

**JOURNAL OF ORGANOMETALLIC CHEMISTRY, VOL. 307 (1986)****SUBJECT INDEX****Aluminium**

- Alkylaluminium ester complexes, stoichiometry of (G. Fochi), (307) 145
- Trimethylaluminium synthesis from methyl iodide via methylaluminium sesquiodide, ultrasonic irradiation in (P.-H. Yang, K.-F. Liou, Y.-T. Lin), (307) 273

**Arsenic**

- Allylic arsenites, reactions with low valent transition metal complexes of (X. Lu, L. Lu), (307) 285
- Carbonyliron RP-bridged clusters, reversible alkyne addition to (K. Knoll, G. Huttner, L. Zsolnai), (307) 237

**Boron**

- Bis(alkynyl)boranes, borol synthesis by organoboration of (A. Sebal, B. Wrackmeyer), (307) 157
- 1,3-Diborabenzene complexes containing carbonyliron groups, preparation of (G.E. Herberich, H. Ohst), (307) C16
- 6-H<sub>3</sub>N-6-CB<sub>9</sub>H<sub>11</sub>, isolation and reactions of (T. Jelinek, B. Štibr, J. Plešek, S. Heřmánek), (307) C13
- Organylboronic bicyclic esters derived from iminodiacetic acids (T. Mancilla, R. Contreras, B. Wrackmeyer), (307) 1

**Chromium**

- Alkenylphosphanes RPX<sub>2</sub> and R<sub>2</sub>PX (X = NEt<sub>2</sub>, Cl), function as monodentate ligands and potential hemilabile chelating agents in metal(0) complexes of (K. Diemert, B. Kottwitz, W. Kuchen), (307) 291
- 1,3-Dipolar germylene ligands, interaction with chromium and tungsten complexes of (A. Castel, P. Rivière, J. Satgé, M. Ahbala, J. Jaud), (307) 205

- Methyl- and t-butyl-substituted ( $\eta^6$ -benzene)tricarbonylchromium(0) complexes, dielectric, electro-optic, IR and <sup>1</sup>H NMR spectra of and solvent effects on (M.J. Aroney, M.K. Cooper, R.K. Pierens, S.J. Pratten, S.W. Filipczuk), (307) 191
- Pentacarbonylmercaptophosphane- and tetracarbonyl-bis(mercaptophosphane)-chromium, -molybdenum and -tungsten complexes, synthesis and spectroscopic investigations of (J. Grobe, D. Le Van, W. Meyring), (307) 327

**Cobalt**

- Cobalt atoms as catalysts of the synthesis of pyridines from nitriles and acetylenes (G. Vitulli, S. Bertozzi, R. Lazzaroni, P. Salvadori), (307) C35
- Ruthenium-cobalt homogeneous systems, catalysis of reductive carbonylation of carboxylic esters by; homologation of the alkoxy moiety (G. Jenner, P. Andrianary), (307) 263
- Silica-supported carbonylcobalt cluster, synthesis and catalysis of (Y.-P. Wang, S.-M. Zhang, A.-M. Zhang, N. Wu, Y.-Z. Luo, H.-X. Fu), (307) 65

**Copper**

- 1-Acetoxy-1,2,2-triethoxyethane, reactions with organometallic compounds of (A. Stambouli, R. Amouroux, F. Chastrette, M. Chastrette, G. Mattioda, A. Blanc), (307) 139

**Germanium**

- 1,3-Dipolar germylene ligands, interaction with chromium and tungsten complexes of (A. Castel, P. Rivière, J. Satgé, M. Ahbala, J. Jaud), (307) 205

