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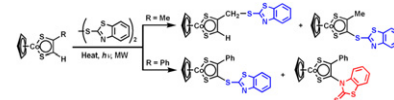
## COMMUNICATION

Mitsushiro Nomura, Hiroki Oguro, Kazuaki Maeshima, Suguru Iida, Satoshi Horikoshi, Toru Sugiyama, Akira Sugimori, Masatsugu Kajitani

*J. Organomet. Chem.* 695 (2010) 1613

Aromatic  $[\text{CpCo}(\text{S}_2\text{C}_2(\text{R})(\text{H}))]$  complexes ( $\text{R} = \text{Me}$  and  $\text{Ph}$ ) reacted with 2,2'-dibenzothiazolyl disulfide ( $\text{R}'\text{SSR}'$  ( $\text{R}' = 2$ -benzothiazolyl)) as a sulfur-centered radical source to form some radical substitution

products by 2-benzothiazolylthiyl radical ( $\text{R}'\text{S}^\bullet$ ). The  $\text{R}'\text{S}^\bullet$  radical was substituted on the dithiolene ring or on the Me group ( $\text{S}$ -substituted products). An  $N$ -substituted product was also formed by a nitrogen-centered radical that is a resonant species of the 2-benzothiazolylthiyl radical. Conventional heating, photochemical and microwave-enhanced reactions were performed.



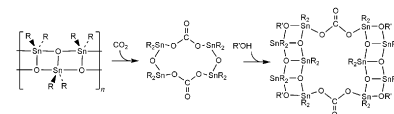
## REGULAR PAPERS

Laurent Plasseraud, Danielle Ballivet-Tkatchenko, H el ene Cattey, St ephane Chambrey, Rosane Ligabue, Philippe Richard, Rudolph Willem, Monique Biesemans

*J. Organomet. Chem.* 695 (2010) 1618

The synthesis of the decakis(di- $n$ -butyltin (IV)) oxocluster,  $(\text{R}_2\text{SnO})_6[(\text{R}_2\text{SnOR}')_2$

$(\text{CO}_3)]_2$  ( $\text{R} = \text{C}_4\text{H}_9$ ,  $\text{R}' = \text{CH}_3$ ), as well as its reactivity toward organic carbonates and its formation mechanism from  $\text{R}_2\text{SnO}$  under supercritical  $\text{CO}_2$  conditions are explored and supported by IR, NMR (solution and solid-state), and X-ray investigations.

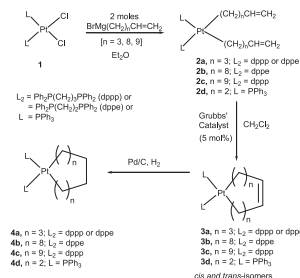


Akella Sivaramakrishna, Banothile C. E. Makhubela, John R. Moss, Gregory S. Smith

*J. Organomet. Chem.* 695 (2010) 1627

Large 19- and 21-membered platinumacycloalkane compounds were synthesized through the ring closing metathesis reaction of bis(1-alkenyl)platinum(II) complexes using Grubbs' catalysts. Reactivity studies of the title compounds with

elemental sulfur, carbon monoxide and methyl iodide were also investigated.

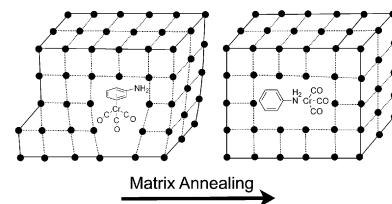


**Mohammed H. Alamiry, Conor Long,  
Padraig P. Fidgeon, Mary T. Pryce**

*J. Organomet. Chem.* 695 (2010) 1634

The structure of  $(\eta\text{-Aniline})\text{Cr}(\text{CO})_3$  is changed by annealing the crystalline matrix in low temperature matrix isolation experiments. The reduced hapticity species

produced in this process undergoes complete decarbonylation following low-energy irradiation. DFT calculations suggest that the singlet–triplet energy gap is smaller for the reduced hapticity species compared to  $(\eta^6\text{-Aniline})\text{Cr}(\text{CO})_3$ .

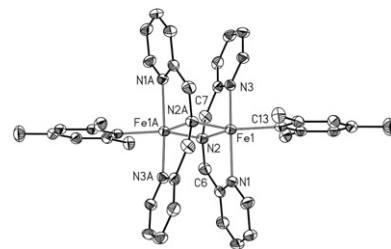


**Astrid Malassa, Christine Agthe,  
Helmar Görls, Manfred Friedrich,  
Matthias Westerhausen**

*J. Organomet. Chem.* 695 (2010) 1641

The di(2-pyridylmethyl)amides show a rather unique redox chemistry in the vicinity of late transition metals. These ligands can be deprotonated at the

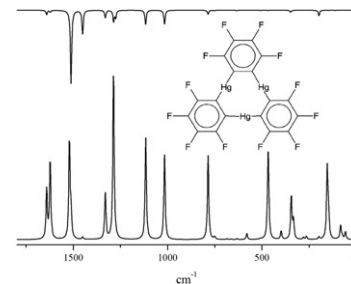
methylene fragments, initiating the formation of 1,3-di(2-pyridyl)-2-azaallyl anions.



