

Subject Index of Volume 632

Ab initio calculations

Synthesis and characterisation of $[M(\eta^5\text{-NC}_4\text{Me}_4)(\text{CH}_2\text{Ph})_3]$ ($M = \text{Ti, Zr, Hf}$) and $[\text{Ti}(\eta^5\text{-NC}_4\text{Me}_4)(\text{Me})\text{Cl}_2]$. Structural determination and bonding of $[\text{Ti}(\eta^5\text{-NC}_4\text{Me}_4)(\text{Me})\text{Cl}_2]$ depicting an agostic interaction, 157

Synthesis, bonding and dynamic behavior of *fac*- $[\text{Mo}(\text{II})\text{-(CO)}_2(\eta^3\text{-allyl})]$ derivatives, 197

Actinide ions

Gas-phase reactivity of lanthanide and actinide cations with the archetypal organometallic complexes $\text{Fe}(\text{CO})_5$ and $\text{Fe}(\text{C}_5\text{H}_5)_2$, 126

Agostic interaction

Rhenium(I) organometallic complexes with novel bis(mercaptoimidazolyl)borates and with hydrotris(mercaptoimidazolyl)borate: chemical and structural studies, 41

Synthesis and characterisation of $[M(\eta^5\text{-NC}_4\text{Me}_4)(\text{CH}_2\text{Ph})_3]$ ($M = \text{Ti, Zr, Hf}$) and $[\text{Ti}(\eta^5\text{-NC}_4\text{Me}_4)(\text{Me})\text{Cl}_2]$. Structural determination and bonding of $[\text{Ti}(\eta^5\text{-NC}_4\text{Me}_4)(\text{Me})\text{Cl}_2]$ depicting an agostic interaction, 157

Alkylidyne

Comparative behaviours of phospho-alkynes and alkynes at electron-rich phosphinic metal centres, 215

Alkyne

Comparative behaviours of phospho-alkynes and alkynes at electron-rich phosphinic metal centres, 215

$\text{CpCo}(\text{CO})_2$ -catalysed cyclotrimerisation of alkynes in supercritical carbon dioxide, 113

Alkynyl

Comparative behaviours of phospho-alkynes and alkynes at electron-rich phosphinic metal centres, 215

Allene

Comparative behaviours of phospho-alkynes and alkynes at electron-rich phosphinic metal centres, 215

Allyl complexes

Heptacoordinate dithiophosphate Mo(II) and W(II) complexes: molecular structures of mono and binuclear phosphine complexes, 175

Allylic complexes

Synthesis, bonding and dynamic behavior of *fac*- $[\text{Mo}(\text{II})\text{-(CO)}_2\text{-(}\eta^3\text{-allyl)}]$ derivatives, 197

Amido

Amido- and imido-ethylpyridine titanium complexes. Crystal structure of $\{\text{Ti}[\text{NCH}_2\text{CH}_2\text{py}]\text{Cl}_2(\text{THF})\}_2$, 17

Amido ligand

Zirconium indenylamido complexes: synthesis and reactivity: Crystal structure of $[\text{Zr}(\text{Ind})_2(\text{NC}_3\text{H}_6)_2]$, 58

2'-Aminoethyl-2-pyridyl derivatives

Amido- and imido-ethylpyridine titanium complexes. Crystal structure of $\{\text{Ti}[\text{NCH}_2\text{CH}_2\text{py}]\text{Cl}_2(\text{THF})\}_2$, 17

Aryl

Thiophene versus aryl coordination in tricarbonylmanganese complexes with interesting non-linear optical properties, 3

Asymmetric synthesis

Synthesis of chiral (7*R*)- $[\eta^6\text{-5-(}N,N\text{-dimethylamino)-7-formyl-1,3-}$

benzodioxole]chromium complex and its application in the synthesis of optically active *cis*- β -lactams, 27

