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# Contents

# **Regular papers**

Elena Klimova, Tatiana Klimova, Soledad Betanzos Lara, Jorge Dominguez Chavez, Simon Hernández Ortega, Toscano Alfredo, Marcos Martinez Garcia

J. Organomet. Chem. 691 (2006) 1

Synthesis of stable 1-ethoxy-2,3-diferrocenylcyclopropenylium tetrafluoroborate and its reactions with lithium reagents Treatment of 1,2-diferrocenylcyclopropenone with triethyloxonium tetrafluoroborate gives highly stable 1-ethoxy-2,3-diferrocenylcyclopropenylium tetrafluoroborate storage-stable at room temperature in the crystalline state. Its reactions with alkyllithium reagents afford stable 1,2,3, substituted cyclopropenes and products of opening small cycle.



#### Kiat Hwa Chan, Weng Kee Leong, Gerard Jaouen, Laurence Leclerq, Siden Top, Anne Vessières

J. Organomet. Chem. 691 (2006) 9

Organometallic cluster analogues of tamoxifen: Synthesis and biochemical assay Simple organometallic cluster analogues of tamoxifen containing triosmium or dicobalt carbonyl fragments have been prepared. Preliminary biological tests on various substrates indicate that the transition metal carbonyl fragment increases lipophilicity dramatically and reduces affinity for the estrogen receptor.



# Simon G. Bott, Kaiyuan Yang, Michael G. Richmond

J. Organomet. Chem. 691 (2006) 20

Synthesis of the chiral tetrahedral clusters  $RCCo_2NiCp(CO)_4(bmf)$  (R = H, Ph) and thermally promoted diphosphine ligand activation: Regiospecific P–C bond scission and X-ray diffraction structure of  $Co_2NiCp-(CO)_4[\mu_2,\eta^2,\eta^1C(H)C=C(PPh_2)C(O)OCH(OMe)]-(\mu-PPh_2)$ 

The tetrahedral clusters  $\text{RCCo}_2\text{NiCp}(\text{CO})_6$ (R = H, Ph) react with the chiral diphosphine ligand 3,4-bis(diphenylphosphino)-5-methoxy-2(5*H*)-furanone (bmf) to give the diphosphinebridged clusters  $\text{RCCo}_2\text{NiCp}(\text{CO})_4$ (bmf) as a mixture of diastereomers. Thermolysis of these products at 83 °C leads to complete decomposition of the phenyl-capped cluster and regioselective P–C bond cleavage in the hydrogen-capped cluster, as evidenced by the isolation and structural characterization of  $\text{Co}_2\text{NiCp}(\text{CO})_4[\mu_2,\eta^2,\eta^1-\text{C}(\text{H})\text{C}=\text{C}(\text{PPh}_2)\text{C}(\text{O}) \text{OCH}(\text{OMe})](\mu-\text{PPh}_2).$ 



#### Contents

#### Varattur Dayal Reddy

J. Organomet. Chem. 691 (2006) 27

Synthesis, characterization, and reactivity of a novel ruthenium carbonyl cluster containing tri-*O*-benzyl-D-glucal as a chiral carbohydrate ligand A chiral carbohydrate ligand 3,4,6-tri-*O*-benzyl-D-glucal (L) reacts with the cluster triruthenium dodecacarbonyl  $Ru_3(CO)_{12}$  to give a novel chiral cluster  $Ru_3(\mu-H)_2(CO)_9(L-2H)$ (I) that shows fluxional behavior at room temperature. The reaction of  $Ru_3(\mu-H)_2(CO)_9$ -(L-2H) (I) with triphenylphosphine and diphenylphosphinoethane (dppe) gives two new clusters  $Ru_3(\mu-H)_2(CO)_7(L-2H)(PPh_3)_2$  (II) and  $Ru_3(\mu-H)_2(CO)_7(L-2H)(dppe)$  (III).



#### Libor Dostál, Roman Jambor, Aleš Rüžička, Robert Jirásko, Ivana Císařová, Jaroslav Holeček

J. Organomet. Chem. 691 (2006) 35

Reactivity of intramolecularly coordinated aluminum compounds to  $R_3EOH$  (E = Sn, Si). Remarkable migration of N,C,N and O,C,O pincer ligands

Reactivity of intramolecularly coordinated aluminum compounds towards  $R_3$ SnOH, (*"*Bu<sub>3</sub>Sn)<sub>2</sub>O and  $R_3$ SiOH was studied. Products of these reactions were characterized by the help of ESI-MS technique, <sup>1</sup>H, <sup>13</sup>C, <sup>29</sup>Si, <sup>119</sup>Sn NMR spectroscopy and X-ray diffraction.



