

## Subject Index of Volume 542

### Ab initio MO

Hydroesterification of ethylene catalyzed by Pd(II) complexes: an ab initio MO study (M. Kawana, S. Nakamura, E. Watanabe and H. Urata), 185

### Absolute stereochemistry

Synthesis and absolute stereochemistry of an organo-palladium complex containing a P-chiral diphosphine ligand (S. Selvaratnam, P.-H. Leung, A.J.P. White and D.J. Williams), 61

### Acetylene complexes

Interaction of carbon dioxide with acetylene complexes of titanocene  $Cp_2Ti(RC_2R)$  ( $R = Ph, SiMe_3$ ). Synthesis and structure of binuclear  $\sigma$ -alkenylcarboxylate complexes of titanium (III)  $Cp_2TiC(R)=C(R)COOTiCp_2$  and unexpected transformation of these complexes into titanafuranone metallacycles under the action of air oxygen (V.V. Burlakov, A.I. Yanovsky, Yu.T. Struchkov, U. Rosenthal, A. Spannenberg, R. Kempe, O.G. Ellert and V.B. Shur), 105

### Acid–base reaction

Donorfreie und donorhaltige Supersilylalkalimetalle  $^tBu_3SiM$ : Synthesen, Charakterisierung, Strukturen (N. Wiberg, K. Amelunxen, H.-W. Lerner, H. Schuster, H. Nöth, I. Krossing, M. Schmidt-Amelunxen und T. Seifert), 1

### Alkaline Metals

Donorfreie und donorhaltige Supersilylalkalimetalle  $^tBu_3SiM$ : Synthesen, Charakterisierung, Strukturen (N. Wiberg, K. Amelunxen, H.-W. Lerner, H. Schuster, H. Nöth, I. Krossing, M. Schmidt-Amelunxen und T. Seifert), 1

### Ansa-metallocene dichloride structures

Group 4 ansa-metallocene Ziegler catalysts derived from trans-1,2-cycloalkylene-bis(indenyl)- and -bis(tetrahydroindenyl) $MCl_2$  systems: structural and reactivity studies (A. Steinhorst, G. Erker, M. Grehl and R. Fröhlich), 191

### Ansa-metallocenes

Group 4 ansa-metallocene Ziegler catalysts derived from trans-1,2-cycloalkylene-bis(indenyl)- and -bis(tetrahydroindenyl) $MCl_2$  systems: structural and reactivity studies (A. Steinhorst, G. Erker, M. Grehl and R. Fröhlich), 191

### Bimetallic dipoles

Nonlinear optical properties in bimetallic monocation  $\pi$ -complexes of iron (E. Hendrickx, A. Persoons, S. Samson and G.R. Stephenson), 295

### Binuclear ferrocene derivatives

$^{57}Fe$  Mössbauer spectra and X-ray structural analyses of iodide salts for 1',1''-bis( $\alpha$ - and  $\beta$ -naphthylmethyl)-1,1''-biferrocenes (S. Nakashima, A. Hori, H. Sakai, M. Watanabe and I. Motoyama), 271

### Bis(carbene)complexes

Kohlenwasserstoffverbrückte Metallkomplexe XXXVIII. Verbrückte Bis(carben)-Komplexe  $(OC)_5M = C(OMe)-C(H) = \overline{CH_2}$   
C-O-C(O)-CH-CH<sub>2</sub>-C(OMe)=M(CO)<sub>5</sub> (M = Cr, W) aus anionischen Carbenkomplexen vom Fischer-Typ und Fumarsäuredichlorid (A. Geisbauer, K. Polborn and W. Beck), 205

### Carbon dioxide

Interaction of carbon dioxide with acetylene complexes of titanocene  $Cp_2Ti(RC_2R)$  ( $R = Ph, SiMe_3$ ). Synthesis and structure of binuclear  $\sigma$ -alkenylcarboxylate complexes of titanium (III)  $Cp_2TiC(R)=C(R)COOTiCp_2$  and unexpected transformation of these complexes into titanafuranone metallacycles under the action of air oxygen (V.V. Burlakov, A.I. Yanovsky, Yu.T. Struchkov, U. Rosenthal, A. Spannenberg, R. Kempe, O.G. Ellert and V.B. Shur), 105

