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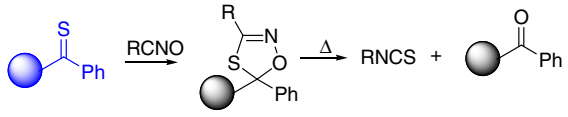
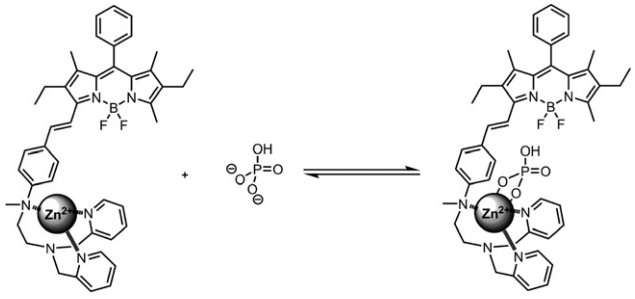
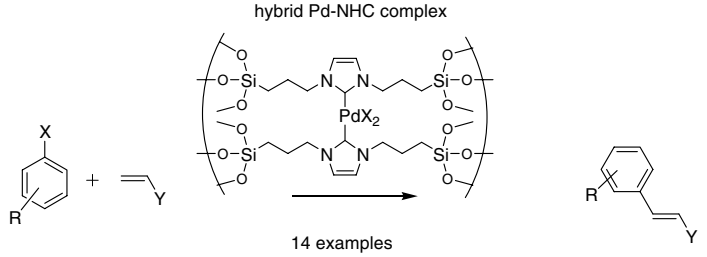
Contents

COMMUNICATIONS

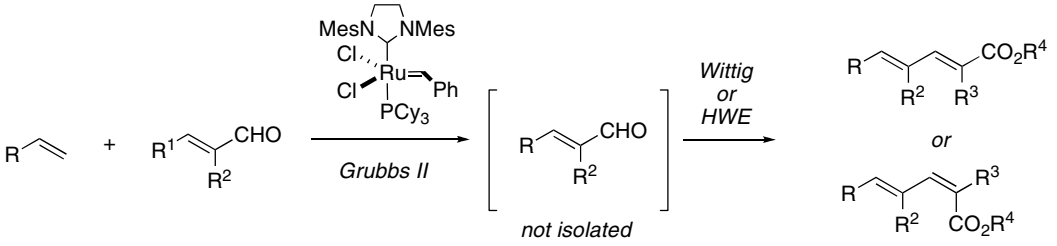


The application of polymer-supported thiobenzophenone as a self-indicating linker for the synthesis of isothiocyanates is described.

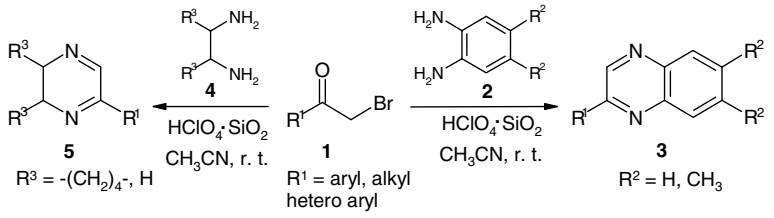


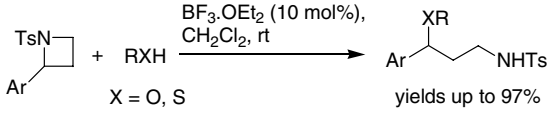


A new silica hybrid material bearing Pd–NHC species, which shows high catalytic activity and excellent recyclability in Mizoroki–Heck reactions.

