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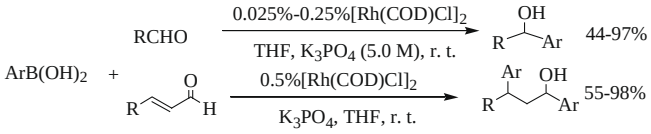
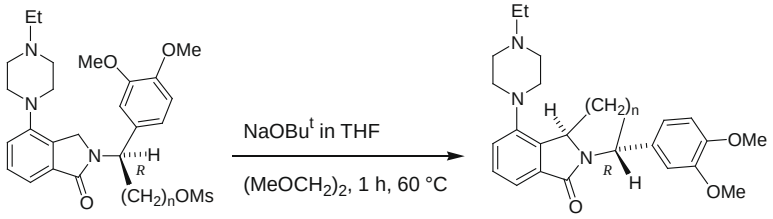
Contents

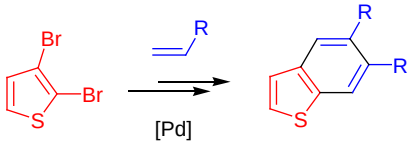
COMMUNICATIONS

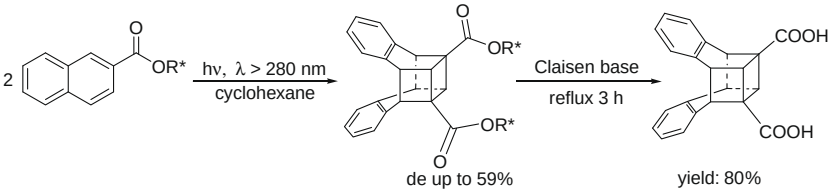


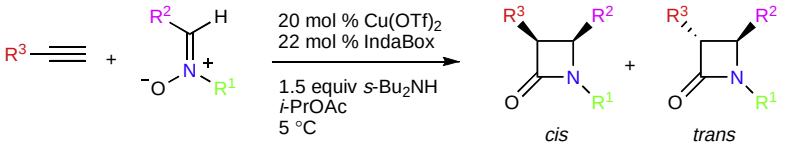


8b n = 3
11 n = 4

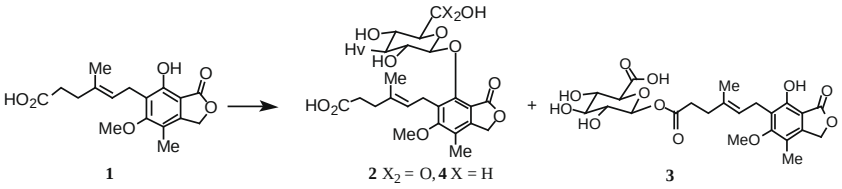
2 n = 3 (48%)
10 n = 4 (32%)



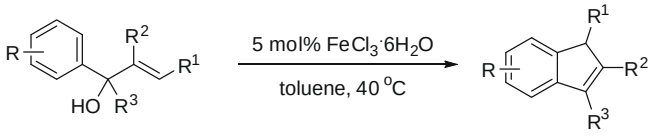


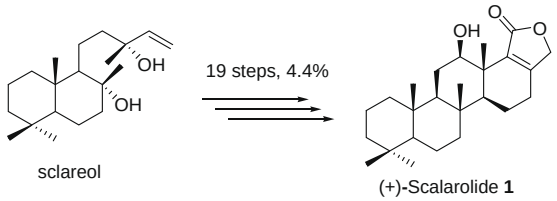


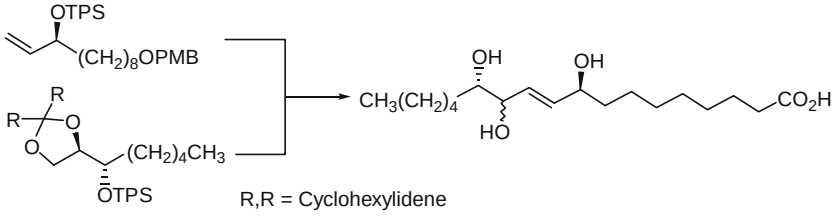
The highest level of enantioselectivity (79–94% ees) was attained in the catalytic Kinugasa reaction using the $Cu(OTf)_2$-IndaBox complex.

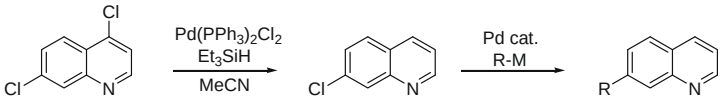


We report effective preparations of the *O*-aryl glucuronide **2** and glucoside **4**, as well as the *O*-acyl glucuronide **3**, of the immunosuppressant agent mycophenolic acid **1**. Heavy metals are avoided in the preparations of **2** and **4** and a careful optimisation of the synthesis of **3** is detailed. Finally we confirm the value of synthetic **3** by comparing its reactivity with that of a biosynthesised sample against a known target protein.

