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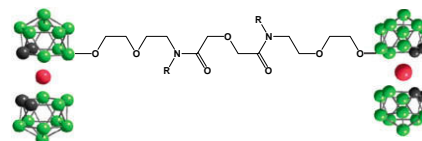
Communication

B. Grüner, M. Kvíčalová, P. Selucký, M. Lučaníková

J. Organomet. Chem. 695 (2010) 1261

Anionic alkyl diglycoldiamides with covalently bonded cobalt bis(dicarbollide)(1⁻) ions for lanthanide and actinide extractions

New ionic diamides composed of a N,N'-dialkyl diglycolyl complexing group and two cobalt bis(dicarbollide)(1⁻) anions were synthesized exhibiting significant increase in the extraction efficiency compared to organic TODGA molecules.



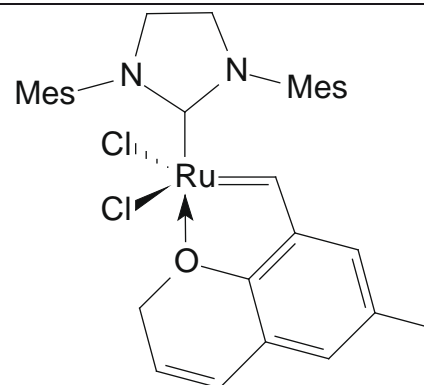
Regular Articles

Agnieszka Hryniewicka, Jacek W. Morzycki, Stanisław Witkowski

J. Organomet. Chem. 695 (2010) 1265

New efficient ruthenium metathesis catalyst containing chromenyl ligand

A synthesis of new Hoveyda–Grubbs-type catalyst with chromenyl ligand was described herein. The new catalyst was tested in model RCM and CM reactions. The catalyst proved to be quite efficient. It showed activity comparable or superior to that of commercially available Grubbs second-generation complexes.

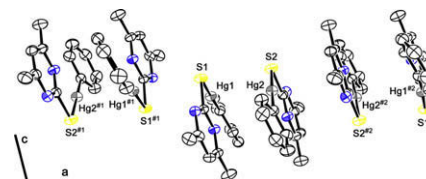


Antonio Rodríguez, Antonio Sousa-Pedrares, José A. García-Vázquez, Jaime Romero, Antonio Sousa

J. Organomet. Chem. 695 (2010) 1271

Phenylmercury(II) complexes with pyrimidine-2-thionato ligands: Synthesis and characterization

A series of pyrimidine-2-thionato complexes of phenyl mercury with general structure [PhHg(RpymS)] has been synthesized and characterized by Vibrational and ¹H, ¹³C and ¹⁹⁹Hg NMR spectroscopies. The crystal structure of [PhHg(4,6-Me₂pymS)], shows the ligand exhibiting a monodentate behaviour through the exocyclic sulfur atom but a weak Hg–N interaction is also proposed.

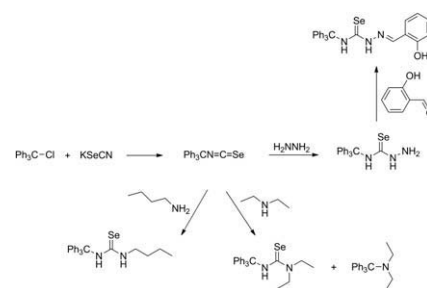


**Mounir Ben Dahman Andaloussi,
Fabian Mohr**

J. Organomet. Chem. 695 (2010) 1276

The chemistry of trityl isoselenocyanate revisited: A preparative and structural investigation

The reaction of trityl chloride with KSeCN gives trityl isoselenocyanate which was structurally characterised by X-ray diffraction. Trityl isoselenocyanate reacts with hydrazine hydrate to give trityl selenosemicarbazide. Reactions of this compound with primary and secondary amines were examined. The reaction of trityl selenosemicarbazide with aldehydes was also examined. The compounds prepared here were fully characterised spectroscopically and several also by X-ray diffraction.

