



Journal of Organo metallic Chemistry

Journal of Organometallic Chemistry 683 (2003) 437-442

www.elsevier.com/locate/jorganchem

Subject Index of Volume 683

Acenaphthylene

The activation and transformations of acenaphthylene by osmium carbonyl cluster complexes, 421

Acenapthyne

The activation and transformations of acenaphthylene by osmium carbonyl cluster complexes, 421

Acetylide

Organometallic chemistry at the edge of polycyclic aromatic hydrocarbons, 288

Synthesis and crystallographic characterization of a 'palladadehydrobenzo[19]annulene', 430

Alkeny

Synthesis of [TpRu(CO)(PPh₃)]₂(μ -CH=CH-CH=CH-C₆H₄-CH =CH-CH=CH) from Wittig reactions, 331

Alkyl

Synthesis of dialkyl, diaryl and metallacyclic complexes of Ni and Pd containing pyridine, α -diimines and other nitrogen ligands: Crystal structures of the complexes cis-NiR₂py₂ (R = benzyl, mesityl), 220

Titanium and zirconium chloro, oxo and alkyl derivatives containing silyl-cyclopentadienyl ligands. Synthesis and characterisation. 70

Alkyl complexes

Synthesis, structure and reactivity of new yttrium bis(dimethylsilyl)amido and bis(trimethylsilyl)methyl complexes of a tetradentate bis(phenoxide) ligand, 131

Alkylmagnesium

Neodymium alk(aryl)oxides—dialkylmagnesium systems for butadiene polymerization and copolymerization with styrene and glycidyl methacrylate, 44

Alkynes

New carbon-rich organometallic architectures based on cyclobutadienecyclopentadienylcobalt and ferrocene modules, 269

Alkvnvlation

Further studies of tetrakis(N,N'-dialkylbenzamidinato)diruthenium(III) chloro and alkynyl compounds: molecular engineering of metallayne monomers, 388

Alkynyl complexes

Carbon-rich organometallic materials derived from 4-ethynylphenylferrocene, 341

Using ligand exchange reactions to control the coordination environment of Pt(II) acetylide complexes: applications to conjugated metallacyclynes, 379

All-carbon chain

Chemistry of the 1,3,5,7-octatetraynediyl carbon rod end-capped by two electron-rich $(\eta^5-C_5Me_5)(\eta^2-dppe)$ Fe groups, 368

Allenylidene complexes

A new method for the preparation of N-stabilized allenylidene complexes of chromium and tungsten, 301

Allyl

Group 4 metallocene complexes incorporating vinyl or allyl substituted ansa ligands. X-Ray crystal structures of [Zr{Me(CH₂=CH)Si(η^5 -C₅Me₄)₂}Cl₂], [Zr{Me(CH₂=CHCH₂)Si(η^5 -C₅H₄)₂}Cl₂] and [Zr{Me(CH₂=CHCH₂)Si(η^5 -ChCH₂)Si(η^5

C_5Me_4)(η^5 - C_5H_4)}Cl₂], 11

π -Allyl

Preparation, structure, and dynamics of a nickel π -allyl cyanide complex, 77

Allv

Homoleptic allyl complexes of chromium with trimethylsilylated ligands. Formation and molecular structure of {[1-(Si-Me₃)C₃H₄]₂Cr}₂, [1,3-(SiMe₃)₂C₃H₃]₂Cr, and [1,1',3-(Si-Me₃)₃C₃H₂]₂Cr, 191

Monomeric f-element chemistry with sterically encumbered allyl ligands, 149

Allyl complexes

Neodymium alk(aryl)oxides-dialkylmagnesium systems for butadiene polymerization and copolymerization with styrene and glycidyl methacrylate, 44

Allylic isomerization

Theoretical exploration of structure–reactivity relationships in organometallic chemistry: butadiene insertion into the organyl–transition-metal bond and conversion of the allyl–transitransition-metal fragment in the $[Ni^{II}(\eta^5-Cp)(\eta^1-phenyl)(\eta^2-butadiene)]$ complex, 181

(π-Allyl)nickel complexes

Preparation of chelate bis(imine)nickel allyl systems by reaction of their corresponding butadiene complexes with electrophiles, 249

Synthesis and structure of the edge-bridged open zirconocene, $Zr(6,6\text{-dmch})_2(PMe_3)_2$ (dmch = dimethylcyclohexadienyl), and its imine coupling product, 64

Amide

Organometallic and related imidotitanium compounds containing a pendant arm functionalised benzamidinate ligand, 120

Amido complexes

Synthesis, structure and reactivity of new yttrium bis(dimethylsilyl)amido and bis(trimethylsilyl)methyl complexes of a tetradentate bis(phenoxide) ligand, 131

1,2 and 2,1 propylene insertion

Propylene bulk phase oligomerization with bisiminepyridine iron complexes in a calorimeter: mechanistic investigation of 1,2 versus 2,1 propylene insertion, 209

ansa-Metallocene complexes

Group 4 metallocene complexes incorporating vinyl or allyl substituted ansa ligands. X-Ray crystal structures of [Zr{Me(CH₂=CH)Si(η^5 -C₅Me₄)₂}Cl₂], [Zr{Me(CH₂=CHCH₂) Si(η^5 -C₅H₄)₂}Cl₂] and [Zr{Me(CH₂=CHCH₂)Si(η^5 -C₅Me₄)(η^5 -C₅H₄)}Cl₂], 11

