

www.elsevier.nl/locate/jorganchem

Journal of Organometallic Chemistry 598 (2000) 421-429



Subject Index of Volume 598

Acetylene complexes

Interaction of bis(trimethylsilyl)acetylene complex of titanocene with tris(pentafluorophenyl)borane. Synthesis and structure of a new type of zwitterionic metallocene $(\eta^5-C_5H_5)\{\eta^5-[C_5H_4B(C_6F_5)_3]\}Ti$, 243

Acetyl ligand

Geometrical and electronic structures of the acetyl complex $Re(bpy)(CO)_3(COCH_3)$ and of $[M(bpy)(CO)_4](OTf)$, M = Mn.Re, 136

Aggregation

Syntheses of cationic four-coordinated aluminum complexes: counter-ion induced aggregation through the N-H···I hydrogen bonds, 13

Alkenes

Synthesis and decomposition of bis(alkoxyethynyl)dimethyltin, 211

Alkenyl

Alkyne insertion reactions of $[RuH(\kappa^2-S_2CNEt_2)(CO)(PPh_3)_2]$: synthesis of alkenyl, alkynyl and enynyl complexes, 20

Alkyl and acyl oxo niobocene

Synthesis and reactivity of new oxo alkyl or oxo acyl niobocene complexes and crystal structure of $Cp_2'Nb(=O)(OC(O)CF_3)$ ($Cp' = \eta^5 - C_5H_4SiMe_3$), 167

Alkylation

Synthesis and some chemical properties of 3-ferrocenyl-3-isopropylcyclopropene: 3-ferrocenyl-3-isopropylstructures of cyclopropene and its adducts with 1,3-diphenylisobenzofuran, 254

Alkynes

Alkyne insertion reactions of $[RuH(\kappa^2-S_2CNEt_2)(CO)(PPh_3)_2]$: synthesis of alkenyl, alkynyl and enynyl complexes, 20 Synthesis and decomposition of bis(alkoxyethynyl)dimethyltin, 211

Alkynyl complexes

Reactions of transition-metal η^1 -propargyl complexes with sulfur dioxide and sulfur trioxide: transition-metal-carbon bond cleaving reactions of the cycloadducts which yield 1,2-oxathiole-2-oxides and -2,2-dioxides, 150

Aluminium

Isolation of new polynuclear aluminium amides; trinuclear [Al-Cl(MeNCH₂CH₂NMe)₂(Al(NMe₂)Cl)(Al(NMe₂)₂)] and fluxional adamantane-like [Al₄Cl₂(NMe₂)₆(NMe)O], 36

Aluminum

Syntheses of cationic four-coordinated aluminum complexes: counter-ion induced aggregation through the N-H···I hydrogen bonds, 13

Amides

Isolation of new polynuclear aluminium amides; trinuclear [Al-Cl(MeNCH₂CH₂NMe)₂(Al(NMe₂)Cl)(Al(NMe₂)₂)] and fluxional adamantane-like [Al₄Cl₅(NMe)₆(NMe)O], 36

Amido ligand

Non-bridged amido cyclopentadienyl complexes of titanium: synthesis, characterization, and olefin polymerization catalysis, 179

β-Arylvinyl azides

P,N-Heterodifunctional ligands by selective Staüdinger reaction of β-substituted vinylazides with (Z)-1,2-bis(diphenylphosphanyl)ethene and formation of cyclometalled complexes of palladium(II) of these ligands — crystal and molecular structure of a new chiral cyclometallaphosphoraniminophosphane of palladium(II), 329

Atomic parameters

Implementation of the IPPP-CLOPPA-INDO/S method for the study of indirect nuclear spin coupling constants and its application to molecules containing tin nuclei, 193

Basicity

2-Thioanisyldichlorophosphine, new starting material for the preparation of multidentate phosphine ligands: syntheses and characterization of derivatives of 2-anisyl- and 2-thioanisyldichlorophosphines, 235

Benzyl cation

Non-bridged amido cyclopentadienyl complexes of titanium: synthesis, characterization, and olefin polymerization catalysis, 179

2,2'-Bipyridine

Development of a T-joint for covalent molecular construction based on 2,2'-bipyridine and phenanthroline isocyanide metal complexes, 55

Bis(diphenylphosphino)ferrocene

Ferrocenyl ligands in mixed valence high-oxidation state rhenium complexes, 108

Bis(ferrocenylmethyl)ethylenediamine

Ferrocenyl ligands in mixed valence high-oxidation state rhenium complexes, 108

Boranes

(Fluoroorgano)fluoroboranes and -fluoroborates I: synthesis and spectroscopic characterization of potassium fluoroaryltrifluoroborates and fluoroaryldifluoroboranes, 127

Borates

(Fluoroorgano)fluoroboranes and -fluoroborates I: synthesis and spectroscopic characterization of potassium fluoroaryltrifluoroborates and fluoroaryldifluoroboranes, 127

Boronic acid

(Fluoroorgano)fluoroboranes and -fluoroborates I: synthesis and spectroscopic characterization of potassium fluoroaryltrifluoroborates and fluoroaryldifluoroboranes, 127

Bulky ligand

Mesitylpseudohalogermanes $Mes_2Ge(CN)_2$ and Mes_3GeX (X = CN, NCS, N_3 , NCO and OH; Mes = 2,4,6-trimethylphenyl): syntheses, crystal and molecular structures, 276

Cage ion

Monoorganotin–polyoxometal compounds: Part 1. Synthesis and crystal structure of [(iPrSn)₁₁(V^{IV}O)O₁₄(OH)₆]Cl·2DMF·H₂O. The first example in a series of monoorganotin–polyoxometal compounds with icosahedral metal arrangement and various contents of tin and vanadium, 381

Carbene complexes

Carbonyl insertion into zirconium-nitrogen bonds; synthesis and X-ray structure of a carbene complex composed of $[Zr(NMe_2)_4]_2$ and three $Fe(CO)_5$ units containing $Fe \rightarrow Zr$ donor-acceptor interactions, 403

Carbenes

Fluoroalkylated N-heterocyclic carbene complexes of palladium, 409

Carbenoid intermediate

Synthesis and some chemical properties of 3-ferrocenyl-3-isopropylcyclopropene: 3-ferrocenyl-3-isopropylstructures of cyclopropene and its adducts with 1,3-diphenylisobenzofuran, 254

Carbide

Reactions of metalloalkynes: Part 6. Synthesis of open tetrametallic clusters. Reaction of [Ru(CO)_4(ethene)] with ethyne-1,2-diyl compounds. Single crystal X-ray structural determinations of [Ru_4(μ_4 -CC)(η -C_5H_4R)_2(μ -CO)_2(CO)_8] (R = H, Me), 28

Carbocation

Synthesis and some chemical properties of 3-ferrocenyl-3-isopropylcyclopropene: 3-ferrocenyl-3-isopropylstructures of cyclopropene and its adducts with 1,3-diphenylisobenzofuran, 254

Carbonyl complexes

Geometrical and electronic structures of the acetyl complex $Re(bpy)(CO)_3(COCH_3)$ and of $[M(bpy)(CO)_4](OTf)$, $M = Mn,Re,\ 136$

