

- Schrade, R., 197  
 Schuler, P., 197  
 Seik Weng, N., 183  
 Selbin, J., 253  
 Shen, Q., 155  
 Shiau, C.-C., 31  
 Simionescu, C., 107  
 Simon, S., 191  
 Singh, J., 183  
 Smith, P.J., 183  
 Sobolev, A.N., 41  
 Sokolova, V.M., 145  
 Srivastava, R.C., 406  
 Steen, M. Van de, 191  
 Stegmann, H.B., 197  
 Struchkov, Yu.T., 351, 367  
 Takegami, Y., 87  
 Tătaru, L., 107  
 Teuben, J.H., 53  
 Teulon, P., 391  
 Trinquier, G., 169  
 Uemura, S., 319  
 Uson, R., 399  
 Van de Steen, M., 191  
 Van Koten, G., 1  
 Van Vliet, R., 1  
 Vătă, M., 107  
 Venanzi, L.M., 125  
 Vliet, R. van, 1  
 Volnina, E.A., 145  
 Von Deuten, K., 71  
 Voronkov, M.G., 145  
 Vrieze, K., 1  
 Wakasugi, M., 319  
 Walker, H.W., C43  
 Watanabe, H., 87  
 Watanabe, K., 87  
 Watanabe, Y., 87  
 Wilcox, D.E., 261  
 Woodford, R.L., 93  
 Yarrow, P., 115  
 Zaikin, V.G., 145

## JOURNAL OF ORGANOMETALLIC CHEMISTRY, Vol. 214 (1981)

### SUBJECT INDEX

#### Aluminium

Bis(trimethylaluminium), reactions with sulphurdiimines and sulphinylanilines of (J.M. Klerks, R. van Vliet, G. van Koten, K. Vrieze), 1

#### Antimony

Bis(dichlorotricarbonylruthenium) trichloroantimony,  $[\text{Ru}(\text{CO})_3\text{Cl}_2]_2 \cdot \text{SbCl}_3$ , synthesis and structural characterization of (P. Teulon, J. Rozière), 391

#### Arsenic

Tri-*p*-chlorophenylarsine, tri-*p*-methoxyphenylarsine and tri-*p*-tolylarsine, molecular structures of (A.N. Sobolev, V.K. Belsky), 41

#### Boron

Pentacarbonyltetrafluoroboratorhenium, preparation and reactivity of (K. Raab, B. Olgemöller, K. Schloter, W. Beck), 81

#### Chromium

Chelate complexes of norphos; diastereoisomers with opposite metal configura-

tion exhibiting similar chiroptical properties (H. Brunner, A.F.M.M. Rahman), 373  
 $(\text{Cp}_2\text{Cr}_2\text{SCMe}_3)(\mu_3\text{-S})\text{Co}(\text{CO})_2$ , transformation into the diamagnetic metalla-tetrahedron  $\text{Cp}_3\text{Cr}_3(\mu_3\text{-S})_4\text{Co}(\text{CO})$  of (A.A. Pasynskii, I.L. Eremenko, B. Orazsakhov, V.T. Kalinnikov, G.G. Aleksandrov, Yu.T. Struchkov), 367  
 $(\text{CpCrSCMe}_3)_2\text{S} \cdot \text{Mn}_2(\text{CO})_6$ , and the cluster  $(\text{CpCr})_2(\mu_2\text{-SCMe}_3)(\mu_3\text{-S})_2\text{Co}(\text{CO})_2$ , synthesis, molecular structures and magnetic properties of (A.A. Pasynskii, I.L. Eremenko, B. Orazsakhov, Yu.V. Rakitin, V.M. Novotortsev, O.G. Ellert, V.T. Kalinnikov, G.G. Aleksandrov, Yu.T. Struchkov), 351  
 Trialkyllead derivatives of chromium, molybdenum and tungsten, thermal and photochemical properties of (K.H. Pannell, R.N. Kapoor), 47  
 Tricarbonylchromium complexes of substituted benzophenones, preparation of coordination isomers and IR and  $^1\text{H}$  NMR studies of (N.J. Gogan, I.L. Dickinson, J.R. Patterson), 65  
 Tricarbonyl- $\eta$ -1,3,5-cycloheptatriene-chromium(0), reactions with 6-mono- and 6-disubstituted fulvenes of (C.G. Kreiter, H. Kurz), 339

