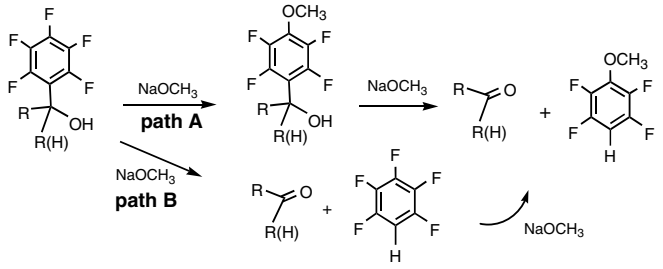
ELSEVIER

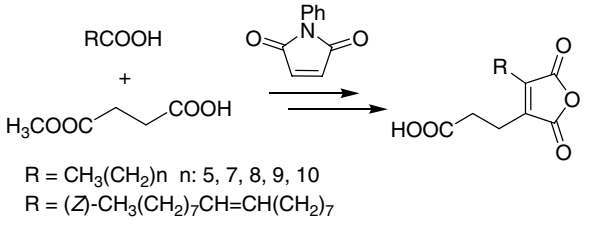
Tetrahedron Letters

Tetrahedron Letters Vol. 47, No. 42, 2006

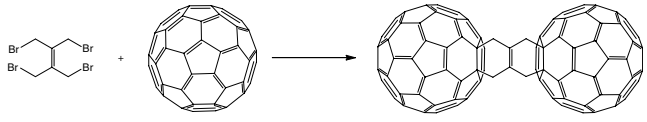
Contents

COMMUNICATIONS

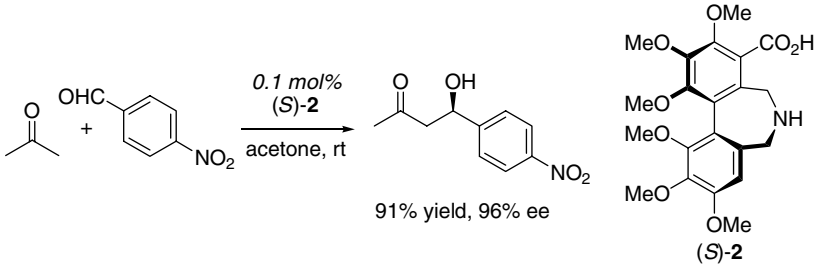


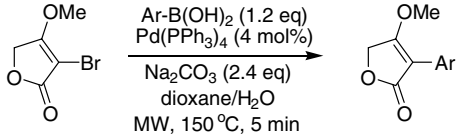


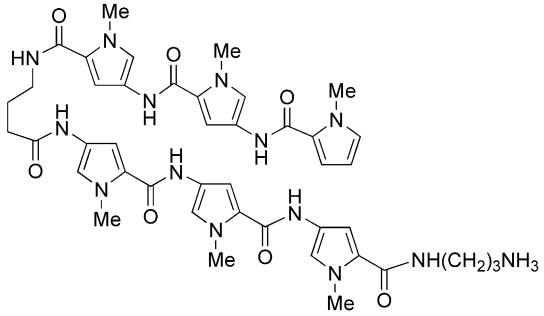
R = $CH_3(CH_2)n$ n: 5, 7, 8, 9, 10
R = (*Z*)-$CH_3(CH_2)_7CH{=}CH(CH_2)_7$

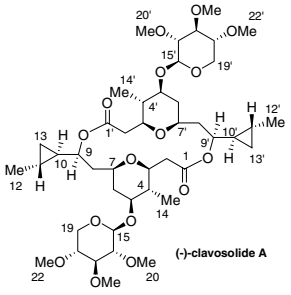


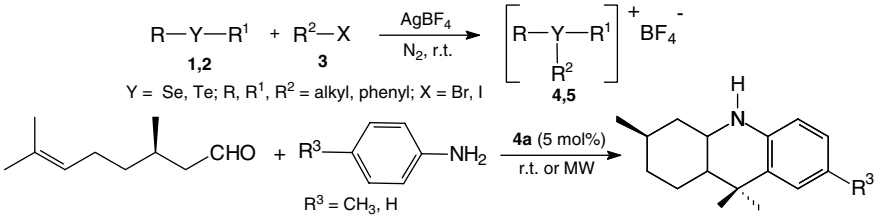
The synthesis of a short-chain fullerene dimer via bifunctional cycloaddition is demonstrated. A mono-functionalised C_{60} species is isolated, and has the potential for further organic functionalisation.