## Gold

- Gold clusters, synthesis and characterisation of  $[\text{Au}_8(\text{PPh}_3)_7(\text{CNR})]^{2+}$ ,  $[\text{Au}_9(\text{PPh}_3)_6(\text{CNR})_2]^{3+}$  and  $[\text{Au}_{11}(\text{PPh}_3)_7(\text{CNR})_2\text{I}]^{2+}$  and reactivity towards amines of; crystal structure of  $[\text{Au}_{11}(\text{PPh}_3)_7(\text{CN-}i\text{-Pr})_2\text{I}](\text{PF}_6)_2$  (W. Bos, R.P.F. Kanters, C.J. van Halen, W.P. Bosman, H. Behm, J.M.M. Smits, P.T. Beurskens, J.J. Bour, L.H. Pignolet), (307) 385
- Metal atom-free radical reactions, generality of; synthesis of trifluoromethylalkyls of gold(III) and silver (M.A. Guerra, T.R. Bierschenk, R.J. Lagow), (307) C58

## Hafnium

- Titanium, zirconium and hafnium mixed sandwich compounds, He(I) and He(II) photoelectron spectra of (R.R. Andréa, A. Terpstra, A. Oskam, P. Bruin, J.H. Teuben), (307) 307

## Iridium

- Tetrafluorobenzobarreleneiridium complexes with 1,10-phenanthroline, 2,2'-bipyridine and diketone ligands; crystal structure of  $[\text{IrI}_2(\text{TFB})(\text{phen})\text{ClO}_4 \cdot (\text{CH}_3)_2\text{CO}$  (TFB = 5,6,7,8-tetrafluoro-1,4-dihydro-1,4-dihydro-1,4-ethenonaphthalene, phen = 1,10-phenanthroline) (L.A. Oro, D. Carmona, M.A. Esteruelas, C. Foces-Foces, F.H. Cano), (307) 83

## Iron

- Carbonyliron RP-bridged clusters, reversible alkyne addition of (K. Knoll, G. Huttner, L. Zsolnai), (307) 237
- $\mu$ -Chloro- $\mu$ -(diphenylethyne)hexacarbonyldiiron(Fe-Fe), synthesis and crystal structure of (J. Ros, J.M. Viñas, R. Mathieu, X. Solans, M. Font-Bardia), (307) C7
- $(\eta^5\text{-C}_5\text{Me}_5\text{Os}(\text{CO})(\text{PMe}_2\text{Ph})\text{Me}$  oxidative reactions; isolation of intermediates during alkyl-metal electrophilic cleavage reactions of (L.J. Sanderson, M.C. Baird), (307) C1
- 1,3-Diborabenzene complexes containing carbonyliron groups, preparation of (G.E. Herberich, H. Ohst), (307) C16

$\text{Fe}_3(\text{N}\equiv\text{CMe})(\text{CO})_9$  formation during reactions of  $\text{Fe}_3(\mu_3\text{-CMe})(\text{CO})_{10}\text{X}$  clusters with alkynes (X = NO) or diazoalkanes (X = H); first examples of ethynylidene-nitrogen coupling to acetonitrile (D. Nuel, R. Mathieu), (307) C5

$\{\text{Fe}_4\text{S}_4\}$  cluster, formation of  $\{\text{Fe}_2\text{S}_2\}$ - and  $\{\text{Fe}_3\text{S}\}$ -carbonyls from; crystal structure of  $[\text{Fe}_3\text{S}(\text{CO})_9]^{2-}$  (F.T. Al-Ani, D.L. Hughes, C.J. Pickett), (307) C31

$[\text{FeW}(\mu\text{-CC}_6\text{H}_4\text{Me-4})(\text{CO})_5(\eta\text{-C}_5\text{Me}_5)]$ , addition of methylene groups to (E. Delgado, J. Hein, J.C. Jeffery, A.L. Ratermann, F.G.A. Stone), (307) C23

Hexamethylbenzene, bifunctionalisation via temporary coordination to  $\text{Fe}^{2+}$  of (D. Mandon, D. Astruc), (307) C27

Indenyliron cationic complexes,  $[\eta^5\text{-C}_9\text{H}_7\text{Fe}(\text{CO})_2\text{L}]^+$  (L = phosphine, phosphite, CO), synthesis of (H.H. Hammud, G.M. Moran), (307) 255