Arene complexes

Coordination chemistry of the activation of [(triazacyclohexane)CrCl₃] with [PhNMe₂H][B(C₆F₅)₄] and AlR₃, 200

Synthesis, structure, electronic properties and thermal behavior of butadiynyl substituted phenylCr(CO)₃-complexes, 354

Arvloxy

Organometallic and related imidotitanium compounds containing a pendant arm functionalised benzamidinate ligand, 120 1-Azaallyls

Synthesis and structures of crystalline lithium 1-azaallyls and a 1,3-diazaallyl derived from $\text{Li}\{\text{CH}(\text{SiMe}_3)(\text{SiMe}_{3-n}(\text{OMe})_n)\}\$ (n=1 or 2) and $\text{Li}\{\text{CH}(\text{SiMe}_2\text{OMe})_2\}$ and RCN $(R={}^t\text{Bu}, \text{Ph}, 2,5\text{-Me}_2\text{C}_6\text{H}_3, \text{ or Ad}), 83$

Benzamidiate ligands

Organometallic and related imidotitanium compounds containing a pendant arm functionalised benzamidinate ligand, 120

Bimetallic

Synthesis of [TpRu(CO)(PPh₃)]₂(μ -CH=CH-CH=CH-C₆H₄-CH =CH-CH=CH) from Wittig reactions, 331

Bisiminepyridine iron complex

Propylene bulk phase oligomerization with bisiminepyridine iron complexes in a calorimeter: mechanistic investigation of 1,2 versus 2,1 propylene insertion, 209

Block copolymers

Neodymium alk(aryl)oxides-dialkylmagnesium systems for butadiene polymerization and copolymerization with styrene and glycidyl methacrylate, 44

Boron Lewis acids

Preparation of chelate bis(imine)nickel allyl systems by reaction of their corresponding butadiene complexes with electrophiles, 249

Bulky ligands

Homoleptic allyl complexes of chromium with trimethylsilylated ligands. Formation and molecular structure of {[1-(Si-Me₃)C₃H₄]₂Cr}₂, [1,3-(SiMe₃)₂C₃H₃]₂Cr, and [1,1',3-(Si-Me₃)₃C₃H₂]₂Cr, 191

Bulley ligands

Monomeric f-element chemistry with sterically encumbered allyl ligands, 149

(Butadiene)nickel complexes

Preparation of chelate bis(imine)nickel allyl systems by reaction of their corresponding butadiene complexes with electrophiles, 249

Butadiynes

Synthesis, structure, electronic properties and thermal behavior of butadiynyl substituted phenylCr(CO)₃-complexes, 354

Calciun

α-Methyl-benzylcalcium complexes: syntheses, structures and reactivity, 56

Carbanion

α-Methyl-benzylcalcium complexes: syntheses, structures and reactivity, 56

Carbene complexes

A new method for the preparation of N-stabilized allenylidene complexes of chromium and tungsten, 301

Carbon chains

Preparation and molecular structures of some complexes containing C₅ chains, 398

Carbon-rich materials

New carbon-rich organometallic architectures based on cyclobutadienecyclopentadienylcobalt and ferrocene modules, 269

Carbonyl cluster

Molecular rearrangements of diynes coordinated to triosmium carbonyl clusters: the synthesis and structural characterisation of $[Os_3(\mu-H)(CO)_{10}\{\mu_3-\eta^1:\eta^3:\eta^1-Ph(C)C_9H_6)\}]$, $[Os_3(\mu-H)(CO)_9\{\mu_3-\eta^1:\eta^3:\eta^1-Ph(C)C_9H_6)\}]$ and $[Os_3(\mu-H)(CO)_8(MeCN)\{\mu_3-\eta^1:\eta^3:\eta^1-Ph(C)C_9H_6)\}]$, 313

Carborane

Reactions of $L_2Zr(NMe_2)_2$ with Me_3Al and $PhC \equiv CH$: synthesis and structural characterization of new zirconium carborane $complexes [L_2 = Me_2Si(C_9H_6)(C_2B_{10}H_{10})]$ and $Me_2C(C_5H_4)(C_2B_{10}H_{10})]$, 39

Catalysis

Synthesis and catalytic activity of rhodium diene complexes bearing indenyl-type fullerene η⁵-ligand, 295

Cationic allyl complexes

Synthesis and characterization of cationic and zwitterionic allyl zirconium complexes derived from trimethylenemethane

(TMM) cyclopentadienylzirconium acetamidinates, 29

Cationic intermediates

¹³C-NMR study of Ti(IV) species formed by Cp*TiMe₃ and Cp*TiCl₃ activation with methylaluminoxane (MAO), 23

C-C Coupling

The activation and transformations of acenaphthylene by osmium carbonyl cluster complexes, 421

C-H activation

α-Methyl-benzylcalcium complexes: syntheses, structures and reactivity, 56

Chelate complexes

Synthesis, structure and reactivity of new yttrium bis(dimethylsilyl)amido and bis(trimethylsilyl)methyl complexes of a tetradentate bis(phenoxide) ligand, 131

Chlorination

A counterintuitive, yet efficient synthesis of bis(indenyl)zirconium dihalides, 2

Chlorosilyl-cyclopentadienyl

Hydro- and chloro-substituted silyl- and silyl-η¹-amido-η⁵-tetramethylcyclopentadienyl titanium complexes, 155

Chromium

A new method for the preparation of N-stabilized allenylidene complexes of chromium and tungsten, 301

