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Tetrahedron Letters

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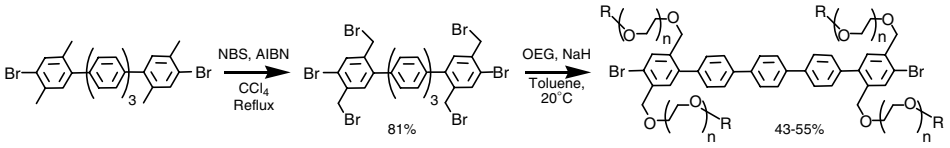
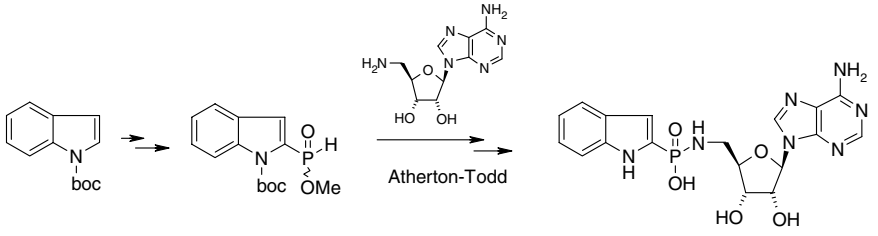
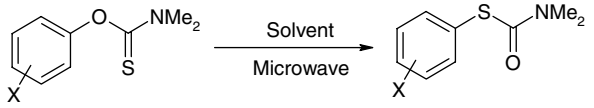
Contents

COMMUNICATIONS

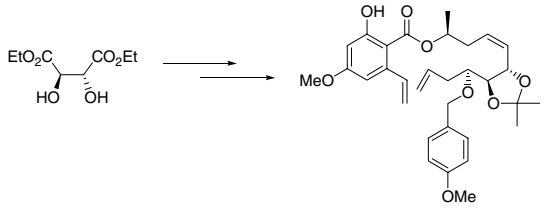


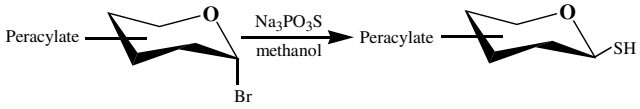
An efficient synthesis of a series of penta-*p*-phenylenes derivatives with four side chains of various lengths, including deca(ethylene glycol) groups, is reported. Side chains are introduced in the last step of the synthesis.

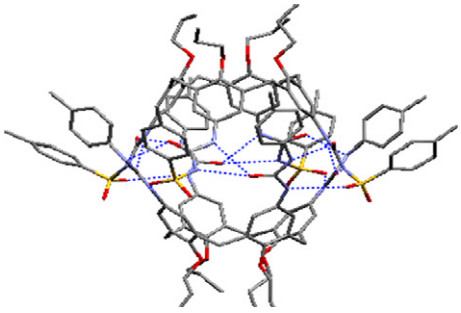


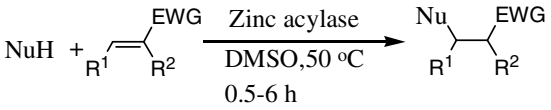


The effect of agitation and fill volume in small scale microwave reactors on the rate of homogenous reaction solutions is reported.



