organometallics

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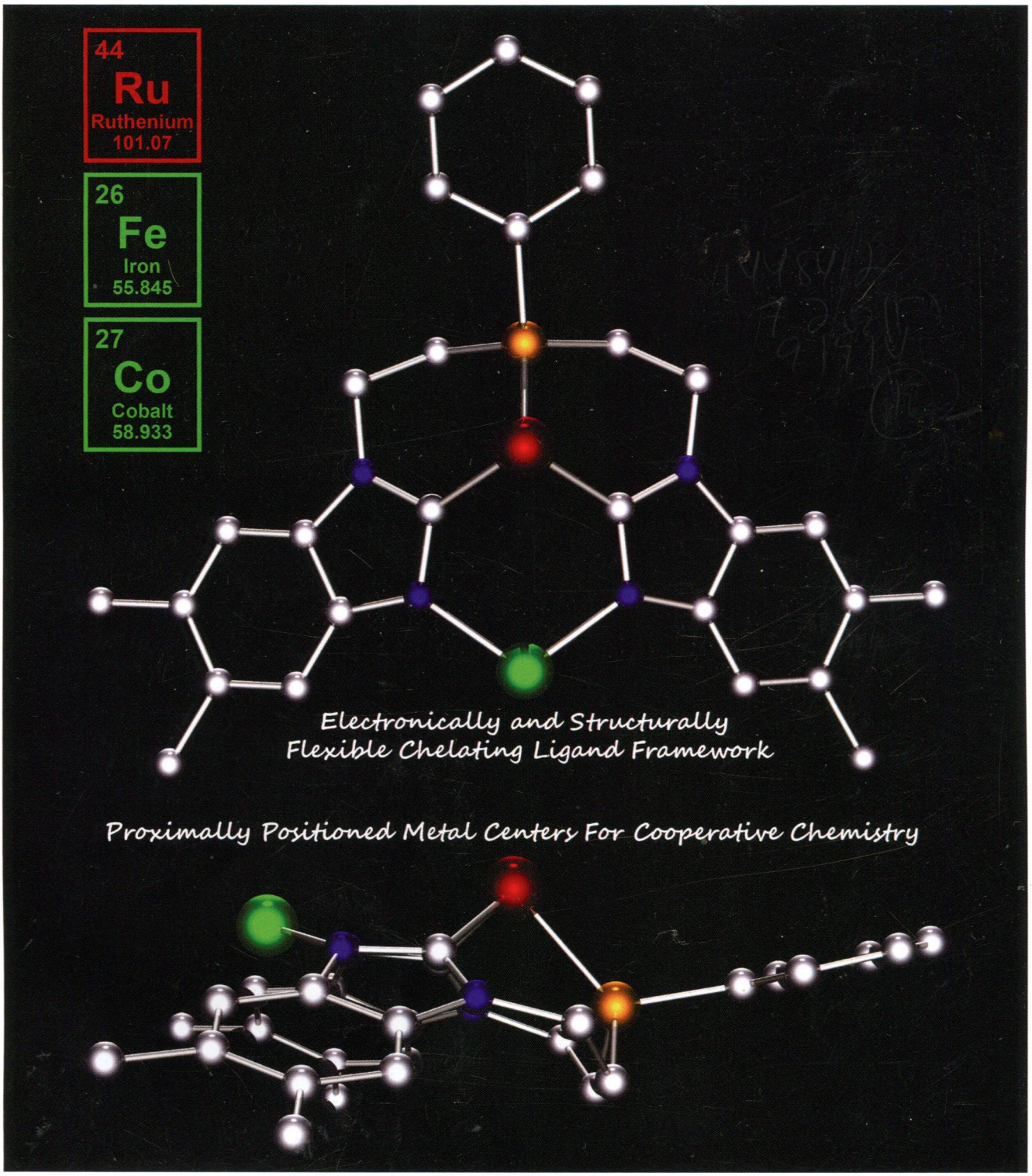
ORGANOMETALLICS



