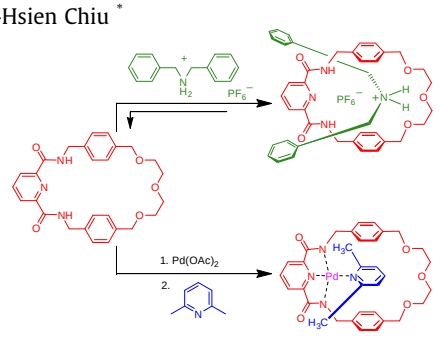
Contents lists available at ScienceDirect

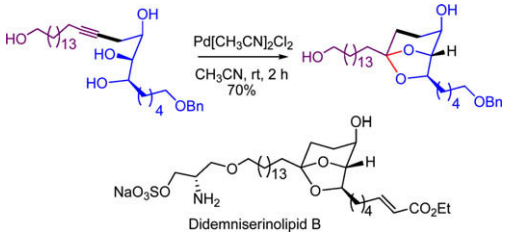
Tetrahedron Letters

journal homepage: www.elsevier.com/locate/tetlet

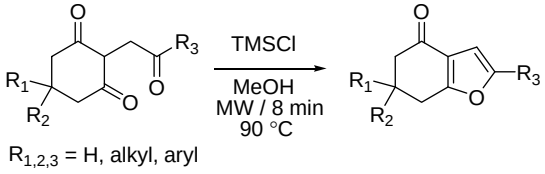
Tetrahedron Letters Vol. 50, No. 3, 2009

Contents

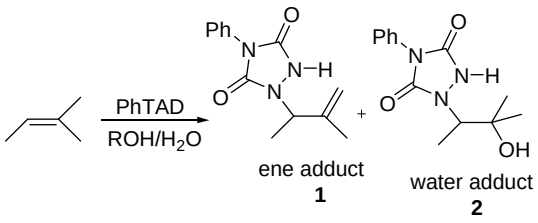




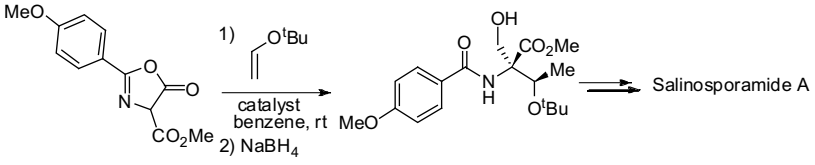
A concise assembly of a central 6,8-dioxabicyclo[3,2,1]octane core of didemniserinolipid featuring a Pd-mediated alkynediol cycloisomerization has facilitated a formal synthesis of didemniserinolipid B

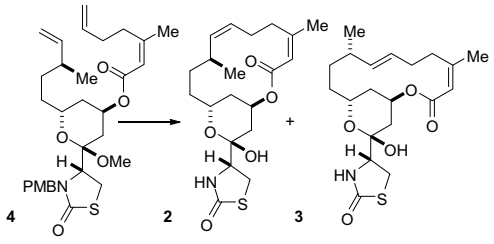


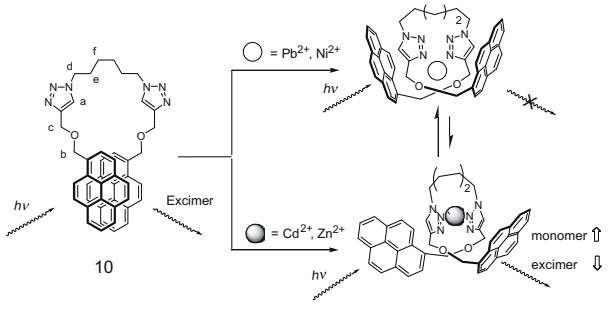
The use of TMSCl in methanol under microwave irradiation allows the intramolecular condensation of a panel of triketones, giving rise to 4-keto-4,5,6,7-tetrahydrobenzofurans.

