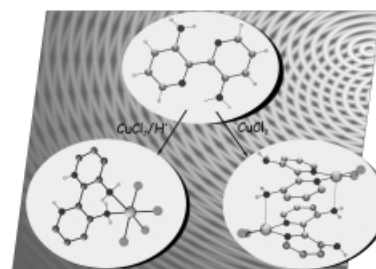


COVER PICTURE

The cover picture shows the pH-dependent coordination chemistry of the potentially ambidentate ligand 2,2'-bipyridine-3,3'-diamine. A dimeric 2:2 complex is formed with copper(II) chloride in which each copper ion is bound to two pyridine nitrogen atoms and two chloride ions in a distorted square-planar arrangement, with a long axial contact from a neighbouring amino group completing a distorted square-pyramidal geometry. Under acidic conditions, both pyridine nitrogen atoms are protonated preventing coordination to the copper(II) ion and as a consequence, the two amino groups together with four chloride ions are bound to the metal ion completing an octahedral coordination sphere. Details are discussed in the article by J. D. Wallis, M. Pilkington et al. on p. 1985 ff.

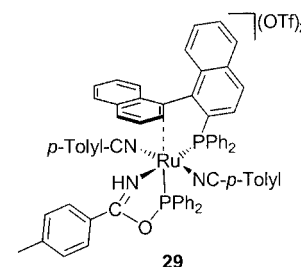
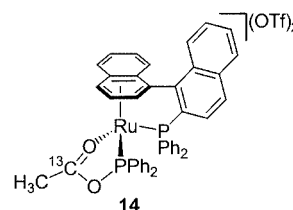


MICROREVIEW

1907 T. J. Geldbach, P. S. Pregosin*

η^1 to η^6 Ru–Arene π Complexation: New Bonding Modes and P–C Bond Cleavage Chemistry

Keywords: P–C bond cleavage / π complexes / Unusual bonding / Stereospecific migration



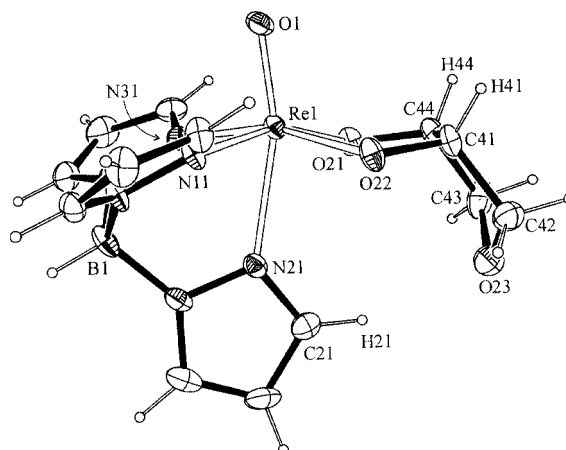
Contents

SHORT COMMUNICATIONS

1919 P. Klüfers,* O. Krotz, M. Oßberger



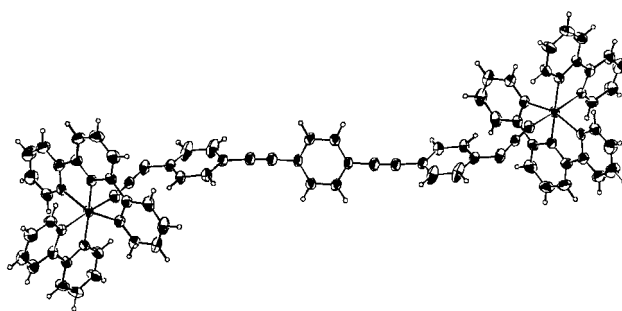
Oxorhenium(V) Complexes of Carbohydrate Ligands



Keywords: Rhenium / Carbohydrates / Oxo ligands

1924 E. Sondaz, J. Jaud, J.-P. Launay,
J. Bonvoisin*

X-ray Structure of a Ruthenium Dinuclear Complex Incorporating 4,4'-Bis(cyanamido-phenylethynyl)benzene as a Ligand, a Conjugated Bridge Two Nanometers in Length

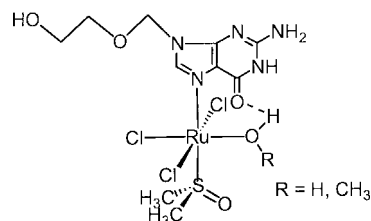


Keywords: Ruthenium / Bridging ligands / N ligands / X-ray structure

1928 I. Turel,* M. Pečanac, A. Golobič,
E. Alessio, B. Serli

Novel Ru^{III}-DMSO Complexes of the Anti-herpes Drug Acyclovir

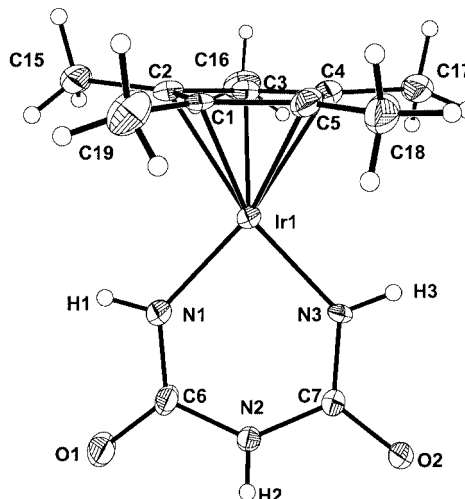
Keywords: Bioinorganic chemistry / Nucleoside analogues / Ruthenium / X-ray diffraction / Hydrogen bonds



1932 W. Ponikwar, P. Mayer, W. Beck*

Coordinatively and Electronically Unsaturated Pentamethylcyclopentadienyliridium(III) Complexes with the Dianions of Biuret, of the Diamide of Malonic Acid and of an *N*-Acetyl-dipeptide Ester

