ELSEVIER

Tetrahedron Letters

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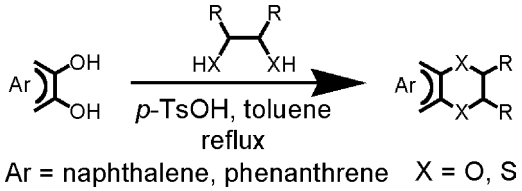
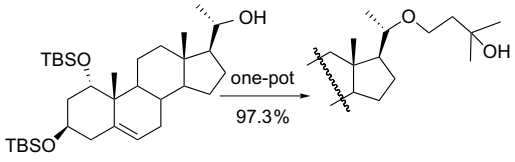
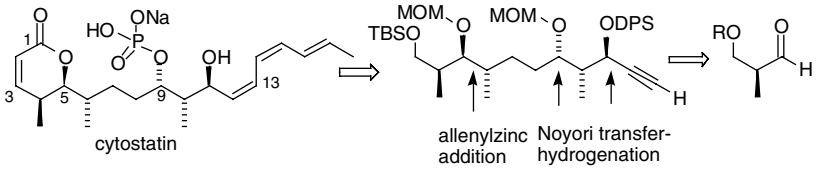
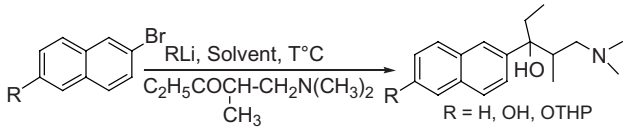
Contents

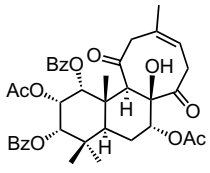


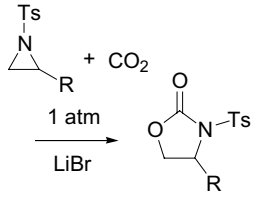


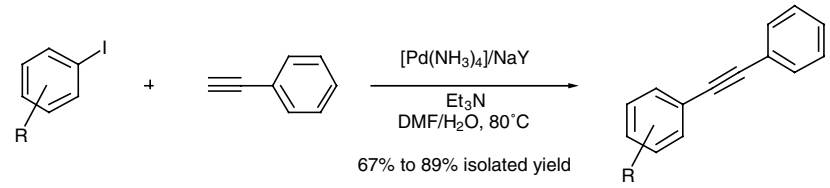




Naphthyl amino alcohols were prepared via nucleophilic addition to racemic 1-dimethylamino-2-methylpentan-3-one. The use of the appropriate experimental conditions allowed the synthesis of both diastereoisomers.



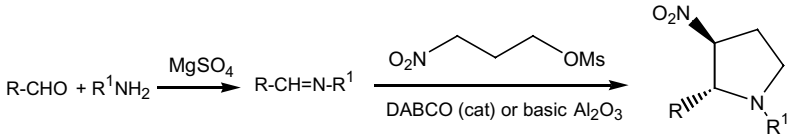


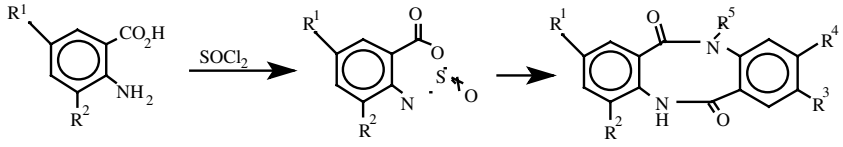


R = *p*-OCH_3, *o*-CH_3, H, *p*-F, *p*-$COCH_3$, *p*-NO_2, *o*-NO_2

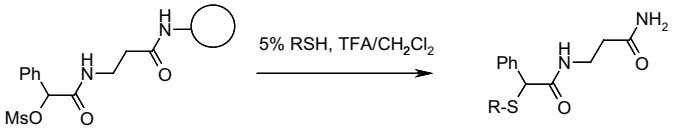
$$Ar{-}NH_2 \xrightarrow{[C_{16}H_{33}N(CH_3)_3]_2Cr_2O_7} Ar{-}N{=}N{-}Ar$$