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ORGANOMETALLICS

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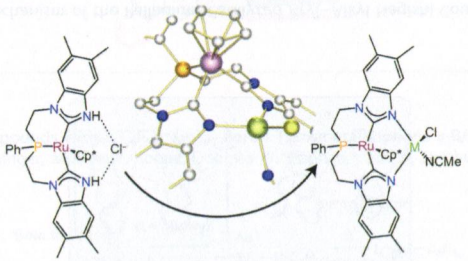
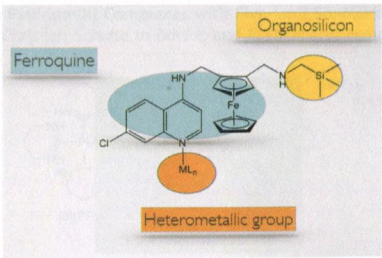
ON THE COVER: The cover page describes the properties of a new class of tridentate bisimidazole phosphine ligands prepared in the Cossairt group. The synthetic method used to access this electronically and structurally flexible chelating ligand framework and its subsequent metalation with one and two metals through a streamlined coordination, tautomerization, deprotonation, and salt elimination methodology is described in this issue. See the paper on pages 4341–4344.

Communications

Cover Paper



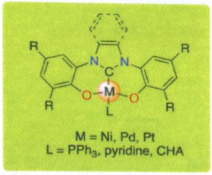


Articles

4374 S dx.doi.org/10.1021/om5003446

Tridentate Complexes of Group 10 Bearing Bis-Aryloxide N-Heterocyclic Carbene Ligands: Synthesis, Structural, Spectroscopic, and Computational Characterization

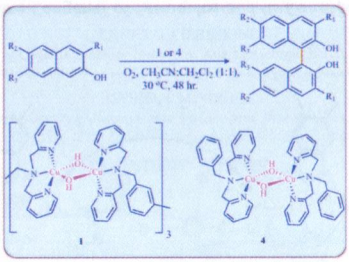
Etienne Borré, Georges Dahm, Alessandro Aliprandi, Matteo Mauro,* Samuel Dagorne,* and Stéphane Bellemin-Laponnaz*



4385 S dx.doi.org/10.1021/om500403k

Aerobic Oxidative Coupling of 2-Naphthol Derivatives Catalyzed by a Hexanuclear Bis(μ-hydroxo)copper(II) Catalyst

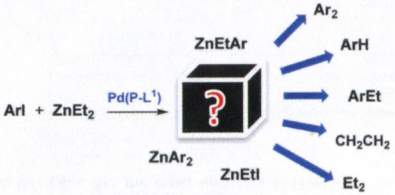
Yedukondalu Meesala, Hsyueh-Liang Wu, Bommisetti Koteswararao, Ting-Shen Kuo, and Way-Zen Lee*



4394 dx.doi.org/10.1021/om5005379

Experimental Study of the Mechanism of the Palladium-Catalyzed Aryl–Alkyl Negishi Coupling Using Hybrid Phosphine–Electron-Withdrawing Olefin Ligands

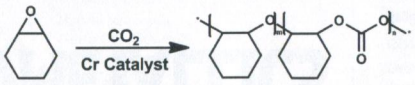
Estefanía Gioria, Jesús M. Martínez-Ilarduya,* and Pablo Espinet*



4401 S dx.doi.org/10.1021/om5005644

Chromium-Catalyzed CO_2–Epoxide Copolymerization

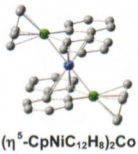
Joanna Gurnham, Sandro Gambarotta,* Ilia Korobkov, Lidia Jasinska-Walc, and Robbert Duchateau*



4410 S dx.doi.org/10.1021/om500574m

Dinickelametallocenes: Sandwich Compounds of the First-Row Transition Metals (M = Fe, Co, Ni) with Two Pentahapto Planar Nickelacycle Ligands