Keywords: Cyclopentadienyl ligands / Iridium / Biuret / Electron-deficient compounds

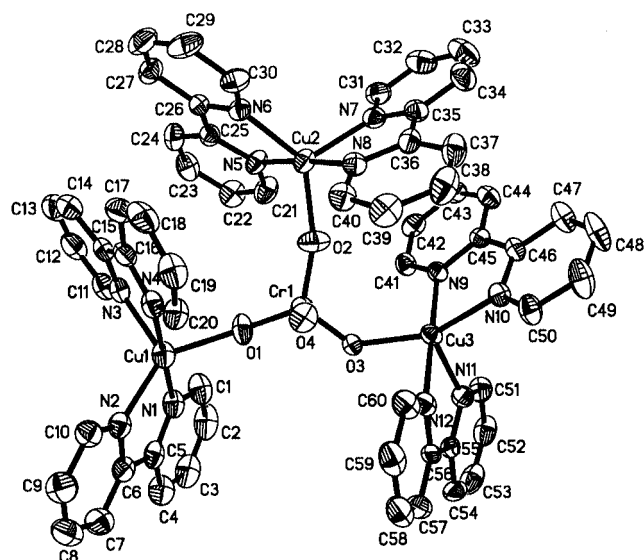


1937

L.-H. Yin, W.-H. Gu, P. Cheng,*
L. Z. Zhang, D.-Z. Liao,* J. Li, X.-L. Yang,
X.-Q. Fu, S.-P. Yan, Z.-H. Jiang

The First Tetranuclear Complex with a (μ -CrO₄-O,O',O'') Bridge: Crystal Structure and Ferromagnetic Behavior of [$\{\text{Cu}(\text{bpy})_2\}_3(\mu\text{-CrO}_4)\text{]}\cdot(\text{ClO}_4)_4\cdot\text{H}_2\text{O}$

Keywords: Structure elucidation / Magnetic properties / Bridging ligands / Chromium / N,O ligands



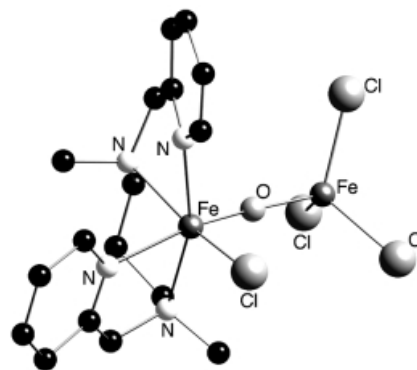
1941

N. Raffard-Pons Y Moll, F. Banse,*
K. Miki, M. Nierlich, J.-J. Girerd*



Hydroxylation of Hexane Using Dioxygen and Trimethylhydroquinone: Biomimetic Catalysis by an Unsymmetrical Diiron- μ -Oxo Complex

Keywords: Bioinorganic chemistry / Iron / Dioxygen activation / Biomimetic catalysis / N ligands

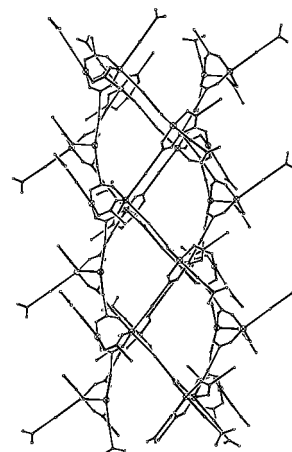


1945

J. Y. Lu,* V. Schauss

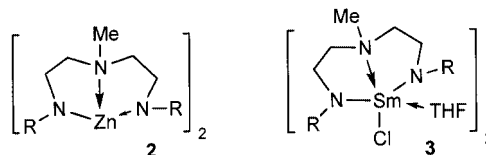
A Novel Nanostructured Open-Channel Coordination Polymer with an Included Fused-Polyiodide Ring

Keywords: Nanostructures / Hydrothermal synthesis / Copper / Iodine



- 1948** A. Dumitrescu, B. Martin-Vaca,
H. Gornitzka, J.-B. Cazaux, D. Bourissou,*
G. Bertrand*

Zinc(II), Samarium(III) and Tin(II) Complexes Featuring a Tridentate Nitrogen Donor for the Ring-Opening Copolymerization of (D,L)-Lactide and Glycolide

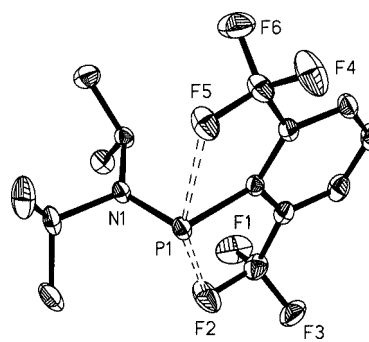


Keywords: N ligands / Zinc / Samarium / Ring-opening polymerization / Copolymerization

FULL PAPERS

- 1953** A. Dumitrescu, H. Gornitzka,
W. W. Schoeller, D. Bourissou, G. Bertrand*

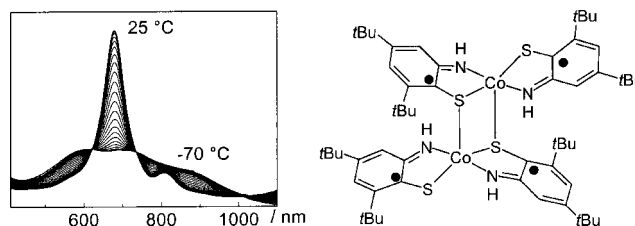
A Crystalline Phosphenium Salt Featuring the Electron-Withdrawing 2,6-Bis(trifluoromethyl)-phenyl Group