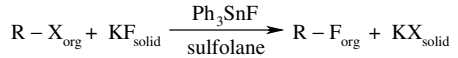
$$R{-}SH \xrightarrow{[C_{16}H_{33}N(CH_3)_3]_2Cr_2O_7} R{-}SS{-}R$$



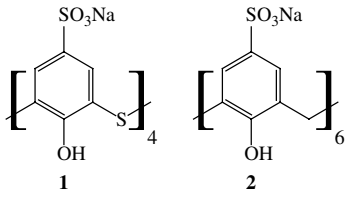


Two step synthesis of nonsymmetrical dibenzodiazocinediones.



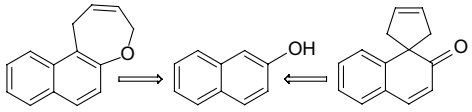


Ph_3SnF acts as phase-transfer catalyst

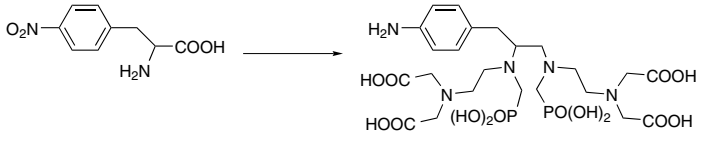


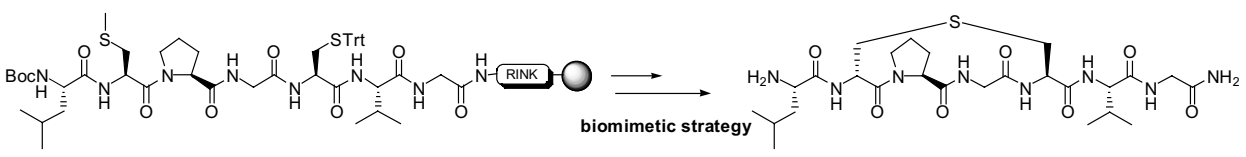
1 **2**

Photoluminescence studies revealed that water-soluble calixarene sulfonate derivatives **1** and **2** form complexes with the C_{60} fullerene with 2:1 and 1:1 stoichiometry, respectively.

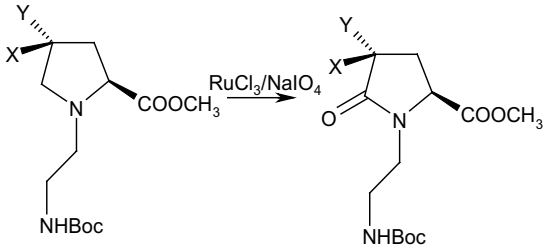


An efficient method for the synthesis of naphthoxepin and spirocyclic skeletons starting from β-naphthol has been developed. The Claisen rearrangement and the ring-closing metathesis reaction are used as key steps for their assembly.

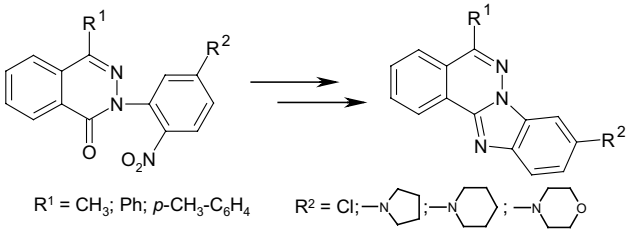


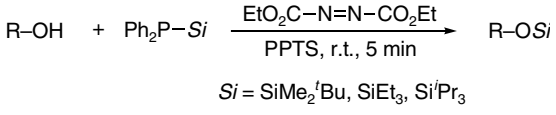


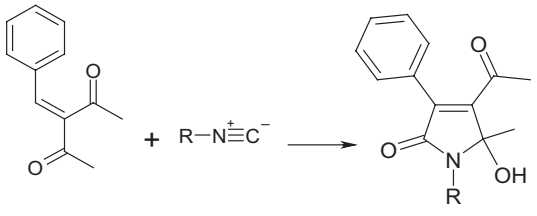
The total solid phase synthesis of an analogue of the B ring of nisin was achieved, in a biomimetic fashion, via the solid phase diastereoselective cyclisation of a dehydrothiol-containing peptide.