Pedro Álvarez-Boo, José S. Casas, María D. Couce, Rosa Farto, Vanesa Fernández-Moreira, Eduardo Freijanes, José Sordo, Ezequiel Vázquez-López

J. Organomet. Chem. 691 (2006) 45

Synthesis, characterization and antibacte- rial activity of some new triphenyltin(IV) sulfanylcarboxylates: Crystal structure of [(SnPh<sub>3</sub>)<sub>2</sub>(p-mpspa)], [(SnPh<sub>3</sub>)<sub>2</sub>(cpa)] and [(Sn-Ph<sub>3</sub>)<sub>2</sub>(tspa)(DMSO)] The synthesis of five new triphenyltin(IV) sulfanylcarboxylates of the general formula  $[(SnPh_3)_2L]$  is reported. Their structural study was carried out by spectroscopic methods and, in some of them, by single-crystal X-ray diffractometry. The antibacterial activity of the compounds is also reported.



## Igor Novak, Branka Kovač

J. Organomet. Chem. 691 (2006) 53

Empirical analysis of bonding in ferrocenes

HeI and HeII photoelectron spectra (UPS) of 1-cyanomethyl, 1-butyryl and 1,1'-bis(dimethylsilyl)-ferrocene were measured. The nature of metal–ligand bonding was analyzed via regression analysis of UPS related experimental descriptors.



The new complexes [(mes)XTe( $\mu$ -X)Te(mes)-(etu)] {X = Br (1), I (2)} and [Ph(etu)Te( $\mu$ -I)Te(etu)Ph][PhTeI<sub>4</sub>] (3) were prepared by onepot procedures and their structures were solved by X-ray diffraction analysis. In 1 and 2, the tellurium atoms attain Te– $\pi$ -aryl interactions and T-shaped coordinations, achieving an octahedral coordination in 3 through secondary Te–I bonds.  $(\text{mesTe})_{2} + \text{Br}_{2}/\text{I}_{2} + \text{etu} \xrightarrow{\text{CH}_{3}\text{OH}}$   $[(\text{mes})X\text{Te}(\mu-X)\text{Te}(\text{mes})(\text{etu})]$  (X = Br, I).  $(\text{PhTe})_{2} + \text{I}_{2} + 2\text{etu} + \text{PhTeI}_{3}$   $\downarrow \text{CH}_{3}\text{OH}$   $[\text{Ph}(\text{etu})\text{Te}(\mu-I)\text{Te}(\text{etu})\text{Ph}][\text{PhTeI}_{4}]$ 

#### Robert J. Baker, Cameron Jones

mesityl; etu = ethylenethiourea)

Ernesto Schulz Lang,

Gelson Manzoni de Oliveira,

**Gleison Antonio Casagrande** 

J. Organomet. Chem. 691 (2006) 59

Synthesis of new T-shaped hypervalent complexes of tellurium showing Te- $\pi$ -

aryl interactions: X-ray characterization

of  $[(mes)XTe(\mu-X)Te(mes)(etu)]$  (X = Br, I) and  $[Ph(etu)Te(\mu-I)Te(etu)Ph][PhTeI_4]$  (mes =

J. Organomet. Chem. 691 (2006) 65

Synthesis and characterisation of sterically bulky lithium amidinate and bis-amidinate complexes

The syntheses of a series of amidines and their corresponding lithium amidinate complexes incorporating the bulky triptycenyl substituent on the backbone carbon are reported. In addition, the sterically demanding tetraaryl-phenylene unit,  $-\{2,3,5,6-C_6(p-C_6H_4Bu')_4\}$ -, has been utilised to prepare a new bis-amidine and a lithium bis-amidinate complex. Several compounds have been the subjects of X-ray crystallographic studies.

Cyril Gouverd, Marcin Brynda, Théo Berclaz, Michel Geoffroy

J. Organomet. Chem. 691 (2006) 72

Chromium tricarbonyl complex of phosphaalkene: Crystal structure and electrochemistry of the Cr(CO)<sub>3</sub> complex of PhC(H)=PMes<sup>\*</sup>, EPR and DFT studies of its radical anion

The phenyl ring bound to a phosphaalkene carbon has been complexed with  $Cr(CO)_3$ ; the crystal structure and the electrochemical behaviour of the resulting complex are described. Structure and stabilization of the radical anion are investigated by EPR and DFT calculations.

