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Tetrahedron Letters

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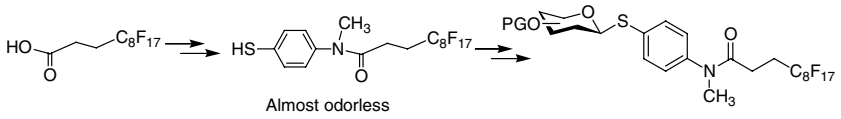
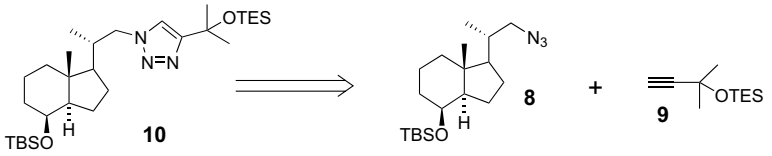
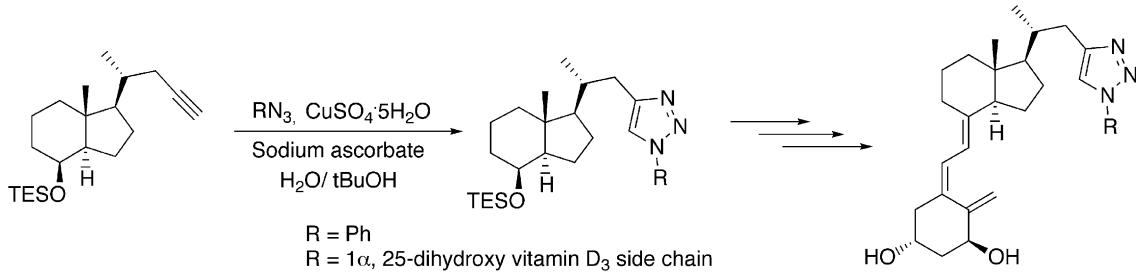
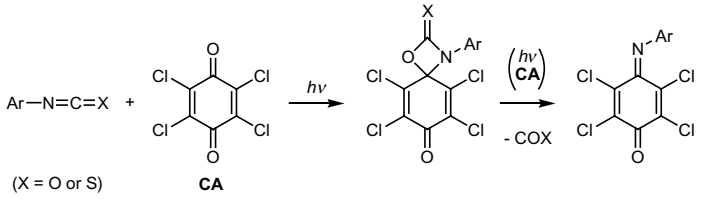
Contents