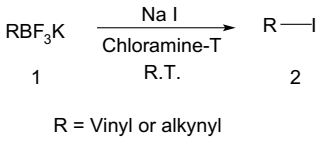


$RuCl_3/NaIO_4$ under $EtOAc/H_2O$ biphasic conditions, selectively oxidizes the Nα-*endo*-methylene group of pyrrolidine derivatives, without affecting the *exo*-methylene group adjacent to the N-heteroatom.

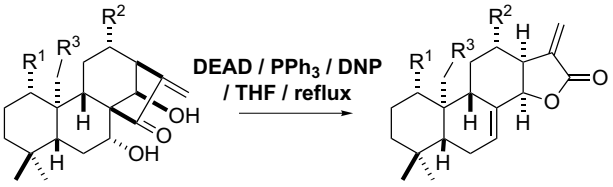


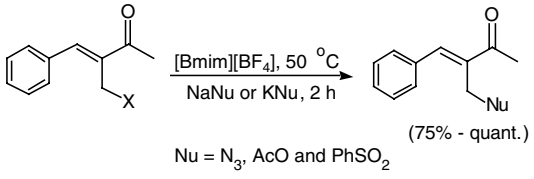


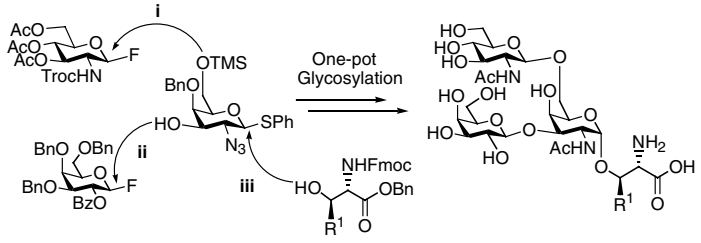


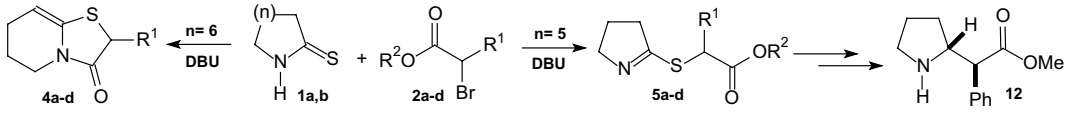


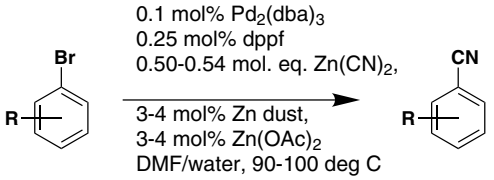
Vinyl- and alkynyltrifluoroborates are rapidly converted to vinyl and alkynyl iodides under mild conditions using sodium iodide in the presence of chloramine-T.



