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Tetrahedron Letters

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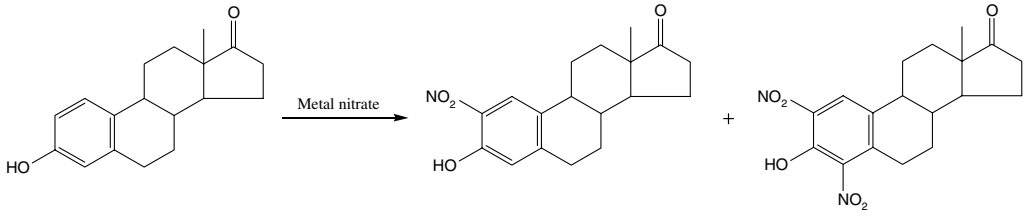
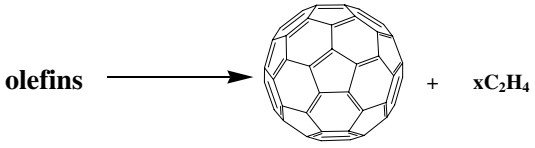
Contents

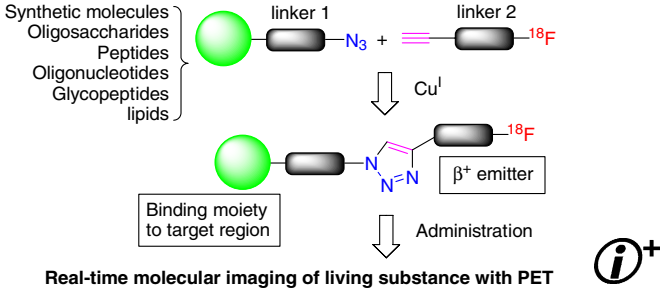
COMMUNICATIONS

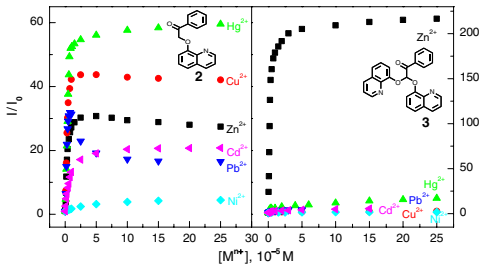


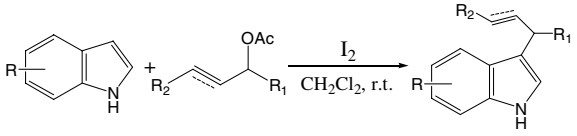


The ASE (aromatic stabilization energy) for C_{60} and C_{70} has been evaluated by a new homodesmotic reaction and the results support the early established fact that C_{70} is more stable than C_{60}.

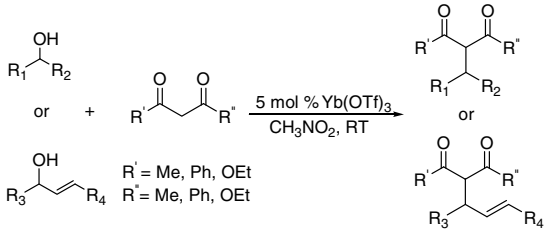
Various F-18-labeled 1,2,3-triazoles were regioselectively prepared via the 'click reaction' of biomolecules and F-18-labeled prosthetic groups.