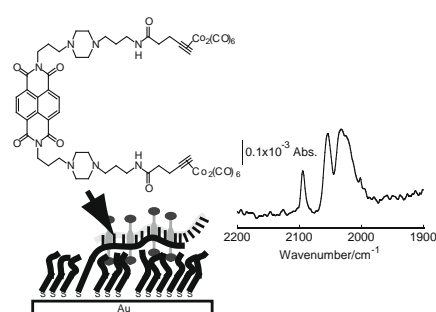


**Keiichi Ohtsuka, Kohei Komizo,
Shigeori Takenaka**

J. Organomet. Chem. 695 (2010) 1281

Synthesis and DNA binding behavior of a naphthalene diimide derivative carrying two dicobalt hexacarbonyl complexes as an infrared DNA probe

Synthetic naphthalene diimide probe **1** having two dicobalt hexacarbonyl complexes at its substituent termini, which forms a stable threading intercalate complex with double stranded DNA, could be utilized in the detection of the target DNA hybridized with DNA probe immobilized on a gold surface using Fourier Transform Infrared Reflection-Absorption Spectroscopy (FT-IR RAS) technique.

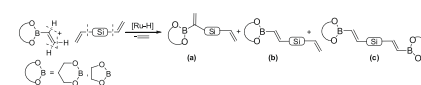


**Jędrzej Walkowiak, Bogdan Marciniec,
Magdalena Jankowska-Wajda**

J. Organomet. Chem. 695 (2010) 1287

New catalytic route to silylene-vinylene-boronate systems

Cross-coupling of divinylorganosilicon compounds with vinylboranes in the presence of complexes containing Ru-H bonds is described. Borylfunctionalized silyldienes can be potentially used as monomers for polymerization reactions or reagents in Pd-catalyzed coupling.

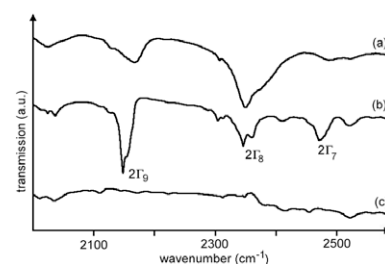


**Hanns-Dieter Amberger,
Hauke Reddmann, Thomas J. Mueller,
William J. Evans**

J. Organomet. Chem. 695 (2010) 1293

Electronic structures of organometallic complexes of f elements LXXIII: Parametric analysis of the crystal field splitting pattern of $\text{tris}(\eta^5\text{-pentamethylcyclopentadienyl})\text{-cerium(III)}$

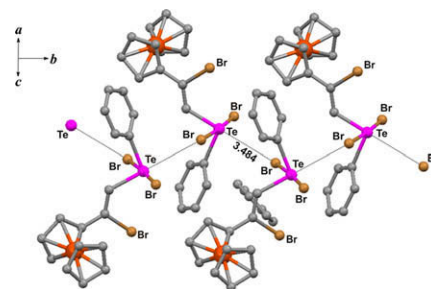
By comparing the low temperature mid-infrared spectra of $\text{Ce}(\eta^5\text{-C}_5\text{Me}_5)_3$ with those of $\text{La}(\eta^5\text{-C}_5\text{Me}_5)_3$, the underlying crystal field splitting pattern could be derived, and simulated by fitting the free parameters of a phenomenological Hamiltonian.



**Yury Torubaev, Pradeep Mathur,
Alexander A. Pasynskii**

J. Organomet. Chem. 695 (2010) 1300

Regio- and stereo-specific addition of organotellurium trihalides to ferrocenylacetylene to give (*Z*)-products of electrophilic addition to C–C triple bond: (*Z*)-FcXC=C₂TeX₂R (R = Ph, X = Br or I; R = trans-8-ethoxy-4-cyclooctenyl, X = Br). In case of PhTeX₃ (X = Br or I) the room temperature reaction is spontaneous and the structure of the product does not depend on the polarity of the solvent used; this is in contrast to the reaction of aryl-acetylenes with RTeBr₃ which were reported to afford (*E*)-bromovinyl aryltellurium dibromides in methanol and its (*Z*)-isomers in benzene.