Catalysis

Synthesis of the diphenylacetylene-based, tetra-amine ligand 1,2-bis(3,5-bis[(dimethylamino)methyl]phenyl)acetylene by palladium-catalysed cross-coupling: isolation and crystal structure of the catalyst *trans-*(3,5-bis[(dimethylamino)methyl]phenyl)bis(triphenylphosphine)palladium(II) iodide, 24

Cation

Syntheses of cationic four-coordinated aluminum complexes: counter-ion induced aggregation through the N-H···I hydrogen bonds. 13

C-H activation

Diverse reactivity of rhodium β -(tetraphenyl)tetraphenyl porphyrin chlorides with benzonitrile: formation of Rh porphyrin arene and imine complexes, 80

Chiral derivatizing agent

Use of *cis*-dichloro[(S)-α-methylbenzylamine](ethylene)Pt(II) as a chiral derivatizing agent for the determination by ¹⁹⁵Pt-NMR of the enantiomeric composition of unsaturated ethers or alcohols having a quaternary chiral carbon atom, 174

Chromium group

Syntheses, characterization and structures of chromium group carbonyl complexes containing a multifunctional $Ph_2P(o-C_6H_4)CH=N(CH_2)_2(o-C_6H_4N)$ ligand, 353

Closed-shell interactions

Crystal structures and spectroscopic properties of platina-β-diketones — a new mode of stacking in platinum complexes, 286

Cluster

Reactions of metalloalkynes: Part 6. Synthesis of open tetrametallic clusters. Reaction of [Ru(CO)_4(ethene)] with ethyne-1,2-diyl compounds. Single crystal X-ray structural determinations of [Ru_4(μ_4 -CC)(η -C_5H_4R)_2(μ -CO)_2(CO)_8] (R = H, Me), 28

Clusters

Synthesis, characterization and solution studies on heteronuclear iron–copper clusters containing diphosphine ligands: crystal structure of the dicluster [$\{Fe_2(\mu\text{-CO})(CO)_6(\mu\text{-PPh}_2)-Cu\}_2(dppp)\}$], 215

Coordination

Synthesis and properties of some novel ferrocene macrocyclic dioxopolyamines, 42

Copper

Synthesis, characterization and solution studies on heteronuclear iron–copper clusters containing diphosphine ligands: crystal structure of the dicluster [{Fe₂(μ-CO)(CO)₆(μ-PPh₂)-Cu}₂(dppp)], 215

Crystal field effects

A theoretical study of gas-phase and solid-state $Hg(CF_3)_2$, 374 Crystal structure

Carbonyl insertion into zirconium—nitrogen bonds; synthesis and X-ray structure of a carbene complex composed of $[Zr(NMe_2)_4]_2$ and three $Fe(CO)_5$ units containing $Fe \rightarrow Zr$ donor—acceptor interactions, 403

Crystal structures and spectroscopic properties of platina-β-diketones — a new mode of stacking in platinum complexes, 286

Geometrical and electronic structures of the acetyl complex $Re(bpy)(CO)_3(COCH_3)$ and of $[M(bpy)(CO)_4](OTf)$, M = Mn,Re, 136

Influence of phenyl ring substituents in the cyclometallation of Schiff base ligands: crystal and molecular structures of $[Pd-\{3,4-(OCH_2O)C_6H_2C(H)=N(Cy)-C2,N\}(\mu-O_2CMe)]_2$ and $[Pd-\{3,4-(OCH_2CH_2O)C_6H_2C(H)=N(Cy)-C6,N\}(\mu-O_2CMe)]_2,\ 71$

Monoorganotin–polyoxometal compounds: Part 1. Synthesis and crystal structure of [('PrSn)₁₁(V^{IV}O)O₁₄(OH)₆]Cl·2DMF·H₂O. The first example in a series of monoorganotin–polyoxometal compounds with icosahedral metal arrangement and various contents of tin and vanadium, 381

Syntheses of titanium μ-arylimido and μ-pyridylimido complexes bearing (un)substituted cyclopentadienyl ligand, 339

Synthesis and crystal structure of $[U(\eta-C_8H_8)]_2[\mu-\eta^4:\eta^4-HN-(CH_2)_3N(CH_2)_2N(CH_2)_3NH]$, a dinuclear compound with a bridging tetra-amide ligand, 313

Crystal structures

Ferrocenyl ligands in mixed valence high-oxidation state rhenium complexes, 108

Mesitylpseudohalogermanes Mes₂Ge(CN)₂ and Mes₃GeX (X = CN, NCS, N₃, NCO and OH; Mes = 2,4,6-trimethylphenyl): syntheses, crystal and molecular structures, 276

Cyano-bridged complex

Cyano-bridged extended heteronuclear supramolecular architectures with hexacyanoferrates(II) as building blocks, 63

Cyclic voltammetry

Synthesis and properties of some novel ferrocene macrocyclic dioxopolyamines, 42

[3+2] Cycloaddition

Reactions of transition-metal η¹-propargyl complexes with sulfur dioxide and sulfur trioxide: transition-metal-carbon bond cleaving reactions of the cycloadducts which yield 1,2-oxathiole-2-oxides and -2,2-dioxides, 150

[3 + 2]-Cycloadditionen

Addukte der Ethene Me₂E=C(SiMe₃)₂ (E = Si, Ge, Sn) mit LiR und RN₂: Wie rasch bilden sie sich?, 304

Dimere der Ethene Me₂E=C(SiMe₃)₂ (E = Si, Ge, Sn): Auf welchem Wege entstehen sie aus Me₂EX-CM(SiMe₃)₂? Wie sind sie strukturiert?, 292

Cyclometallated

Reactivity of cyclometallated semicarbazone complexes of Pd(II): crystal and molecular structures of [Pd $\{C_6H_4C(Et)=NN(H)C(=O)NH_2\}(PPh_3)][CIO_4]$ and [Pd $\{C_6H_4C(Et)=NN(H)C(=O)NH_2\}\{(Ph_2PCH_2CH_2)_2PPh-P,P,P\}][CI], 1$

Cyclometallation

Influence of phenyl ring substituents in the cyclometallation of Schiff base ligands: crystal and molecular structures of $[Pd-\{3,4-(OCH_2O)C_6H_2C(H)=N(Cy)-C2,N\}(\mu-O_2CMe)]_2$

and [Pd-{3,4-(OCH $_2$ CH $_2$ O)C $_6$ H $_2$ C(H)=N(Cy)-C6,N}(μ -O $_2$ -CMe)],, 71

Cyclometalled complexes

P,N-Heterodifunctional ligands by selective Staüdinger reaction of β-substituted vinylazides with (Z)-1,2-bis(diphenylphosphanyl)ethene and formation of cyclometalled complexes of palladium(II) of these ligands — crystal and molecular structure of a new chiral cyclometallaphosphoraniminophosphane of palladium(II), 329

Cyclopalladation

Platinum(II) and palladium(II) compounds derived from [(η^5 - C_5H_5)Fe{(η^5 - C_5H_4)-CH=N-CH₂-CH₂-OH}], 87

Cyclopropane

Synthesis and some chemical properties of 3-ferrocenyl-3-isopropylcyclopropene: 3-ferrocenyl-3-isopropylstructures of cyclopropene and its adducts with 1,3-diphenylisobenzofuran, 254