Keywords: Electron-deficient compounds / Carbenoids / Phosphorus / Fluorine

- 1957** D. Herebian, P. Ghosh, H. Chun, E. Bothe,
T. Weyhermüller, K. Wieghardt*

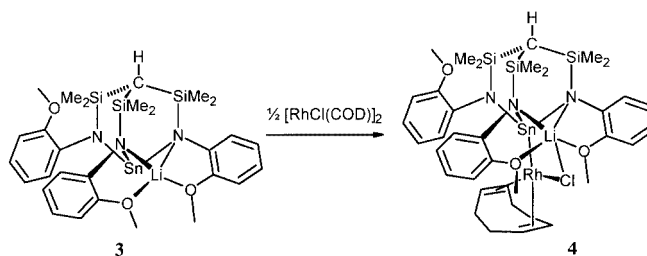
Cobalt(II)/(III) Complexes Containing *o*-Iminothiobenzosemiquinonato(1-) and *o*-Iminobenzosemiquinonato(1-) π -Radical Ligands



Keywords: Cobalt / Electrochemistry / EPR spectroscopy / N ligands / Radicals / S ligands

- 1968** M. Lutz, C. Galka, M. Haukka,
T. A. Pakkanen,* L. H. Gade*

Intramolecular Lithium Cation Solvation in the “Active Ligand Periphery” of a Tripodal Triaminostannate

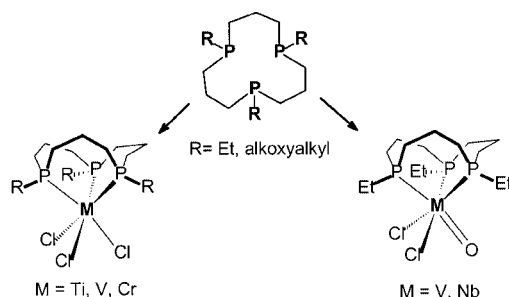


Keywords: Tin / Lithium / N ligands / Metal-metal interactions / Rhodium

1975 R. J. Baker, P. C. Davies, P. G. Edwards,*
R. D. Farley, S. S. Liyanage, D. M. Murphy,
B. Yong

Early Transition Metal Complexes of Triphosphorus Macrocycles

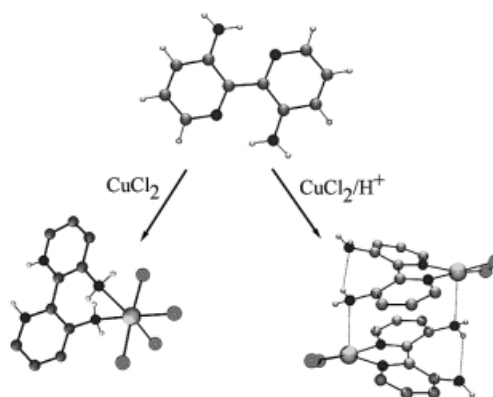
Keywords: Macrocyclic ligands / P ligands / Titanium / Vanadium / Chromium



1985 C. R. Rice, S. Onions, N. Vidal,
J. D. Wallis,* M.-C. Senna, M. Pilkington,*
H. Stoeckli-Evans

The Coordination Chemistry of 3,3'-Diamino-2,2'-bipyridine and Its Dication: Exploring the Role of the Amino Groups by X-ray Crystallography

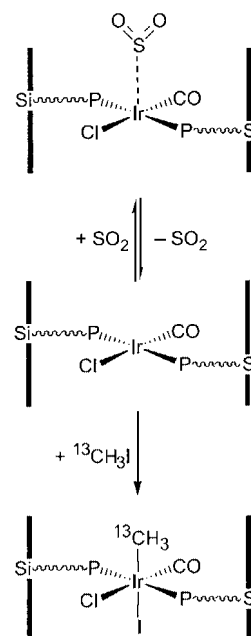
Keywords: N ligands / Hydrogen bonds / Ambidentate ligands / X-ray Crystallography / Cations



1998 E. Lindner,* T. Salesch, S. Brugger,
S. Steinbrecher, E. Plies, M. Seiler,
H. Bertagnolli, H. A. Mayer

Accessibility Studies of Sol-Gel Processed Phosphane-Substituted Iridium(I) Complexes in the Interphase

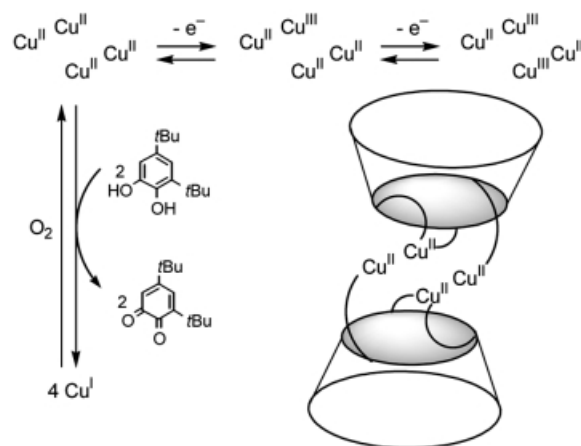
Keywords: Iridium / Immobilization / Sol-gel processes / Accessibility studies / NMR spectroscopy



2007 O. S  n  que, M. Campion, B. Douziech,
M. Giorgi, E. Riv  re, Y. Journaux,
Y. Le Mest,* O. Reinaud*

Supramolecular Assembly with Calix[6]arene
and Copper Ions – Formation of a Novel
Tetranuclear Core Exhibiting Unusual Redox
Properties and Catecholase Activity