# Anthony J. Deeming, Caroline Forth, Graeme Hogarth

J. Organomet. Chem. 691 (2006) 79

Reactions of *trans*- $[RuCl_2(CO)_2(PEt_3)_2]$  with 1,1-dithiolates: Stepwise formation of *cis*- $[Ru(CO)(PEt_3)(S_2X)]$  (X = CNMe<sub>2</sub>, CNEt<sub>2</sub>, COEt, P(OEt)<sub>2</sub>, PPh<sub>2</sub>)

The reactivity of *trans*- $[RuCl_2(CO)_2(PEt_3)_2]$  with a series of 1,1-dithiolate ligands has been investigated leading to the synthesis of *cis*- $[Ru(CO)(PEt_3)(dithiolate)_2]$  complexes.







# M. Visseaux, T. Chenal, P. Roussel, A. Mortreux

J. Organomet. Chem. 691 (2006) 86

Synthesis and X-ray structure of a borohydrido metallocene of neodymium and its use as pre-catalyst in Nd/Mg dual-component ethylene and isoprene polymerisations

Monomeric  $Cp_2^*NdBH_4(THF)$  has been synthesised and fully characterised. Combined with butylethylmagnesium (BEM), it gives rise to a powerful ethylene polymerisation catalyst, the first one made of a borohydrido organolanthanide.  $Cp_2^*NdBH_4(THF)/BEM$  also allows isoprene polymerisation, in contrast with the corresponding chloro neodymocene.



#### Malcolm H. Chisholm, Judith C. Gallucci, Carl B. Hollandsworth

J. Organomet. Chem. 691 (2006) 93

Unexpected formation of anti-1,2-W<sub>2</sub>(SBu')<sub>2</sub>-(NMe<sub>2</sub>)<sub>4</sub> in the thiolysis of gauche-1,2-W<sub>2</sub>Cp<sub>2</sub>(NMe<sub>2</sub>)<sub>4</sub> and W<sub>2</sub>COT(NMe<sub>2</sub>)<sub>4</sub> with Bu'SH

 $W_2COT(NMe_2)_4$  and 1,2- $W_2Cp_2(NMe_2)_4$  undergo thiolysis with excess Bu'SH to produce the known thiolate compound *anti*-1,2- $W_2(SBu')_2(NMe_2)_4$ . The solid state structure of the thiolate product was determined and it was shown to be isostructural with the Mo analogue. The preferential W–C activation observed during thiolysis is contrasted with the alcoholysis reactions of the same precursors.



# Shariff E. Kabir, Madhu S. Saha, Derek A. Tocher, G.M. Golzar Hossain, Edward Rosenberg

# J. Organomet. Chem. 691 (2006) 97

 $\begin{array}{l} Triosmium clusters containing bridging dppm \\ and EPh (E = S, Te) ligands: X-ray structures \\ of \quad [(\mu-H)Os_3(CO)_7(\mu-SPh) \{\mu_3-\eta^4-Ph_2PCHP-(Ph)C_6H_4\}], \ [Os_3(CO)_8(\mu-SPh)_2(\mu-dppm)] \ and \\ [Os_3(CO)_8(\mu-TePh)_2(\mu-dppm)] \end{array}$ 

The reactions of  $[Os_3(CO)_{10}(\mu-dppm)]$  (1) with PhEEPh (E = S, Te) under thermal conditions provide distinctly different products: For PhSSPh three new triosmium compounds [( $\mu$ -H)Os\_3(CO)\_7( $\mu$ -SPh){ $\mu_3$ - $\eta^4Ph_2PCHP(Ph)C_6H_4$ }] (2),  $[Os_3(CO)_8(\mu-SPh)_2(\mu-dppm)]$  (3) and [( $\mu$ -H)Os\_3(CO)\_7( $\mu$ - $\eta^2$ -SC<sub>6</sub>H<sub>4</sub>)( $\mu$ -SPh)( $\mu$ -dppm)] (4) are obtained while for PhTeTePh the dinuclear compound  $[Os_2(CO)_4(\mu-TePh)_2(\mu-dppm)]$  (6), and two 50 electron isomeric compounds 5 and 7 with the formula  $[Os_3(CO)_8(\mu-TePh)_2(\mu-dppm)]$  are obtained. The solid-state molecular structures of 2, 3 and 7 are described.