Benzonitrile derivatives

Synthesis of new donor/acceptor η^5 -cyclopentadienyl and η^5 -indenyliron(II) complexes with *p*-benzonitrile derivatives. Crystal structures of $[\text{Fe}(\eta^5\text{-C}_5\text{H}_5)(\text{CO})(\text{P}(\text{OC}_6\text{H}_5)_3)(p\text{-NCC}_6\text{H}_4\text{NO}_2)][\text{BF}_4] \cdot \text{CH}_2\text{Cl}_2$ and $[\text{Fe}(\eta^5\text{-C}_9\text{H}_7)(\text{CO})(\text{P}(\text{OC}_6\text{H}_5)_3)(p\text{-NCC}_6\text{H}_4\text{NO}_2)][\text{BF}_4]$, 145

Bimetallic compounds

Synthesis and characterisation of ring-coupled cyclopentadienyl and indenyl bimetallic derivatives of nickel, 164

Binuclear

Biscyclopentadienyl Group 6 metal complexes as metalloligands in the synthesis of heterobimetallic species. Crystal structures of new thiolato-bridged molybdenum(IV)–copper(I) complexes, 75

Binuclear complexes

Heptacoordinate dithiophosphate Mo(II) and W(II) complexes: molecular structures of mono and binuclear phosphine complexes, 175

Bond dissociation enthalpy

Bond dissociation enthalpies of U(IV) complexes. An integrated view, 209

Bond enthalpies

Organometallic thermochemistry at CQE-IST. An overview, 188

Carbonyl

Rhenium(I) organometallic complexes with novel bis(mercaptoimidazolyl)borates and with hydrotris(mercaptoimidazolyl)borate: chemical and structural studies, 41

Carbyne

Comparative behaviours of phospho-alkynes and alkynes at electron-rich phosphinic metal centres, 215

Chromium

Synthesis of chiral (7*R*)- $[\eta^6\text{-5-(}N,N\text{-dimethylamino)-7-formyl-1,3-}$ benzodioxole]chromium complex and its application in the synthesis of optically active *cis*- β -lactams, 27

Cobaloximes

Characterization of the photolysis products of *sec*-butylcobaloximes with imidazole and benzimidazole bases, 85

Cobalt(II) complexes

Characterization of the photolysis products of *sec*-butylcobaloximes with imidazole and benzimidazole bases, 85

Copper

Biscyclopentadienyl Group 6 metal complexes as metalloligands in the synthesis of heterobimetallic species. Crystal structures of new thiolato-bridged molybdenum(IV)–copper(I) complexes, 75

CpCo(CO)₂

$\text{CpCo}(\text{CO})_2$ -catalysed cyclotrimerisation of alkynes in supercritical carbon dioxide, 113

Crystal structures

Heptacoordinate dithiophosphate Mo(II) and W(II) complexes: molecular structures of mono and binuclear phosphine complexes, 175