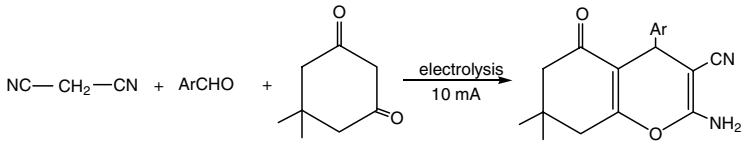


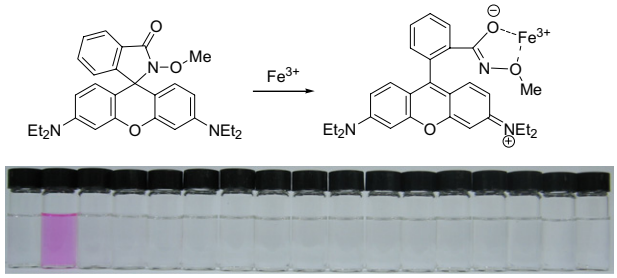
R = alkyl, aryl; R^1 = H or Me; R^2 = H or Me; R^3 = H or Me; R^4 Me or Et

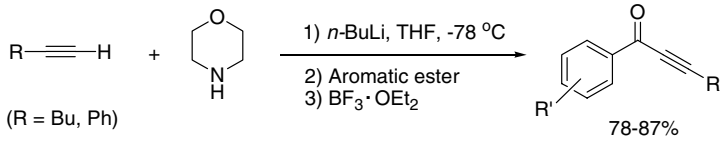


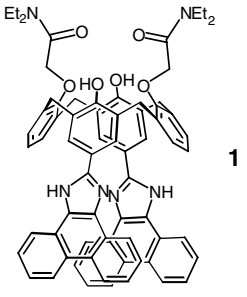


An efficient synthesis of amino ethers and amino thioethers were achieved via the ring cleavage of *N*-tosylazetidines with alcohols or thiols. The reactions were studied in the presence of various Lewis acids and $BF_3{\cdot}OEt_2$ was found to be the most efficient. The products were obtained in modest to good yields under very mild conditions in 5–15 min.









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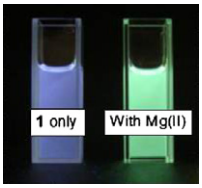
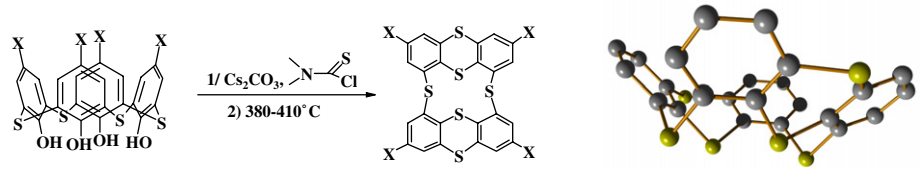
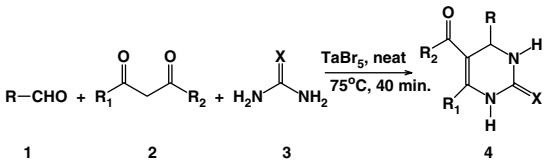
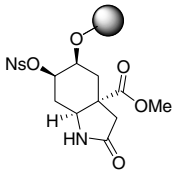


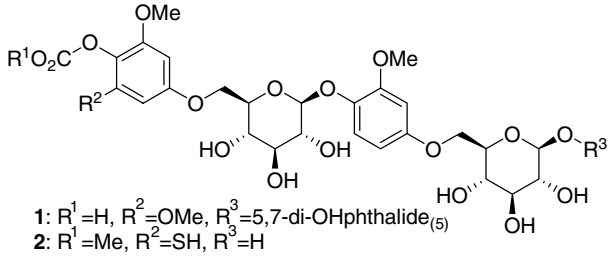


New thianthrene based macrocycles with basket shaped structures were prepared by thermal treatment of tetrakis-(*N*,*N*′-dimethylthiocarbamoyl)-tetra-*tert*-butyl-thiacalix[4]arene.

