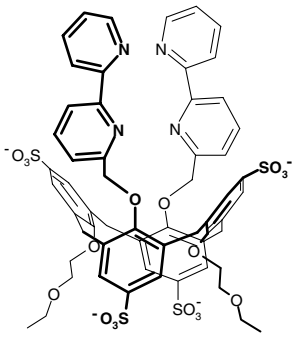
ELSEVIER

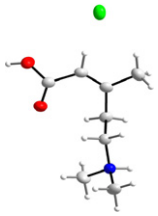
Tetrahedron Letters

Tetrahedron Letters Vol. 48, No. 47, 2007

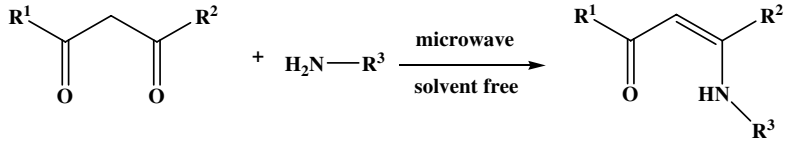
Contents

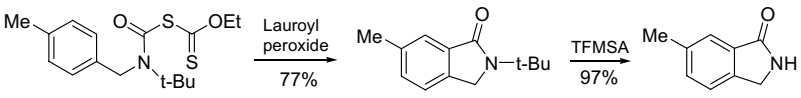
COMMUNICATIONS

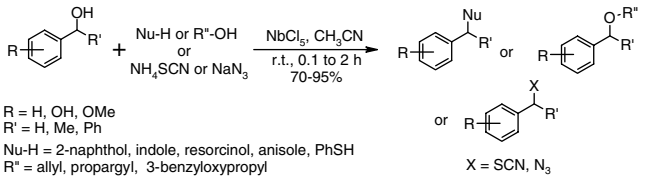


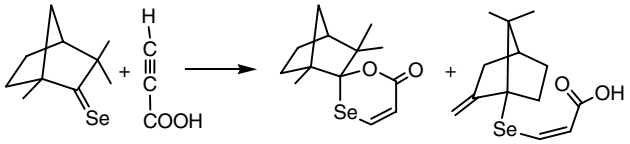


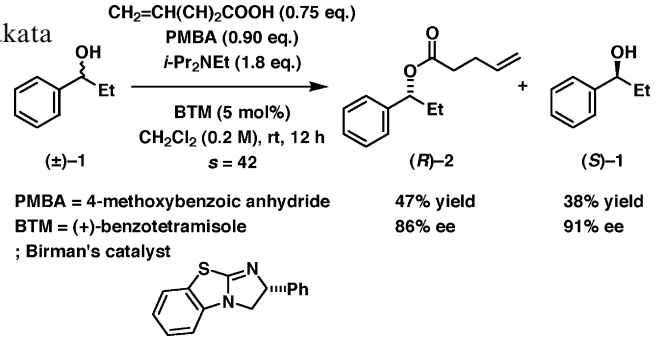
Diamond projection of α,β-unsaturated δ-amino acid derivative.