Cyclopropene

Synthesis and some chemical properties of 3-ferrocenyl-3-isopropylcyclopropene: 3-ferrocenyl-3-isopropylstructures of cyclopropene and its adducts with 1,3-diphenylisobenzofuran, 254

Cyclosilanes

On some reactions of undecamethylcyclohexasilanyl-substituted silanes, 202

Density-functional calculations

A theoretical study of gas-phase and solid-state Hg(CF₃)₂, 374 Deprotonation

Synthesis and some chemical properties of 3-ferrocenyl-3-isopropylcyclopropene: 3-ferrocenyl-3-isopropylstructures of cyclopropene and its adducts with 1,3-diphenylisobenzofuran, 254

Dichlorophosphines

2-Thioanisyldichlorophosphine, new starting material for the preparation of multidentate phosphine ligands: syntheses and characterization of derivatives of 2-anisyl- and 2-thioanisyldichlorophosphines, 235

Diene adduct

Synthesis and some chemical properties of 3-ferrocenyl-3-isopropylcyclopropene: 3-ferrocenyl-3-isopropylstructures of cyclopropene and its adducts with 1,3-diphenylisobenzofuran, 254

Diethynylbenzene

Alkyne insertion reactions of $[RuH(\kappa^2-S_2CNEt_2)(CO)(PPh_3)_2]$: synthesis of alkenyl, alkynyl and enynyl complexes, 20

Dinuclear

Synthesis and crystal structure of $[U(\eta-C_8H_8)]_2[\mu-\eta^4:\eta^4-HN(CH_2)_3N(CH_2)_2N(CH_2)_3NH]$, a dinuclear compound with a bridging tetra-amide ligand, 313

Diphenylamide complex

Heteroleptic diphenylamido complexes of ytterbium: syntheses and molecular structures of $(MeC_5H_4)_2YbNPh_2(THF)$ and $(C_5Me_5)_2YbNPh_2$, 359

Diphosphine

Synthesis, characterization and solution studies on heteronuclear iron–copper clusters containing diphosphine ligands: crystal structure of the dicluster [{Fe}_2(\mu\text{-CO})(CO)_6(\mu\text{-PPh}_2)Cu}_2(dppp)], 215

1,2-Disilacyclobutanes

Head-to-head versus head-to-tail dimerizations of transient silenes
— the generation and dimerization behavior of 2-(2-dimethylaminoaryl)-1,1-bis(trimethylsilyl)silenes, 395

1,3-Disilacyclobutanes

Head-to-head versus head-to-tail dimerizations of transient silenes
 the generation and dimerization behavior of 2-(2-dimethylaminoaryl)-1,1-bis(trimethylsilyl)silenes, 395

Dithiophosphates

Synthesis, characterization and X-ray structure of stannocanes substituted with a cyclic dithiophosphate ligand $X(CH_2-CH_2S)_2Sn^nBu$ [$S_2P(OCH_2C(Et_2)CH_2O)$], (X=O,~S): a study about the conformational tendencies and the relationship with the anomeric effect of the stannocane rings, 160

Diverse reactivity

Diverse reactivity of rhodium β-(tetraphenyl)tetraphenyl porphyrin chlorides with benzonitrile: formation of Rh porphyrin arene and imine complexes, 80

Electron transfer

Activation of a coordinated alkyne by electron transfer: crystal structures of $[Pd{PPh_2CH=C(Bu')NN=C(Bu')CH_2PPh_2}-{C(CO_2Me)=CH(CO_2Me)}]$ and $[Pd{(Z,Z)PPh_2CH_2C(Bu')=NN=C(Bu')CH_2PPh_2}{C(CO_2Me)}]$, 318

Electrophilic aromatic substitution

Bromination and nitration reactions of metallated (Ru and Os) multiaromatic ligands and crystal structures of selected products, 262

Electrophilic substitution

Interaction of bis(trimethylsilyl)acetylene complex of titanocene with tris(pentafluorophenyl)borane. Synthesis and structure of a new type of zwitterionic metallocene (η^5 -C₅H₅){ η^5 -[C₅H₄B(C₆F₅)₃]}Ti, 243

Emission spectroscopy

Crystal structures and spectroscopic properties of platina-β-diketones — a new mode of stacking in platinum complexes, 286

Enantiomeric purity

Use of *cis*-dichloro[(S)-α-methylbenzylamine](ethylene)Pt(II) as a chiral derivatizing agent for the determination by ¹⁹⁵Pt-NMR of the enantiomeric composition of unsaturated ethers or alcohols having a quaternary chiral carbon atom, 174

Enynyl

Alkyne insertion reactions of $[RuH(\kappa^2-S_2CNEt_2)(CO)(PPh_3)_2]$: synthesis of alkenyl, alkynyl and enynyl complexes, 20

Ferrocene

New 1,1'- or 1,2- or 1,3-bis(diphenylphosphino)ferrocenes, 365 Synthesis and properties of some novel ferrocene macrocyclic dioxopolyamines, 42

Synthesis and some chemical properties of 3-ferrocenyl-3-isopropylcyclopropene: 3-ferrocenyl-3-isopropylstructures of cyclopropene and its adducts with 1,3-diphenylisobenzofuran, 254

Ferrocenyl

Synthesis, structure and coordination chemistry of mono- and bis-heterocyclic-ferrocenyl derivatives, 248

Ferrocenyl ligand

Platinum(II) and palladium(II) compounds derived from [(η^5 -C₅H₅)Fe{(η^5 -C₅H₄)-CH=N-CH₂-CH₂-OH}], 87

Ferrocenyl ligands

Ferrocenyl ligands in mixed valence high-oxidation state rhenium complexes, 108

β-Ferrocenylvinylazide

P,N-Heterodifunctional ligands by selective Staüdinger reaction of β-substituted vinylazides with (Z)-1,2-bis(diphenylphosphanyl)ethene and formation of cyclometalled complexes of palladium(II) of these ligands — crystal and molecular structure of a new chiral cyclometallaphosphoraniminophosphane of palladium(II), 329

Fluoroalkylated carbenes

Fluoroalkylated N-heterocyclic carbene complexes of palladium,

Fluorophenyl α-amino acids

Water soluble phosphines: Part XIII. Chiral phosphine ligands with amino acid moieties, 116

Fluorophenyl boron compounds

(Fluoroorgano)fluoroboranes and -fluoroborates I: synthesis and spectroscopic characterization of potassium fluoroaryltrifluoroborates and fluoroaryldifluoroboranes, 127

Fluxiona

Isolation of new polynuclear aluminium amides; trinuclear [Al-Cl(MeNCH₂CH₂NMe)₂(Al(NMe₂)Cl)(Al(NMe₂)₂)] and fluxional adamantane-like [Al₄Cl₂(NMe)₆(NMe)O], 36

Germaethene

Addukte der Ethene Me₂E=C(SiMe₃)₂ (E = Si, Ge, Sn) mit LiR und RN₃: Wie rasch bilden sie sich?, 304

Dimere der Ethene Me₂E=C(SiMe₃)₂ (E = Si, Ge, Sn): Auf welchem Wege entstehen sie aus Me₂EX-CM(SiMe₃)₂? Wie sind sie strukturiert?, 292

Germatranes

Preparation of germatranyl triflates: reactions of germatranes $N(CH_2CHRO)_3X$ (X = Br, OTf, OSiMe₃; R = H, Me) with lithium reagents, 387