- New studies on the chemical oxidation of bis(η^5 -cyclopentadienyl)dithiolatetungsten(IV) complexes. Crystal structures of $[\text{Mo}(\eta^5\text{-C}_5\text{H}_5)_2\text{S}(\text{C}_6\text{H}_4\text{-}o\text{-SC}_6\text{H}_5)][\text{BF}_4]$ and $[\text{Mo}(\eta^5\text{-C}_5\text{H}_5)_2(\text{SC}_6\text{H}_5)_2]$, 107
- Samarium(III) compounds supported by the hydrotris(3,5-dimethyl-pyrazolyl)borate ligand: synthetic utility of the putative, reduction prone Sm(III)-hydrocarbyls, '(Tp^{Me2})₂-SmR', 119
- Second harmonic generation of η^5 -monocyclopentadienyl ruthenium *p*-benzonitrile derivatives by Kurtz powder technique. Crystal and molecular structure determinations of $[\text{Ru}(\eta^5\text{-C}_5\text{H}_5)((+)-\text{DIOP})(p\text{-NCC}_6\text{H}_4\text{NO}_2)][\text{X}]$, X = PF₆⁻, CF₃SO₃⁻ and $[\text{Ru}(\eta^5\text{-C}_5\text{H}_5)((+)-\text{DIOP})(\text{NCCCH}_3)][\text{PF}_6]$, 133
- Synthesis and characterisation of ring-coupled cyclopentadienyl and indenyl bimetallic derivatives of nickel, 164
- Synthesis of new donor/acceptor η^5 -cyclopentadienyl and η^5 -indenylirone(II) complexes with *p*-benzonitrile derivatives. Crystal structures of $[\text{Fe}(\eta^5\text{-C}_5\text{H}_5)(\text{CO})(\text{P}(\text{OC}_6\text{H}_5)_3)(p\text{-NCC}_6\text{H}_4\text{NO}_2)][\text{BF}_4] \cdot \text{CH}_2\text{Cl}_2$ and $[\text{Fe}(\eta^5\text{-C}_9\text{H}_7)(\text{CO})(\text{P}(\text{OC}_6\text{H}_5)_3)(p\text{-NCC}_6\text{H}_4\text{NO}_2)][\text{BF}_4]$, 145
- Synthesis, structural and magnetic characterization of the metamagnet $[\text{Fe}(\text{C}_5\text{Me}_5)_2]\text{DMe-DCNQI}$, 67
- Cyanide bridges
- Metal–metal interaction in polynuclear complexes with cyanide bridges: synthesis, characterisation, and theoretical studies, 94
- Cyclic voltammetry
- New studies on the chemical oxidation of bis(η^5 -cyclopentadienyl)dithiolatetungsten(IV) complexes. Crystal structures of $[\text{Mo}(\eta^5\text{-C}_5\text{H}_5)_2\text{S}(\text{C}_6\text{H}_4\text{-}o\text{-SC}_6\text{H}_5)][\text{BF}_4]$ and $[\text{Mo}(\eta^5\text{-C}_5\text{H}_5)_2(\text{SC}_6\text{H}_5)_2]$, 107
- Cycloadditions
- Synthesis of chiral (7*R*)-[η^6 -5-(*N,N*-dimethylamino)-7-formyl-1,3-benzodioxole]chromium complex and its application in the synthesis of optically active *cis*- β -lactams, 27
- Cyclodextrins
- Experimental and theoretical study of the interaction of molybdenocene dichloride (Cp₂MoCl₂) with β -cyclodextrin, 11
- Cyclohexadienyl
- Mechanism of the electrochemical reduction of $[\text{Fe}(\eta^5\text{-C}_6\text{H}_7)(\text{CO})_3][\text{PF}_6]$ — a theoretical approach to the intermediates, 49
- Cyclopentadienyl
- Synthesis and characterisation of ring-coupled cyclopentadienyl and indenyl bimetallic derivatives of nickel, 164
- Synthesis of new donor/acceptor η^5 -cyclopentadienyl and η^5 -indenylirone(II) complexes with *p*-benzonitrile derivatives. Crystal structures of $[\text{Fe}(\eta^5\text{-C}_5\text{H}_5)(\text{CO})(\text{P}(\text{OC}_6\text{H}_5)_3)(p\text{-NCC}_6\text{H}_4\text{NO}_2)][\text{BF}_4] \cdot \text{CH}_2\text{Cl}_2$ and $[\text{Fe}(\eta^5\text{-C}_9\text{H}_7)(\text{CO})(\text{P}(\text{OC}_6\text{H}_5)_3)(p\text{-NCC}_6\text{H}_4\text{NO}_2)][\text{BF}_4]$, 145
- Cyclotrimerisation
- CpCo(CO)₂-catalysed cyclotrimerisation of alkynes in supercritical carbon dioxide, 113
- Decamethylferrocenium