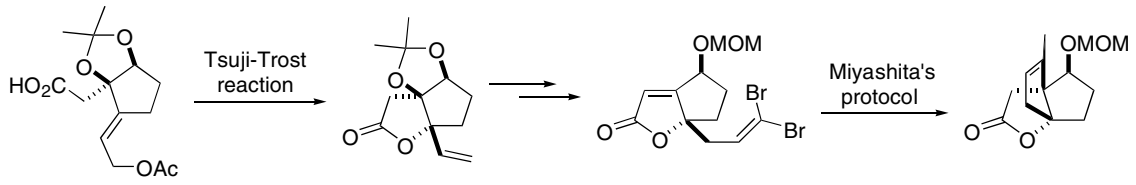


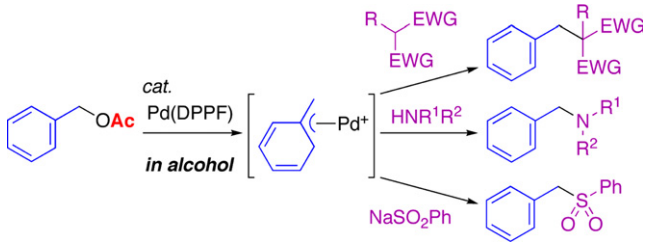


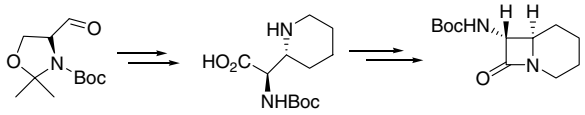


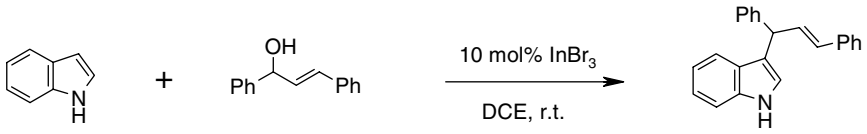
NuH=aromatic N-heterocycles; R^1,R^2=H, CH_3;
EWG=COOMe, COOEt, COOBu, $COOCH{=}CH_2$, CN.

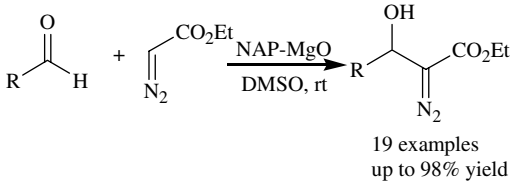
An efficient protocol for aza-Michael addition of aromatic N-heterocycles to α,β-unsaturated compounds has been described. The reaction was catalyzed by promiscuous zinc-active-site acylase in organic solvent at 50 °C and most of the procedures could provide products in good yields in several hours (0.5–6 h).

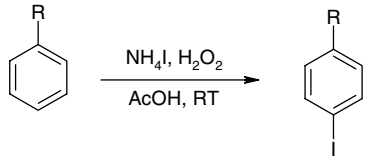




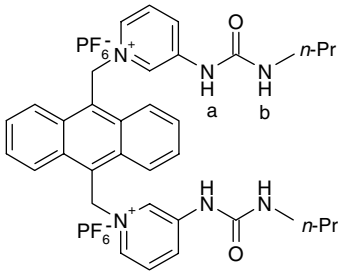




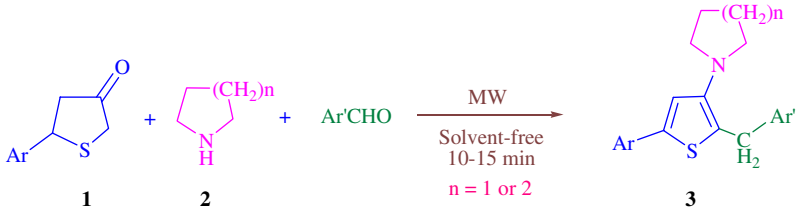


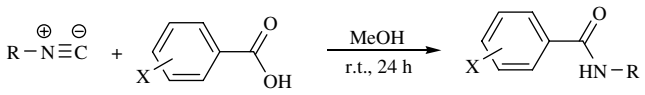


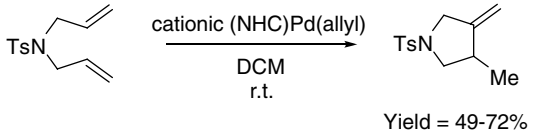
An eco-friendly procedure for the oxyiodination of aromatic compounds with NH_4I as an iodine source and H_2O_2 as an oxidant without any catalyst is presented.



