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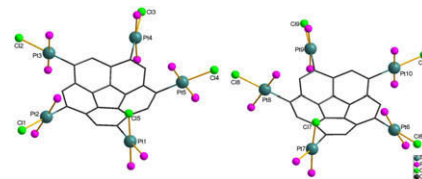
Communication

**Hyunbong Choi, Chulwoo Kim,
Ki-Min Park, Jinho Kim, Youngjin Kang,
Jaejung Ko**

J. Organomet. Chem. 694 (2009) 3529

Synthesis and structure of penta-platinum σ -bonded derivatives of corannulene

An oxidative addition reaction of 1,3,5,7,9-pentachlorocorannulene with $\text{Pt}(\text{PETe}_3)_4$ affords a penta-platinum σ -bonded derivative of corannulene. The substitution reaction of 1-ethynyl-4-nitro-benzene is described.



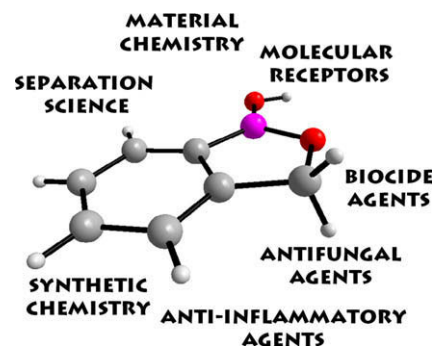
Review

**Agnieszka Adamczyk-Woźniak,
Michał K. Cyrański, Anna Żubrowska,
Andrzej Sporzyński**

J. Organomet. Chem. 694 (2009) 3533

Benzoxaboroles – Old compounds with new applications

Benzoxaboroles – derivatives of boronic acids – were first described over 50 years ago, however most of them have been investigated only recently due to their exceptional properties and wide applications. In addition to their usage as building blocks and protecting groups in organic synthesis, certain benzoxaboroles display biological and receptor activity.



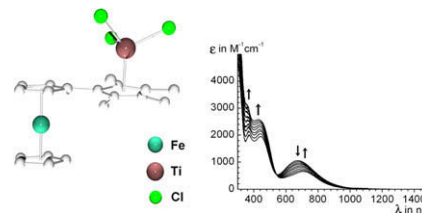
Regular Papers

**Alexander Jakob, Petra Ecorchard,
Tobias Rüffer, Michael Linseis,
Rainer F. Winter, Heinrich Lang**

J. Organomet. Chem. 694 (2009) 3542

Fulvalenediyl-bridged heterobimetallic complexes consisting of sandwich and half-sandwich compounds with early-late transition metals

A straightforward synthesis methodology to prepare heterobimetallic complexes with early and late transition metals of type $[(\eta^5\text{-C}_5\text{H}_5)(\eta^5\text{-C}_5\text{H}_4\text{-C}_5\text{Me}_4)\text{M}]$ and $[(\eta^5\text{-C}_5\text{H}_5)((\mu\text{-}\eta^5\text{:}\eta^5\text{-C}_5\text{H}_4\text{-C}_5\text{Me}_4)\text{TiCl}_3)\text{M}]$ ($\text{M} = \text{Fe}, \text{Ru}$) is described. These fulvalenediyl bridged complexes were characterized and the electrochemical and spectroelectrochemical behavior of **4a** is reported.

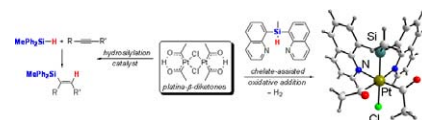


**Sebastian Schwieger, Renate Herzog,
Christoph Wagner, Dirk Steinborn**

J. Organomet. Chem. 694 (2009) 3548

Platina- β -diketones as catalysts for hydrosilylation and their reactivity towards hydrosilanes