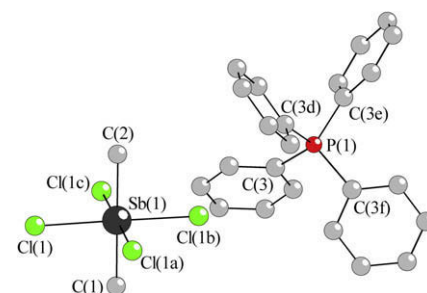


**Hans J. Breunig, Tim Koehne,
Ovidiu Moldovan, Ana Maria Preda,
Anca Silvestru, Cristian Silvestru, Richard
A. Varga, Luis F. Piedra-Garza,
Ulrich Kortz**

J. Organomet. Chem. 695 (2010) 1307

Syntheses, structures and intermolecular interactions of tetraorganoammonium, -phosphonium and -stibonium dimethyl- and diphenyltetrahaloantimonates

The antimonates [R₄E]⁺[R'₂SbX₄]⁻ (R = Me, Et, Bu, Ph; E = N, P, Sb; R' = Me, Ph; X = F, Cl, Br) were prepared and characterized (NMR, MS). Halogen scrambling reactions of Et₄NBr or Ph₄EBr (E = P, Sb) with R₂SbCl₃ (R = Me, Ph) produce mixtures of compounds including mixed-halogen species. The ionic nature and the almost uniform structure of the tetrahedral cations and the octahedral antimony anions with the organic groups in *trans* positions are clearly demonstrated by single-crystal X-ray diffraction.

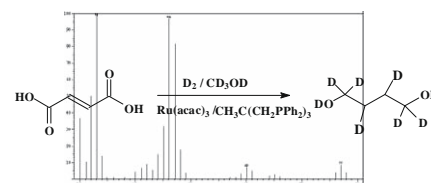


Luca Rosi, Marco Frediani, Piero Frediani

J. Organomet. Chem. 695 (2010) 1314

Isotopomeric diols by “one-pot” Ru-catalyzed homogeneous hydrogenation of dicarboxylic acids

Hydrogenation of 1,4-dicarboxylic acids gives 1,4-butanediol using a ruthenium catalyst, triphos ligand and methanol. The one pot synthesis of isotopomeric butanediols containing 6, 8 or 10 deuterium atoms was easily achieved with this catalytic system.

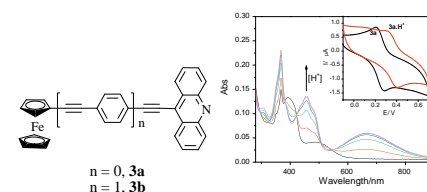


**Qian-Yong Cao, Xin Lu, Zhi-Hua Li,
Li Zhou, Zhen-Yu Yang, Jiang-Hua Liu**

J. Organomet. Chem. 695 (2010) 1323

Synthesis and characterization of ferrocenyl-acridine dyads and their multiresponse to proton and metal cations

Two new π -conjugated linked ferrocenyl-acridine dyads, **3a** and **3b**, have been synthesized and investigated. Both compounds show multiresponse to protons and selected metal ions (M = Zn²⁺, Pb²⁺, Hg²⁺, Fe³⁺, Cr³⁺), with the MLCT transition shifting to the low-energy, the redox potential of the ferrocene nucleus shifting anodically, and the luminescence increasing.