Coordination chemistry of the activation of [(triazacyclohexane)CrCl₃] with [PhNMe₂H][B(C₆F₅)₄] and AlR₃, 200

Homoleptic allyl complexes of chromium with trimethylsilylated ligands. Formation and molecular structure of {[1-(Si-Me₃)C₃H₄]₂Cr}₂, [1,3-(SiMe₃)₂C₃H₃]₂Cr, and [1,1',3-(Si-Me₃)₃C₃H₂]₂Cr, 191

The molecular structure of Cr[(CH₂)₂PMe₂]₃: dimethylphosphonium-bis-methylide chromium compounds as inner-phosphonium-alkyl-ate- or 2-phospha-allyl-complexes?, 261

Chromium compounds

Synthesis, structure, electronic properties and thermal behavior of butadiynyl substituted phenylCr(CO)₃-complexes, 354

Cobalt

New carbon-rich organometallic architectures based on cyclobutadienecyclopentadienylcobalt and ferrocene modules, 269

Tetrahydrofuran-mediated radical processes: stereoselective synthesis of D,L-hexestrol, 324

Complex

Monomeric f-element chemistry with sterically encumbered allyl ligands, 149

Conjugated organometallic polymers

Preparation of models and oligomers of metal alkynyls: NMR, GPC and X-ray structural characterization of building blocks for the construction of molecular devices, 406

Copper

New carbon-rich organometallic architectures based on cyclobutadienecyclopentadienylcobalt and ferrocene modules, 269

Crystal structure

Homoleptic allyl complexes of chromium with trimethylsilylated ligands. Formation and molecular structure of {[1-(Si-Me₃)C₃H₄]₂Cr₇, [1,3-(SiMe₃)₂C₃H₃]₂Cr, and [1,1',3-(Si-Me₃)₃C₃H₂]₂Cr, 191

Monomeric f-element chemistry with sterically encumbered allyl ligands, 149

Crystal structures

Expanding the scope of solvent-free synthesis: entrapment of thermally unstable species, 337

Cumulene

Reactions of $L_2Zr(NMe_2)_2$ with Me_3Al and $PhC \equiv CH$: synthesis and structural characterization of new zirconium carborane complexes [$L_2 = Me_2Si(C_9H_6)(C_2B_{10}H_{10})$ and $Me_2C(C_3H_4)(C_2B_{10}H_{10})$], 39

Cyclobutadiene complexes

New carbon-rich organometallic architectures based on cyclobuta-

dienecyclopentadienylcobalt and ferrocene modules, 269 Cyclohexadienyl

Synthesis and structure of the edge-bridged open zirconocene, $Zr(6,6-dmch)_2(PMe_3)_2$ (dmch = dimethylcyclohexadienyl), and its imine coupling product, 64

Dehydro[14]annulenes

New carbon-rich organometallic architectures based on cyclobutadienecyclopentadienylcobalt and ferrocene modules, 269

Dehydro[18]annulenes

New carbon-rich organometallic architectures based on cyclobutadienecyclopentadienylcobalt and ferrocene modules, 269

Dendrimers

New carbon-rich organometallic architectures based on cyclobutadienecyclopentadienylcobalt and ferrocene modules, 269

Diacetylene

Synthesis and crystallographic characterization of a 'palladadehy-drobenzo[19]annulene', 430

1.3-Diazaallyls

Synthesis and structures of crystalline lithium 1-azaallyls and a 1,3-diazaallyl derived from Li{CH(SiMe₃)(SiMe_{3-n}(OMe)_n)} (n=1 or 2) and Li{CH(SiMe₂OMe)₂} and RCN (R = 'Bu, Ph, 2,5-Me₂C₆H₃, or Ad), 83

Diene polymerization

Neodymium alk(aryl)oxides-dialkylmagnesium systems for butadiene polymerization and copolymerization with styrene and glycidyl methacrylate, 44

Diiminate ligands

Structure and reactivity of mono- and dinuclear diiminate zinc alkyl complexes, 137

1,4-Diiodo-1,3-butadiyne

Expanding the scope of solvent-free synthesis: entrapment of thermally unstable species, 337

Diketiminates

 β -Diketiminate complexes of Group 4: active complexes for the isomerization of α -olefins and the polymerization of propylene towards elastomeric polypropylene, 165

Dimethylphosphonium-bis-methylide

The molecular structure of Cr[(CH₂)₂PMe₂]₃: dimethylphosphonium-bis-methylide chromium compounds as inner-phosphonium-alkyl-ate- or 2-phospha-allyl-complexes?, 261

Dinuclear

Titanium and zirconium chloro, oxo and alkyl derivatives containing silyl-cyclopentadienyl ligands. Synthesis and characterisation, 70

Dirhodium(II) carboxylate

Expanding the scope of solvent-free synthesis: entrapment of thermally unstable species, 337

Diruthenium

Further studies of tetrakis(N,N'-dialkylbenzamidinato)diruthenium(III) chloro and alkynyl compounds: molecular engineering of metallayne monomers, 388

Diyne

Molecular rearrangements of diynes coordinated to triosmium carbonyl clusters: the synthesis and structural characterisation of $[Os_3(\mu\text{-H})(CO)_{10}\{\mu_3-\eta^1:\eta^3:\eta^1\text{-Ph}(C)C_9H_6)\}], [Os_3(\mu\text{-H})(CO)_9\{\mu_3-\eta^1:\eta^3:\eta^1\text{-Ph}(C)C_9H_6)\}]$ and $[Os_3(\mu\text{-H})(CO)_8(MeCN)\{\mu_3-\eta^1:\eta^3:\eta^1\text{-Ph}(C)C_9H_6)\}], 313$

