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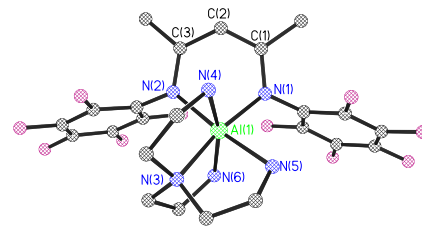
Communications

**Dragoslav Vidovic, Michael Findlater,
Gregor Reeske, Alan H. Cowley**

J. Organomet. Chem. 692 (2007) 5683

Synthesis and characterization of a β -diketiminate-supported aluminum dication

The first example of a mononuclear aluminum dication has been "captured" by treatment of the bis-triflate $[\text{HC}(\text{CMe})_2(\text{NC}_6\text{F}_5)_2]\text{Al}(\text{OTf})_2$ with the tetradentate ligand tris(2-aminoethyl)amine.

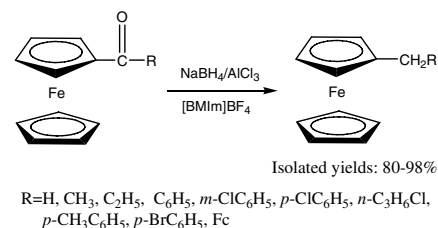


Hongyan Zhang, Zhanxi Bian

J. Organomet. Chem. 692 (2007) 5687

Highly efficient reduction of ferrocenyl aldehyde and ketones in ionic liquids

Ferrocenyl aldehyde and ketones were effectively reduced to corresponding alkylferrocene in excellent yields (80–98%) using sodium borohydride and aluminum chloride in ILs under mild conditions (35–50 °C). The ionic liquid $[\text{BMIm}]\text{BF}_4$ was a perfect reaction media for reduction of ferrocene derivatives, which could be reused at least seven times for performing reactions.



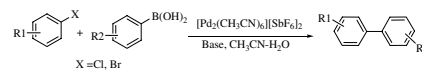
Regular Papers

Xiaoyan Han, Zhiqiang Weng, T. S. Andy Hor

J. Organomet. Chem. 692 (2007) 5690

Suzuki coupling catalyzed by a homoleptic Pd(I)–Pd(I) solvento complex

The binary dinuclear Pd(I) CH₃CN complex is catalytically active towards Suzuki cross-coupling reactions under mild conditions.

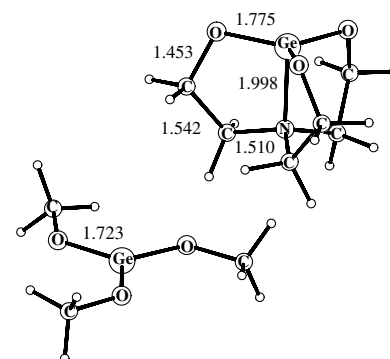


**Igor S Ignatyev, Tom R. Sundius,
Dmitriy V. Vrazhnov, Tatiana A. Kochina,
Mikhail G. Voronkov**

J. Organomet. Chem. 692 (2007) 5697

Bonding in germatranyl cation and germatranes

Stereoelectronic structure of germatranyl ion in comparison with classical three-coordinated cation $(RO)_3Ge^+$ is obtained at the B3LYP/cc-pVDZ level of theory. Changes in the bonding on going from cation to a neutral molecule are analyzed by using the NBO method.

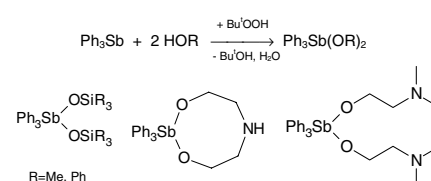


**Elena Yu. Ladilina, Vladimir V. Semenov,
Georgii K. Fukin, Aleksey V. Gushchin,
Viktor A. Dodonov, Irina V. Zhdanovich,
Jean-Pierre Finet**

J. Organomet. Chem. 692 (2007) 5701

One-step synthesis of pentavalent triphenyl-antimony derivatives $Ph_3Sb(OSiR_3)_2$, $Ph_3Sb(OCH_2CH_2)_2NH$ and $Ph_3Sb(OCH_2CH_2NMe_2)_2$; X-ray molecular structure of $Ph_3Sb(OSiMe_3)_2$

The simplicity of the procedure and mildness of the reaction conditions (0–20 °C, 2–24h) are the main advantages of this method. $Ph_3Sb(OSiR_3)_2$ (R = Me (1), Ph (2)) and $Ph_3Sb(OCH_2CH_2)_2NH$ (3) are stable to air and moisture resistant. The mixture of $Ph_3Sb(OCH_2CH_2NMe_2)_2$ (4) with Ph_3SbO was obtained. 4 formed very rapidly. Then it is hydrolyzed to Ph_3SbO .