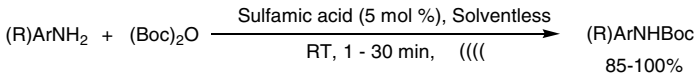


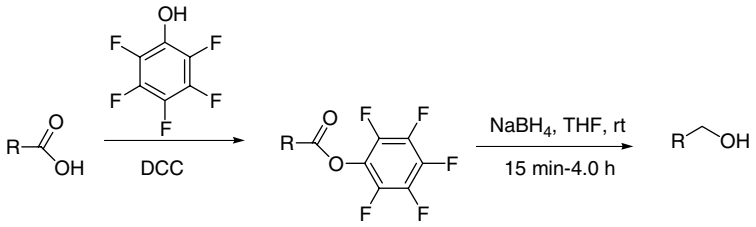






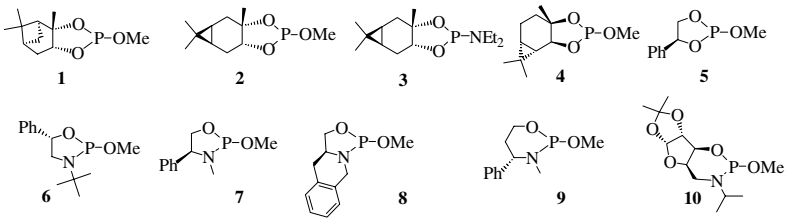


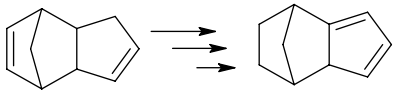


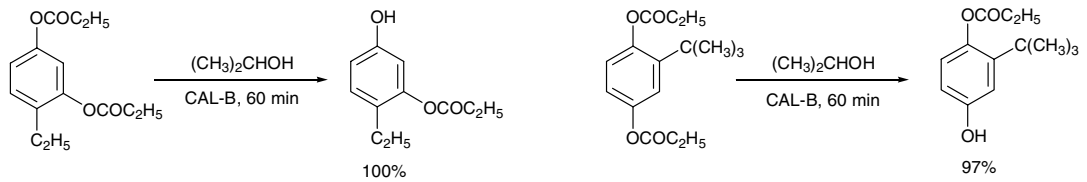


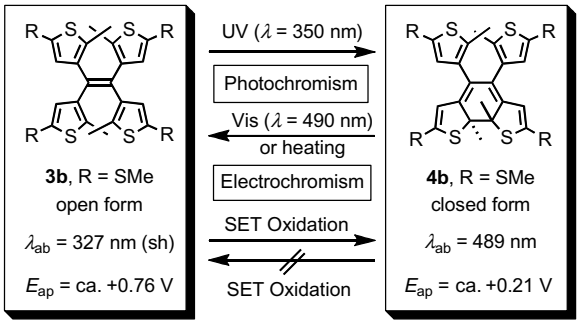
The reduction of a variety of pentafluorophenyl esters of carboxylic acids, including N-protected amino acids, by $NaBH_4$ in THF has been developed.

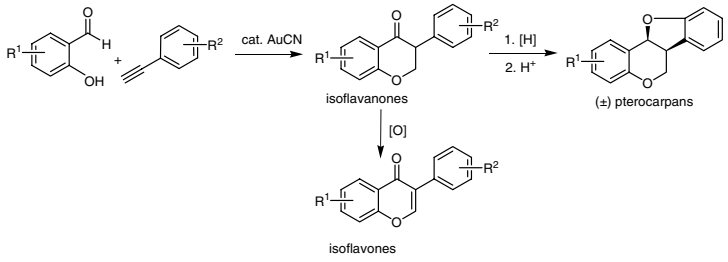
Various P*-chiral phosphite-type ligands used in Pd-catalysed allylation



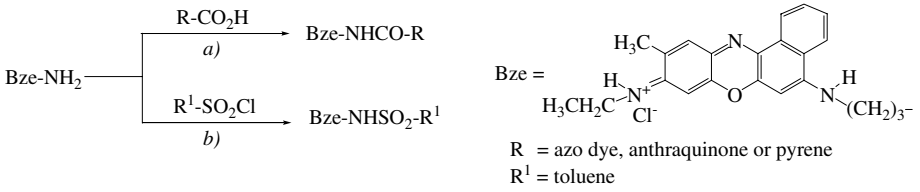




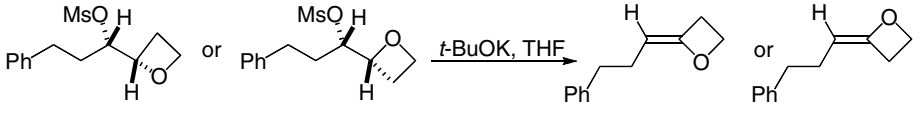


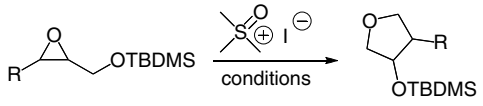


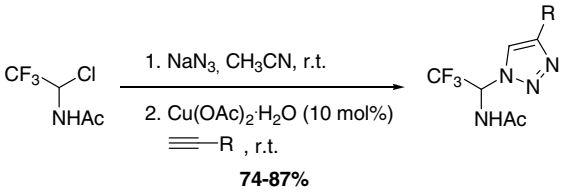
(±)-Pterocarpan and analogues have been synthesized efficiently via the annulation of salicylaldehydes and *o*-methoxymethoxylphenylacetylene followed by a one-pot reduction and acidic cyclization of ketones. In addition, isoflavone derivatives have been synthesized rapidly via the annulation of salicylaldehyde and arylacetylenes followed by IBX/DMSO oxidation of the isoflavanones.

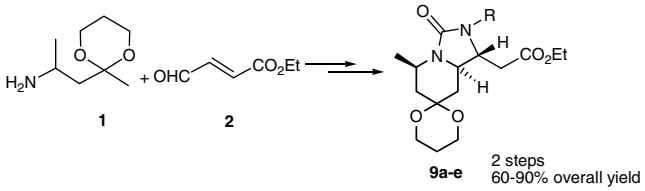


Reagents and conditions: (a) DCC/HOBt, rt; (b) 1 M $NaOH/H_2O$, 0 °C and rt.

