

Subject Index of Volume 520

Ab initio

Zur Chemie des Galliums, 6¹: Tris(trimethylsilyl)silylgallium. (I)—eine experimentelle und theoretische Studie (G. Linti), 107

Acenaphthylene and fluoranthene dianions

Wechselwirkungen in Kristallen 99. Alkalimetall-Kontaktionen-multipel von Acenaphthylen- und Fluoranthen-Dianionen: Fünfring- und Sechsring-Koordination (H. Bock, C. Arad und C. Näther), 1

Acetylene

Copper-substituted ethanes as a model for copper-acetylene interactions on the metal surface. Quantum mechanical study of the structure and bonding of copper-acetylene and copper-ethylene compounds $Cu_n(C_2H_2)$ ($n = 1, 2, 4$), $Cu(C_2H_2)^+$, $Cu_n(C_2H_4)$ ($n = 1, 2$) and $Cu(C_2H_4)^{+1,2}$ (M. Böhme, T. Wagener and G. Freinking), 31

Alkoxide

Conversion of rhenium alkylidyne complexes that contain unsupported metal-metal double bonds into relatives that contain μ -alkylidyne ligands (R. Toreki, R.R. Schrock and W.M. Davis), 69

Alkyl derivatives

Linked amido-indenyl complexes of titanium (F. Amor and J. Okuda), 245

Alkylidene

Conversion of rhenium alkylidyne complexes that contain unsupported metal-metal double bonds into relatives that contain μ -alkylidyne ligands (R. Toreki, R.R. Schrock and W.M. Davis), 69

Alkylidyne complexes

Conversion of rhenium alkylidyne complexes that contain unsupported metal-metal double bonds into relatives that contain μ -alkylidyne ligands (R. Toreki, R.R. Schrock and W.M. Davis), 69

Alkyne complex

Reaktion eines Titanocen-Alkin-Komplexes mit Trialkylammoniumtetraphenylborat — eine neue Darstellungsweise und erste Kristallstrukturanalyse von neutraligandhaltigen kationischen Titanocen(III)-Komplexen $[(Cp)_2Ti(L)_2^+][BPh_4^-]$ (A. Ohff, R. Kempe, W. Baumann und U. Rosenthal), 241

Allenyl

Regioselective addition of chalcogenol to an η^3 -propargyl/allenyl complex via formation of the carbon-chalcogen bond leading to new chalcogenoxyallyl species (F.-Y. Tsai, R.-H. Hsu, T.-M. Huang, J.-T. Chen, G.-H. Lee and Y. Wang), 85

Allyl

¹³⁹La-NMR-Spektroskopie an Allyllanthan(III)-Komplexen (H. Windisch, J. Scholz, R. Taube und B. Wrackmeyer), 23

Amido-indenyl ligand

Linked amido-indenyl complexes of titanium (F. Amor and J. Okuda), 245

Anionic nucleophile

Reaktionen kationischer η^2 -Phosphinocarben-Komplexe des Wolframs mit anionischen Nucleophilen (Th. Lehotkay, J. Ostermeier, C. Ogric und F.R. Kreißl), 59

13-Benzyl-1,5,9-triazatricyclo[7.3.1.0^{5,13}]-tridecane

The chemistry of 1,3,5-triazacyclohexane complexes 5: cationic zinc(II) alkyl complexes of N-alkylated 1,3,5-triazacyclohexanes and 13-benzyl-1,5,9-triazatricyclo[7.3.1.0^{5,13}]-tridecane (M. Haufe, R.D. Köhn, R. Weimann, G. Seifert and D. Zeigan), 121

Biaryls, configuratively unstable

Local and non-local DF calculation of the structure of the helically twisted 1,3-dimethyl- $\{(\eta^6\text{-chromium-tricarbonyl})\text{benzo}[b]\text{naphtho}[1,2-d]\text{pyran-6-one}$: a comparison (G. Bringmann, R. Stowasser and D. Vitt), 261

Biaryls, lactone-bridged

Local and non-local DF calculation of the structure of the helically twisted 1,3-dimethyl- $\{(\eta^6\text{-chromium-tricarbonyl})\text{benzo}[b]\text{naphtho}[1,2-d]\text{pyran-6-one}$: a comparison (G. Bringmann, R. Stowasser and D. Vitt), 261

Bidentate phosphine

Bidentate phosphines of heteroarenes: effective stabilization of the $Co_2(CO)_6$ fragment by 4,6-bis(diphenylphosphino)dibenzofuran (E.M. Vogl, J. Bruckmann, C. Krüger and M.W. Haene!), 249

Binaphthyl

Synthesis of ansa-2,2'-bis[(4,7-dimethyl-inden-1-yl)methyl]-1,1'-binaphthyl and ansa-2,2'-bis[(4,5,6,7-tetrahydroinden-1-yl)methyl]-1,1'-binaphthyltitanium and -zirconium dichlorides (R.L. Halterman, D. Combs, J.G. Kihaga and M.A. Khan), 163

BINAS

BINAS — synthesis and use of a new ligand for propylene hydroformylation (H. Bahrman, K. Bergrath, H.-J. Kleiner, P. Lappe, C. Naumann, D. Peters and D. Regnat), 97

Carbon-chalcogen bond formation

Regioselective addition of chalcogenol to an η^3 -propargyl/allenyl complex via formation of the carbon-chalcogen bond leading to new chalcogenoxyallyl species (F.-Y. Tsai, R.-H. Hsu, T.-M. Huang, J.-T. Chen, G.-H. Lee and Y. Wang), 85

Carbonyl

Bidentate phosphines of heteroarenes: effective stabilization of the $Co_2(CO)_6$ fragment by 4,6-bis(diphenylphosphino)dibenzofuran (E.M. Vogl, J. Bruckmann, C. Krüger and M.W. Haene!), 249

Influence of solvents on the insertion of methacrolein into zirconacycloprenes (N. Peulecke, A. Ohff, W. Baumann, R. Kempe, V.V. Burlakov and U. Rosenthal), 235

New heterodimetallic cyclopentadienyl carbonyl complexes: crystal structure of $(C_5Me_4Et)W(\mu-CO)_3Ru(C_5Me_5)$ (S.F. Amevor, H.-U. Hund and A. Salzer), 79

