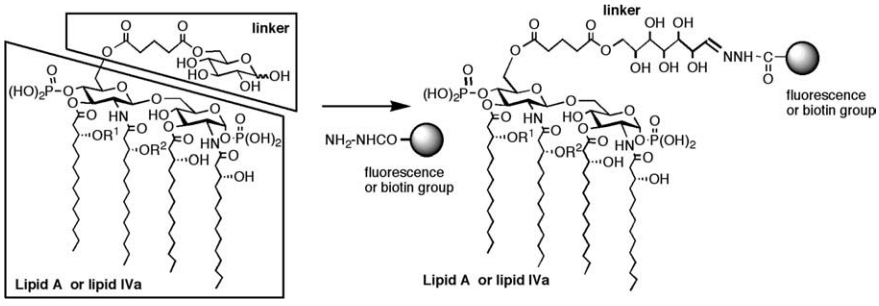


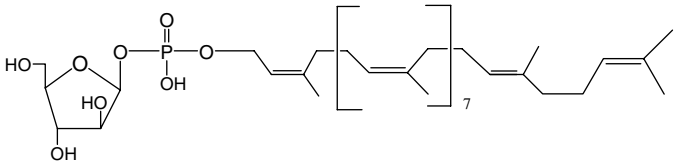




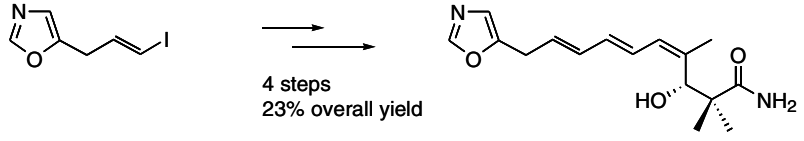


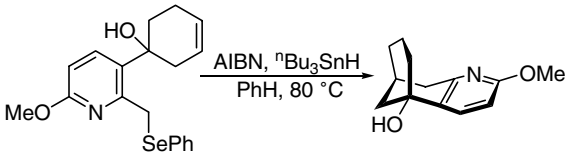


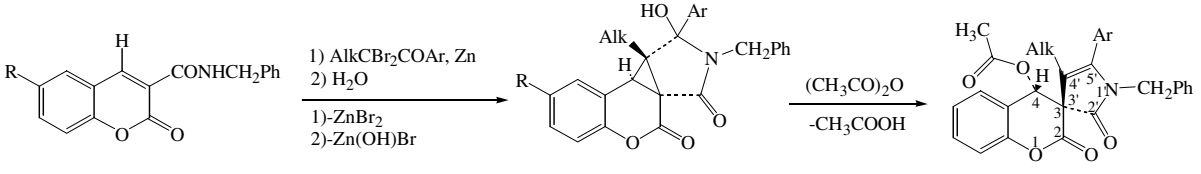


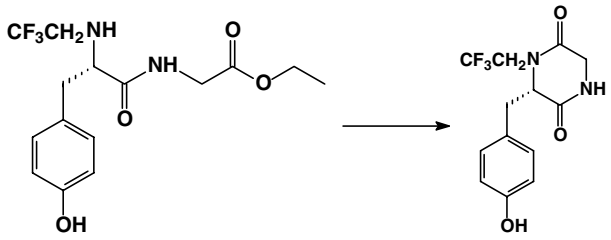


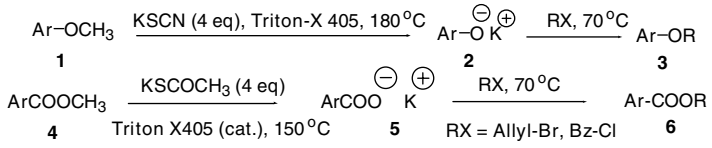
The title product was synthesized by coupling the trichloroacetimidate derivative of decaprenol to a suitably protected β-D-arabinofuranosyl phosphate.