## Cobalt

Co=Co bonds, carbene addition to (W.A. Herrmann, J.M. Huggins, B. Reiter, C. Bauer), C19

(Cp<sub>2</sub>Cr<sub>2</sub>SCMe<sub>3</sub>)·(μ<sub>3</sub>-S)<sub>2</sub>Co(CO)<sub>2</sub>, transformation into the diamagnetic metallatetrahedron Cp<sub>3</sub>Cr<sub>3</sub>·(μ<sub>3</sub>-S)<sub>4</sub>Co(CO) of (A.A. Pasynskii, I.L. Eremenko, B. Orazsakhov, V.T. Kalinnikov, G.G. Aleksandrov, Yu.T. Struchkov), 367

(CpCrSCMe<sub>3</sub>)<sub>2</sub>S·Mn<sub>2</sub>(CO)<sub>9</sub>, and the cluster (CpCr)<sub>2</sub>(μ<sub>2</sub>-SCMe<sub>3</sub>)(μ<sub>3</sub>-S)<sub>2</sub>Co(CO)<sub>2</sub>, synthesis, molecular structures and magnetic properties of (A.A. Pasynskii, I.L. Eremenko, B. Orazsakhov, Yu.V. Rakitin, V.M. Novotortsev, O.G. Ellert, V.T. Kalinnikov, G.G. Aleksandrov, Yu.T. Struchkov), 351

Tetracarbonylcobalt anion, strong interactions with Li<sup>+</sup> and Na<sup>+</sup> in diethyl ether of; the system LiBr/Co<sub>2</sub>(CO)<sub>8</sub>/diethyl ether (P.S. Braterman, A.E. Leslie), C45

## Germanium

Cyclopropenylgermanium, cleavage and isomerisation reactions of (M. Massol, J. Barrau, S. Monteverdi, J. Satgé), 311

Germanone and germathione, structure determination through ab initio calculations of (G. Trinquier, M. Pelissier, B. Saint-Roch, H. Lavayssière), 169

## Gold

Gold(I) mono- and di-nuclear alkynyl complexes, preparation and properties of (R. Nast, P. Schneller, A. Hengefeld), 273

## Iron

Chelate complexes of norphos; diastereoisomers with opposite metal configuration exhibiting similar chiroptical properties (H. Brunner, A.F.M.M. Rahman), 373

Ferricinium salts, heteroarylation of (V.N. Babin, Yu.A. Belousov, V.V. Gumenyuk, R.B. Materikova, R.M. Salimov, N.S. Kochetkova), C13

Ferricinium salts, azole anions as one-electron reducers of (V.N. Babin, Yu.A. Belousov, I.R. Lyatifov, R.B. Materikova, V.V. Gumenyuk), C11

Ferrocene polymers, polyferrocenylen-iminoimides (L. Tătaru, I. Mazilu, M. Vătă, T. Lixandru, C. Simionescu), 107

[3]Ferrocenophane bridge reversal barriers, C, O and S bridging atoms (E.W. Abel, M. Booth, C.A. Brown, K.G. Orrell, R.L. Woodford), 93

Iron-57 satellites in <sup>13</sup>C NMR spectra elucidating "hidden processes" in the dynamics of metal carbonyls (S. Aime, D. Osella), C27

1R, 1R', 2,3,4,5-Tetraphenyl-1-silacyclopentadiene, synthesis and reactions of (P. Jutzi, A. Karl), 289

Tricarbonylcyclohexadienyliron substituted cations, rates of reaction of pentane-2,4-dione with (A.J. Birch, D. Bogsanyi, L.F. Kelly), C39

Tricarbonyliron complexes, application of frontier orbital theory to cycloaddition reactions of (S.K. Chopra, G. Moran, P. McArdle), C36