Platina- β -diketones were found to catalyze the hydrosilylation of alkynes and alkenes such as hexynes, hex-1-ene, styrene and trimethylvinylsilane showing up to twice as high activities in comparison with the well-established catalysts from Speier and Karstedt. To get insight into the mechanism of the hydrosilylation, Si-H oxidative addition reactions towards the dinuclear platina- β -diketone $[\text{Pt}_2\{(\text{COMe})_2\text{H}\}_2(\mu\text{-Cl})_2]$ have been explored resulting with an 8-quinolyl substituted silane under loss of H_2 in the formation of a diacetyl(silyl)platinum(IV) complex $[\text{Pt}(\text{COMe})_2\text{-Cl}(\text{N}^-\text{SiMe}^-\text{N}-\kappa^2\text{N,N}',\kappa\text{Si})]$.

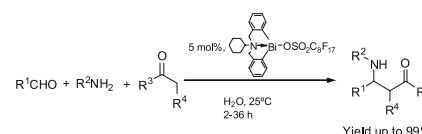


**Xiaowen Zhang, Shuangfeng Yin,
Renhua Qiu, Jun Xia, Weili Dai,
Zhenying Yu, Chak-Tong Au,
Wai-Yeung Wong**

J. Organomet. Chem. 694 (2009) 3559

Synthesis and structure of an air-stable hypervalent organobismuth (III) perfluorooctanesulfonate and its use as high-efficiency catalyst for Mannich-type reactions in water

A new air-stable hypervalent organo-bismuth (III) perfluorooctanesulfonate ($\text{C}_6\text{H}_{11}\text{N}(\text{CH}_2\text{C}_6\text{H}_4)_2\text{Bi}(\text{OSO}_2\text{C}_8\text{F}_{17})$) was synthesized and characterized, and found to show high catalytic efficiency towards one-pot Mannich-type reaction of ketones with aromatic aldehydes and aromatic amines, showing high yield as well as good selectivity, stability, recyclability and reusability.

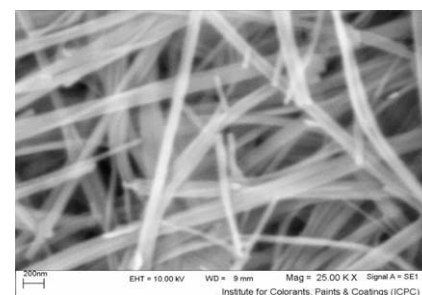


**Haida Ahmadzadi, Farzin Marandi,
Ali Morsali**

J. Organomet. Chem. 694 (2009) 3565

Structural and X-ray powder diffraction studies of nano-structured lead(II) coordination polymer with η^2 Pb...C interactions

Nano-structures of a new Pb(II) one-dimensional polymer with η^2 Pb-C interactions, $[\text{Pb}_2(\mu_3\text{-ba})_2(\mu_2\text{-ba})_2]_n$ (**1**) [ba^- = benzylacetylacetonate] were synthesized by both thermal gradient and sonochemical methods. The new nano-structure was characterized by scanning electron microscopy, X-ray powder diffraction, IR spectroscopy and elemental analyses.

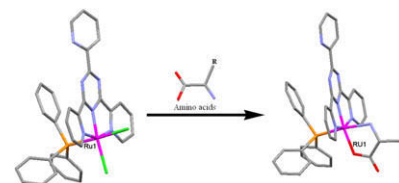


**Prashant Kumar, Ashish Kumar Singh,
Jitendra Kumar Saxena,
Daya Shankar Pandey**

J. Organomet. Chem. 694 (2009) 3570

Synthesis, and characterization of ruthenium(II) polypyridyl complexes containing α -amino acids and its DNA binding behavior

Ruthenium complexes $[\text{Ru}(\kappa^3\text{-tptz})(\text{PPh}_3)\text{Cl}_2]$ and $[\text{Ru}(\kappa^3\text{-tpy})(\text{PPh}_3)\text{Cl}_2]$ [tptz = 2,4,6-tris(2-pyridyl)-1,3,5-triazine; tpy = 2,2':6',2''-terpyridine] containing α -amino acids [glycine (gly); leucine (leu); isoleucine (isoleu); valine (val); tyrosine (tyr); proline (pro) and phenylalanine (phe)] act as mild Topo II inhibitors and also inhibit heme polymerase activity of the malarial parasite *Plasmodium yoelii* lysate.