### Christa Grogger, Bernhard Loidl, Harald Stueger, Thomas Kammel, Bernd Pachaly

J. Organomet. Chem. 691 (2006) 105

Electrochemical synthesis of symmetrical difunctional disilanes as precursors for organofunctional silanes

Difunctional disilanes  $XR_2SiSiR_2X$  (X = OMe, H; R = Me, Ph, H) have been synthesized by electrolysis of the appropriate chlorosilanes HR<sub>2</sub>SiCl. The results of preparative electrolyses were rationalized by cyclic voltammetry measurements. The reaction of MeO-Me<sub>2</sub>SiSiMe<sub>2</sub>OMe with NaOMe in the presence of functional aryl bromides  $BrC_6H_4Y$ (Y = OMe, NEt<sub>2</sub>, NH<sub>2</sub>) affords organofunctional silanes MeO(Me<sub>2</sub>)SiC<sub>6</sub>H<sub>4</sub>Y.



# Vadim I. Ponomarenko, Tatiana S. Pilyugina, Vassily D. Khripun, Elena V. Grachova, Sergey P. Tunik, Matti Haukka, Tapani A. Pakkanen

J. Organomet. Chem. 691 (2006) 111

Reactions of diphenylpyridylphosphine with  $H_2Os_3(CO)_{10}$  and  $H_4Ru_4(CO)_{12}$ , P–C bond splitting in the coordinated ligand and isolation of the oxidative addition products

Reactions of diphenylpyridylphosphine with  $H_2Os_3(CO)_{10}$  and  $H_4Ru_4(CO)_{12}$  afford the clusters containing face-bridging phoshide ligands through the sequence of oxidative addition–reductive elimination stages.



#### Shaozhong Ge, Ove S. Andell, Antti Penninkangas, Janne Maaranen, Tuula Telén, Ilpo Mutikainen

J. Organomet. Chem. 691 (2006) 122

The first synthesised examples of di-siloxysubstituted cyclopentadienyl zirconocenes, their synthesis, structure and activity in ethylene polymerisation Bis-(1,2-(RMe<sub>2</sub>SiO)<sub>2</sub>)ZrCl<sub>2</sub> complexes with R = Me-(5a), *i*Pr-(5b) and *t*Bu-(5c) have been synthesised in good yields and characterised. Compounds 5a-c are the first synthesised examples of multi-siloxy-substituted cyclopentadienyl metallocenes. The siloxy-substituents in 5a have for siloxy substituted metallocenes a unique steric arrangement, with one siloxy nearly on the same plane, and the other almost perpendicular to the plane of the cyclopentadienyl ligand of the zirconocene.



# Maria Michela Dell'Anna, Antonio Lofù, Piero Mastrorilli, Vittoria Mucciante, Cosimo Francesco Nobile

J. Organomet. Chem. 691 (2006) 131

Stille coupling reactions catalysed by a polymer supported palladium complex

 $Pd(AAEMA)_2$  supported complex (Pd-pol) [AAEMA<sup>-</sup> is the deprotonated form of 2-(acetoacetoxy)ethyl methacrylate] is an active catalyst for the Stille coupling of iodoarenes or activated bromoarenes with different organostannanes. Its recyclability was satisfactory when Sn(CH<sub>3</sub>)<sub>4</sub> or PhSn<sup>n</sup>Bu<sub>3</sub> were used with iodoarenes or activated bromoarenes.



#### M.J. Macazaga, M.L. Marcos, C. Moreno, F. Benito-Lopez, J. Gomez-González, J. González-Velasco, R.M. Medina

J. Organomet. Chem. 691 (2006) 138

Syntheses, structures and comparative electrochemical study of  $\pi$ -acetylene complexes of cobalt New butadiyne and octatetrayne complexes containing one or two  $Co_2(CO)_4(X)$  units (X = dppm, dmpm) have been prepared and characterized. Electronic communication in the bis(dinuclear) compounds has been proven by electrochemical (the cyclic and square-wave voltammetry) means. A comparative electrochemical study is presented.



