

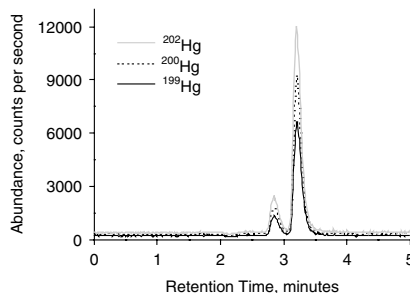
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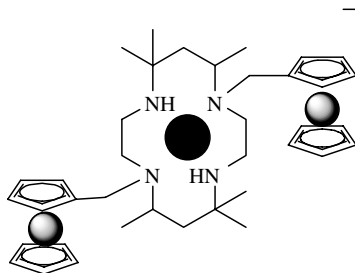
The use of high performance liquid chromatography (HPLC) coupled to inductively coupled plasma mass spectrometry (ICP-MS) for the determination of methylmercury (MeHg^+) in fish tissue and hair samples is described. The developed protocol can be used with atmospheric pressure ionization mass spectrometry (API-MS) to provide structural characterization and also with calibration via isotope dilution (IDMS) to provide high accuracy quantitation of MeHg^+ in biological samples used in biomonitoring studies.



D. S. Vidler, R. O. Jenkins, J. F. Hall and C. F. Harrington* 303–310

The determination of methylmercury in biological samples by HPLC coupled to ICP-MS detection

A new electrochemical chemosensor 1,8-bis(ferrocenylmethyl)-5,5,7,12,12,14-hexamethyl-1,4,8,11-tetraazacyclotetradecane (*R*) for transition metal ions has been synthesized and characterized.



K. R. Krishnapriya, N. Sampath, M. N. Ponnuswamy and M. Kandaswamy* 311–317

Synthesis and electrochemical sensing behaviour of a new ferrocene functionalized tet 'a' macrocyclic receptor towards transition metal ions

Continued overleaf

Identification statement

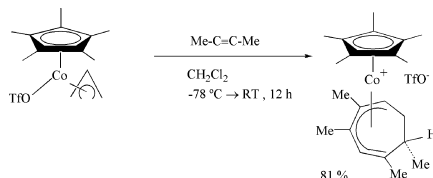
Applied Organometallic Chemistry (Print ISSN 0268-2605; Online ISSN 1099-0739 at Wiley InterScience, www.interscience.wiley.com) (USPS 005409) is published monthly by John Wiley & Sons, Ltd., The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, UK. Periodicals postage paid at Rahway, NJ. Air freight and mailing in the USA by Mercury Airfreight International Ltd. Inc., 365 Blair Road, Avenel, NJ 07001, USA. USA POSTMASTER—please send address changes to *Applied Organometallic Chemistry*, c/o Mercury Airfreight International Ltd. Inc., 365 Blair Road, Avenel, NJ 07001, USA.

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Section: Materials, Nanoscience and Catalysis

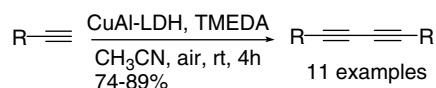
There are three characteristic reactions of organocobalt compounds in organic syntheses. The first involves the reactions of a mutually bridged bond between the two π -bonds of acetylene and the cobalt-cobalt bond of hexacarbonyldicobalt, the second one is carbonylations, and the third one is reactions with vitamin B₁₂ type compounds.



I. Omae* 318–344

Three characteristic reactions of organocobalt compounds in organic synthesis

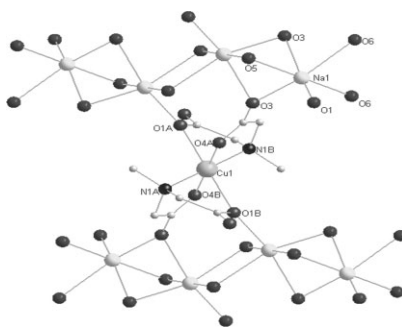
CuAl-LDH has been prepared and applied in the homocoupling reaction of a variety of terminal alkynes at room temperature. The Cu (II) in the host layers of the hydrotalcite exhibits high activity and the catalyst can be easily recovered and reused for eight cycles without depreciation of catalytic activity.



