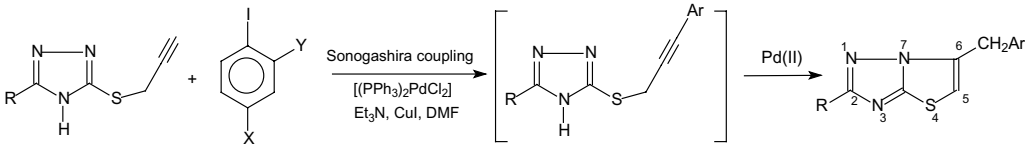
ELSEVIER

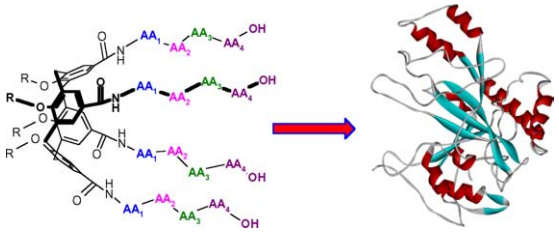
Tetrahedron Letters

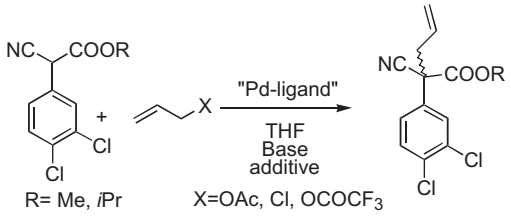
Tetrahedron Letters Vol. 46, No. 10, 2005

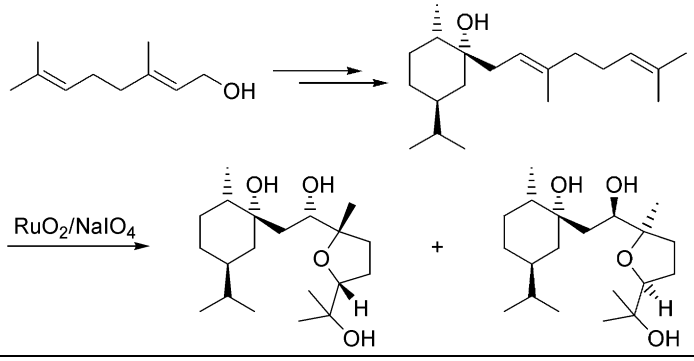
Contents

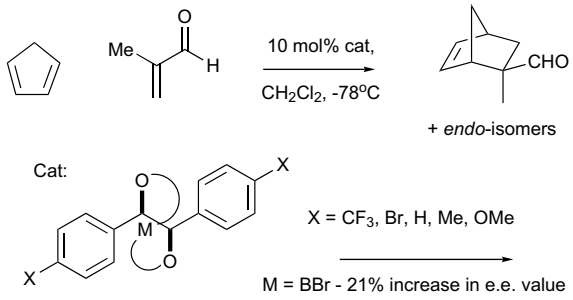


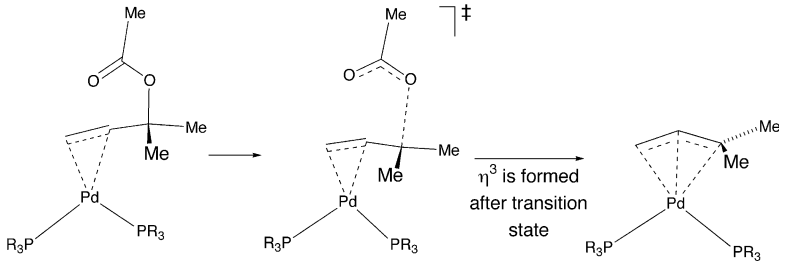
The reaction of 3-mercaptopropargyl-1,2,4-triazoles with various iodobenzenes catalyzed by Pd–Cu leads to the regioselective formation of 6-benzylthiazolo[3,2-*b*]1,2,4-triazoles.



