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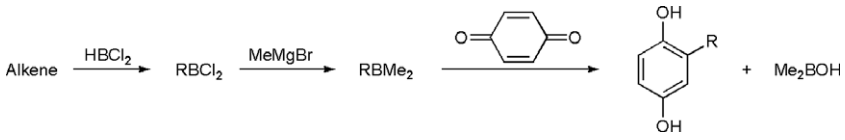
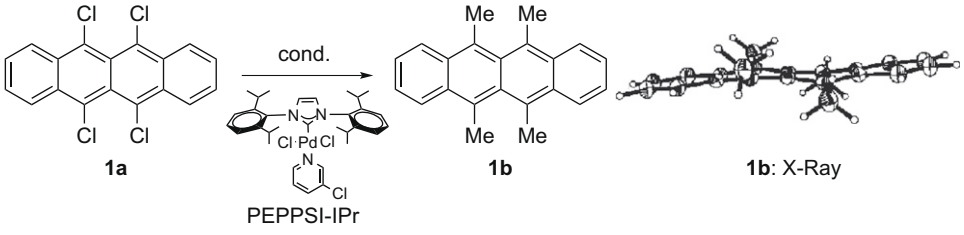
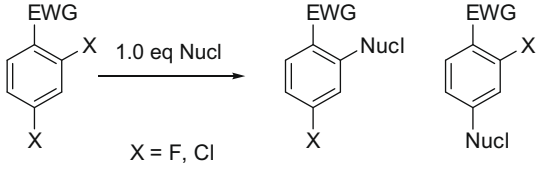
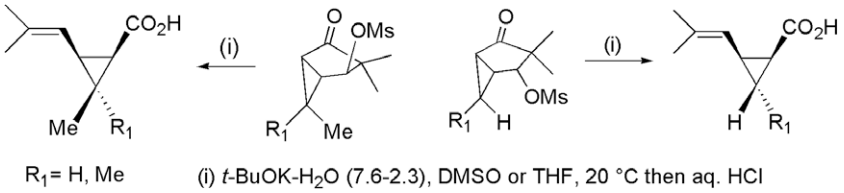
Contents

COMMUNICATIONS

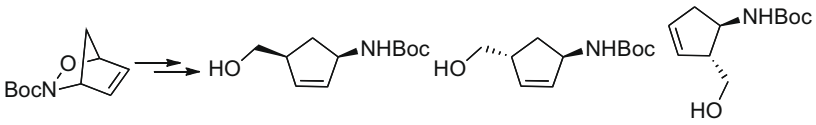


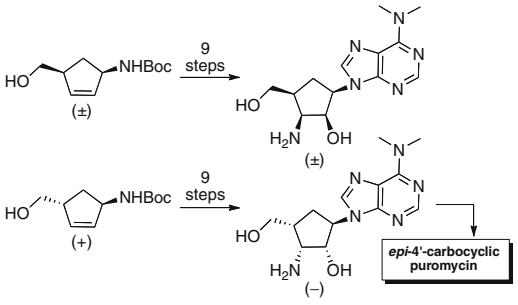


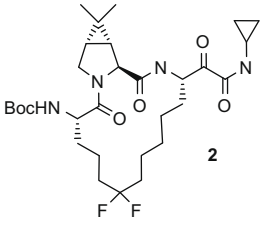




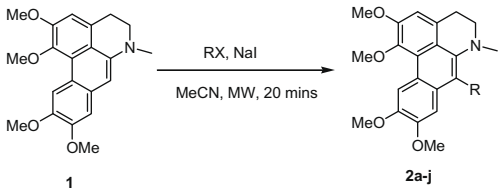
Fragmentation by potassium hydroxide of non-enolisable β-mesyloxy-cyclopentanones fused to a cyclopropane ring in α′,β′-positions proceeds efficiently from derivatives possessing (i) an *exo*-mesyloxy group and an *endo*-methyl group on the cyclopropane ring and (ii) an *endo*-mesyloxy group and an *endo*-hydrogen on the cyclopropane ring. This reactivity has been tentatively correlated to an antiperiplanar arrangement of atoms and bonds involved in the process accessible from various stereoisomers owing the flexibility of the five-membered ring.