Dynamic NMR

Preparation, structure, and dynamics of a nickel π -allyl cyanide complex, 77

Elastomeric polypropylene

β-Diketiminate complexes of Group 4: active complexes for the isomerization of α-olefins and the polymerization of propylene towards elastomeric polypropylene, 165

Enamides

Synthesis and structures of crystalline lithium 1-azaallyls and a 1,3-diazaallyl derived from $\text{Li}\{\text{CH}(\text{SiMe}_3)(\text{SiMe}_{3-n}(\text{OMe})_n)\}$

(n = 1 or 2) and Li{CH(SiMe₂OMe)₂} and RCN (R = t Bu, Ph, 2,5-Me₂C₆H₃, or Ad), 83

EOP synthesis

Preparation of models and oligomers of metal alkynyls: NMR, GPC and X-ray structural characterization of building blocks for the construction of molecular devices, 406

EPR

¹³C-NMR study of Ti(IV) species formed by Cp*TiMe₃ and Cp*TiCl₃ activation with methylaluminoxane (MAO), 23

Ethene polymerization.

Preparation of chelate bis(imine)nickel allyl systems by reaction of their corresponding butadiene complexes with electrophiles, 249

⁵⁷Fe Mössbauer

Chemistry of the 1,3,5,7-octatetraynediyl carbon rod end-capped by two electron-rich $(\eta^5\text{-}C_5\text{Me}_5)(\eta^2\text{-dppe})\text{Fe}$ groups, 368

Ferrocene

Carbon-rich organometallic materials derived from 4-ethynylphenylferrocene, 341

Fluorenone

Carbon-rich organometallic materials derived from 4-ethynylphenylferrocene, 341

Fullerene

Synthesis and catalytic activity of rhodium diene complexes bearing indenyl-type fullerene η⁵-ligand, 295

Hafnium

Group 4 metallocene complexes incorporating vinyl or allyl substituted ansa ligands. X-Ray crystal structures of [Zr{Me(CH₂=CH)Si(η^5 -C₅Me₄)₂}Cl₂], [Zr{Me(CH₂=CHCH₂) Si(η^5 -C₅H₄)₂}Cl₂] and [Zr{Me(CH₂=CHCH₂)Si(η^5 -C₅Me₄)(η^5 -C₅H₄)}Cl₂], 11

Half-titanocene catalysts

¹³C-NMR study of Ti(IV) species formed by Cp*TiMe₃ and Cp*TiCl₃ activation with methylaluminoxane (MAO), 23

¹H- and ¹³C-NMR

¹H-, ¹³C-NMR and ethylene polymerization studies of zirconocene/ MAO catalysts: effect of the ligand structure on the formation of active intermediates and polymerization kinetics, 92

Hexestrol

Tetrahydrofuran-mediated radical processes: stereoselective synthesis of D,L-hexestrol, 324

Hydroboration

Group 4 metallocene complexes incorporating vinyl or allyl substituted ansa ligands. X-Ray crystal structures of [Zr{Me(CH₂=CH)Si(η^5 -C₅Me₄)₂}Cl₂], [Zr{Me(CH₂=CHCH₂) Si(η^5 -C₅H₄)₂}Cl₂] and [Zr{Me(CH₂=CHCH₂)Si(η^5 -C₅Me₄)(η^5 -C₅H₄)}Cl₂], 11

Hydrogenation

Group 4 metallocene complexes incorporating vinyl or allyl substituted ansa ligands. X-Ray crystal structures of [Zr{Me(CH₂=CH)Si(η^5 -C₅Me₄)₂}Cl₂], [Zr{Me(CH₂=CHCH₂) Si(η^5 -C₅H₄)₂}Cl₂] and [Zr{Me(CH₂=CHCH₂)Si(η^5 -C₅Me₄)(η^5 -C₅H₄)}Cl₂], 11

Imido

Organometallic and related imidotitanium compounds containing a pendant arm functionalised benzamidinate ligand, 120

Imine coupling

Synthesis and structure of the edge-bridged open zirconocene, $Zr(6,6\text{-dmch})_2(PMe_3)_2$ (dmch = dimethylcyclohexadienyl), and its imine coupling product, 64

Indenyl ligand

Synthesis and catalytic activity of rhodium diene complexes bearing indenyl-type fullerene η^5 -ligand, 295

Isomerization

 β -Diketiminate complexes of Group 4: active complexes for the isomerization of α-olefins and the polymerization of propylene towards elastomeric polypropylene, 165

Lanthanide

Monomeric f-element chemistry with sterically encumbered allyl ligands, 149

Linked amido-cyclopentadienyl

Hydro- and chloro-substituted silyl- and silyl-η¹-amido-η⁵-tetramethylcyclopentadienyl titanium complexes, 155

Lithium

Synthesis and structures of crystalline lithium 1-azaallyls and a 1,3-diazaallyl derived from $\text{Li}\{\text{CH}(\text{SiMe}_3)(\text{SiMe}_{3-n}(\text{OMe})_n)\}$ (n=1 or 2) and $\text{Li}\{\text{CH}(\text{SiMe}_2\text{OMe})_2\}$ and RCN $(R={}^t\text{Bu}, \text{Ph}, 2,5\text{-Me}_2\text{C}_6\text{H}_3, \text{ or Ad}), 83$