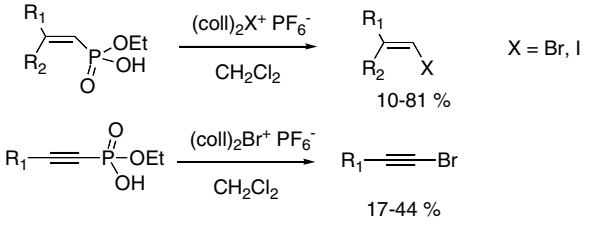


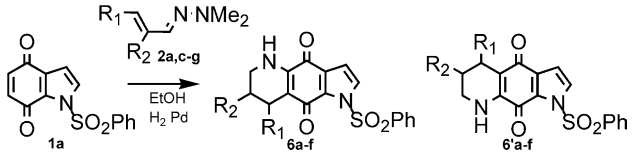


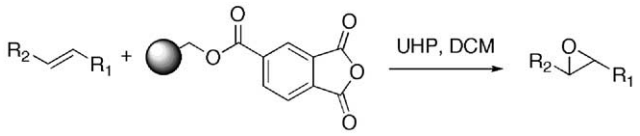


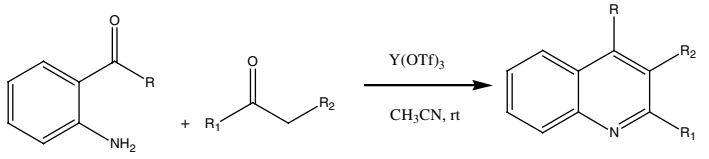


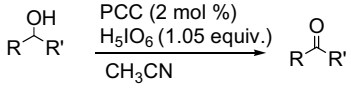
Isotope effects and theoretical calculations support a transition state resembling a S_N1 ionization rather than an intramolecular S_N2 substitution.

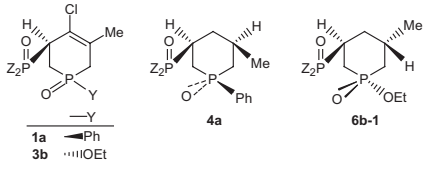




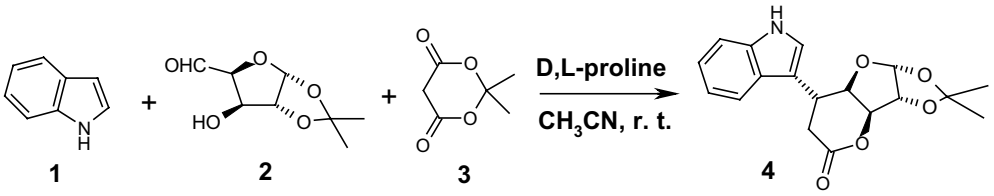


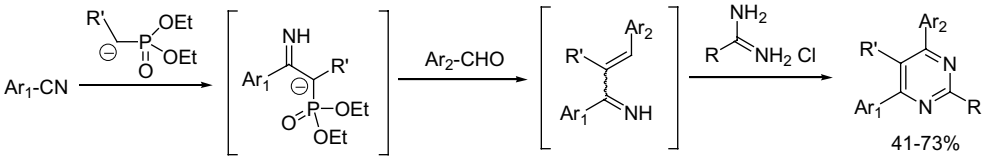


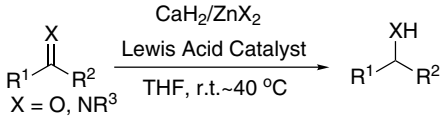




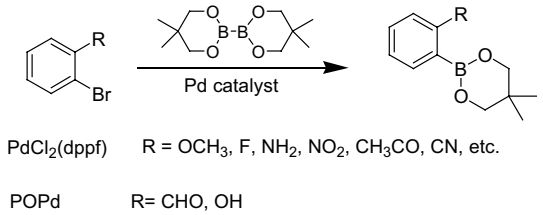
Catalytic hydrogenation of 3-substituted 1,2-dihydrophosphinine oxides (e.g., **1a** and **3b**) gave the title compounds as exclusive or major diastereomers (e.g., **4a** and **6b**–**1**, respectively).