### Chiral diphosphine

Synthesis and absolute stereochemistry of an organo-palladium complex containing a P-chiral diphosphine ligand (S. Selvaratnam, P.-H. Leung, A.J.P. White and D.J. Williams), 61

### Chirality

Optically active transition metal compounds 112. Synthesis of chiral carbonylnitrosylcobalt complexes with bidentate  $PP^*$ ,  $PN^*$  and  $NN^*$  ligands (H. Brunner, P. Faustmann, A. Dietl and B. Nuber), 255

### Chromium

Kohlenwasserstoffverbrückte Metallkomplexe XXXVIII. Verbrückte Bis(carben)-Komplexe  $(OC)_5M = C(OMe)-C(H) = \overline{CH_2}$   
C-O-C(O)-CH-CH<sub>2</sub>-C(OMe)=M(CO)<sub>5</sub> (M = Cr, W) aus anionischen Carbenkomplexen vom Fischer-Typ und Fumarsäuredichlorid (A. Geisbauer, K. Polborn and W. Beck), 205

### Cobalt(carbonyl)(nitrosyl) complexes

Optically active transition metal compounds 112. Synthesis of chiral carbonylnitrosylcobalt complexes with bidentate  $PP^*$ ,  $PN^*$  and  $NN^*$  ligands (H. Brunner, P. Faustmann, A. Dietl and B. Nuber), 255

### Crystal structure

Synthesis and absolute stereochemistry of an organo-palladium complex containing a P-chiral diphosphine ligand (S. Selvaratnam, P.-H. Leung, A.J.P. White and D.J. Williams), 61

Synthesis and X-ray crystal structure of bis( $\eta^5$ -1,3-bis(trimethylsilyl)cyclopentadienyl) lanthanide and yttrium iodide complexes (Z. Xie, Z. Liu, F. Xue, Z. Zhang and T.C.W. Mak), 285

### Cyclopentadienyl

Synthesis and X-ray crystal structure of bis( $\eta^5$ -1,3-bis(trimethylsilyl)cyclopentadienyl) lanthanide and yttrium iodide complexes (Z. Xie, Z. Liu, F. Xue, Z. Zhang and T.C.W. Mak), 285

### Dicyclopentadienyl

Insertion of isocyanides into zirconium–alkyl bonds of di-ansa-zirconocene complexes. X-ray molecular structure of  $[Zr\{(SiMe_2)_2(\eta^5-C_5H_3)_2\}Cl\{\eta^2-C(i-Pr)N(2,6-Me_2C_6H_3)\}]$  (A.M. Barriola, A.M. Cano, T. Cuenca, F.J. Fernández, P. Gómez-Sal, A. Manzanero and P. Royo), 247

### Dinuclear

Synthesis and characterization of dinuclear complexes of Pd<sup>II</sup> containing the ( $\mu$ -N-C-S)<sub>2</sub> skeleton (M. Espino Lizarraga, R. Navarro and E.P. Urriolabeitia), 51

## Donors

Donorfreie und donorhaltige Supersilylalkalimetalle  ${}^1\text{Bu}_3\text{SiM}$ : Synthesen, Charakterisierung, Strukturen (N. Wiberg, K. Amelunxen, H.-W. Lerner, H. Schuster, H. Nöth, I. Krossing, M. Schmidt-Amelunxen und T. Seifert), 1

## Double hydrostannation

On the chemospecificity of the double stannylation and double hydrostannation of terminal alkynes by the tributylstannane in the presence of thiol (J.-C. Meurice, M. Vallier, M. Ratier, J.-G. Duboudin and M. Pétraud), 67

## Double stannylation

On the chemospecificity of the double stannylation and double hydrostannation of terminal alkynes by the tributylstannane in the presence of thiol (J.-C. Meurice, M. Vallier, M. Ratier, J.-G. Duboudin and M. Pétraud), 67