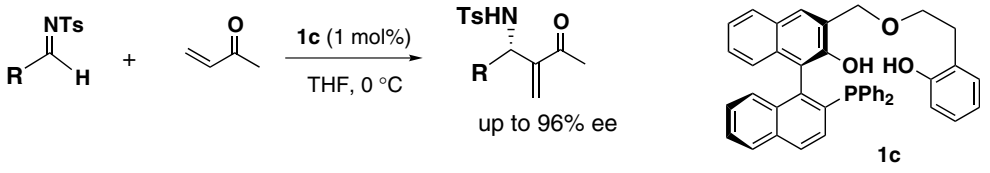
An anthracene-labelled ureidopyridyl sensor was designed and synthesized. The emission of the sensor increases in the presence of dicarboxylates.

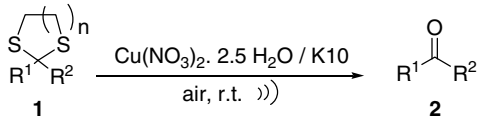






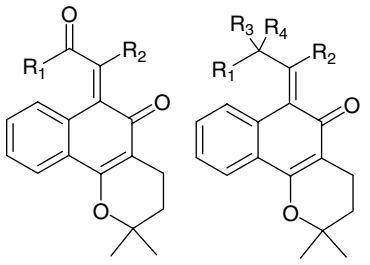
Various (NHC)Pd(η^3-allyl)Cl complexes possessing different NHC ligands and allyl groups are utilized for the cycloisomerization of simple 1,6-dienes to afford the desired cyclized product with an excellent selectivity.



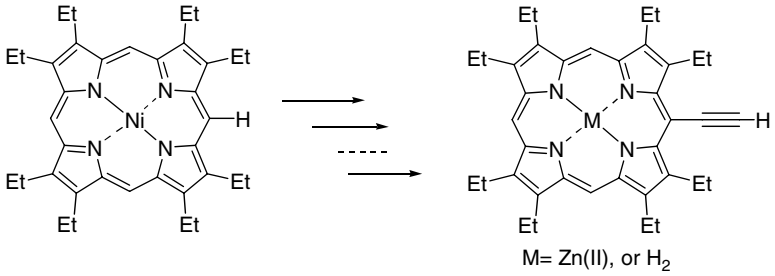


1 **2**

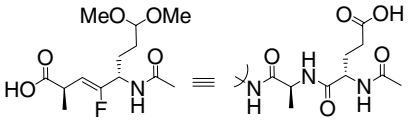
R^1 = alkyl, aryl; R^2 = H, alkyl, aryl; n = 1, 2



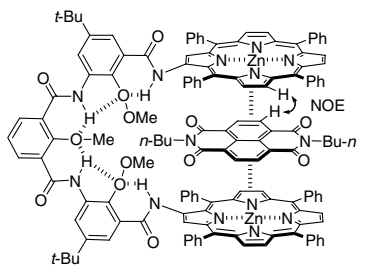
Synthesis of new carbonyl and fluoroalkyl *o*-quinone methides of β-lapachone is reported.

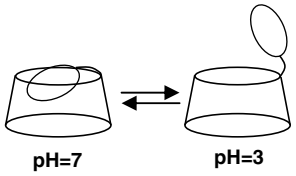


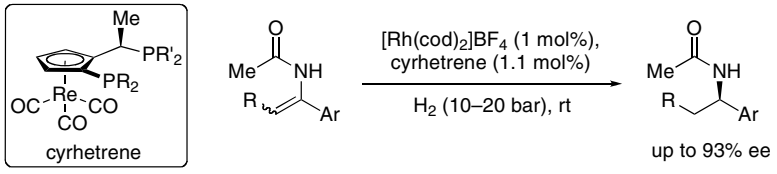
A method leading to the preparation of the free base or zinc *meso*-ethynyl functionalized octaethylporphyrin has been developed, which will open the access to various *meso*-ethynyl metalloporphyrins.

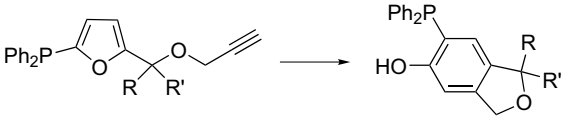


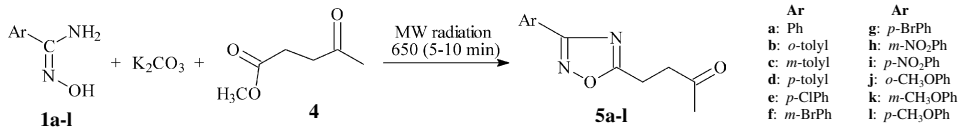
A fluoroolefin peptidomimetic of the dipeptide Glu-Ala was synthesized via an Evans asymmetric aldol reaction and an Overman rearrangement.



