



ELSEVIER

Available online at www.sciencedirect.com

SCIENCE @ DIRECT®

Journal of Organometallic Chemistry 681 (2003) 283–287

Journal
of Organo
metallic
Chemistrywww.elsevier.com/locate/jorgchem

Subject Index of Volume 681

- Adamantane**
Organosilicon chalcogenides with trisilane units — adamantanes and noradamantanes, 5
- Addition**
The unusual stereochemical behaviour of ferrocenecarboxaldehyde in reaction with chiral alkylammonium hypophosphite, 225
- Alkylidyne**
Transformations of organoarsine-oxides and -sulfides on di- and tri-cobalt carbonyl centres, 102
- Alkyne**
Catalytic hydrosilylation of acetylenes mediated by phosphine complexes of cobalt(I), rhodium(I), and iridium(I), 91
Reaction of $[M(CO)_4(\eta^2-C_2H_2)]$ ($M = Fe, Os$) with $[(\eta^5-C_5H_5)(CO)_2W \equiv CC_6H_5]$; unexpected substitution of acetylene, formation and molecular structure of $[MW(\mu-CC_6H_5)(CO)_6(\eta^5-C_5H_5)]$, 250
Transformations of organoarsine-oxides and -sulfides on di- and tri-cobalt carbonyl centres, 102
- Alkynyl ligands**
Synthesis, characterization, structure and luminescence studies of mono-, di- and trinuclear gold(I) phosphine alkynyl complexes, 196
- Allylic alkylation**
A structure–activity relationship for pincer palladium(II) complexes — influence of ring-size of metallacycles on the activity in allylic alkylation, 189
- Aluminum hydrides**
Transition metal-catalyzed reduction of Zr^{IV} in $Cp_2ZrX_2-LiAlH_4$ and $Cp_2ZrX_2-AlH_3$ ($X = Cl, Br, I$) systems: structural study of resulting zirconocene(III) aluminum hydride complexes, 167
- Arylation**
A comparative study of base-free arylcopper reagents for the transfer of aryl groups to boron halides, 134
- Aryloxide**
Synthesis of polymetallic Group 4 complexes bridged by benzene-diolate and triolate ligands. X-ray crystal structure of $\{[Ti(C_5Me_5)Cl_2]_2[\mu-1,4-O(2,3-C_6H_2Me_2)O^-]\}$, 228
- Azide**
Reactions of cobaltadithiolene complexes with aryl azides: Formations of metal chelate rings containing nitrogen atoms by substitution reactions via nitrene, 180
- Azomethine bond**
The unusual stereochemical behaviour of ferrocenecarboxaldehyde in reaction with chiral alkylammonium hypophosphite, 225
- Bis(cyclopentadienyl)methane**
Preparation of cyclopentadienylrhodium(I) compounds with a dangling $CH_2C_5H_5$ unit and their use as starting materials for the synthesis of hetero-bimetallic Rh–Ti and Rh–Zr complexes, 70
- Bis-diarsineoxide**
Transformations of organoarsine-oxides and -sulfides on di- and tri-cobalt carbonyl centres, 102
- Bis-diarsinesulfide**
Transformations of organoarsine-oxides and -sulfides on di- and tri-cobalt carbonyl centres, 102
- Boron**
A comparative study of base-free arylcopper reagents for the transfer of aryl groups to boron halides, 134
- Bridging carbyne**
Reaction of $[M(CO)_4(\eta^2-C_2H_2)]$ ($M = Fe, Os$) with $[(\eta^5-C_5H_5)(CO)_2W \equiv CC_6H_5]$; unexpected substitution of acetylene, formation and molecular structure of $[MW(\mu-CC_6H_5)(CO)_6(\eta^5-C_5H_5)]$, 250
- Carbonyl**
Reaction of $[M(CO)_4(\eta^2-C_2H_2)]$ ($M = Fe, Os$) with $[(\eta^5-C_5H_5)(CO)_2W \equiv CC_6H_5]$; unexpected substitution of acetylene, formation and molecular structure of $[MW(\mu-CC_6H_5)(CO)_6(\eta^5-C_5H_5)]$, 250
- Carbonylmetallates**
Nucleophilic vinylic substitution with transition metal carbonyl anions—a rare case of a halophilic reaction mechanism: Formation of halo(acyl)rhenate complexes and X-ray structure of *cis*- $[CF_2=CF(CO)Re(CO)_4Br]Na$, 59
- Catalysis**
Supported rhodium nanoparticles in catalysis: the role of stabilizers on catalytic activity and structural features, 37
- Catalysts**
Binuclear oxalamidinate complexes $(MePd)_2(oxam)$ and homoleptic complexes of the type $[(THF)_nLi_4(Me_8)M_2]$ and $[(THF)_4Li_2(Ph_4)M]$ ($M = Pd, Ni$): synthesis, structures and catalytic C–C linking reactions, 24
- Chiral**
Chiral *cis*-octahedral Grignard reagents, 215
- Cobalt**
Transformations of organoarsine-oxides and -sulfides on di- and tri-cobalt carbonyl centres, 102
- Cobaltadithiolene**
Reactions of cobaltadithiolene complexes with aryl azides: Formations of metal chelate rings containing nitrogen atoms by substitution reactions via nitrene, 180
- Copper**
A comparative study of base-free arylcopper reagents for the transfer of aryl groups to boron halides, 134
- Cross-coupling**
Binuclear oxalamidinate complexes $(MePd)_2(oxam)$ and homoleptic complexes of the type $[(THF)_nLi_4(Me_8)M_2]$ and $[(THF)_4Li_2(Ph_4)M]$ ($M = Pd, Ni$): synthesis, structures and catalytic C–C linking reactions, 24
- Cross-coupling reaction**
Stereoselective synthesis of (*Z,E*)-2-phenylselenobutadienes by palladium-catalyzed cross-coupling reaction, 98
- Crystal structure**
Chiral *cis*-octahedral Grignard reagents, 215
Synthesis, structures and reactivity of bis(diphenylphosphino)-methane (dppm)-substituted selenido osmium carbonyl clusters, 237