 ${}^{57}\text{Fe}$  Mössbauer spectroscopy

${}^{57}\text{Fe}$  Mössbauer spectra and X-ray structural analyses of iodide salts for 1',1'''-bis( $\alpha$ - and  $\beta$ -naphthylmethyl)-1,1''-biferrocenes (S. Nakashima, A. Hori, H. Sakai, M. Watanabe and I. Motoyama), 271

## Ferrocene

Nonlinear optical properties in bimetallic monocation  $\pi$ -complexes of iron (E. Hendrickx, A. Persoons, S. Samson and G.R. Stephenson), 295

## Germanium

Insertion of  $\text{GeCl}_2$  into group VI transition metal–chlorine bonds: synthesis, spectroscopy and structure of molybdenum and tungsten trichlorogermyl complexes (A.C. Filippou, J.G. Winter, G. Kociok-Köhn and I. Hinz), 35

## Halide exchange

Synthesis and X-ray crystal structure of bis[ $\eta^5$ -1,3-bis(trimethylsilyl)cyclopentadienyl] lanthanide and yttrium iodide complexes (Z. Xie, Z. Liu, F. Xue, Z. Zhang and T.C.W. Mak), 285

## Homolysis

Photodegradation of thin films of polygermanes (K. Mochida, S.-s. Nagano, H. Kawata, M. Wakasa and H. Hayashi), 75

## Hydroesterification

Hydroesterification of ethylene catalyzed by Pd(II) complexes: an ab initio MO study (M. Kawana, S. Nakamura, E. Watanabe and H. Urata), 185

## Iminoacyl

Insertion of isocyanides into zirconium–alkyl bonds of di-ansa-zirconocene complexes. X-ray molecular structure of  $[\text{Zr}\{\{\text{SiMe}_2\}_2(\eta^5\text{-C}_5\text{H}_3)_2\}\text{Cl}\{\eta^2\text{-C}(\text{i-Pr})\text{N}(2,6\text{-Me}_2\text{C}_6\text{H}_3)\}]$  (A.M. Barriola, A.M. Cano, T. Cuenca, F.J. Fernández, P. Gómez-Sal, A. Manzanero and P. Royo), 247

## Insertion

Insertion of  $\text{GeCl}_2$  into group VI transition metal–chlorine bonds: synthesis, spectroscopy and structure of molybdenum and tungsten trichlorogermyl complexes (A.C. Filippou, J.G. Winter, G. Kociok-Köhn and I. Hinz), 35

## Isotactic polypropylene

Group 4 ansa-metallocene Ziegler catalysts derived from trans-1,2-cycloalkylene-bis(indenyl)- and -bis(tetrahydroindenyl) $\text{MCl}_2$  systems: structural and reactivity studies (A. Steinhörst, G. Erker, M. Grehl and R. Fröhlich), 191

## Laser flash photolysis

Photodegradation of thin films of polygermanes (K. Mochida, S.-s. Nagano, H. Kawata, M. Wakasa and H. Hayashi), 75

## Mass spectrum

Studies in aryltin chemistry. Part 11. The effects of substituent type and position on the disintegration patterns in the mass spectra of  $\text{Ar}_4\text{Sn}$  and  $\text{Ar}_3\text{SnX}$  compounds (J.M. Miller, Y. Luo and I. Wharf), 89

## Mixed-valence state

${}^{57}\text{Fe}$  Mössbauer spectra and X-ray structural analyses of iodide salts for 1',1'''-bis( $\alpha$ - and  $\beta$ -naphthylmethyl)-1,1''-biferrocenes (S. Nakashima, A. Hori, H. Sakai, M. Watanabe and I. Motoyama), 271

## Molybdenum

Insertion of  $\text{GeCl}_2$  into group VI transition metal–chlorine bonds: synthesis, spectroscopy and structure of molybdenum and tungsten trichlorogermyl complexes (A.C. Filippou, J.G. Winter, G. Kociok-Köhn and I. Hinz), 35