Trichloromethyltrimethylsilane, reactions with ferrotetraarylporphyrins of (J.-P. Battioni, D. Dupré, D. Mansuy), 303

1,2,3-Triferrocenylcyclopropenes, electrochemical behaviour of (A.J. Fry, P.S. Jain, R.L. Krieger), 381

(η<sup>3</sup>-Vinylcarbene)iron complex, reactions with diazo compounds of, preparation of (η<sup>4</sup>-butadiene)iron derivatives of (T.-A. Mitsudo, H. Watanabe, K. Watanabe, Y. Watanabe, Y. Takegami), 87

## Lead

Trialkyllead derivatives of chromium, molybdenum and tungsten, thermal and photochemical properties of (K.H. Pannell, R.N. Kapoor), 47

## Lithium

Organolithium and organomagnesium, reactions with α,α'-difunctional conjugated enynes (D. Mesnard, J.-P. Charpentier, L. Miginiac), 15, 23

Organolithium, organomagnesium and organozinc compounds, reactions with α,α'-enynes of (D. Mesnard, J.-P. Charpentier, L. Miginiac), 135

Tetracarbonylcobalt anion, strong interactions with Li<sup>+</sup> and Na<sup>+</sup> in diethyl ether of; the system LiBr/Co<sub>2</sub>(CO)<sub>8</sub>/diethyl ether (P.S. Braterman, A.E. Leslie), C45

1R,1R',2,3,4,5-Tetraphenyl-1-silacyclopentadiene, synthesis and reactions of (P. Jutzi, A. Karl), 289

## Magnesium

Cyclopentadienylmagnesium hydride, convenient synthesis and study of reactions with organic substrates via single electron transfer of (A.B. Goel, E.C. Ashby), C1

Organolithium and organomagnesium, reactions with  $\alpha,\alpha'$ -difunctional conjugated enynes (D. Mesnard, J.-P. Charpentier, L. Miginiac), 15, 23

Organolithium, organomagnesium and organozinc compounds, reactions with  $\alpha,\alpha'$ -enynes of (D. Mesnard, J.-P. Charpentier, L. Miginiac), 135

1R,1R',2,3,4,5-Tetraphenyl-1-silacyclopentadiene, synthesis and reactions of (P. Jutzi, A. Karl), 289

## Manganese

Chelate complexes of norphos; diastereoisomers with opposite metal configuration exhibiting similar chiroptical properties (H. Brunner, A.F.M.M. Rahman), 373

(CpCrSCMe<sub>3</sub>)<sub>2</sub>S·Mn<sub>2</sub>(CO)<sub>9</sub>, and the cluster (CpCr)<sub>2</sub>( $\mu_2$ -SCMe<sub>3</sub>)( $\mu_3$ -S)<sub>2</sub>Co(CO)<sub>2</sub>, synthesis, molecular structures and magnetic properties of (A.A. Pasynskii, I.L. Eremenko, B. Orazsakhmatov, Yu.V. Rakitin, V.M. Novotortsev, O.G. Ellert, V.T. Kalinnikov, G.G. Aleksandrov, Yu.T. Struchkov), 351

Manganacyclohexane, irreversible rearrangement to manganacyclopentane compound of (E. Lindner, G. Funk, S. Hoehne), C7

## Metalloenes

Alkyltitanocenes, cyclometallation reactions with pyridines of (E. Klei, J.H. Teuben), 53

Ferricinium salts, azole anions as one-electron reducers of (V.N. Babin, Yu.A. Belousov, I.R. Lyatifov, R.B. Materikova, V.V. Gumenyuk), C11

—, heteroarylation of (V.N. Babin, Yu.A. Belousov, V.V. Gumenyuk, R.B. Materikova, R.M. Salimov, N.S. Kochetkova), C13

Ferrocene polymers, polyferrocenylene-

iminoimides (L. Tătaru, I. Mazilu, M. Vătă, T. Lixandru, C. Simionescu), 107

[3]Ferrocenophane bridge reversal barriers, C, O and S bridging atoms (E.W. Abel, M. Booth, C.A. Brown, K.G. Orrell, R.L. Woodford), 93