Crystal structures

Synthesis and characterization of a new class of divalent lanthanide complexes $\{[C_5H_4(CMe_2Ph)]_4Ln_2(\mu-X)_2\}[Li(DME)_3]_2$ ($Ln = Sm, X = I; Ln = Yb, X = Cl; DME = \text{dimethoxyethane}, \text{dimethoxyethane}$), 174

Synthesis and characterization of new rhodium–cobalt mixed-metal octahedral linked clusters containing η^2 -diyne ligands, 275

Transition metal-catalyzed reduction of Zr^{IV} in $Cp_2ZrX_2-LiAlH_4$ and $Cp_2ZrX_2-AlH_3$ ($X = Cl, Br, I$) systems: structural study of resulting zirconocene(III) aluminum hydride complexes, 167

[4+2] Cycloaddition

Simple preparation of cobaloxime dienyl complexes and their *exo* selective Diels–Alder cycloadducts: Progress toward transition metal-mediated Diels–Alder reactions which are catalytic in metal dienyl complex, 120

Cyclometallated compounds

Reactions of $[C,N,N']$ -cyclometallated platinum compounds with phosphines: *transphobia* and effect of the chloro substituents: Crystal structure of $[PtCl(3,5-C_6H_2Cl_2CHNCH_2CH_2NMe_2)(PPh_3)_2]$, 143

Cyclometallation

Formation of a sterically crowded iridium(III)-silyl complex from the bulky terphenyl silane $H_3Si(C_6H_3-Mes_{2-2,6})$, 1

Cyclopalladated complexes

Assembly of cyclopalladated units: synthesis, characterization, X-ray crystal structure and study of the reactivity of the tetrametallic cyclopalladated complex $[Pd\{C_6H_4-CH=N-(C_6H_4-2-O)\}_4 \cdot 2CHCl_3]$, 82

