

ORGANOMETALLICS

**A NEW TRIANIONIC
ONO³⁻ PYRROLIDE
PINCER**



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ON THE COVER: If you have played solitaire, then you can recall the sense of accomplishment and feeling of satisfaction when you complete the game. Synthesis relates to solitaire in that you can play all day and never complete the game. However, persistent effort pays off. In synthesis the satisfaction of creating something new is an addicting pleasure that compels you to play again and again. Presented in this work are the synthesis and characterization of a new pyrrolide-centered trianionic pincer ligand and its use in supporting an anionic tungsten-alkylidyne complex. The new pyrrolide ligand adds to the growing list of trianionic pincer ligands created by Veige et al. and now includes NCN^{3-} , OCO^{3-} , and ONO^{3-} derivatives. See the paper by Veige et al. on pages 836–839.

Editor's Page

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[dx.doi.org/10.1021/om500109u](https://doi.org/10.1021/om500109u)

New Author Guidelines for 2014: A Format for Computational Structural Data That Can Be Opened with Freely Available Programs such as "Mercury"

Dennis L. Lichtenberger* and John A. Gladysz*

Communications

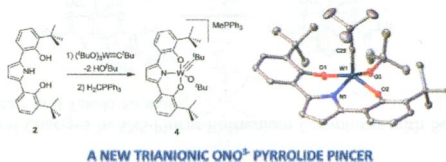
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[dx.doi.org/10.1021/om400942z](https://doi.org/10.1021/om400942z)

Synthesis and Characterization of Tungsten Alkylidene and Alkylidyne Complexes Supported by a New Pyrrolide-Centered Trianionic ONO^{3-} Pincer-Type Ligand

Matthew E. O'Reilly, Soufiane S. Nadif, Ion Ghiviriga, Khalil A. Abboud, and Adam S. Veige*



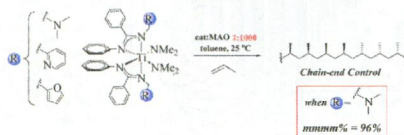
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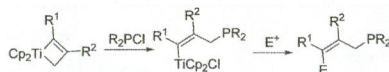
[dx.doi.org/10.1021/om401165g](https://doi.org/10.1021/om401165g)

Titanium Bis(amidinates) Bearing Electron Donating Pendant Arms as Catalysts for Stereospecific Polymerization of Propylene

Tatyana Elkin, Mark Botoshansky, Robert M. Waymouth, and Moris S. Eisen*



Chemoselective Phosphination of Titanacyclobutene: A Convenient Method for Synthesis of Allylphosphine Derivatives
Yiqing Zhou, Chao Chen,* Xiaoyu Yan, and Chanjuan Xi*

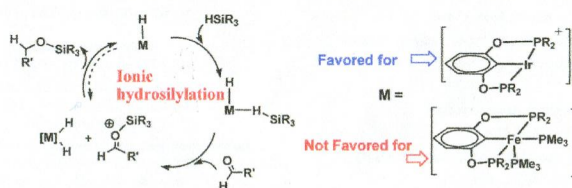


Articles

Theoretical Study of POCOP-Pincer Iridium(III)/Iron(II) Hydride Catalyzed Hydrosilylation of Carbonyl Compounds: Hydride Not Involved in the Iridium(III) System but Involved in the Iron(II) System

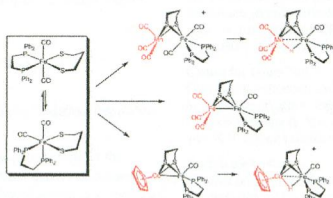
Wenmin Wang, Piao Gu, Yiou Wang, and Haiyan Wei*

Ionic hydrosilylation pathway is favored for Iridium hydride, not for Iron hydride



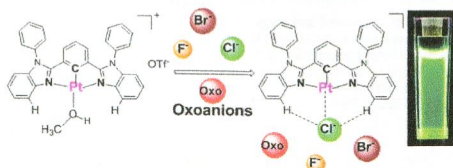
Ferrous Carbonyl Dithiolates as Precursors to FeFe, FeCo, and FeMn Carbonyl Dithiolates

Maria E. Carroll, Jinzhu Chen, Danielle E. Gray, James C. Lansing, Thomas B. Rauchfuss,* David Schilter, Phillip I. Volkers, and Scott R. Wilson