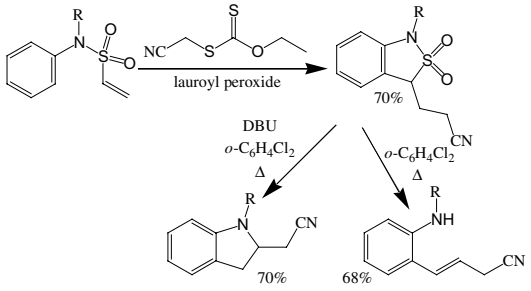
COMMUNICATIONS



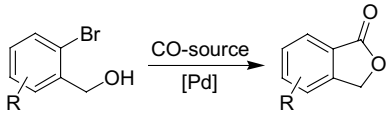


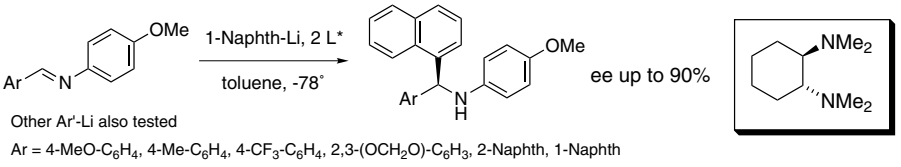


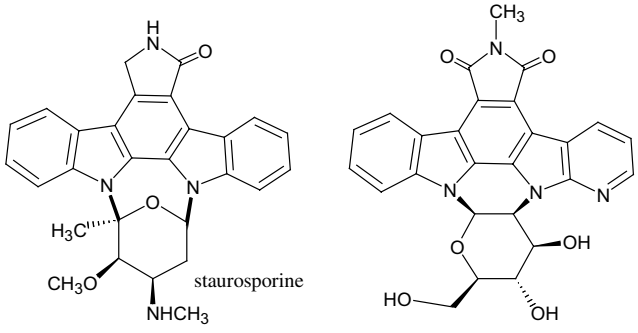


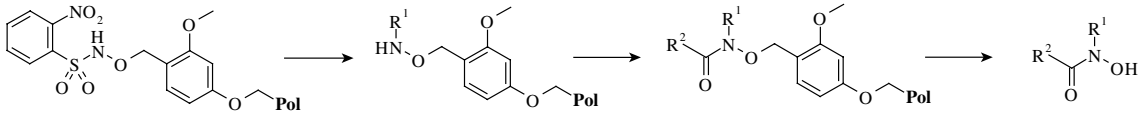


Intermolecular radical addition of a xanthate to a vinyl sulfanilide is followed by ring closure to the aromatic ring to give a dihydrobenzoisothiazole dioxide structure, which upon heating loses sulfur dioxide to give a 2-substituted aniline; in some examples, the presence of DBU during heating induces the formation of an indoline.

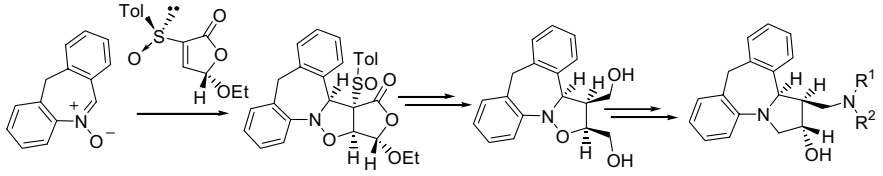


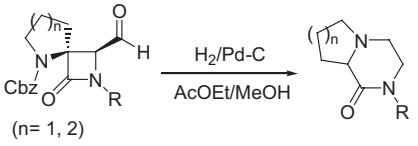


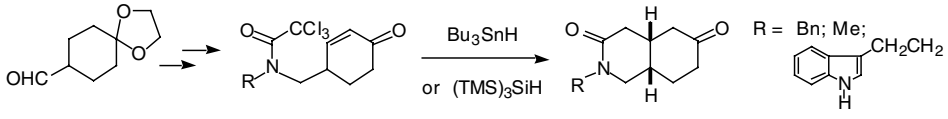


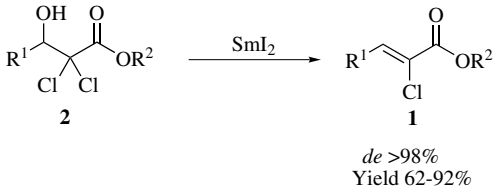


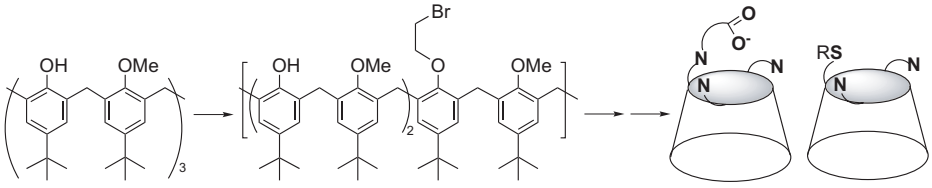
N-Alkylation of polymer-supported *N*-benzyloxy-2-nitrobenzenesulfonamides represents a useful route to *N*-alkyl hydroxamic acids.