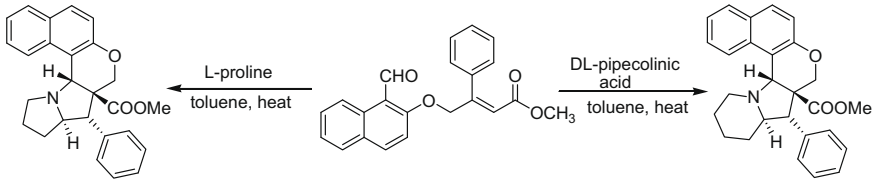


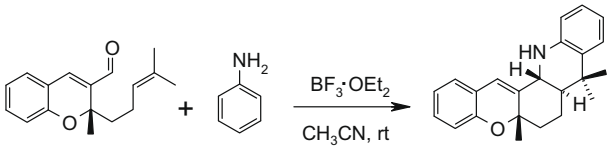


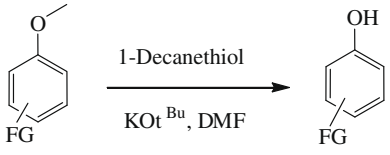


The design and synthesis of various fluoro amino acids required for the synthesis of new macrocyclic inhibitors are described. Biological activity of representative compounds against HCV NS3 protease is also reported.



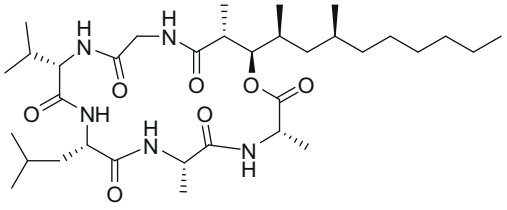




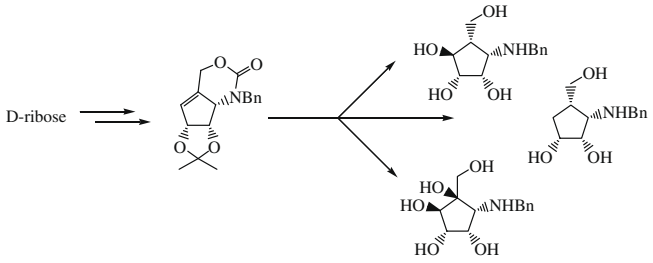


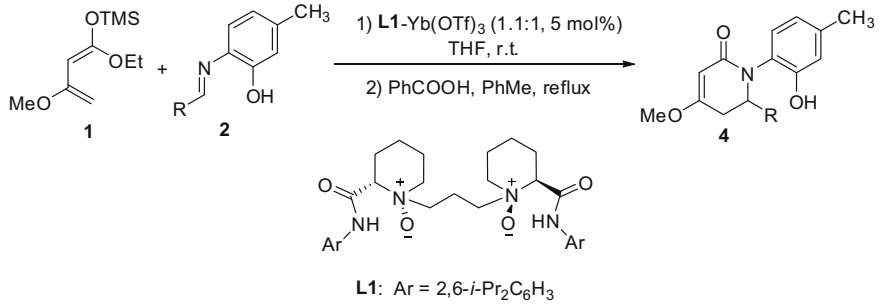
FG = Cl, Br, NH_2, OMe, CHO, C=O, COOH, CN, C=C-CN

1-Decanethiol has been found to be an excellent reagent for the deprotection of aryl methyl ethers. This newly developed protocol afforded the corresponding phenols in good to excellent yields. A clear advantage of 1-decanethiol over the more commonly used thiols is the easy extraction of both the deprotecting reagent and the reaction byproduct into the aqueous phase, which allows an essentially odorless work-up.

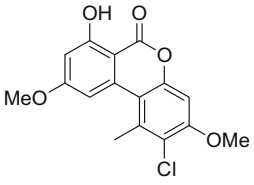


Emericellamide B

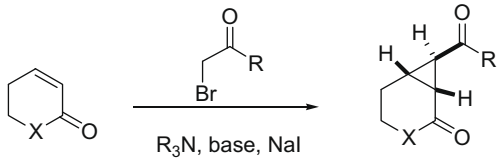


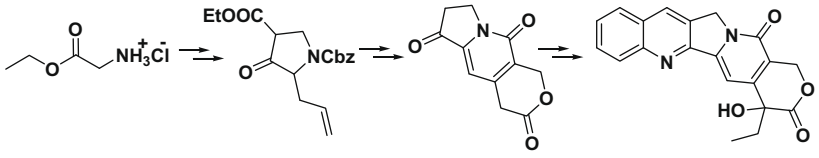


L1: Ar = 2,6-*i*-Pr$_2$C$_6$H$_3$

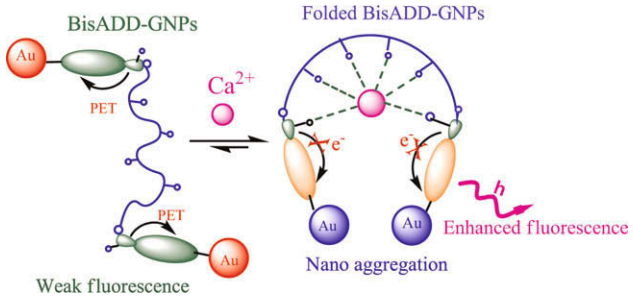


Cytotoxic graphislactone G, a metabolite of the fungus *Cephalosporium acremonium* was synthesized for the first time starting with orcinol and phloroglucinic acid.