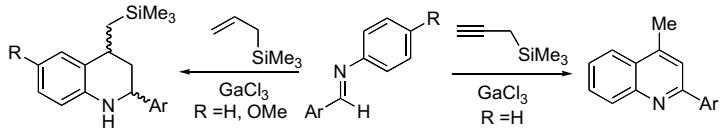


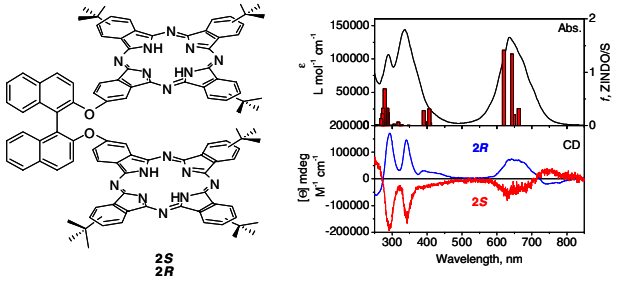


The synthesis of a chemical compound library using diversity-oriented synthesis (DOS) is discussed. The library is structurally inspired by the Amaryllidaceae alkaloids, a family of natural products which has been known to demonstrate potent antiviral and antineoplastic activity. Highlights of this work include the rapid, high-yielding construction of the octahydroindolinone core and the solid-phase diversification of the lactam using a neutral phosphazene base.

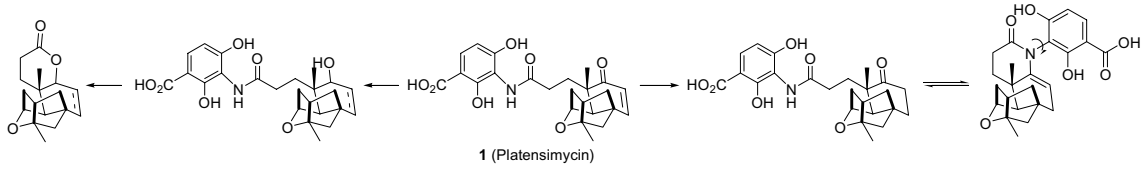


Rhamnakoside A (**1**) and B (**2**) are two novel carbonic acid esters that could be phase II conjugation products of quinones in the form of oligophenyl glucosides.

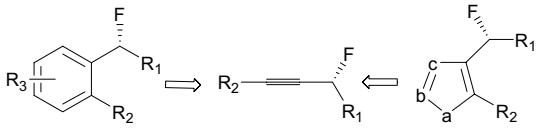


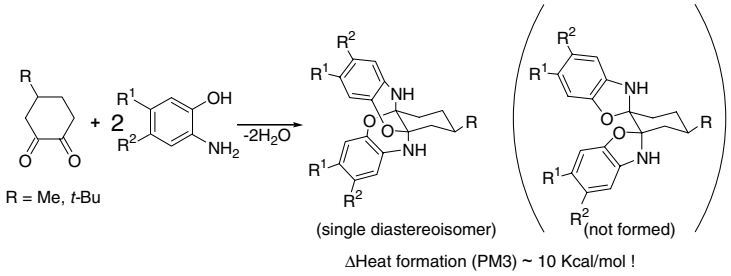


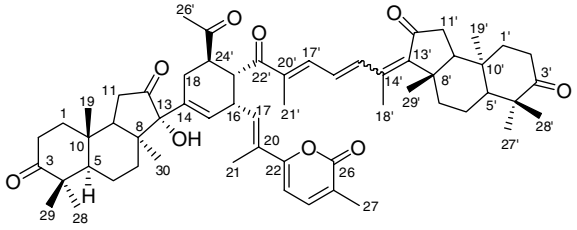
The first optically active rigid covalently linked by enantiomerically pure (*R*)- or (*S*)-BINOL metal-free phthalocyanine dimers have been prepared and characterized by spectroscopic and theoretical methods.



Selective methylation of the phenolic groups, halogenation, reduction, epoxidation reactions and details of the conversion of dihydroplatensimycin to the cyclic enamino-amido forms have been described.