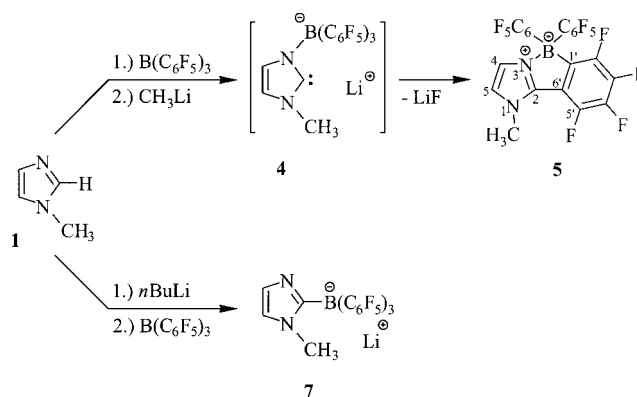
Keywords: Copper / N Ligands / Calixarenes / Bioinor-
ganic chemistry / Electrochemistry



2015 D. Vagedes, G. Kehr, D. K  nig,
K. Wedeking, R. Fr  hlich, G. Erker,*
C. M  ck-Lichtenfeld, S. Grimme

Formation of Isomeric BAr₃ Adducts of 2-
Lithio-*N*-methylimidazole

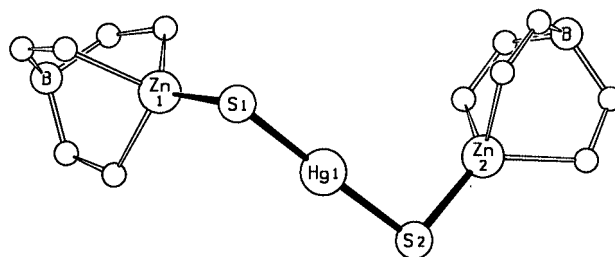
Keywords: Boranes / Carbenes / Density functional
calculations / Lithium / Nucleophilic
substitution



2022 M. Rombach, H. Vahrenkamp*

Molecular Mercury Zinc Sulfides

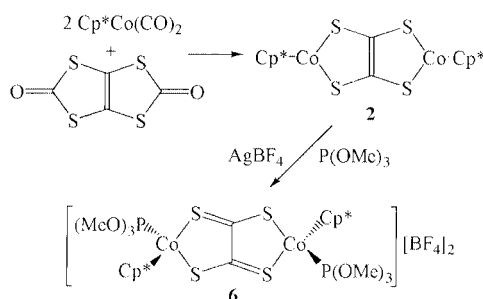
Keywords: Mercury / Zinc / S ligands / Tripod ligands



2026 F. Guyon,* I. V. Jourdain, M. Knorr,
D. Lucas, T. Monzon, Y. Mugnier,
N. Avarvari, M. Fourmigu  

Synthesis of μ -C₂S₄⁴⁻ Cobalt Complexes by
Activation of the 1,3,4,6-tetrathiapentalene-2,5-
dione, and Electrochemical Study of [(Cp*Co)₂-
(μ -C₂S₄)]

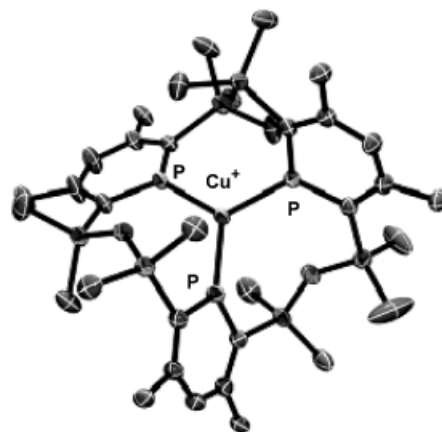
Keywords: Cobalt / S ligands / Cyclopentadienyl
ligands / Electrochemistry



2034 A. Moores, N. Mézailles, N. Maigrot,
L. Ricard, F. Mathey,* P. le Floch*

Synthesis and Reactivity Towards Cationic Group 11 Metal Centers of an Extended Sila-calix-[3]-phosphinine Macrocycle

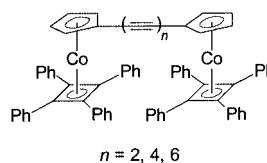
Keywords: Copper / Gold / Phosphinines / Macro-cycles / Silver



2040 J. Classen, R. Gleiter,* F. Rominger

Oligoalkyne-Bridged (η^4 -Cyclobutadiene)(η^5 -cyclopentadienyl)cobalt Fragments – Syntheses and Properties

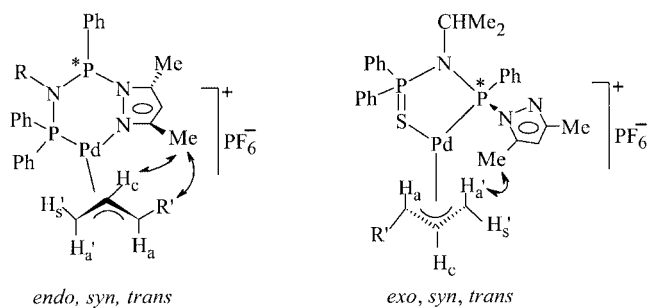
Keywords: Alkynes / Conjugation / Electron transfer / Rod-like molecules / Cobalt



2047 S. K. Mandal, G. A. N. Gowda,
S. S. Krishnamurthy,* C. Zheng, S. Li,
N. S. Hosmane

Allylpalladium Complexes of Mixed-Donor Diposphazane Ligands Bearing a Stereogenic Phosphorus Centre: Structure and Stereodynamics

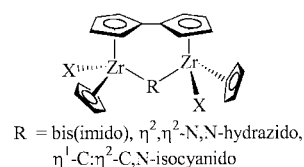
Keywords: Allyl complexes / P ligands / Palladium / N ligands