Gold

Synthesis, characterization and solution studies on heteronuclear iron–copper clusters containing diphosphine ligands: crystal structure of the dicluster [{Fe}_2(\mu-CO)(CO)_6(\mu-PPh_2)-Cu}_2(dppp)], 215

Half-sandwich complex

Non-bridged amido cyclopentadienyl complexes of titanium: synthesis, characterization, and olefin polymerization catalysis, 179

Haloalkyls

Synthesis and crystal structures of the monomeric organotellurium(IV) trihalides: *trans*-2-ethoxy-cyclohexyl-tellurium(IV) trichloride, trichloro(2-chlorobicyclo[2.2.1]hept-7-yl)-λ⁴-tellurane, and mesityltellurium(IV) tribromide, 49

Haloaryls

Synthesis and crystal structures of the monomeric organotellurium(IV) trihalides: *trans*-2-ethoxy-cyclohexyl-tellurium(IV) trichloride, trichloro(2-chlorobicyclo[2.2.1]hept-7-yl)-λ⁴-tellurane, and mesityltellurium(IV) tribromide, 49

Heteroarylferrocene

Conversion of tributylstannylferrocene to a variety of heteroaryl ferrocenes, 348

Heteroary ltrimethyl tins

Organotin mediated nitration in heteroaromatic series using tetranitromethane or dinitrogen tetroxide, 187

Heterocyclic

Synthesis, structure and coordination chemistry of mono- and bisheterocyclic-ferrocenyl derivatives, 248

Heterocyclic bromides

Conversion of tributylstannylferrocene to a variety of heteroaryl ferrocenes, 348

Heterometallic

Synthesis, characterization and solution studies on heteronuclear iron–copper clusters containing diphosphine ligands: crystal structure of the dicluster [$\{Fe_2(\mu\text{-CO})(CO)_6(\mu\text{-PPh}_2)Cu\}_2(dppp)\}$], 215

Heteronuclear coordination polymer

Cyano-bridged extended heteronuclear supramolecular architectures with hexacyanoferrates(II) as building blocks, 63

Heteropolyoxometalates

Monoorganotin-polyoxometal compounds: Part 1. Synthesis and crystal structure of [(PrSn)₁₁(V^{IV}O)O₁₄(OH)₆]Cl·2DMF·H₂O. The first example in a series of monoorganotin-poly-

oxometal compounds with icosahedral metal arrangement and various contents of tin and vanadium, 381

Hg(CF₃)₂ compound

A theoretical study of gas-phase and solid-state $Hg(CF_3)_2$, 374 Honeycomb structure

Cyano-bridged extended heteronuclear supramolecular architectures with hexacyanoferrates(II) as building blocks, 63

Hydride

Alkyne insertion reactions of [RuH(κ²-S₂CNEt₂)(CO)(PPh₃)₂]: synthesis of alkenyl, alkynyl and enynyl complexes, 20

Hydrogen bond

Cyano-bridged extended heteronuclear supramolecular architectures with hexacyanoferrates(II) as building blocks, 63

Syntheses of cationic four-coordinated aluminum complexes: counter-ion induced aggregation through the N-H···I hydrogen bonds, 13

Imido

Syntheses of titanium μ -arylimido and μ -pyridylimido complexes bearing (un)substituted cyclopentadienyl ligand, 339

Indirect nuclear spin coupling constants

Implementation of the IPPP-CLOPPA-INDO/S method for the study of indirect nuclear spin coupling constants and its application to molecules containing tin nuclei, 193

Indium antimonide

Preparation of [Et₂InSb(SiMe₃)₂]₃; a trimeric single-source precursor to indium antimonide, 182

Insertionen

Addukte der Ethene $Me_2E=C(SiMe_3)_2$ (E=Si, Ge, Sn) mit LiR und RN $_3$: Wie rasch bilden sie sich?, 304

Dimere der Ethene Me₂E=C(SiMe₃)₂ (E = Si, Ge, Sn): Auf welchem Wege entstehen sie aus Me₂EX-CM(SiMe₃)₂? Wie sind sie strukturiert?, 292

Intramolecular coordination

Syntheses of titanium μ-arylimido and μ-pyridylimido complexes bearing (un)substituted cyclopentadienyl ligand, 339

Intramolecular transformation

Synthesis and some chemical properties of 3-ferrocenyl-3-isopropylcyclopropene: 3-ferrocenyl-3-isopropylstructures of cyclopropene and its adducts with 1,3-diphenylisobenzofuran, 254

Ionization potentials

A theoretical study of gas-phase and solid-state Hg(CF₃)₂, 374 IPPP-CLOPPA-INDO/S

Implementation of the IPPP-CLOPPA-INDO/S method for the study of indirect nuclear spin coupling constants and its application to molecules containing tin nuclei, 193

Iron

Ferrocenyl ligands in mixed valence high-oxidation state rhenium complexes, 108

Ironpentacarbonyl

Carbonyl insertion into zirconium—nitrogen bonds; synthesis and X-ray structure of a carbene complex composed of $[Zr(NMe_2)_4]_2$ and three $Fe(CO)_5$ units containing $Fe \rightarrow Zr$ donor—acceptor interactions, 403

Isocyanide

Development of a T-joint for covalent molecular construction based on 2,2'-bipyridine and phenanthroline isocyanide metal complexes, 55

Ligand

The synthesis and characterisation of bis(phenylpyridylphosphino)ethane, 103

Lithium reagents

Preparation of germatranyl triflates: reactions of germatranes $N(CH_2CHRO)_3X$ (X = Br, OTf, OSiMe₃; R = H, Me) with lithium reagents, 387

Macrocyclic dioxopolyamine

Synthesis and properties of some novel ferrocene macrocyclic dioxopolyamines, 42

Manganese compounds

Geometrical and electronic structures of the acetyl complex $Re(bpy)(CO)_3(COCH_3)$ and of $[M(bpy)(CO)_4](OTf)$, M = Mn.Re, 136

Mesityl

Mesitylpseudohalogermanes $Mes_2Ge(CN)_2$ and Mes_3GeX ($X = CN, NCS, N_3, NCO$ and OH; Mes = 2,4,6-trimethylphenyl): syntheses, crystal and molecular structures, 276

Metal amides

Carbonyl insertion into zirconium-nitrogen bonds; synthesis and X-ray structure of a carbene complex composed of $[Zr(NMe_2)_4]_2$ and three $Fe(CO)_5$ units containing $Fe \rightarrow Zr$ donor-acceptor interactions, 403

Metal complexes

Development of a T-joint for covalent molecular construction based on 2,2'-bipyridine and phenanthroline isocyanide metal complexes, 55

Metallocane conformation

Synthesis, characterization and X-ray structure of stannocanes substituted with a cyclic dithiophosphate ligand $X(CH_2CH_2S)_2Sn^{\prime\prime}Bu~[S_2P(OCH_2C(Et_2)CH_2O)],~(X=O,~S);$ a study about the conformational tendencies and the relationship with the anomeric effect of the stannocane rings, 160

α-Methylated

Water soluble phosphines: Part XIII. Chiral phosphine ligands with amino acid moieties, 116