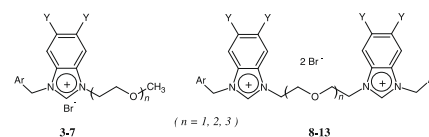


Süleyman Gülcemal, Sema Kahraman, Jean-Claude Daran, Engin Çetinkaya, Bekir Çetinkaya

J. Organomet. Chem. 694 (2009) 3580

The synthesis of oligoether-substituted benzimidazolium bromides and their use as ligand precursors for the Pd-catalyzed Heck coupling in water

Synthesis and characterization of oligoether-substituted **3–7** and oligoether-linked **8–13** benzimidazolium bromides were carried out. Pd–NHC complexes **14–19** of the salts **4** and **6** were also prepared. The benzimidazolium salts and preformed Pd(II) complexes were tested as catalyst for the Heck coupling reaction in water.

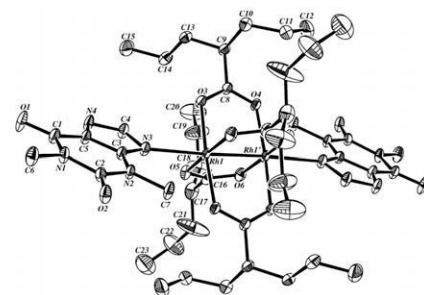


A. Latif Abuhijleh, Hijazi Abu Ali, Abdul-Hamid Emwas

J. Organomet. Chem. 694 (2009) 3590

Synthesis, spectral and structural characterization of dinuclear rhodium (II) complexes of the anticonvulsant drug valproate with theophylline and caffeine

The dinuclear complex tetra(μ -valproato)dirhodium(II), $\text{Rh}_2(\text{valp})_4$ (**1**), and its bis-adducts with theophylline, $\text{Rh}_2(\text{valp})_4(\text{ThH})_2$ (**4**), or caffeine, $\text{Rh}_2(\text{valp})_4(\text{Caf})_2$ (**5**), have been synthesized and characterized by various techniques. Within, the syntheses and X-ray structures are reported.

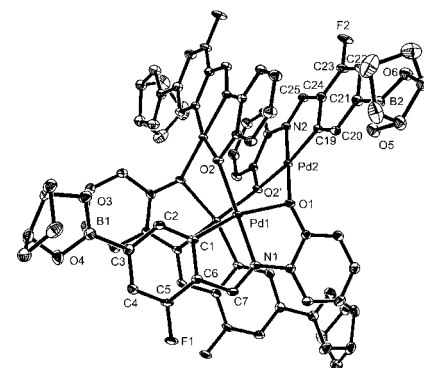


Nina Gómez-Blanco, Jesús J. Fernández, Alberto Fernández, Digna Vázquez-García, Margarita López-Torres, Antonio Rodríguez, José M. Vila

J. Organomet. Chem. 694 (2009) 3597

Synthesis and reactivity of new functionalized Pd(II) cyclometallated complexes with boronic esters

Schiff base ligands bearing boronic esters are a new route to functionalized palladacycles. Under the appropriate conditions the boronic ester sites undergo transesterification and the Petasis reaction.



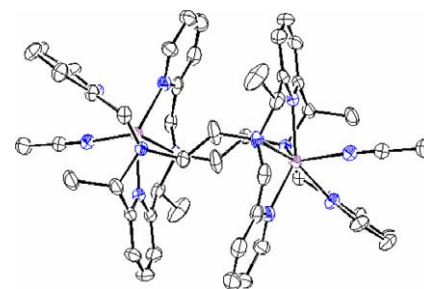
M^a del Carmen Fernández-Fernández, Rufina Bastida, Alejandro Macías, Paulo Pérez-Lourido, Laura Valencia