**Eliano Diana, Edoardo Marchese**

*J. Organomet. Chem.* 695 (2010) 1651

Vibrational analysis from DFT calculation of  $\text{C}_6\text{F}_4\text{Hg}_2$  fragment: a “fingerprint” pattern for perfluorinated aromatic organomercurial.

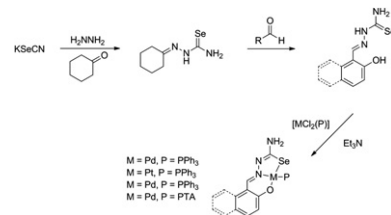


**Patrick Bippus, Anja Molter,  
David Müller, Fabian Mohr**

*J. Organomet. Chem.* 695 (2010) 1657

The reaction of hydrazine hydrate with  $\text{KSeCN}$  and cyclohexanone in acidic aqueous ethanol gives cyclohexanone selenosemicarbazone. This was converted

into various functionalised selenosemicarbazones by treatment with aldehydes. Salicylaldehyde selenosemicarbazone and its 1,2-naphthyl-derivative were prepared and reacted with some Pd(II) and Pt(II) phosphine complexes. In these complexes the ligands act as tridentate, dianionic  $[\text{Se}-\text{N}-\text{O}]^{2-}$  ligands.

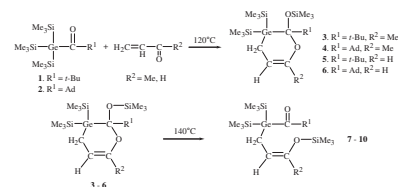


**Akinobu Naka, Shinsuke Ueda,  
Hiroki Fujimoto, Toshiko Miura,  
Hisayoshi Kobayashi, Mitsuo Ishikawa**

*J. Organomet. Chem.* 695 (2010) 1663

The cothermolysis of pivaloyl- and adamantoyltris(trimethylsilyl)germane (**1** and

**2**) with methyl vinyl ketone and acrolein at 120 °C gave the respective six-membered-ring compounds. At 140 °C, the same reactions afforded acylbis(trimethylsilyl)germanes arising from ring-opening of the six-membered-ring compounds as the main products.

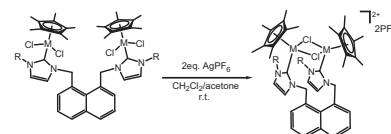


**Kenichi Ogata, Toshinori Nagaya, Shin-ichi Fukuzawa**

*J. Organomet. Chem.* 695 (2010) 1675

An binuclear iridium(III) and rhodium(III) complex bearing a methylnaphthalene-linked *N*-heterocyclic carbene was prepared by the reaction of [Cp\*<sub>2</sub>MCl<sub>2</sub>]<sub>2</sub> (M

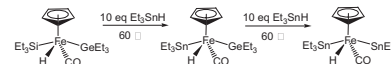
= Ir, Rh) with silver NHC complex. On treatment of the binuclear neutral complexes with AgPF<sub>6</sub>, the Cl-bridged cationic iridium and rhodium complexes were formed. The cationic iridium complex could be applied to the intramolecular hydroamination of 2-ethynylaniline to give the corresponding indole compound.



**Xiangai Yuan, Siwei Bi, Lingjun Liu,  
Min Sun, Jiayong Wang**

*J. Organomet. Chem.* 695 (2010) 1682

A computational study with Becke3LYP of DFT was carried out to investigate the ligand exchange reaction mechanisms of Cp(CO)FeH(EEt<sub>3</sub>)(E'E<sub>3</sub>) with (HEEt<sub>3</sub>) (E, E' = Si, Ge, Sn).

