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Tetrahedron Letters

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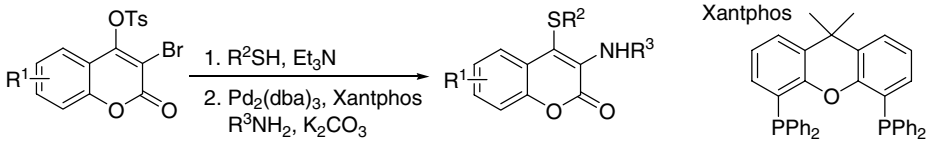
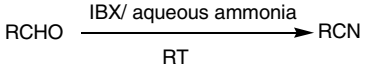
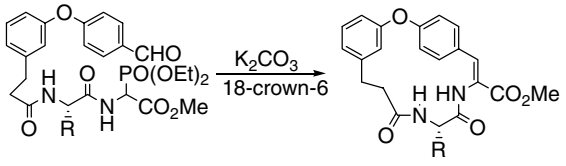
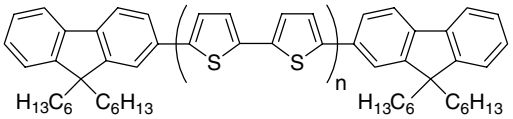
Contents

COMMUNICATIONS



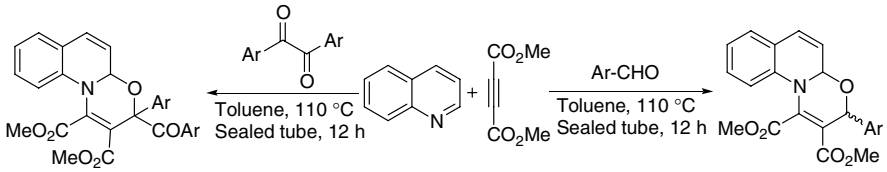


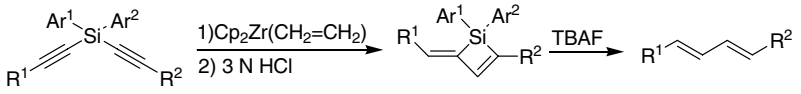


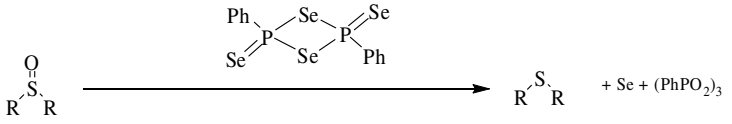


n = 1-3

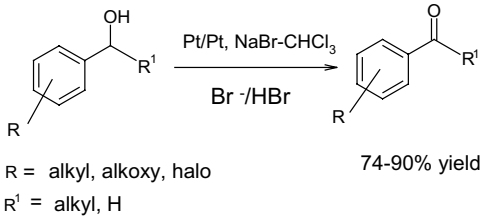
A series of new α,α′-bis(9,9-bis-*n*-hexylfluorenyl)-substituted oligothiophenes with 2-, 4-, and 6-thiophene rings have been synthesized and their optical, thermal, and electrochemical properties investigated.

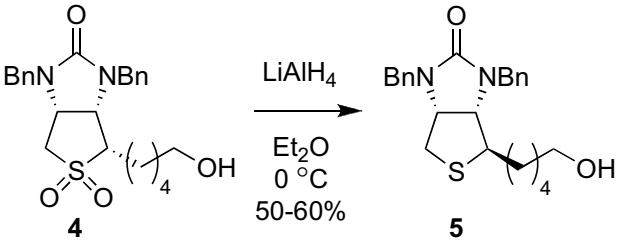


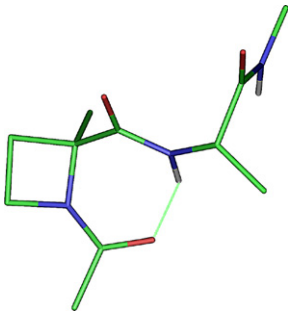


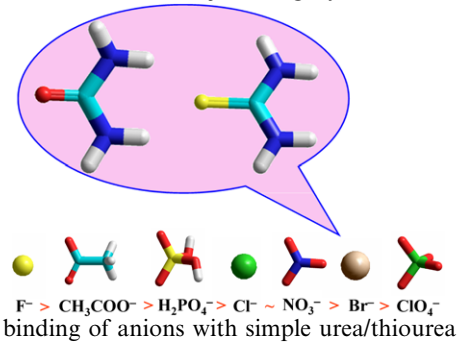


An efficient deoxygenation of sulfoxides using a P–Se heterocycle is reported.