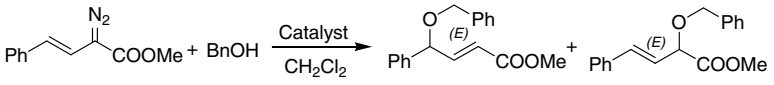




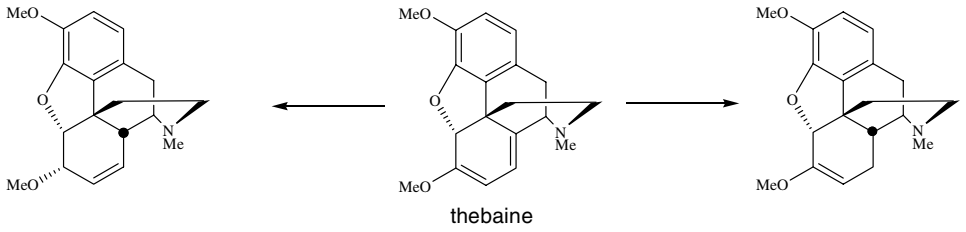


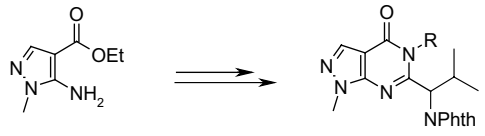
A mild and efficient allylation/propargylation of indoles has been developed with high regioselectivities and excellent yields. In the presence of catalytic molecular iodine, various indoles could smoothly react with allylic/propargylic acetates at room temperature to exclusively provide C-3 alkylated products.



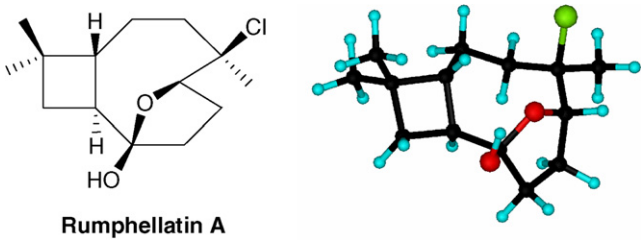


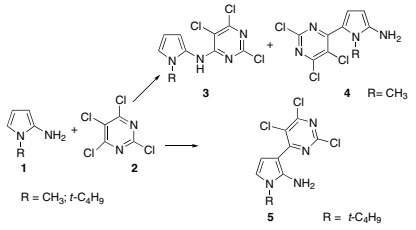
Catalyst		
$AgClO_4$:	> 98 :	2
$Rh_2(OAc)_4$:	< 2 :	98

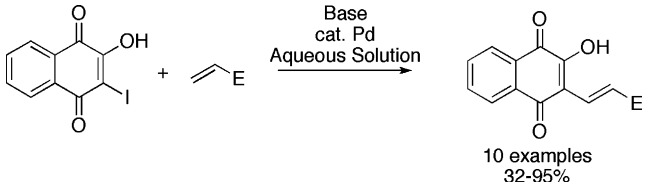




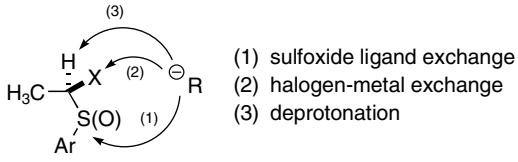
A novel synthesis of 4*H*-pyrazolo-[3,4-*d*]pyrimidin-4-ones utilizing an in situ generated iminochloride as a key precursor for amidine formation and subsequent base-catalyzed ring closure is described.



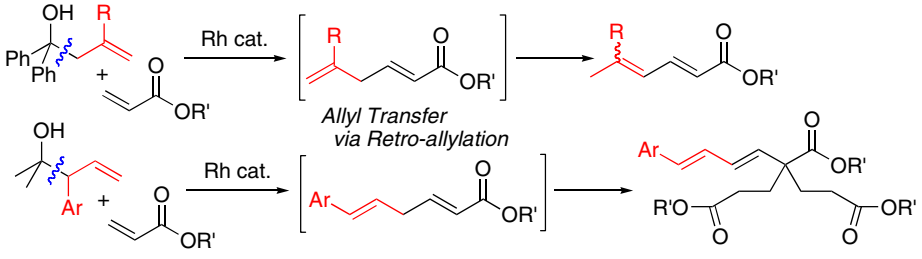


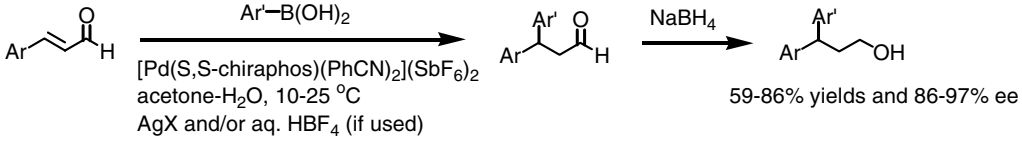


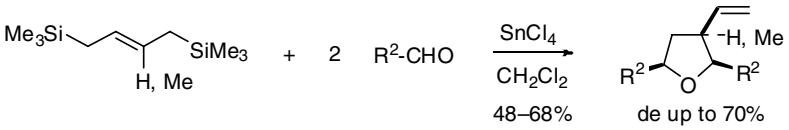
The first Heck coupling of a naphthoquinone nucleus in aqueous solution is described. The methodology is noteworthy for the use of 'green' chemistry and the ease of isolation of the products.