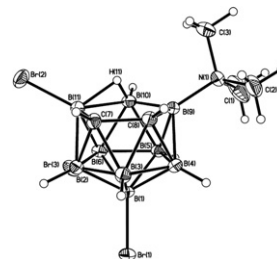


**Sergey V. Timofeev, Elena A. Prikaznova,  
Zoya A. Starikova, Ivan A. Godovikov,  
Vladimir I. Bregadze**

*J. Organomet. Chem.* 695 (2010) 1688

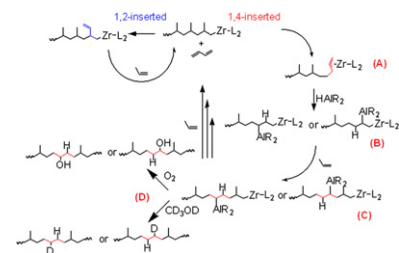
Halogenation of charge-compensated *nido*-carborane [9-Me<sub>3</sub>N-7,8-C<sub>2</sub>B<sub>9</sub>H<sub>11</sub>] (**1**) with elemental halogens X<sub>2</sub> (X = Cl, Br, I) was investigated. Structures of [11-I-9-Me<sub>3</sub>N-7,8-C<sub>2</sub>B<sub>9</sub>H<sub>10</sub>], [6,11-Br<sub>2</sub>-9-Me<sub>3</sub>N-7,8-C<sub>2</sub>B<sub>9</sub>H<sub>9</sub>]

and [1,6,11-Br<sub>3</sub>-9-Me<sub>3</sub>N-7,8-C<sub>2</sub>B<sub>9</sub>H<sub>8</sub>] were established using single crystal X-ray diffraction.



**Takeshi Ishihara, Hoang The Ban,  
Hideaki Hagihara, Takeshi Shiono**

*J. Organomet. Chem.* 695 (2010) 1694

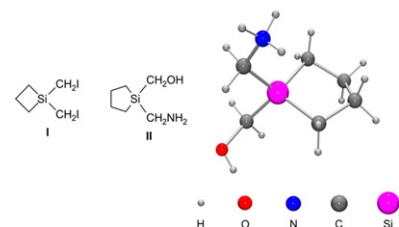


**Dennis Troegel, W. Peter Lippert,  
Frank Möller, Christian Burschka,  
Reinhold Tacke**

*J. Organomet. Chem.* 695 (2010) 1700

A series of novel bifunctional silacyclobutanes and silacyclopentanes of the formula types  $(\text{CH}_2)_n\text{Si}(\text{CH}_2\text{X})_2$  (e.g. **I**) and  $(\text{CH}_2)_n\text{Si}(\text{CH}_2\text{X})\text{CH}_2\text{X}'$  (e.g. **II**·HCl) ( $n = 3, 4$ ; X,

X' = functional groups) was synthesized, starting from  $(\text{CH}_2)_3\text{Si}(\text{CH}_2\text{Cl})_2$  and  $(\text{CH}_2)_4\text{Si}(\text{CH}_2\text{Cl})_2$ , respectively. The different reactivity profiles of the analogous silacyclobutanes and silacyclopentanes were compared.

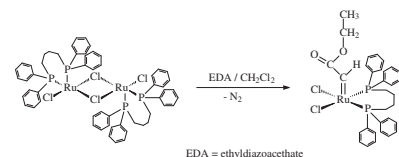


**André L. Bogado, Marília I.F. Barbosa,  
Gezimar D. de Souza, Marília A. Trappi,  
Edson R. Filho, Leonardo T. Ueno,  
Antonio E.H. Machado, Alzir A. Batista**

*J. Organomet. Chem.* 695 (2010) 1708

During the reaction between  $[\{\text{RuCl}(\text{dppb})\}_2-(\mu\text{-Cl})_2]$  and ethyldiazoacetate

(EDA) an in situ neutral carbene complex was observed in a methylene chloride solution with vigorous  $\text{N}_2$  evolution. This reaction was investigated by ESI-MS analysis, NMR and DFT-calculation which suggests the formation of a mononuclear carbene containing ruthenium as product,  $[\text{RuCl}_2(\text{dppb})(=\text{CHC}(\text{O})\text{OCH}_2\text{CH}_3)]$ .

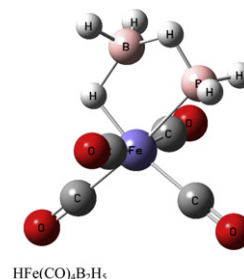


**Abdeladim Guermoune,  
Driss Cherqaoui, Abdellah Jarid,  
Joel F. Liebman**

*J. Organomet. Chem.* 695 (2010) 1715

$[\text{HFe}(\text{CO})_4(\text{B}_2\text{H}_5)]$  complex exhibits an unusual borane coordination. This coordination mode is reproduced in Ru and Os congeners. The decomposition to  $\text{Fe}(\text{CO})_5$  and  $\text{B}_2\text{H}_6$  involves a three-centres-bridged-hydrogen structure. The spin multiplicity

of  $\text{Fe}(\text{CO})_4$  seems to take part of this decomposition. A clear structural study is proposed.