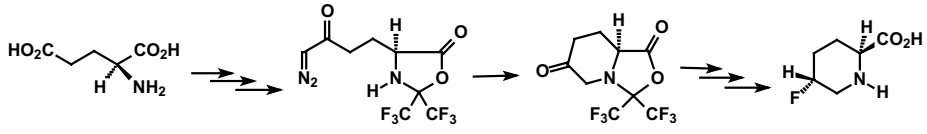




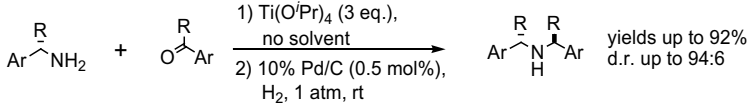




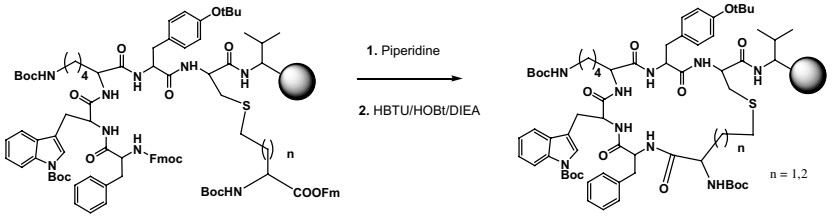
A more robust procedure to convert aryl bromides to aryl cyanides that uses zinc dust and zinc acetate has been described.



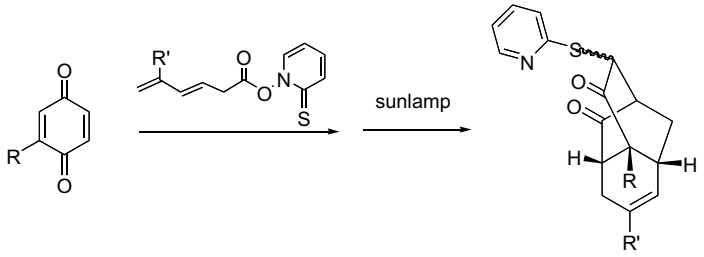
Starting from hexafluoroacetone-protected (*S*)-glutamic acid, *trans*-5-fluoropipecolic and 5,5-difluoropipecolic acid have been synthesized. The piperidine ring was constructed by an intramolecular metal carbenoid NH insertion.



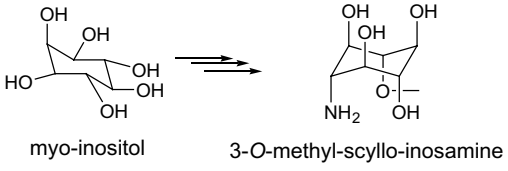
A novel one-pot reductive amination of ketones using the combination $Ti(O^iPr)_4/H_2/Pd$–C is reported. This practical procedure does not require any solvent and affords C_2-symmetrical secondary amines in high yields and excellent diastereoselectivities.

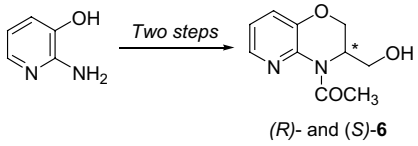


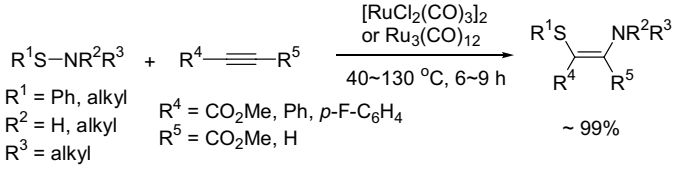
A novel approach for the synthesis of cyclic peptides containing unnatural thioether side-chain bridges, is reported.

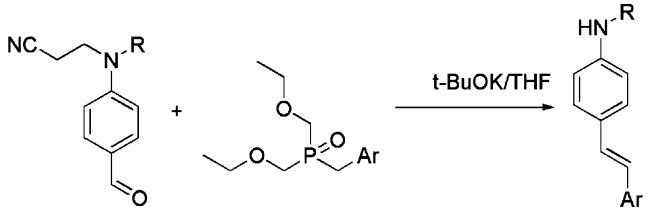


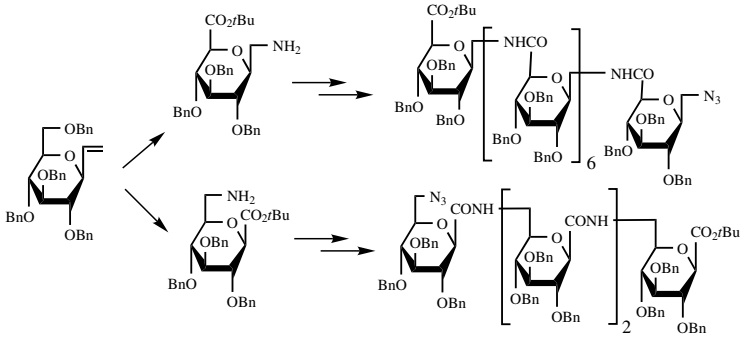
Bridged tricyclic ring systems can be prepared in a one-pot reaction using a tandem Diels–Alder reaction/radical cyclization strategy. The regiochemistry of the radical addition is unexpected.