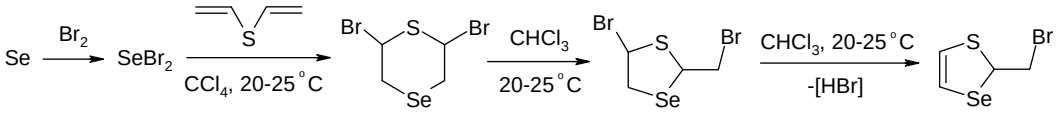


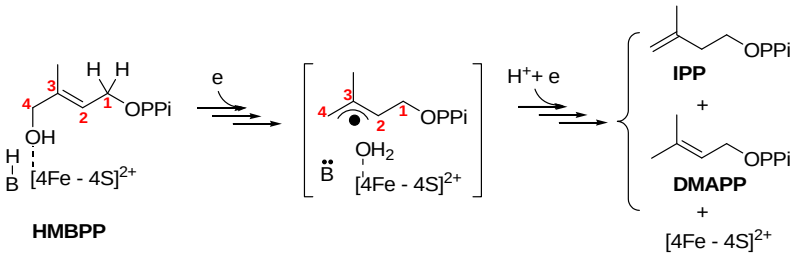
The reaction of *N*-phenyltriazolinedione with simple alkenes in alcohol/water mixtures affords, in addition to the ene adduct, an alcohol which arises from the addition of water to the aziridinium imide intermediate. The structures of the new hydration products have been established by X-ray analysis and spectroscopy.