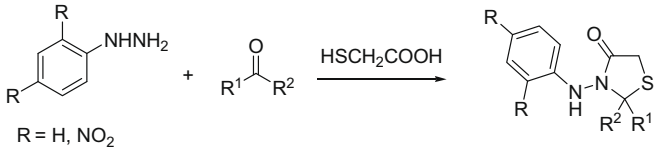




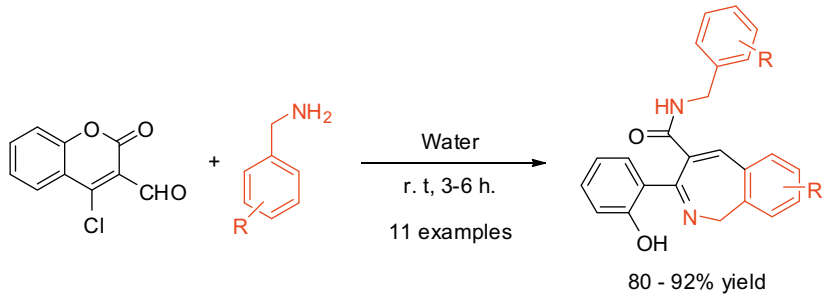
Formal synthesis of (±)-camptothecin via CDE tricyclic lactone employing tandem Michael addition, Dieckmann condensation and addition–elimination reaction as key steps starting from glycinate is described.

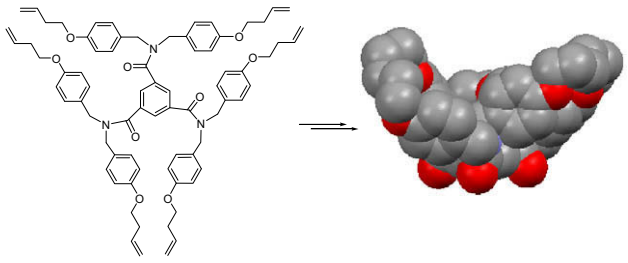


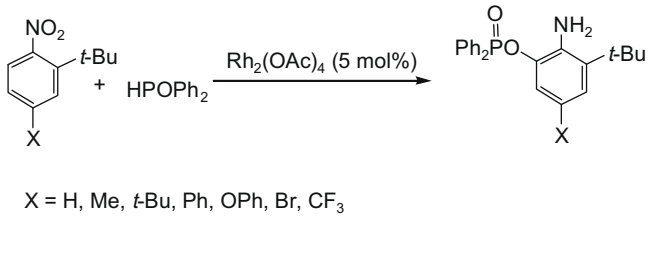
Ca^{2+}-induced folding of bisacridinedione scaffold on gold nanoparticle and dual spectral responses.

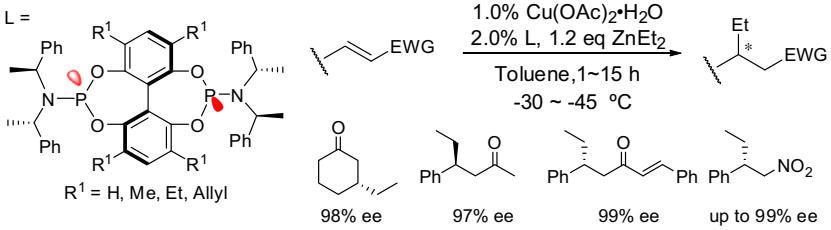


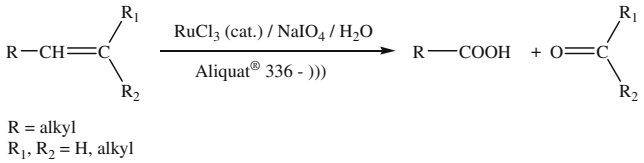
An efficient solvent-free synthesis of thiazolidinones from phenylhydrazine and 2,4-dinitrophenylhydrazine has been described.