Metal alkyl

Reactions of $L_2Zr(NMe_2)_2$ with Me₃Al and PhC=CH: synthesis and structural characterization of new zirconium carborane complexes [$L_2 = Me_2Si(C_9H_6)(C_2B_{10}H_{10})$] and $Me_2C(C_3H_4)(C_2B_{10}H_{10})$], 39

Metal amide

Reactions of $L_2Zr(NMe_2)_2$ with Me₃Al and PhC=CH: synthesis and structural characterization of new zirconium carborane complexes [$L_2 = Me_2Si(C_9H_6)(C_2B_{10}H_{10})$] and Me₂C(C_5H_4)($C_2B_{10}H_{10}$)], 39

Metal boron betaines

Preparation of chelate bis(imine)nickel allyl systems by reaction of their corresponding butadiene complexes with electrophiles, 249

Metallacycle

Reactions of $L_2Zr(NMe_2)_2$ with Me_3Al and $PhC \equiv CH$: synthesis and structural characterization of new zirconium carborane $complexes[L_2 = Me_2Si(C_9H_6)(C_2B_{10}H_{10})]$ and $Me_2C(C_5H_4)(C_2B_{10}H_{10})]$, 39

Synthesis and crystallographic characterization of a 'palladadehydrobenzo[19]annulene', 430

Synthesis of dialkyl, diaryl and metallacyclic complexes of Ni and Pd containing pyridine, α -diimines and other nitrogen ligands: Crystal structures of the complexes cis-NiR₂py₂ (R = benzyl, mesityl), 220

Metallacycles

Organometallic chemistry at the edge of polycyclic aromatic hydrocarbons, 288

Using ligand exchange reactions to control the coordination environment of Pt(II) acetylide complexes: applications to conjugated metallacyclynes, 379

Metallayne

Further studies of tetrakis(N,N'-dialkylbenzamidinato)diruthenium(III) chloro and alkynyl compounds: molecular engineering of metallayne monomers, 388

Metallocene catalysts

¹H-, ¹³C-NMR and ethylene polymerization studies of zirconocene/ MAO catalysts: effect of the ligand structure on the formation of active intermediates and polymerization kinetics, 92

Methyl

Organometallic and related imidotitanium compounds containing a pendant arm functionalised benzamidinate ligand, 120

Methylaluminoxane

¹³C-NMR study of Ti(IV) species formed by Cp*TiMe₃ and Cp*TiCl₃ activation with methylaluminoxane (MAO), 23

Methyl complexes

Hydro- and chloro-substituted silyl- and silyl-η¹-amido-η⁵-tetramethylcyclopentadienyl titanium complexes, 155

MMA polymerization

Synthesis, structure and reactivity of new yttrium bis(dimethylsilyl)amido and bis(trimethylsilyl)methyl complexes of a tetradentate bis(phenoxide) ligand, 131

Molecular orbital calculations

The molecular structure of Cr[(CH₂)₂PMe₂]₃: dimethylphosphonium-bis-methylide chromium compounds as inner-phosphonium-alkyl-ate- or 2-phospha-allyl-complexes?, 261

Molecular structures

Photochemical synthesis of a palladium dichloromethyl complex,

 ${(\text{hexyl})HC(N-\text{methyl-imidazol-2-yl})_2}Pd(CHCl_2)Cl.$ X-ray molecular structures of ${(\text{hexyl})HC(N-\text{methylimidazolyl-2-yl})_2}Pd(X)Cl, X = Cl, and CHCl_2, 240$

Mononuclear

Titanium and zirconium chloro, oxo and alkyl derivatives containing silyl-cyclopentadienyl ligands. Synthesis and characterisation, 70

Neodymium

Neodymium alk(aryl)oxides-dialkylmagnesium systems for butadiene polymerization and copolymerization with styrene and glycidyl methacrylate, 44

N-Heterocyclic carbene ligands

The synthesis and X-ray structure of *trans*-NiCl₂(1,3-bis(2,6-diisopropylphenyl)imidazol-2-ylidene)₂; attempts to polymerize olefins utilizing a nickel(II) complex of a sterically demanding *N*-heterocyclic carbene, 114

Nickel

Organometallic chemistry at the edge of polycyclic aromatic hydrocarbons, 288

Preparation, structure, and dynamics of a nickel π -allyl cyanide complex, 77

Synthesis of dialkyl, diaryl and metallacyclic complexes of Ni and Pd containing pyridine, α-diimines and other nitrogen ligands: Crystal structures of the complexes *cis*-NiR₂py₂ (R = benzyl, mesityl), 220

The synthesis and X-ray structure of *trans*-NiCl₂(1,3-bis(2,6-disopropylphenyl)imidazol-2-ylidene)₂; attempts to polymerize olefins utilizing a nickel(II) complex of a sterically demanding *N*-heterocyclic carbene, 114

Nickel complexes

Theoretical exploration of structure–reactivity relationships in organometallic chemistry: butadiene insertion into the organyl–transition-metal bond and conversion of the allyl–transitransition-metal fragment in the [Ni^{II}(η^5 -Cp)(η^1 -phenyl)(η^2 -butadiene)] complex, 181

Nitrogen ligands

Synthesis of dialkyl, diaryl and metallacyclic complexes of Ni and Pd containing pyridine, α-diimines and other nitrogen ligands: Crystal structures of the complexes *cis*-NiR₂py₂ (R = benzyl, mesityl), 220