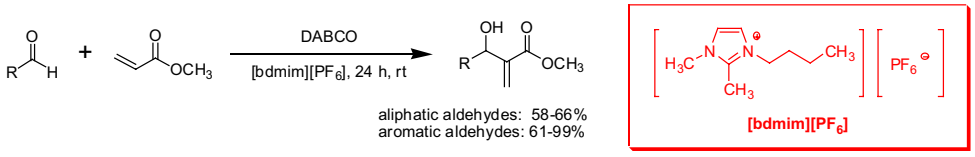


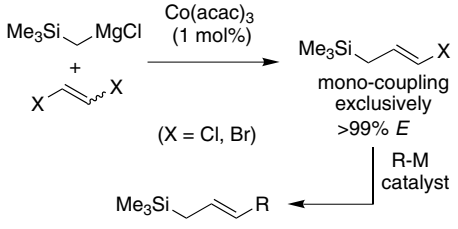


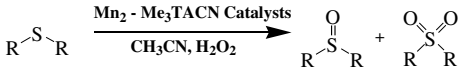


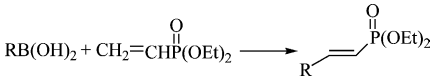




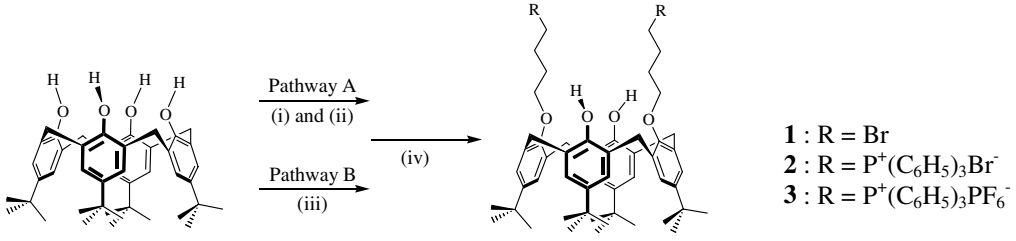


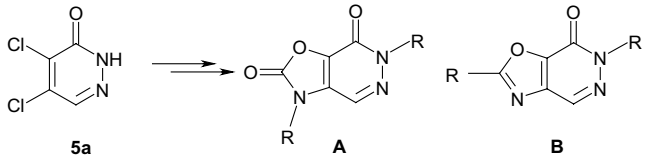


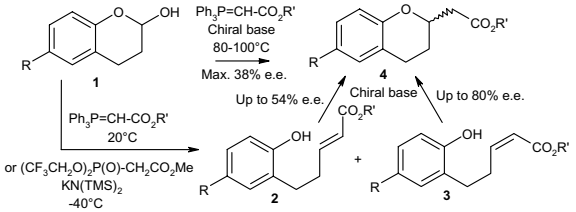




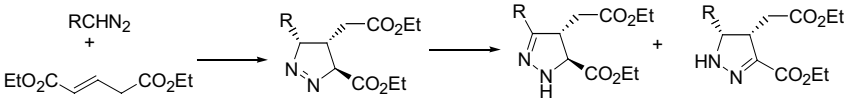
Palladium acetate catalyzed Mizoroki–Heck reactions of arylboronic acids with diethyl vinylphosphonates afford α,β-unsaturated phosphonates in good yields.