Cyclopentadiene

Synthesis of ferrocenylvinylcyclopropene and its transformation into cyclopentadiene, 115

Cyclopentadienyl

Synthesis and characterization of a new class of divalent lanthanide complexes $\{[C_5H_4(CMe_2Ph)]_4Ln_2(\mu-X)_2\}[Li(DME)_3]_2$ ($Ln = Sm, X = I; Ln = Yb, X = Cl; DME = \text{dimethoxyethane}, \text{dimethoxyethane}$), 174

Synthesis of polymetallic Group 4 complexes bridged by benzene-diolate and triolate ligands. X-ray crystal structure of $\{[Ti(C_5Me_5)Cl_2]_2\{\mu-1,4-O(2,3-C_6H_2Me_2)O-\}\}$, 228

Cyclopentadienyl manganese tricarbonyl

Intramolecular photo-substitution in the inclusion compound of mono[6-deoxy-6-(2-aminoethyl thio-1,2-dicyane ethylenylthio)]- β -cyclodextrin with cyclopentadienyl manganese tricarbonyl in DMF solution, 269

Cyclopropane

Synthesis of ferrocenylvinylcyclopropene and its transformation into cyclopentadiene, 115

Cyclopropene

Synthesis of ferrocenylvinylcyclopropene and its transformation into cyclopentadiene, 115

Demetallation

Simple preparation of cobaloxime dienyl complexes and their *exo* selective Diels–Alder cycloadducts: Progress toward transition metal-mediated Diels–Alder reactions which are catalytic in metal dienyl complex, 120

Dianion

Synthesis and characterization of a new class of divalent lanthanide complexes $\{[C_5H_4(CMe_2Ph)]_4Ln_2(\mu-X)_2\}[Li(DME)_3]_2$ ($Ln = Sm, X = I; Ln = Yb, X = Cl; DME = \text{dimethoxyethane}, \text{dimethoxyethane}$), 174

Diels–Alder

Simple preparation of cobaloxime dienyl complexes and their *exo* selective Diels–Alder cycloadducts: Progress toward transition metal-mediated Diels–Alder reactions which are catalytic in metal dienyl complex, 120

Dienyl complexes

Simple preparation of cobaloxime dienyl complexes and their *exo* selective Diels–Alder cycloadducts: Progress toward transition metal-mediated Diels–Alder reactions which are catalytic in metal dienyl complex, 120

Diphosphine

Study of the self-assembly reactions between the organic linker 1,4-bis(4-pyridyl)butadiyne and the metal-containing corners (diphosphine)M(II) ($M = Pd, Pt$; diphosphine = dppp, dppf, depe, dppbz), 158

Dipolar chromophores

Synthesis and properties of new dinuclear organoiron(II) hydrazones combining the potent electron-donating $[-(\eta^5-C_5H_4)FeCp]$ fragment with $[CpFe(\eta^6\text{-arene})-]^+$ -type acceptors, 150

1,3-Dipole

Reactions of cobaltadithiolene complexes with aryl azides: Formations of metal chelate rings containing nitrogen atoms by substitution reactions via nitrene, 180

Diyne ligand

Synthesis and characterization of new rhodium–cobalt mixed-metal octahedral linked clusters containing η^2 -diyne ligands, 275

Electroluminescence

Synthesis, structural characterization and electroluminescence study of alkylgallium derivatives of thiobenzhydrazones, 51

Ferrocene

Synthesis of ferrocenylvinylcyclopropene and its transformation into cyclopentadiene, 115

Ferrocenecarboxaldehyde

The unusual stereochemical behaviour of ferrocenecarboxaldehyde in reaction with chiral alkylammonium hypophosphite, 225

Ferrocene complexes

Synthesis and properties of new dinuclear organoiron(II) hydrazones combining the potent electron-donating $[-(\eta^5-C_5H_4)FeCp]$ fragment with $[CpFe(\eta^6\text{-arene})-]^+$ -type acceptors, 150