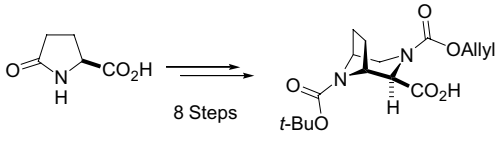


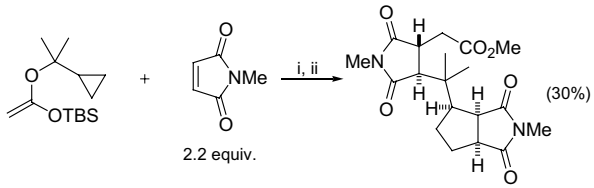




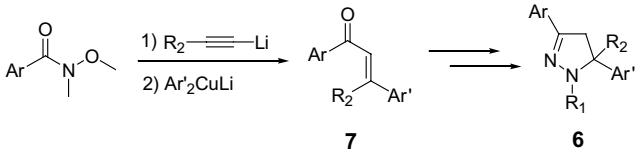


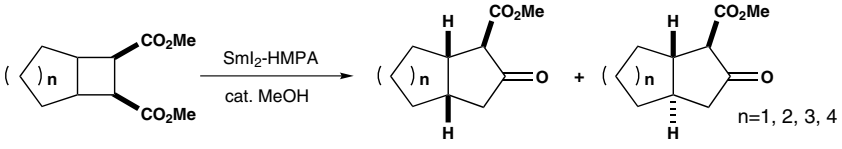


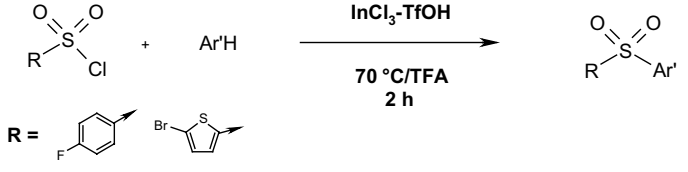


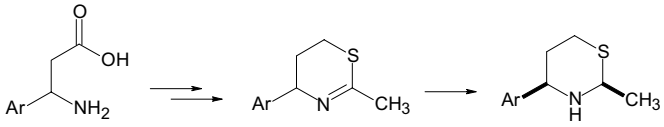


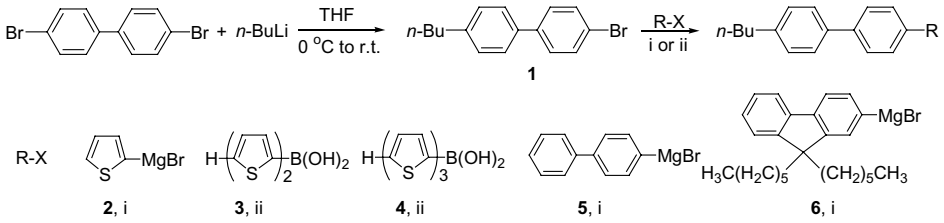
Conditions: i Dilauroyl peroxide (0.10 equiv.) initiator, refluxing benzene; ii TBAF, MeI