J. Organomet. Chem. 694 (2009) 3608

Dinuclear tetrapyrrolyl pendant-armed azamacrocyclic complexes of Co(II), Ni(II), Cu(II) and Cd(II)

The coordination capability of the new tetrapyrrolyl pendant-armed azamacrocyclic ligand **L**, towards Co(II), Ni(II), Cu(II) and Cd(II) ions was studied. The ligand and the complexes were characterized by microanalysis, LSI mass spectro-

metry, IR, UV-Vis and NMR spectroscopy, magnetic studies and conductivity measurements. Crystal structures of $[\text{Co}_2\text{L}(\text{CH}_3\text{CN})_2](\text{ClO}_4)_4 \cdot 2\text{CH}_3\text{CN}$ and $[\text{Cd}_2\text{L}(\text{NO}_3)_2](\text{NO}_3)_2 \cdot 2\text{H}_2\text{O}$ complexes have been determined. The X-ray studies show the presence of dinuclear endomacrocyclic complexes with the metal ion in a similar distorted octahedral environment, coordinated by one pyridyl bridgehead group, two amine nitrogen atoms and two pyridyl pendant-arms. The six coordination position around the metal ion is completed by one acetonitrile molecule in $[\text{Co}_2\text{L}(\text{CH}_3\text{CN})_2](\text{ClO}_4)_4 \cdot 2\text{CH}_3\text{CN}$ and by one monodentate nitrate anion in $[\text{Cd}_2\text{L}(\text{NO}_3)_2](\text{NO}_3)_2 \cdot 2\text{H}_2\text{O}$. Different sort of intramolecular non-classical hydrogen bonds were found in the crystal lattice of both structures.

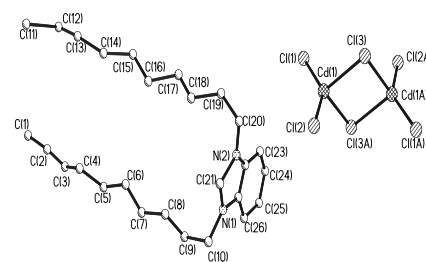


**RuiRui Zhuang, FangFang Jian,
KeFei Wang**

J. Organomet. Chem. 694 (2009) 3614

A new binuclear Cd(II)-containing ionic liquid: Preparation and electrocatalytic activities

The structure of the Cd(II)-containing ionic liquid was characterized by X-ray crystallography, IR spectroscopy and elemental analysis. The melting point of Cd-IL was 80 °C. Electrochemical properties of the Cd-IL had been investigated by preparing bulk-modified carbon paste electrode (Cd-IL/CPE). This modified electrode showed good electrocatalytic activities toward the reduction of the hydrogen peroxide and bromate.

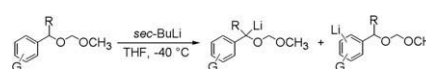


Ugo Azzena, Luisa Pisano, Sarah Mocci

J. Organomet. Chem. 694 (2009) 3619

Direct metalation of methoxymethyl arylmethyl ethers: A tin-free approach to the generation of α -alkoxyalkoxy-substituted aryllithiums

A wide array of α -methoxymethoxy-substituted aryllithiums was generated by direct metalation of the corresponding arylmethyl methoxymethyl ethers, thus avoiding manipulation and isolation of toxic organotin reagents. Substituents located on the aromatic ring promote the set up of a competition between lateral and aromatic metalation.

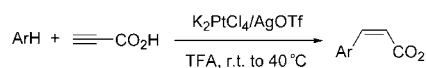


**Juzo Oyamada, Takuya Hashimoto,
Tsugio Kitamura**

J. Organomet. Chem. 694 (2009) 3626

A high hydroarylation activity of $K_2PtCl_4/AgOTf$ catalyst in the reaction of propiolic acid with unactivated and activated arenes

A mixed catalyst $K_2PtCl_4/AgOTf$ showed an extremely high activity for hydroarylation of propiolic acid to form *cis*-cinnamic acids in good to high yields. This catalyst was effective even in the reaction with less reactive benzene and toluene to give *cis*-cinnamic acids in good yield.