Trimetallic complex containing three redox centres, syntheses of; assessment of inductive effect transmission through an iron atom (P.D. Beer, S.M. Charsley, C.J. Jones, J.A. McCleverty), (307) C19

$(\eta^6\text{-1-Triphenylstannylbenzene})(\eta^5\text{-cyclopentadienyl})\text{iron(II) hexafluorophosphate}$ , preparation, structure and reactivity of (C.S. Framp-ton, K.G. Ofori-Okai, R.M.G. Roberts, J. Silver), (307) 231

## Lead

Allylic arsenites, reactions with low valent transition metal complexes of (X. Lu, L. Lu), (307) 285

Methylbenzalazines with Pd-C(aliphatic) bonds, six-membered cyclometallated compounds of (R.M.<sup>a</sup>. Ceder, J. Granell, J. Sales), (307) C44

Palladium(II) and platinum(II) derivatives with chiral 2,2'-bipyridines; X-ray structure of  $\text{C}_{18}\text{H}_{15}\text{ClN}_2\text{Pd}$ ; C- and N-coordination in a six-membered metallacycle (G. Minghetti, M.A. Cinellu, G. Chelucci, S. Gladiali, F. Demartin, M. Manassero), (307) 107

## Lithium

1-Acetoxy-1,2,2-triethoxyethane, reactions with organometallic compounds of (A. Stambouli, R. Amouroux, F. Chastrette, M. Chastrette, G. Mattioda, A. Blanc), (307) 139

- 1,3-Diborabenzene complexes containing carbonyliron groups, preparation of (G.E. Herberich, H. Ohst), (307) C16
- Tetrachlorotitanium and trichlorocyclopentadienyltitanium, reactions with tridentate triminosilyl ligands; crystal and molecular structure of a titanabicycloheptane with Si-N-Li-Cl-Ti chain (D.J. Brauer, H. Bürger, G.R. Liewald), (307) 177

## Magnesium

- 1-Acetoxy-1,2,2-triethoxyethane, reactions with organometallic compounds of (A. Stambouli, R. Amouroux, F. Chastrette, M. Chastrette, G. Mattioda, A. Blanc), (307) 139

## Manganese

- Carbonyl-manganese(I) and -molybdenum(II) mononuclear complexes with chelating biimidazole, bibenzimidazole or tetramethylbiimidazole ligands (M.P. Gamasa, E. Garcia, J. Gimeno, C. Ballesteros), (307) 39
- Phosphido-bridged dinuclear manganese complexes, synthesis and ligand substitution chemistry of; X-ray crystal structures of  $Mn_2(\mu-H)(\mu-Cy_2P)(CO)_7(Cy_2PH)$  and  $Mn_2(\mu-H)(\mu-Cy_2P)(CO)_6(PMe_3)_2$  (Cy = cyclohexyl) (A.M. Arif, R.A. Jones, S.T. Schwab), (307) 219

## Mercury

- $(\eta^5-C_5Me_5Os)(CO)(PMe_2Ph)Me$  oxidative reactions; isolation of intermediates during alkyl-metal electrophilic cleavage reactions of (L.J. Sanderson, M.C. Baird), (307) C1

## Metalloenes

- $(\eta^5-C_5H_5)_2Zr[CH(SC_6H_5)C_6H_5]_2$ , thermally induced elimination from (E.A. Mintz, A.S. Ward), (307) C52
- Titanium, zirconium and hafnium mixed sandwich compounds, He(I) and He(II) photoelectron spectra of (R.R. Andréa, A. Terpstra, A. Oskam, P. Bruin, J.H. Teuben), (307) 307
- Trimetallic complex containing three redox centres, syntheses of; assessment of inductive

effect transmission through an iron atom (P.D. Beer, S.M. Charsley, C.J. Jones, J.A. McCleverty), (307) C19

- $(\eta^6-1-Triphenylstannylbenzene)(\eta^5-cyclopentadienyl)iron(II)$  hexafluorophosphate, preparation, structure and reactivity of (C.S. Frampton, K.G. Ofori-Okai, R.M.G. Roberts, J. Silver), (307) 231