NMR

Chemistry of the 1,3,5,7-octatetraynediyl carbon rod end-capped by two electron-rich $(\eta^5-C_5Me_5)(\eta^2$ -dppe)Fe groups, 368

¹³C-NMR study of Ti(IV) species formed by Cp*TiMe₃ and Cp*TiCl₃ activation with methylaluminoxane (MAO), 23

Molecular rearrangements of diynes coordinated to triosmium carbonyl clusters: the synthesis and structural characterisation of $[Os_3(\mu\text{-}H)(CO)_{10}\{\mu_3\text{-}\eta^1\text{:}\eta^3\text{:}\eta^1\text{-}Ph(C)C_9H_6)\}], [Os_3(\mu\text{-}H)(CO)_9\{\mu_3\text{-}\eta^1\text{:}\eta^3\text{:}\eta^1\text{-}Ph(C)C_9H_6)\}]$ and $[Os_3(\mu\text{-}H)(CO)_8(MeCN)\{\mu_3\text{-}\eta^1\text{:}\eta^3\text{:}\eta^1\text{-}Ph(C)C_9H_6)\}], 313$

N,N'-Dialkylbenzamidinate

Further studies of tetrakis(N,N'-dialkylbenzamidinato)diruthenium(III) chloro and alkynyl compounds: molecular engineering of metallayne monomers, 388

1,3,5,7-Octatetraynediyl carbon rod

Chemistry of the 1,3,5,7-octatetraynediyl carbon rod end-capped by two electron-rich $(\eta^5-C_5Me_5)(\eta^2$ -dppe)Fe groups, 368

Olefin polymers

The synthesis and X-ray structure of *trans*-NiCl₂(1,3-bis(2,6-diisopropylphenyl)imidazol-2-ylidene)₂; attempts to polymerize olefins utilizing a nickel(II) complex of a sterically demanding *N*-heterocyclic carbene, 114

Olefin trimerisation

Coordination chemistry of the activation of [(triazacyclohexane)CrCl₃] with [PhNMe₂H][B(C₆F₅)₄] and AlR₃, 200

Organoiron complex

Chemistry of the 1,3,5,7-octatetraynediyl carbon rod end-capped by

two electron-rich ($\eta^5\text{-}C_5Me_5$)($\eta^2\text{-}dppe$)Fe groups, 368 Organometallic polymers

New carbon-rich organometallic architectures based on cyclobutadienecyclopentadienylcobalt and ferrocene modules, 269

Osmium

Carbon-rich organometallic materials derived from 4-ethynylphenylferrocene, 341

Molecular rearrangements of diynes coordinated to triosmium carbonyl clusters: the synthesis and structural characterisation of $[Os_3(\mu-H)(CO)_{10}\{\mu_3-\eta^1:\eta^3:\eta^1-Ph(C)C_9H_6)\}]$, $[Os_3(\mu-H)(CO)_9\{\mu_3-\eta^1:\eta^3:\eta^1-Ph(C)C_9H_6)\}]$ and $[Os_3(\mu-H)(CO)_8(MeCN)\{\mu_3-\eta^1:\eta^3:\eta^1-Ph(C)C_9H_6)\}]$, 313

The activation and transformations of acenaphthylene by osmium carbonyl cluster complexes, 421

Oxo

Titanium and zirconium chloro, oxo and alkyl derivatives containing silyl-cyclopentadienyl ligands. Synthesis and characterisation, 70

Palladium

Synthesis of dialkyl, diaryl and metallacyclic complexes of Ni and Pd containing pyridine, α -diimines and other nitrogen ligands: Crystal structures of the complexes cis-NiR₂py₂ (R = benzyl, mesityl), 220

Palladium catalysis

Preparation of models and oligomers of metal alkynyls: NMR, GPC and X-ray structural characterization of building blocks for the construction of molecular devices, 406

Palladium dichloromethyl complexes

Photochemical synthesis of a palladium dichloromethyl complex, {(hexyl)HC(N-methyl-imidazol-2-yl)₂}Pd(CHCl₂)Cl. X-ray molecular structures of {(hexyl)HC(N-methylimidazolyl-2-yl)₂}Pd(X)Cl, X = Cl, and CHCl₂, 240

Palladium(II)

Synthesis and crystallographic characterization of a 'palladadehy-drobenzo[19]annulene', 430

Pd-catalysis

New carbon-rich organometallic architectures based on cyclobutadienecyclopentadienylcobalt and ferrocene modules, 269

Phenyl

Organometallic and related imidotitanium compounds containing a pendant arm functionalised benzamidinate ligand, 120

Phosphine-gold(I) complexes

Preparation and molecular structures of some complexes containing C₅ chains, 398

Photochemical synthesis

Photochemical synthesis of a palladium dichloromethyl complex, $\{(\text{hexyl})HC(N\text{-methyl-imidazol-2-yl})_2\}Pd(CHCl_2)Cl.$ X-ray molecular structures of $\{(\text{hexyl})HC(N\text{-methylimidazolyl-2-yl})_2\}Pd(X)Cl,$ X = Cl, and CHCl₂, 240

Platinacycles

Using ligand exchange reactions to control the coordination environment of Pt(II) acetylide complexes: applications to conjugated metallacyclynes, 379

Platinum

Carbon-rich organometallic materials derived from 4-ethynylphenylferrocene, 341

Platinum acetylide

Using ligand exchange reactions to control the coordination environment of Pt(II) acetylide complexes: applications to conjugated metallacyclynes, 379