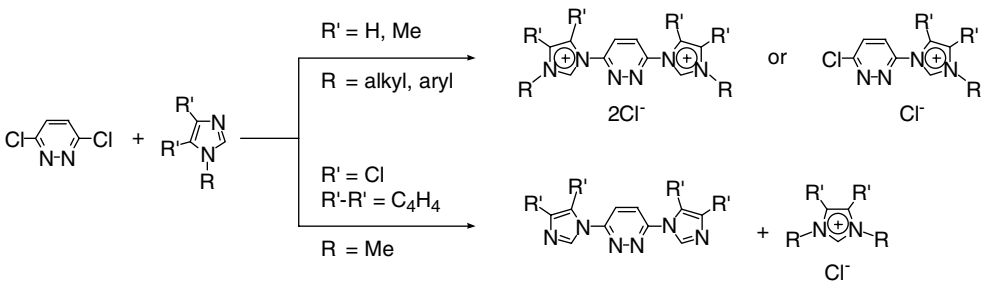


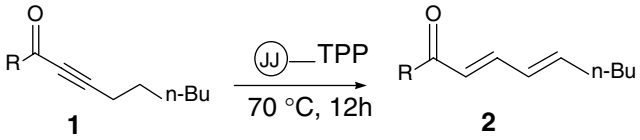




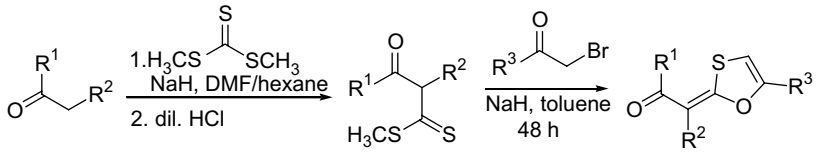


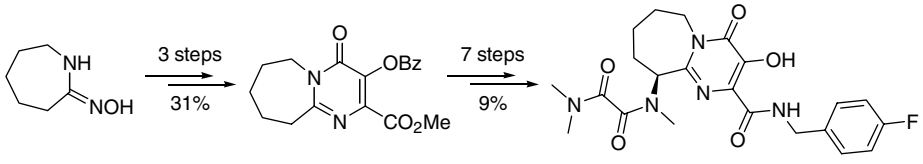
Original N-heterocyclic ureas **9a**–**e** were prepared efficiently from aminoketal **1** and ethyl-*trans*-4-oxo-buten-2-oate **2**.

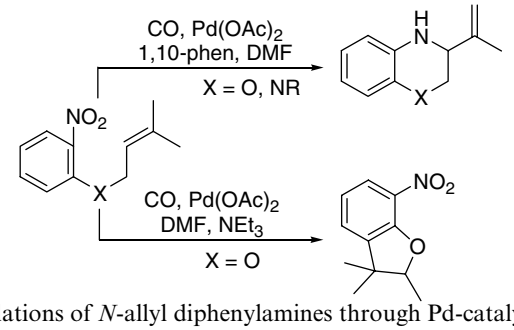




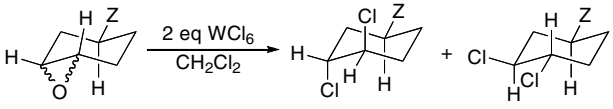
Stereoselective isomerization of α,β-ynones was catalyzed by polymer-supported tertiaryphosphines under solvent-free conditions. (*E*,*E*)-α,β-γ,δ-Dienones were obtained with up to 93% isolated yields when ***JJ*-TPP** was employed.



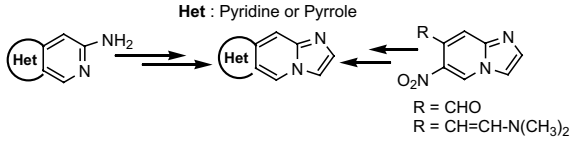




New Pd-mediated reductive heteroannulations of *N*-allyl diphenylamines through Pd-catalyzed N-arylation and of *O*-allylethers are reported.



The reactions of substituted cyclohexene oxides with tungsten hexachloride were carried out to learn the functional group tolerance of this reagent. Several groups proved stable—esters, sufides, sulfones—while others were unstable—alcohols, silyl ethers, ketones. The diaxial dichloride is usually formed although the diequatorial dichloride could also be prepared.



*Corresponding author
ⓘ+ Supplementary data available via ScienceDirect

COVER

This protocol directly produces chiral carboxylic esters from free carboxylic acids and racemic secondary alcohols, by utilizing the trans-acylation process to generate mixed anhydrides from acid components and benzoic anhydride derivatives under the influence of chiral catalysts.
Tetrahedron Letters **2007**, *48*, 8314–8317.

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