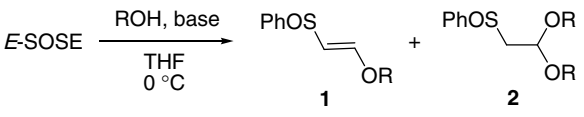


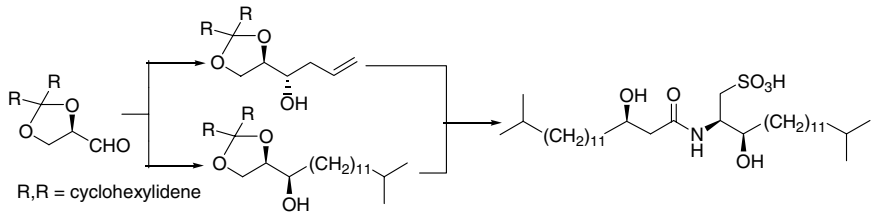


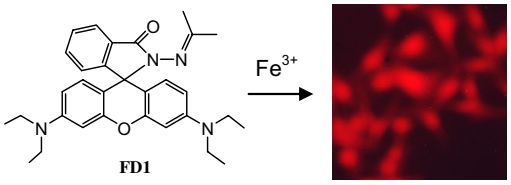




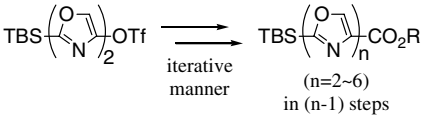
A DFT study predicted the trend towards binding of anions with simple urea/thiourea molecules.



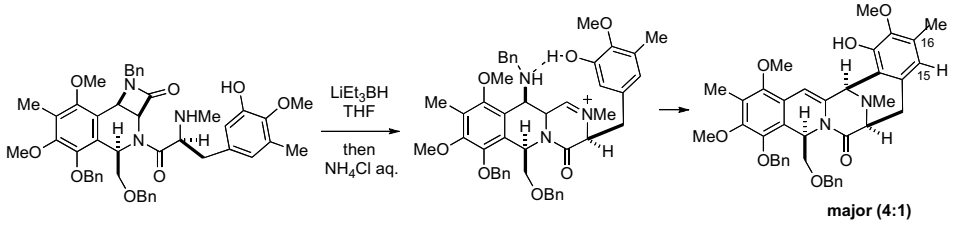


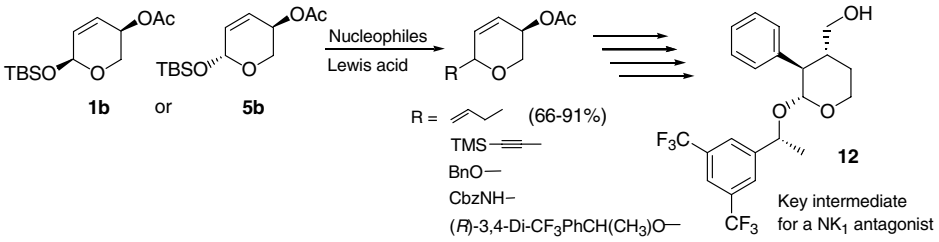


Based on the spirolactam (nonfluorescence) to ring-open amide (fluorescence) equilibrium, a novel compound FD1 was demonstrated as a turn-on fluorescent sensor for Fe^{3+} over other metal ions. Moreover, fluorescent microscopy experiments further established that FD1 could be used for sensing Fe^{3+} within living cells.

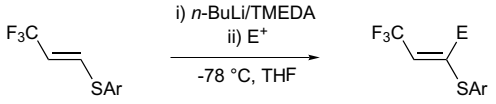


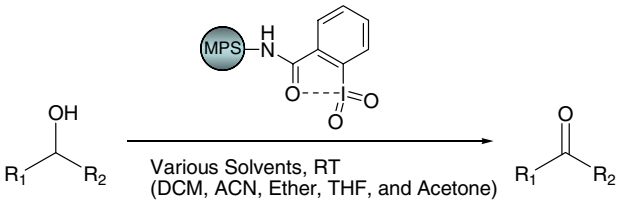
An iterative method for the synthesis of C2–C4′ linked poly-oxazoles has been developed.



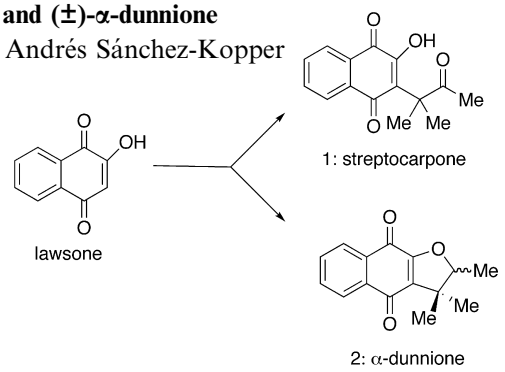


The reactions of **1b** or **5b** with various nucleophiles were investigated. Application to the synthesis of **12**, a key intermediate for a NK_1 antagonist, is also described.