Molecular conformation

Synthesis and some chemical properties of 3-ferrocenyl-3-isopropylcyclopropene: 3-ferrocenyl-3-isopropylstructures of cyclopropene and its adducts with 1,3-diphenylisobenzofuran, 254

Molecular structures

Mesitylpseudohalogermanes $\mathrm{Mes_2Ge(CN)_2}$ and $\mathrm{Mes_3GeX}$ (X = CN, NCS, N₃, NCO and OH; Mes = 2,4,6-trimethylphenyl): syntheses, crystal and molecular structures, 276 Molybdenum

Development of a T-joint for covalent molecular construction based on 2,2'-bipyridine and phenanthroline isocyanide metal complexes, 55

Multifunctional ligand

Syntheses, characterization and structures of chromium group carbonyl complexes containing a multifunctional Ph₂P(o-C₆H₄)CH=N(CH₂)₂(o-C₆H₄N) ligand, 353

Nanocrystalline

Preparation of [Et₂InSb(SiMe₃)₂]₃; a trimeric single-source precursor to indium antimonide, 182

Niobium

Synthesis and reactivity of new oxo alkyl or oxo acyl niobocene complexes and crystal structure of $Cp_2'Nb(=O)(OC(O)CF_3)$ $(Cp' = \eta^5 - C_5H_4SiMe_3)$, 167

Nitration

Organotin mediated nitration in heteroaromatic series using tetranitromethane or dinitrogen tetroxide, 187

2-Nitrobenzo[b]furan

Organotin mediated nitration in heteroaromatic series using tetranitromethane or dinitrogen tetroxide, 187

2-Nitrobenzo[b]thiophene

Organotin mediated nitration in heteroaromatic series using tetranitromethane or dinitrogen tetroxide, 187

2-Nitroindoles

Organotin mediated nitration in heteroaromatic series using tetranitromethane or dinitrogen tetroxide, 187 2-Nitropyridine

Organotin mediated nitration in heteroaromatic series using tetranitromethane or dinitrogen tetroxide, 187

NMR

(Fluoroorgano)fluoroboranes and -fluoroborates I: synthesis and spectroscopic characterization of potassium fluoroaryltrifluoroborates and fluoroaryldifluoroboranes, 127

On some reactions of undecamethylcyclohexasilanyl-substituted silanes, 202

Synthesis and decomposition of bis(alkoxyethynyl)dimethyltin, 211

Use of *cis*-dichloro[(*S*)-α-methylbenzylamine](ethylene)Pt(II) as a chiral derivatizing agent for the determination by ¹⁹⁵Pt-NMR of the enantiomeric composition of unsaturated ethers or alcohols having a quaternary chiral carbon atom,

Nucleophilic phosphination

Water soluble phosphines: Part XIII. Chiral phosphine ligands with amino acid moieties, 116

Organogermanium

Mesitylpseudohalogermanes $Mes_2Ge(CN)_2$ and Mes_3GeX (X = CN, NCS, N_3 , NCO and OH; Mes = 2,4,6-trimethylphenyl): syntheses, crystal and molecular structures, 276

ortho-Carborane-dithiolato complexes

The 16-electron dithiolene complexes $(p\text{-}cymene)M[S_2C_2(B_{10}H_{10})]$ (M=Ru, Os) containing both $\eta^6\text{-}(p\text{-}cymene)$ and $\eta^2\text{-}(or\text{-}tho\text{-}carborane\text{-}dithiolate)$: adduct formation with Lewis bases, and X-ray crystal structures of (p-cymene)-Ru[S_2C_2(B_{10}H_{10})](L) $(L=PPh_3)$ and $\{(p\text{-}cymene)$ -Ru[S_2C_2(B_{10}H_{10})]\}_2(μ -LL) $(LL=Ph_2PCH_2CH_2PPh_2$ and N_2H_4), 142

Orthometallation

Preparation of some dinuclear rhodium complexes with the orthometallated ligand $[2,6\text{-}(PPh_2CH_2)_2C_6H_3]^-$ and their catalytic activity for polymerization of phenylacetylene, 228

ortho-Metallation

Bromination and nitration reactions of metallated (Ru and Os) multiaromatic ligands and crystal structures of selected products, 262

Osmium

Bromination and nitration reactions of metallated (Ru and Os) multiaromatic ligands and crystal structures of selected products, 262

The 16-electron dithiolene complexes $(p\text{-}cymene)M[S_2C_2(B_{10}H_{10})]$ (M=Ru, Os) containing both $\eta^6\text{-}(p\text{-}cymene)$ and $\eta^2\text{-}(or\text{-}tho\text{-}carborane\text{-}dithiolate)$: adduct formation with Lewis bases, and X-ray crystal structures of (p-cymene)-Ru[S₂C₂(B₁₀H₁₀)](L) $(L=PPh_3)$ and $\{(p\text{-}cymene)$ Ru-[S₂C₂(B₁₀H₁₀)] $\}_2(\mu\text{-}LL)$ $(LL=Ph_2PCH_2CH_2PPh_2)$ and N_2H_4 , 142

Palladium

Platinum(II) and palladium(II) compounds derived from [$(\eta^5-C_5H_5)Fe\{(\eta^5-C_5H_4)-CH=N-CH_2-CH_3-OH\}$], 87

P,N-Heterodifunctional ligands by selective Staüdinger reaction of β-substituted vinylazides with (Z)-1,2-bis(diphenylphosphanyl)ethene and formation of cyclometalled complexes of palladium(II) of these ligands — crystal and molecular structure of a new chiral cyclometallaphosphoraniminophosphane of palladium(II), 329

Reactivity of cyclometallated semicarbazone complexes of Pd(II): crystal and molecular structures of $[Pd\{C_6H_4C(Et)=NN(H)C(=O)NH_2\}(PPh_3)][CIO_4]$ and $[Pd\{C_6H_4C(Et)=NN(H)C(=O)NH_2\}\{(Ph_2PCH_2CH_2)_2PPh-P,P,P\}][CI], 1$

Synthesis of the diphenylacetylene-based, tetra-amine ligand 1,2-bis(3,5-bis[(dimethylamino)methyl]phenyl)acetylene by palladium-catalysed cross-coupling: isolation and crystal structure of the catalyst *trans*-(3,5-bis[(dimethylamino)methyl]phenyl)bis(triphenylphosphine)palladium(II) iodide, 24

Synthesis, structure and coordination chemistry of mono- and bis-heterocyclic-ferrocenyl derivatives, 248

Palladium complexes

Fluoroalkylated N-heterocyclic carbene complexes of palladium, 409

Palladium(II)

Influence of phenyl ring substituents in the cyclometallation of Schiff base ligands: crystal and molecular structures of $[Pd-\{3,4-(OCH_2O)C_6H_2C(H)=N(Cy)-C2,N\}(\mu-O_2CMe)]_2 \\ and \qquad [Pd-\{3,4-(OCH_2CH_2O)C_6H_2C(H)=N(Cy)-C6,N\}(\mu-O_2CMe)]_2, \ 71$

p-Cymene complexes

The 16-electron dithiolene complexes $(p\text{-}cymene)M[S_2C_2(B_{10}H_{10})]$ (M=Ru, Os) containing both $\eta^6\text{-}(p\text{-}cymene)$ and $\eta^2\text{-}(or\text{-}tho\text{-}carborane\text{-}dithiolate)$: adduct formation with Lewis bases, and X-ray crystal structures of $(p\text{-}cymene)Ru=[S_2C_2(B_{10}H_{10})](L)$ $(L=PPh_3)$ and $\{(p\text{-}cymene)Ru=[S_2C_2(B_{10}H_{10})]\}_2(\mu\text{-}LL)$ $(LL=Ph_2PCH_2CH_2PPh_2)$ and $N_2H_4)$, 142