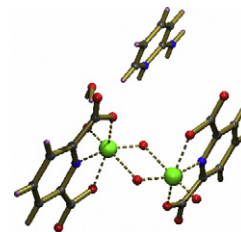


**Manoj Trivedi, R. Nagarajan,  
Abhinav Kumar, Nigam P. Rath**

*J. Organomet. Chem.* 695 (2010) 1722

Reactions of vanadium(IV) complexes with 2,6-dicarboxamido-2-pyridylpyridine ligand results in the formation of oxido-bridged dinuclear vanadium complex  $[\text{apyH}]_2\{(\text{VOL})_2(\mu\text{-O})_2\} \cdot 2\text{H}_2\text{O}$  [**1**]. Molecular

structure of **1** has been determined by single-crystal X-ray analysis and exhibited efficient catalytic activity toward epoxidation of *cis*-cyclooctene with *tert*-butylhydroperoxide (TBHP) selectively.

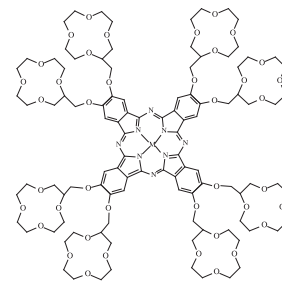


**Zekeriya Bıyıklıođlu, Salih Zeki Yıldız,  
Halit Kantekin**

*J. Organomet. Chem.* 695 (2010) 1729

The metal-free phthalocyanine **2** was synthesized from the 4,5-bis(1,4,7,10-tetraoxacyclododecan-2-ylmethoxy)phthalonitrile **1** in the presence of a strong base in *n*-pentanol. The synthesis of metallo derivatives [Ni(II), Co(II), Cu(II)] of phthalocyanines obtained from corresponding phthalonitrile derivative **1** and in the

presence of the anhydrous divalent metal salts ( $\text{NiCl}_2$ ,  $\text{CoCl}_2$  and  $\text{CuCl}_2$ ) were described. The thermal stabilities of the metal-free and metallophthalocyanines were determined by thermogravimetric analysis. These phthalocyanines were good soluble in organic solvents such as chloroform, dichloromethane, tetrahydrofuran and DMF. The products were characterized by elemental analysis, IR,  $^1\text{H}$  NMR, UV-vis and MS spectral data.

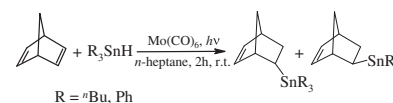


**Magdalena Zyder, Teresa Szymańska-Buzar**

*J. Organomet. Chem.* 695 (2010) 1734

Photochemically activated  $[\text{Mo}(\text{CO})_6]$  and  $[\text{Mo}(\text{CO})_4(\text{h}^4\text{-nbd})]$  are demonstrated to be good catalysts for the hydrostannation of norbornadiene by stannyl hydrides ( $^n\text{Bu}_3\text{SnH}$  and  $\text{Ph}_3\text{SnH}$ ) to give

stannylnorbornene in *ca.* 100% yield. The reaction was carried out at room temperature in *n*-heptane ( $20\text{ cm}^3$ ) with continued photolysis (2h) at  $\text{Mo}(\text{CO})_6$ :  $\text{R}_3\text{SnH}$ : $\text{nbd}$  = 1:50:50.

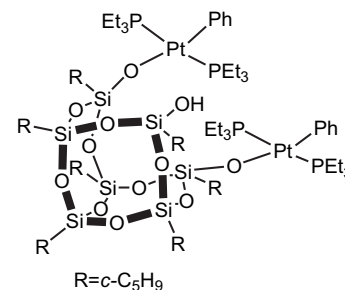


**NOTES**

**Neli Mintcheva, Makoto Tanabe,  
Kohtaro Osakada, Ivelina Georgieva,  
Tzvetan Mihailov, Natasha Trendafilova**

*J. Organomet. Chem.* 695 (2010) 1738

The first dinuclear platinum complex containing a  $(\mu\text{-O},\text{O})$ -bridging silsesquioxanate ligand was synthesized. The molecular structure was proposed by DFT calculations and NMR study.

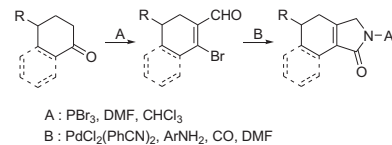


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**Chan Sik Cho, Hyo Bo Kim,  
Sang Yeon Lee***J. Organomet. Chem.* 695 (2010) 1744

2-Bromocyclohex-1-enecarbaldehydes are carbonylatively cyclized with anilines

under CO in the presence of a palladium catalyst to furnish hydroisoindol-1-ones.



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**Tomoyuki Mochida, Kenji Yoza***J. Organomet. Chem.* 695 (2010) 1749

The first-order phase transition at 257 K in decamethylferrocene–acenaphthenequinone is associated with ordering of the disordered pentamethylcyclopentadienyl rings in decamethylferrocene.

