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Tetrahedron Letters

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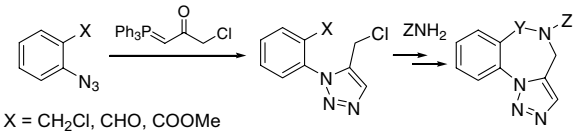
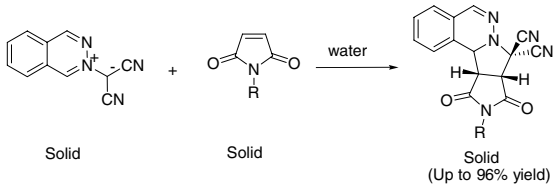
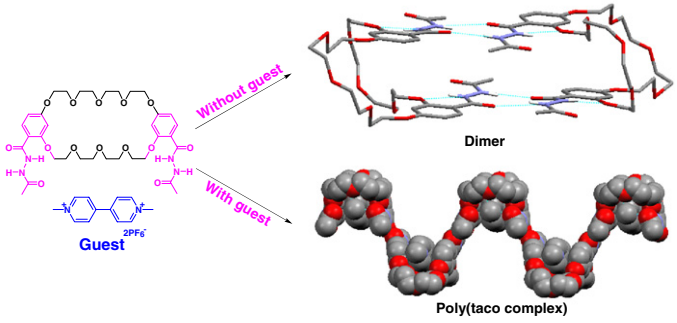
Contents

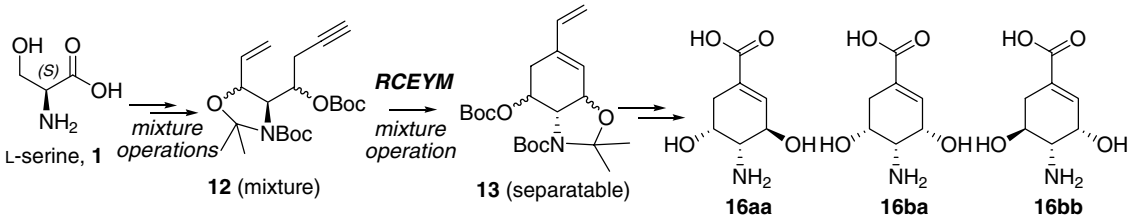
COMMUNICATIONS

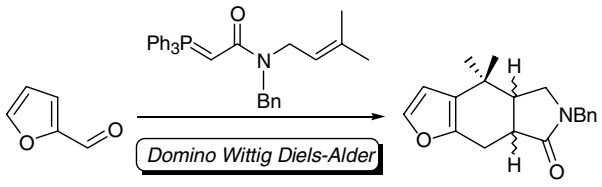


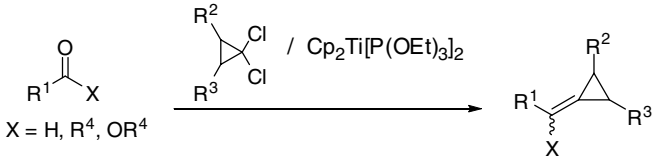
New strategy for the access to [1,2,3]triazolo[1,5-*a*][1,4]benzodiazepines based on the cycloaddition of 2-oxoalkylidenephosphoranes to azides as the key step.