Yi Zeng, Hao Feng,* R. Bruce King,* and Henry F. Schaefer III

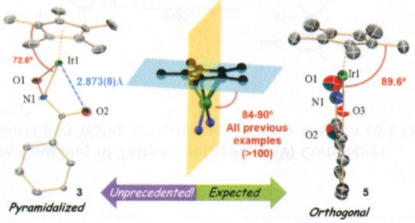


$(\eta^5\text{-CpNiC}_{12}\text{H}_8)_2\text{Co}$

4417 S dx.doi.org/10.1021/om500625c

Distortional Effects of Noncovalent Interactions in the Crystal Lattice of a Cp*Ir(III) Acylhydroxamic Acid Complex: A Joint Experimental–Computational Study

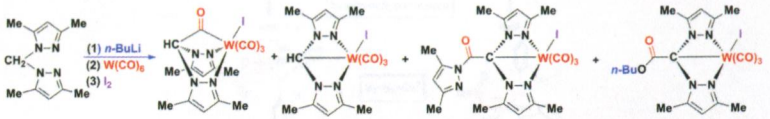
Jeffrey Chen, Jesús Campos, Brandon Q. Mercado, Robert H. Crabtree, and David Balcells*



4425 S dx.doi.org/10.1021/om500639f

(Pyrazol-1-yl)carbonyl and Ester-Functionalized Bis(pyrazol-1-yl)methide Carbonyl Tungsten Complexes

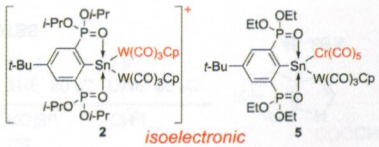
Jian-Peng Sun, Da-Wei Zhao, Hai-Bin Song, and Liang-Fu Tang*



4433 S dx.doi.org/10.1021/om500649d

Syntheses and Molecular Structures of $[RSn\{W(CO)_3Cp\}_2][W(CO)_3Cp]$, $[RSn\{W(CO)_3Cp\}Cl_2]$, and $[RSn\{W(CO)_3Cp\}Cr(CO)_5]$ (R = [4-*t*-Bu-2,6-$\{P(O)(OR')_2\}_2C_6H_2$], R′ = Et, *i*-Pr). Autoionization Induced by Intramolecular P═O→Sn Coordination

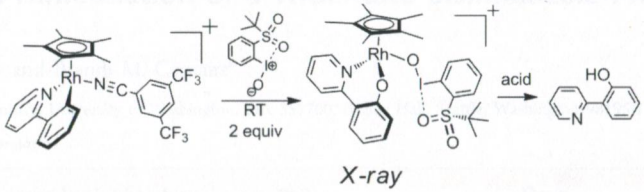
Stefan Krabbe, Michael Wagner, Christian Löw, Christina Dietz, Markus Schürmann, Alexander Hoffmann, Sonja Herres-Pawlis, Michael Lutter, and Klaus Jurkschat*



4442 S dx.doi.org/10.1021/om500660n

Exploring Oxidation of Half-Sandwich Rhodium Complexes: Oxygen Atom Insertion into the Rhodium–Carbon Bond of κ^2-Coordinated 2-Phenylpyridine

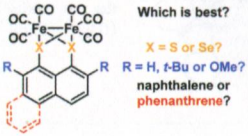
Christopher R. Turlington, James Morris, Peter S. White, William W. Brennessel, William D. Jones,* Maurice Brookhart, and Joseph L. Templeton*