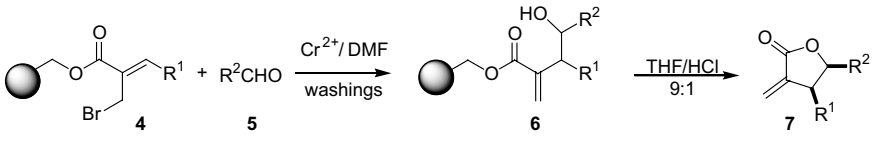




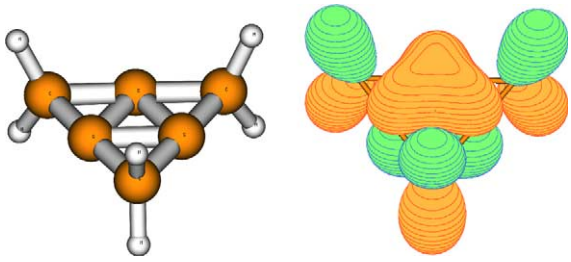




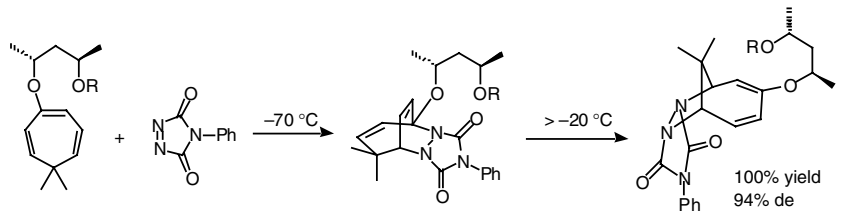




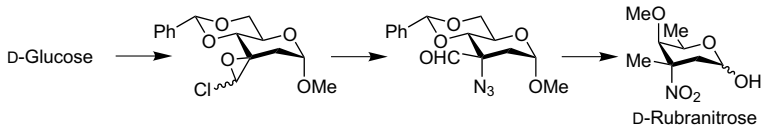
A solid-phase version of the Nozaki–Hiyama allylation of supported allylic bromides with aldehydes is described. α-Methylene γ-butyrolactones **7** can be obtained by cyclization cleavage of the supported, intermediate homoallylic alcohols **6**, which can also be isolated by proper choice of reaction conditions.

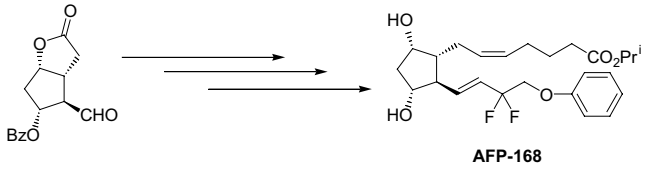


A novel structure, $C_6H_6^{2+}$, with three contiguous planar tetracoordinate carbon atoms is proposed as a viable candidate.

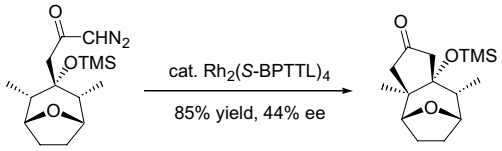


The PTAD addition to 7,7-dimethylcycloheptatriene resulted in a stereocontrolled [6+2] cycloaddition as a result of the rearrangement of the [4+2] adduct.

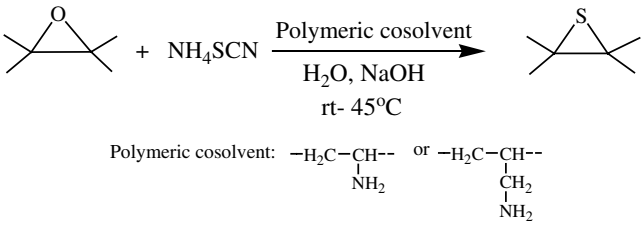


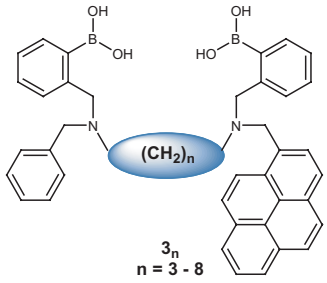


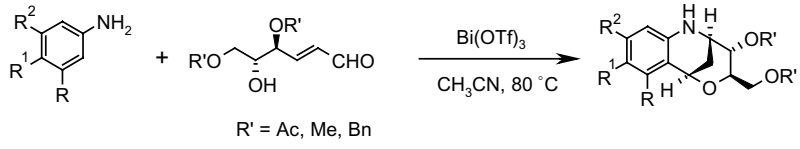
A novel 15-deoxy-15,15-difluoro-prostaglandin(PG)$F_{2\alpha}$ derivative **6** (AFP-168) has been synthesized from the Corey aldehyde in 6 steps.