Formaldehyde

Transition metal-catalyzed polymerization of 1,3,5-trioxane, 12

[60]Fullerene complexes

Synthesis, characterization and properties of new organocobalt complexes containing η^5 -functionally substituted cyclopentadienyl and [60]fullerene ligands, 264

Gold(I)

Synthesis, characterization, structure and luminescence studies of mono-, di- and trinuclear gold(I) phosphine alkynyl complexes, 196

Grignard reagents

Chiral *cis*-octahedral Grignard reagents, 215

Halogen–metal exchange

Nucleophilic vinylic substitution with transition metal carbonyl anions—a rare case of a halophilic reaction mechanism: Formation of halo(acyl)rhenate complexes and X-ray structure of *cis*- $[CF_2=CF(CO)Re(CO)_4Br]Na$, 59

Heck reaction

Binuclear oxalamidinate complexes $(MePd)_2(\text{oxam})$ and homoleptic complexes of the type $[(THF)_nLi_4(Me_8)M_2]$ and $[(THF)_4Li_2(Ph_4)M]$ ($M = Pd, Ni$): synthesis, structures and catalytic C–C linking reactions, 24

Hetero-bimetallic complexes

Preparation of cyclopentadienylrhodium(I) compounds with a dangling $CH_2C_5H_5$ unit and their use as starting materials for the synthesis of hetero-bimetallic Rh–Ti and Rh–Zr com-