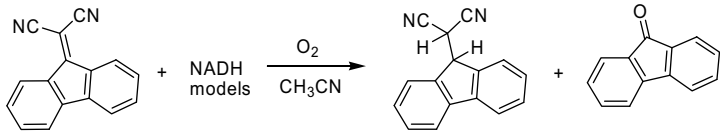




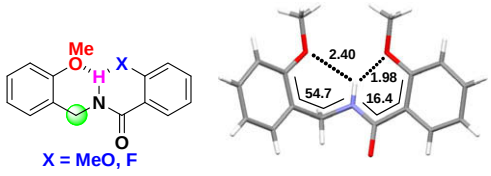


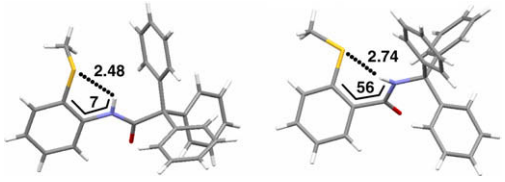


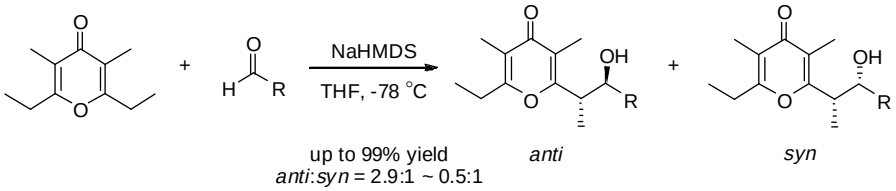


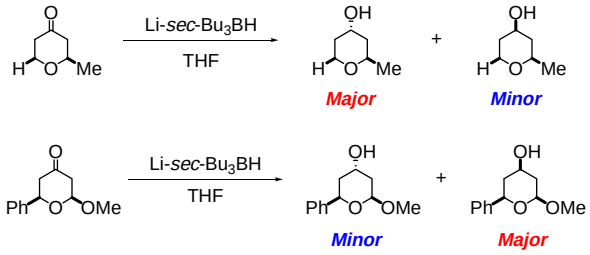


NADH model =			
	HEH	90%	0
	Me-HEH	78%	8.3%
	BNAH	6%	76%

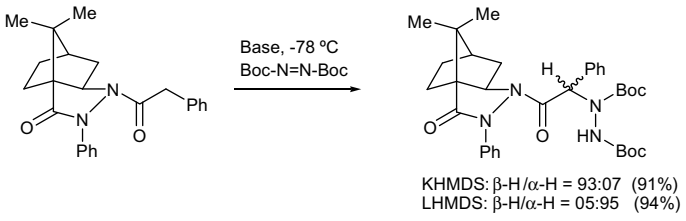


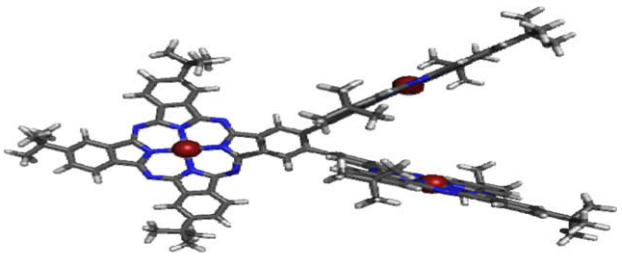




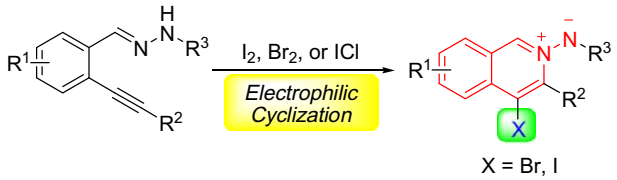


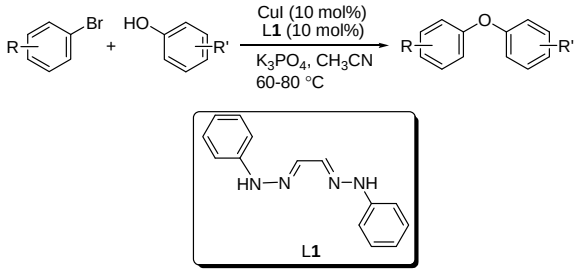
The unusual facial stereoselection in the hydride reduction of the Danishefsky pyranones (2,3,5,6-tetrahydro-4-pyranones) with L-Selectride (Li-*sec*-Bu_3BH) has been explained based on the exterior frontier orbital extension model (the EFOE model).



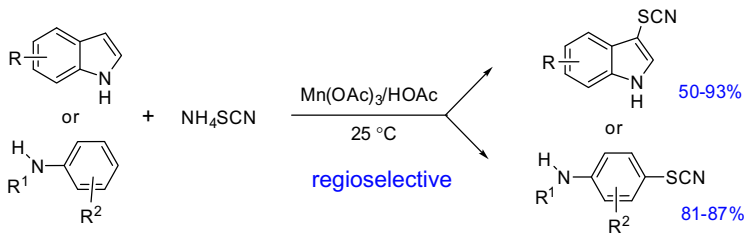


(Model of Pc-Pc branched triad)