2057 M. González-Maupoey, G. M. Rodríguez,
T. Cuenca*

μ -Imido, μ -(η^2 , η^2 -N,N-Hydrazido) and μ -(η^1 -C: η^2 -C,N-Isocyanido) Dinuclear (Fulvalene)zirconium Derivatives

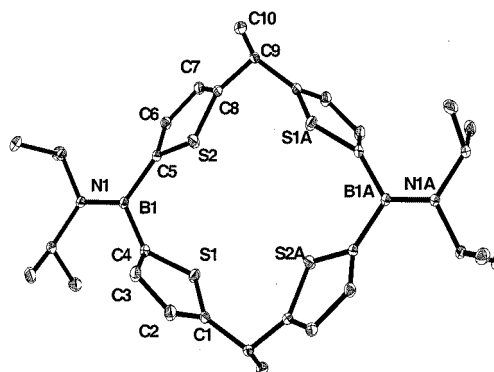
Keywords: Zirconium / Fulvalene ligands / Imido ligands / Hydrazido ligands / Isocyanido



2064 A. Eckert, H. Pritzkow, W. Siebert*

Synthesis and Structure of Diboraporphyrinogenes

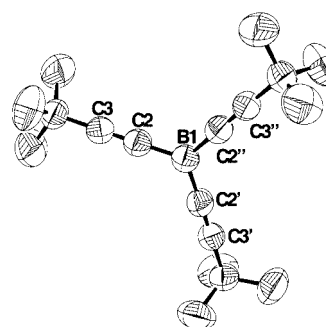
Keywords: Boranes / Boraporphyrinogenes / Porphyrins / Macrocycles



2069 M. J. Bayer, H. Pritzkow, W. Siebert*

Synthesis, Structures, and Donor–Acceptor Adducts of Tris(3,3-dimethyl-1-butynyl)borane

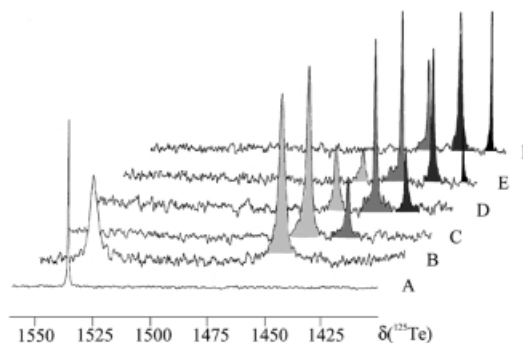
Keywords: Alkynes / Tris(alkynyl)boranes / Donors / Boron



2073 H. Fleischer,* Y. Dienes, D. Schollmeyer

Tellurium(IV) Tetraalkoxides and Chlorotellurium(IV) Alkoxides Derived from β -Donor Alcohols

Keywords: Tellurium / Donor-acceptor systems / Ab initio calculations / X-ray diffraction / NMR spectroscopy

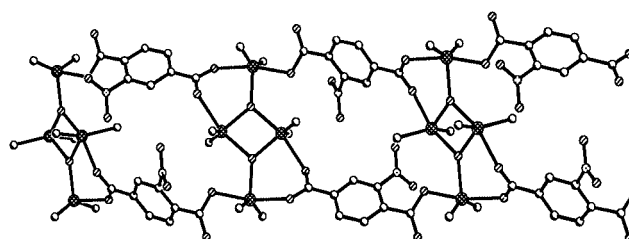


2082 R.-H. Wang, M.-C. Hong,* J.-H. Luo, R. Cao,* J.-B. Weng



Synthesis and Crystal Structures of the First Two Novel Dicarboxylate Organotin Polymers Constructed from Dimeric Tetraorganodistannoxane Units

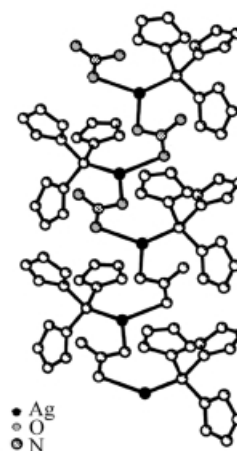
Keywords: Carboxylate ligands / Tin / X-ray diffraction / Polymers



2086 F. Bachechi, A. Burini,* R. Galassi,
B. R. Pietroni, D. Tesei

A Single-Strand Helical Motif Induced by Self-Assembly of $[\text{Ag}(\text{TFP})]^+$ Moieties with Nitrate Anions – ^{31}P NMR Spectroscopic and X-ray Crystal Structure Characterization of the Complexes Involved in Equilibrium Reactions of Silver Salts and TFP Ligand

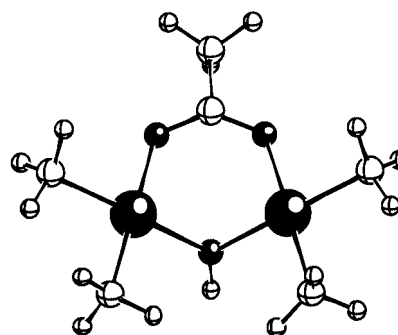
Keywords: P ligands / Silver / Helical structures / NMR spectroscopy / Equilibrium reactions



2094 L. Gutierrez, G. Alzuet, J. A. Real, J. Cano,
J. Borrás,* A. Castiñeiras

Strong Ferromagnetic Coupling in Linear Mixed μ -Acetato, μ -Hydroxo Trinuclear Copper(II) Complexes with *N*-sulfonamide derivatives – Synthesis, Structure, EPR and Magnetic Properties

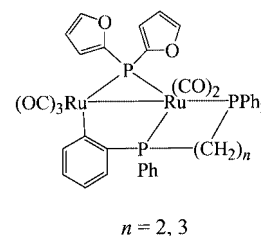
Keywords: Copper / Sulfonamide ligands / Magnetic properties / EPR spectroscopy / Density functional calculations