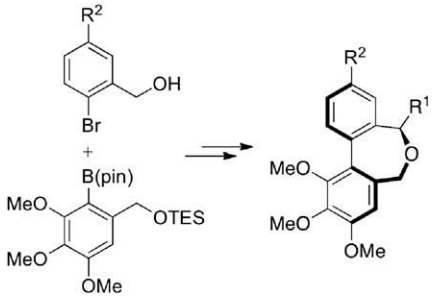


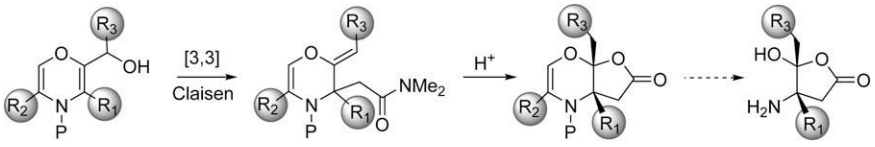


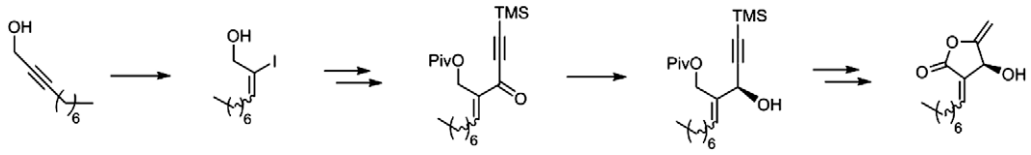




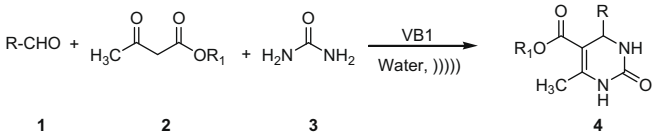
The catalytic RuO_4 oxidative cleavage of alkenes, cycloalkenes, etc. was performed under organic solvent-free condition and 20 kHz ultrasonic irradiation.



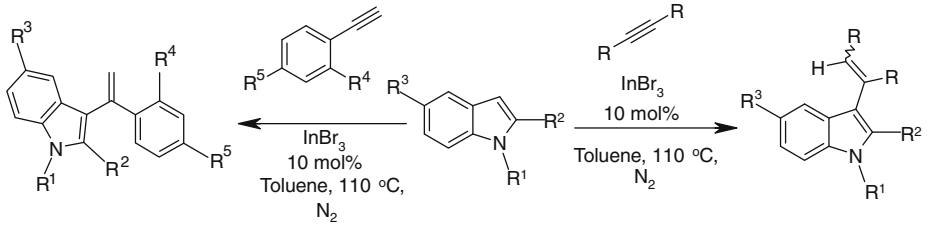


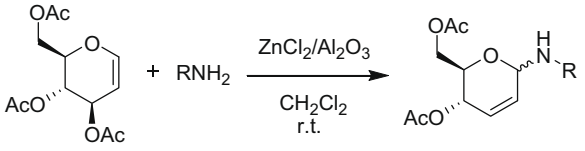


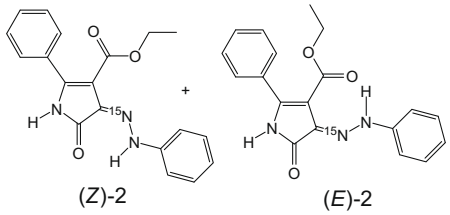
Stereo-controlled construction of the core structure of peumusolide A (**1**), α-alkylidene-β-hydroxy-γ-methylenebutyrolactone, was developed by a combination of regio- and stereo-selective hydroiodination of 2-yn-1-ol and asymmetric reduction of 1-yn-4-en-3-one as the key reactions.

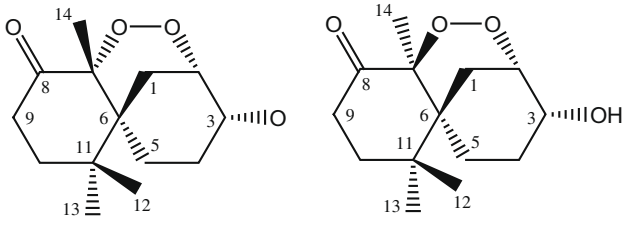


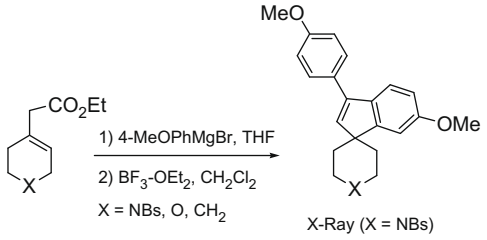
An environmentally benign aqueous Biginelli protocol for the synthesis of substituted 3,4-dihydropyrimidin-2(1*H*)-ones using thiamine hydrochloride as a catalyst has been achieved. These ultrasound-assisted reactions proceed efficiently in water in the absence of organic solvent. Utilization of ultrasound irradiation, simple reaction conditions, isolation, and purification makes this manipulation very interesting from an economic and environmental perspective.











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Supplementary data available via ScienceDirect

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