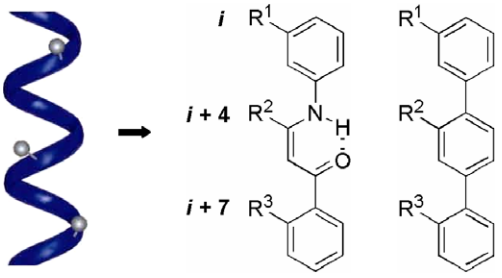


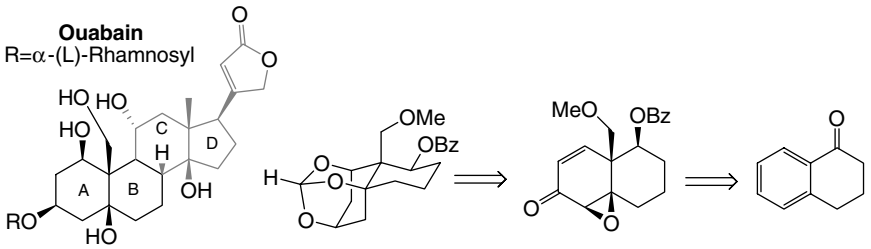


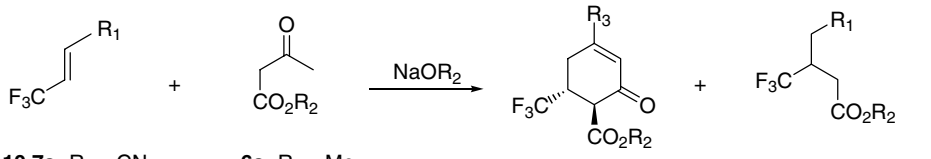




An intramolecularly hydrogen bonded enaminone scaffold was designed and synthesized in order to mimic the *i*, *i* + 4, and *i* + 7 residues of an α-helix. The conformationally rigid vinylogous amide group serves as an aromatic ring isostere and allows the positioning and angular projection of the R-groups in a manner similar to an α-helix.





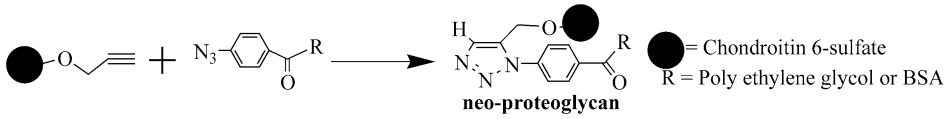


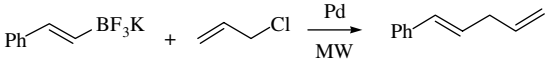
10,7a: R_1 = CN
11,7b: R_1 = CO_2Et

6a: R_2 = Me
6b: R_2 = Et

8a: R_3 = NH_2, R_2 = Me
8b: R_3 = NH_2, R_2 = Et
9a: R_3 = OH, R_2 = Me
9b: R_3 = OH, R_2 = Et

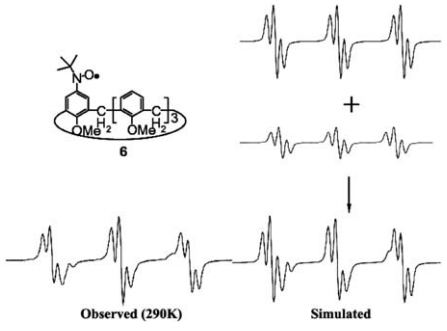
10: R_2 = Me
11: R_2 = Et

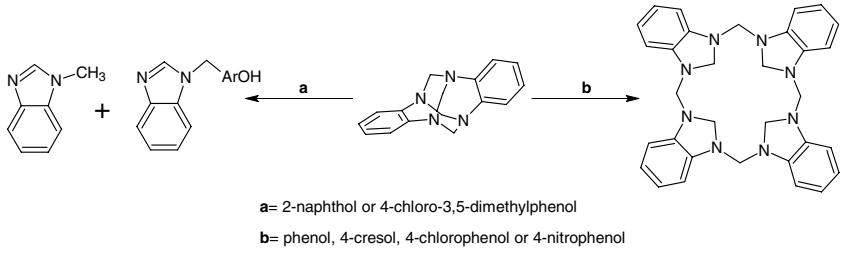


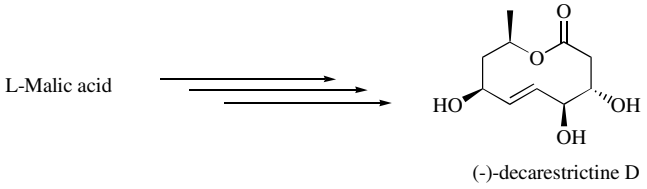


The allylation of potassium alkenyltrifluoroborates with allyl chloride via a palladium catalyzed cross-coupling reaction occurs rapidly under microwave irradiation. The allylation reaction produces 1,4-pentadienes in high yields.