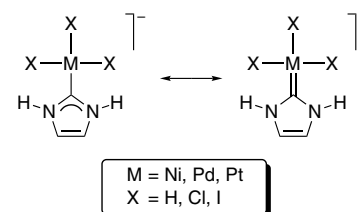


**Emmanuel F. Penka, Carl W. Schläpfer,
Michael Atanasov, Martin Albrecht,
Claude Daul**

J. Organomet. Chem. 692 (2007) 5709

Theoretical investigation of the bonding properties of *N*-heterocyclic carbenes coordinated to electron-rich d^8 metal centers

The π bonding interactions of *N*-heterocyclic carbenes and pyridine to nickel(II), palladium(II), and platinum(II) centers has been investigated by energy decomposition analysis, atomic charge variation and bond order analysis. The carbene ligand appears to feature significant π backbonding, in particular when bound to electron-rich metals (X = H, in pictogram).

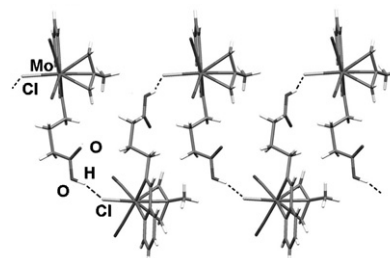


**Celedonio M. Alvarez, Raúl García-Rodríguez,
Daniel Miguel**

J. Organomet. Chem. 692 (2007) 5717

Carbonyl complexes of manganese, rhenium and molybdenum with 2-pyridylimino acid ligands

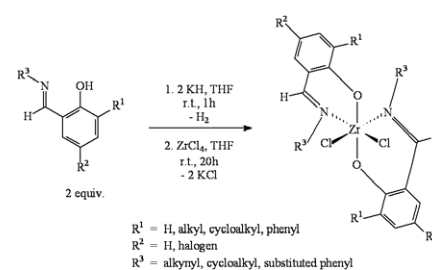
Complexes with iminopyridine ligands derived from aminoacids can be prepared by a facile, high-yield method, from the corresponding complexes with chelating pyridine-2-carboxaldehyde. Their solid state structures display interesting H-bonding patterns which are strongly dependent on the metal–ligand fragment attached to the iminopyridine.



Christian Görl, Helmut G. Alt*J. Organomet. Chem.* 692 (2007) 5727

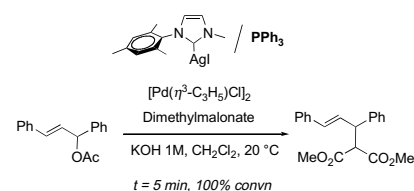
The combination of mononuclear metallocene and phenoxyimine complexes to give trinuclear catalysts for the polymerization of ethylene

A series of 23 mononuclear and trinuclear zirconium complexes containing phenoxyimine or combined metallocene/phenoxyimine ligands were synthesized and characterized. After activation with methylalumoxane (MAO), the trinuclear catalysts produced polyethylenes with broad or bimodal molecular weight distributions.

**Alexandre Flahaut, Sylvain Roland, Pierre Mangeney***J. Organomet. Chem.* 692 (2007) 5754

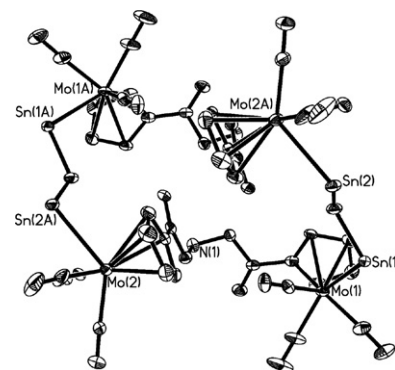
Allylic alkylation and amination using mixed (NHC)(phosphine) palladium complexes under biphasic conditions

High reaction rates and conversions have been obtained in the alkylation of allylic acetates using mixed (NHC)(PPh₃) palladium complexes generated in situ from appropriate NHC–silver complexes, [Pd(η^3 -C₃H₅)Cl]₂ and PPh₃ and under biphasic conditions (CH₂Cl₂/KOH 1 M). The allylic amination catalyzed by (NHC)(PPh₃) palladium complexes is also described.

**Shan-Shan Chen, Hai-Bin Song, Liang-Fu Tang***J. Organomet. Chem.* 692 (2007) 5763

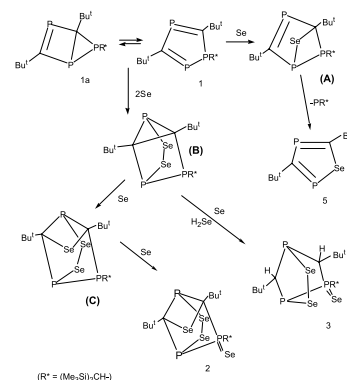
Novel N-bridging cyclopentadienyl heteropolynuclear organometallamacrocycles with M–Sn (M = Mo or W) bonds

Reaction of [PhN(CH₂COCpM(CO)₃)₂]²⁻ (M = Mo or W) with Ph₂SnX₂ yields tetranuclear heterodimetallic complexes PhN(CH₂COCpM(CO)₃SnPh₂X)₂ (X = Cl or Br), while with CH₂(SnPh₂Br)₂ results in octanuclear heterodimetallic organometallamacrocycles [PhN(CH₂COCpM(CO)₃)₂]₂(SnPh₂)₂CH₂.