## Molybdenum

- Alkenylphosphanes  $RPX_2$  and  $R_2PX$  (X =  $Net_2$ , Cl), function as monodentate ligands and potential hemilabile chelating agents in metal(0) complexes of (K. Diemert, B. Kottwitz, W. Kuchen), (307) 291
- Carbonyl-manganese(I) and -molybdenum(II) mononuclear complexes with chelating biimidazole, bibenzimidazole or tetramethylbiimidazole ligands (M.P. Gamasa, E. Garcia, J. Gimeno, C. Ballesteros), (307) 39
- Dicyclopentadienyl-diligand-molybdenum and -titanium complexes, estimation of stepwise M-L bond dissociation enthalpies in (M.J. Calhorda, A.R. Dias, A.M. Galvão, J.A. Martinho Simões), (307) 167
- Hexacarbonylmolybdenum, reductive coupling with thioketals of (C.S. Wong, W.S. Leung, L.L. Yeung, T.-Y. Luh), (307) C49
- Pentacarbonylmercaptophosphane- and tetracarbonyl-bis(mercaptophosphane)-chromium, -molybdenum and -tungsten complexes, synthesis and spectroscopic investigations of (J. Grobe, D. Le Van, W. Meyring), (307) 327
- Trimetallic complex containing three redox centres, syntheses of; assessment of inductive effect transmission through an iron atom (P.D. Beer, S.M. Charsley, C.J. Jones, J.A. McCleverty), (307) C19

## Nickel

- $(\eta^5-C_5H_5)NiOs_3(\mu-H)_3(CO)_9$ , reactions with Group V donor ligands, spectroscopic characterisation of disubstituted derivatives of; crystal structure of  $(\eta^5-C_5H_5)NiOs_3(\mu-H)_3(CO)_7(PMe_2Ph)_2$  (E. Sappa, M.L.N. Marchino, G. Predieri, A. Tiripicchio, M. Tiripicchio-Camellini), (307) 97
- Oxanickela complexes and pentenoic acids, reaction products from C-C coupling of alkenes with  $CO_2$  to nickel(0) (H. Hoberg, Y. Peres, A. Milchereit), (307) C41

- Oxanickelacyclopentanones and cinnamic acid, reaction products from C-C coupling of alkenes with CO<sub>2</sub> to nickel(0) (H. Hoberg, Y. Peres, A. Milchereit), (307) C38
- 1-Phosphaallene  $\eta^1$ -complexation with tetracarbonylnickel (R. Appel, F. Knoch, V. Winkhaus), (307) 93

## Osmium

- ( $\eta^5$ -C<sub>5</sub>H<sub>5</sub>)NiOs<sub>3</sub>( $\mu$ -H)<sub>3</sub>(CO)<sub>9</sub>, reactions with Group V donor ligands, spectroscopic characterisation of disubstituted derivatives of; crystal structure of ( $\eta^5$ -C<sub>5</sub>H<sub>5</sub>)NiOs<sub>3</sub>( $\mu$ -H)<sub>3</sub>(CO)<sub>7</sub>(PMe<sub>2</sub>Ph)<sub>2</sub> (E. Sappa, M.L.N. Marchino, G. Predieri, A. Tiripicchio, M. Tiripicchio-Camellini), (307) 97
- ( $\eta^5$ -C<sub>5</sub>Me<sub>5</sub>)Os(CO)(PMe<sub>2</sub>Ph)Me oxidative reactions; isolation of intermediates during alkyl-metal electrophilic cleavage reactions of (L.J. Sanderson, M.C. Baird), (307) C1
- Osmia-five-membered heterocyclic compounds, formation by insertion reactions of alkyne into Os-I or Os-H bonds of (H. Werner, R. Weinand, H. Otto), (307) 49
- [Ru<sub>3</sub>(CO)<sub>11</sub>(CNBu<sup>1</sup>)] and [Os<sub>3</sub>(CO)<sub>11</sub>(CNBu<sup>1</sup>)], X-ray structures of (M.I. Bruce, G.N. Pain, C. Hughes, J.M. Patrick, B.W. Skelton, A.H. White), (307) 343
- Triosmium cluster, [Os<sub>3</sub>(CO)<sub>10</sub>(NCMe)<sub>2</sub>], synthetic studies of reactions with aldehydes of (B.F.G. Johnson, J. Lewis, T.I. Odiaka), (307) 61