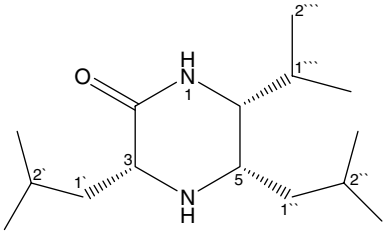


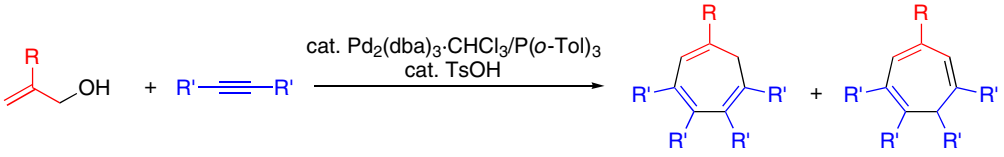
Competing sulfoxide ligand exchange, halogen–metal exchange, and deprotonation pathways from α-halo-α-protioalkyl aryl sulfoxides were investigated.

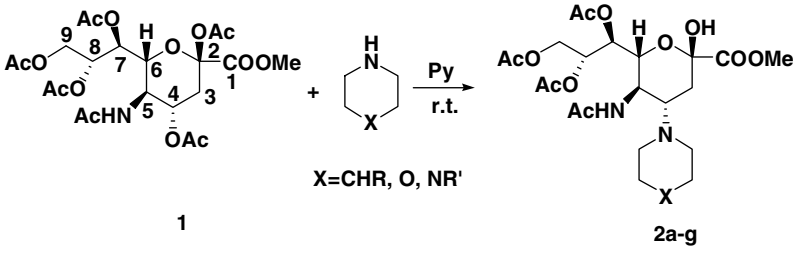




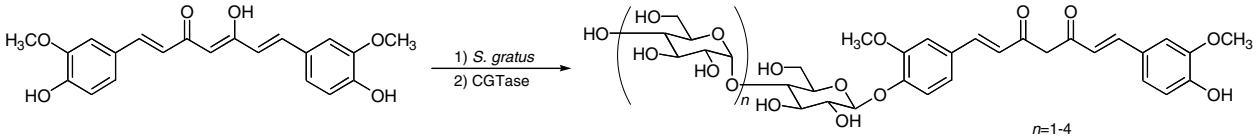


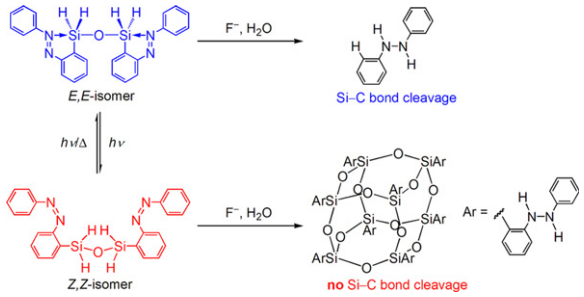


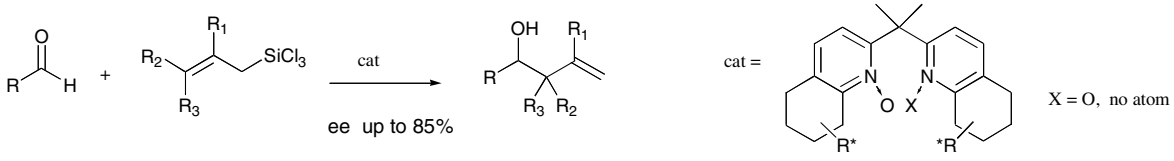


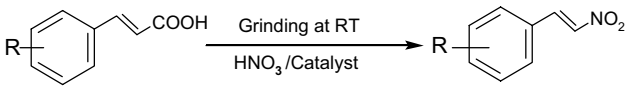