Reactions of $[Ru_3(CO)_{10}(\mu-Ph_2PCH_2PPh_2)]$ with secondary phosphines R_2PH involving bulky substituents ($R = ^iBu, 1-Ad, Cy$): X-ray crystal structures of $[Ru_3(CO)_6(\mu-H)_2(\mu-PCy_2)_2(\mu-Ph_2PCH_2PPh_2)]$ and the electron-deficient carbonyl cluster $[Ru_3(\mu-CO)(CO)_4(\mu_3-H)(\mu-H)(\mu-P^iBu_2)(\mu-Ph_2PCH_2PPh_2)]$ (H.-C. Böttcher, H. Thönnessen, P.G. Jones and R. Schmutzler), 15

Catalysis

First palladium-catalyzed Heck reactions with efficient colloidal catalyst systems (M. Beller, H. Fischer, K. Kühlein, C.-P. Reisinger and W.A. Herrmann), 257

Nanoscale colloidal metals and alloys stabilized by solvents and surfactants. Preparation and use as catalyst precursors (H. Bönemann, G. Braun, W. Brijoux, R. Brinkmann, A. Schulze Tilling, K. Seevogel and K. Siepen), 143

Rhodium-catalyzed double carbonylation of diiodomethane in the presence of triethylorthoformate (M. Cheong, M.-N. Kim and J.Y. Shim), 253

Cationic titanium(III) bonding

Reaktion eines Titanocen-Alkin-Komplexes mit Trialkylammoniumtetraphenylborat — eine neue Darstellungsweise und erste Kristallstrukturanalyse von neutraligandhaltigen kationischen Titanocen(III)-Komplexen $\{[Cp_2Ti(L)_2]^+[BPh_4]^- \}$ (A. Ohff, R. Kempe, W. Baumann und U. Rosenthal), 241

C-C coupling

Supported transition-metal catalysts for the C-C coupling reaction between ethene and diazoalkanes (M.E. Schneider, U. Möhring and H. Werner), 181

Chiral phosphite ligands

Chirale Tripod-Rhodium-Komplexe: Ligandsynthese, Komplexchemie, Katalyse (J. Scherer, G. Huttner, M. Büchner und J. Bakos), 45

Chiral rhodium complexes

Chirale Tripod-Rhodium-Komplexe: Ligandsynthese, Komplexchemie, Katalyse (J. Scherer, G. Huttner, M. Büchner und J. Bakos), 45

Chiral tripodal ligands

Chirale Tripod-Rhodium-Komplexe: Ligandsynthese, Komplexchemie, Katalyse (J. Scherer, G. Huttner, M. Büchner und J. Bakos), 45

Chromium

New heterodimetallic cyclopentadienyl carbonyl complexes: crystal structure of $(C_5Me_4Et)W(\mu-CO)_3Ru(C_5Me_5)$ (S.F. Amevor, H.-U. Hund and A. Salzer), 79

The Union Carbide catalyst $(Cp_2Cr + SiO_2)$, studied by solid-state NMR (M. Schnellbach, F.H. Köhler and J. Blümel), 227

Chromium tricarbonyl arene complex

Local and non-local DF calculation of the structure of the helically twisted 1,3-dimethyl-((η^6 -chromium-tricarbonyl)benzo)[b]naphtho[1,2-d]pyran-6-one: a comparison (G. Bringmann, R. Stowasser and D. Vitt), 261

Chromocenes

The Union Carbide catalyst $(Cp_2Cr + SiO_2)$, studied by solid-state NMR (M. Schnellbach, F.H. Köhler and J. Blümel), 227

Cleavage of epichlorohydrine

Chirale Tripod-Rhodium-Komplexe: Ligandsynthese, Komplexchemie, Katalyse (J. Scherer, G. Huttner, M. Büchner und J. Bakos), 45

Cobalt

Bidentate phosphines of heteroarenes: effective stabilization of the $Co_2(CO)_6$ fragment by 4,6-bis(diphenylphosphino)dibenzofuran (E.M. Vogl, J. Bruckmann, C. Krüger and M.W. Haenel), 249

Colloids

First palladium-catalyzed Heck reactions with efficient colloidal catalyst systems (M. Beller, H. Fischer, K. Kühlein, C.-P. Reisinger and W.A. Herrmann), 257

Contact ion multiples

Wechselwirkungen in Kristallen 99. Alkalimetall-Kontaktionen-multipel von Acenaphthylen- und Fluoranthen-Dianionen: Fünfring- und Sechsring-Koordination (H. Bock, C. Arad und C. Näther), 1

Copper

Copper-substituted ethanes as a model for copper-acetylene interactions on the metal surface. Quantum mechanical study of the structure and bonding of copper-acetylene and copper-ethylene compounds $Cu_n(C_2H_2)$ ($n = 1, 2, 4$), $Cu(C_2H_2)^+$, $Cu_n(C_2H_4)$ ($n = 1, 2$) and $Cu(C_2H_4)^{+1.2}$ (M. Böhme, T. Wagener and G. Frenking), 31

Coupling constants

New phosphabenzene by [4 + 2] cycloaddition of stannoles to 1-phospha-1-alkynes — determination of signs of coupling constants [$^nJ(^{31}P, ^{13}C)$, $^nJ(^{31}P, ^1H)$, $^2J(^{31}P, ^{29}Si)$, $^2J(^{119}Sn, ^{31}P)$] (B. Wrackmeyer and U. Klaus), 211

Crystal structure

Multiple bonds between main group elements and transition metals, 155. (Hexamethylphosphoramide)methyl(oxo)bis(η^2 -peroxo)rhenium(VII), the first example of an anhydrous rhenium peroxo complex: crystal structure and catalytic properties (W.A. Herrmann, J.D.G. Correia, G.R.J. Artus, R.W. Fischer and C.C. Romão), 139

New heterodimetallic cyclopentadienyl carbonyl complexes: crystal structure of $(C_5Me_4Et)W(\mu-CO)_3Ru(C_5Me_5)$ (S.F. Amevor, H.-U. Hund and A. Salzer), 79