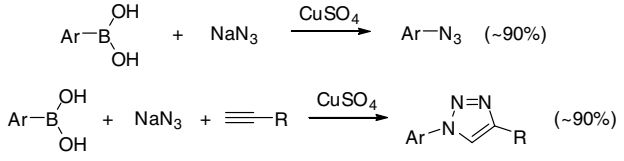


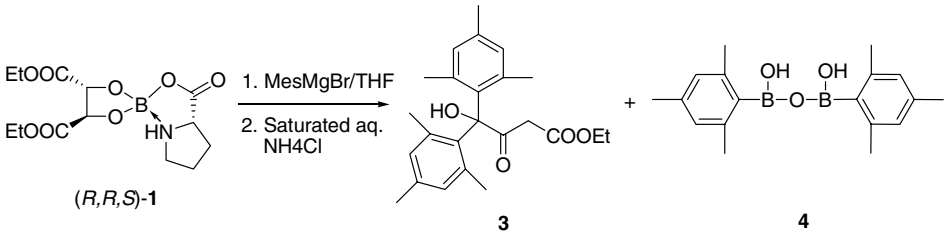


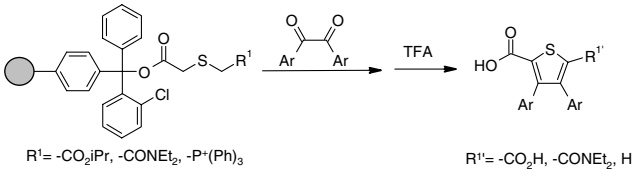


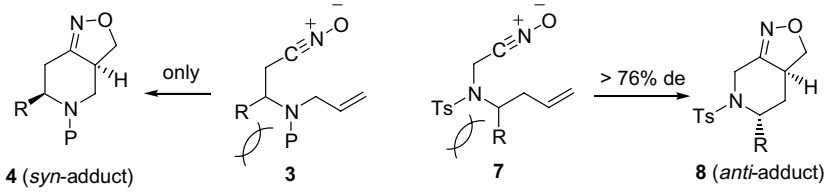


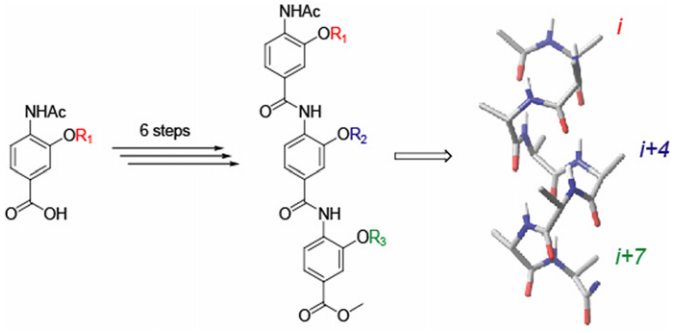


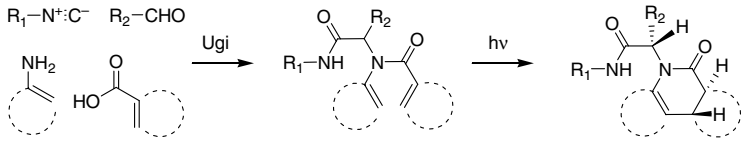


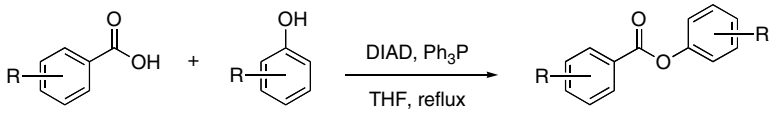




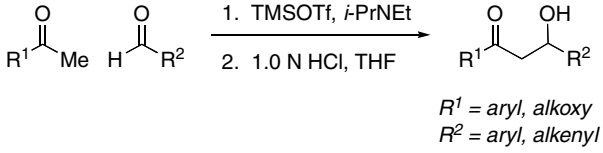


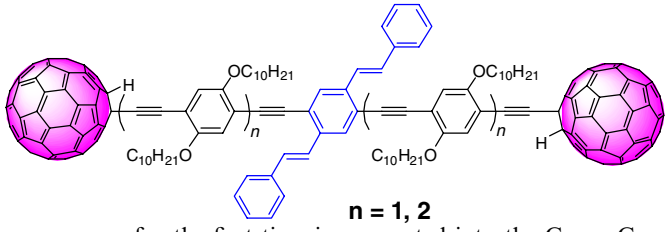




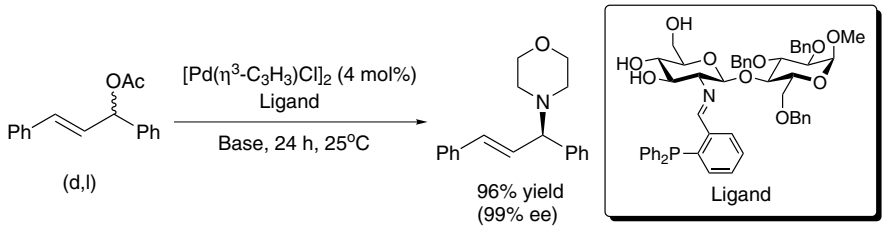


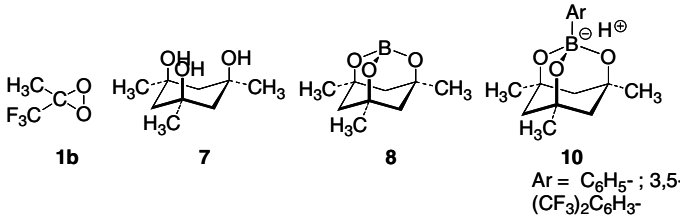
The Mitsunobu reaction was found to be a convenient and effective method for the esterification of various benzoic acids with differentially functionalized phenols producing the corresponding phenyl esters in good to excellent yields.



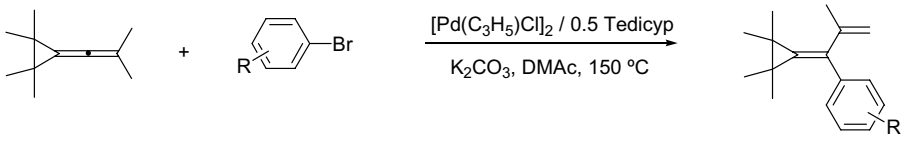


