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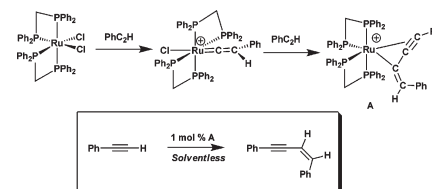
Regular Papers

Jason M. Lynam, Tracy D. Nixon, Adrian C. Whitwood

J. Organomet. Chem. 693 (2008) 3103

Solvent and phosphine dependency in the reaction of *cis*-RuCl₂(P–P)₂ (P–P = dppm or dppe) with terminal alkynes

Reaction of *cis*-[RuCl₂(dppm)₂] with PhC≡CH in MeOH results in the formation of the butenylnyl complex **A**. This species is an effective catalyst for the dimerisation of the same alkyne to *Z*-PhC≡C–CH=CHPh.

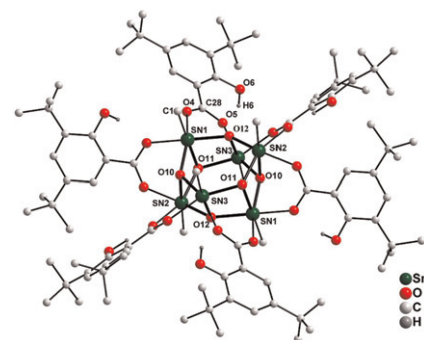


Ramaswamy Murugavel, Nayanmoni Gogoi

J. Organomet. Chem. 693 (2008) 3111

Microwave assisted solid-state synthesis of functional organotin carboxylates from sterically encumbered 3,5-di-*tert*-butylsalicylic acid

Microwave assisted solid-state reaction between equimolar quantities of sterically encumbered 3,5-di-*tert*-butylsalicylic acid (H₂-DTBSA) and *n*-butylstannic acid results in the formation of hexameric drum shaped stannoxane [nBuSn(O)(H-DTBSA)]₆ (**1**). However, the azeotropic removal of water produced in the reaction of nBu₂SnO with 3,5-di-*tert*-butyl salicylic acid in benzene yielded the tetrameric ladder shaped stannoxane [(nBu₂Sn(H-DTBSA))₂O]₂ (**2**), which could also be synthesized in better yields by microwave irradiation as in the case of **1**.

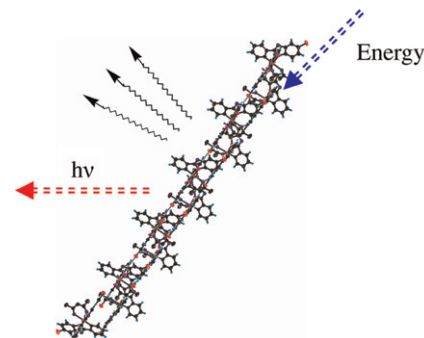


Tsun-Ren Chen

J. Organomet. Chem. 693 (2008) 3117

Synthesis and characterization of cyclometalated iridium(III) complexes containing benzoxazole derivatives and different ancillary ligands

The synthesis, structures, and electrochemistry of a series of cyclometalated iridium(III) complexes based on benzoxazole derivatives are reported; the relationship between the conformation of the lumophore of these complexes and photophysical properties has been studied in detail.

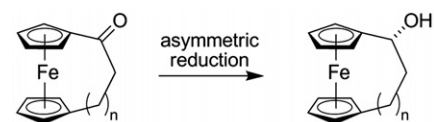


**Radovan Šebesta, Mária Mečiarová,
Éva Molnár, Jana Csizmadiová,
Peter Fodran, Osamu Onomura,
Štefan Toma**

J. Organomet. Chem. 693 (2008) 3131

Enantioselective reductions of [m] ferrocenophanones

Prochiral ferrocenophane ketones were enantioselectively reduced. Oxazaborolidine mediated reduction and proline-derived activator with trichlorosilane proved to efficient methods, with enantioselectivities up to 97% ee and 99% ee, respectively. Ruthenium-catalyzed transfer hydrogenation was rather unsuccessful in reducing cyclic ferrocene ketones.

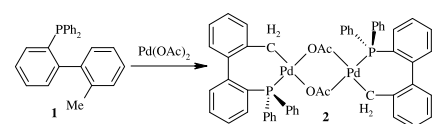


**Mohammad Joshaghani,
Marzieh Daryanavard, Ezzat Rafiee,
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J. Organomet. Chem. 693 (2008) 3135

Synthesis and applications of a new palladacycle as a high active catalyst in the Suzuki couplings

A new palladacycle **2** was synthesized and employed for the coupling of arylboronic acids with aryl halides.