Reactions of $[Ru_3(CO)_{10}(\mu-Ph_2PCH_2PPh_2)]$ with secondary phosphines R_2PH involving bulky substituents ($R = ^iBu, 1-Ad, Cy$); X-ray crystal structures of $[Ru_3(CO)_6(\mu-H)_2(\mu-PCy_2)_2(\mu-Ph_2PCH_2PPh_2)]$ and the electron-deficient carbonyl cluster $[Ru_3(\mu-CO)(CO)_4(\mu_3-H)(\mu-H)(\mu-P^iBu_2)_2(\mu-Ph_2PCH_2PPh_2)]$ (H.-C. Böttcher, H. Thönnessen, P.G. Jones and R. Schmutzler), 15

[4 + 2] Cycloadditions

New phosphabenzene by [4 + 2] cycloaddition of stannoles to 1-phospha-1-alkynes — determination of signs of coupling constants [$^nJ(^{31}P, ^{13}C)$, $^nJ(^{31}P, ^1H)$, $^2J(^{31}P, ^{29}Si)$, $^2J(^{119}Sn, ^{31}P)$] (B. Wrackmeyer and U. Klaus), 211

Cyclopentadienyl

¹³⁹La-NMR-Spektroskopie an Allyllanthan(III)-Komplexen (H. Windisch, J. Scholz, R. Taube und B. Wrackmeyer), 23

Intramolekulare Cyclisierung von terminal disubstituierten α,ω -Dienen an Titanocen "Cp₂Ti" mit einer nachfolgenden ungewöhnlichen Cp-Ringöffnung und neuen intramolekularen C-C-Knüpfung (A. Tillack, W. Baumann, A. Ohff, C. Lefebvre, A. Spännenberg, R. Kempe und U. Rosenthal), 187

Metallorganische Verbindungen der Lanthanoide CVIII. Synthese und Strukturaufklärung monomerer Organolanthanoideacetate (H. Schumann, K. Zietzke, F. Erbstein und R. Weimann), 265

New heterodimetallic cyclopentadienyl carbonyl complexes: crystal structure of $(C_5Me_4Et)W(\mu-CO)_3Ru(C_5Me_5)$ (S.F. Amevor, H.-U. Hund and A. Salzer), 79

Density functional calculation

Local and non-local DF calculation of the structure of the helically twisted 1,3-dimethyl-((η^6 -chromium-tricarbonyl)benzo)[b]naphtho[1,2-d]pyran-6-one: a comparison (G. Bringmann, R. Stowasser and D. Vitt), 261

Diazoalkanes

Supported transition-metal catalysts for the C-C coupling reaction between ethene and diazoalkanes (M.E. Schneider, U. Möhring and H. Werner), 181

Dibenzofuran

Bidentate phosphines of heteroarenes: effective stabilization of the $Co_2(CO)_6$ fragment by 4,6-bis(diphenylphosphino)dibenzofuran (E.M. Vogl, J. Bruckmann, C. Krüger and M.W. Haenel), 249

Diiodomethane

Rhodium-catalyzed double carbonylation of diiodomethane in the presence of triethylorthoformate (M. Cheong, M.-N. Kim and J.Y. Shim), 253

Dimethylsilylen-bridged metallocenes

Untersuchungen von Polymerisations- und Metathesereaktionen, XXIII. Einfach und zweifach dimethylsilylen-verbrückte Metallocendichloride des Ti, Zr und Hf in der Ethen- und Propen-Polymerisation (K. Weiss, U. Neugebauer, S. Blau und H. Lang), 171

Dinuclear phosphine complex

Bidentate phosphines of heteroarenes: effective stabilization of the $\text{Co}_2(\text{CO})_6$ fragment by 4,6-bis(diphenylphosphino)dibenzofuran (E.M. Vogl, J. Bruckmann, C. Krüger and M.W. Haenel), 249

Diphosphines

o-Hydroxyarylphosphines and diphosphines: metallation-rearrangement versus P–O reduction of *o*-halogenoaryloxyphosphines by sodium (J. Heinicke and R. Kadyrov), 131

Diyenes

Intramolekulare Cyclisierung von terminal disubstituierten α,ω -Dienen an Titanocen " Cp_2Ti " mit einer nachfolgenden ungewöhnlichen Cp-Ringöffnung und neuen intramolekularen C–C-Knüpfung (A. Tillack, W. Baumann, A. Ohff, C. Lefebvre, A. Spannenberg, R. Kempe und U. Rosenthal), 187

Double Carbonylation

Rhodium-catalyzed double carbonylation of diiodomethane in the presence of triethylorthoformate (M. Cheong, M.-N. Kim and J.Y. Shim), 253

Early transition metals

Influence of solvents on the insertion of methacrolein into zirconacyclopropenes (N. Peulecke, A. Ohff, W. Baumann, R. Kempe, V.V. Burlakov and U. Rosenthal), 235

Enantioselective hydrogenations

Chirale Tripod-Rhodium-Komplexe: Ligandsynthese, Komplexchemie, Katalyse (J. Scherer, G. Huttner, M. Büchner und J. Bakos), 45

Enantioselectivity

Nanoscale colloidal metals and alloys stabilized by solvents and surfactants. Preparation and use as catalyst precursors (H. Bönemann, G. Braun, W. Brijioux, R. Brinkmann, A. Schulze Tilling, K. Seevogel and K. Siepen), 143

Epoxidation

Highly selective olefin epoxidation with manganese triazacyclononane complexes: impact of ligand substitution (D.E. De Vos and T. Bein), 195

Ethyl

The chemistry of 1,3,5-triazacyclohexane complexes 5: cationic zinc(II) alkyl complexes of *N*-alkylated 1,3,5-triazacyclohexanes and 13-benzyl-1,5,9-triazatricyclo[7.3.1.0^{5,13}]-tridecane (M. Haufe, R.D. Köhn, R. Weimann, G. Seifert and D. Zeigan), 121

Functionalized triazacyclononane

Highly selective olefin epoxidation with manganese triazacyclononane complexes: impact of ligand substitution (D.E. De Vos and T. Bein), 195

Gallium(I) compounds

Zur Chemie des Galliums, 6¹: Tris(trimethylsilyl)silylgallium. (I)—eine experimentelle und theoretische Studie (G. Linti), 107

Gallium silyl

Zur Chemie des Galliums, 6¹: Tris(trimethylsilyl)silylgallium. (I)—eine experimentelle und theoretische Studie (G. Linti), 107