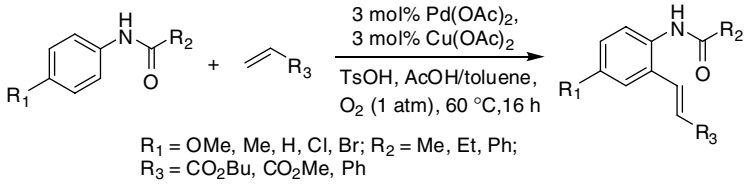


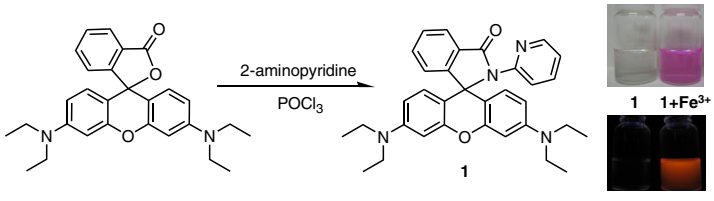


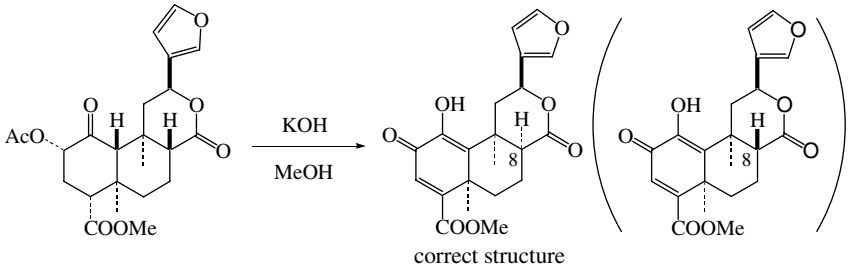


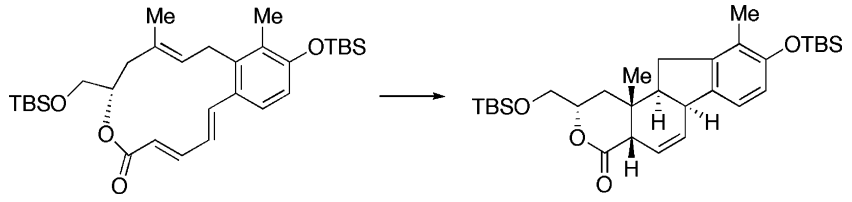
1. 13′*Z*
2. 13′*E*

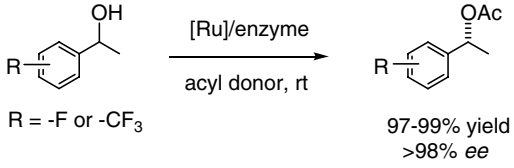
Two unique bisisomalabaricanes jaspolides, G (**1**) and H (**2**), were isolated from the marine sponge *Jaspis* sp. Their structures were elucidated on the basis of extensive spectroscopic data (IR, 1D and 2D NMR, MS) analyses.