- Synthesis, structural and magnetic characterization of the metamagnet $[\text{Fe}(\text{C}_5\text{Me}_5)_2]\text{DMe-DCNQI}$, 67
- DFT
- Thiophene versus aryl coordination in tricarbonylmanganese complexes with interesting non-linear optical properties, 3
- DFT calculations
- Heptacoordinate dithiophosphate Mo(II) and W(II) complexes: molecular structures of mono and binuclear phosphine complexes, 175
- Mechanism of the electrochemical reduction of $[\text{Fe}(\eta^5\text{-C}_6\text{H}_7)(\text{CO})_3][\text{PF}_6]$ — a theoretical approach to the intermediates, 49
- Metal–metal interaction in polynuclear complexes with cyanide bridges: synthesis, characterisation, and theoretical studies, 94
- Dynamic NMR
- Synthesis, bonding and dynamic behavior of *fac*-[Mo(II)(CO)₂(η^3 -allyl)] derivatives, 197
- Electrochemistry
- Mechanism of the electrochemical reduction of $[\text{Fe}(\eta^5\text{-C}_6\text{H}_7)(\text{CO})_3][\text{PF}_6]$ — a theoretical approach to the intermediates, 49
- Electrophilic addition
- Comparative behaviours of phospho-alkynes and alkynes at electron-rich phosphinic metal centres, 215
- ELHB
- Biscyclopentadienyl Group 6 metal complexes as metallogands in the synthesis of heterobimetallic species. Crystal structures of new thiolato-bridged molybdenum(IV)–copper(I) complexes, 75
- Entropy changes
- Organometallic thermochemistry at CQE-IST. An overview, 188
- EPR
- Characterization of the photolysis products of *sec*-butylcobaloximes with imidazole and benzimidazole bases, 85
- Ethylene and propylene polymerisation
- Zirconium indenylamido complexes: synthesis and reactivity: Crystal structure of $[\text{Zr}(\text{Ind})_2(\text{NC}_3\text{H}_6)_2]$, 58
- Fluorophosphine
- Comparative behaviours of phospho-alkynes and alkynes at electron-rich phosphinic metal centres, 215
- FT-ICR/MS
- Gas-phase reactivity of lanthanide and actinide cations with the archetypal organometallic complexes Fe(CO)₅ and Fe(C₅H₅)₂, 126
- Gas phase
- Gas-phase reactivity of lanthanide and actinide cations with the archetypal organometallic complexes Fe(CO)₅ and Fe(C₅H₅)₂, 126
- Group IV transition metals
- Synthesis and characterisation of $[\text{M}(\eta^5\text{-NC}_4\text{Me}_4)(\text{CH}_2\text{Ph})_3]$ (M = Ti, Zr, Hf) and $[\text{Ti}(\eta^5\text{-NC}_4\text{Me}_4)(\text{Me})\text{Cl}_2]$. Structural determination and bonding of $[\text{Ti}(\eta^5\text{-NC}_4\text{Me}_4)(\text{Me})\text{Cl}_2]$ depicting an agostic interaction, 157
- Half-sandwich complexes
- Zirconium indenylamido complexes: synthesis and reactivity: Crystal structure of $[\text{Zr}(\text{Ind})_2(\text{NC}_3\text{H}_6)_2]$, 58
- Hapticity change
- Mechanism of the electrochemical reduction of $[\text{Fe}(\eta^5\text{-C}_6\text{H}_7)(\text{CO})_3][\text{PF}_6]$ — a theoretical approach to the intermediates, 49
- Host–guest chemistry
- Experimental and theoretical study of the interaction of molybdenocene dichloride (Cp₂MoCl₂) with β -cyclodextrin, 11
- Hydrotris(pyrazolyl)borate ligands
- Samarium(III) compounds supported by the hydrotris(3,5-dimethyl-pyrazolyl)borate ligand: synthetic utility of the putative, reduction prone Sm(III)-hydrocarbyls, '(Tp^{Me2})₂-SmR', 119
- Imido
- Amido- and imido-ethylpyridine titanium complexes. Crystal structure of $\{\text{Ti}[\text{NCH}_2\text{CH}_2\text{py}]\text{Cl}_2(\text{THF})\}_2$, 17