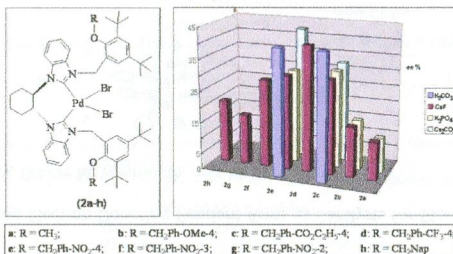
Chemosensing of Chloride Based on a Luminescent Platinum(II) NCN Pincer Complex in Aqueous Media

Alejandro Dorazco-Gonzalez*



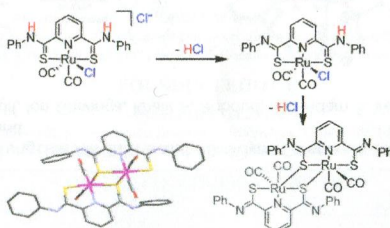
Chiral 1,2-Cyclohexane-Bridged Bis-NHC Palladium Catalysts for Asymmetric Suzuki–Miyaura Coupling: Synthesis, Characterization, and Steric Effects on Enantiocontrol

Yinle Li, Junkai Tang, Jun Gu, Quanrui Wang, Peipei Sun,* and Dao Zhang*



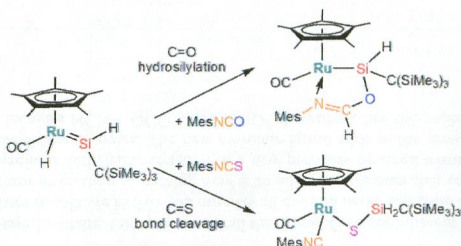
Deprotonation-Induced Structural Changes in SNS-Pincer Ruthenium Complexes with Secondary Thioamide Ligands

Yoko Komiyama, Junpei Kuwabara,* and Takaki Kanbara*



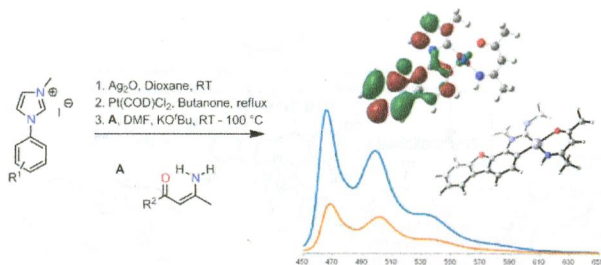
Understanding the Reactivity Difference of Isocyanate and Isothiocyanate toward a Ruthenium Silylene Hydride Complex

Hujun Xie and Zhenyang Lin*

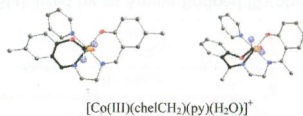


C⁺C⁺* Cyclometalated Platinum(II) NHC Complexes with β -Ketoimine Ligands

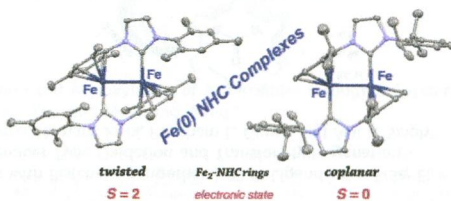
Alexander Tronnier, Alexander Poethig, Eberhardt Herdtweck, and Thomas Strassner*

**A Novel Series of Co^{III} (salen-type) Complexes Containing a Seven-Membered Metallacycle: Synthesis, Structural Characterization and Factors Affecting the Metallocyclization Rate**

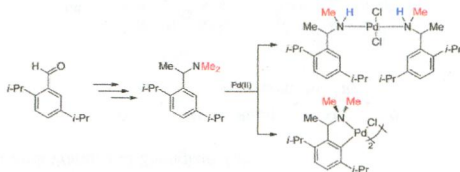
Patrizia Siega, Renata Dreos,* Giovanna Brancatelli, Ennio Zangrando, Claudio Tavagnacco, Višnja Vrdoljak, and Tomica Hrenar

**Dinuclear Iron(0) Complexes of N-Heterocyclic Carbenes**

Takayoshi Hashimoto, Ryoko Hoshino, Tsubasa Hatanaka, Yasuhiro Ohki,* and Kazuyuki Tatsumi*

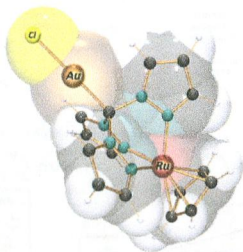
**Synthesis, Optical Resolution, and Stereochemical Properties of a Rationally Designed Chiral C–N Palladacycle**

Jeanette See Leng Yap, Hougungang Jeremy Chen, Yongxin Li, Sumod A. Pullarkat, and Pak-Hing Leung*