Group 4

Influence of solvents on the insertion of methacrolein into zirconacyclopropenes (N. Peulecke, A. Ohff, W. Baumann, R. Kempe, V.V. Burlakov and U. Rosenthal), 235

Intramolekulare Cyclisierung von terminal disubstituierten α,ω -Dienen an Titanocen " Cp_2Ti " mit einer nachfolgenden ungewöhnlichen Cp-Ringöffnung und neuen intramolekularen C–C-Knüpfung (A. Tillack, W. Baumann, A. Ohff, C. Lefebvre, A. Spannenberg, R. Kempe und U. Rosenthal), 187

Reaktion eines Titanocen–Alkin-Komplexes mit Trialkylammoniumtetraphenylborat — eine neue Darstellungsweise und erste Kristallstrukturanalyse von neutralligandhaltigen kationischen Titanocen(III)-Komplexen $[(\text{Cp}_2\text{Ti}(\text{L})_2^+)(\text{BPh}_4^-)]$ (A. Ohff, R. Kempe, W. Baumann und U. Rosenthal), 241

Hafnium

Untersuchungen von Polymerisations- und Metathesereaktionen, XXIII. Einfach und zweifach dimethylsilylen-verbrückte Metallocendichloride des Ti, Zr und Hf in der Ethen- und Propen-Polymerisation (K. Weiss, U. Neugebauer, S. Blau und H. Lang), 171

Heck reaction

First palladium-catalyzed Heck reactions with efficient colloidal catalyst systems (M. Beller, H. Fischer, K. Kühlein, C.-P. Reisinger and W.A. Herrmann), 257

Heterocyclic carbenes

N-Heterocyclic carbenes as ligands in high-valent molybdenum and tungsten complexes (W.A. Herrmann, G.M. Lobmaier and M. Elison), 231

Heterogeneous bimetallic catalysis

New optically active organotin compounds for heterogeneous bimetallic catalysis (C. Lucas, C.C. Santini, M. Prinz, M.-A. Cordonnier, J.-M. Basset, M.-F. Connil and B. Jousseume), 101

Hydrogen peroxide

Highly selective olefin epoxidation with manganese triazacyclononane complexes: impact of ligand substitution (D.E. De Vos and T. Bein), 195

Hydroxyarylphosphines

o-Hydroxyarylphosphines and diphosphines: metallation-rearrangement versus P–O reduction of *o*-halogenoaryloxyphosphines by sodium (J. Heinicke and R. Kadyrov), 131

Hypersilyl gallium

Zur Chemie des Galliums, 6¹: Tris(trimethylsilyl)silylgallium. (I)—eine experimentelle und theoretische Studie (G. Linti), 107

Imidazoline-2-ylidene

N-Heterocyclic carbenes as ligands in high-valent molybdenum and tungsten complexes (W.A. Herrmann, G.M. Lobmaier and M. Elison), 231

Intramolecular cyclizations

Intramolekulare Cyclisierung von terminal disubstituierten α,ω -Dienen an Titanocen " Cp_2Ti " mit einer nachfolgenden ungewöhnlichen Cp-Ringöffnung und neuen intramolekularen C–C-Knüpfung (A. Tillack, W. Baumann, A. Ohff, C. Lefebvre, A. Spannenberg, R. Kempe und U. Rosenthal), 187

Iridium

Supported transition-metal catalysts for the C–C coupling reaction between ethene and diazoalkanes (M.E. Schneider, U. Möhring and H. Werner), 181

Isotactic propylene polymerization

Synthesis and characterization of the catalytic isotactic-specific metallocene complex $(\eta^5\text{-C}_5\text{H}_3\text{C}_4\text{H}_9\text{-CMe}_2\text{-}\eta^5\text{-C}_{13}\text{H}_8)\text{ZrCl}_2$. Mechanistic aspects of the formation of isotactic polypropylene, the stereoregulative effect of the distal substituent and the relevance of C_2 symmetry (A. Razavi and J.L. Atwood), 115

¹³⁹La-NMR spectroscopy

¹³⁹La-NMR-Spektroskopie an Allyllanthan(III)-Komplexen (H. Windisch, J. Scholz, R. Taube und B. Wrackmeyer), 23

Lanthanum

¹³⁹La-NMR-Spektroskopie an Allyllanthan(III)-Komplexen (H. Windisch, J. Scholz, R. Taube und B. Wrackmeyer), 23

Metallorganische Verbindungen der Lanthanoide CVIII. Synthese und Strukturaufklärung monomerer Organolanthanoidacetate (H. Schumann, K. Zietzke, F. Erbstein und R. Weimann), 265

Ligand

o-Hydroxyarylphosphines and diphosphines: metallation-rearrangement versus P=O reduction of *o*-halogenoarylphosphines by sodium (J. Heinicke and R. Kadyrov), 131

Lithium stannate

New optically active organotin compounds for heterogeneous bimetallic catalysis (C. Lucas, C.C. Santini, M. Prinz, M.-A. Cordonnier, J.-M. Basset, M.-F. Connil and B. Jousseume), 101

Lutetium

Metallorganische Verbindungen der Lanthanoide CVIII. Synthese und Strukturaufklärung monomerer Organolanthanoidacetate (H. Schumann, K. Zietzke, F. Erbstein und R. Weimann), 265

Manganese

Highly selective olefin epoxidation with manganese triazacyclononane complexes: impact of ligand substitution (D.E. De Vos and T. Bein), 195

Metal colloids

Nanoscale colloidal metals and alloys stabilized by solvents and surfactants. Preparation and use as catalyst precursors (H. Bönne-mann, G. Braun, W. Brijoux, R. Brinkmann, A. Schulze Tilling, K. Seevogel and K. Siepen), 143

Metallacycle

Intramolekulare Cyclisierung von terminal disubstituierten α,ω -Dienen an Titanocen "Cp₂Ti" mit einer nachfolgenden ungewöhnlichen Cp-Ringöffnung und neuen intramolekularen C-C-Knüpfung (A. Tillack, W. Baumann, A. Ohff, C. Lefeber, A. Spannenberg, R. Kempe und U. Rosenthal), 187