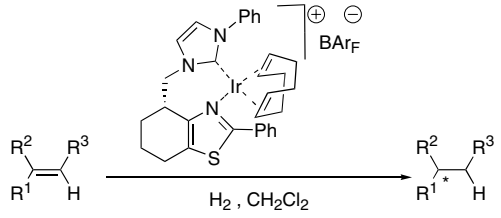
A novel paramagnetic calix[4]arene **6** with an N–O monoradical on the upper rim was synthesized and studied by ESR spectroscopy. Its ESR behaviors were mainly induced by its intrinsic conformational flexibility. The effects of varying temperature and complexation of silver ions on its ESR behaviors were also investigated.

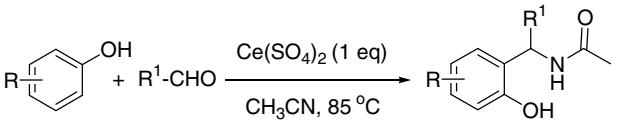




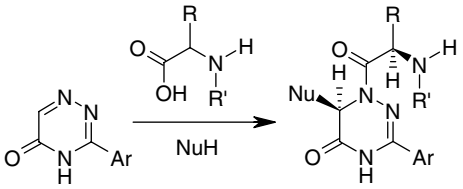


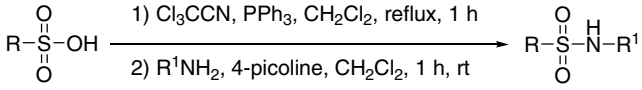
A convergent stereoselective total synthesis of (−)-decarestrictine D from L-malic acid is reported.

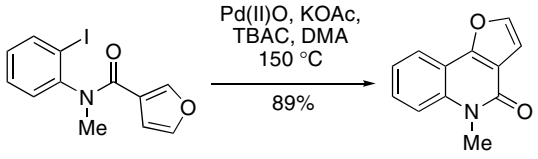




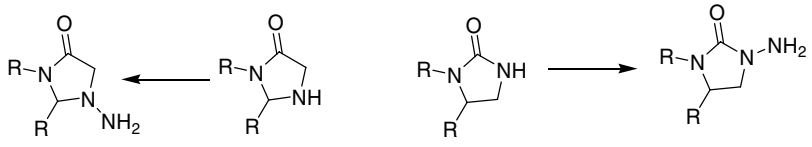
A new method for the synthesis of acetamido phenols by a one-pot, three-component Ritter type reaction in moderate to good yields is described. Both electron donating and electron releasing substitution on aromatic rings are tolerated.

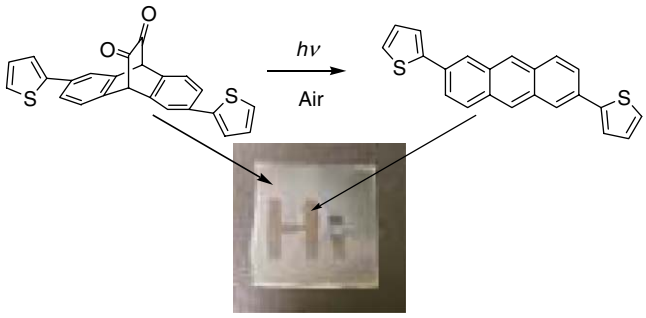






A new method for the synthesis of 5-methylfuro[3,2-*c*]quinolin-4(5*H*)-one has been developed and the palladium-catalysed cyclisation step has been shown to give the best yields when palladium oxide was used as the catalyst.





*Corresponding author
ⓘ+ Supplementary data available via ScienceDirect

Available online at www.sciencedirect.com
ScienceDirect

Abstracted/indexed in: AGRICOLA, Beilstein, BIOSIS Previews, CAB Abstracts, Chemical Abstracts, Chemical Engineering and Biotechnology Abstracts, Current Biotechnology Abstracts, Current Contents: Life Sciences, Current Contents: Physical, Chemical and Earth Sciences, Current Contents Search, Derwent Drug File, Ei Compendex, EMBASE/Excerpta Medica, Medline, PASCAL, Research Alert, Science Citation Index, SciSearch. Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect®

ELSEVIER

ISSN 0040-4039