4449 S dx.doi.org/10.1021/om500683p

[FeFe]-Hydrogenase Synthetic Mimics Based on *Peri*-Substituted Dichalcogenides

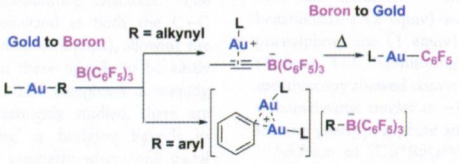
Carlotta Figliola, Louise Male, Peter N. Horton, Mateusz B. Pitak, Simon J. Coles, Sarah L. Horswell,* and Richard S. Grainger*



4461 S dx.doi.org/10.1021/om5006885

Reactivity of Organogold Compounds with $B(C_6F_5)_3$: Gold–Boron Transmetalation via σ-B/π-Au Species

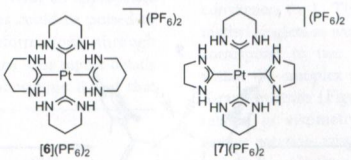
Max M. Hansmann,* Frank Rominger, Michael P. Boone, Douglas W. Stephan,* and A. Stephen K. Hashmi*



4471 S dx.doi.org/10.1021/om5006947

Template Synthesis of Tetracarbene Platinum(II) Complexes with Five- and Six-Membered-Ring N-Heterocyclic Carbenes

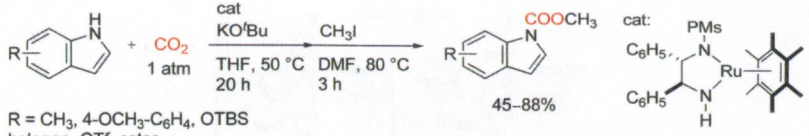
Verena Blase, Aarón Flores-Figueroa, Christian Schulte to Brinke, and F. Ekkehardt Hahn*



4479 S dx.doi.org/10.1021/om500695a

Heterolysis of NH-Indoles by Bifunctional Amido Complexes and Applications to Carboxylation with Carbon Dioxide

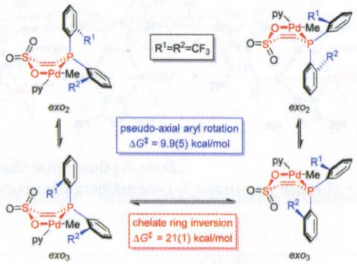
Atsushi Ueno, Yoshihito Kayaki, and Takao Ikariya*



4486 S dx.doi.org/10.1021/om500699t

Differentiation between Chelate Ring Inversion and Aryl Rotation in a CF_3-Substituted Phosphine-Sulfonate Palladium Methyl Complex

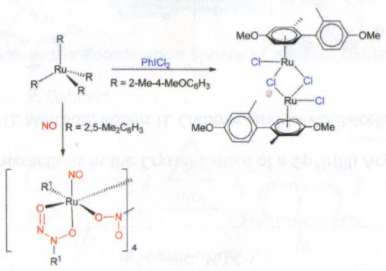
Ge Feng, Matthew P. Conley, and Richard F. Jordan*



4497 S dx.doi.org/10.1021/om500707e

Migratory Insertion and Reductive Coupling of Tetraarylruthenium(IV) Complexes

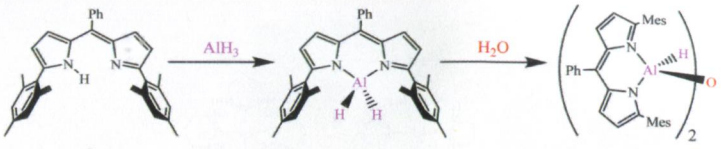
Shiu-Chun So, Wai-Man Cheung, Guo-Cang Wang, Enrique Kwan Huang, Man-Kit Lau, Qian-Feng Zhang, Herman H.-Y. Sung, Ian D. Williams, and Wa-Hung Leung*



4503 S dx.doi.org/10.1021/om500730g

Mono- and Bimetallic Aluminum Alkyl, Aryl, and Hydride Complexes of a Bulky Dipyrromethene Ligand

Christopher G. Gianopoulos, Kristin Kirschbaum, and Mark R. Mason*



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