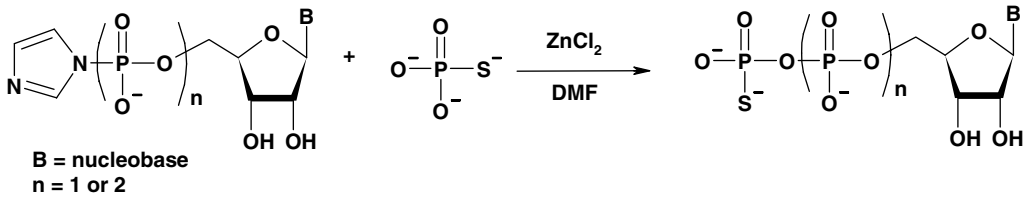




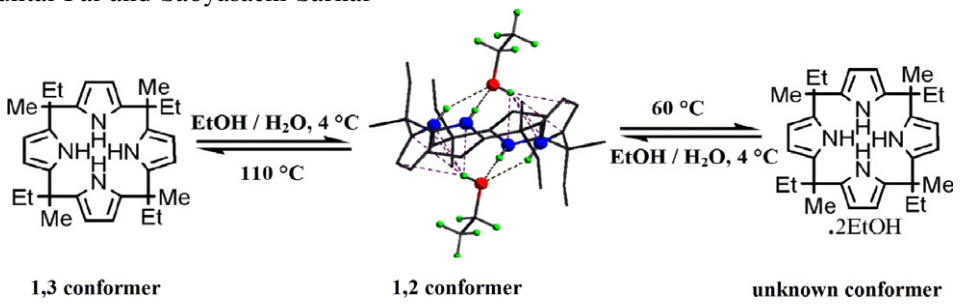


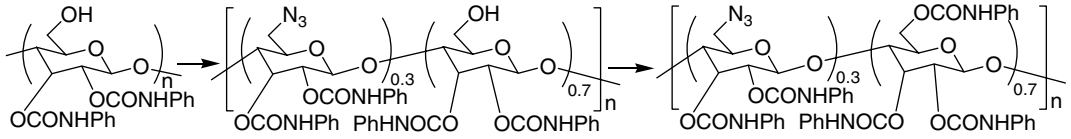


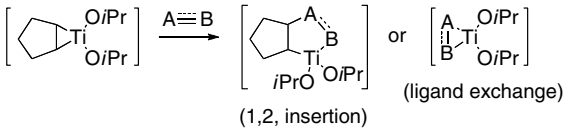




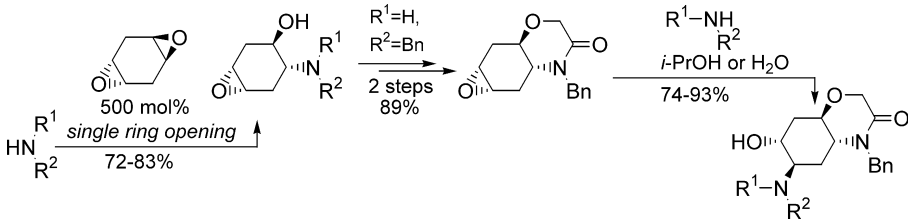
A straightforward method for the synthesis of nucleotide analogues bearing a phosphorothioate moiety at the terminal position of the polyphosphate chain is described.

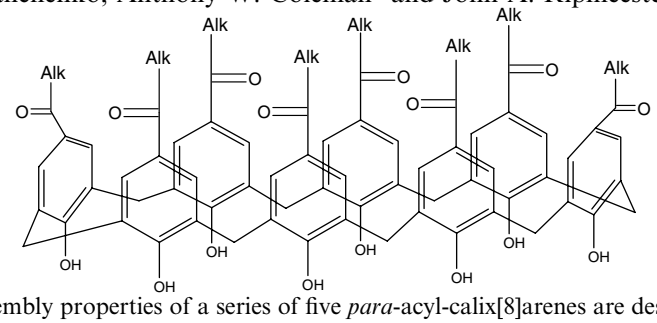




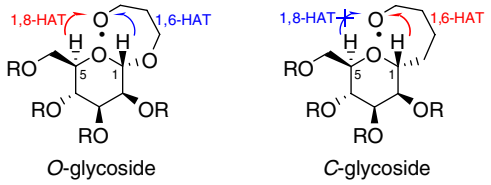


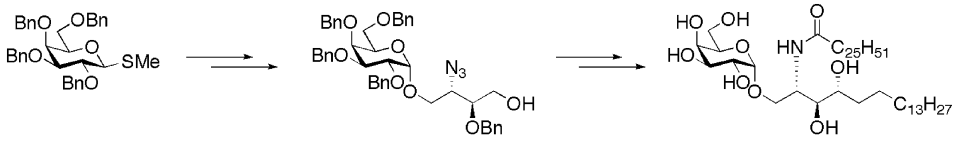
In reactions of diisopropyloxy(η^2-cyclopentene)titanium with unsaturated compounds, competition experiments revealed the following reactivity scale: RCHO > RCN > acetophenone > phenylacetylene > 1-phenyl-1-pentyne > styrene > ethyl carbonate.



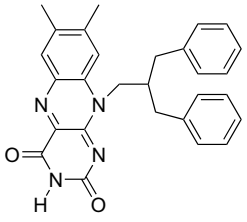


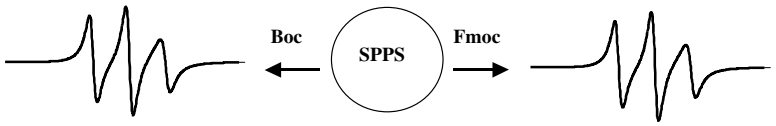
The synthesis and interfacial assembly properties of a series of five *para*-acyl-calix[8]arenes are described, the products are obtained in good yields and all form stable monolayers at the air–water interface.