1 2a-g

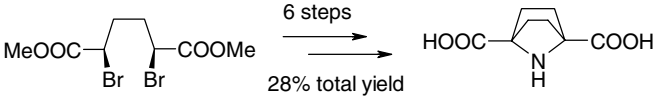


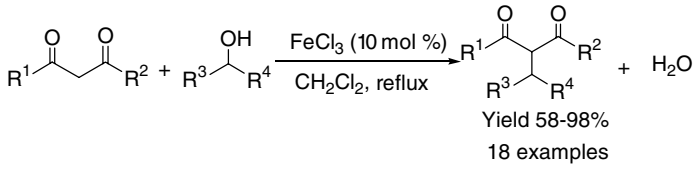


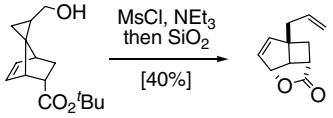


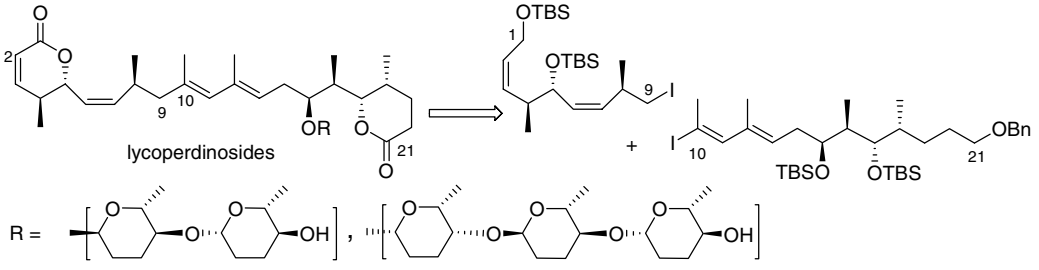


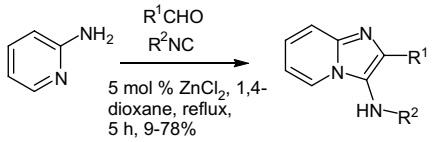
Catalyst = $Mg(NO_3)_2$, $Sr(NO_3)_2$, $Al(NO_3)_3$, $Ca(NO_3)_2$, $Ni(NO_3)_2$, $Cd(NO_3)_2$, $Zn(NO_3)_2$, $Hg(NO_3)_2$, $AgNO_3$, $ZrO(NO_3)_2$, $UO_2(NO_3)_2$, $Th(NO_3)_2$ or ammonium nitrate.