Polymer-supported metallocenes and their applications in catalysis of olefin isomerisation, oligomerisation, epoxidation and dinitrogen fixation reactions (C.-P. Lau, B.-H. Chang, R.H. Grubbs, C.H. Brubaker, Jr.), 325

1,2,3-Triferrocenylcyclopropenes, electrochemical behaviour of (A.J. Fry, P.S. Jain, R.L. Krieger), 381

## Molybdenum

Trialkyllead derivatives of chromium, molybdenum and tungsten, thermal and photochemical properties of (K.H. Pannell, R.N. Kapoor), 47

## Osmium

Bis(triphenylphosphine)iminium tetracarbonylhydorruthenium, synthesis and characterisation of and route to [PPN][HOs(CO)<sub>4</sub>] (H.W. Walker, P.C. Ford), C43

## Palladium

Dichlorobis(benzonitrile)palladium(II), reactions with bicyclic cyclopropanes and bicyclic cyclobutanes of (M.F. Rettig, D.E. Wilcox, R.S. Fleischer), 261

Palladium(II) and rhodium(III) mixed ligand complexes, <sup>1</sup>H NMR studies of (J. Selbin, M.A. Gutierrez), 253

Palladium-promoted cyclization reactions of aminoalkenes (B. Pugin, L.M. Venanzi), 125

## Phosphorus

Bis(tri-*t*-butylphosphine)platinum(0), synthesis and oxidative addition and ligand exchange reactions of (R.G. Goel, W.O. Ogini, R.C. Srivastava), 405

Bis(triphenylphosphine)iminium tetracarbonylhydorruthenium, synthesis and characterisation of and route to [PPN][HOs(CO)<sub>4</sub>] (H.W. Walker, P.C. Ford), C43

Carbonyl- $\eta^5$ -cyclopentadienyl(1,1,4,7,7-pentaphenyl-1,4,7-triphosphaheptane)-vanadium(I), molecular structure and spectroscopic properties of (K. von Deuten, D. Rehder, W. Roose), 71

Gold(I) mono- and di-nuclear alkynyl complexes, preparation and properties of (R. Nast, P. Schneller, A. Hengefeld), 273

Manganacyclohexane, irreversible rearrangement to manganacyclopentane compound of (E. Lindner, G. Funk, S. Hoehne), C7

[ $\text{ReH}_3(\text{PR}_3)_4$ ] and [ $\text{ReH}_3(\text{PR}_3)_3$ ] complexes, photodissociation of  $\text{PR}_3$  from (D.A. Roberts, G.L. Geoffroy), 221

1R,1R',2,3,4,5-Tetraphenyl-1-silacyclopentadiene, synthesis and reactions of (P. Jutzi, A. Karl), 289

## Platinum

Bis(tri-*t*-butylphosphine)platinum(0), synthesis and oxidative addition and ligand exchange reactions of (R.G. Goel, W.O. Ogini, R.C. Srivastava), 405

Trinuclear platinum hydrides (G. Minghetti, A.L. Bandini, G. Banditelli, F. Bonati), C50

## Rhenium

Pentacarbonyltetrafluoroboratorhenium, preparation and reactivity of (K. Raab, B. Olgemöller, K. Schloter, W. Beck), 81

[ $\text{ReH}_3(\text{PR}_3)_4$ ] and [ $\text{ReH}_3(\text{PR}_3)_3$ ] complexes, photodissociation of  $\text{PR}_3$  from (D.A. Roberts, G.L. Geoffroy), 221

## Rhodium

Binuclear rhodium complexes activating carbon disulphide, and structure of [ $\text{Rh}_2\text{Cl}_2(\text{CO})(\text{C}_2\text{S}_4)(\text{Ph}_2\text{PCH}_2\text{PPh}_2)_2$ ] (M. Cowie, S.K. Dwight), 233

Palladium(II) and rhodium(III) mixed ligand complexes,  $^1\text{H}$  NMR studies of (J. Selbin, M.A. Gutierrez), 253