# Christian Mechtler, Michaela Zirngast, Walter Gaderbauer, Andreas Wallner, Judith Baumgartner, Christoph Marschner

J. Organomet. Chem. 691 (2006) 150

Synthesis of oligosilyldi- and trianions

The synthesis of multiply anionic oligosilanes was investigated. 1,3- and 1,4-bis[tris(trimethylsilyl)silylethynyl]benzenes as well as 1,3,5-tris[tris(trimethylsilyl)silylethynyl]benzene could be obtained employing Sonogashira cross-coupling conditions. All three molecules underwent facile di- or trimetalation with potassium *tert*-butoxide to afford the respective oligosilyldi- and trianions.



#### Mikhail G. Voronkov, Alexey N. Egorochkin, Olga V. Kuznetsova

J. Organomet. Chem. 691 (2006) 159

Polarizability effect in silatranes and related compounds

The interaction between the substituents X and the silatrane skeleton is composed of the joint influence of the inductive, resonance, and polarizability effects.

Silatranes X Si(OCH<sub>2</sub>CH<sub>2</sub>)<sub>3</sub>N

### Gianluca Ciancaleoni, Gianfranco Bellachioma, Giuseppe Cardaci, Giacomo Ricci, Renzo Ruzziconi, Daniele Zuccaccia, Alceo Macchioni

J. Organomet. Chem. 691 (2006) 165

Cationic half-sandwich Ru(II) complexes bearing (S)-2-pyridyl-imino-[2.2]paracyclophane ligands: Synthesis, intramolecular and interionic structure Cationic arene Ru(II) complexes bearing (S)-2pyridyl-imino-[2.2]paracyclophane ligands, possessing both planar chirality in the ligand and central chirality at the metal, were synthesized and completely characterized in solution (<sup>1</sup>H-NOESY and <sup>19</sup>F,<sup>1</sup>H-HOESY NMR) and in the solid state (X-Ray) from both intramolecular and interionic points of view.



# Shin Masaoka, Tadashi Banno, Mitsuo Ishikawa

J. Organomet. Chem. 691 (2006) 174

The synthesis of chlorosilanes from alkoxysilanes, silanols, and hydrosilanes with bulky substituents The reaction of trialkyl-alkoxysilanes, silanols, and silanes bearing the bulky alkyl groups with concentrated hydrochloric acid afforded the respective trialkylchlorosilanes in high yields.

$R_3SIOR' + conc. HCl \longrightarrow$	R <sub>3</sub> SiCl
R = i-Pr, sec-Bu, cycloHex	R = i-Pr, sec-Bu, cyclo-Hex
$\mathbf{R'} = \mathbf{Me}, i\text{-}\mathbf{Pr}, n\text{-}\mathbf{Bu}, \mathbf{H}$	
RR' <sub>2</sub> SiH + conc. HCl Pd-catalyst	RR'2SiCl
R = R' = Et, <i>i</i> -Pr	$\mathbf{R}=\mathbf{R'}\!\!=\mathbf{E}\mathbf{t},i\!\cdot\!\mathbf{P}\mathbf{r}$
R = tert-Bu, $R' = Me$	R = tert-Bu, R'= Me

#### Shin Masaoka, Tadashi Banno, Mitsuo Ishikawa

J. Organomet. Chem. 691 (2006) 182

Versatile method for introduction of bulky substituents to alkoxychlorosilanes

Tri(alkyl)alkoxysilanes bearing the bulky alkyl groups were readily synthesized by the reaction of Grignard reagents with alkoxychlorosilanes.

 $\begin{array}{ccc} \text{SiCl}_4 + \text{ROH} &\longrightarrow \text{Cl}_3\text{SiOR} & \overrightarrow{\text{R'gCl}} & \text{R'}_3\text{SiOR} \\ \text{R'} = i\text{-}\text{Pr}, s\text{-}\text{Bu}, c\text{-}\text{Hex} \\ \text{MeSiCl}_3 + \text{MeOH} &\longrightarrow \text{MeSiCl}_2\text{OMe} & \overrightarrow{\text{R}} & \overrightarrow{\text{MeSiR}}_2\text{OMe} \\ & & R = i\text{-}\text{Pr}, s\text{-}\text{Bu}, c\text{-}\text{Hex} \\ \text{Me}_5\text{SiCl}_2 + \text{MeOH} &\longrightarrow \text{Me}_2\text{SiClOMe} & \overrightarrow{\text{r}} & \overrightarrow{\text{Me}}_2\text{Si}(r\text{-}\text{Bu})\text{OMe} \\ \end{array}$ 