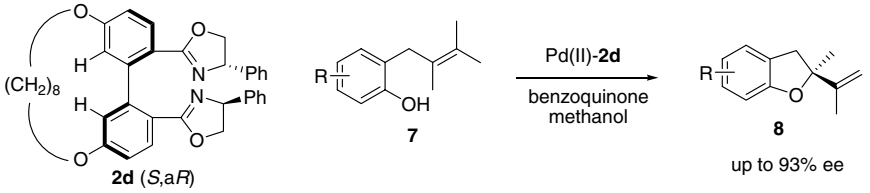




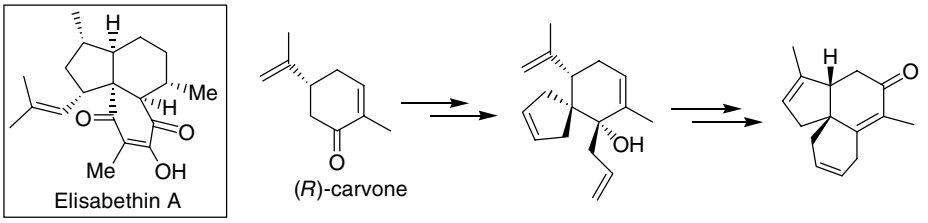


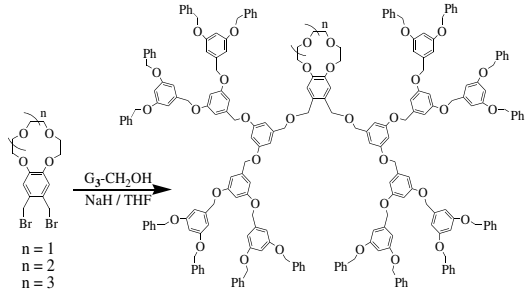


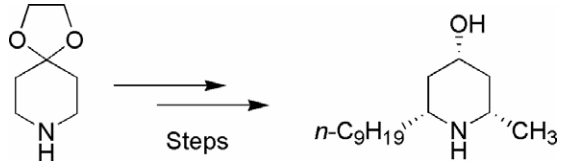




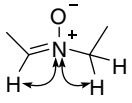
A new family of atropisomeric bisoxazoline ligands **2** with a bridge across the 5,5′-position of biphenyl has been developed. The axial chirality of this type of ligands can be retained by macro-ring strain produced by 5,5′-linkage of biphenyls even without 6,6′-substituents on biphenyls. The Pd(II)-**2d** complex as catalyst showed high catalytic activity and enantioselectivity for asymmetric Wacker-type cyclization of allylphenols.



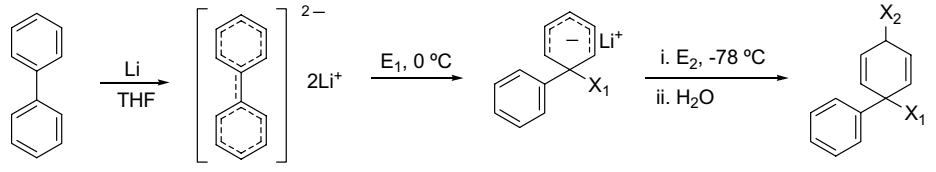




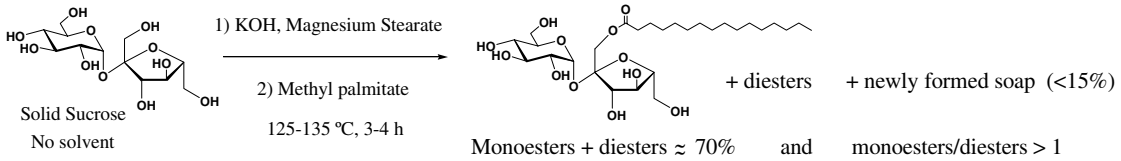
A stereoselective synthesis of dendrobates (±)-alkaloid 241D is described. Key steps involve the stepwise electrochemical elaboration of C-4 hydroxylated α-aminonitriles, which were alkylated with iodomethane and 1-bromononane, respectively.



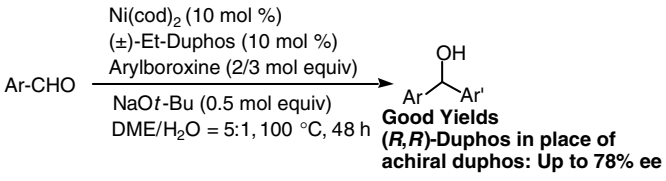
$^{1}H–^{15}N$ HMBC provides an efficient and high-speed method for the identification and characterization of aromatic nitrones.