- plexes, 70
- Homogeneous catalysis
Transition metal-catalyzed polymerization of 1,3,5-trioxane, 12
- Hydrogen sulfide
Transformations of organoarsine-oxides and -sulfides on di- and tri-cobalt carbonyl centres, 102
- Hydrosilylation
Catalytic hydrosilylation of acetylenes mediated by phosphine complexes of cobalt(I), rhodium(I), and iridium(I), 91
- Hydrozirconation
Stereoselective synthesis of (*Z,E*)-2-phenylselenobutadienes by palladium-catalyzed cross-coupling reaction, 98
- Inclusion compound
Intramolecular photo-substitution in the inclusion compound of mono[6-deoxy-6-(2-aminoethyl thio-1,2-dicyane ethylenylthio)]- β -cyclodextrin with cyclopentadienyl manganese tricarbonyl in DMF solution, 269
- Intramolecular photo-substitution
Intramolecular photo-substitution in the inclusion compound of mono[6-deoxy-6-(2-aminoethyl thio-1,2-dicyane ethylenylthio)]- β -cyclodextrin with cyclopentadienyl manganese tricarbonyl in DMF solution, 269
- Ion-pairs
Synthesis and characterization of a new class of divalent lanthanide complexes $\{[C_5H_4(CMe_2Ph)]_4Ln_2(\mu-X)_2\}[Li(DME)_3]_2$ ($Ln = Sm, X = I; Ln = Yb, X = Cl; DME = dimethoxyethane, dimethoxyethane$), 174
- Iridium
Catalytic hydrosilylation of acetylenes mediated by phosphine complexes of cobalt(I), rhodium(I), and iridium(I), 91
Formation of a sterically crowded iridium(III)-silyl complex from the bulky terphenyl silane $H_3Si(C_6H_3-Mes_2-2,6)$, 1
- Iron
Reaction of $[M(CO)_4(\eta^2-C_2H_2)]$ ($M = Fe, Os$) with $[(\eta^5-C_5H_5)(CO)_2W \equiv CC_6H_5]$; unexpected substitution of acetylene, formation and molecular structure of $[MW(\mu-CC_6H_5)(CO)_6(\eta^5-C_5H_5)]$, 250
Syntheses and structures of selenido dimanganese and iron–manganese carbonyl cluster complexes, 258
- Lewis acid
A comparative study of base-free arylcopper reagents for the transfer of aryl groups to boron halides, 134
- Linked cluster
Synthesis and characterization of new rhodium–cobalt mixed-metal octahedral linked clusters containing η^2 -diyne ligands, 275
- Lithium–halogen exchange
Effect of solvent and temperature on the lithium–iodine exchange of primary alkyl iodides: reaction of *t*-butyllithium with 1-iodooctane in heptane–ether mixtures, 210
- Luminescence
Synthesis, characterization, structure and luminescence studies of mono-, di- and trinuclear gold(I) phosphine alkynyl complexes, 196
- Manganese
Syntheses and structures of selenido dimanganese and iron–manganese carbonyl cluster complexes, 258
- Metal vapour synthesis
Supported rhodium nanoparticles in catalysis: the role of stabilizers on catalytic activity and structural features, 37
- Mixed-metal
Synthesis and characterization of new rhodium–cobalt mixed-metal octahedral linked clusters containing η^2 -diyne ligands, 275
- Molecular recognition
Study of the self-assembly reactions between the organic linker 1,4-bis(4-pyridyl)butadiyne and the metal-containing corners (diphosphine)M(II) ($M = Pd, Pt$; diphosphine = dppp, dppf, depe, dppbz), 158
- Molybdenum
Transition metal-catalyzed polymerization of 1,3,5-trioxane, 12
- Mono[6-deoxy-6-(2-aminoethyl thio-1,2-dicyane ethylenylthio)]- β -CD
Intramolecular photo-substitution in the inclusion compound of mono[6-deoxy-6-(2-aminoethyl thio-1,2-dicyane ethylenylthio)]- β -cyclodextrin with cyclopentadienyl manganese tricarbonyl in DMF solution, 269
- N-donor ligands
Reactions of [C,N,N]-cyclometallated platinum compounds with phosphines: *transphobia* and effect of the chloro substituents: Crystal structure of $[PtCl(3,5-C_6H_2Cl_2CHNCH_2CH_2NMe_2)(PPh_3)_2]$, 143
- Nickel
Binuclear oxalamidate complexes $(MePd)_2(oxam)$ and homoleptic complexes of the type $[(THF)_nLi_4(Me_8)M_2]$ and $[(THF)_4Li_2(Ph_4)M]$ ($M = Pd, Ni$): synthesis, structures and catalytic C–C linking reactions, 24
- Nitrene
Reactions of cobaltadithiolenes complexes with aryl azides: Formations of metal chelate rings containing nitrogen atoms by substitution reactions via nitrene, 180
- Noradamantane
Organosilicon chalcogenides with trisilane units — adamantanes and noradamantanes, 5
- Octahedral
Chiral *cis*-octahedral Grignard reagents, 215
- Organoborane
A comparative study of base-free arylcopper reagents for the transfer of aryl groups to boron halides, 134
- Organocobalt complexes
Synthesis, characterization and properties of new organocobalt complexes containing η^5 -functionally substituted cyclopentadienyl and [60]fullerene ligands, 264
- Organocopper reagent
A comparative study of base-free arylcopper reagents for the transfer of aryl groups to boron halides, 134
- Organoiron complexes
Synthesis and properties of new dinuclear organoiron(II) hydrazones combining the potent electron-donating $[-(\eta^5-C_5H_4)FeCp]$ fragment with $[CpFe(\eta^6-arene)-]^+$ -type acceptors, 150
- Organolithiums
Effect of solvent and temperature on the lithium–iodine exchange of primary alkyl iodides: reaction of *t*-butyllithium with 1-iodooctane in heptane–ether mixtures, 210
- Organometallic hydrazone complexes
Synthesis and properties of new dinuclear organoiron(II) hydrazones combining the potent electron-donating $[-(\eta^5-C_5H_4)FeCp]$ fragment with $[CpFe(\eta^6-arene)-]^+$ -type acceptors, 150
- Osmium
Reaction of $[M(CO)_4(\eta^2-C_2H_2)]$ ($M = Fe, Os$) with $[(\eta^5-C_5H_5)(CO)_2W \equiv CC_6H_5]$; unexpected substitution of acetylene, formation and molecular structure of $[MW(\mu-CC_6H_5)(CO)_6(\eta^5-C_5H_5)]$, 250
- Palladium
A structure–activity relationship for pincer palladium(II) complexes — influence of ring-size of metallacycles on the activity in allylic alkylation, 189