Phenanthroline

Development of a T-joint for covalent molecular construction based on 2,2'-bipyridine and phenanthroline isocyanide metal complexes, 55

Phosphine

New 1,1'- or 1,2- or 1,3-bis(diphenylphosphino)ferrocenes, 365
Preparation of some dinuclear rhodium complexes with the orthometallated ligand [2,6-(PPh₂CH₂)₂C₆H₃]⁻ and their catalytic activity for polymerization of phenylacetylene, 228

Phosphine derivatives

Water soluble phosphines: Part XIII. Chiral phosphine ligands with amino acid moieties, 116

Phosphine ligands

2-Thioanisyldichlorophosphine, new starting material for the preparation of multidentate phosphine ligands: syntheses and characterization of derivatives of 2-anisyl- and 2-thioanisyldichlorophosphines, 235

Platinum

Crystal structures and spectroscopic properties of platina-β-diketones — a new mode of stacking in platinum complexes, 286

Platinum(II) and palladium(II) compounds derived from [$(\eta^5-C_5H_5)Fe\{(\eta^5-C_5H_4)-CH=N-CH_2-CH_2-OH\}$], 87

Platinum(II)

Influence of phenyl ring substituents in the cyclometallation of Schiff base ligands: crystal and molecular structures of $[Pd-\{3,4-(OCH_2O)C_6H_2C(H)=N(Cy)-C2,N\}(\mu-O_2CMe)]_2\\ and \qquad [Pd-\{3,4-(OCH_2CH_2O)C_6H_2C(H)=N(Cy)-C6,N\}(\mu-O_2CMe)]_2,\ 71$

P,N-Difunctional ligands

P,N-Heterodifunctional ligands by selective Staüdinger reaction of β-substituted vinylazides with (Z)-1,2-bis(diphenylphosphanyl)ethene and formation of cyclometalled complexes of palladium(II) of these ligands — crystal and molecular structure of a new chiral cyclometallaphosphoraniminophosphane of palladium(II), 329

³¹P-NMR spectroscopy

2-Thioanisyldichlorophosphine, new starting material for the preparation of multidentate phosphine ligands: syntheses and characterization of derivatives of 2-anisyl- and 2-thioanisyldichlorophosphines, 235

Polymerization acetylene

Preparation of some dinuclear rhodium complexes with the orthometallated ligand [2,6-(PPh₂CH₂)₂C₆H₃] and their catalytic activity for polymerization of phenylacetylene, 228

Polynuclear

Isolation of new polynuclear aluminium amides; trinuclear [Al-Cl(MeNCH₂CH₂NMe)₂(Al(NMe₂)Cl)(Al(NMe₂)₂)] and fluxional adamantane-like [Al₄Cl₂(NMe₂)₆(NMe)O], 36

Precursor

Preparation of [Et₂InSb(SiMe₃)₂]₃; a trimeric single-source precursor to indium antimonide, 182

Propargyl complexes

Reactions of transition-metal η^1 -propargyl complexes with sulfur dioxide and sulfur trioxide: transition-metal-carbon bond cleaving reactions of the cycloadducts which yield 1,2-oxathiole-2-oxides and -2,2-dioxides, 150

Pseudohalides

Mesitylpseudohalogermanes Mes₂Ge(CN)₂ and Mes₃GeX (X = CN, NCS, N₃, NCO and OH; Mes = 2,4,6-trimethylphenyl): syntheses, crystal and molecular structures, 276

Pyridine

The synthesis and characterisation of bis(phenylpyridylphosphino)ethane, 103

Pyridyl

Syntheses of titanium μ-arylimido and μ-pyridylimido complexes bearing (un)substituted cyclopentadienyl ligand, 339

Pyridylphosphines

The synthesis and characterisation of bis(phenylpyridylphosphino)ethane, 103

Rearrangement

Synthesis and some chemical properties of 3-ferrocenyl-3-isopropylcyclopropene: 3-ferrocenyl-3-isopropylstructures of cyclopropene and its adducts with 1,3-diphenylisobenzofuran, 254

Recyclization

Synthesis and some chemical properties of 3-ferrocenyl-3-isopropylcyclopropene: 3-ferrocenyl-3-isopropylstructures of cyclopropene and its adducts with 1,3-diphenylisobenzofuran, 254

Redox process

Activation of a coordinated alkyne by electron transfer: crystal structures of $[Pd{PPh_2CH=C(Bu')NN=C(Bu')CH_2PPh_2}-{C(CO_2Me)=CH(CO_2Me)}]$ and $[Pd{(Z,Z)PPh_2CH_2C(Bu')=NN=C(Bu')CH_2PPh_2}{C(CO_2-Me)=C(CO_2Me)}]$, 318

relative Reaktionsgeschwindigkeiten

Addukte der Ethene $Me_2E=C(SiMe_3)_2$ (E = Si, Ge, Sn) mit LiR und RN₃: Wie rasch bilden sie sich?, 304

Relativistic effects

Implementation of the IPPP-CLOPPA-INDO/S method for the study of indirect nuclear spin coupling constants and its application to molecules containing tin nuclei, 193

Resolution

Water soluble phosphines: Part XIII. Chiral phosphine ligands with amino acid moieties, 116

Rhenium

Development of a T-joint for covalent molecular construction based on 2,2'-bipyridine and phenanthroline isocyanide metal complexes, 55

Ferrocenyl ligands in mixed valence high-oxidation state rhenium complexes, 108

Rhenium compounds

Geometrical and electronic structures of the acetyl complex $Re(bpy)(CO)_3(COCH_3)$ and of $[M(bpy)(CO)_4](OTf)$, $M=Mn,Re,\ 136$

Rhodium

Preparation of some dinuclear rhodium complexes with the orthometallated ligand [2,6-(PPh₂CH₂)₂C₆H₃] ⁻ and their catalytic activity for polymerization of phenylacetylene, 228 Rhodium porphyrin

Diverse reactivity of rhodium β -(tetraphenyl)tetraphenyl porphyrin chlorides with benzonitrile: formation of Rh porphyrin arene and imine complexes, 80

Röntgenstrukturanalysen

Dimere der Ethene Me₂E=C(SiMe₃)₂ (E = Si, Ge, Sn): Auf welchem Wege entstehen sie aus Me₂EX-CM(SiMe₃)₂? Wie sind sie strukturiert?, 292

Ruthenium

Alkyne insertion reactions of [RuH(κ²-S₂CNEt₂)(CO)(PPh₃)₂]: synthesis of alkenyl, alkynyl and enynyl complexes, 20

Bromination and nitration reactions of metallated (Ru and Os) multiaromatic ligands and crystal structures of selected products, 262

Reactions of metalloalkynes: Part 6. Synthesis of open tetrametallic clusters. Reaction of [Ru(CO)₄(ethene)] with ethyne-1,2-diyl compounds. Single crystal X-ray structural determinations of [Ru₄(μ_4 -CC)(η -C₅H₄R)₂(μ -CO)₂(CO)₈] (R = H, Me), 28