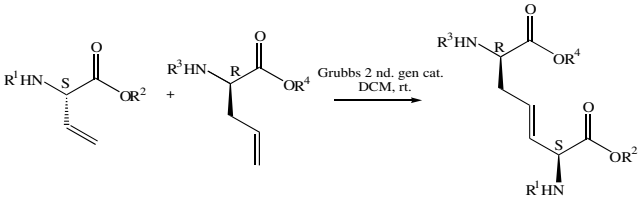




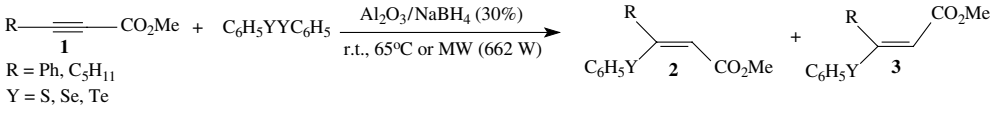


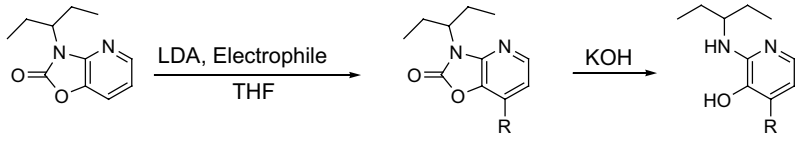
A reagent combination of CaH_2/ZnX_2 effectively reduced ketones and imines in the presence of a Lewis acid.



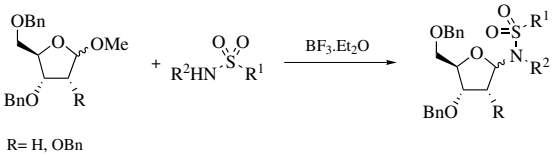


Properly protected diaminopimelic acid (DAP), a component of Gram-negative peptidoglycan was prepared by a metathesis cross coupling using Grubb's second-generation catalyst.

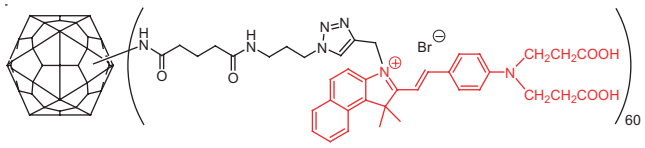




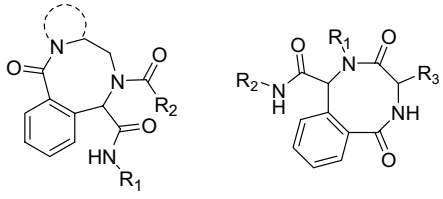
An efficient route to the preparation of 2-amino-3-hydroxy-4-substituted pyridines via regioselective metalation and subsequent alkylation of the [1,3]oxazolo[4,5-*b*]pyridin-2(3*H*)-one ring system is described.



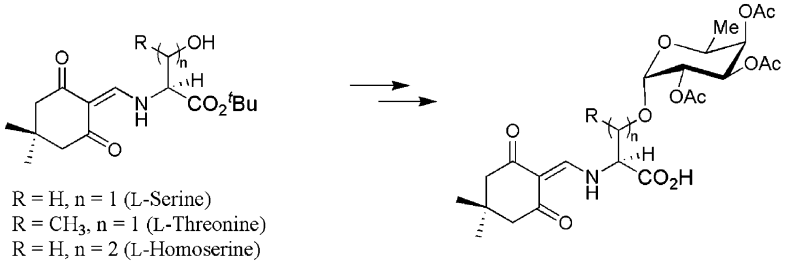
The sulfonamidoglycosylation of benzylated methyl ribofuranosides using boron trifluoride etherate as catalyst, proceeded effectively to give the new sulfonamidofuranosides with good to high yields.