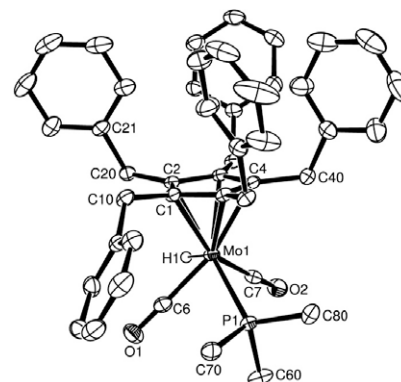


M. Augusta Antunes, Sónia Namorado, Cristina G. de Azevedo, M. Amélia Lemos, M. Teresa Duarte, José R. Ascenso, Ana M. Martins

J. Organomet. Chem. 695 (2010) 1328

Pentabenzylcyclopentadienyl molybdenum and tungsten hydrides: Syntheses, structures and electrochemistry of $[\text{MHCp}^{\text{Bz}}(\text{CO})_2(\text{L})]$ ($\text{L} = \text{CO}, \text{PMe}_3, \text{PPh}_3$)

The syntheses, characterization and electrochemical study of complexes $[\text{MHCp}^{\text{Bz}}(\text{CO})_2(\text{PR}_3)]$ ($\text{M} = \text{Mo}, \text{W}$; $\text{R} = \text{CH}_3, \text{Ph}$; $\text{Cp}^{\text{Bz}} = \text{C}_5(\text{CH}_2\text{Ph})_5$) are described and the influence of a very bulky cyclopentadienyl in the electrochemical behavior is addressed.

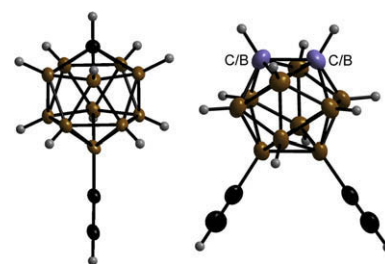


Alexander Himmelspach, Maik Finze

J. Organomet. Chem. 695 (2010) 1337

Ethynylmonocarbocloso-dodecaborates: $[\text{M}[12\text{-HCC-closo-1-CB}_{11}\text{H}_{11}]]$ and $[\text{M}[7,12\text{-(HCC)}_2\text{-closo-1-CB}_{11}\text{H}_{10}]]$ ($\text{M} = \text{Cs}^+, [\text{Et}_4\text{N}]^+$)

The syntheses, spectroscopic, and structural properties of the first carba-closo-dodecaborate anions with ethynyl groups bonded to the cluster boron atoms $[12\text{-HCC-closo-1-CB}_{11}\text{H}_{11}]^-$ and $[7,12\text{-(HCC)}_2\text{-closo-1-CB}_{11}\text{H}_{10}]^-$ are described.

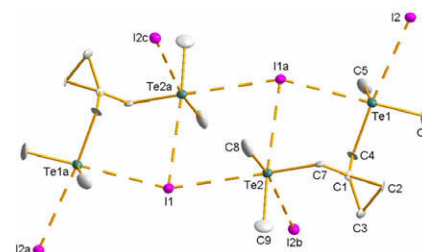


William Levason, Luke P. Ollivere, Gillian Reid, Michael Webster

J. Organomet. Chem. 695 (2010) 1346

Synthesis and complexation of dichalcogenoethers with cyclopropyl backbones, $(\text{CH}_2)_2\text{C}(\text{CH}_2\text{EME})_2$ ($\text{E} = \text{Se}$ or Te)

The synthesis of $(\text{CH}_2)_2\text{C}(\text{CH}_2\text{TeMe})_2$, some organotellurium(IV) derivatives and complexes $[\text{Mn}(\text{CO})_3\text{Cl}\{(\text{CH}_2)_2\text{C}(\text{CH}_2\text{EME})_2\}]$ ($\text{E} = \text{Se}$ or Te) and $[\text{MCl}(\eta^6\text{-p-cymene})\{(\text{CH}_2)_2\text{C}(\text{CH}_2\text{EME})_2\}]\text{PF}_6$ ($\text{M} = \text{Ru}$ or Os) are described.