Synthesis and structural characterisation of *trans*- $\text{Cp}_2\text{Mo}_2\text{O}_2(\mu\text{-O})(\mu\text{-Te})$  and *cis*- $\text{Cp}_2\text{Mo}_2\text{O}_2(\mu\text{-O})(\mu\text{-S})$  (P. Mathur, S. Ghose, Md.M. Hossain, P.B. Hitchcock and J.F. Nixon), 265

## NOESY

Synthesis and characterization of dinuclear complexes of  $\text{Pd}^{\text{II}}$  containing the  $(\mu\text{-N-C-S})_2$  skeleton (M. Espino Lizarraga, R. Navarro and E.P. Urriolabeitia), 51

## Nonlinear optics

Nonlinear optical properties in bimetallic monocation  $\pi$ -complexes of iron (E. Hendrickx, A. Persoons, S. Samson and G.R. Stephenson), 295

## N,S-bridging ligands

Synthesis and characterization of dinuclear complexes of  $\text{Pd}^{\text{II}}$  containing the  $(\mu\text{-N-C-S})_2$  skeleton (M. Espino Lizarraga, R. Navarro and E.P. Urriolabeitia), 51

## Nucleophilic substitution

Donorfreie und donorhaltige Supersilylalkalimetalle  ${}^1\text{Bu}_3\text{SiM}$ : Synthesen, Charakterisierung, Strukturen (N. Wiberg, K. Amelunxen, H.-W. Lerner, H. Schuster, H. Nöth, I. Krossing, M. Schmidt-Amelunxen und T. Seifert), 1

## Organolanthanide

Synthesis and X-ray crystal structure of bis[ $\eta^5$ -1,3-bis(trimethylsilyl)cyclopentadienyl] lanthanide and yttrium iodide complexes (Z. Xie, Z. Liu, F. Xue, Z. Zhang and T.C.W. Mak), 285

## Ortho-metallated

Synthesis and characterization of dinuclear complexes of  $\text{Pd}^{\text{II}}$  containing the  $(\mu\text{-N-C-S})_2$  skeleton (M. Espino Lizarraga, R. Navarro and E.P. Urriolabeitia), 51

## Oxo

Synthesis and structural characterisation of *trans*- $\text{Cp}_2\text{Mo}_2\text{O}_2(\mu\text{-O})(\mu\text{-Te})$  and *cis*- $\text{Cp}_2\text{Mo}_2\text{O}_2(\mu\text{-O})(\mu\text{-S})$  (P. Mathur, S. Ghose, Md.M. Hossain, P.B. Hitchcock and J.F. Nixon), 265

## Palladium

Synthesis and characterization of dinuclear complexes of  $\text{Pd}^{\text{II}}$  containing the  $(\mu\text{-N-C-S})_2$  skeleton (M. Espino Lizarraga, R. Navarro and E.P. Urriolabeitia), 51

## Palladium catalysis

Preparation of 3-oxo-2-cyclohexen-2-ylzinc iodides and their palladium-mediated reactions with aryl or alkenyl halides (R. Rossi, F. Bellina and D. Ciucci), 113

## Palladium(II)

Synthesis and absolute stereochemistry of an organo-palladium complex containing a P-chiral diphosphine ligand (S. Selvaratnam, P.-H. Leung, A.J.P. White and D.J. Williams), 61

## Pd–H

Hydroesterification of ethylene catalyzed by Pd(II) complexes: an ab initio MO study (M. Kawana, S. Nakamura, E. Watanabe and H. Urata), 185

## Pd(II)

Hydroesterification of ethylene catalyzed by Pd(II) complexes: an ab initio MO study (M. Kawana, S. Nakamura, E. Watanabe and H. Urata), 185

## Photodegradation

Photodegradation of thin films of polygermanes (K. Mochida, S.-s. Nagano, H. Kawata, M. Wakasa and H. Hayashi), 75

## Polyfunctional organozinc derivatives

Preparation of 3-oxo-2-cyclohexen-2-ylzinc iodides and their palladium-mediated reactions with aryl or alkenyl halides (R. Rossi, F. Bellina and D. Ciucci), 113

## Polygermane

Photodegradation of thin films of polygermanes (K. Mochida, S.-s. Nagano, H. Kawata, M. Wakasa and H. Hayashi), 75