Metallation

o-Hydroxyarylphosphines and diphosphines: metallation-rearrangement versus P=O reduction of *o*-halogenoarylphosphines by sodium (J. Heinicke and R. Kadyrov), 131

ansa-Metallocene

Synthesis of ansa-2,2'-bis(4,7-dimethyl-inden-1-yl)methyl-1,1'-binaphthyl and ansa-2,2'-bis(4,5,6,7-tetrahydroinden-1-yl)methyl-1,1'-binaphthyltitanium and -zirconium dichlorides (R.L. Halterman, D. Combs, J.G. Kihiga and M.A. Khan), 163

Metallocenes

Reaktion eines Titanocen-Alkin-Komplexes mit Trialkylammoniumtetraphenylborat — eine neue Darstellungsweise und erste Kristallstrukturanalyse von neutralligandhaltigen kationischen Titanocen(III)-Komplexen [(Cp₂Ti(L)₂]⁺][BPh₄⁻] (A. Ohff, R. Kempe, W. Baumann und U. Rosenthal), 241

The Union Carbide catalyst (Cp₂Cr + SiO₂), studied by solid-state NMR (M. Schnellbach, F.H. Köhler and J. Blümel), 227

Metal-metal bond

New heterodimetallic cyclopentadienyl carbonyl complexes: crystal structure of (C₅Me₄Et)W(μ -CO)₃Ru(C₅Me₅) (S.F. Amevor, H.-U. Hund and A. Salzer), 79

Methyloxo)bis(η^3 -peroxo)rhenium(VII)

Multiple bonds between main group elements and transition metals, 155. (Hexamethylphosphoramide)methyl(oxo)bis(η^3 -peroxo)rhenium(VII), the first example of an anhydrous rhenium peroxo complex: crystal structure and catalytic properties (W.A. Herrmann, J.D.G. Correia, G.R.J. Artus, R.W. Fischer and C.C. Romão), 139

MNDO calculations

Wechselwirkungen in Kristallen 99. Alkalimetall-Kontaktionen-multipel von Acenaphthylen- und Fluoranthen-Dianionen: Fünfring- und Sechsring-Koordination (H. Bock, C. Arad und C. Näther), 1

Molybdenum

New heterodimetallic cyclopentadienyl carbonyl complexes: crystal structure of (C₅Me₄Et)W(μ -CO)₃Ru(C₅Me₅) (S.F. Amevor, H.-U. Hund and A. Salzer), 79

Molybdenum(VI)

N-Heterocyclic carbenes as ligands in high-valent molybdenum and tungsten complexes (W.A. Herrmann, G.M. Lobmaier and M. Elison), 231

Multinuclear NMR

New phosphabenzenes by [4 + 2] cycloaddition of stannoles to 1-phospha-1-alkynes — determination of signs of coupling constants [ⁿJ(³¹P, ¹³C), ⁿJ(³¹P, ¹H), ²J(³¹P, ²⁹Si), ²J(¹¹⁹Sn, ³¹P)] (B. Wrackmeyer and U. Klaus), 211

NMR spectroscopy

¹³⁹La-NMR-Spektroskopie an Allyllanthan(III)-Komplexen (H. Windisch, J. Scholz, R. Taube und B. Wrackmeyer), 23

The chemistry of 1,3,5-triazacyclohexane complexes 5: cationic zinc(II) alkyl complexes of *N*-alkylated 1,3,5-triazacyclohexanes and 13-benzyl-1,5,9-triazatricyclo[7.3.1.0^{5,13}]-tridecane (M. Haufe, R.D. Köhn, R. Weimann, G. Seifert and D. Zeigan), 121

2*N,N*-dimethylamino-indenyl ligand

ansa-Metallocene derivatives XXXIII. 2-Dimethylamino-substituted bis-indenyl zirconium dichloride complexes with and without a dimethylsilyl bridge: syntheses, crystal structures and properties in propene polymerization catalysis (E. Barsties, S. Schaible, M.-H. Proscen, U. Rief, W. Röhl, O. Weyand, B. Dorer and H.-H. Brintzinger), 63

Olefin

Supported transition-metal catalysts for the C-C coupling reaction between ethene and diazoalkanes (M.E. Schneider, U. Möhring and H. Werner), 181

Olefin polymerization

Untersuchungen von Polymerisations- und Metathesereaktionen, XXIII. Einfach und zweifach dimethylsilylen-verbrückte Metallocendichloride des Ti, Zr und Hf in der Ethen- und Propen-Polymerisation (K. Weiss, U. Neugebauer, S. Blau und H. Lang), 171

Optically active organotin compounds

New optically active organotin compounds for heterogeneous bimetallic catalysis (C. Lucas, C.C. Santini, M. Prinz, M.-A. Cordonnier, J.-M. Basset, M.-F. Connil and B. Jousseume), 101

Organolanthanoid acetate

Metallorganische Verbindungen der Lanthanoide CVIII. Synthese und Strukturaufklärung monomerer Organolanthanoidacetate (H. Schumann, K. Zietzke, F. Erbstein und R. Weimann), 265

Orthoamides

The chemistry of 1,3,5-triazacyclohexane complexes 5: cationic zinc(II) alkyl complexes of *N*-alkylated 1,3,5-triazacyclohexanes and 13-benzyl-1,5,9-triazatricyclo[7.3.1.0^{5,13}]-tridecane (M. Haufe, R.D. Köhn, R. Weimann, G. Seifert and D. Zeigan), 121

Palladium

First palladium-catalyzed Heck reactions with efficient colloidal catalyst systems (W. Beller, H. Fischer, K. Kühlein, C.-P. Reisinger and W.A. Herrmann), 257

1-Phospha-1-alkynes

New phosphabenzenes by [4 + 2] cycloaddition of stannoles to 1-phospha-1-alkynes — determination of signs of coupling constants