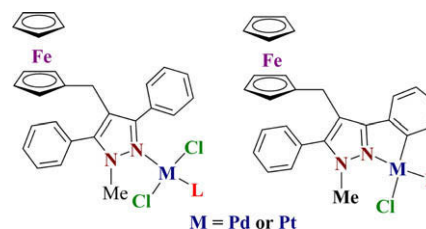
Ar = benzene, toluene, *p*-xylene, mesitylene, pentamethylbenzene, bromomesitylene, naphthalene, *p*-di-*tert*-butylbenzene

**Pradipta Kumar Basu, Asensio González,
Concepción López, Mercè Font-Bardía,
Teresa Calvet**

J. Organomet. Chem. 694 (2009) 3633

1-Methyl-4-ferrocenylmethyl-3,5-diphenylpyrazole: A versatile ligand for palladium(II) and platinum(II)

The study of the reactivity of the novel ferrocene derivatives containing 3,5-diphenylpyrazole [1-R-3,5-Ph₂-(C₃N₂)-CH₂-Fc] {Fc = (η^5 -C₅H₅)Fe(η^5 -C₅H₄) and R = H (**2**) or Me (**3**)}, *cis*-[MCl₂(dmsO)₂] (M = Pd or Pt, Pd(OAc)₂ has allowed to isolate and characterize a wide variety of complexes where the ligands adopt an N-donor or a [C(sp²,phenyl),N(pyrazole)]⁻ mode of binding.

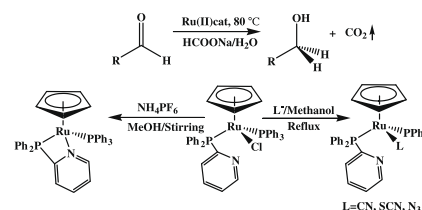


Prashant Kumar, Ashish Kumar Singh, Sanjeev Sharma, Daya Shankar Pandey

J. Organomet. Chem. 694 (2009) 3643

Structures, preparation and catalytic activity of ruthenium cyclopentadienyl complexes based on pyridyl-phosphine ligand

Complex $[(\eta^5\text{-C}_5\text{H}_5)\text{Ru}(\text{PPh}_3)_2\text{Cl}]$ on reaction with diphenyl-2-pyridylphosphine (PPh_2Py) afforded mono $[(\eta^5\text{-C}_5\text{H}_5)\text{Ru}(k^1\text{-P-PPh}_2\text{Py})(\text{PPh}_3)\text{Cl}]$ (**1**) and bis-chelated complex $[(\eta^5\text{-C}_5\text{H}_5)\text{Ru}(k^2\text{-P,N-PPh}_2\text{Py})(\text{PPh}_3)]^+$ (**1a**). Complex **1** effectively catalyze reduction of aldehydes/substituted aldehydes into corresponding alcohol in the presence of HCOONa in water under aerobic conditions.

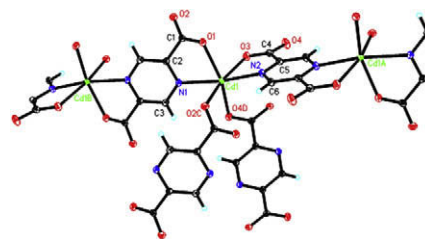


Fa-Qian Liu, Rong-Xun Li, Yue-Yi Deng, Wei-Hua Li, Nai-Xiu Ding, Guang-Ye Liu

J. Organomet. Chem. 694 (2009) 3653

Studies on two coordination polymers $[\text{M}(\mu_4\text{-pz25dc})_n]$ ($\text{M} = \text{Cd}$ or Zn , $\text{pz25dc} = \text{pyrazine-2,5-dicarboxylato}$) with three-dimensional pillared-layer three-nodal framework: Synthesis, structural characterization, strong optical nonlinearities and optical limiting properties

Two isomorphous coordination polymer candidates for nonlinear optical (NLO) materials have been synthesized hydrothermally and characterized crystallographically as pillared-layer three-nodal frameworks. Both polymers have large hyperpolarizability γ and limiting threshold values. The heavy atom effect plays important role in the enhancement of optical non-linearities and optical limiting properties.