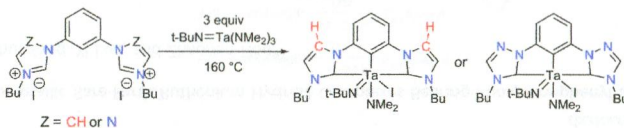
Coinage Metal Complexes of Tris(pyrazolyl)methanide-Based Redox-Active Metalloligands

Sandra González-Gallardo, Istemi Kuzu, Pascual Oña-Burgos, Tanja Wolfer, Cong Wang, Karl W. Klinkhammer, Wim Klopper, Stefan Bräse, and Frank Breher*

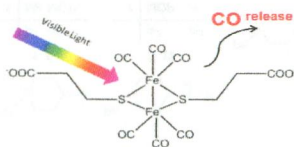


Synthesis, Characterization, and X-ray Molecular Structure of Tantalum CCC-N-Heterocyclic Carbene (CCC-NHC) Pincer Complexes with Imidazole- and Triazole-Based Ligands

Theodore R. Helgert, T. Keith Hollis,* Allen G. Oliver, Henry U. Valle, Yunshan Wu, and Charles Edwin Webster

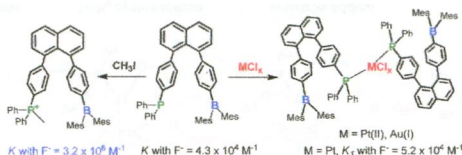
The Dithiolate-Bridged Diiron Hexacarbonyl Complex $\text{Na}_2[(\mu\text{-SCH}_2\text{CH}_2\text{COO})\text{Fe}(\text{CO})_2]_2$ as a Water-Soluble PhotoCORM

Hwa Tiong Poh, Bai Ting Sim, Tsz Sian Chwee, Weng Kee Leong, and Wai Yip Fan*



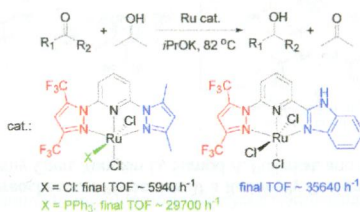
A Dual-Emissive Phosphine–Borane Lewis Pair with a U-Shaped Linker: Impact of Methylation and Complexation on Fluoride Binding Affinity

Yufei Li, Youngjin Kang, Jia-Sheng Lu, Ian Wyman, Soo-Byung Ko, and Suning Wang*



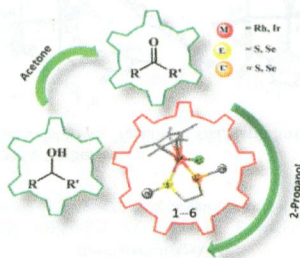
Ruthenium Complex Catalysts Supported by a Bis(trifluoromethyl)pyrazolyl–Pyridyl-Based NNN Ligand for Transfer Hydrogenation of Ketones

Wangming Du, Qingfu Wang, Liandi Wang, and Zhengkun Yu*



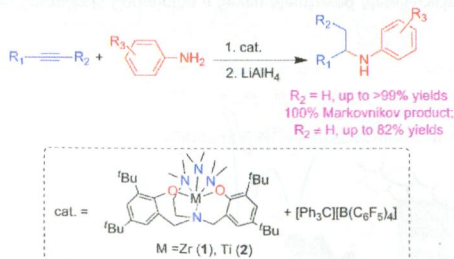
($\eta^5\text{-Cp}^*$)Rh(III)/Ir(III) Complexes with Bis(chalcogenoethers) (E, E' Ligands: E = S/Se; E' = S/Se): Synthesis, Structure, and Applications in Catalytic Oppenauer-Type Oxidation and Transfer Hydrogenation

Om Prakash, Kamal Nayan Sharma, Hemant Joshi, Pancham L. Gupta, and Ajai K. Singh*



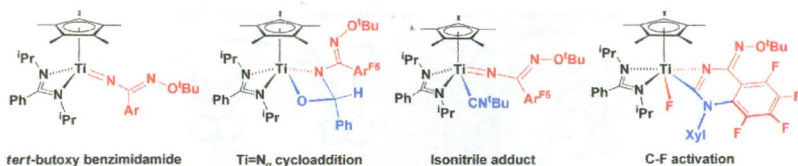
Synthesis of Group 4 Metal Complexes Stabilized by an Amine-Bridged Bis(phenolato) Ligand and Their Catalytic Behavior in Intermolecular Hydroamination Reactions