- Binuclear oxalamidinate complexes (MePd)₂(oxam) and homoleptic complexes of the type [(THF)_nLi₄(Me₈)M₂] and [(THF)₄Li₂(Ph₄)M] (M = Pd, Ni): synthesis, structures and catalytic C–C linking reactions, 24
- Stereoselective synthesis of (*Z,E*)-2-phenylselenobutadienes by palladium-catalyzed cross-coupling reaction, 98
- Study of the self-assembly reactions between the organic linker 1,4-bis(4-pyridyl)butadiyne and the metal-containing corners (diphosphine)M(II) (M = Pd, Pt; diphosphine = dppp, dppf, depe, dppbz), 158
- Phosphine ligands**
- Synthesis, characterization, structure and luminescence studies of mono-, di- and trinuclear gold(I) phosphine alkynyl complexes, 196
- Phosphines**
- Reactions of [C,N,N']-cyclometallated platinum compounds with phosphines: *transphobia* and effect of the chloro substituents: Crystal structure of [PtCl(3,5-C₆H₂Cl₂CHNCH₂CH₂NMe₂)-(PPh₃)₂], 143
- Phosphine selenide**
- Syntheses and structures of selenido dimanganese and iron–manganese carbonyl cluster complexes, 258
- Phosphorus**
- A structure–activity relationship for pincer palladium(II) complexes — influence of ring-size of metallacycles on the activity in allylic alkylation, 189
- Pincer**
- A structure–activity relationship for pincer palladium(II) complexes — influence of ring-size of metallacycles on the activity in allylic alkylation, 189
- Platinum**
- Reactions of [C,N,N']-cyclometallated platinum compounds with phosphines: *transphobia* and effect of the chloro substituents: Crystal structure of [PtCl(3,5-C₆H₂Cl₂CHNCH₂CH₂NMe₂)-(PPh₃)₂], 143
- Study of the self-assembly reactions between the organic linker 1,4-bis(4-pyridyl)butadiyne and the metal-containing corners (diphosphine)M(II) (M = Pd, Pt; diphosphine = dppp, dppf, depe, dppbz), 158
- PMP angle**
- A structure–activity relationship for pincer palladium(II) complexes — influence of ring-size of metallacycles on the activity in allylic alkylation, 189
- Polyfluorinated alkenyl halides**
- Nucleophilic vinylic substitution with transition metal carbonyl anions—a rare case of a halophilic reaction mechanism: Formation of halo(acyl)rhenate complexes and X-ray structure of *cis*-[CF₂=CF(CO)Re(CO)₄Br]Na, 59
- Polyoxymethylene**
- Transition metal-catalyzed polymerization of 1,3,5-trioxane, 12
- Push–pull complexes**
- Synthesis and properties of new dinuclear organoiron(II) hydrazones combining the potent electron-donating [–(η⁵-C₅H₄)FeCp] fragment with [CpFe(η⁶-arene)–]⁺-type acceptors, 150
- Reverse saturable absorption**
- Synthesis, characterization and properties of new organocobalt complexes containing η⁵-functionally substituted cyclopentadienyl and [60]fullerene ligands, 264
- Rhenium acyl anions**
- Nucleophilic vinylic substitution with transition metal carbonyl anions—a rare case of a halophilic reaction mechanism: Formation of halo(acyl)rhenate complexes and X-ray structure of *cis*-[CF₂=CF(CO)Re(CO)₄Br]Na, 59
- Rhodium**