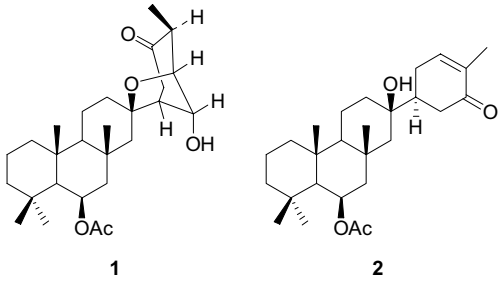


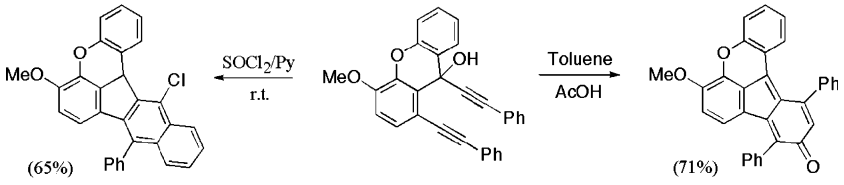


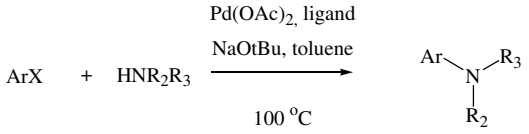


A new asymmetric synthesis of 2-substituted chiral chromanes has been achieved. The key step is the intramolecular conjugate addition of a phenolic nucleophile on a α,β-unsaturated ester catalyzed by Cinchona alkaloids. The high ee's obtained with cinchonine and its derivatives have been rationalized by ab initio quantum chemistry calculations of transition state structures.

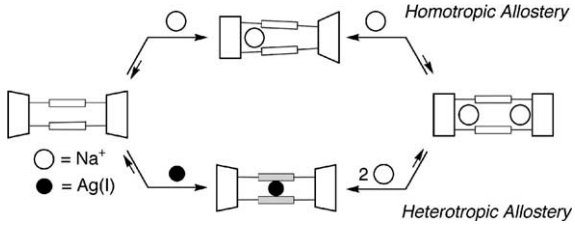




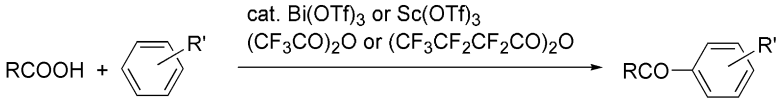


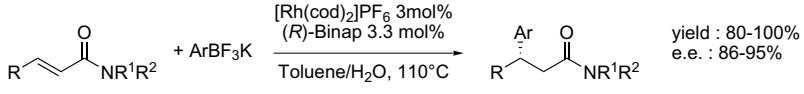


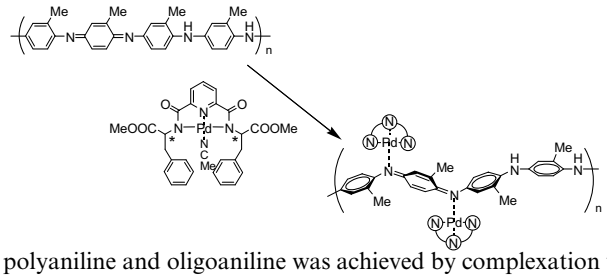
Three families of phosphine ligands were prepared for use in Pd-catalyzed aryl aminations.



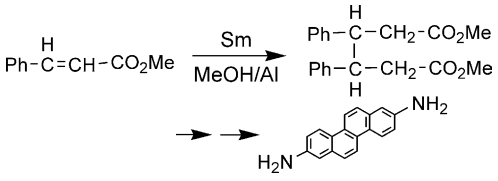
Homotropic and heterotropic negative allostery for Na^+ and Ag^+ recognition was achieved by the biscalix[4]arene-based host bearing two rigid bipyridine linkers and two ester moieties.

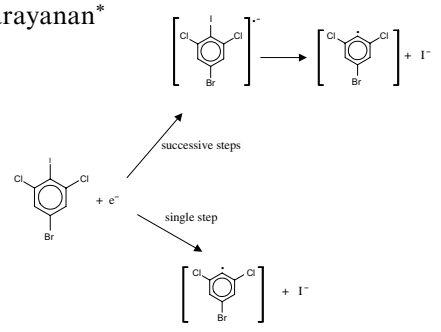


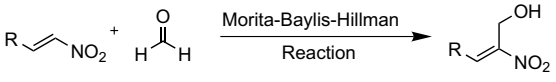


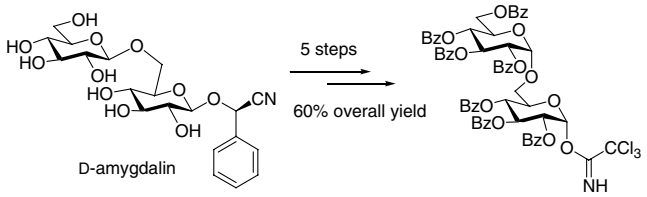


Chirality induction of π-conjugated polyaniline and oligoaniline was achieved by complexation with chiral palladium(II) complexes. The crystal structure of the chiral complex with a model compound of the polyaniline revealed a chiral propeller twist conformation of the π-conjugated moiety.