**Sevim Bilgiç, Nurgün S. Büyükkıdan, Bülent Büyükkıdan, Peter B. Hitchcock, John F. Nixon***J. Organomet. Chem.* 692 (2007) 5769

New pathways in the reaction between the 1,2,4-triphosphole P₃C₂Bu'^tCH(SiMe₃)₂ and selenium: Crystal and molecular structures of three new cage compounds, P₃Se₄C₂Bu'^tCH(SiMe₃)₂, P₃Se₃C₂Bu'^tH₂CH(SiMe₃)₂ and P₅Se₂C₄Bu'^t(CHSiMe₃Bu'^t)

Three new, fully structurally characterised cage compounds P₃Se₄C₂Bu'^tCH(SiMe₃)₂, P₃Se₃C₂Bu'^tH₂CH(SiMe₃)₂ and P₅Se₂C₄Bu'^t(CHSiMe₃Bu'^t), are formed (together with the previously reported 1,2,4-selenadiphosphole, P₂Se₂C₂Bu'^t) from the reaction of the 1,2,4-triphosphole P₃C₂Bu'^tCH(SiMe₃)₂, with elemental selenium. Possible mechanistic aspects concerning this and related reactions are discussed.

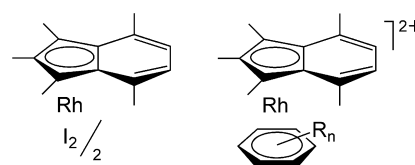


Dmitry A. Loginov, Mikhail M. Vinogradov, Zoya A. Starikova, Elena A. Petrovskaya, Piero Zanello, Franco Laschi, Fulvio Rossi, Arnaldo Cinquantini, Alexander R. Kudinov

J. Organomet. Chem. 692 (2007) 5777

(1,2,3,4,7-Pentamethylindenyl)rhodium complexes with arene ligands

Arene complexes $[(\eta^5\text{-C}_9\text{H}_2\text{Me}_5)\text{Rh}(\text{arene})]^{2+}$ were prepared from iodide $[(\eta^5\text{-C}_9\text{H}_2\text{Me}_5)\text{RhI}_2]$ via intermediate generation of labile solvates $[(\eta^5\text{-C}_9\text{H}_2\text{Me}_5)\text{Rh}(\text{MeNO}_2)_3]^{2+}$. The electrochemical behaviour of new complexes was studied. The rhodium–benzene bonding in series of the related cations $[(\text{ring})\text{Rh}(\text{C}_6\text{H}_6)]^{2+}$ (ring = Cp, Cp*, C₉H₇, C₉H₂Me₅) was analyzed using energy and charge decomposition schemes.

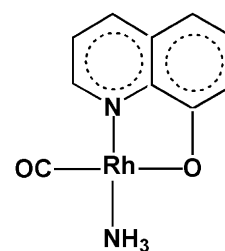


Yu.S. Varshavsky, M.R. Galding, T.G. Cherkasova, S.N. Smirnov, V.N. Khrustalev

J. Organomet. Chem. 692 (2007) 5788

First examples of $[\text{Rh}(\text{Bident})(\text{CO})(\text{L})]$ complexes where L is N-donor ligand: Molecular structure of $[\text{Rh}(\text{8-Oxiquinolinato})(\text{CO})(\text{NH}_3)]$

$[\text{Rh}(\text{Oxq})(\text{CO})(\text{NH}_3)]$ has been prepared from $[\text{Rh}(\text{Oxq})(\text{CO})_2]$ via selective CO *trans* to N oxidation by Me₃NO. A new scale of σ -donor/ π -acceptor properties of ligands L is proposed based on the series $[\text{Rh}(\text{Oxq})(\text{CO})(\text{L})]$ including NH₃ and CO as the natural endpoints.



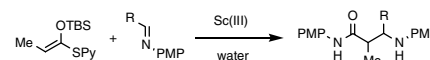
Notes

Cinzia Biaggi, Maurizio Benaglia, Alessandra Puglisi

J. Organomet. Chem. 692 (2007) 5795

Catalysis in water: Synthesis of β -amino amides by Sc(III) promoted condensation of silylketene pyridylthioacetal and imines

The scandium (III) catalysed condensation of silylketene thioacetals and pyridylthioacetals with imines in pure water affords amino amides in good yields. That represents a new, easy, one pot catalytic synthesis in water of an interesting class of compounds, direct precursors of 1,3-diamino hydroxy compounds.



C. Krempner, K. Martens, H. Reinke

J. Organomet. Chem. 692 (2007) 5799

Synthesis and structure of silyl acetonitriles

The new silyl acetonitriles Mes₂HSiCH₂CN (**1**) and (Mes₂HSi)₂CHCN (**2**) and the silanol Mes₂SiHOH (**3**) have been derived from reactions of Mes₂SiHCl with LiCH₂CN (Mes = 2,4,6-trimethylphenyl). The X-ray structures of **1–3** are reported.