## Phosphorus

- Alkenylphosphanes RPX<sub>2</sub> and R<sub>2</sub>PX (X = NEt<sub>2</sub>, Cl), function as monodentate ligands and potential hemilabile chelating agents in metal(0) complexes of (K. Diemert, B. Kottwitz, W. Kuchen), (307) 291
- Carbonyliron RP-bridged clusters, reversible alkyne addition to (K. Knoll, G. Huttner, L. Zsolnai), (307) 237
- ( $\eta^5$ -C<sub>5</sub>H<sub>5</sub>)NiOs<sub>3</sub>( $\mu$ -H)<sub>3</sub>(CO)<sub>9</sub>, reactions with Group V donor ligands, spectroscopic characterisation of disubstituted derivatives of; crystal structure of ( $\eta^5$ -C<sub>5</sub>H<sub>5</sub>)NiOs<sub>3</sub>( $\mu$ -H)<sub>3</sub>(CO)<sub>7</sub>(PMe<sub>2</sub>Ph)<sub>2</sub> (E. Sappa, M.L.N. Marchino, G. Predieri, A. Tiripicchio, M. Tiripicchio-Camellini), (307) 97
- 1,3-Diborabenzene complexes containing carbonyliron groups, preparation of (G.E. Herberich, H. Ohst), (307) C16

*cis*-Diphenylplatinum(II) nitro-substituted compounds, synthesis of (H.A. Brune, B. Stapp, G. Schmidtberg), (307) 129

Gold clusters, synthesis and characterisation of [Au<sub>8</sub>(PPh<sub>3</sub>)<sub>7</sub>(CNR)]<sup>2+</sup>, [Au<sub>9</sub>(PPh<sub>3</sub>)<sub>6</sub>(CNR)<sub>2</sub>]<sup>3+</sup> and [Au<sub>11</sub>(PPh<sub>3</sub>)<sub>7</sub>(CNR)<sub>2</sub>I]<sup>2+</sup> and reactivity towards amines of; crystal structure of [Au<sub>11</sub>(PPh<sub>3</sub>)<sub>7</sub>(CN-*i*-Pr)<sub>2</sub>I](PF<sub>6</sub>)<sub>2</sub> (W. Bos, R.P.F. Kanters, C.J. van Halen, W.P. Bosman, H. Behm, J.M.M. Smits, P.T. Beurskens, J.J. Bour, L.H. Pignolet), (307) 385

Indenyliron cationic complexes, [ $\eta^5$ -C<sub>9</sub>H<sub>7</sub>-Fe(CO)<sub>2</sub>L]<sup>+</sup> (L = phosphine, phosphite, CO), synthesis of (H.H. Hammud, G.M. Moran), (307) 255

Osmia-five-membered heterocyclic compounds, formation by insertion reactions of alkyne into Os-I or Os-H bonds of (H. Werner, R. Weinand, H. Otto), (307) 49

<sup>31</sup>P and <sup>195</sup>Pt investigations of substituted *cis*- and *trans*-diphenylbis(tri-*n*-butylphosphane)platinum(II) compounds (H.G. Alt, W.-D. Müller, J. Unsin, H.A. Brune), (307) 121

Pentacarbonylmercaptophosphane- and tetracarbonylbis(mercaptophosphane)-chromium, -molybdenum and -tungsten complexes, synthesis and spectroscopic investigations of (J. Grobe, D. Le Van, W. Meyring), (307) 327

1-Phosphaallene  $\eta^1$ -complexation with tetracarbonylnickel (R. Appel, F. Knoch, V. Winkhaus), (307) 93