Rhodium(I) cationic complexes, catalytic transfer hydrogenation by (R. Uson, L.A. Oro, R. Sariago, M.A. Esteruelas), 399

Rhodium(I) complexes with spin-labeled ligands, ESR investigation of substitution reactions in (V.I. Nevodchikov,

G.A. Abakumov, V.K. Cherkasov, G.A. Razuvaev), 119

## Ruthenium

Bis(dichlorotricarbonylruthenium) trichloroantimony, [ $\text{Ru}(\text{CO})_3\text{Cl}_2$ ] $_2 \cdot \text{SbCl}_3$ , synthesis and structural characterization of (P. Teulon, J. Rozière), 391

Bis(triphenylphosphine)iminium tetracarbonylhydroruthenium, synthesis and characterisation of and route to [PPN][ $\text{HOs}(\text{CO})_4$ ] (H.W. Walker, P.C. Ford), C43

Ruthenium mononuclear carbonyl complexes in strongly acidic solutions, nature of (P. Yarrow, P.C. Ford), 115

Triruthenium clusters containing dimethyl-amino-substituted allyl and allenyl ligands, transmission of electronic substituent effects through clusters (S. Aime, G. Jannon, D. Osella, A.J. Deeming), C15

## Silicon

3,3-Diethyl-2,4-dimethyl-3-silathietane, thermal isomerisation and decomposition of (L.E. Gusel'nikov, V.M. Sokolova, E.A. Volnina, V.G. Zaikin, N.S. Nametkin, M.G. Voronkov, S.V. Kirpichenko, V.V. Keiko), 145

Difluorosilylene, reaction with propene of (C.-C. Shiau, T.-L. Hwang, C.-S. Liu), 31

3-Silabicyclo[3.2.1]octane and *endo*-3-methyl-3-silabicyclo[3.2.1]octane, molecular structure determined by gas phase electron diffraction of (Q. Shen, R.L. Hilderbrandt, C.S. Blankenship, S.E. Cremer), 155

1R,1R',2,3,4,5-Tetraphenyl-1-silacyclopentadiene, synthesis and reactions of (P. Jutzi, A. Karl), 289

Trichloromethyltrimethylsilane, reactions with ferrotetraarylporphyrins of (J.-P. Battioni, D. Dupré, D. Mansuy), 303

Trimethylsilylphenylsilylene, photolysis reactions with allylic halides and allyl ethyl ether of (M. Ishikawa, K.-I. Nakagawa, M. Kumada), 277

## Sodium

Tetracarbonylcobalt anion, strong interactions with  $\text{Li}^+$  and  $\text{Na}^+$  in diethyl

ether of; the system  $\text{LiBr}/\text{Co}_2(\text{CO})_8/$  diethyl ether (P.S. Braterman, A.E. Leslie), C45

