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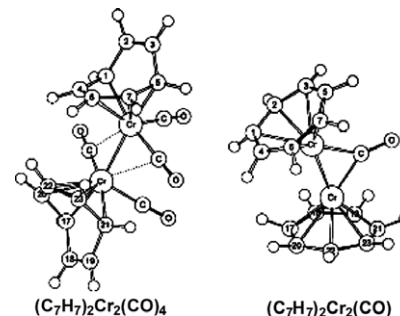
Regular Papers

**Hongyan Wang, Yaoming Xie,
R. Bruce King, Henry F. Schaefer III**

J. Organomet. Chem. 693 (2008) 3201

Formal chromium–chromium triple bonds and bent rings in the binuclear cycloheptatrienylchromium carbonyls $(C_7H_7)_2Cr_2(CO)_n$ ($n = 6, 5, 4, 3, 2, 1, 0$): A density functional theory study

The structures and energetics of $(C_7H_7)_2Cr_2(CO)_n$ ($n = 6, 5, 4, 3, 2, 1, 0$) have been investigated by density functional theory. Most of the predicted $(C_7H_7)_2Cr_2(CO)_n$ structures have bent trihapto or pentahapto C_7H_7 rings and $Cr\equiv Cr$ distances in the range 2.4–2.5 Å suggesting formal triple bonds. In some cases rearrangement of the heptagonal C_7H_7 ring to a tridentate cyclopropyldivinyl or tridentate bis(carbene)-alkyl ligand is observed.

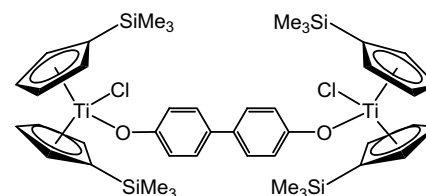


**Stefan Köcher, Bernhard Walfort,
Gerd Rheinwald, Tobias Rüffer,
Heinrich Lang**

J. Organomet. Chem. 693 (2008) 3213

Alkyloxy- and aryloxy-titanocenes: Synthesis, solid-state structure and cyclic voltammetric studies

The synthesis and reactivity of diverse alkyloxy- and aryloxy-titanocene chlorides, bis(aryloxy) titanocenes, $([Ti]Cl)_2(\mu-OC_6H_4O)$ and $([Ti](Cl)(\mu-OC_6H_4-4))_2$ is described. The structures of six samples in the solid state are reported. The electrochemical behavior of these molecules is discussed.

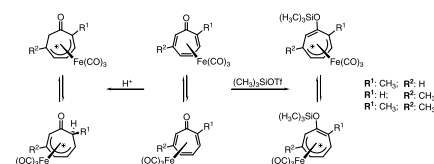


**Ambroz Almássy, Zuzana Benková,
Branislav Horváth, Andrej Boháč**

J. Organomet. Chem. 693 (2008) 3223

Fluxional behavior of methyl-substituted tricarbonyl(tropone)iron complexes and their different reactivity

The influence of methyl substituents on the site preference of $Fe(CO)_3$ group in neutral, cationic C-protonized and O-trimethylsilylated tricarbonyliron complexes of (di)-methyltropone was investigated and the related differences in the reactivity of these complexes in nucleophilic additions and [3+2] cycloaddition reactions were explained.

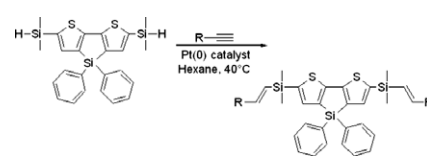


**In-Sook Lee, Young-Woo Kwak,
Dong-Ha Kim, Yong Cho, Joji Ohshita**

J. Organomet. Chem. 693 (2008) 3233

Synthesis of *E*-alkenylsilanes with dithienosilole and their electrochemical and optical properties

The synthesis, optical, and electrochemical properties of novel silylene-spaced dithienosilole derivatives (**3–10**) by hydrosilylation of various terminal alkynes with 2,6-bis(dimethylsilyl)-4,4-diphenyldithienosilole (**2**) in the presence of platinum(0) catalyst are described.

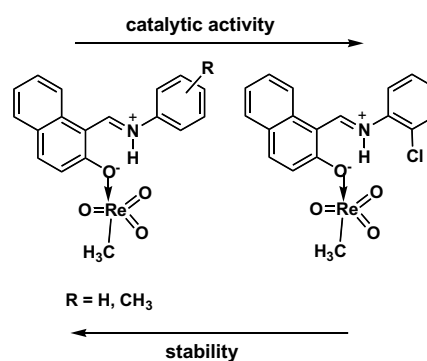


**Alejandro Capapé, Ming-Dong Zhou,
Shu-Liang Zang, Fritz E. Kühn**

J. Organomet. Chem. 693 (2008) 3240

((2-Hydroxynaphthalen-1-yl)methylene)aniline derived Schiff base adducts of MTO: Synthesis and catalytic application

((2-Hydroxynaphthalen-1-yl)methylene)aniline derived Schiff base adducts of MTO depends largely on the substituents of the Schiff base ligand, despite the comparatively weak coordination of this ligand.