Platinum(II)

Synthesis and crystallographic characterization of a 'palladadehy-drobenzo[19]annulene', 430

Polycyclic aromatics

Organometallic chemistry at the edge of polycyclic aromatic hydrocarbons, 288

Polyethylene

¹H-, ¹³C-NMR and ethylene polymerization studies of zirconocene/ MAO catalysts: effect of the ligand structure on the formation of active intermediates and polymerization kinetics, 92

Polymerization

β-Diketiminate complexes of Group 4: active complexes for the isomerization of α-olefins and the polymerization of propylene towards elastomeric polypropylene, 165

Polymetallaaryleneethynylene

Preparation of models and oligomers of metal alkynyls: NMR, GPC and X-ray structural characterization of building blocks for the construction of molecular devices, 406

Polysterene

¹³C-NMR study of Ti(IV) species formed by Cp*TiMe₃ and Cp*TiCl₃ activation with methylaluminoxane (MAO), 23

Polystyrene

 α -Methyl-benzylcalcium complexes: syntheses, structures and reactivity, 56

Propargyl cation

Tetrahydrofuran-mediated radical processes: stereoselective synthesis of D,L-hexestrol, 324

Propargyl radical

Tetrahydrofuran-mediated radical processes: stereoselective synthesis of D,L-hexestrol, 324

Propenylidene complexes

A new method for the preparation of N-stabilized allenylidene complexes of chromium and tungsten, 301

Propylene dimers

Propylene bulk phase oligomerization with bisiminepyridine iron complexes in a calorimeter: mechanistic investigation of 1,2 versus 2,1 propylene insertion, 209

Propylene oligomerization

Propylene bulk phase oligomerization with bisiminepyridine iron complexes in a calorimeter: mechanistic investigation of 1,2 versus 2,1 propylene insertion, 209

Reactivity

Structure and reactivity of mono- and dinuclear diiminate zinc alkyl complexes, 137

Rh complex

Synthesis and catalytic activity of rhodium diene complexes bearing indenyl-type fullerene η^5 -ligand, 295

Ring-opening polymerization

Synthesis, structure and reactivity of new yttrium bis(dimethylsilyl)amido and bis(trimethylsilyl)methyl complexes of a tetradentate bis(phenoxide) ligand, 131

Ruthenium

Synthesis of [TpRu(CO)(PPh₃)]₂(μ-CH=CH-CH=CH-C₆H₄-CH=CH-CH=CH) from Wittig reactions, 331

Schiff base complexes

Biaryl-bridged Schiff base complexes of zirconium alkyls: synthesis structure and stability, 103

Silylmethyls

Synthesis and structures of crystalline lithium 1-azaallyls and a 1,3-diazaallyl derived from $\text{Li}\{\text{CH}(\text{SiMe}_3)(\text{SiMe}_{3-n}(\text{OMe})_n)\}\$ (n=1 or 2) and $\text{Li}\{\text{CH}(\text{SiMe}_2\text{OMe})_2\}$ and RCN $(R={}^t\text{Bu}, \text{Ph}, 2,5\text{-Me}_2\text{C}_6\text{H}_3, \text{ or Ad}), 83$

Sterical demand of the ligand system

Propylene bulk phase oligomerization with bisiminepyridine iron complexes in a calorimeter: mechanistic investigation of 1,2 versus 2,1 propylene insertion, 209

Structure-property relations

¹H-, ¹³C-NMR and ethylene polymerization studies of zirconocene/ MAO catalysts: effect of the ligand structure on the formation of active intermediates and polymerization kinetics, 92

Substituent effects

Synthesis, structure, electronic properties and thermal behavior of butadiynyl substituted phenylCr(CO)₃-complexes, 354

Synthesis

A counterintuitive, yet efficient synthesis of bis(indenyl)zirconium dihalides 2

Biaryl-bridged Schiff base complexes of zirconium alkyls: synthesis structure and stability, 103

Tetrahydrofuran

Monomeric f-element chemistry with sterically encumbered allyl ligands, 149

Tetramethyl cyclopentadienyl

Hydro- and chloro-substituted silyl- and silyl-η¹-amido-η⁵-tetramethylcyclopentadienyl titanium complexes, 155

Thermolysis

Synthesis, structure, electronic properties and thermal behavior of butadiynyl substituted phenylCr(CO)₃-complexes, 354

Titanium

 β -Diketiminate complexes of Group 4: active complexes for the isomerization of α -olefins and the polymerization of propylene towards elastomeric polypropylene, 165

Group 4 metallocene complexes incorporating vinyl or allyl substituted ansa ligands. X-Ray crystal structures of [Zr{Me(CH₂=CH)Si(η^5 -C₅Me₄)₂}Cl₂], [Zr{Me(CH₂=CHCH₂) Si(η^5 -C₅H₄)₂}Cl₂] and [Zr{Me(CH₂=CHCH₂)Si(η^5 -C₅Me₄)(η^5 -C₅H₄)}Cl₂], 11

Hydro- and chloro-substituted silyl- and silyl-η¹-amido-η⁵-tetramethylcyclopentadienyl titanium complexes, 155

Organometallic and related imidotitanium compounds containing a pendant arm functionalised benzamidinate ligand, 120

Titanium and zirconium chloro, oxo and alkyl derivatives containing silyl-cyclopentadienyl ligands. Synthesis and characterisation, 70