Phosphido-bridged dinuclear manganese complexes, synthesis and ligand substitution chemistry of; X-ray crystal structures of Mn<sub>2</sub>( $\mu$ -H)( $\mu$ -Cy<sub>2</sub>P)(CO)<sub>7</sub>(Cy<sub>2</sub>PH) and Mn<sub>2</sub>( $\mu$ -H)( $\mu$ -Cy<sub>2</sub>P)(CO)<sub>6</sub>(PMe<sub>3</sub>)<sub>2</sub> (Cy = cyclohexyl) (A.M. Arif, R.A. Jones, S.T. Schwab), (307) 219

Silica-supported carbonylcobalt cluster, synthesis and catalysis of (Y.-P. Wang, S.-M. Zhang, A.-M. Zhang, N. Wu, Y.-Z. Luo, H.-X. Fu), (307) 65

## Platinum

Allylic arsenites, reactions with low valent transition metal complexes of (X. Lu, L. Lu), (307) 285

*trans*-Chloro(*N,N*-dimethyl-*D*-phenylglycine)(3-methyl-1-phenylpent-1-ene)platinum(II) complexes, HPLC separation and identification of the diastereomers (D. Schmidt, E. Gil-Av) (307) 377

*cis*-Diphenylplatinum(II) nitro-substituted compounds, synthesis of (H.A. Brune, B. Stapp, G. Schmidtberg), (307) 129

Palladium(II) and platinum(II) derivatives with chiral 2,2'-bipyridines; X-ray structure of  $C_{18}H_{15}ClN_2Pd$ ; *C*- and *N*-coordination in a six-membered metallacycle (G. Minghetti, M.A. Cinellu, G. Chelucci, S. Gladiali, F. Demartin, M. Manassero), (307) 107

$^{31}P$  and  $^{165}Pt$  investigations of substituted *cis*- and *trans*-diphenylbis(tri-*n*-butylphosphane)platinum(II) compounds (H.G. Alt, W.-D. Müller, J. Unsinn, H.A. Brune), (307) 121

Platinum(II) chloride mononuclear complexes with *N*-[(triorganylsilyl)alkyl]ethylenediamines (C. Hu, J.-G. He, D.H. O'Brien, K.J. Irgolic), (307) 115

## Rhodium

Bis(dicarbonylchlororhodium),  $[Rh(CO)_2Cl]_2$ , reactivity patterns in reactions with chelating ketones of (J.W. Suggs, M.J. Wovkulich, P.G. Williard, K.S. Lee), (307) 71

$\pi$ -Cyclohexadienonerhodium(I) acetylacetonate derivatives; crystal and molecular structure of rhodium ( $\eta^4$ -4-methyl-4-*exo*-trichloromethyl-2,5-cyclohexadiene-1-one)(pentane-*O*, *O'*-2,4-dionate) (V.A. Nikanorov, V.I. Rozenberg, A.I. Yanovsky, Yu.T. Struchkov, O.A. Reutov, B.I. Ginzburg, V.V. Kaverin, V.P. Yur'ev), (307) 363

(1-Methylene-4,4-dialkyl-2,5-cyclohexadienes), mixed ( $\eta^2$ :  $\eta^4$ ) coordination with two transition metal centres in bi- and tri-nuclear rhodium(I) complexes (V.A. Nikanorov, V.I. Rozenberg, V.I. Bakhmutov, O.A. Reutov, B.I. Ginzburg, V.V. Kaverin, V.P. Yur'ev), (307) 351

## Ruthenium

Cycloheptatriene and cyclohepta-1,3-diene insertion into Ru-H bond of  $RuHCl(PPh_3)_3$ , formation of  $Ru(\eta^5-C_7H_9)Cl(PPh_3)_2$  and  $Ru(\eta^3-C_7H_{11})Cl(PPh_3)_2$  (M. Grassi, B.E. Mann, P. Manning, C.M. Spencer), (307) C55  
 $[Ru_3(CO)_{11}(CNBu^t)]$  and  $[Os_3(CO)_{11}(CNBu^t)]$ , X-ray structures of (M.I. Bruce, G.N. Pain, C. Hughes, J.M. Patrick, B.W. Skelton, A.H. White), (307) 343