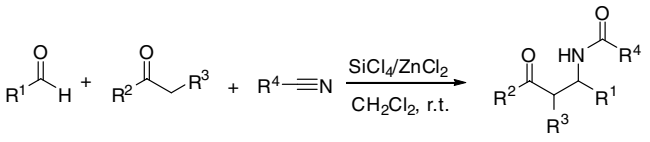




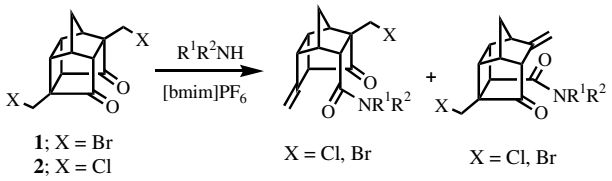


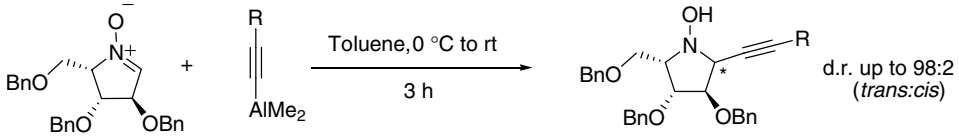


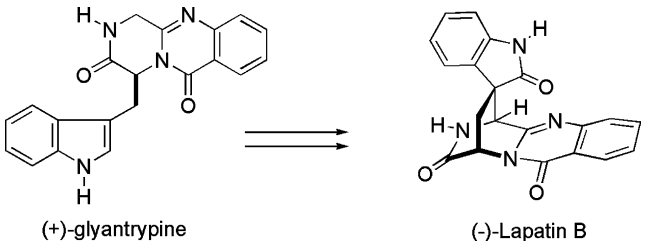
The synthesis of 4-(3-aryl-1,2,4-oxadiazol-5-yl)-butan-2-ones (**5a**–**l**) formed from methyl levulinate (**4**) and arylamidoximes (**1a**–**l**) is described. The reaction was carried out under solvent free microwave irradiation conditions in much shorter time and in yields comparable with the yields obtained by conventional method.

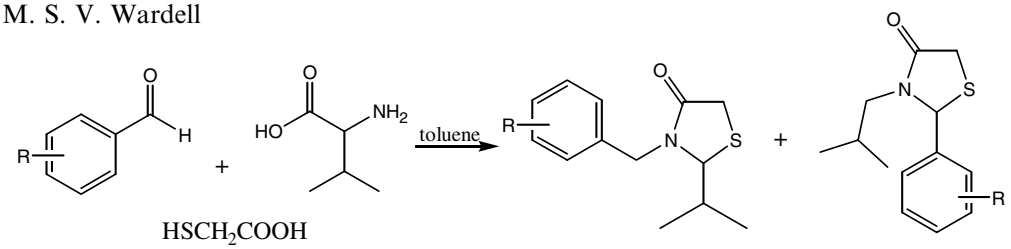


A general, mild and efficient protocol for the synthesis of β-amido ketone libraries was achieved utilizing $SiCl_4$–$ZnCl_2$ (TCS–$ZnCl_2$) at ambient temperature via a one-pot, three-component condensation of various aldehydes, ketones and nitriles.

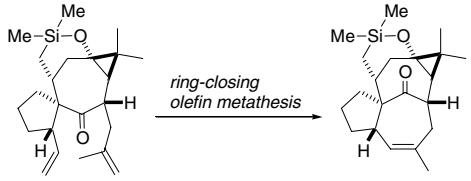








The study of the synthesis of 4-thiazolidinones has been described.



OTHER CONTENT

*Corresponding author

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