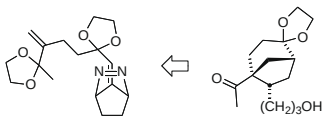


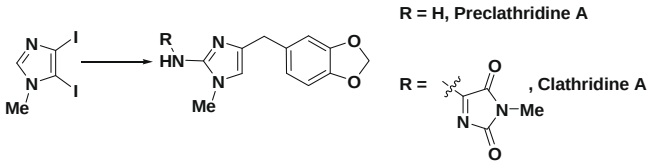




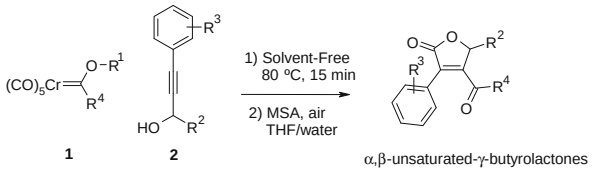


A practical synthesis of 7-mono-substituted quinolines has been achieved. Selective reduction of the inexpensive commercial reagent 4,7-dichloroquinoline affords 7-chloroquinoline, which has been converted into more complex 7-mono-substituted quinolines through a series of Pd-catalyzed cross coupling reactions. These studies include the first examples of Suzuki reactions for the preparation of 7-mono-substituted quinolines as well as the first application of the Sonagashira reaction for the synthesis of 7-substituted quinolines. This strategy has been extended to the preparation of 2,7-di-substituted quinolines.

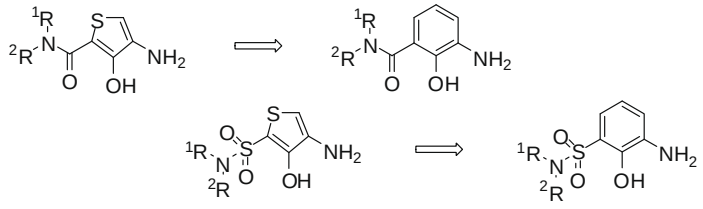


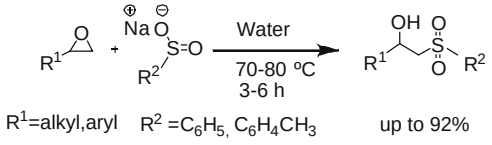


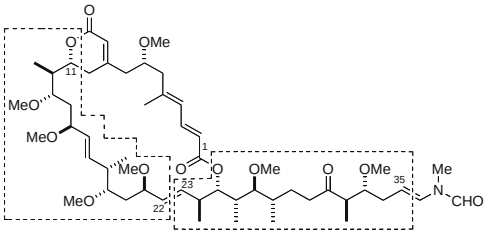
A short and operationally simple total synthesis of the marine alkaloids preclathridine A and clathridine A from a 4,5-diiodoimidazole derivative is described.



Substituted butyrolactones are synthesized from Fischer chromium carbenes and substituted alkynols in a two-step sequence. This method demonstrates a novel route for the synthesis of this class of molecules.

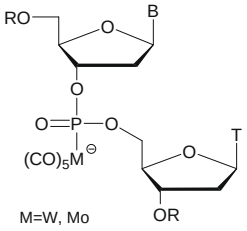






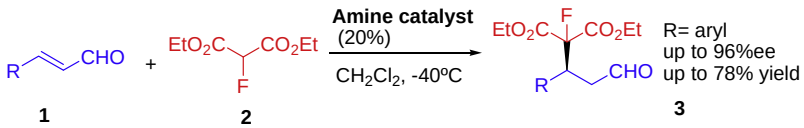
1

The C11–C22 and C23–C35 segments **2** and **3** of reidispongiolide A (**1**), an actin-depolymerizing marine macrolide, were synthesized enantioselectively in 12 steps from (*R*)-glycidyl trityl ether and in 12 steps from chiral ketone **15**, respectively.



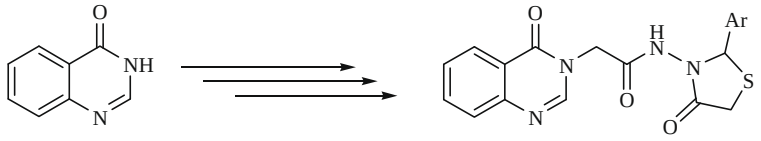
M=W, Mo

Substituents on the pyridinium ring of *N*-methylpyridinium derivatives, especially those on the 2- or 4-position, have a large effect on the ^{1}H and ^{13}C NMR chemical shifts of the *N*-methyl group. Reasonable correlations between the chemical shift changes and the resonance substituent constants are observed. The dual substituent parameter approach provides an excellent correlation when a combination of polar and resonance substituent constants is employed.