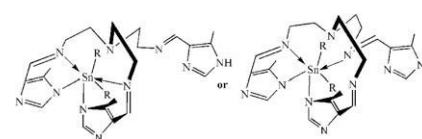


Mala Nath, Pramendra Kumar Saini, Ashok Kumar

J. Organomet. Chem. 695 (2010) 1353

New di- and triorganotin(IV) complexes of tripodal Schiff base derived from condensation of tris(2-aminoethyl)amine and 4-methyl-5-imidazolecarboxaldehyde have been synthesized and characterized. The newly synthesized complexes have been tested for their anti-inflammatory activity and toxicity (LD_{50}). Thermal studies of all of the synthesized organotin(IV) complexes have been carried out.

Some new tri- and diorganotin(IV) complexes of Schiff base derived from condensation of tris(2-aminoethyl)amine and 4-methyl-5-imidazolecarboxaldehyde have been synthesized and characterized. The newly synthesized complexes have been tested for their anti-inflammatory activity and toxicity (LD_{50}). Thermal studies of all of the synthesized organotin(IV) complexes have been carried out.

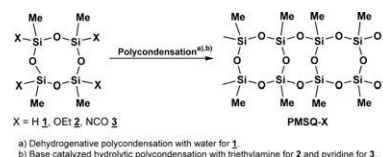


**Hiroyasu Seki, Takashi Kajiwara,
Yoshimoto Abe, Takahiro Gunji**

J. Organomet. Chem. 695 (2010) 1363

Synthesis and structure of ladder polymethylsilsesquioxanes from sila-functionalized cyclotetrasiloxanes

Ladder polymethylsilsesquioxanes (PMSQ-X) were synthesized by the polycondensation of $[\text{MeSiXO}]_4$ ($X = \text{H, OEt, NCO}$). Infrared spectra, ^{29}Si nuclear magnetic resonance, and size exclusion chromatography supports that PMSQ-NCO has a highly regulated ladder structure, or a random-coil conformation, with less defects in the siloxane framework.

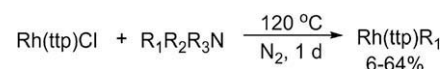


Ching Chi Au, Tsz Ho Lai, Kin Shing Chan

J. Organomet. Chem. 695 (2010) 1370

Carbon–nitrogen bond activation of amines by rhodium(III) porphyrin complexes

Carbon–nitrogen bond activation of amines by rhodium porphyrin chloride.

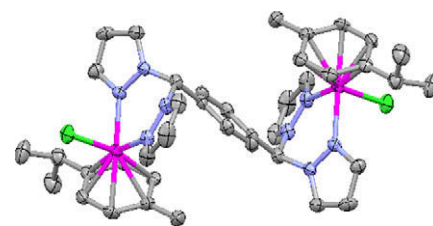


**Kota Thirumala Prasad, Bruno Therrein,
Kollipara Mohan Rao**

J. Organomet. Chem. 695 (2010) 1375

Syntheses and characterization of mono and dinuclear complexes of platinum group metals bearing benzene-linked bis(pyrazolyl)methane ligands

Reactions of η^5 - and η^6 -half-sandwich platinum group metal complexes with 1,4-bis[bis(pyrazolyl)-methyl]benzene ligands result in the formation of both mono and dinuclear complexes.

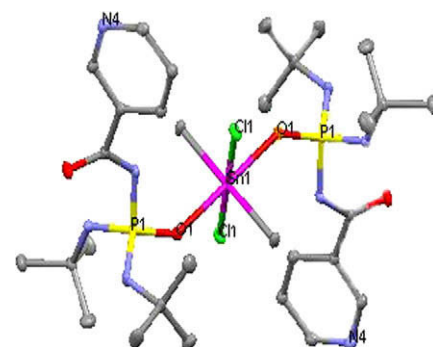


**Khodayar Gholivand, Nasrin Orouzadeh,
Farzaneh Afshar**

J. Organomet. Chem. 695 (2010) 1383

New organotin(IV) complexes of nicotinamide, isonicotinamide and some of their novel phosphoric triamide derivatives: Syntheses, spectroscopic study and crystal structures

Several novel phosphoramidate ligands and their organotin(IV) complexes were synthesized besides two new Sn(IV) complexes of nicotinamide and isonicotinamide and all were characterized by different spectroscopic techniques. The crystal structure of four complexes was determined by X-ray crystallography. The competition between $\text{P}=\text{O}$ and $\text{N}_{\text{pyridine}}$ donor sites was studied in these complexes.