- [$^nJ(^{31}\text{P}, ^{13}\text{C})$, $^nJ(^{31}\text{P}, ^1\text{H})$, $^2J(^{31}\text{P}, ^{29}\text{Si})$, $^2J(^{119}\text{Sn}, ^{31}\text{P})$] (B. Wrackmeyer and U. Klaus), 211
- Phosphabenzenes**
New phosphabenzenes by [4 + 2] cycloaddition of stannoles to 1-phospha-1-alkynes – determination of signs of coupling constants [$^nJ(^{31}\text{P}, ^{13}\text{C})$, $^nJ(^{31}\text{P}, ^1\text{H})$, $^2J(^{31}\text{P}, ^{29}\text{Si})$, $^2J(^{119}\text{Sn}, ^{31}\text{P})$] (B. Wrackmeyer and U. Klaus), 211
- Phosphido-bridged**
Reactions of $[\text{Ru}_3(\text{CO})_{10}(\mu\text{-Ph}_2\text{PCH}_2\text{PPh}_2)]$ with secondary phosphines R_2PH involving bulky substituents ($\text{R} = ^t\text{Bu}$, 1-Ad, Cy); X-ray crystal structures of $[\text{Ru}_3(\text{CO})_6(\mu\text{-H})_2(\mu\text{-PCy}_2)_2(\mu\text{-Ph}_2\text{PCH}_2\text{PPh}_2)]$ and the electron-deficient carbonyl cluster $[\text{Ru}_3(\mu\text{-CO})(\text{CO})_4(\mu\text{-H})(\mu\text{-H})(\mu\text{-P}^t\text{Bu}_2)_2(\mu\text{-Ph}_2\text{PCH}_2\text{PPh}_2)]$ (H.-C. Böttcher, H. Thönnessen, P.G. Jones and R. Schmutzler), 15
- Phosphinocarbene complex**
Reaktionen kationischer η^2 -Phosphinocarbon-Komplexe des Wolframs mit anionischen Nucleophilen (Th. Lehotkay, J. Ostermeier, C. Ogric und F.R. Kreißl), 59
- Phosphinovinyl complex**
Reaktionen kationischer η^2 -Phosphinocarbon-Komplexe des Wolframs mit anionischen Nucleophilen (Th. Lehotkay, J. Ostermeier, C. Ogric und F.R. Kreißl), 59
- Phosphorus ligands**
BINAS – synthesis and use of a new ligand for propylene hydroformylation (H. Bahrmann, K. Bergrath, H.-J. Kleiner, P. Lappe, C. Naumann, D. Peters and D. Regnat), 97
- Photolysis**
Mehrfachbindungen zwischen Hauptgruppenelementen und Übergangsmetallen. 158. Photochemische und photophysikalische Eigenschaften des Epoxidierungskatalysators $\text{CH}_3\text{ReO}(\text{O}_2)_2 \cdot \text{H}_2\text{O}$ (I. Hatzopoulos, H.-D. Brauer, M.R. Geisberger und W.A. Herrmann), 201
- Platinum**
Regioselective addition of chalcogenol to an η^3 -propargyl/allenyl complex via formation of the carbon–chalcogen bond leading to new chalcogenoxyallyl species (F.-Y. Tsai, R.-H. Hsu, T.-M. Huang, J.-T. Chen, G.-H. Lee and Y. Wang), 85
- Propargyl**
Regioselective addition of chalcogenol to an η^3 -propargyl/allenyl complex via formation of the carbon–chalcogen bond leading to new chalcogenoxyallyl species (F.-Y. Tsai, R.-H. Hsu, T.-M. Huang, J.-T. Chen, G.-H. Lee and Y. Wang), 85
- Propylene hydroformylation**
BINAS – synthesis and use of a new ligand for propylene hydroformylation (H. Bahrmann, K. Bergrath, H.-J. Kleiner, P. Lappe, C. Naumann, D. Peters and D. Regnat), 97
- Quantum mechanical study**
Copper-substituted ethanes as a model for copper–acetylene interactions on the metal surface. Quantum mechanical study of the structure and bonding of copper–acetylene and copper–ethylene compounds $\text{Cu}_n(\text{C}_2\text{H}_2)$ ($n = 1, 2, 4$), $\text{Cu}(\text{C}_2\text{H}_2)^+$, $\text{Cu}_n(\text{C}_2\text{H}_4)$ ($n = 1, 2$) and $\text{Cu}(\text{C}_2\text{H}_4)^{+1,2}$ (M. Böhme, T. Wagener and G. Frenking), 31
- Rearrangement**
o-Hydroxyarylphosphines and diphosphines: metallation–rearrangement versus P–O reduction of *o*-halogenoaryloxyphosphines by sodium (J. Heinicke and R. Kadyrov), 131
- Regioselective addition reactions**
Regioselective addition of chalcogenol to an η^3 -propargyl/allenyl complex via formation of the carbon–chalcogen bond leading to new chalcogenoxyallyl species (F.-Y. Tsai, R.-H. Hsu, T.-M. Huang, J.-T. Chen, G.-H. Lee and Y. Wang), 85
- Rhenium**
Conversion of rhenium alkylidyne complexes that contain unsupported metal–metal double bonds into relatives that contain μ -alkylidyne ligands (R. Toreki, R.R. Schrock and W.M. Davis), 69
Mehrfachbindungen zwischen Hauptgruppenelementen und Übergangsmetallen. 158. Photochemische und photophysikalische Eigenschaften des Epoxidierungskatalysators $\text{CH}_3\text{ReO}(\text{O}_2)_2 \cdot \text{H}_2\text{O}$ (I. Hatzopoulos, H.-D. Brauer, M.R. Geisberger und W.A. Herrmann), 201
Multiple bonds between main group elements and transition metals, 155. (Hexamethylphosphoramide)methyl(oxo)bis(η^2 -peroxy)rhenium(VII), the first example of an anhydrous rhenium peroxy complex: crystal structure and catalytic properties (W.A. Herrmann, J.D.G. Correia, G.R.J. Artus, R.W. Fischer and C.C. Romão), 139
- Rhodium**
Rhodium-catalyzed double carbonylation of diiodomethane in the presence of triethylorthoformate (M. Cheong, M.-N. Kim and J.Y. Shim), 253
Supported transition-metal catalysts for the C–C coupling reaction between ethene and diazoalkanes (M.E. Schneider, U. Möhring and H. Werner), 181
- Ruthenium**
New heterodimetallic cyclopentadienyl carbonyl complexes: crystal structure of $(\text{C}_5\text{Me}_4\text{Et})\text{W}(\mu\text{-CO})_3\text{Ru}(\text{C}_5\text{Me}_5)$ (S.F. Ameyor, H.-U. Hund and A. Salzer), 79
Reactions of $[\text{Ru}_3(\text{CO})_{10}(\mu\text{-Ph}_2\text{PCH}_2\text{PPh}_2)]$ with secondary phosphines R_2PH involving bulky substituents ($\text{R} = ^t\text{Bu}$, 1-Ad, Cy); X-ray crystal structures of $[\text{Ru}_3(\text{CO})_6(\mu\text{-H})_2(\mu\text{-PCy}_2)_2(\mu\text{-Ph}_2\text{PCH}_2\text{PPh}_2)]$ and the electron-deficient carbonyl cluster $[\text{Ru}_3(\mu\text{-CO})(\text{CO})_4(\mu\text{-H})(\mu\text{-H})(\mu\text{-P}^t\text{Bu}_2)_2(\mu\text{-Ph}_2\text{PCH}_2\text{PPh}_2)]$ (H.-C. Böttcher, H. Thönnessen, P.G. Jones and R. Schmutzler), 15
- Silyl derivatives**
Zur Chemie des Galliums. 6¹: Tris(trimethylsilyl)silylgallium. (I) – eine experimentelle und theoretische Studie (G. Linti), 107
- Single crystal structure analysis**
Wechselwirkungen in Kristallen 99. Alkalimetall-Kontaktionen-multipel von Acenaphthylen- und Fluoranthen-Dianionen: Fünfring- und Sechsring-Koordination (H. Bock, C. Arad und C. Näther), 1
- Sodium**
o-Hydroxyarylphosphines and diphosphines: metallation–rearrangement versus P–O reduction of *o*-halogenoaryloxyphosphines by sodium (J. Heinicke and R. Kadyrov), 131
- Sodium organic compounds**
Wechselwirkungen in Kristallen 99. Alkalimetall-Kontaktionen-multipel von Acenaphthylen- und Fluoranthen-Dianionen: Fünfring- und Sechsring-Koordination (H. Bock, C. Arad und C. Näther), 1
- Solid-state NMR spectroscopy**
The Union Carbide catalyst ($\text{Cp}_2\text{Cr} + \text{SiO}_2$), studied by solid-state NMR (M. Schnellbach, F.H. Köhler and J. Blümel), 227
- Solvent effects**
Highly selective olefin epoxidation with manganese triazacyclononane complexes: impact of ligand substitution (D.E. De Vos and T. Bein), 195
- Stannoles**
New phosphabenzenes by [4 + 2] cycloaddition of stannoles to 1-phospha-1-alkynes – determination of signs of coupling constants [$^nJ(^{31}\text{P}, ^{13}\text{C})$, $^nJ(^{31}\text{P}, ^1\text{H})$, $^2J(^{31}\text{P}, ^{29}\text{Si})$, $^2J(^{119}\text{Sn}, ^{31}\text{P})$] (B. Wrackmeyer and U. Klaus), 211