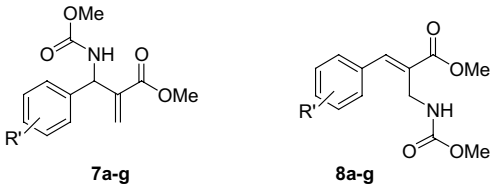


Using chiral rhodium catalysts, moderate enantioselectivities have been achieved in the desymmetrizations of *meso* oxabicyclo[3.2.1]diazoketones via intramolecular C–H insertion to give fused cyclopentanones.



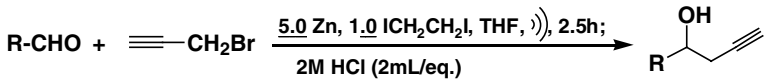




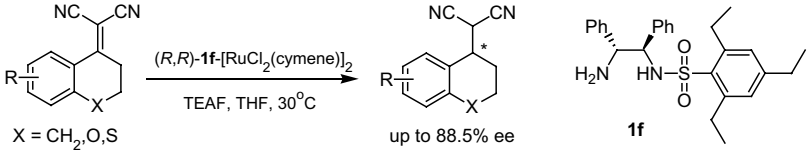


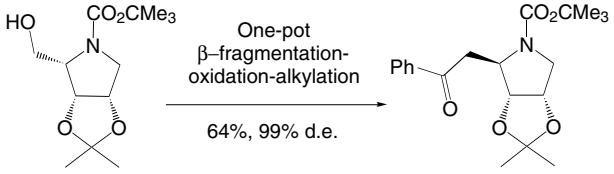
R'=H, 4-Me, 4-MeO, 3-NO_2, 4-NO_2, 4-Cl, 2-Cl

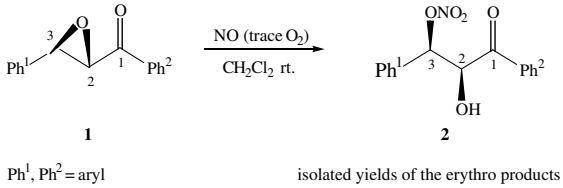
An easy, one-pot convenient transformation of Baylis–Hillman adducts into carbamates of unsaturated β-amino acids, for example, **7a**–**g** and **8a**–**g** via reaction with the Burgess reagent is described.



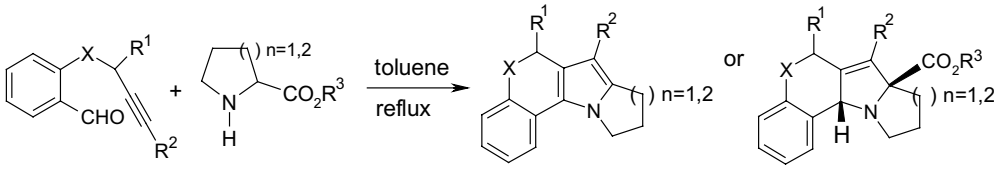
The homopropargyl alcohols were obtained as the only product when aldehydes were reacted with 3-bromo-1-propyne under the sonochemical Barbier-type reaction condition.







2,3-Epoxy phenyl ketones are opened regioselectively at C-3 by nitric oxide, affording *erythro*-α-hydroxyl nitrates in a highly *syn*-selective manner.



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*Corresponding author
ⓘ+ Supplementary data available via ScienceDirect

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