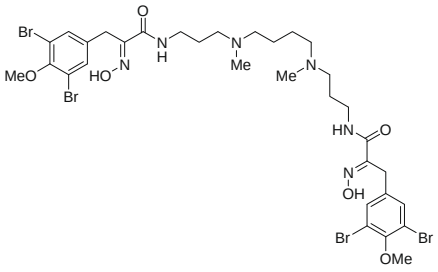


1 2 3

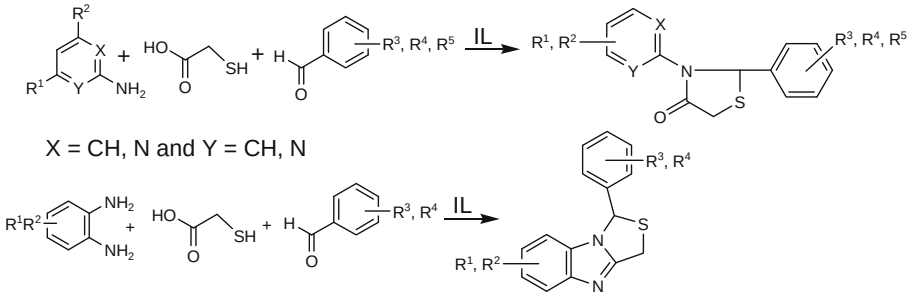
A highly enantioselective organocatalytic fluoromalonate addition to α,β-unsaturated aldehydes is reported. The reaction is catalyzed by simple and commercially available secondary amines, affording the corresponding 1,4-adducts with high yields and enantioselectivities.

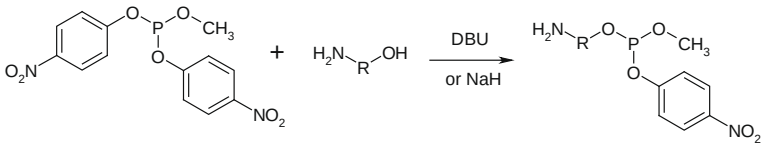


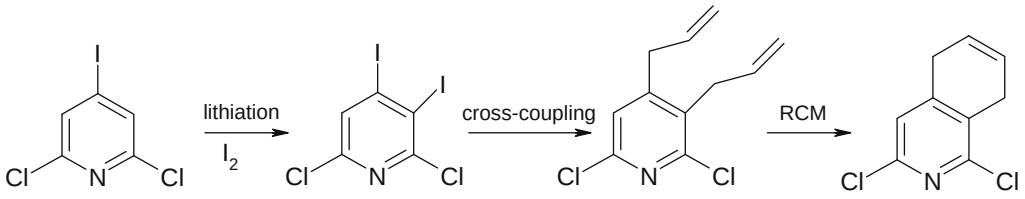
An efficient solvent-free cyclocondensation route for condensing mercaptoacetic acid with quinazolinyl-substituted azomethines has been developed using silica chloride as a catalyst for obtaining heteryl-substituted 4-thiazolidinones. The route is found be rapid, relatively economical, and eco-friendly. The precursors, quinazolinyl azomethines have been obtained in multisteps starting from quinazolinone.



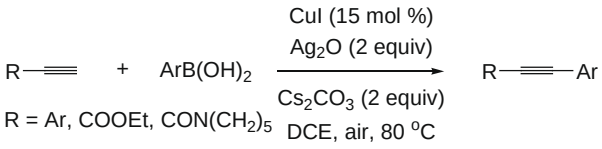
The first total synthesis of spermatinamine, an inhibitor of isoprenylcysteine carboxyl methyltransferase (Icmt) with a bromotyrosine–spermine–bromotyrosine dimeric structure is described.

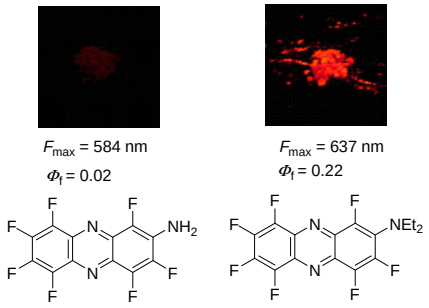




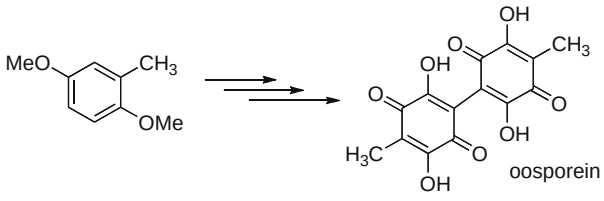


Commercially available 2,6-dichloro-4-iodopyridine is converted into 1,3-dichloro-5,8-dihydroisoquinoline via a novel three-step synthesis.

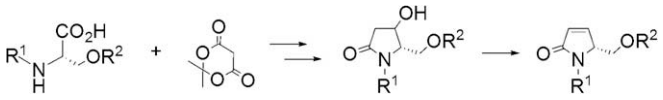


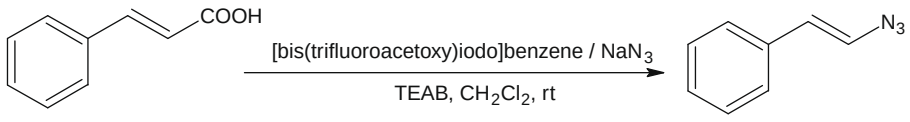


First perfluoroaromatic red solid-state fluorescent compounds.



Oosporein is prepared in four steps and 24% overall yield from 2,5-dimethoxytoluene.





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Supplementary data available via ScienceDirect

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