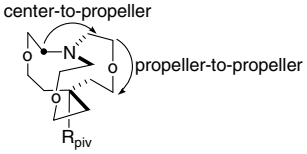
Curciform OPE/OPV hybrid oligomers were for the first time incorporated into the C_{60}–π–C_{60} system as bridging units. Electrochemical, UV–vis absorption, and fluorescence emission properties of these novel compounds were investigated.

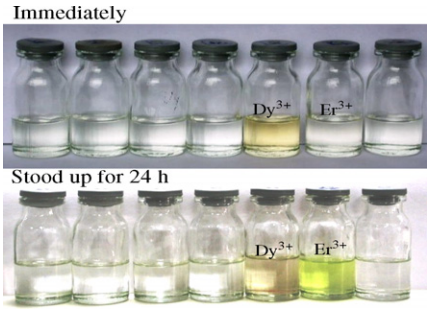


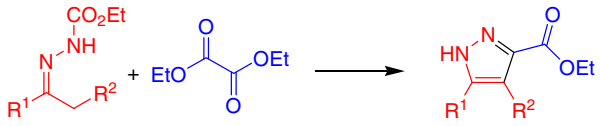


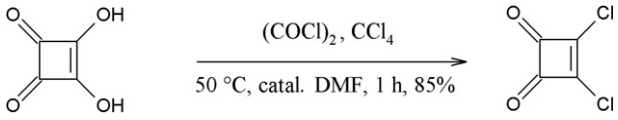
Methyl(trifluoromethyl)dioxirane (TFDO, **1b**) was employed to obtain triol **7** upon *direct* stereoselective hydroxylation of *cis,cis*-1,3,5-tri-methylcyclohexane. Starting with **7**, the cage-shaped 'tripod' borate ester **8** was easily obtained; **7** also provided easy access to **10**, a new kind of arylboronic Brönsted-assisted Lewis acids (BLA).