2103 W.-Y. Wong,* F.-L. Ting, W.-L. Lam

Reactivity of $[\text{Ru}_2(\text{CO})_6(\mu\text{-PFu}_2)(\mu\text{-}\eta^1, \eta^2\text{-Fu})]$ (Fu = 2-furyl) towards Diphosphanes – Substitution, Polymerisation, Cyclometallation and Elimination Reactions

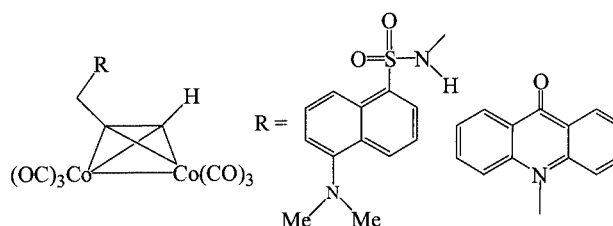
Keywords: Ruthenium / Phosphane ligands / Phosphido complexes



2112 W.-Y. Wong,* K.-H. Choi, Z. Lin

Syntheses, Structures and Photophysical Properties of Metal Carbonyl Clusters with Dansyl and Acridone Luminophores

Keywords: Transition metal / Dansyl group / Acridone / Luminophores

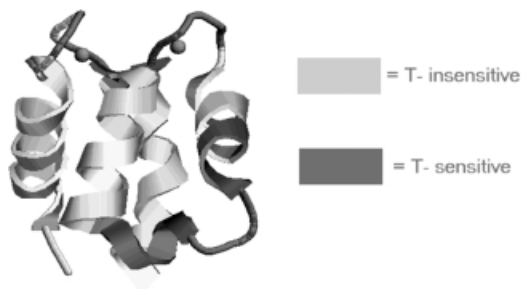


2121 M. Allegrozzi, I. Bertini,* S.-N. Choi,
Y.-M. Lee, C. Luchinat



Detecting Small Structural Changes in Metalloproteins by the Use of NMR Pseudocontact Shifts

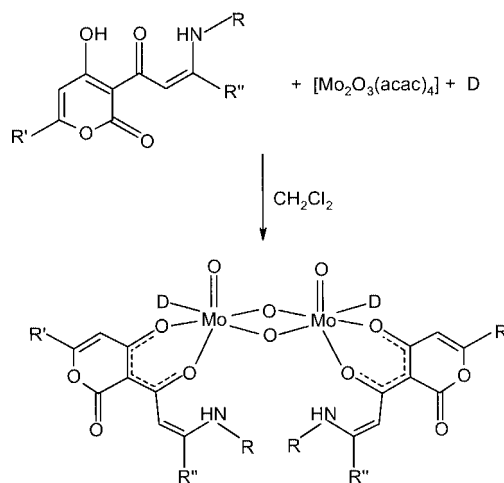
Keywords: Metalloproteins / Pseudocontact shifts / Lanthanides / Protein structures / Temperature-dependence / Magnetic susceptibility



2128 M. Cindrić,* V. Vrdoljak, N. Strukan,
P. Tepeš, P. Novak, A. Brbot-Šaranović,
G. Giester, B. Kamenar

New Dinuclear Molybdenum(V) Complexes With β' -Hydroxy- β -enaminones Containing a 4-Hydroxy-2-pyrone Ring

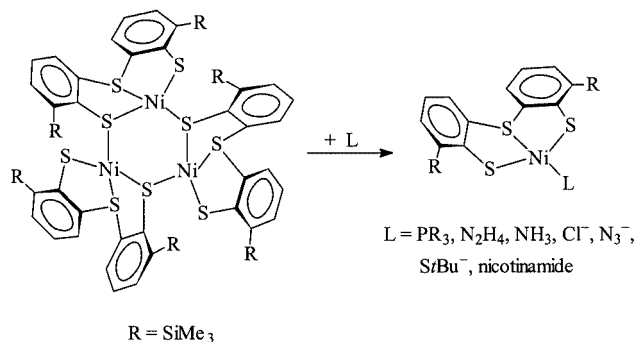
Keywords: Amine ligands / Molybdenum / Nitrogen heterocycles



2138 D. Sellmann,* R. Prakash, F. Geipel,
F. W. Heinemann

Highly Soluble Sulfur-Rich $[\text{Ni}(\text{L})(^{\text{Si}}\text{S}_3)]$ Complexes Containing the New Ligand Bis(2-mercapto-3-trimethylsilylphenyl) Sulfide(2-) ($^{\text{Si}}\text{S}_3^{2-}$)

Keywords: Nickel / S ligands / Silicon / Hydrazine / Nicotinamide

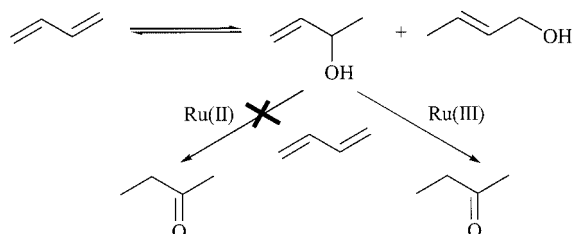


2147 R. C. van der Drift, J. W. Sprengers,
E. Bouwman,* W. P. Mul, H. Kooijman,
A. L. Spek, E. Drent



Ruthenium-Catalyzed Isomerization of Allylic Alcohols: Oxidation State Determines Resistance Against Diene Inhibition