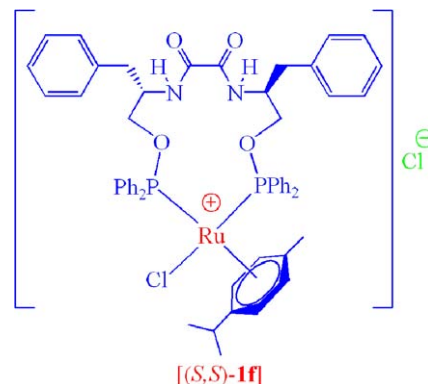


**Murat Aydemir, Nermin Meriç,
Feyyaz Durap, Akin Baysal,
Mahmut Toğrul**

J. Organomet. Chem. 695 (2010) 1392

Asymmetric transfer hydrogenation of aromatic ketones with the ruthenium(II) catalyst derived from C_2 symmetric N,N' -bis[(1*S*)-1-benzyl-2-*O*-(diphenylphosphinite)ethyl]ethanediamide

Herein, we report synthesis and characterization of a new chiral phosphinite compound N,N' -bis[(1*S*)-1-benzyl-2-*O*-(diphenylphosphinite)ethyl]ethanediamide **1** and its corresponding oxidized derivatives and Pd(II), Pt(II) and Ru(II) complexes. The use of chiral Ru(II) complex **1f** as a catalyst in the transfer hydrogenation of aromatic ketones gives secondary alcohols with high yields and TOF values under moderate conditions.

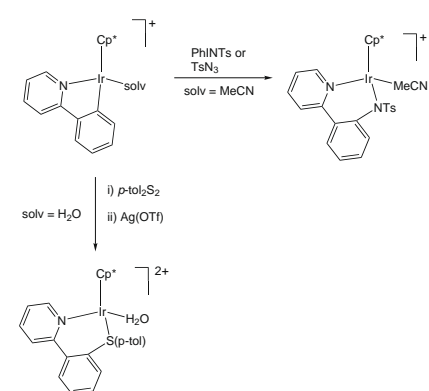


**Yiu-Keung Sau, Xiao-Yi Yi,
Ka-Wang Chan, Chun-Sing Lai,
Ian D. Williams, Wa-Hung Leung**

J. Organomet. Chem. 695 (2010) 1399

Insertion of nitrene and chalcogenolate groups into the Ir-C σ bond in a cyclometalated iridium(III) complex

$[\text{Cp}^*\text{Ir}(\text{ppy})(\text{H}_2\text{O})][\text{OTf}]$ ($\text{Cp}^* = \eta^5\text{-C}_5\text{Me}_5$, ppy = 2-(2-pyridyl)phenyl, OTf^- = triflate) can catalyze oxidation of styrene with PhIO. Treatment of $[\text{Cp}^*\text{Ir}(\text{ppy})(\text{MeCN})][\text{OTf}]$ with PhINTs (Ts = tosyl) led to insertion of the nitrene group into the Ir-C(ppy) bond and formation of $[\text{Cp}^*\text{Ir}(\text{ppy})(\eta^2\text{-ppy-NTs})(\text{MeCN})][\text{OTf}]$. Reaction of $[\text{Cp}^*\text{Ir}(\text{ppy})(\text{H}_2\text{O})][\text{OTf}]$ with $p\text{-tol}_2\text{S}_2$ followed by treatment with $\text{Ag}(\text{OTf})$ afforded $[\text{Cp}^*\text{Ir}(\eta^2\text{-ppy-S-}p\text{-tol})(\text{H}_2\text{O})][\text{OTf}]_2$.