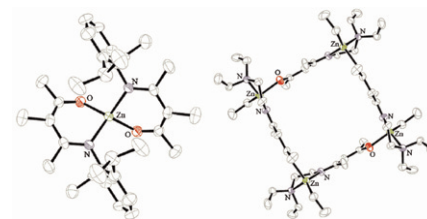


**Leslie A. Lesikar, Audra F. Gushwa,
Anne F. Richards**

J. Organomet. Chem. 693 (2008) 3245

Synthesis, characterization, and steric hindrance comparisons of selected transition and main group metal β -ketoiminato complexes

The coordination preference of the ketoiminato ligand, $\text{RN}(\text{H})(\text{C}(\text{Me})_2\text{C}(\text{Me})=\text{O})$, ($\text{R} = 2,6$ -diisopropylphenyl, (Dipp), L^1 , and $\text{RN}(\text{H})(\text{C}(\text{Me})\text{CH}(\text{C}(\text{Me})=\text{O})$, $\text{R} = \text{C}_2\text{H}_4\text{-NEt}_2$, L^2 , have been investigated with a range of d and p block metal halides, (or alkyls).



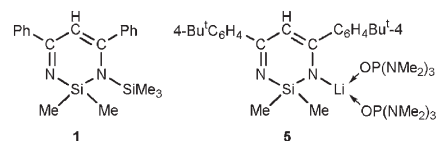
**Xue-Hong Wei, Peter B. Hitchcock,
Michael F. Lappert**

J. Organomet. Chem. 693 (2008) 3256

Synthesis and structures of the 2-(dimethylsila)pyrimidine derivatives $[\text{Si}(\text{Me})_2\text{NC}(\text{Ar})\text{C}(\text{H})\text{C}(\text{Ar})\text{NX}]_n$ ($\text{Ar} = \text{Ph}$, $\text{C}_6\text{H}_4\text{Bu}^t\text{-4}$; $\text{X} = \text{H}$, SiMe_3 , $\text{Li}(\text{hmpa})_2$, $\text{K}(\text{thf})_3$; $n = 1, 2$)

Five 2-(dimethylsila)pyrimidine derivatives $[\text{Si}(\text{Me})_2\text{NC}(\text{Ar})\text{C}(\text{H})\text{C}(\text{Ar})\text{NX}]_n$ (**1**)–(**5**) have been prepared and characterized:

No.	Ar	X	n
1	Ph	SiMe_3	1
2	$\text{C}_6\text{H}_4\text{Bu}^t\text{-4}$	$\text{K}(\text{thf})_3$	2
3	$\text{C}_6\text{H}_4\text{Bu}^t\text{-4}$	H	1
4	$\text{C}_6\text{H}_4\text{Bu}^t\text{-4}$	SiMe_3	1
5	$\text{C}_6\text{H}_4\text{Bu}^t\text{-4}$	$\text{Li}(\text{hmpa})_2$	1

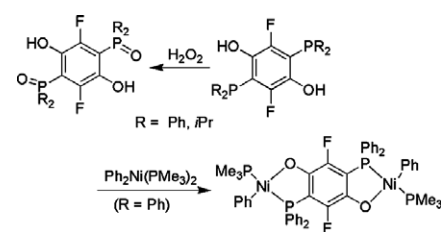


**Louis R. Pignotti,
Natcharee Kongprakaiwoot,
William W. Brennessel,
Jonas Baltrusaitis, Rudy L. Luck,
Eugenijus Urnezisius**

J. Organomet. Chem. 693 (2008) 3263

1,4-Bis(phosphine)-2,5-difluoro-3,6-dihydroxybenzenes and their P-oxides: Syntheses, structures, ligating and electronic properties

p-Hydroquinones appended with phosphine substituents can be conveniently prepared via low-temperature syntheses involving the generation of organolithio intermediates. The compounds serve as effective binucleating ligands towards selected metal sources, or as starting materials for other ligands built on *p*-hydroquinone platform.

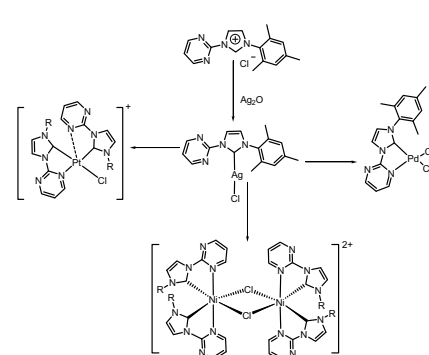


**Chao Chen, Huayu Qiu, Wanzhi Chen,
Daqi Wang**

J. Organomet. Chem. 693 (2008) 3273

Structural variations in nickel, palladium, and platinum complexes containing pyrimidyl *N*-heterocyclic carbene ligand

Nickel(II), palladium(II), and platinum(II) complexes of 2-(3-mesitylimidazolylidene)pyrimidine have been prepared and structurally characterized.