Imine complexes

Synthesis of chiral (7*R*)-[η^6 -5-(*N,N*-dimethylamino)-7-formyl-1,3-benzodioxole]chromium complex and its application in the synthesis of optically active *cis*- β -lactams, 27

Indenyl

Synthesis and characterisation of ring-coupled cyclopentadienyl and indenyl bimetallic derivatives of nickel, 164

Synthesis of new donor/acceptor η^5 -cyclopentadienyl and η^5 -indenyliron(II) complexes with *p*-benzonitrile derivatives. Crystal structures of [Fe(η^5 -C₅H₅)(CO)(P(OC₆H₅)₃)(*p*-NCC₆H₄NO₂)](BF₄)·CH₂Cl₂ and [Fe(η^5 -C₉H₇)(CO)(P(OC₆H₅)₃)(*p*-NCC₆H₄NO₂)](BF₄), 145

Zirconium indenylamido complexes: synthesis and reactivity: Crystal structure of [Zr(Ind)₂(NC₃H₆)₂], 58

Iron complexes

Gas-phase reactivity of lanthanide and actinide cations with the archetypal organometallic complexes Fe(CO)₅ and Fe(C₅H₅)₂, 126

Synthesis of new donor/acceptor η^5 -cyclopentadienyl and η^5 -indenyliron(II) complexes with *p*-benzonitrile derivatives. Crystal structures of [Fe(η^5 -C₅H₅)(CO)(P(OC₆H₅)₃)(*p*-NCC₆H₄NO₂)](BF₄)·CH₂Cl₂ and [Fe(η^5 -C₉H₇)(CO)(P(OC₆H₅)₃)(*p*-NCC₆H₄NO₂)](BF₄), 145

Kurtz powder SHG

Second harmonic generation of η^5 -monocyclopentadienyl ruthenium *p*-benzonitrile derivatives by Kurtz powder technique. Crystal and molecular structure determinations of [Ru(η^5 -C₅H₅)((+)-DIOP)(*p*-NCC₆H₄NO₂)](X), X = PF₆⁻, CF₃SO₃⁻ and [Ru(η^5 -C₅H₅)((+)-DIOP)(NCCH₃)](PF₆), 133

 β -Lactams

Synthesis of chiral (7*R*)-[η^6 -5-(*N,N*-dimethylamino)-7-formyl-1,3-benzodioxole]chromium complex and its application in the synthesis of optically active *cis*- β -lactams, 27

Lanthanide ions

Gas-phase reactivity of lanthanide and actinide cations with the archetypal organometallic complexes Fe(CO)₅ and Fe(C₅H₅)₂, 126

Magnetic molecular materials

Synthesis, structural and magnetic characterization of the metamagnet [Fe(C₅Me₅)₂]DMe–DCNQI, 67

Mechanism

Mechanism of the electrochemical reduction of [Fe(η^5 -C₆H₇)(CO)₃](PF₆) — a theoretical approach to the intermediates, 49

Metallocenes

Metal–metal interaction in polynuclear complexes with cyanide bridges: synthesis, characterisation, and theoretical studies, 94

Metal–metal bonds

Gas-phase reactivity of lanthanide and actinide cations with the archetypal organometallic complexes Fe(CO)₅ and Fe(C₅H₅)₂, 126

Metamagnetism

Synthesis, structural and magnetic characterization of the metamagnet [Fe(C₅Me₅)₂]DMe–DCNQI, 67

Molecular orbital calculations

Thiophene versus aryl coordination in tricarbonylmanganese complexes with interesting non-linear optical properties, 3

Molybdenocene

Experimental and theoretical study of the interaction of molybdenocene dichloride (Cp₂MoCl₂) with β -cyclodextrin, 11

Molybdenocenes

New studies on the chemical oxidation of bis(η^5 -cyclopentadienyl)dithiolatetungsten(IV) complexes. Crystal struc-

tures of [Mo(η^5 -C₅H₅)₂S(C₆H₄-*o*-SC₆H₅)](BF₄) and [Mo(η^5 -C₅H₅)₂(SC₆H₅)₂], 107

Molybdenum

Experimental and theoretical study of the interaction of molybdenocene dichloride (Cp₂MoCl₂) with β -cyclodextrin, 11

Heptacoordinate dithiophosphate Mo(II) and W(II) complexes: molecular structures of mono and binuclear phosphine complexes, 175

Synthesis, bonding and dynamic behavior of *fac*-[Mo(II)(CO)₂(η^3 -allyl)] derivatives, 197

Molybdenum bicyclopentadienyl

Bicyclopentadienyl Group 6 metal complexes as metalloligands in the synthesis of heterobimetallic species. Crystal structures of new thiolato-bridged molybdenum(IV)–copper(I) complexes, 75

Nickel

Synthesis and characterisation of ring-coupled cyclopentadienyl and indenyl bimetallic derivatives of nickel, 164