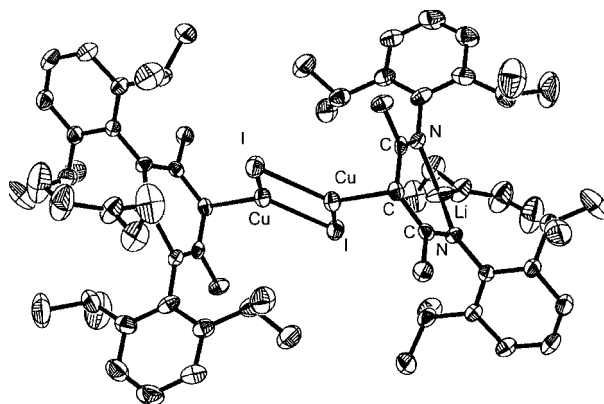
Keywords: Isomerization / Allylic alcohols / Homogeneous catalysis / Ruthenium / Diene inhibition



2156

J. Prust, H. Hohmeister, A. Stasch,
H. W. Roesky,* J. Magull, E. Alexopoulos,
I. Usón, H.-G. Schmidt, M. Noltemeyer

Synthesis and Structural Characterization of
 β -Diketoiminate Complexes Containing Three-
Coordinate Zinc and Copper Atoms

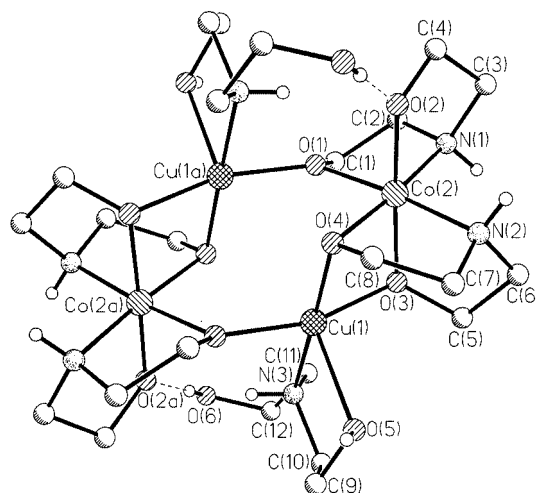


Keywords: Acetylides / Copper / N ligands / Zinc

2163

V. G. Makhankova, O. Y. Vassilyeva,*
V. N. Kokozay, J. Reedijk, G. A. van Albada,
J. Jezierska, B. W. Skelton

Formation, Structures, and Magnetic and EPR
Spectroscopic Properties of Dicobalt(III)-Di-
copper(II) Complexes Featuring Heterotetra-
nuclear Cations of a Puckered Cyclic Structure
with Diethanolamine and Diethanolamine(2-)
as Bridging Ligands



Keywords: Heterometallic complexes / Copper /
Cobalt / Amino alcohols / EPR spectroscopy

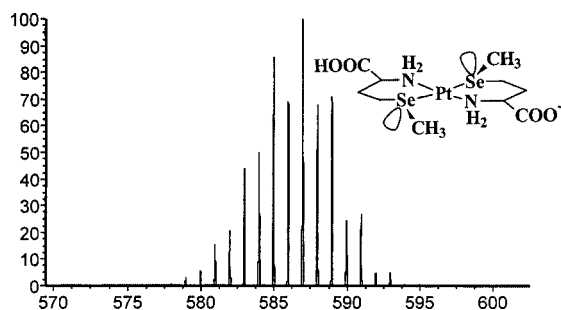
2170

Q. Liu, J. Lin, P. Jiang, J. Zhang, L. Zhu,
Z. Guo*



Monitoring the Reactions of the Anticancer
Drug Carboplatin with the Chemopreventive
Agent Selenomethionine by Electrospray Mass
Spectrometry and $[^1\text{H}, ^{15}\text{N}]$ HSQC NMR
Spectroscopy

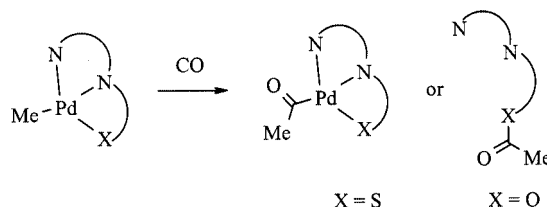
Keywords: Antitumor agents / Platinum / L-Seleno-
methionine / Mass spectrometry / NMR
spectroscopy



2179 A. Bacchi, M. Carcelli, C. Pelizzi, G. Pelizzi, P. Pelagatti,* S. Ugolotti

Potentially Tridentate Ligands in the Synthesis of Methyl- and Acetypalladium(II) Complexes

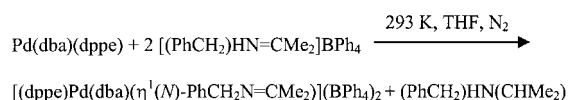
Keywords: Carbonylation / Insertion / N ligands / Palladium / Tridentate ligands



2188 M. Aresta,* A. Dibenedetto, E. Amodio, I. Tommasi

Oxidative Addition of Benzyliminium Tetraphenylborate to Pd(dba)(dppe): Synthesis and Catalytic Activity of [(dppe)Pd(dba){ $\eta^1(N)$ -PhCH₂N=CM₂}(BPh₄)₂]

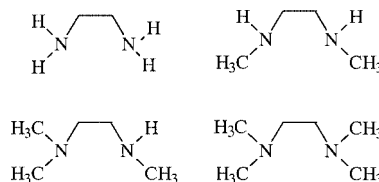
Keywords: Methyl acrylate / Dimerization / Styrene–methyl acrylate coupling / Palladium



2194 C. Comuzzi,* A. Melchior, P. Polese, R. Portanova, M. Tolazzi*

Cobalt(II) Complexes with Nitrogen Donors and Their Dioxygen Affinity in Dimethyl Sulfoxide