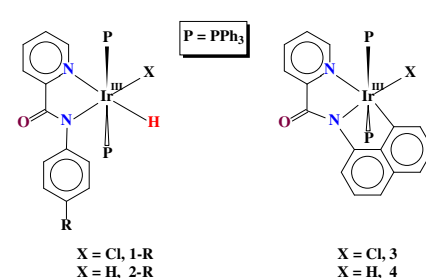


**Moutusi Dasgupta, Haregewine Tadesse,
Alexander J. Blake,
Samaresh Bhattacharya**

J. Organomet. Chem. 693 (2008) 3281

Interaction of *N*-(aryl)picolinamides with iridium. *N*-H and C-H bond activations

Reaction of *N*-(aryl)picolinamides with [Ir(PPh₃)₃Cl] in refluxing ethanol in the presence of a base (NEt₃) affords two yellow complexes (**1-R** and **2-R**). Similar reaction of *N*-(naphthyl)picolinamide with [Ir(PPh₃)₃Cl] affords two organometallic complexes, **3** and **4**.

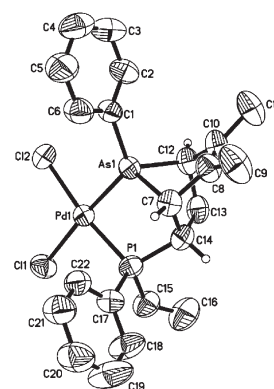


**Mengtao Ma, Sumod A. Pullarkat,
Yongxin Li, Pak-Hing Leung**

J. Organomet. Chem. 693 (2008) 3289

Asymmetric synthesis of a chiral heterobidentate As-P ligand containing both As and P-stereogenic centres

The organopalladium complex containing ortho-metalated (*S*)-[1-(dimethylamino)ethyl]naphthalene as the chiral auxiliary promoted the asymmetric cycloaddition reaction between phenyldivinylphosphine and 3,4-dimethyl-1-phenylarsole yielding the optically pure As⁺-P⁺ heterobidentate ligand. An interesting arsenic elimination reaction was also observed in the arsanorbornene skeleton.



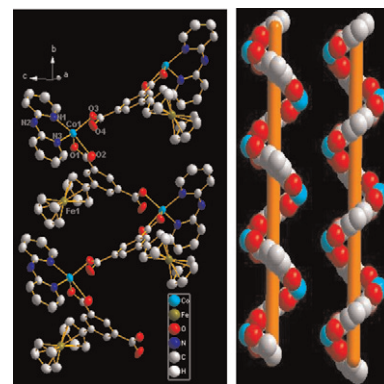
**Xia Li, Wei Liu, Hong-Yun Zhang,
Ben-Lai Wu**

J. Organomet. Chem. 693 (2008) 3295

Novel coordination polymers with ferrocene-containing dicarboxylate ligand: Syntheses, crystal structures and properties

Self-assembly of a new ferrocene-containing dicarboxylate ligand L (L = 5-ferrocene-1,3-benzenedicarboxylic acid), M(II) salts (M = Co and Zn) and chelating ligands dpa or phen (dpa = 2,2'-dipyridylamine and phen = 1,10-phen) gave rise to four new coordination

polymers 1–4. The isostructural complexes 1 and 2 possess 1D helical chain structures with 2_1 screw axes along the *b*-direction, and the right- and left-handed helical chains are alternate arrayed into 2D layer structures through hydrogen-bonding interactions; while isostructural complexes 3 and 4 are 1D linear chain structures with phen and ferrocene groups of L as pendants hanging on the different sides of the main chain. A structural comparison of complexes 1–4 demonstrated that the characteristics of subsidiary ligands and slight difference in coordination models of L play very important role in the construction of the complexes.



Kuang-Hway Yih, Gene-Hsiang Lee

J. Organomet. Chem. 693 (2008) 3303

Synthesis, fluxional behavior, and *endo*, *exo*-stereoisomers of allyl molybdenum complexes with *O*-ethylthiocarbonate, EtOCS_2^- , containing ligand: Crystal structures of $[\text{Mo}(\text{CH}_3\text{CN})(\eta^3\text{-C}_3\text{H}_5)(\text{CO})_2(\text{S}_2\text{COEt})]$, *exo*- $[\text{Mo}(\text{dppm})(\eta^3\text{-C}_3\text{H}_5)(\text{CO})(\text{S}_2\text{COEt})]$, and *endo*-, *exo*- $[\text{Mo}(\text{dppa})(\eta^3\text{-C}_3\text{H}_5)(\text{CO})(\text{S}_2\text{COEt})]$

The reactions of the very air-sensitive η^3 -allyldicarbonylethoxyldithiocarbonato molybdenum(II) compound $[\text{Mo}(\eta^3\text{-C}_3\text{H}_5)(\text{CO})_2(\eta^2\text{-S}_2\text{COEt})(\text{CH}_3\text{CN})]$ (1) with piperidine, pyrrolidylthiocarbamate, bipyridine and diphos ligands have been discussed. X-ray analysis on $[\text{Mo}(\eta^3\text{-C}_3\text{H}_5)(\eta^2\text{-S}_2\text{COEt})(\text{CO})(\eta^2\text{-dppa})]$ (8) shows that the unit cell contains two independent molecules, *endo* and *exo*, which differ mainly by the orientation of the allyl group with respect to the carbonyl group.