NLO

Thiophene versus aryl coordination in tricarbonylmanganese complexes with interesting non-linear optical properties, 3

NLO materials

Second harmonic generation of η^5 -monocyclopentadienyl ruthenium *p*-benzonitrile derivatives by Kurtz powder technique. Crystal and molecular structure determinations of [Ru(η^5 -C₅H₅)((+)-DIOP)(*p*-NCC₆H₄NO₂)](X), X = PF₆⁻, CF₃SO₃⁻ and [Ru(η^5 -C₅H₅)((+)-DIOP)(NCCH₃)](PF₆), 133

Nonlinear optics

Second harmonic generation of η^5 -monocyclopentadienyl ruthenium *p*-benzonitrile derivatives by Kurtz powder technique. Crystal and molecular structure determinations of [Ru(η^5 -C₅H₅)((+)-DIOP)(*p*-NCC₆H₄NO₂)](X), X = PF₆⁻, CF₃SO₃⁻ and [Ru(η^5 -C₅H₅)((+)-DIOP)(NCCH₃)](PF₆), 133

Nucleophilic addition

Comparative behaviours of phospho-alkynes and alkynes at electron-rich phosphinic metal centres, 215

Organometallic electron-transfer salts

Synthesis, structural and magnetic characterization of the metamagnet [Fe(C₅Me₅)₂]DMe–DCNQI, 67

Oxidation reactions

New studies on the chemical oxidation of bis(η^5 -cyclopentadienyl)dithiolatetungsten(IV) complexes. Crystal structures of [Mo(η^5 -C₅H₅)₂S(C₆H₄-*o*-SC₆H₅)](BF₄) and [Mo(η^5 -C₅H₅)₂(SC₆H₅)₂], 107

Phospha-alkene

Comparative behaviours of phospho-alkynes and alkynes at electron-rich phosphinic metal centres, 215

Phospha-alkyne

Comparative behaviours of phospho-alkynes and alkynes at electron-rich phosphinic metal centres, 215

Phosphine

Comparative behaviours of phospho-alkynes and alkynes at electron-rich phosphinic metal centres, 215

Phosphinedene oxide

Comparative behaviours of phospho-alkynes and alkynes at electron-rich phosphinic metal centres, 215

Photolysis

Characterization of the photolysis products of *sec*-butylcobaloximes with imidazole and benzimidazole bases, 85

Poly(mercaptoimidazoly)borates

Rhenium(I) organometallic complexes with novel bis(mercaptoimidazoly)borates and with hydrotris(mercaptoimidazoly)borate: chemical and structural studies, 41

Polynuclear complexes

Metal–metal interaction in polynuclear complexes with cyanide bridges: synthesis, characterisation, and theoretical studies, 94

Protonation

Comparative behaviours of phospho-alkynes and alkynes at electron-rich phosphinic metal centres, 215

Pyrrolyl

Synthesis and characterisation of $[M(\eta^5\text{-NC}_4\text{Me}_4)(\text{CH}_2\text{Ph})_3]$ ($M = \text{Ti, Zr, Hf}$) and $[\text{Ti}(\eta^5\text{-NC}_4\text{Me}_4)(\text{Me})\text{Cl}_2]$. Structural determination and bonding of $[\text{Ti}(\eta^5\text{-NC}_4\text{Me}_4)(\text{Me})\text{Cl}_2]$ depicting an agostic interaction, 157

Rhenium

Rhenium(I) organometallic complexes with novel bis(mercaptoimidazolyl)borates and with hydrotris(mercaptoimidazolyl)borate: chemical and structural studies, 41

Ring-coupled derivatives

Synthesis and characterisation of ring-coupled cyclopentadienyl and indenyl bimetallic derivatives of nickel, 164

Ring slippage

Mechanism of the electrochemical reduction of $[\text{Fe}(\eta^5\text{-C}_6\text{H}_7)(\text{CO})_3][\text{PF}_6]$ — a theoretical approach to the intermediates, 49