- Catalytic hydrosilylation of acetylenes mediated by phosphine complexes of cobalt(I), rhodium(I), and iridium(I), 91
- Preparation of cyclopentadienylrhodium(I) compounds with a dangling CH₂C₅H₅ unit and their use as starting materials for the synthesis of hetero-bimetallic Rh–Ti and Rh–Zr complexes, 70
- Rhodium and cobalt**
- Synthesis and characterization of new rhodium–cobalt mixed-metal octahedral linked clusters containing η²-diyne ligands, 275
- Selenium**
- Organosilicon chalcogenides with trisilane units — adamantanes and noradamantanes, 5
- Stereoselective synthesis of (*Z,E*)-2-phenylselenobutadienes by palladium-catalyzed cross-coupling reaction, 98
- Syntheses and structures of selenido dimanganese and iron–manganese carbonyl cluster complexes, 258
- Selenium ligands**
- Synthesis, structures and reactivity of bis(diphenylphosphino)-methane (dppm)-substituted selenido osmium carbonyl clusters, 237
- Self-assembly**
- Assembly of cyclopalladated units: synthesis, characterisation, X-ray crystal structure and study of the reactivity of the tetrametallic cyclopalladated complex [Pd {C₆H₄–CH=N–(C₆H₄–2-O)}₄·2CHCl₃, 82
- Study of the self-assembly reactions between the organic linker 1,4-bis(4-pyridyl)butadiyne and the metal-containing corners (diphosphine)M(II) (M = Pd, Pt; diphosphine = dppp, dppf, depe, dppbz), 158
- Self-stabilized compound**
- Intramolecular photo-substitution in the inclusion compound of mono[6-deoxy-6-(2-aminoethyl thio-1,2-dicyane ethylenylthio)]-β-cyclodextrin with cyclopentadienyl manganese tricarbonyl in DMF solution, 269
- Silanes**
- Formation of a sterically crowded iridium(III)-silyl complex from the bulky terphenyl silane H₃Si(C₆H₃–Mes₂-2,6), 1
- Silyl complexes**
- Formation of a sterically crowded iridium(III)-silyl complex from the bulky terphenyl silane H₃Si(C₆H₃–Mes₂-2,6), 1
- SNV reactions**
- Nucleophilic vinylic substitution with transition metal carbonyl anions—a rare case of a halophilic reaction mechanism: Formation of halo(acyl)rhenate complexes and X-ray structure of *cis*-[CF₂=CF(CO)Re(CO)₄Br]Na, 59
- Solvent effects**
- Effect of solvent and temperature on the lithium–iodine exchange of primary alkyl iodides: reaction of *t*-butyllithium with 1-iodooctane in heptane–ether mixtures, 210
- Stereoselective section**
- Chiral *cis*-octahedral Grignard reagents, 215
- Stereoselectivity**
- The unusual stereochemical behaviour of ferrocenecarboxaldehyde in reaction with chiral alkylammonium hypophosphite, 225
- Sulfur**
- Organosilicon chalcogenides with trisilane units — adamantanes and noradamantanes, 5
- Sulfur replacement**
- Reactions of cobaltadithiolene complexes with aryl azides: Formations of metal chelate rings containing nitrogen atoms by substitution reactions via nitrene, 180
- Supported rhodium nanoparticles**
- Supported rhodium nanoparticles in catalysis: the role of stabilizers on catalytic activity and structural features, 37
- Supramolecular chemistry**
- Study of the self-assembly reactions between the organic linker 1,4-