B. C. Zhu and X. Z. Jiang* 345–349

A new CuAl-hydrotalcite catalyzed homocoupling reaction of terminal alkynes at room temperature

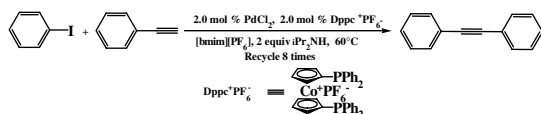
A new complex $\{[\text{Na}_2(\text{H}_2\text{O})_3(\mu\text{-L})_2\text{Cu}]_4\}_\infty$ ($\text{L} = N$ -methylimino diacetic acid) has been synthesized and structurally characterized. The structure consists of CuL_2 moieties linked by sodium chain via the exo oxygen atoms of two ligands, forming a novel three-dimensional structure. IR, UV-vis, ESR spectroscopy and thermal stability were determined.



F. X. Gao, W. Gu, J. Qian, Y. S. Yang and S. P. Yan* 350–354

A new 3s-3d heterometallic polymer containing N-methyliminodiacetic acid: synthesis, structure and characterization

An air-stable, copper-free and highly efficient $\text{Dppc}^+\text{PF}_6^- - \text{PdCl}_2 - [\text{bmim}][\text{PF}_6]$ catalytic system has been developed for the Sonogashira coupling reaction of aryl iodides with various aryl- and alkylacetylenes. The catalytic system allows for the facile separation and can be recycled at least eight times with minimal loss of activity.

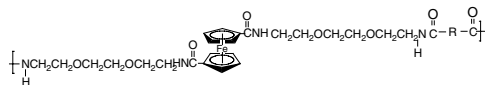


J. Guan, G. A. Yu*, J. G. Hou, N. Yu, Y. Ren and S. H. Liu* 355–359

$\text{Dppc}^+\text{PF}_6^- - \text{PdCl}_2 - [\text{bmim}][\text{PF}_6] - a$ copper-free recyclable catalytic system for Sonogashira coupling reaction

Continued from overleaf

A series of ferrocene-based polyamides with flexible spacers was prepared via polycondensation reaction of a new ferrocenyl diamine (FDADO) with different diacid chlorides. The polymers showed heat- and flame-resistancy and improved solubility.

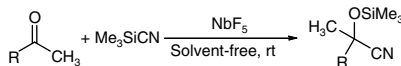


S. Mehdipour-Ataei* and S. Babanzadeh 360–367

Synthesis, characterization and properties of novel polyamides containing ferrocene unit and flexible spacers

Section: Main Group Metal Compounds

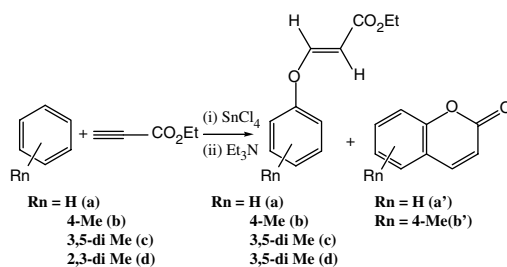
NbF_5 acts as a highly effective catalyst for cyanosilylation of various ketones to the corresponding cyanohydrin trimethylsilyl ethers in excellent yield. The reaction proceeds smoothly with 1 mol% catalyst loading at room temperature under solvent-free conditions.



S. S. Kim*, G. Rajagopal and S. C. George 368–372

Solvent-free cyanosilylation of ketones with $(\text{CH}_3)_3\text{SiCN}$ (TMSCN) catalyzed by NbF_5

A new method of synthesis of 3-phenoxyacrylic acid ethyl esters, coumarin and 6-methylcoumarin has been elucidated. This procedure is based on the reaction of different organotin phenoxides, prepared by the azeotropic dehydration of the mixture of phenols and bis(tributyltin) oxide in toluene, with ethyl propiolate catalysed by Et_3N or SnCl_4 .



W. J. Kinart* and A. Kinart... 373–376

Studies on the reaction of organotin phenoxides with ethyl propiolate catalysed by triethylamine and tin (IV) chloride

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Book Review

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Molecular heterogeneous catalysis: a conceptual and computational approach