#### Kei Nishii, Hideaki Hagihara, Tomiki Ikeda, Munetaka Akita, Takeshi Shiono

J. Organomet. Chem. 691 (2006) 193

Stereospecific polymerization of propylene with group 4 *ansa*-fluorenylamidodimethyl complexes

Group 4  $[\eta^1:\eta^3$ -*tert*-butyl(dimethylfluorenylsilyl)amido]dimethyl complexes [*t*-BuNSi-Me<sub>2</sub>Flu]MMe<sub>2</sub> (M = Ti, 1; Zr, 2; Hf, 3) were synthesized from the ligand, MeLi and MCl<sub>4</sub> (M = Ti, Zr, Hf) in a one-pot synthesis, and the structures of these complexes were determined by X-ray crystallography. Propylene polymerization was conducted at 0 or 20 °C in toluene by 1–3 activated with dried methylaluminoxane (MAO) or HNMe<sub>2</sub>-PhB(C<sub>6</sub>F<sub>5</sub>)<sub>4</sub>-<sup>*i*</sup>Bu<sub>3</sub>Al. The catalytic performance strongly depended on the center metal of the complexes and the cocatalysts employed. When NMe<sub>2</sub>PhB(C<sub>6</sub>F<sub>5</sub>)<sub>4</sub>-<sup>*i*</sup>Bu<sub>3</sub>Al was used at 20 °C, **2** and **3** gave highly syndiotactic polypropylene.



#### Jan Honzíček, Hana Paláčková, Ivana Císařová, Jaromír Vinklárek

J. Organomet. Chem. 691 (2006) 202

Ansa-vanadocene complexes with short interannular bridges

The new *ansa*-vanadocene complexes with short interannular bridges  $(CH_3)_2C(C_5H_4)_2$ -VX<sub>2</sub> (X = Cl, Br) were prepared, characterized by spectroscopic methods and X-ray structural analysis. The behavior *ansa*-vanadocene dichloride in aqueous solution in presence of bio-ligands was studied by EPR spectroscopy.



# Ju Xie, Dacheng Feng, Shengyu Feng

J. Organomet. Chem. 691 (2006) 208

Insertion of the p-complex structure of silylenoid  $H_2SiLiF$  into X–H bonds (X = C, Si, N, P, O, S, and F)

The insertion reactions of the p-complex structure of silylenoid H<sub>2</sub>SiLiF into X–H bonds proceed via three reaction pathways forming the same products, substituted silanes H<sub>3</sub>SiXH<sub>n-1</sub> with dissociation of LiF, respectively, and all insertion reactions are exothermic.



## Thengarai S. Venkatakrishnan, Munirathinam Nethaji, Setharampattu S. Krishnamurthy

J. Organomet. Chem. 691 (2006) 224

Ruthenium carbonyl clusters derived from pyrazolyl substituted diphosphazanes: Crystal and molecular structure of a triruthenium cluster featuring a triply bridging  $\mu_3$ - $\eta^1$ : $\eta^1$ : $\eta^1$ : $\eta^1$  coordination mode of pyrazolate moiety

Cleavage of P-N(pyrazolyl) bond occurs in the reactions of  $Ru_3(CO)_{12}$  with  $Ph_2PN(R)$ -PPh( $N_2C_3HMe_2$ -3,5) to give tri-ruthenium phosphido clusters bearing a triply bridging pyrazolate moiety.



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#### Ute Bäumer, Helmut Reinke, Hartmut Oehme

J. Organomet. Chem. 691 (2006) 229

Intramolecularly donor-stabilized silenes: Part 6. The synthesis of 1-[2,6-bis(dimethylaminomethyl)phenyl]silenes and their reaction with aromatic aldehydes The intramolecularly donor-stabilized silenes ArRSi=C(SiMe<sub>3</sub>)<sub>2</sub> (R = Me, Ph; Ar = 2, 6-(Me<sub>2</sub>NCH<sub>2</sub>)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>), easily accessable by treatment of (dichloromethyl)bis(trimethylsilyl)silanes with 2,6-bis(dimethylaminomethyl)-phenyllithium (1:2), react with aromatic aldehydes to give substituted 2-oxa-1-sila-1,2,3,4-tetrahydronaphthalenes. The formation of these cyclic products provides interesting information on the general mechanism of the reaction of silenes with carbonyl compounds.