- bis(4-pyridyl)butadiyne and the metal-containing corners (diphosphine)M(II) (M = Pd, Pt; diphosphine = dppp, dppf, depe, dppbz), 158
- Surface properties
Supported rhodium nanoparticles in catalysis: the role of stabilizers on catalytic activity and structural features, 37
- Synthesis
Synthesis, characterization and properties of new organocobalt complexes containing η^5 -functionally substituted cyclopentadienyl and [60]fullerene ligands, 264
- Tetraosmium clusters
Synthesis, structures and reactivity of bis(diphenylphosphino)methane (dppm)-substituted selenido osmium carbonyl clusters, 237
- Thiobenzhydrazone
Synthesis, structural characterization and electroluminescence study of alkylgallium derivatives of thiobenzhydrazones, 51
- Titan
Preparation of cyclopentadienylrhodium(I) compounds with a dangling $\text{CH}_2\text{C}_5\text{H}_5$ unit and their use as starting materials for the synthesis of hetero-bimetallic Rh–Ti and Rh–Zr complexes, 70
- Titanium
Synthesis of polymetallic Group 4 complexes bridged by benzene-diolate and triolate ligands. X-ray crystal structure of $[\{\text{Ti}(\text{C}_5\text{Me}_5\text{Cl}_2)_2\{\mu\text{-}1,4\text{-O}(2,3\text{-C}_6\text{H}_2\text{Me}_2)\text{O}\}\}]$, 228
- Trialkylgallium
Synthesis, structural characterization and electroluminescence study of alkylgallium derivatives of thiobenzhydrazones, 51
- Trioctylamine
Supported rhodium nanoparticles in catalysis: the role of stabilizers on catalytic activity and structural features, 37
- Triosmium clusters
Synthesis, structures and reactivity of bis(diphenylphosphino)methane (dppm)-substituted selenido osmium carbonyl clusters, 237
- Trioxane
Transition metal-catalyzed polymerization of 1,3,5-trioxane, 12
- Trisilane
Organosilicon chalcogenides with trisilane units — adamantanes and noradamantanes, 5
- Vinylsilane
Catalytic hydrosilylation of acetylenes mediated by phosphine complexes of cobalt(I), rhodium(I), and iridium(I), 91
- X-ray crystallography
Synthesis, structural characterization and electroluminescence study of alkylgallium derivatives of thiobenzhydrazones, 51
- X-ray crystal structures
Assembly of cyclopalladated units: synthesis, characterisation, X-ray crystal structure and study of the reactivity of the tetrametallic cyclopalladated complex $[\text{Pd}\{\text{C}_6\text{H}_4\text{-CH}=\text{N}(\text{C}_6\text{H}_4\text{-}2\text{-O})\}_4\cdot 2\text{CHCl}_3]$, 82
- X-ray structure
Reaction of $[\text{M}(\text{CO})_4(\eta^2\text{-C}_2\text{H}_2)]$ (M = Fe, Os) with $[(\eta^5\text{-C}_5\text{H}_5)(\text{CO})_2\text{W}=\text{CC}_6\text{H}_5]$; unexpected substitution of acetylene, formation and molecular structure of $[\text{MW}(\mu\text{-CC}_6\text{H}_5)(\text{CO})_6(\eta^5\text{-C}_5\text{H}_5)]$, 250
- X-ray structures
Transition metal-catalyzed polymerization of 1,3,5-trioxane, 12
- Zirconium
Stereoselective synthesis of (Z,E)-2-phenylselenobutadienes by palladium-catalyzed cross-coupling reaction, 98
Synthesis of polymetallic Group 4 complexes bridged by benzene-diolate and triolate ligands. X-ray crystal structure of $[\{\text{Ti}(\text{C}_5\text{Me}_5\text{Cl}_2)_2\{\mu\text{-}1,4\text{-O}(2,3\text{-C}_6\text{H}_2\text{Me}_2)\text{O}\}\}]$, 228
- Zirconium(III)
Transition metal-catalyzed reduction of Zr^{IV} in $\text{Cp}_2\text{ZrX}_2\text{-LiAlH}_4$ and $\text{Cp}_2\text{ZrX}_2\text{-AlH}_3$ (X = Cl, Br, I) systems: structural study of resulting zirconocene(III) aluminum hydride complexes, 167
- Zirconocenes
Transition metal-catalyzed reduction of Zr^{IV} in $\text{Cp}_2\text{ZrX}_2\text{-LiAlH}_4$ and $\text{Cp}_2\text{ZrX}_2\text{-AlH}_3$ (X = Cl, Br, I) systems: structural study of resulting zirconocene(III) aluminum hydride complexes, 167
- Zirkonium
Preparation of cyclopentadienylrhodium(I) compounds with a dangling $\text{CH}_2\text{C}_5\text{H}_5$ unit and their use as starting materials for the synthesis of hetero-bimetallic Rh–Ti and Rh–Zr complexes, 70