**Michele Abbate, Girolamo Casella,
Tiziana Fiore, Giulia Grasso,
Claudia Pellerito,
Michelangelo Scopelliti, Alberto Spinella,
Lorenzo Pellerito**

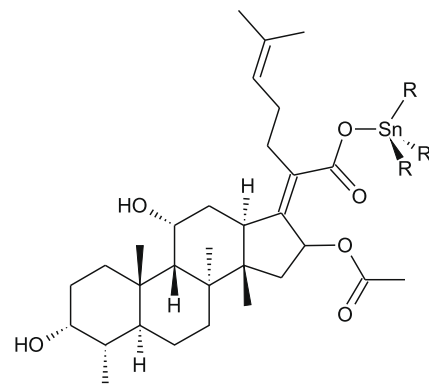
J. Organomet. Chem. 695 (2010) 1405

Structural characterization of triorganotin(IV) complexes with sodium fusidate and DFT calculations

Three new complexes of the steroid sodium fusidate with triorganotin(IV) moieties have been prepared and investigated by conventional techniques as FTIR, Mössbauer, ESI-MS and NMR

spectroscopies. The isolated compounds showed stoichiometries organotin(IV)/fusidate 1:1, $\text{R}_3\text{Sn}(\text{IV})\text{FA}$ (R = Me, **FA1**; Bu, **FA2**; Ph, **FA3**). In the complexes, the carboxylate group of the fusidate ligand behaves as monodentate monoanionic donor binding the Sn(IV) through the oxygen atom in a somehow distorted tetrahedral structure.

^{119}Sn CP-MAS data confirmed the distorted tetrahedral arrangement. In MeOH solution, ^1H , ^{13}C and ^{119}Sn NMR spectroscopy showed monomeric complexes, where the carboxylate group mainly acts as monodentate ester-type ligand, and the occurrence of a coordinated solvent molecule to the tin center, as validated by non-relativistic NMR DFT study.



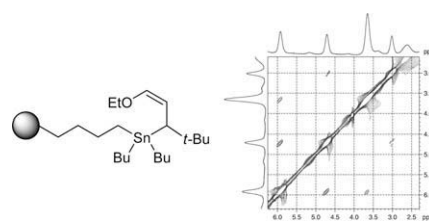
**Gaëlle Kerric, Erwan Le Grogneç,
Valérie Fargeas, Françoise Zammattio,
Jean-Paul Quintard, Monique Biesemans,
Rudolph Willem**

J. Organomet. Chem. 695 (2010) 1414

Synthesis, characterization and primary evaluation of the synthetic efficiency of supported vinyltins and allyltins

Supported vinyltins and allyltins grafted to an insoluble cross-linked polystyrene matrix were prepared using methods usually employed in solution, like hydrostannylation of alkynes, transmetallation of a tin halide with

organomagnesium or organozinc reagents, and substitution of an allyl halide by a supported stannyanion or $\text{S}_{\text{N}}2'$ substitution of a supported β -stannylacrolein acetal by cyanocopper reagents in the presence of boron trifluoride etherate. The insoluble grafted organotin reagents were analysed by HRMAS NMR, allowing an unambiguous assignment of their isomeric distribution or the identification of side products. When involved in Stille cross-coupling reactions (vinyltins) or in addition on aldehydes (allyltins), these supported reagents exhibit similar reactivity and similar stereoselectivity when compared to the tributyltin analogues, with the advantage to prevent problems due to the contamination by tin residues.



**Michal Horáček, Róbert Gyepes,
Jan Merna, Jiří Kubišta, Karel Mach,
Jiří Pinkas**

J. Organomet. Chem. 695 (2010) 1425

Dinuclear titanium complexes with methylphenylsilylene bridge between cyclopentadienyl rings. Synthesis, characterization and reactivity towards ethylene

Synthesis of new dinuclear titanium hexachloro complexes bearing methylphenylsilylene bridge between cyclopentadienyl rings is described. Activation of complexes by an excess of MAO leads to catalytic systems polymerizing ethylene to linear polymers with broad MWD.