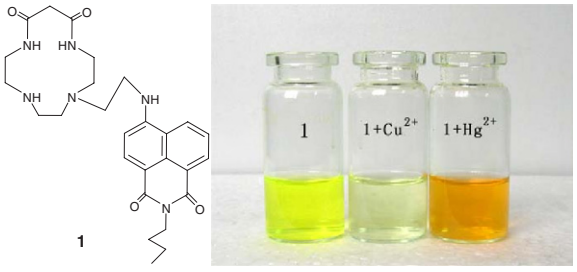


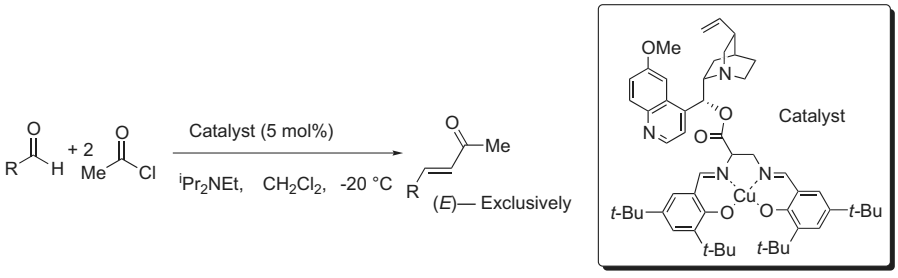
α-Galactosylceramides, potentially immunostimulating agents were synthesized in eight steps from a common intermediate.

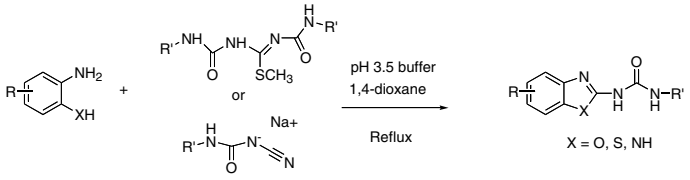


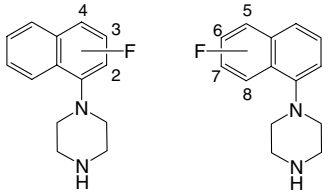


A novel chemosensor has been synthesized from macrocyclic dioxotetraamine with 1,8-naphthalimide derivative. In the presence of Cu^{2+} or Hg^{2+}, the color of the solution changed from both yellow-green to almost colorless or orange, respectively, which make naked-eyes detection of these two metal ions possible. At the same time, in the presence of Cu^{2+} or Hg^{2+}, its fluorescence has been quenched remarkably. It was found that **1** was a novel and unique colorimetric and fluorescent chemosensor for the optical detection of Cu^{2+} or Hg^{2+}.



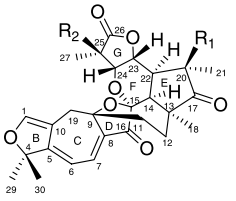




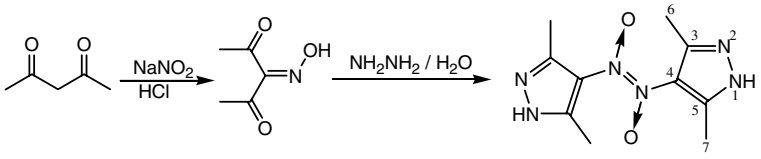


A series of regioisomerically monofluorinated 1-(naphthalen-1-yl)piperazines is described.

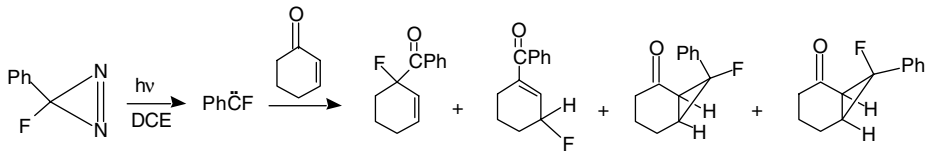
Four novel highly oxygenated trinortriterpenoids, sphenalactones A–D (**1**–**4**), were isolated from the leaves and stems of *Schisandra sphenanthera* and their structures were elucidated by extensive analysis of 1D and 2D NMR data. Compounds **1**–**4** featured a C_{27} backbone and showed anti-HIV-1 activity with EC_{50} values in the range of 35.5–89.1 μg/mL with a low cytotoxicity against C8166 cells (CC_{50} > 200 μg/mL).