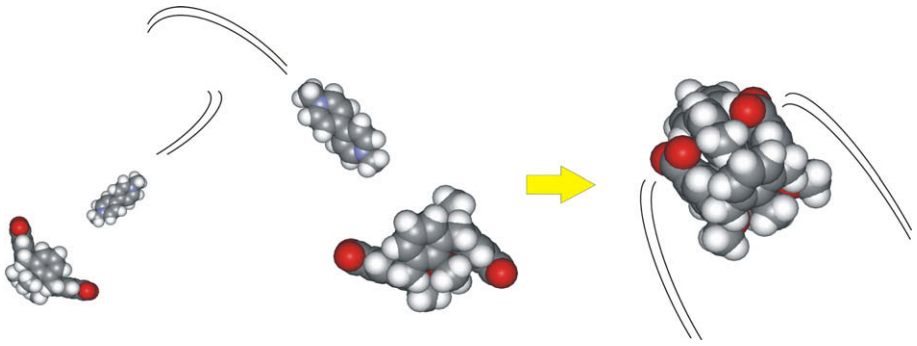


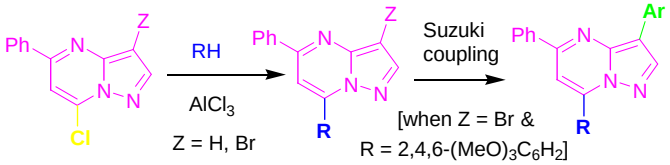


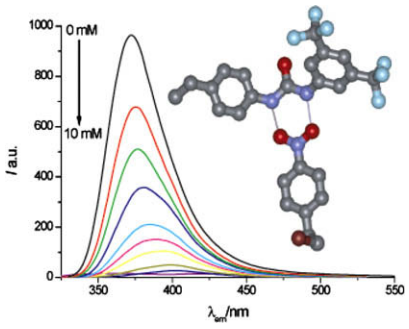
A very simple bishydrazone-type ligand, glyoxal bis(phenylhydrazone) (L**1**), was found to effectively promote the CuI-catalyzed O-arylation of phenols with aryl bromides under mild conditions. A diverse array of phenols and bromoarenes was employed as substrates to afford diaryl ethers in good to excellent yields.



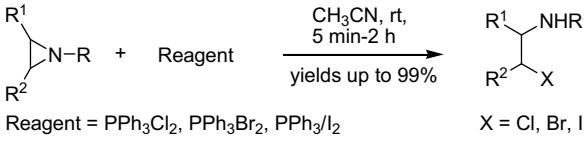
$Mn(OAc)_3$-promoted free radical thiocyanations of indoles and anilines are introduced. Reactions performed under mild conditions give regioselective products in good to excellent yields.



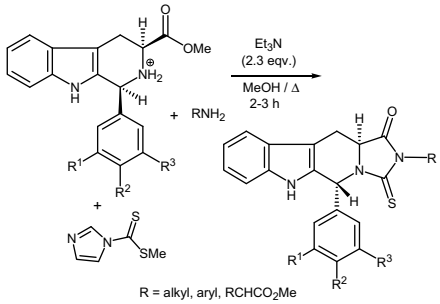




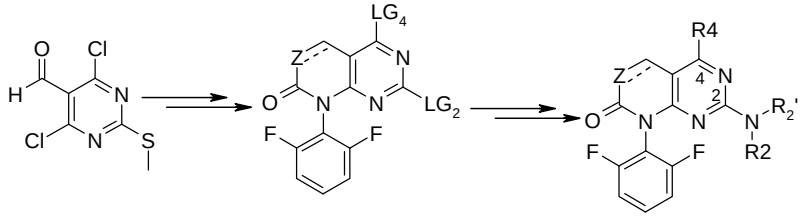
Arylurea-/guanidine-based receptors were studied concerning their binding capability toward towards neutral nitrogroups; nitro groups; specific binding with relatively high binding constants in DMSO are is revealed.



We report here the use of PPh_3/halogenating agents as highly efficient reagents for the ring opening of aziridines with halides. The method works effectively for both activated and non-activated aziridines, and furnishes the products in excellent yields within a short period of time.



An efficient one-pot, three-component synthesis of novel 2-substituted-5-aryl-1-oxo-3-thioxo-1,2,3,5,11,11a-hexahydro-6*H*-imidazo-[1,5-*b*]-β-carbolines employing 1-aryl-1,2,3,4-tetrahydro-β-carboline-3-carboxylates, primary amines (or amino acid esters) and methyl 1-imidazolecarbodithioate as thiocarbonyl transfer reagent is reported.



*Corresponding author
ⓘ+ Supplementary data available via ScienceDirect

Abstracted/indexed in: AGRICOLA, Beilstein, BIOSIS Previews, CAB Abstracts, Chemical Abstracts, Chemical Engineering and Biotechnology Abstracts, Current Biotechnology Abstracts, Current Contents: Life Sciences, Current Contents: Physical, Chemical and Earth Sciences, Current Contents Search, Derwent Drug File, Ei Compendex, EMBASE/Excerpta Medica, Medline, PASCAL, Research Alert, Science Citation Index, SciSearch. Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect®

ELSEVIER

Available online at www.sciencedirect.com
ScienceDirect

ISSN 0040-4039