Stannylenes

New phosphabenzenes by [4 + 2] cycloaddition of stannoles to 1-phospha-1-alkynes – determination of signs of coupling constants [$^nJ(^{31}\text{P}, ^{13}\text{C})$, $^nJ(^{31}\text{P}, ^1\text{H})$, $^2J(^{31}\text{P}, ^{29}\text{Si})$, $^2J(^{119}\text{Sn}, ^{31}\text{P})$] (B. Wrackmeyer and U. Klaus), 211

Stereoregulative effects

Synthesis and characterization of the catalytic isotactic-specific metallocene complex ($\eta^5\text{-C}_5\text{H}_5\text{C}_4\text{H}_9\text{-CMe}_2\text{-}\eta^5\text{-C}_{13}\text{H}_8$)ZrCl₂. Mechanistic aspects of the formation of isotactic polypropylene, the stereoregulative effect of the distal substituent and the relevance of C₂ symmetry (A. Razavi and J.L. Atwood), 115

Stereoselectivity

Highly selective olefin epoxidation with manganese triazacyclononane complexes: impact of ligand substitution (D.E. De Vos and T. Bein), 195

Supported catalyst

Supported transition-metal catalysts for the C–C coupling reaction between ethene and diazoalkanes (M.E. Schneider, U. Möhring and H. Werner), 181

Thiocarbene complex

Reaktionen kationischer η^2 -Phosphinocarben-Komplexe des Wolframs mit anionischen Nucleophilen (Th. Lehotkay, J. Ostermeier, C. Ogric and F.R. Kreißl), 59

Tin

New optically active organotin compounds for heterogeneous bimetallic catalysis (C. Lucas, C.C. Santini, M. Prinz, M.-A. Cordonnier, J.-M. Basset, M.-F. Connil and B. Jousseume), 101

Titanium

Intramolekulare Cyclisierung von terminal disubstituierten α,ω -Dienen an Titanocen "Cp₂Ti" mit einer nachfolgenden ungewöhnlichen Cp-Ringöffnung und neuen intramolekularen C–C-Knüpfung (A. Tillack, W. Baumann, A. Ohff, C. Lefeber, A. Spannenberg, R. Kempe and U. Rosenthal), 187

Linked amido=indenyl complexes of titanium (F. Amor and J. Okuda), 245

Synthesis of ansa-2,2'-bis[(4,7-dimethyl-inden-1-yl)methyl]-1,1'-binaphthyl and ansa-2,2'-bis[(4,5,6,7-tetrahydroinden-1-yl)methyl]-1,1'-binaphthyltitanium and -zirconium dichlorides (R.L. Halterman, D. Combs, J.G. Kihaga and M.A. Khan), 163

Untersuchungen von Polymerisations- und Metathesereaktionen, XXIII. Einfach und zweifach dimethylsilylen-verbrückte Metallocendichloride des Ti, Zr und Hf in der Ethen- und Propen-Polymerisation (K. Weiss, U. Neugebauer, S. Blau und H. Lang), 171

Titanocene

Reaktion eines Titanocen-Alkin-Komplexes mit Trialkylammoniumtetraphenylborat – eine neue Darstellungsweise und erste Kristallstrukturanalyse von neutralligandhaltigen kationischen Titanocen(III)-Komplexen [(Cp₂Ti(L)₂)(BPh₄)] (A. Ohff, R. Kempe, W. Baumann und U. Rosenthal), 241