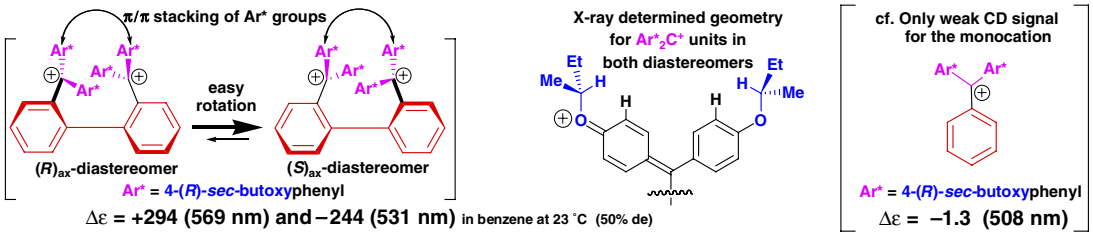


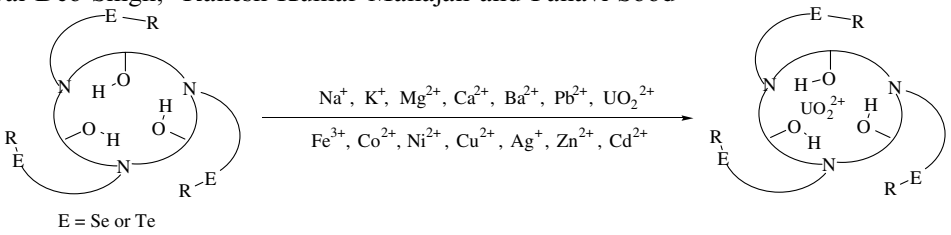




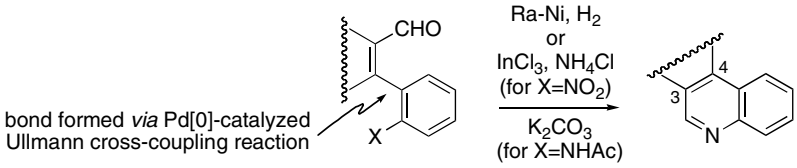


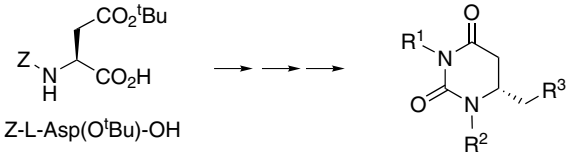
A very convenient, entropy-assisted preparation of this versatile compound.

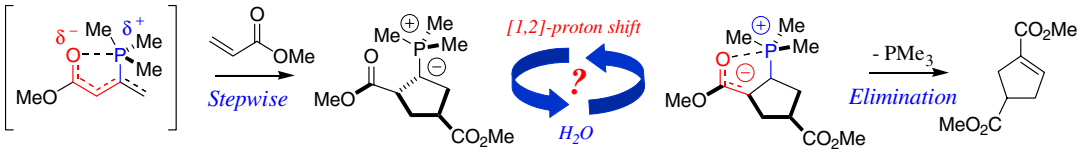




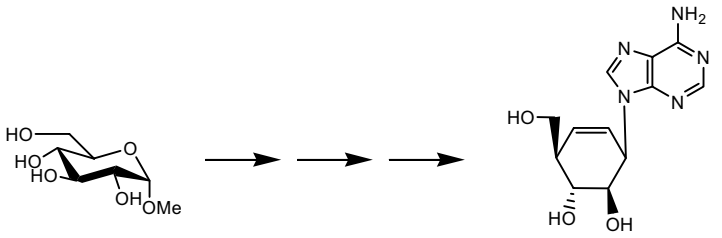
The syntheses of azacalixarenes supported from three-armed lariat organochalcogenoethers are described. The molecules act selectively as highly sensitive potentiometric sensors for UO_2^{2+} ions in the presence of alkali, alkaline earth metals, transition and heavy metal ions under neutral conditions.







A mechanistic study of phosphine-mediated [3+2] annulation of allenoate and acrylate is presented. The insight gained has identified that (1) [3+2] cycloaddition proceeds through a stepwise mechanism and (2) the involvement of a molecule of water, which services as a proton-shuttle, is essential for annulated product formation.



*Corresponding author
ⓘ+ Supplementary data available via ScienceDirect

COVER

A new electrochiroptical system was designed by a novel approach based on ''chiroptical enhancement'' shown in the cover figure. Through face-to-face overlap of chiral alkoxyphenyl groups, as high as 50% de of axial chirality was attained, which corresponds huge CD amplitude ($A > 500$) in the visible region. Compared with the corresponding mono(triarylmethylium), this bis-(triarylmethylium) exhibits 400-times stronger CD signal thanks to the exciton-coupling mechanism.
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