# Janne Maaranen, Ove S. Andell, Tiina Vanne, Ilpo Mutikainen

#### J. Organomet. Chem. 691 (2006) 240

Dimethyl-, diphenyl- and cyclotetramethylene silylchloride derivatives of guanidine, their synthesis and structure. Formation of pentacoordinated silicon compounds and an unexpected diionic disiladiguan-idinium dichloride The reaction of 1,3,4,6,7,8-hexahydro 2*H*-pyrimido[1,2*a*]pyrimidinyl potassium, [hpp]<sup>-</sup>K<sup>+</sup> (1), with dimethyldichlorosilane, diphenyldichlorosilane or cyclotetramethylenedichlorosilane (1,1-dichloro silolane) resulted in the formation of the diionic dimer,  $\lambda^4 Si$ -[Me<sub>2</sub>-SiCl(hpp)]<sub>2</sub> (2), as well as  $\lambda^5 Si$ -Ph<sub>2</sub>SiCl(hpp) (3) and  $\lambda^5 Si$ -(CH<sub>2</sub>)<sub>4</sub>SiCl(hpp) (4), respectively. The structures were also studied in solution by <sup>29</sup>Si NMR.



#### Communication

#### Zhao Xue, DeYu Yang, ChunYan Wang

J. Organomet. Chem. 691 (2006) 247

The cross-coupling reaction of vinylindiums generated via hydroindation of terminal alkynes with diaryliodoniums salts

In InCl<sub>3</sub>–NaBH<sub>4</sub>–MeCN system, vinylindiums generated by hydroindation of aryl terminal alkynes can undergo cross-coupling reaction with diaryliodonium salts high regio- and stereoselectively. But under the same conditions, the aliphatic terminal alkynes do not react very well.







# Notes

### Manfredo Hörner, Gelson Manzoni de Oliveira, Julieta Saldanha de Oliveira, Wagner Magno Teles, Carlos Alberto Lombardi Filgueiras, Johannes Beck

J. Organomet. Chem. 691 (2006) 251

Stabilization of the  $(\eta^4\text{-COD})\text{Pt-fragment}$ (COD =  $\eta^2, \eta^2$ -cyclo-octa-1,5-diene) by a bistriazenide: Synthesis and X-ray structural characterization of  $[(\eta^4\text{-COD})\text{Pt}(\text{NNN-Ph})_2\text{-}C_6\text{H}_4]$ , a neutral 1,2-bis(phenyltriazenido)benzene complex of platinum(II) [(COD)PtCl<sub>2</sub>] reacts with the sodium salt of 1,2-bis(phenyltriazene)benzene after exchange of Cl against NO<sub>3</sub> to give [( $\eta^4$ -COD)Pt(NNN-Ph)<sub>2</sub>C<sub>6</sub>H<sub>4</sub>], the first  $\pi$ -fragment of platinum(II) stabilized by two symmetrical triazenide chains. A singular feature of the new complex is its *flying dragon* alike structure which maintains the C<sub>2v</sub> symmetry of the free anion 1,2-bis(phenyltriazenide)benzene.

## Xue Mei Zhao, Xin Qi Hao, Bin Liu, Mao Lin Zhang, Mao Ping Song, Yang Jie Wu

J. Organomet. Chem. 691 (2006) 255

Syntheses and structural characterization of novel heteroannular cyclopalladated ferro-cenylimine

This paper describing the synthesis of cyclopalladated ferrocenylimines shows that the unsubstituted Cp ring was palladated, resulting in a novel heteroannular cyclopalladated ferrocenylimine. In addition, preliminary application of this novel cyclopalladated complex in Heck reaction was also demonstrated in this paper.



# Shuang Liu, Xin Wang, Guo-Xin Jin

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Synthesis of heteronuclear (MoRu<sub>2</sub>) clusters from 16-electron half-sandwich complexes (*p*-Cymene)Ru[ $E_2C_2(B_{10}H_{10})$ ] (E = S, Se) The heteronuclear (Ru<sub>2</sub>Mo) clusters **2** and **3** have been synthesized by the reactions of the 16e half-sandwich ruthenium complexes (*p*-Cymene)Ru[E<sub>2</sub>C<sub>2</sub>(B<sub>10</sub>H<sub>10</sub>)] (E = S(**1a**), Se(**1b**)) with Mo(CO)<sub>3</sub>(Py)<sub>3</sub> in the presence of BF<sub>3</sub>. Et<sub>2</sub>O. The molecular structure of **2** has been determined by X-ray crystallography.

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