The 16-electron dithiolene complexes $(p\text{-}cymene)M[S_2C_2(B_{10}H_{10})]$ (M=Ru,Os) containing both $\eta^6\text{-}(p\text{-}cymene)$ and $\eta^2\text{-}(ortho-carborane-dithiolate)$: adduct formation with Lewis bases, and X-ray crystal structures of $(p\text{-}cymene)Ru-[S_2C_2(B_{10}H_{10})](L)$ $(L=PPh_3)$ and $\{(p\text{-}cymene)Ru-[S_2C_2(B_{10}H_{10})]\}_2(\mu\text{-}LL)$ $(LL=Ph_2PCH_2CH_2PPh_2)$ and N_2H_4 , 142

Schiff bases

Influence of phenyl ring substituents in the cyclometallation of Schiff base ligands: crystal and molecular structures of $[Pd-\{3,4-(OCH_2O)C_6H_2C(H)=N(Cy)-C2,N\}(\mu-O_2CMe)]_2 \\ and \qquad [Pd-\{3,4-(OCH_2CH_2O)C_6H_2C(H)=N(Cy)-C6,N\}(\mu-O_2CMe)]_2, \ 71$

Semicarbazone

Silaethene

Addukte der Ethene Me₂E=C(SiMe₃)₂ (E = Si, Ge, Sn) mit LiR und RN₃: Wie rasch bilden sie sich?, 304

Dimere der Ethene Me₂E=C(SiMe₃)₂ (E = Si, Ge, Sn): Auf welchem Wege entstehen sie aus Me₂EX-CM(SiMe₃)₂? Wie sind sie strukturiert?, 292

Silene dimerization

Head-to-head versus head-to-tail dimerizations of transient silenes
— the generation and dimerization behavior of 2-(2-dimethylaminoaryl)-1,1-bis(trimethylsilyl)silenes, 395

Silenes

Head-to-head versus head-to-tail dimerizations of transient silenes
— the generation and dimerization behavior of 2-(2-dimethylaminoaryl)-1,1-bis(trimethylsilyl)silenes, 395

Silicon

Direct displacement of chlorine or iodine in reactions of (Me₃Si)₃CSiRR'X with metal salts, 222

Head-to-head versus head-to-tail dimerizations of transient silenes
— the generation and dimerization behavior of 2-(2-dimethylaminoaryl)-1,1-bis(trimethylsilyl)silenes, 395

Sonogashira coupling

Synthesis of the diphenylacetylene-based, tetra-amine ligand 1,2-bis(3,5-bis[(dimethylamino)methyl]phenyl)acetylene by palladium-catalysed cross-coupling: isolation and crystal structure of the catalyst *trans*-(3,5-bis[(dimethylamino)-

methyl]phenyl)bis(triphenylphosphine)palladium(II) iodide, 24

Stannaethene

Addukte der Ethene Me₂E=C(SiMe₃)₂ (E = Si, Ge, Sn) mit LiR und RN₃: Wie rasch bilden sie sich?, 304

Dimere der Ethene Me₂E=C(SiMe₃)₂ (E = Si, Ge, Sn): Auf welchem Wege entstehen sie aus Me₂EX-CM(SiMe₃)₂? Wie sind sie strukturiert?, 292

Stannocanes

Synthesis, characterization and X-ray structure of stannocanes substituted with a cyclic dithiophosphate ligand $X(CH_2CH_2S)_2Sn''Bu\ [S_2P(OCH_2C(Et_2)CH_2O)],\ (X=O,\ S)$: a study about the conformational tendencies and the relationship with the anomeric effect of the stannocane rings, 160

Steric Hindrance

Direct displacement of chlorine or iodine in reactions of (Me₃Si)₃CSiRR'X with metal salts, 222

Stille coupling

Conversion of tributylstannylferrocene to a variety of heteroaryl ferrocenes, 348

Styrene polymerization

Non-bridged amido cyclopentadienyl complexes of titanium: synthesis, characterization, and olefin polymerization catalysis, 179

Sulfur heterocycles

Reactions of transition-metal η^1 -propargyl complexes with sulfur dioxide and sulfur trioxide: transition-metal-carbon bond cleaving reactions of the cycloadducts which yield 1,2-oxathiole-2-oxides and -2,2-dioxides, 150

Syntheses

Mesitylpseudohalogermanes $Mes_2Ge(CN)_2$ and Mes_3GeX (X = CN, NCS, N₃, NCO and OH; Mes = 2,4,6-trimethylphenyl): syntheses, crystal and molecular structures, 276

Synthesis

Heteroleptic diphenylamido complexes of ytterbium: syntheses and molecular structures of $(MeC_5H_4)_2YbNPh_2(THF)$ and $(C_5Me_5)_2YbNPh_2$, 359

Synthesis and properties of some novel ferrocene macrocyclic dioxopolyamines, 42

Tellurium

Synthesis and crystal structures of the monomeric organotellurium (IV) trihalides: trans-2-ethoxy-cyclohexyl-tellurium (IV) trichloride, trichloro(2-chlorobicyclo[2.2.1]hept-7-yl)- λ^4 -tellurane, and mesityltellurium (IV) tribromide, 49

Tetra-amide

Synthesis and crystal structure of $[U(\eta-C_8H_8)]_2[\mu-\eta^4:\eta^4-HN(CH_2)_3N(CH_2)_2N(CH_2)_3NH]$, a dinuclear compound with a bridging tetra-amide ligand, 313

Tetraamine ligand

Synthesis of the diphenylacetylene-based, tetra-amine ligand 1,2-bis(3,5-bis[(dimethylamino)methyl]phenyl)acetylene by palladium-catalysed cross-coupling: isolation and crystal structure of the catalyst *trans-*(3,5-bis[(dimethylamino)methyl]phenyl)bis(triphenylphosphine)palladium(II) iodide, 24

Tetranuclear

Reactions of metalloalkynes: Part 6. Synthesis of open tetrametallic clusters. Reaction of [Ru(CO)₄(ethene)] with ethyne-1,2-diyl compounds. Single crystal X-ray structural determinations of [Ru₄(μ_4 -CC)(η -C₅H₄R)₂(μ -CO)₂(CO)₈] (R = H, Me), 28

Tin

Monoorganotin-polyoxometal compounds: Part 1. Synthesis and crystal structure of [('PrSn)₁₁(V^{IV}O)O₁₄(OH)₆]Cl·2DMF·H₂O. The first example in a series of monoorganotin-polyoxometal compounds with icosahedral metal arrangement and various contents of tin and vanadium, 381

Synthesis and decomposition of bis(alkoxyethynyl)dimethyltin,

Titanium

Interaction of bis(trimethylsilyl)acetylene complex of titanocene with tris(pentafluorophenyl)borane. Synthesis and structure of a new type of zwitterionic metallocene $(\eta^5-C_5H_5)\{\eta^5-[C_5H_4B(C_6F_5)_3]\}Ti$, 243

Non-bridged amido cyclopentadienyl complexes of titanium: synthesis, characterization, and olefin polymerization catalysis,