1,3,5-Triazacyclohexane

The chemistry of 1,3,5-triazacyclohexane complexes 5: cationic zinc(II) alkyl complexes of N-alkylated 1,3,5-triazacyclohexanes and 13-benzyl-1,5,9-triazatricyclo[7.3.1.0^{5,13}]-tridecane (M. Haufe, R.D. Köhn, R. Weimann, G. Seifert and D. Zeigan), 121

Tricyclic

The chemistry of 1,3,5-triazacyclohexane complexes 5: cationic zinc(II) alkyl complexes of N-alkylated 1,3,5-triazacyclohexanes and 13-benzyl-1,5,9-triazatricyclo[7.3.1.0^{5,13}]-tridecane (M. Haufe, R.D. Köhn, R. Weimann, G. Seifert and D. Zeigan), 121

Triethylorthoformate

Rhodium-catalyzed double carbonylation of diiodomethane in the presence of triethylorthoformate (M. Cheong, M.-N. Kim and J.Y. Shim), 253

Trimethylsilyl

Influence of solvents on the insertion of methacrolein into zirconacyclopropenes (N. Peulecke, A. Ohff, W. Baumann, R. Kempe, V.V. Burlakov and U. Rosenthal), 235

Triplet oxygen

Mehrfachbindungen zwischen Hauptgruppenelementen und Übergangsmetallen. 158. Photochemische und photophysikalische Eigenschaften des Epoxidierungskatalysators CH₃ReO(O₂)₂ · H₂O (I. Hatzopoulos, H.-D. Brauer, M.R. Geisberger und W.A. Herrmann), 201

Trisaminomethanes

The chemistry of 1,3,5-triazacyclohexane complexes 5: cationic zinc(II) alkyl complexes of N-alkylated 1,3,5-triazacyclohexanes and 13-benzyl-1,5,9-triazatricyclo[7.3.1.0^{5,13}]-tridecane (M. Haufe, R.D. Köhn, R. Weimann, G. Seifert and D. Zeigan), 121

Tungsten

New heterodimetallic cyclopentadienyl carbonyl complexes: crystal structure of (C₅Me₅Et)W(μ -CO)₃Ru(C₅Me₅) (S.F. Anevov, H.-U. Hund and A. Salzer), 79

Reaktionen kationischer η^2 -Phosphinocarben-Komplexe des Wolframs mit anionischen Nucleophilen (Th. Lehotkay, J. Ostermeier, C. Ogric and F.R. Kreißl), 59

Tungsten(VI)

N-Heterocyclic carbenes as ligands in high-valent molybdenum and tungsten complexes (W.A. Herrmann, G.M. Lobmaier and M. Elison), 231

Union Carbide catalyst

The Union Carbide catalyst (Cp₂Cr + SiO₂), studied by solid-state NMR (M. Schnellbach, F.H. Köhler and J. Blümel), 227

X-ray diffraction

Influence of solvents on the insertion of methacrolein into zirconacyclopropenes (N. Peulecke, A. Ohff, W. Baumann, R. Kempe, V.V. Burlakov and U. Rosenthal), 235

Metallorganische Verbindungen der Lanthanoide CVIII. Synthese und Strukturaufklärung monomerer Organolanthanoidacetate (H. Schumann, K. Zietze, F. Erbstein und R. Weimann), 265

X-ray structure

Bidentate phosphines of heteroarenes: effective stabilization of the Co₂(CO)₈ fragment by 4,6-bis(diphenylphosphino)dbenzofuran (E.M. Vogl, J. Bruckmann, C. Krüger and M.W. Haedel), 249

Regioselective addition of chalcogenol to an η^3 -propargyl/allenyl complex via formation of the carbon–chalcogen bond leading to new chalcogenoxyallyl species (F.-Y. Tsai, R.-H. Hsu, T.-M. Huang, J.-T. Chen, G.-H. Lee and Y. Wang), 85

Zinc

The chemistry of 1,3,5-triazacyclohexane complexes 5: cationic zinc(II) alkyl complexes of N-alkylated 1,3,5-triazacyclohexanes and 13-benzyl-1,5,9-triazatricyclo[7.3.1.0^{5,13}]-tridecane (M. Haufe, R.D. Köhn, R. Weimann, G. Seifert and D. Zeigan), 121

Zirconium

ansa-Metallocene derivatives XXXIII. 2-Dimethylamino-substituted bis-indenyl zirconium dichloride complexes with and without a dimethylsilyl bridge: syntheses, crystal structures and properties in propene polymerization catalysis (E. Barsties, S. Schaible, M.-H. Prosenç, U. Rief, W. Röhl, O. Weyand, B. Dorer and H.-H. Brintzinger), 63

Influence of solvents on the insertion of methacrolein into zirconacyclopropenes (N. Peulecke, A. Ohff, W. Baumann, R. Kempe, V.V. Burlakov and U. Rosenthal), 235

Synthesis and characterization of the catalytic isotactic-specific metallocene complex ($\eta^5\text{-C}_5\text{H}_5\text{C}_4\text{H}_9\text{-CMe}_2\text{-}\eta^5\text{-C}_{13}\text{H}_8$)ZrCl₂. Mech-

- anistic aspects of the formation of isotactic polypropylene, the stereoregulative effect of the distal substituent and the relevance of C_2 symmetry (A. Razavi and J.L. Atwood), 115
- Synthesis of ansa-2,2'-bis[(4,7-dimethyl-inden-1-yl)methyl]-1,1'-binaphthyl and ansa-2,2'-bis[(4,5,6,7-tetrahydroinden-1-yl)methyl]-1,1'-binaphthyltitanium and -zirconium dichlorides (R.L. Halterman, D. Combs, J.G. Kihega and M.A. Khan), 163
- Untersuchungen von Polymerisations- und Metathesereaktionen. XXXIII. Einfach und zweifach dimethylsilylen-verbrückte Metallocendichloride des Ti, Zr und Hf in der Ethen- und Propen-Polymerisation (K. Weiss, U. Neugebauer, S. Blau und H. Lang), 171
- ansa-Zirconocenes
- ansa-Metallocene derivatives XXXIII. 2-Dimethylamino-substituted bis-indenyl zirconium dichloride complexes with and without a dimethylsilyl bridge: syntheses, crystal structures and properties in propene polymerization catalysis (E. Barsües, S. Schaible, M.-H. Prosenc, U. Rief, W. Röhl, O. Weyand, B. Dorer and H.-H. Brintzinger), 63