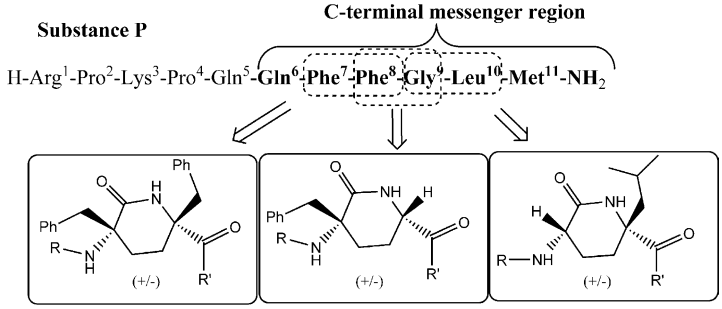
virus-cyanine dyes click conjugates

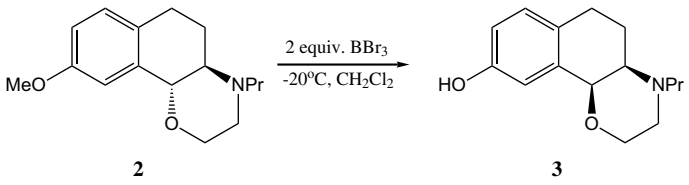


An Ugi-deprotection–carbonylation/intramolecular amidation approach toward the synthesis of novel bicyclic and tricyclic macrolactams is described.

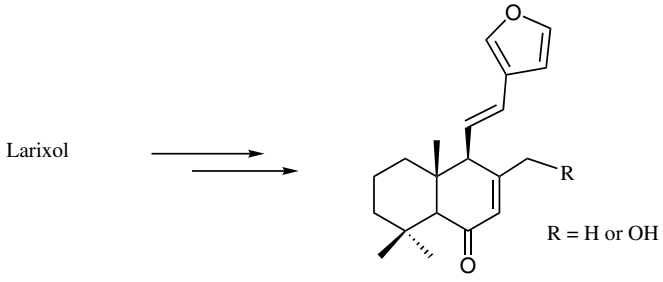


R = H, n = 1 (L-Serine)
R = CH_3, n = 1 (L-Threonine)
R = H, n = 2 (L-Homoserine)

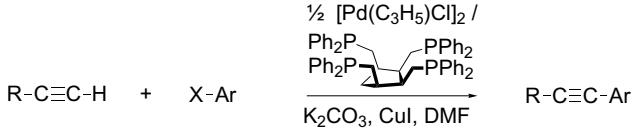




2 3

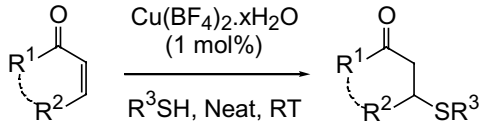


Hedychenone (R = H) is obtained in seven steps (>20% overall).

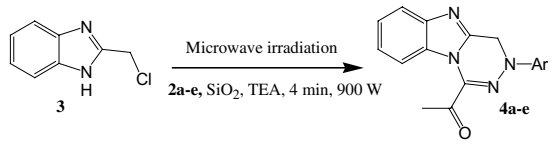


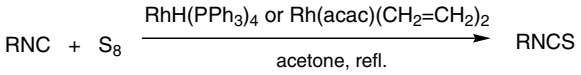
R = -Ph, -CH_2OH, -$(CH_2)_2OH$, -$(CH_2)_3OH$, -$(CH_2)_4OH$

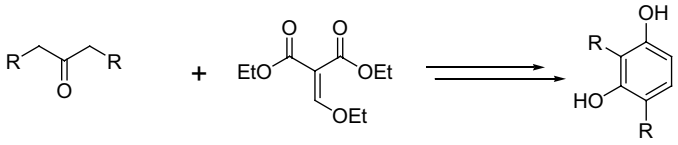
Ar = pyridine, quinoline, pyrimidine, indole, thiophene, thiazole