Ruthenium-cobalt homogeneous systems, catalysis of reductive carbonylation of carboxylic

esters by; homologation of the alkoxy moiety (G. Jenner, P. Andrianary), (307) 263

## Silicon

Hexafluorodisilane pyrolysis as a source for highly reactive difluorosilylene (S. Konieczny, P.P. Gaspar, J. Wormhoudt), (307) 151

Platinum(II) chloride mononuclear complexes with *N*-[(triorganylsilyl)alkyl]ethylenediamines (C. Hu, J.-G. He, D.H. O'Brien, K.J. Irgolic), (307) 115

Silafluorenes, precursors to (J.Y. Corey, L.S. Chang), (307) 7

Silica-supported carbonylcobalt cluster, synthesis and catalysis of (Y.-P. Wang, S.-M. Zhang, A.-M. Zhang, N. Wu, Y.-Z. Luo, H.-X. Fu), (307) 65

Silylated cyclobutenes, synthesis of (L. Birkofer, D. Eichstädt), (307) 279

Tetrachlorotitanium and trichlorocyclopentadienyltitanium, reactions with tridentate triaminosilyl ligands; crystal and molecular structure of a titanabicycloheptane with Si-N-Li-Cl-Ti chain (D.J. Brauer, H. Bürger, G.R. Liewald), (307) 177

## Silver

Metal atom-free radical reactions, generality of; synthesis of trifluoromethylalkyls of gold(III) and silver (M.A. Guerra, T.R. Bierschenk, R.J. Lagow), (307) C58

## Sulphur

( $\eta^5-C_5H_5$ ) $_2Zr[CH(SC_6H_5)C_6H_5]_2$ , thermally induced elimination of stilbene from (E.A. Mintz, A.S. Ward), (307) C52

$Fe_4S_4$  cluster, formation of  $Fe_2S_2$ - and  $Fe_3S$ -carbonyls from; crystal structure of  $[Fe_3S(CO)_9]^{2-}$  (F.T. Al-Ani, D.L. Hughes, C.J. Pickett), (307) C31

Hexacarbonylmolybdenum, reductive coupling with thioacetals of (C.S. Wong, W.S. Leung, L.L. Yeung, T.-Y. Luh), (307) C49

Mono- $\eta^5$ -cyclopentadienyl-titanium(IV) and -zirconium(IV) complexes with one or two toluene-3,4-dithiolate ligands, synthesis of (H. Köpf, T. Klapötke), (307) 319

Pentacarbonylmercaptophosphane- and tetracarbonyl-bis(mercaptophosphane)-chromium,

-molybdenum and -tungsten complexes, synthesis and spectroscopic investigations of (J. Grove, D. Le Van, W. Meyring), (307) 327

## Thorium

Indenyl-*f*-metal cationic complexes with pentagonal bipyramidal geometry; crystal structures of  $[\text{C}_9\text{H}_7\text{U}(\text{Br})_2(\text{CH}_3\text{CN})_4]^+ \text{[UBr}_6\text{]}^{2-}$  and  $[\{(\text{C}_9\text{H}_7\text{U}(\text{Br})(\text{CH}_3\text{CN})_4)_2\text{O}\}]^{2+} \text{[UBr}_6\text{]}^{2-}$  (W. Beekman, J. Goffart, J. Rebizant, M.R. Spirlet), (307) 23

## Tin

Bis(alkynyl)boranes, borol synthesis by organoboration of (A. Sebald, B. Wrackmeyer), (307) 157

Methylphenyltin dichloride and dihydride, electroreduction with formation of bis(chloromethylphenyltin) of (M. Engel, M. Devaud), (307) 15