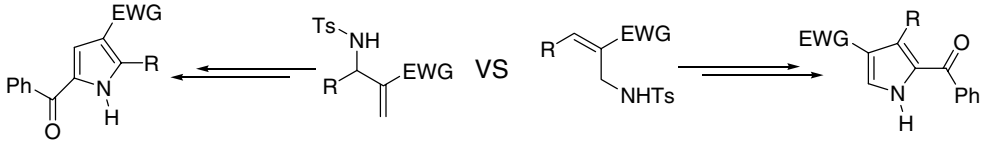


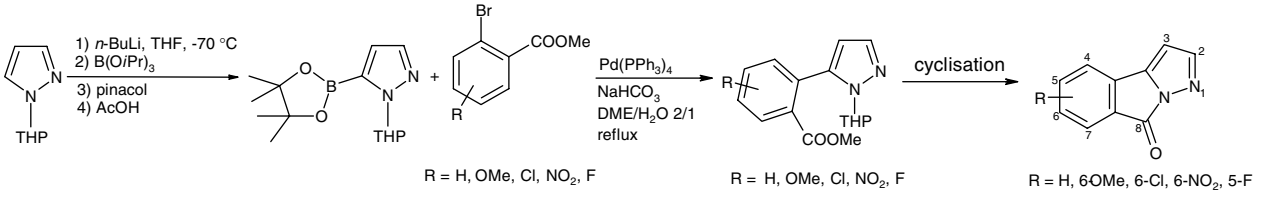
[E_1 = *n*-$C_8H_{17}F$, *c*-$C_5H_9CH_2F$, CH_2=$CH(CH_2)_4F$; E_2 = *n*-C_4H_9Br, Et_2CO, $Me_2C(O)CH_2$, *i*-Pr_3SiCl]

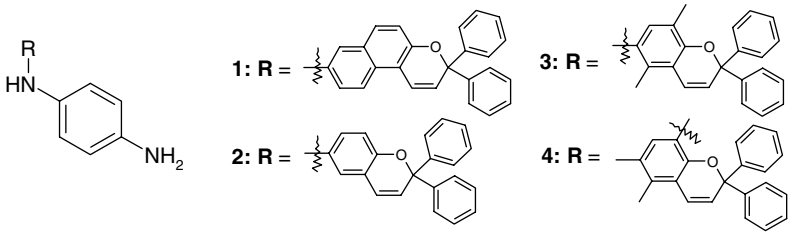


Sucrose co-melted with multivalent cation soap ⟹ **Homogeneous kinetics, higher monoesters yields, lower degradation**

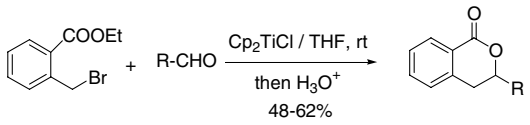


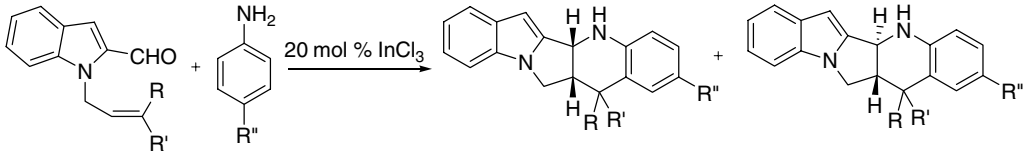




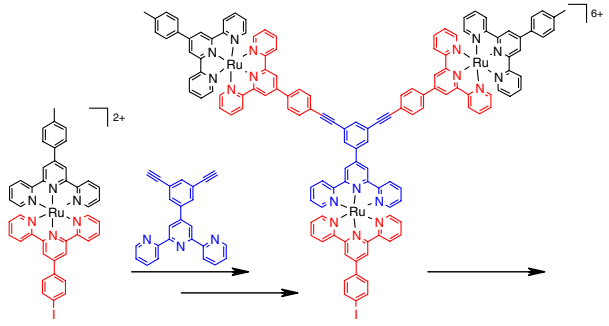


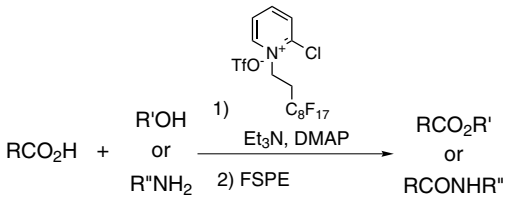
A convenient new synthetic route to *p*-aminophenylaminobenzo- and naphthopyrans was developed via palladium-catalyzed C–N coupling. It was demonstrated that novel targeted aminoderivatives reveal photochromic properties. The structure of intermediate *p*-nitrophenylaminochromenes was confirmed by X-ray crystallographic analysis.





We report the synthesis of dendrons and metallodendrons bearing adapted functional pendant groups that make them valuable building blocks for the straightforward synthesis of fully conjugated metallodendrimers using the Sonogashira cross-coupling reaction.





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*Corresponding author
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