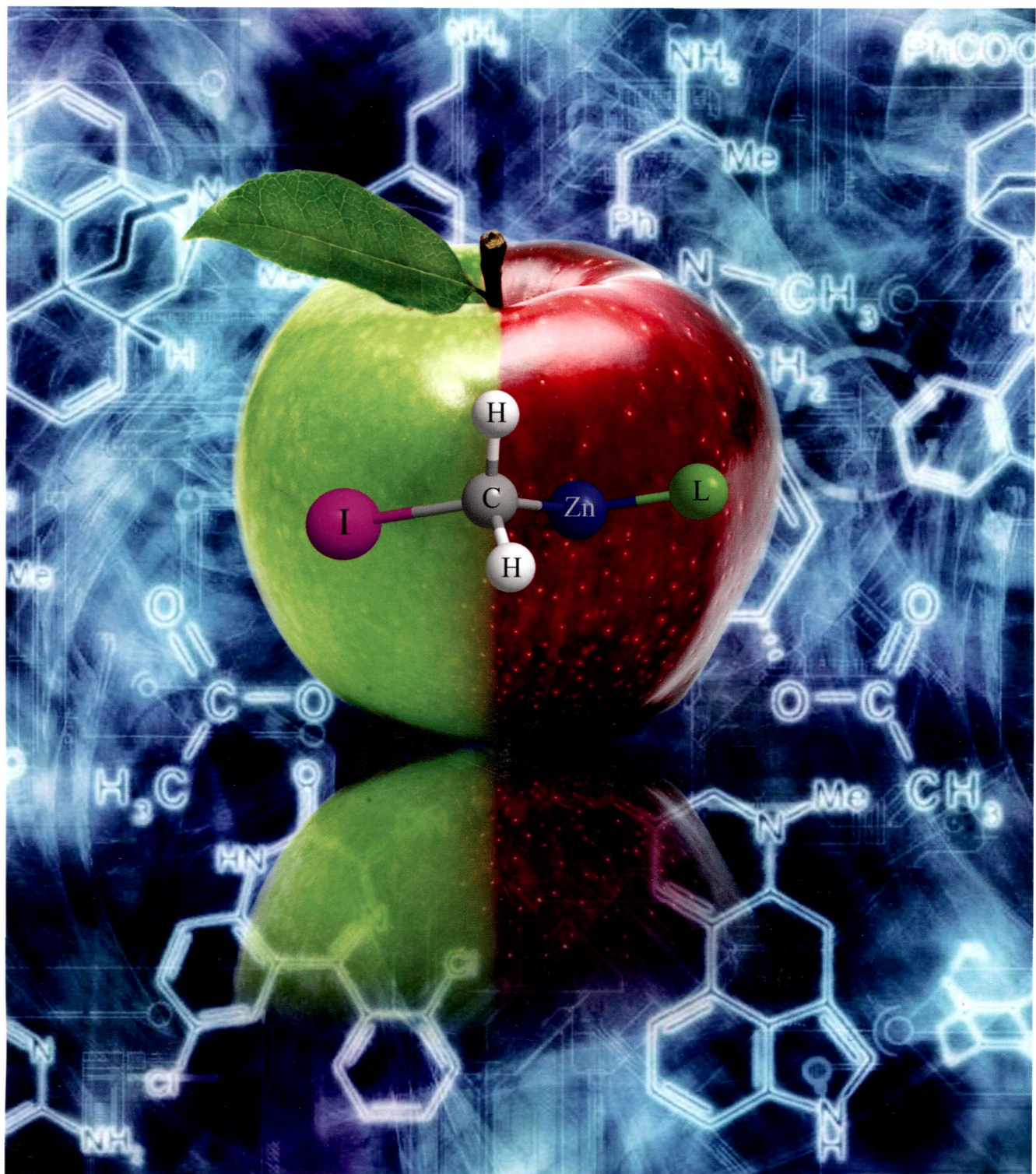


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ON THE COVER: The cover depicts an apple, colored in green and red (two halves) with a representation of a zinc carbenoid molecule on a blue background. This symbolizes the creation of asymmetry through the use of carbenoids. See the paper by Marek et al. on pages 942–950.

Editor's Page

941
Award-Winning Organometallic Chemistry: The 2011 RSC Organometallic Chemistry Award (and More)
John A. Gladysz

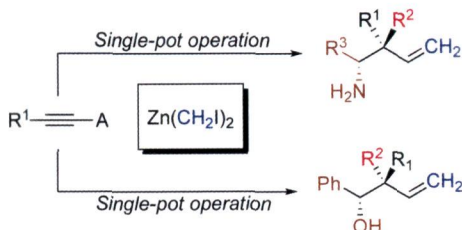
dx.doi.org/10.1021/om400058x



Reviews

942
The Renaissance of Zinc Carbenoid in Stereoselective Synthesis in Acyclic Systems
Morgane Pasco, Noga Gilboa, Tom Mejuch, and Ilan Marek*