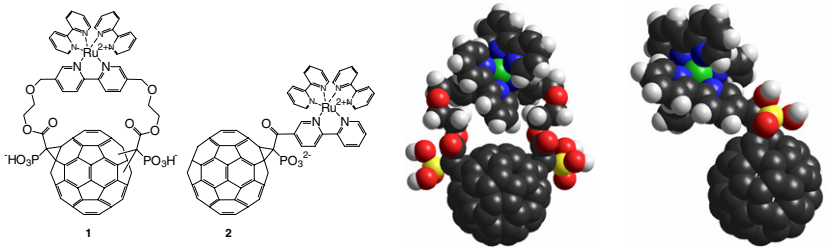




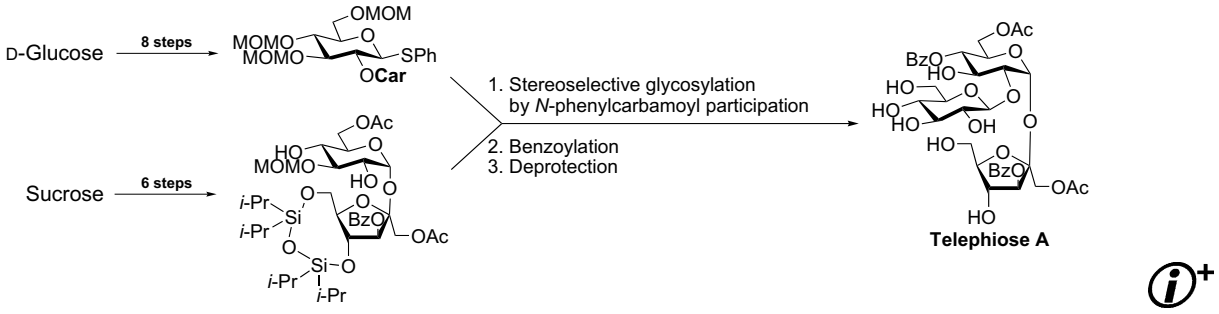
In this study, macroporous polystyrene-supported IBX (MPS-IBX) amides were prepared in two simple steps, and the polymeric reagent was then evaluated for its efficiency in converting a range of alcohols to the corresponding carbonyl compounds in various solvents. The results indicated that MPS-IBX amides were compatible with a variety of solvents, and had a more efficient oxidation activity toward alkyl alcohols than the gel type polystyrene-supported IBX amide resin.

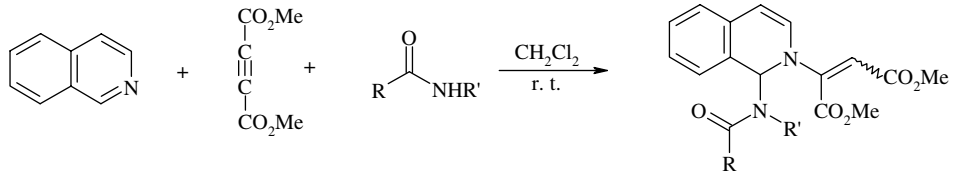


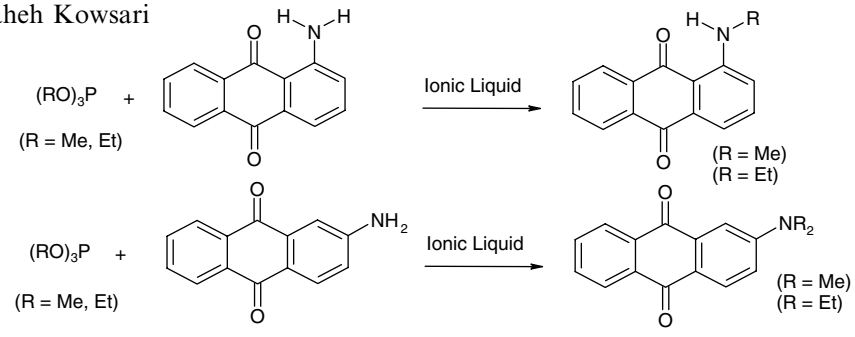
An efficient divergent synthesis of both streptocarpone and racemic α-dunnione from lawsone are described.



Efficient photoinduced electron-transfer was detected by luminescence measurements in the title dyads either in solution or in the solid state (amorphous Zr matrix).







*Corresponding author
Supplementary data available via ScienceDirect

COVER

Fullerene reacted with mono- and diphosphonate-bearing bipyridines by way of Bingel-type reactions to give adducts which were easily transformed in the corresponding dyads by forming $Ru(bpy)_3$ complexes. Electrochemical measurements and the observation of heavy quenching of the $Ru(bpy)_3$ luminescence manifested strong interactions between the active moieties. Attempts to include the dyads into inorganic matrices derived from zirconium phosphate are reported.
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