## Propargylic compounds

On the chemospecificity of the double stannylation and double hydrostannylation of terminal alkynes by the tributylstannane in the presence of thiol (J.-C. Meurice, M. Vallier, M. Ratier, J.-G. Duboudin and M. Pétraud), 67

## Propene polymerization

Group 4 ansa-metallocene Ziegler catalysts derived from *trans*-1,2-cycloalkylene-bis(indenyl)- and -bis(tetrahydroindenyl)MCl<sub>2</sub> systems: structural and reactivity studies (A. Steinhorst, G. Erker, M. Grehl and R. Fröhlich), 191

## Redox reaction

Donorfreie und donorhaltige Supersilylalkalimetalle <sup>1</sup>Bu<sub>3</sub>SiM: Synthesen, Charakterisierung, Strukturen (N. Wiberg, K. Amelunxen, H.-W. Lerner, H. Schuster, H. Nöth, I. Krossing, M. Schmidt-Amelunxen und T. Seifert), 1

## Silyl ester

The investigation of a transsilylation reaction for the preparation of silyl esters: reactivity correlated with <sup>29</sup>Si NMR resonance frequencies (J.M. Weinberg and K.L. Wooley), 235

<sup>29</sup>Si NMR

The investigation of a transsilylation reaction for the preparation of silyl esters: reactivity correlated with <sup>29</sup>Si NMR resonance frequencies (J.M. Weinberg and K.L. Wooley), 235

## 2-Substituted 2-cyclohexen-1-ones

Preparation of 3-oxo-2-cyclohexen-2-ylzinc iodides and their palladium-mediated reactions with aryl or alkenyl halides (R. Rossi, F. Bellina and D. Ciucci), 113

## Sulphur

Synthesis and structural characterisation of *trans*-Cp<sub>2</sub>Mo<sub>2</sub>O<sub>2</sub>(μ-O)(μ-Te) and *cis*-Cp<sub>2</sub>Mo<sub>2</sub>O<sub>2</sub>(μ-O)(μ-S) (P. Mathur, S. Ghose, Md..M. Hossain, P.B. Hitchcock and J.F. Nixon), 265

Supersilyl anion <sup>1</sup>Bu<sub>3</sub>Si<sup>-</sup>

Donorfreie und donorhaltige Supersilylalkalimetalle <sup>1</sup>Bu<sub>3</sub>SiM: Synthesen, Charakterisierung, Strukturen (N. Wiberg, K. Amelunxen, H.-W. Lerner, H. Schuster, H. Nöth, I. Krossing, M. Schmidt-Amelunxen und T. Seifert), 1

## Tellurium

Synthesis and structural characterisation of *trans*-Cp<sub>2</sub>Mo<sub>2</sub>O<sub>2</sub>(μ-O)(μ-Te) and *cis*-Cp<sub>2</sub>Mo<sub>2</sub>O<sub>2</sub>(μ-O)(μ-S) (P. Mathur, S. Ghose, Md..M. Hossain, P.B. Hitchcock and J.F. Nixon), 265

## Thiols

On the chemospecificity of the double stannylation and double hydrostannylation of terminal alkynes by the tributylstannane in the presence of thiol (J.-C. Meurice, M. Vallier, M. Ratier, J.-G. Duboudin and M. Pétraud), 67

## Tin

Studies in aryltin chemistry. Part 11. The effects of substituent type and position on the disintegration patterns in the mass spectra of Ar<sub>4</sub>Sn and Ar<sub>3</sub>SnX compounds (J.M. Miller, Y. Luo and I. Wharf), 89

## Titanium

Interaction of carbon dioxide with acetylene complexes of titanocene Cp<sub>2</sub>Ti(RC<sub>2</sub>R) (R = Ph, SiMe<sub>3</sub>). Synthesis and structure of binu-

clear  $\sigma$ -alkenylcarboxylate complexes of titanium (III) Cp<sub>2</sub>TiC(R)=C(R)COOTiCp<sub>2</sub> and unexpected transformation of these complexes into titanafuranone metallacycles under the action of air oxygen (V.V. Burlakov, A.I. Yanovsky, Yu.T. Struchkov, U. Rosenthal, A. Spannberg, R. Kempe, O.G. Ellert and V.B. Shur), 105