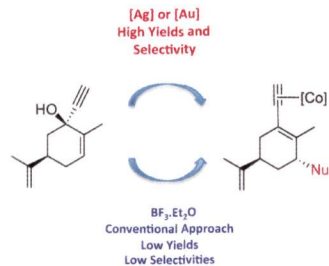
dx.doi.org/10.1021/om301220a



951 **S** dx.doi.org/10.1021/om3011257

The Gold(I)- and Silver(I)-Catalyzed Nicholas Reaction

Carolina Valderas, María C. de la Torre,* Israel Fernández, María Paz Muñoz, and Miguel A. Sierra*



Articles

957 **S** dx.doi.org/10.1021/om301252w

Cp* Iridium Precatalysts for Selective C–H Oxidation with Sodium Periodate As the Terminal Oxidant

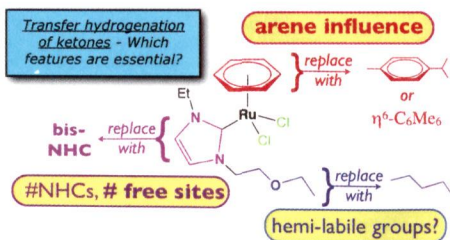
Meng Zhou, Ulrich Hintermair, Brian G. Hashiguchi, Alexander R. Parent, Sara M. Hashmi, Menachem Elimelech,* Roy A. Periana,* Gary W. Brudvig,* and Robert H. Crabtree*



966 **S** dx.doi.org/10.1021/om300547f

Variations on an NHC Theme: Which Features Enhance Catalytic Transfer Hydrogenation with Ruthenium Complexes?

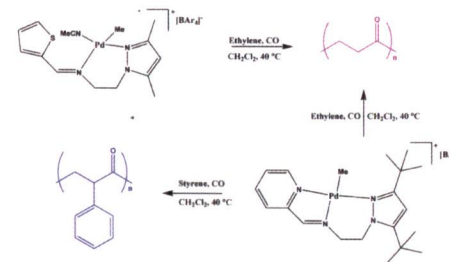
Joseph DePasquale, Mukesh Kumar, Matthias Zeller, and Elizabeth T. Papish*



980 **S** dx.doi.org/10.1021/om300798y

Ethylene and Styrene Carbon Monoxide Copolymerization Catalyzed by Pyrazolyl Palladium(II) Complexes

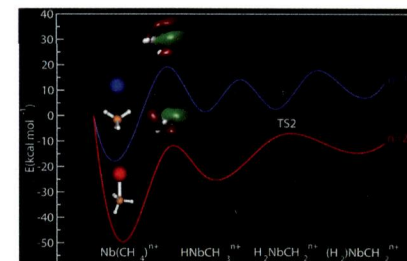
Collins Obuah, Michael K. Ainooson, Sibulele Boltina, Ilia A. Guzei, Kyoko Nozaki, and James Darkwa*



989 dx.doi.org/10.1021/om300856c

Methane Dehydrogenation by Niobium Ions; A First-Principles Study of the Gas-Phase Catalytic Reactions

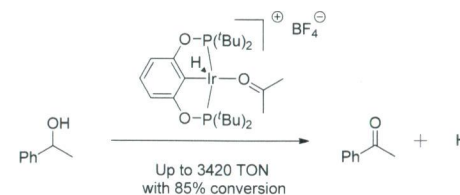
K. J. de Almeida,* T. C. Ramalho, J. L. Neto, R. T. Santiago, V. C. Felicíssimo, and H. A. Duarte



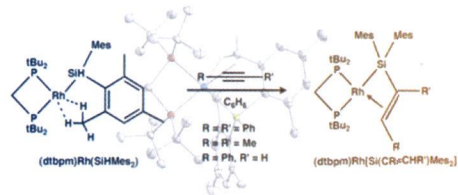
1000 **S** dx.doi.org/10.1021/om300921q

Dehydrogenation of Alcohols by Bis(phosphinite) Benzene Based and Bis(phosphine) Ruthenocene Based Iridium Pincer Complexes

Alexey V. Polukeev, Pavel V. Petrovskii, Alexander S. Peregudov, Mariam G. Ezernitskaya, and Avthandil A. Koridze*

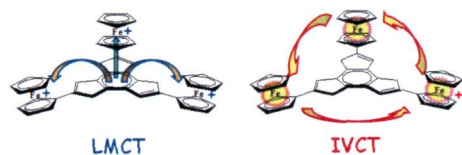


Multiple Si–H Bond Activations by $t\text{Bu}_2\text{PCH}_2\text{CH}_2\text{P}^t\text{Bu}_2$ and $t\text{Bu}_2\text{PCH}_2\text{P}^t\text{Bu}_2$ Di(phosphine) Complexes of Rhodium and Iridium
Meg E. Fasulo, Elisa Calimano, J. Matthew Buchanan, and T. Don Tilley*