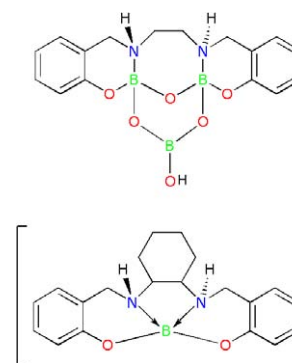


Gabriela Vargas-Díaz, Herbert Höpfl

J. Organomet. Chem. 694 (2009) 3660

A cationic mononuclear and a neutral trinuclear boron compound derived from boric acid and N_2O_2 -type ligands of the Salan class

A mononuclear boronium and a neutral trinuclear boron complex have been prepared by reaction of two different Salan ligands with boric acid. Both compounds might have applications, the trinuclear species as Lewis acid catalyst and the borocation as positively charged counterion for voluminous anions.

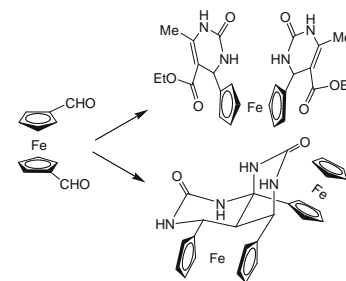


A. Csámpai, A.Z. Györfi, Gy.I. Túrós, P. Sohár

J. Organomet. Chem. 694 (2009) 3667

Application of Biginelli reaction to the synthesis of ferrocenylpyrimidones and [3]-ferrocenophane-containing pyrimido-[4,5-d]pyrimidinediones

Ferrocene-containing dihydropyrimidines (DHP's) and *cis*-fused pyrimido[4,5-*d*]pyrimidine-2,7(1*H*,3*H*)-diones were prepared either by boric acid – or iron(III)-mediated three-component Biginelli reactions of ferrocene-carboxaldehydes, urea and 1,3-dioxo- or methyl ketone components. The structure of the new compounds was established by IR and NMR spectroscopy, including HMQC, HMBC and DEPT measurements.



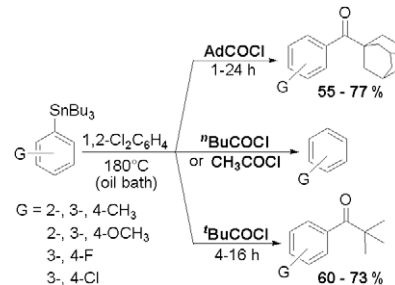
Notes

**Marcos J. Lo Fiego, María T. Lockhart,
Alicia B. Chopa**

J. Organomet. Chem. 694 (2009) 3674

Catalyst-free alkanoylation of aromatic rings via arylstannanes. Scope and limitations

Tertiary alkanoyl chlorides react regioselectively with electronically diverse arylstannanes to form the corresponding aryl ketones in good to excellent yields in absence of any type of catalyst. Under these conditions acid chlorides bearing α -hydrogens render only protodestannylation products.



**Vladimir A. Potapov,
Valentina N. Elokhina, Lyudmila I. Larina,
Tatiana I. Yaroshenko,
Anna A. Tatarinova, Svetlana V. Amosova**

J. Organomet. Chem. 694 (2009) 3679

Reactions of sodium selenide with ethynyl and bromoethynyl ketones: Stereo- and regioselective synthesis of functionalized divinyl selenides and 1,3-diselenetanes

A method for the preparation of 2,4-dimethylene-1,3-diselenetanes based on the novel reaction of sodium selenide with bromoethynyl ketones has been developed. New functionalized divinyl selenides have been obtained by regio- and stereoselective addition of sodium selenide to ethynyl ketones.