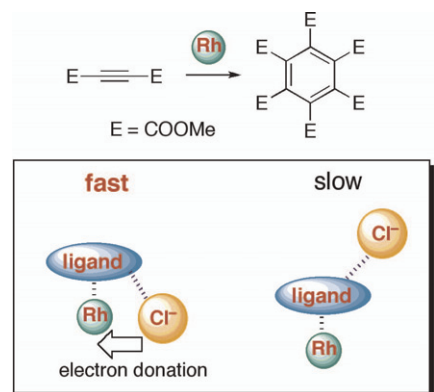


**Motoki Toganoh, Naoyuki Harada,
Hiroyuki Furuta**

J. Organomet. Chem. 693 (2008) 3141

Hydrogen-bonding network in new scorpionate-type ligand composed of pyridine/pyrrole hybrid and anion-binding behavior of the corresponding rhodium complexes in alkyne cyclotrimerization reaction

In the alkyne cyclotrimerization reactions catalyzed by the rhodium(I) complexes of new heteroscorpionate ligands composed of pyrrole and pyridine, electron donating counter anions placed near the metal center considerably enhanced the reactivity through anion recognition with the pyrrolic NH moiety.

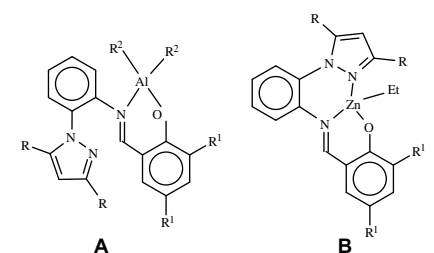


Cheng Zhang, Zhong-Xia Wang

J. Organomet. Chem. 693 (2008) 3151

Aluminum and zinc complexes supported by functionalized phenolate ligands: Synthesis, characterization and catalysis in the ring-opening polymerization of ϵ -caprolactone and *rac*-lactide

Aluminum and zinc complexes supported by functionalized phenolate ligands were synthesized and characterized, and the catalysis of these complexes toward the ROP of cyclic esters was investigated.

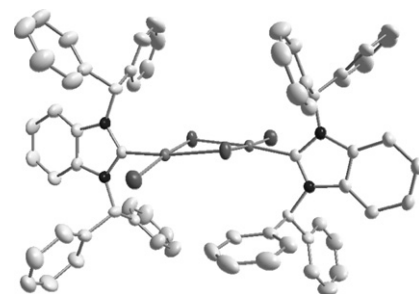


**Yuan Han, Yuan-Ting Hong,
Han Vinh Huynh**

J. Organomet. Chem. 693 (2008) 3159

Ag(I) and Pd(II) complexes of a 1,3-dibenzhydryl substituted benzannulated *N*-heterocyclic carbene: Unexpected rearrangement, structures and catalytic studies

A series of Ag(I) and Pd(II) complexes with the bulky 1,3-dibenzhydrylbenzimidazolin-2-ylidene ligand has been synthesized. One of these complexes contains an unusual benzimidazole ligand, which resulted from a complex rearrangement reaction. The catalytic activity of a dimeric Pd(II) complex in the Suzuki–Miyaura reaction is also described.

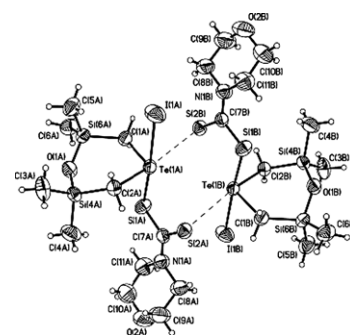


**Deyanira Fuentes-Alemán,
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Raymundo Cea-Olivares**

J. Organomet. Chem. 693 (2008) 3166

Synthesis, characterization and structural studies of dithiocarbamate derivatives of 2,2,6,6-tetramethyl-1-oxa-4,4-diiodo-4-tellura-2,6-disilacyclohexane, O[Si(CH₃)₂-CH₂]₂Tel(dtc)

Five new organotellurium (IV) of the type O[Si(CH₃)₂CH₂]₂Tel(dtc) have been synthesized and characterized. The molecular structures of 1, 3 and 4 were determined by X-ray analyses. The compound 1 is monomeric while the compounds 3 and 4 exhibits important intermolecular interaction Te···S(2B). This interaction result in the formation of a dimer.

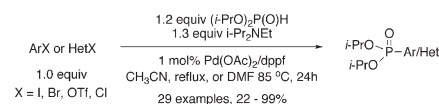


**Yamina Belabassi, Saeed Alzghari,
Jean-Luc Montchamp**

J. Organomet. Chem. 693 (2008) 3171

Revisiting the Hirao cross-coupling: improved synthesis of aryl and heteroaryl phosphonates

The palladium-catalyzed cross-coupling of dialkylphosphite with aromatic electrophiles (Hirao coupling) was re-investigated. Some limitations in terms of palladium loadings and substrate reactivity are alleviated with the use of Pd(OAc)₂ complexed to 1,1'-bis(diphenylphosphino)ferrocene (dppf) as a ligand. Various aryl and heteroaryl halides are employed to deliver both known and novel substituted phosphonates. The first examples of aryl chloride couplings are also reported.