Syntheses of titanium μ-arylimido and μ-pyridylimido complexes bearing (un)substituted cyclopentadienyl ligand, 339

trans-Metallation

Bromination and nitration reactions of metallated (Ru and Os) multiaromatic ligands and crystal structures of selected products, 262

Tributylstannylferrocene

Conversion of tributylstannylferrocene to a variety of heteroaryl ferrocenes, 348

Trimer

Preparation of [Et₂InSb(SiMe₃)₂]₃; a trimeric single-source precursor to indium antimonide, 182

Tris(pentafluorophenyl)borane

Interaction of bis(trimethylsilyl)acetylene complex of titanocene with tris(pentafluorophenyl)borane. Synthesis and structure of a new type of zwitterionic metallocene (η^5 -C₅H₅){ η^5 -[C₅H₄B(C₆F₅)₃]}Ti, 243

Trisyl

Direct displacement of chlorine or iodine in reactions of (Me₃Si)₃CSiRR'X with metal salts, 222

Unsaturated alcohols

Use of *cis*-dichloro[(S)-α-methylbenzylamine](ethylene)Pt(II) as a chiral derivatizing agent for the determination by ¹⁹⁵Pt-NMR of the enantiomeric composition of unsaturated ethers or alcohols having a quaternary chiral carbon atom, 174

Unsaturated ethers

Use of *cis*-dichloro[(S)-α-methylbenzylamine](ethylene)Pt(II) as a chiral derivatizing agent for the determination by ¹⁹⁵Pt-NMR of the enantiomeric composition of unsaturated ethers or alcohols having a quaternary chiral carbon atom, 174

Uranium

Synthesis and crystal structure of $[U(\eta-C_8H_8)]_2[\mu-\eta^4:\eta^4-HN(CH_2)_3N(CH_2)_2N(CH_2)_3NH]$, a dinuclear compound with a bridging tetra-amide ligand, 313

UV-vis spectrometry

Synthesis and properties of some novel ferrocene macrocyclic dioxopolyamines, 42

Vanadium

Monoorganotin–polyoxometal compounds: Part 1. Synthesis and crystal structure of [(PrSn)₁₁(V^{IV}O)O₁₄(OH)₆]Cl·2DMF· H₂O. The first example in a series of monoorganotin–polyoxometal compounds with icosahedral metal arrangement and various contents of tin and vanadium, 381

X-ray

Synthesis of the diphenylacetylene-based, tetra-amine ligand 1,2-bis(3,5-bis[(dimethylamino)methyl]phenyl)acetylene by palladium-catalysed cross-coupling: isolation and crystal structure of the catalyst *trans*-(3,5-bis[(dimethylamino)methyl]phenyl)bis(triphenylphosphine)palladium(II) iodide, 24

The 16-electron dithiolene complexes $(p\text{-}cymene)M[S_2C_2(B_{10}H_{10})]$ (M = Ru, Os) containing both η^6 -(p-cymene) and η^2 -(ortho-carborane-dithiolate): adduct formation with Lewis bases, and X-ray crystal structures of (p-cymene)Ru-[S₂C₂(B₁₀H₁₀)](L) (L = PPh₃) and {(p-cymene)Ru-[S₂C₂(B₁₀H₁₀)]}₂(μ -LL) (LL = Ph₂PCH₂CH₂PPh₂ and N₂H₄), 142

X-ray structure

Development of a T-joint for covalent molecular construction based on 2,2'-bipyridine and phenanthroline isocyanide metal complexes, 55

Heteroleptic diphenylamido complexes of ytterbium: syntheses and molecular structures of $(MeC_5H_4)_2YbNPh_2(THF)$ and $(C_5Me_5)_2YbNPh_2$, 359

Interaction of bis(trimethylsilyl)acetylene complex of titanocene with tris(pentafluorophenyl)borane. Synthesis and structure of a new type of zwitterionic metallocene $(\eta^5-C_5H_5)\{\eta^5-[C_5H_4B(C_6F_5)_3]\}$ Ti, 243

On some reactions of undecamethylcyclohexasilanyl-substituted silanes, 202

Synthesis and crystal structures of the monomeric organotellurium (IV) trihalides: trans-2-ethoxy-cyclohexyl-tellurium (IV) trichloride, trichloro(2-chlorobicyclo[2.2.1]hept-7-yl)- λ^4 -tellurane, and mesityltellurium (IV) tribromide, 49

Synthesis, characterization and X-ray structure of stannocanes substituted with a cyclic dithiophosphate ligand $X(CH_2z)$ $CH_2S)_2Sn^nBu$ $[S_2P(OCH_2C(Et_2)CH_2O)]$, (X=O, S): a study about the conformational tendencies and the relationship with the anomeric effect of the stannocane rings, 160

X-ray structure analysis

P,N-Heterodifunctional ligands by selective Staüdinger reaction of β-substituted vinylazides with (Z)-1,2-bis(diphenylphosphanyl)ethene and formation of cyclometalled complexes of palladium(II) of these ligands — crystal and molecular structure of a new chiral cyclometallaphosphoraniminophosphane of palladium(II), 329

X-ray structures

Bromination and nitration reactions of metallated (Ru and Os) multiaromatic ligands and crystal structures of selected products, 262

Fluoroalkylated N-heterocyclic carbene complexes of palladium, 409

Water soluble phosphines: Part XIII. Chiral phosphine ligands with amino acid moieties, 116

Ytterbocene amides

Heteroleptic diphenylamido complexes of ytterbium: syntheses and molecular structures of (MeC₅H₄)₂YbNPh₂(THF) and (C₅Me₅)₂YbNPh₂, 359

(Z)-1,2-bis(Diphenylphosphanyl)ethene

P,N-Heterodifunctional ligands by selective Staüdinger reaction of β-substituted vinylazides with (Z)-1,2-bis(diphenylphosphanyl)ethene and formation of cyclometalled complexes of palladium(II) of these ligands — crystal and molecular structure of a new chiral cyclometallaphosphoraniminophosphane of palladium(II), 329

Zerovalent complexes

Activation of a coordinated alkyne by electron transfer: crystal structures of $[Pd{PPh2CH=C(Bu')NN=C(Bu')CH_2PPh_2}-{C(CO_2Me)=CH(CO_2Me)}]$ and $[Pd{(Z,Z)PPh_2CH_2C(Bu')=NN=C(Bu')CH_2PPh_2}{C(CO_2-Me)=C(CO_2Me)}]$, 318

Zirconium

Carbonyl insertion into zirconium-nitrogen bonds; synthesis and X-ray structure of a carbene complex composed of $[Zr(NMe_2)_4]_2$ and three $Fe(CO)_5$ units containing $Fe \rightarrow Zr$ donor-acceptor interactions, 403

Zirconium-iron interaction

Carbonyl insertion into zirconium-nitrogen bonds; synthesis and X-ray structure of a carbene complex composed of $[Zr(NMe_2)_4]_2$ and three Fe(CO)₅ units containing Fe \rightarrow Zr donor-acceptor interactions, 403

Zwitterionic metallocenes

Interaction of bis(trimethylsilyl)acetylene complex of titanocene with tris(pentafluorophenyl)borane. Synthesis and structure of a new type of zwitterionic metallocene $(\eta^5-C_5H_5)\{\eta^5-[C_5H_4B(C_6F_5)_3]\}$ Ti, 243