Ruthenium

Second harmonic generation of η^5 -monocyclopentadienyl ruthenium *p*-benzonitrile derivatives by Kurtz powder technique. Crystal and molecular structure determinations of $[\text{Ru}(\eta^5\text{-C}_5\text{H}_5)((+)-\text{DIOP})(p\text{-NCC}_6\text{H}_4\text{NO}_2)][\text{X}]$, $\text{X} = \text{PF}_6^-$, CF_3SO_3^- and $[\text{Ru}(\eta^5\text{-C}_5\text{H}_5)((+)-\text{DIOP})(\text{NCCH}_3)][\text{PF}_6]$, 133

Samarium complexes

Samarium(III) compounds supported by the hydrotris(3,5-dimethyl-pyrazolyl)borate ligand: synthetic utility of the putative, reduction prone $\text{Sm}(\text{III})$ -hydrocarbyls, '(Tp^{Me2})₂-SmR', 119

Solid-state structures

Experimental and theoretical study of the interaction of molybdenocene dichloride (Cp_2MoCl_2) with β -cyclodextrin, 11

Supercritical CO₂

CpCo(CO)₂-catalysed cyclotrimerisation of alkynes in supercritical carbon dioxide, 113

Theoretical studies

Metal–metal interaction in polynuclear complexes with cyanide bridges: synthesis, characterisation, and theoretical studies, 94

Thermochemistry

Organometallic thermochemistry at CQE-IST. An overview, 188

Thiolate-bridged

Biscyclopentadienyl Group 6 metal complexes as metalloligands in the synthesis of heterobimetallic species. Crystal structures of new thiolato-bridged molybdenum(IV)–copper(I) complexes, 75

Thiolates

New studies on the chemical oxidation of bis(η^5 -cyclopentadienyl)dithiolatetungsten(IV) complexes. Crystal structures of $[\text{Mo}(\eta^5\text{-C}_5\text{H}_5)_2\text{S}(\text{C}_6\text{H}_4\text{-}o\text{-SC}_6\text{H}_5)][\text{BF}_4]$ and $[\text{Mo}(\eta^5\text{-C}_5\text{H}_5)_2(\text{SC}_6\text{H}_5)_2]$, 107

Thiophene

Thiophene versus aryl coordination in tricarbonylmanganese complexes with interesting non-linear optical properties, 3

Titanium

Amido- and imido-ethylpyridine titanium complexes. Crystal structure of $\{\text{Ti}[\text{NCH}_2\text{CH}_2\text{py}]\text{Cl}_2(\text{THF})\}_2$, 17

Zirconium indenylamido complexes: synthesis and reactivity: Crystal structure of $[\text{Zr}(\text{Ind})_2(\text{NC}_3\text{H}_6)_2]$, 58

Tricarbonylmanganese

Thiophene versus aryl coordination in tricarbonylmanganese complexes with interesting non-linear optical properties, 3

Uranium compounds

Bond dissociation enthalpies of U(IV) complexes. An integrated view, 209

Vinyl

Comparative behaviours of phospho-alkynes and alkynes at electron-rich phosphinic metal centres, 215

Vinylidene

Comparative behaviours of phospho-alkynes and alkynes at electron-rich phosphinic metal centres, 215

X-ray diffraction

Synthesis and characterisation of $[M(\eta^5\text{-NC}_4\text{Me}_4)(\text{CH}_2\text{Ph})_3]$ ($M = \text{Ti, Zr, Hf}$) and $[\text{Ti}(\eta^5\text{-NC}_4\text{Me}_4)(\text{Me})\text{Cl}_2]$. Structural determination and bonding of $[\text{Ti}(\eta^5\text{-NC}_4\text{Me}_4)(\text{Me})\text{Cl}_2]$ depicting an agostic interaction, 157

Synthesis, bonding and dynamic behavior of *fac*- $[\text{Mo}(\text{II})(\text{CO})_2(\eta^3\text{-allyl})]$ derivatives, 197

X-ray diffraction analysis

Rhenium(I) organometallic complexes with novel bis(mercaptoimidazolyl)borates and with hydrotris(mercaptoimidazolyl)borate: chemical and structural studies, 41

Zirconium

Zirconium indenylamido complexes: synthesis and reactivity: Crystal structure of $[\text{Zr}(\text{Ind})_2(\text{NC}_3\text{H}_6)_2]$, 58