Transition-metal allyl complexes

Theoretical exploration of structure–reactivity relationships in organometallic chemistry: butadiene insertion into the organyl–transition-metal bond and conversion of the allyl–transitransition-metal fragment in the $[Ni^{II}(\eta^5-Cp)(\eta^1-phenyl)(\eta^2-butadiene)]$ complex. 181

Transition metal chemistry

¹H-, ¹³C-NMR and ethylene polymerization studies of zirconocene/ MAO catalysts: effect of the ligand structure on the formation of active intermediates and polymerization kinetics, 92

Tricobaltcarbon cluster

Preparation and molecular structures of some complexes containing C₅ chains, 398

Trimethylphosphine

Synthesis and structure of the edge-bridged open zirconocene, $Zr(6,6-dmch)_2(PMe_3)_2$ (dmch = dimethylcyclohexadienyl), and its imine coupling product, 64

Trimethylsilyl group

Homoleptic allyl complexes of chromium with trimethylsilylated ligands. Formation and molecular structure of {[1-(Si-Me₃)C₃H₄]₂Cr}₂, [1,3-(SiMe₃)₂C₃H₃]₂Cr, and [1,1',3-(Si-Me₃)₃C₃H₂]₂Cr, 191

Tungsten

A new method for the preparation of *N*-stabilized allenylidene complexes of chromium and tungsten, 301

Vinyl

Group 4 metallocene complexes incorporating vinyl or allyl substituted ansa ligands. X-Ray crystal structures of [Zr{Me(CH₂=CH)Si(η^5 -C₅Me₄)₂}Cl₂], [Zr{Me(CH₂=CHCH₂) Si(η^5 -C₅H₄)₂}Cl₂] and [Zr{Me(CH₂=CHCH₂)Si(η^5 -C₅Me₄)(η^5 -C₅H₄)}Cl₂], 11

Wittig reactions

Synthesis of [TpRu(CO)(PPh₃)]₂(μ-CH=CH-CH=CH-C₆H₄-CH=CH-CH=CH) from Wittig reactions, 331

X-ray crystal structures

Molecular rearrangements of diynes coordinated to triosmium carbonyl clusters: the synthesis and structural characterisation of $[Os_3(\mu-H)(CO)_{10}\{\mu_3-\eta^1:\eta^3:\eta^1-Ph(C)C_9H_6)\}]$, $[Os_3(\mu-H)(CO)_9\{\mu_3-\eta^1:\eta^3:\eta^1-Ph(C)C_9H_6)\}]$ and $[Os_3(\mu-H)(CO)_8(MeCN)\{\mu_3-\eta^1:\eta^3:\eta^1-Ph(C)C_9H_6)\}]$, 313

X-ray structure

β-Diketiminate complexes of Group 4: active complexes for the isomerization of α-olefins and the polymerization of propylene towards elastomeric polypropylene, 165

Synthesis and crystallographic characterization of a 'palladadehydrobenzo[19]annulene', 430

Tetrahydrofuran-mediated radical processes: stereoselective synthesis of D,L-hexestrol, 324

X-ray structures

Synthesis and structures of crystalline lithium 1-azaallyls and a 1,3-diazaallyl derived from Li{CH(SiMe₃)(SiMe_{3-n}(OMe)_n)} (n = 1 or 2) and Li{CH(SiMe₂OMe)₂} and RCN $(R = {}^{t}Bu, Ph, 2,5-Me_{2}C_{6}H_{3}, or Ad), 83$

Yttrium

Synthesis, structure and reactivity of new yttrium bis(dimethylsilyl)amido and bis(trimethylsilyl)methyl complexes of a tetradentate bis(phenoxide) ligand, 131

Ziegler-Natta polymerization

Synthesis and characterization of cationic and zwitterionic allyl zirconium complexes derived from trimethylenemethane (TMM) cyclopentadienylzirconium acetamidinates, 29

Zinc alkyl complexes

Structure and reactivity of mono- and dinuclear diiminate zinc alkyl complexes, 137

Zirconium

A counterintuitive, yet efficient synthesis of bis(indenyl)zirconium dihalides, 2

β-Diketiminate complexes of Group 4: active complexes for the isomerization of α-olefins and the polymerization of propylene towards elastomeric polypropylene, 165

Group 4 metallocene complexes incorporating vinyl or allyl substituted ansa ligands. X-Ray crystal structures of [Zr{Me(CH₂=CH)Si(η^5 -C₅Me₄)₂}Cl₂], [Zr{Me(CH₂=CHCH₂) Si(η^5 -C₅H₄)₂}Cl₂] and [Zr{Me(CH₂=CHCH₂)Si(η^5 -C₅Me₄)(η^5 -C₅H₄)}Cl₂], 11

Organometallic chemistry at the edge of polycyclic aromatic hydrocarbons, 288

Synthesis and structure of the edge-bridged open zirconocene, $Zr(6,6-dmch)_2(PMe_3)_2$ (dmch = dimethylcyclohexadienyl), and its imine coupling product, 64

Titanium and zirconium chloro, oxo and alkyl derivatives containing silyl-cyclopentadienyl ligands. Synthesis and characterisation, 70

Zirconium alkyls

Biaryl-bridged Schiff base complexes of zirconium alkyls: synthesis structure and stability, 103

Zwitterionic allyl complexes

Synthesis and characterization of cationic and zwitterionic allyl zirconium complexes derived from trimethylenemethane (TMM) cyclopentadienylzirconium acetamidinates, 29