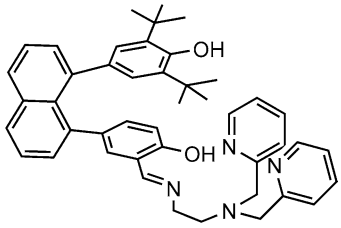




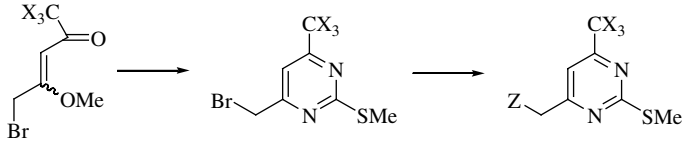


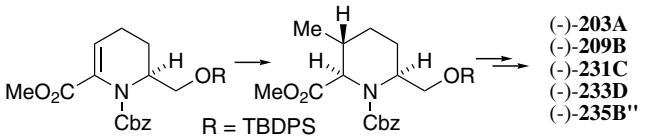


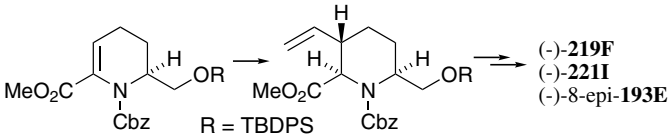
A simple, surfactant-mediated, one-pot, solvent-free dealkylative cleavage of aryl ethers and esters followed by subsequent optional trans-alkylation under essentially neutral conditions has been developed.

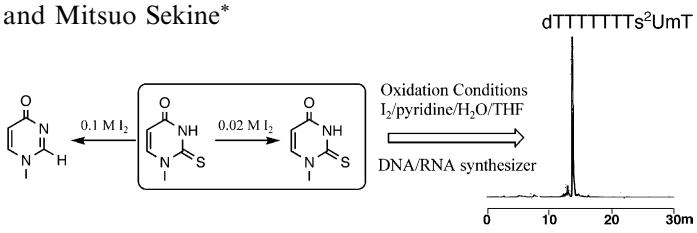


A salen-type ligand bearing an encumbered phenol ring in a face to face disposition has been synthesised in the view to modelise metal–radical enzymatic systems.

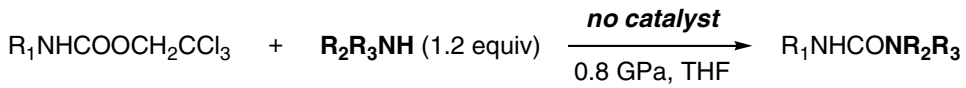


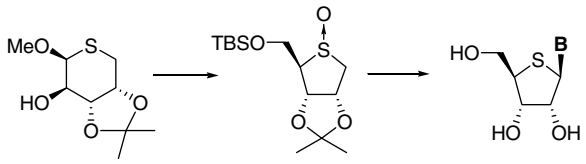


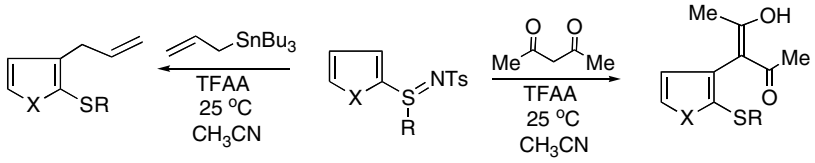


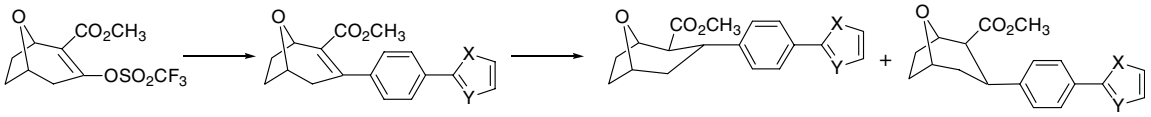


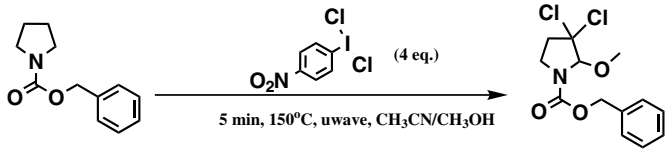
Oligonucleotides containing s^2U derivatives were stable toward a 0.02 M solution of iodine in pyridine–THF–H_2O. These conditions were successfully applied to the synthesis of oligonucleotides containing s^2U derivatives on an automated DNA/RNA synthesizer.

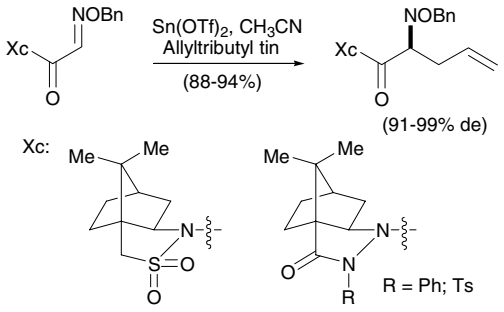












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*Corresponding author
ⓘ+ Supplementary data available via ScienceDirect

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