## Sulphur

- Binuclear rhodium complexes activating carbon disulphide, and structure of  $[\text{Rh}_2\text{Cl}_2(\text{CO})(\text{C}_2\text{S}_4)(\text{Ph}_2\text{PCH}_2\text{PPh}_2)_2]$  (M. Cowie, S.K. Dwight), 233
- Bis(trimethylaluminium), reactions with sulphurdiimines and sulphinylanulines of (J.M. Klerks, R. van Vliet, G. van Koten, K. Vrieze), 1
- $(\text{Cp}_2\text{Cr}_2\text{SCMe}_3)(\mu_3\text{-S})_2\text{Co}(\text{CO})_2$ , transformation into the diamagnetic metallatetrahedron  $\text{Cp}_3\text{Cr}_3(\mu_3\text{-S})_4\text{Co}(\text{CO})$  of (A.A. Pasynskii, I.L. Eremenko, B. Orazsakhatov, V.T. Kalinnikov, G.G. Aleksandrov, Yu.T. Struchkov), 367
- $(\text{CpCrSCMe}_3)_2\text{S}\cdot\text{Mn}_2(\text{CO})_9$ , and the cluster  $(\text{CpCr})_2(\mu_2\text{-SCMe}_3)(\mu_3\text{-S})_2\text{Co}(\text{CO})_2$ , synthesis, molecular structures and magnetic properties of (A.A. Pasynskii, I.L. Eremenko, B. Orazsakhatov, Yu.V. Rakitin, V.M. Novotortsev, O.G. Ellert, V.T. Kalinnikov, G.G. Aleksandrov, Yu.T. Struchkov), 351
- 3,3-Diethyl-2,4-dimethyl-3-silathietane, thermal isomerisation and decomposition of (L.E. Gusel'nikov, V.M. Sokolova, E.A. Volnina, V.G. Zaikin, N.S. Nametkin, M.G. Voronkov, S.V. Kirpichenko, V.V. Keiko), 145
- Germanone and germathione, structure determination through ab initio calculations of (G. Trinquier, M. Pelissier, B. Saint-Roch, H. Lavyssi re), 169
- Iron-57 satellites in  $^{13}\text{C}$  NMR spectra elucidating "hidden processes" in the dynamics of metal carbonyls (S. Aime, D. Osella), C27
- Palladium(II) and rhodium(III) mixed ligand complexes,  $^1\text{H}$  NMR studies of (J. Selbin, M.A. Gutierrez), 253
- Trichloromethyltrimethylsilane, reactions with ferrotetraarylporphyrins of (J.-P. Battioni, D. Dupr , D. Mansuy), 303

## Tellurium

- Aryltellurium(IV) compounds, halodeteluration of (S. Uemura, S.-I. Fukuzawa, M. Wakasugi, M. Okano), 319

## Tin

- Diorganotin(IV) mixed chelate complexes, syntheses and M ssbauer studies of (V.G. Kumar Das, N.S. Weng, J. Singh, P.J. Smith, R. Hill), 183
- Tetraorganotin aldehydic and ketonic compounds, syntheses and properties of (M. Gielen, S. Simon, M. van de Steen), 191
- Tin(IV)-oxygen heterocyclic compounds, paramagnetic ion pairs as intermediates in the synthesis of (H.B. Stegmann, R. Schrade, H. Saur, P. Schuler, K. Scheffler), 197

## Titanium

- Alkyltitanocenes, cyclometallation reactions with pyridines of (E. Klei, J.H. Teuben), 53
- Polymer-supported metallocenes and their applications in catalysis of olefin isomerisation, oligomerisation, epoxidation and dinitrogen fixation reactions (C.-P. Lau, B.-H. Chang, R.H. Grubbs, C.H. Brubaker, Jr.), 325

## Tungsten

- Trialkyllead derivatives of chromium, molybdenum and tungsten, thermal and photochemical properties of (K.H. Pannell, R.N. Kapoor), 47

## Uranium

- Tricyclopentadienylalkyluraniums, reactions with  $\text{SO}_2$  of (L. Arnaudet, G. Folcher, H. Marquet-Ellis), 215

## Vanadium

- Alkyl- and aryl-isocyanidepentacarbonylvanadate(1-) complexes, syntheses of (J.E. Ellis, K.L. Fjare), C33
- Carbonyl- $\eta^5$ -cyclopentadienyl(1,1,4,7,7-pentaphenyl-1,4,7-triphosphaheptane)-vanadium(I), molecular structure and spectroscopic properties of (K. von Deuten, D. Rehder, W. Roose), 71

## Zinc

- Organolithium, organomagnesium and organozinc compounds, reactions with  $\alpha, \alpha'$ -enynes of (D. Mesnard, J.-P. Charpentier, L. Miginiac), 135

**Book reviews**

**Advances in physical organic chemistry,**  
Vol. 17; edited by V. Gold and D. Bethell  
(C. Eaborn), C31

**Handbook of liquid crystals;** by H. Kelker  
and R. Hatz (C. Eaborn), C25

**Structure and bonding 43. Bonding**  
**problems;** edited by J.B. Goodenough,  
P. Hemmerich, J.A. Ibers, C.K.  
Jørgensen, J.B. Neilands, D. Reinen  
and J.R.P. Williams (M.F. Lappert), C53