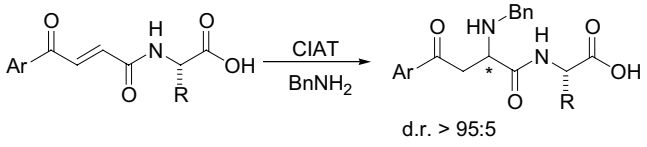


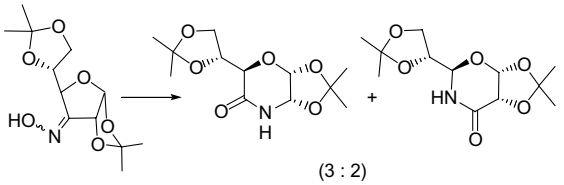


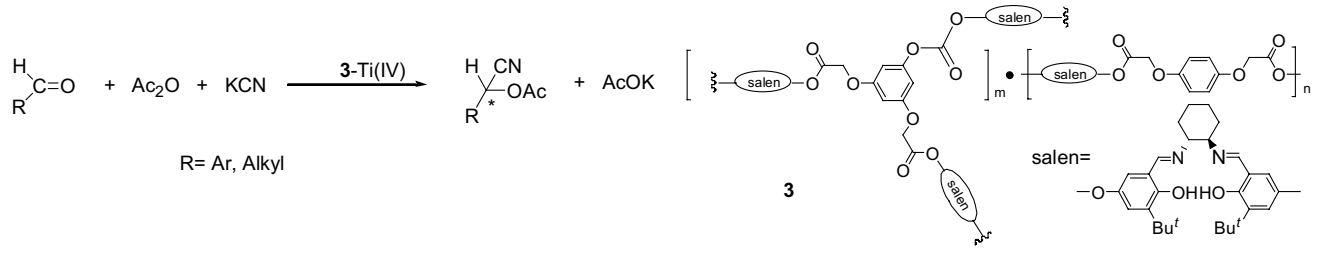


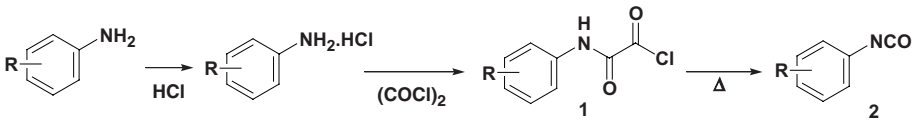


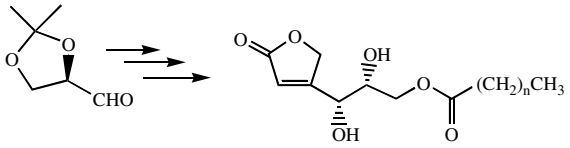
Acid catalyzed rearrangement of amygdalin derivatives give the thermodynamically more stable α-anomers. This reaction was applied to different di-, tri-, and tetrasaccharides.