( $\eta^6$ -1-Triphenylstannylbenzene)( $\eta^5$ -cyclopentadienyl)iron(II) hexafluorophosphate, preparation, structure and reactivity of (C.S. Framp-ton, K.G. Ofori-Okai, R.M.G. Roberts, J. Silver), (307) 231

## Titanium

Dicyclopentadienyl-diligand-molybdenum and -titanium complexes, estimation of stepwise M-L bond dissociation enthalpies in (M.J. Calhorda, A.R. Dias, A.M. Galvão, J.A. Martinho Simões), (307) 167

Mono- $\eta^5$ -cyclopentadienyl-titanium(IV) and -zirconium(IV) complexes with one or two toluene-3,4-dithiolate ligands, synthesis of (H. Köpf, T. Klapötke), (307) 319

Tetrachlorotitanium and trichlorocyclopentadienyltitanium, reactions with tridentate triaminosilyl ligands; crystal and molecular structure of a titanabicycloheptane with Si-N-Li-Cl-Ti chain (D.J. Brauer, H. Bürger, G.R. Liewald), 177

Titanium, zirconium and hafnium mixed sandwich compounds, He(I) and He(II) photoelectron spectra of (R.R. Andréa, A. Terpstra, A. Oskam, P. Bruin, J.H. Teuben), (307) 307

## Tungsten

Alkenylphosphanes  $\text{RPX}_2$  and  $\text{R}_2\text{PX}$  ( $\text{X} = \text{NEt}_2, \text{Cl}$ ), function as monodentate ligands and potential hemilabile chelating agents in metal(0) complexes of (K. Diemert, B. Kottwitz, W. Kuchen), (307) 291

1,3-Dipolar germylene ligands, interaction with chromium and tungsten complexes of (A. Castel, P. Rivière, J. Satgé, M. Ahbala, J. Jaud), (307) 205

$[\text{FeW}(\mu\text{-CC}_6\text{H}_4\text{Me-4})(\text{CO})_5(\eta\text{-C}_5\text{Me}_5)]$ , addition of methylene groups to (E. Delgado, J. Hein, J.C. Jeffery, A.L. Ratermann, F.G.A. Stone), (307) C23

Pentacarbonylmercaptophosphane- and tetra-carbonyl-bis(mercaptophosphane)-chromium, -molybdenum and -tungsten complexes, synthesis and spectroscopic investigations of (J. Grobe, D. Le Van, W. Meyring), (307) 327

## Uranium

Indenyl-*f*-metal cationic complexes with pentagonal bipyramidal geometry; crystal structures of  $[\text{C}_9\text{H}_7\text{U}(\text{Br})_2(\text{CH}_3\text{CN})_4]^+ \text{[UBr}_6\text{]}^{2-}$  and  $[\{(\text{C}_9\text{H}_7\text{U}(\text{Br})(\text{CH}_3\text{CN})_4)_2\text{O}\}]^{2+} \text{[UBr}_6\text{]}^{2-}$  (W. Beekman, J. Goffart, J. Rebizant, M.R. Spirlet), (307) 23

## Zirconium

( $\eta^5\text{-C}_5\text{H}_5$ ) $_2\text{Zr}[\text{CH}(\text{SC}_6\text{H}_5)\text{C}_6\text{H}_5]_2$ , thermally induced elimination of stilbene from (E.A. Mintz, A.S. Ward), (307) C52

Mono- $\eta^5$ -cyclopentadienyl-titanium(IV) and -zirconium(IV) complexes with one or two toluene-3,4-dithiolate ligands, synthesis of (H. Köpf, T. Klapötke), (307) 319

Titanium, zirconium and hafnium mixed sandwich compounds, He(I) and He(II) photoelectron spectra of (R.R. Andréa, A. Terpstra, A. Oskam, P. Bruin, J.H. Teuben), (307) 307

## Book reviews

Gmelin handbook of inorganic chemistry, 8th edit., Cu, organocopper compounds, Part 1; by J. Faust, J. Füssel and H. Somer (C. Eaborn) (307) C63

Organomercury compounds in organic synthesis; by R.C. Larock (P.A. Chaloner) (307) C10