Full Papers

Assembly of the 1-Azaspiro-[5.5]undecane Framework Associated with Perhydrohistrionicotoxin via Electrocyclic Ring-Opening of a Ring-Fused gem-Dichlorocyclopropane and Trapping of the Resulting \(\pi\)-Allyl Cation by a Tethered, Nitrogen-Centered Nucleophile

Martin G. Banwell, Florian Vogt, Angela W. Wu


An Expansion of the Role of the Corey–Link Reaction for the Synthesis of \(\alpha\)-Substituted Carboxylic Acid Esters

Adrian Scaffidi, Brian W. Skelton, Robert V. Stick, Allan H. White


Synthesis, Characterization, and Photophysics of a New Trinuclear Mercury(II) Complex of 1,3,5-Triethynylbenzene

Li Liu, Wai-Yeung Wong, Cheuk-Lam Ho


Synthesis and Characterization of \(\alpha,\beta\)-Unsaturated Hydroximoyl Chlorides and Hydroximates

James E. Johnson, Ling Lu, Houquan Dai, Diana C. Canseco, Krista M. Small, Debra D. Dolliver, Frank R. Fronczek

Synthesis and Biological Activity of Allosteric Modulators of GABA<sub>B</sub> Receptors, Part 1. N-(Phenylpropyl)-1-arylethylamines

David I. B. Kerr, Jennifer Ong, Michael V. Perkins, Rolf H. Prager, Ni Made Puspawati


In the second of two papers, a new series of 2,2-disubstituted 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propan-1-ol derivatives have been prepared for evaluation as allosteric modulators of moderately active GABA<sub>B</sub> receptors, but which are limited at this stage by very poor solubility. The activity was greatest for the cyclohexyl and cyclopentyl analogues.

An Efficient, Eco-Friendly, One-Pot Protocol for the Synthesis of 2-Oxazolines Promoted by Ionic Liquid/Indium Chloride

R. Kamakshi, Boreddy S. R. Reddy


The synthesis of substituted 2-oxazolines in ionic liquid/InCl<sub>3</sub> media affords products in good yield and purity, and provides an environmentally friendly route to these synthetically useful compounds. Both the amide bond formation and cyclic dehydration are achieved using this single-pot synthesis. The reaction mechanism and procedure optimization is discussed.

Enantioselective Friedel–Crafts Reactions of Aromatic Amines with Ethyl Glyoxylate in Pyridinium-Based Ionic Liquids

Sanjay V. Malhotra, Ying Xiao


Ionic liquids provide a viable alternative to conventional organic solvents to carry out asymmetric reactions. This has been demonstrated with a study of the enantioselective Friedel–Crafts reaction of aromatic amines with ethyl glyoxylate in pyridinium-based ionic liquids. Results show that these solvents provide a suitable medium for the reaction to achieve high efficiency in terms of yield and enantioselectivity.

Communication

Determination of the Anomeric Configurations of 2,3,4,6-Tetra-O-Acetyl-o-Mannopyranosyl Azide

Kelly L. Cosgrove, Paul V. Bernhardt, Benjamin P. Ross, Ross P. McGeary


The synthesis of biologically important glycosylamines and -amides often proceeds through a glycosyl azide intermediate. The anomeric configurations of two previously reported azides has been unclear; combination of crystallographic and NMR techniques clarified the stereochemistry at C1.