## Transsilylation

The investigation of a transsilylation reaction for the preparation of silyl esters: reactivity correlated with <sup>29</sup>Si NMR resonance frequencies (J.M. Weinberg and K.L. Wooley), 235

## Tricarbonyliron

Nonlinear optical properties in bimetallic monocation  $\pi$ -complexes of iron (E. Hendrickx, A. Persoons, S. Samson and G.R. Stephenson), 295

## Trichlorogermyl complexes

Insertion of GeCl<sub>2</sub> into group VI transition metal-chlorine bonds: synthesis, spectroscopy and structure of molybdenum and tungsten trichlorogermyl complexes (A.C. Filippou, J.G. Winter, G. Kociok-Köhn and I. Hinz), 35

## Tungsten

Insertion of GeCl<sub>2</sub> into group VI transition metal-chlorine bonds: synthesis, spectroscopy and structure of molybdenum and tungsten trichlorogermyl complexes (A.C. Filippou, J.G. Winter, G. Kociok-Köhn and I. Hinz), 35

Kohlenwasserstoffverbrückte Metallkomplexe XXXVIII. Verbrückte Bis(carben)-Komplexe (OC)<sub>5</sub>M=C(OMe)-C(H)= $\overline{\text{CH}_2}$ -C-O-C(O)-CH-CH<sub>2</sub>-C(OMe)=M(CO)<sub>3</sub> (M = Cr, W) aus anionischen Carbenkomplexen vom Fischer-Typ und Fumarsäuredichlorid (A. Geisbauer, K. Polborn and W. Beck), 205

## X-ray structural analysis

<sup>57</sup>Fe Mössbauer spectra and X-ray structural analyses of iodide salts for 1',1''-bis( $\alpha$ - and  $\beta$ -naphthylmethyl)-1,1''-biferrocenes (S. Nakashima, A. Hori, H. Sakai, M. Watanabe and I. Motoyama), 271

## X-ray structure analyses

Donorfreie und donorhaltige Supersilylalkalimetalle <sup>1</sup>Bu<sub>3</sub>SiM: Synthesen, Charakterisierung, Strukturen (N. Wiberg, K. Amelunxen, H.-W. Lerner, H. Schuster, H. Nöth, I. Krossing, M. Schmidt-Amelunxen und T. Seifert), 1

## X-ray structure analysis

Optically active transition metal compounds 112. Synthesis of chiral carbonylnitrosylcobalt complexes with bidentate PP<sup>+</sup>, PN<sup>+</sup> and NN<sup>+</sup> ligands (H. Brunner, P. Faustmann, A. Dietl and B. Nuber), 255

## Ziegler catalysts

Group 4 ansa-metallocene Ziegler catalysts derived from *trans*-1,2-cycloalkylene-bis(indenyl)- and -bis(tetrahydroindenyl)MCl<sub>2</sub> systems: structural and reactivity studies (A. Steinhorst, G. Erker, M. Grehl and R. Fröhlich), 191

## Zinc

Preparation of 3-oxo-2-cyclohexen-2-ylzinc iodides and their palladium-mediated reactions with aryl or alkenyl halides (R. Rossi, F. Bellina and D. Ciucci), 113

## Zirconium

Insertion of isocyanides into zirconium-alkyl bonds of di-ansa-zirconocene complexes. X-ray molecular structure of [Zr-((SiMe<sub>2</sub>)<sub>2</sub>( $\eta^2$ -C<sub>5</sub>H<sub>3</sub>)<sub>2</sub>)Cl{ $\eta^2$ -C(i-Pr)N(2,6-Me<sub>2</sub>C<sub>6</sub>H<sub>3</sub>)}] (A.M. Barriola, A.M. Cano, T. Cuenca, F.J. Fernández, P. Gómez-Sal, A. Manzanero and P. Royo), 247