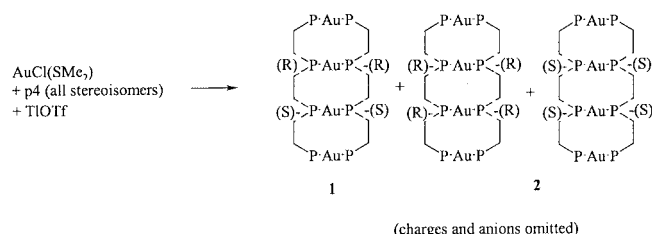
Keywords: Cobalt / Amine ligands / Thermodynamics / Solvent effects / Oxygen



2202 W. Schuh, H. Kopacka, K. Wurst, P. Peringer*

Homochiral Self Recognition in Gold-Phosphane-Helicates

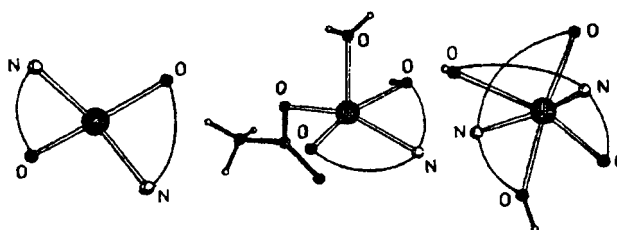
Keywords: Self-assembly / Helical structures / Gold / X-ray diffraction / Auophilicity



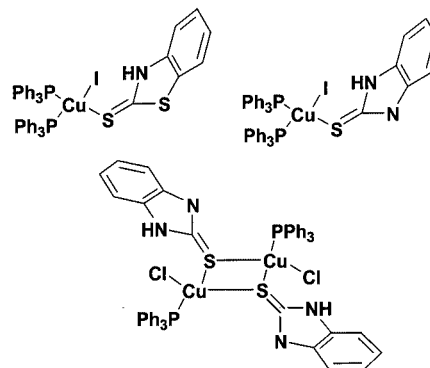
2207 M. Dey, C. P. Rao,* P. Saarenketo, K. Rissanen, E. Kolehmainen

Four-, Five- and Six-Coordinated Zn^{II} Complexes of OH-Containing Ligands: Syntheses, Structure and Reactivity

Keywords: N,O ligands / X-ray diffraction / Hydrogen bonds / Metalloenzymes / Zinc



Copper(I) Halide Complexes with Triphenylphosphane and Heterocyclic Thione Ligands: The Crystal Structures of [Bis(Triphenylphosphane)(Benzimidazole-2-Thione)Copper(I) Iodide], [Bis(Triphenylphosphane)(Benzothiazole-2-Thione)Copper(I) Iodide], and Bis[μ -S-(Benzimidazole-2-Thione)(Triphenylphosphane)-Copper(I) Chloride]



Keywords: Copper / Sulfur heterocycles / Phosphane ligands

RECRUITMENT

GROUP LEADER POSITIONS AT THE NEW INSTITUTE OF CHEMICAL RESEARCH OF CATALONIA (ICIQ)

AREAS: Homogeneous Catalysis Heterogeneous Catalysis Molecular Recognition Molecular Devices Mechanistic Organometallic Chemistry Theoretical Organometallic Chemistry

The Institute of Chemical Research of Catalonia (ICIQ), financially supported by the autonomous government of Catalonia (Generalitat de Catalunya) and sponsored by a group of chemical/petrochemical companies, has been recently created with the mission of contributing to a significant improvement of the scientific level of chemical research and of strengthening, by means of innovation and technological upgrade, competitiveness of the chemical and pharmaceutical industries in Catalonia (Spain).

Located in the town of Tarragona, 100 km south from Barcelona, nearby one of the most important chemical/petrochemical complexes in Southern Europe, the Institute will be based on a 7000 square meter building now under construction at the scientific campus of the Universitat Rovira i Virgili (URV) and will constitute, together with the Faculty of Chemistry and the School of Chemical Engineering of the URV, the nucleus of the Tarragona Research Cluster. The Institute will be equipped with highly functional laboratories and state-of-the-art scientific instruments. Research at ICIQ will be in the areas of Catalysis and Supramolecular Chemistry, with special focus on sustainable aspects of chemistry and on molecular nanotechnology. A combined theoretical/experimental approach will be followed, and dynamic collaborations for multidisciplinary approaches to relevant scientific/industrial problems will be favored.

For the start-up of research activities, planned for the 4th quarter of 2003, positions are available at ICIQ at the levels of Senior Group Leader and Junior Group Leader. The successful candidates will be responsible of leading and developing a research group of up to 16 people (Sr. group leader) or up to 8 people (Jr. group leader). Besides performing high-quality research, they should

have a positive attitude towards the implication in multidisciplinary projects and in the solution of industrially relevant problems.

If you have built-up a scientific career with outstanding achievements in one of the following areas: Homogeneous Catalysis, Heterogeneous Catalysis, Molecular Recognition, Molecular Devices, Mechanistic Organometallic Chemistry, Theoretical Organometallic Chemistry

and you feel attracted by the possibility of participating in the ICIQ project from the early beginning, please submit a letter of application accompanied by a CV, a description of previous accomplishments (up to 5 pages), a brief plan of the research you would like to develop at ICIQ (up to 5 pages), and the names and contact addresses of three or more scientists willing to act as reference persons, to:

Miquel A. Pericàs, Director
Institut Català d'Investigació Química
Pg. Lluís Companys, 23
08028 Barcelona (Spain)
e-mail: mapericas@fcr.es

In addition, an electronic version of the above documents should be attached to a cover message e-mailed to: **positions@iciq.es**. All the information relative to applicants will be treated confidentially. Only applications received before October 31st, 2002 will be considered, and pre-selected candidates will be notified before the end of 2002.

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