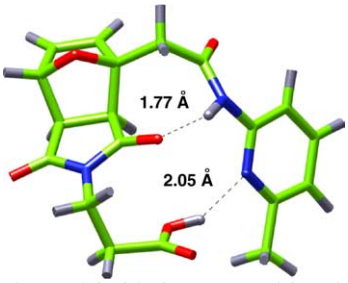




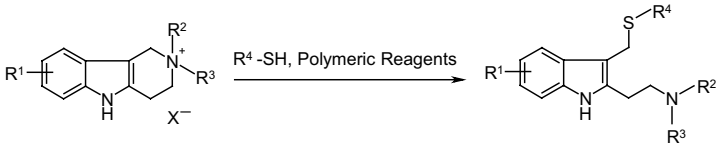


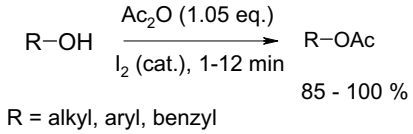


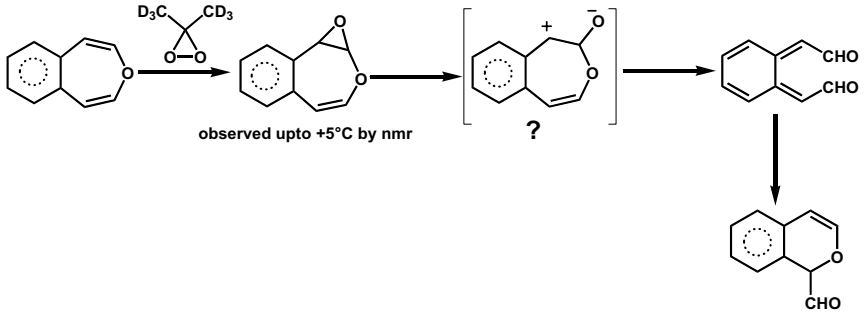
The total synthesis of syributins **1** and **2** using the Baylis–Hillman adduct of 2,3-*O*-isopropylidene-*R*-glyceraldehyde-ethyl acrylate as starting material followed by ring closing metathesis (RCM) is reported.

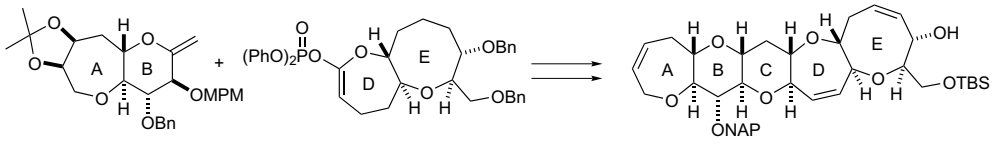


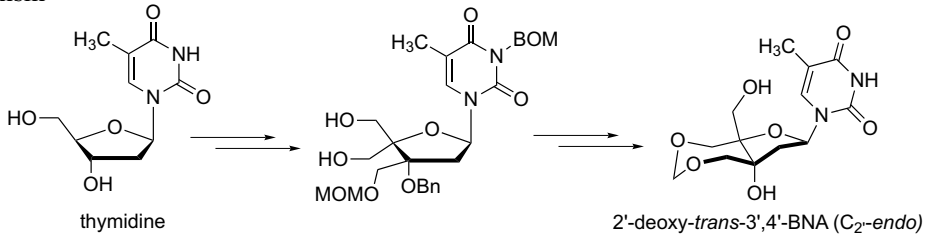
A Diels–Alder cycloaddition between a furan and a maleimide is presented in which the presence of complementary hydrogen bonding sites dramatically accelerate the reaction and, additionally, ensure that only one of two possible diastereoisomers is formed.



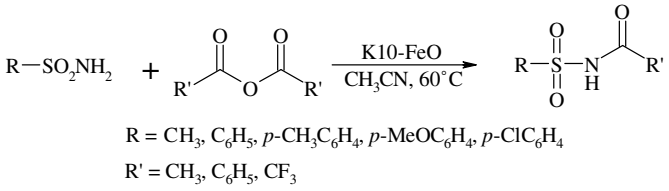








A novel bridged nucleoside having $C_{2'}$-*endo* sugar conformation, 2′-deoxy-*trans*-3′,4′-BNA monomer, was successfully synthesized.



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*Corresponding author
ⓘ+ Supplementary data available via ScienceDirect

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