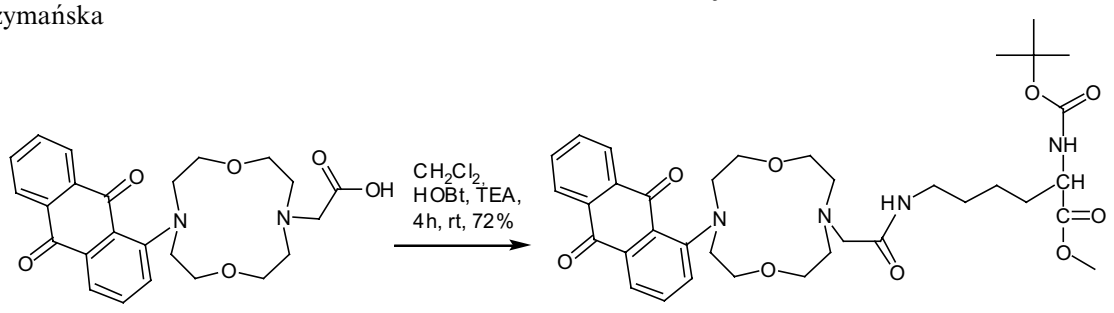


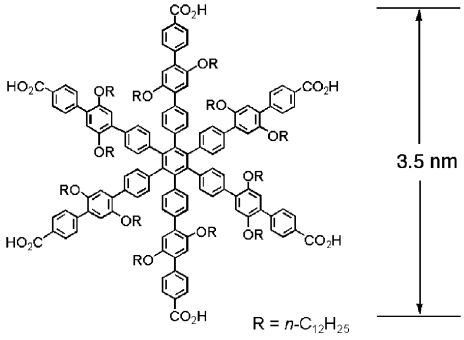
$Cu(BF_4)_2{\cdot}xH_2O$ efficiently catalyses thia Michael addition of thiols to α,β-unsaturated carbonyl compounds.

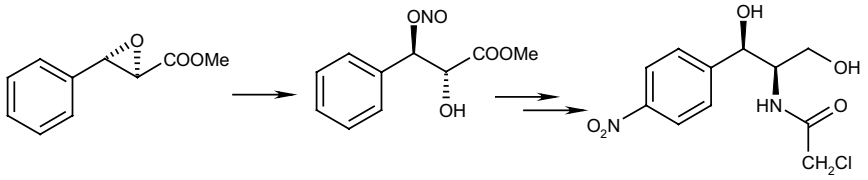






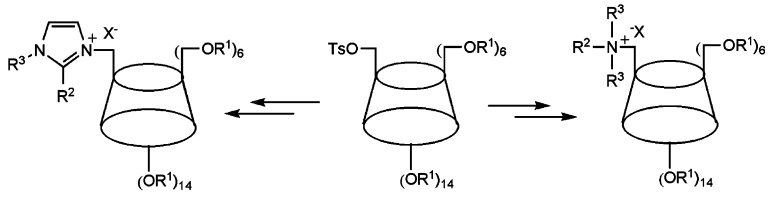


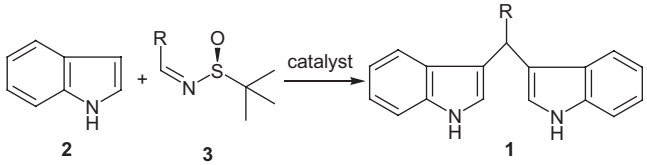




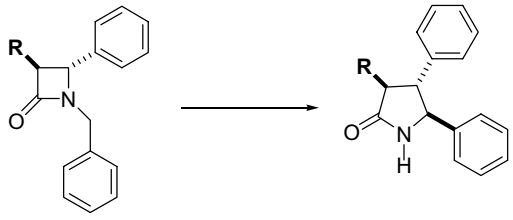
Chloramphenicol

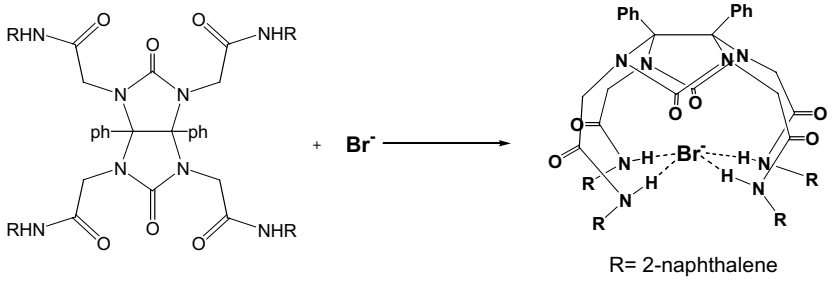
Chloramphenicol has been prepared in 45% overall yield; the key step is the synthesis of a selectively protected 1,2-diol from an epoxide in an aqueous medium.





A series of bisindolylalkanes were synthesized by nucleophilic addition reactions of indole with *N-tert*-butanesulfinyl aldimines in good to excellent yields catalyzed by either iodine, potassium hydrogen sulfate and amberlyst.





OTHER CONTENTS

*Corresponding author
ⓘ+ Supplementary data available via ScienceDirect

Indexed/Abstracted 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

ELSEVIER

ISSN 0040-4039