Qiu Sun, Yaorong Wang, Dan Yuan,* Yingming Yao,* and Qi Shen



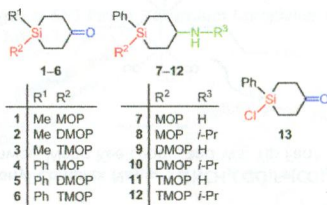
Reactions of a Cyclopentadienyl–Aminidate Titanium Benzimidamido Complex

Laura R. Groom, Adam F. Russell, Andrew D. Schwarz, and Philip Mountford*



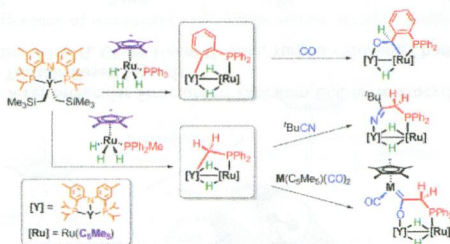
Synthesis of 4-Silacyclohexan-1-ones and (4-Silacyclohexan-1-yl)amines Containing the Silicon Protecting Groups MOP (4-Methoxyphenyl), DMOP (2,4-Dimethoxyphenyl), or TMOP (2,4,6-Trimethoxyphenyl): Versatile Si- and C-Functional Building Blocks for Synthesis

Markus Fischer, Christian Burschka, and Reinhold Tacke*



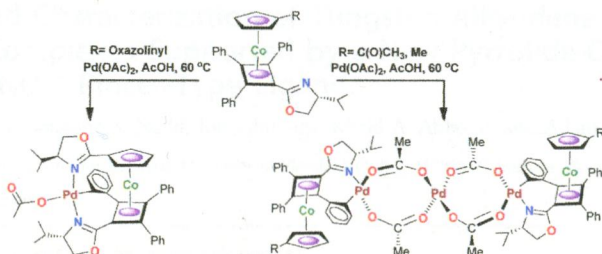
PNP-Ligated Heterometallic Rare-Earth/Ruthenium Hydride Complexes Bearing Phosphinophenyl and Phosphinomethyl Bridging Ligands

Wylie W. N. O, Xiaohui Kang, Yi Luo, and Zhaomin Hou*



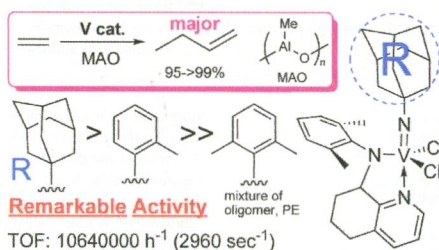
New Chiral Palladacycles from an Unprecedented Cyclopalladation of Cyclobutadiene-Bound Phenyl Groups of Cobalt Sandwich Compounds

Jatinder Singh, Dheeraj Kumar, Nem Singh, and Anil J. Elias*



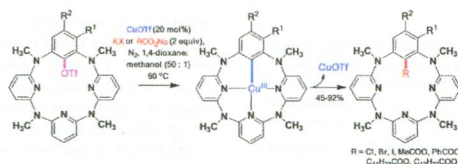
Synthesis of (Imido)vanadium(V) Complexes Containing 8-(2,6-Dimethylanilide)-5,6,7-trihydroquinoline Ligands: Highly Active Catalyst Precursors for Ethylene Dimerization

Xiao-Yan Tang, Atsushi Igarashi, Wen-Hua Sun, Akiko Inagaki, Jingyu Liu, Wenjuan Zhang, Yue-Sheng Li, and Kotohiro Nomura*

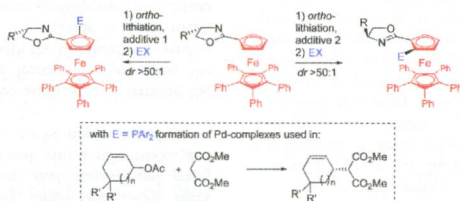


Copper(I)-Catalyzed Halogenation and Acyloxylation of Aryl Triflates through a Copper(I)/Copper(III) Catalytic Cycle

Chao Long, Liang Zhao, Jing-Song You, and Mei-Xiang Wang*



Sterically Demanding Planar Chiral P,N Ligands by Diastereoselective Ortho Lithiation of Pentaphenylferrocenyloxazolines and Their Application to Palladium-Catalyzed Substitutions with Cyclic Allylic Acetates
Marta Ayerbe Garcia, Wolfgang Frey, and René Peters*



Notes

Transition-Metal-Free Synthesis of Fluorinated Arenes from Perfluorinated Arenes Coupled with Grignard Reagents
Yunqiang Sun, Hongjian Sun, Jiong Jia, Aiqin Du, and Xiaoyan Li*