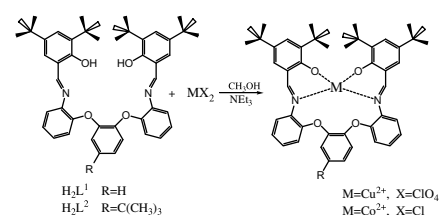


**Hassan Keypour, Maryam Shayesteh,
Abdolhossein Sharifi-Rad,
Sadegh Salehzadeh, Hamidreza Khavasi,
Laura Valencia**

J. Organomet. Chem. 693 (2008) 3179

Synthesis and characterization of copper(II) and cobalt(II) complexes with two new potentially hexadentate Schiff base ligands. X-ray crystal structure determination of one copper(II) complex

From the direct reaction of two new ligands [H₂L¹] and [H₂L²] with copper(II) and cobalt(II) salts in methanolic solution and in the presence of N(Et)₃ the neutral [CuL¹], [CuL²], [CoL¹] and [CoL²] complexes were prepared. All complexes were characterized by IR spectra, elemental analysis, magnetic susceptibility, mass spectra, molar conductance (Λ_m), UV–Vis spectra and in the case of [CuL²] with X-ray diffraction. X-ray crystal structure of [CuL²] showed that the complex contains copper(II) in a distorted square planar environment of N₂O₂ donors. Three CH/π interactions were observed in the molecular structure of latter complex.



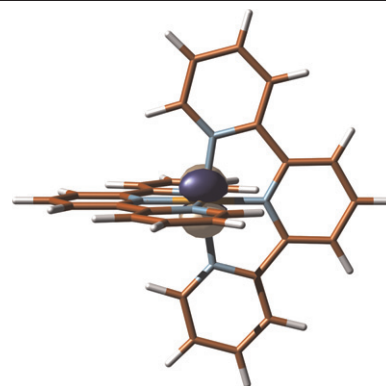
Notes

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Robertus J.M. Klein Gebbink,
Gerard P.M. van Klink, Gerard van Koten**

J. Organomet. Chem. 693 (2008) 3188

Comment on "Theoretical studies on the ground states in $[M(\text{terpyridine})_2]^{2+}$ and $[M(4-(4-(t\text{-butyl})\text{phenyl})\text{terpyridine})_2]^{2+}$ ($M = \text{Fe}, \text{Ru}, \text{Os}$) and excited states in $[\text{Ru}(\text{terpyridine})_2]^{2+}$ using density functional theory" [1]

The nature of the first excited state of $[\text{Fe}(\text{terpyridine})_2]^{2+}$ has been reinvestigated. In contrast to previous findings, it is metal-to-ligand charge-transfer in nature, thus fitting in the series of the Ru and Os complexes.

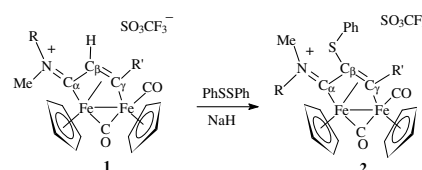


**Luigi Busetto, Fabio Marchetti,
Rita Mazzoni, Mauro Salmi,
Stefano Zacchini, Valerio Zanotti**

J. Organomet. Chem. 693 (2008) 3191

SPh functionalized bridging-vinyliminium diiron and diruthenium complexes

SPh functionalized bridging-vinyliminium complexes **2** are conveniently obtained by reaction of the corresponding vinyliminium precursors **1** upon treatment with PhSSPh in the presence of NaH.



**Kentaro Iwasa, Hidetake Seino,
Yasushi Mizobe**

J. Organomet. Chem. 693 (2008) 3197

C–S bond cleavage of 2-methoxythiophene by Ir–TMEDA complex (TMEDA = N,N,N',N' -tetramethylethylenediamine). Formation of novel dinuclear iridathiacyclohexenyl complex

Treatment of $[\text{Ir}(\text{C}_2\text{H}_4)_2(\text{TMEDA})(\text{MeCN})][\text{BF}_4]$ with 2-methoxythiophene in MeCN in the presence of H_2O afforded the novel dinuclear iridathiacyclohexenyl complex $[\text{Ir}_2\{\text{C}(\text{OMe})\text{CHCHCHS}(\text{CMe}=\text{NH})\}(\text{MeCONH})(\text{TMEDA})_2][\text{BF}_4]_2$, in which two Ir(TMEDA) fragments, one 2-methoxythiophene, and two MeCN molecules are incorporated together with one H_2O molecule.