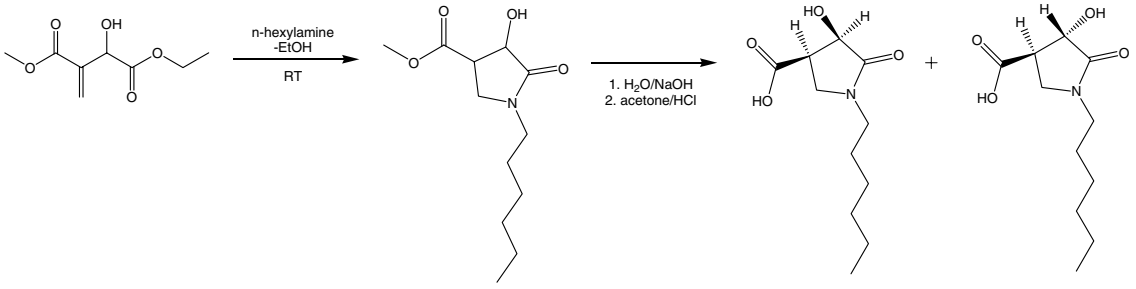


1 R_1 = OH R_2 = H
2 R_1 = H R_2 = OH
3 R_1 = OH R_2 = OH
4 R_1 = H R_2 = H

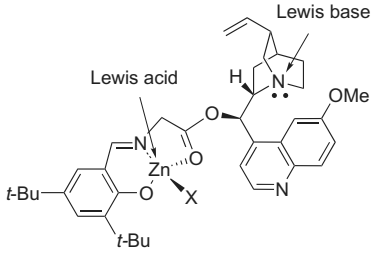


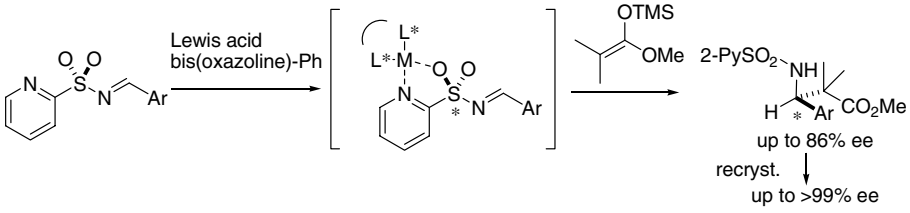
Bis-(3,5-dimethyl-4-nitrosopyrazole) dimer was prepared by reaction of acetyl acetone with nitrous acid and condensation with hydrazine. Spectroscopic techniques, such as IR, UV, ^{1}H NMR, and ^{13}C NMR, and CHN analysis were used to identify the product.

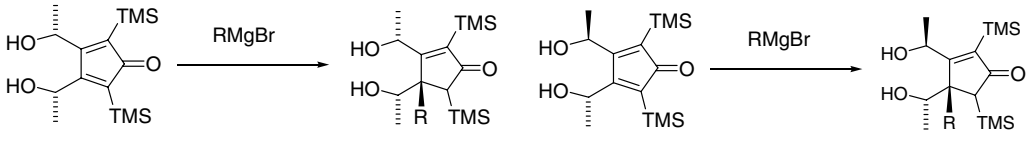


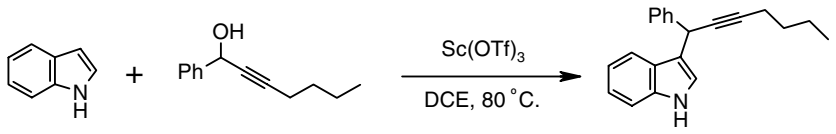


Facile synthesis of new polyfunctional 2-pyrrolidinone derivatives from methyl 2-(carboethoxyhydroxymethyl)acrylate.









*Corresponding author
ⓘ+ Supplementary data available via ScienceDirect

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