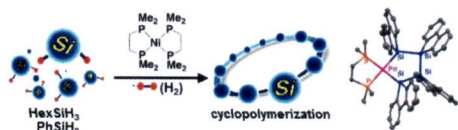
Charge Transfer Properties of Multi(ferrocenyl)trindenenes

Alessandro Donoli, Annalisa Bisello, Roberta Cardena, Cristina Prinzivalli, and Saverio Santi*



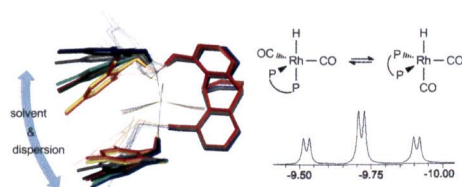
Nickel-Catalyzed Cyclopolymerization of Hexyl- and Phenylsilanes

Makoto Tanabe, Atsushi Takahashi, Tomoko Fukuta, and Kohtaro Osakada*



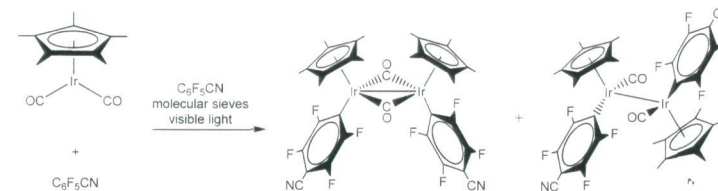
Inter- and Intramolecular Interactions in Triptycene-Derived Bisphosphite Hydroformylation Catalysts: Structures, Energies, and Caveats for DFT-Assisted Ligand Design

Sebastian Schmidt, Golnar Abkai, Tobias Rosendahl, Frank Rominger, and Peter Hofmann*



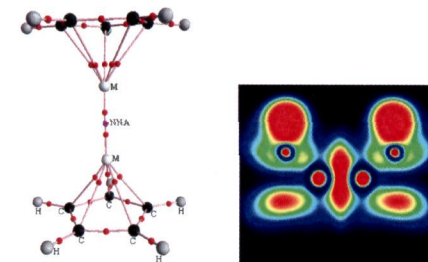
Photochemical Reaction of $\text{Cp}^*\text{Ir}(\text{CO})_2$ with $\text{C}_6\text{F}_5\text{X}$ (X = CN, F): Formation of Diiridium(II) Complexes

Kar Hang Garvin Mak, Pek Ke Chan, Wai Yip Fan,* Rakesh Ganguly, and Weng Kee Leong*



Metal–Metal and Metal–Ligand Bonds in $(\eta^5\text{-C}_5\text{H}_5)_2\text{M}_2$ (M = Be, Mg, Ca, Ni, Cu, Zn)

Xiaoyan Li, Suhong Huo, Yanli Zeng, Zheng Sun, Shijun Zheng, and Lingpeng Meng*



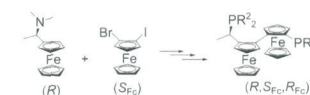
Zinc Complexes with the N-Donor-Functionalized Cyclopentadienyl Ligand $\text{C}_5\text{Me}_4(\text{CH}_2)_2\text{NMe}_2$

Maren A. Chilleck, Thomas Braun,* Roy Herrmann, and Beatrice Braun



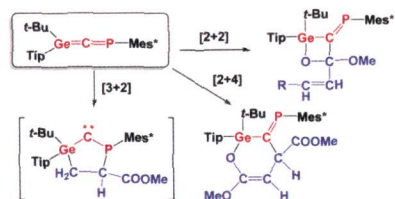
Biferrocene-Based Diphosphine Ligands: Synthesis and Application of Walphos Analogues in Asymmetric Hydrogenations

Afroz Zirakzadeh, Manuela A. Groß, Yaping Wang, Kurt Mereiter, Felix Spindler, and Walter Weissensteiner*



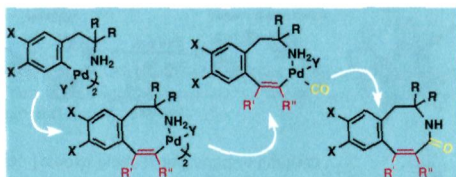
Versatile Reactivity of Phosphagermaene Tip(*t*-Bu)Ge=C=PMe_s* with α -Ethylenic Esters

Dumitru Ghereg, Fatima Ouhsaine, Jean Escudie,* Stéphane Labat, Erwan André, Karinne Miqueu, Jean-Marc Sotiropoulos, Heinz Gornitzka,* and Nathalie Saffon

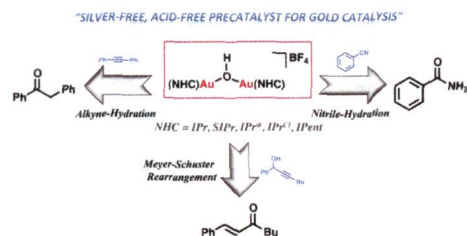


Room-Temperature Isolation of Palladium(II) Organocarbonyl Intermediates in the Synthesis of Eight-Membered Lactams after Alkyne/CO Sequential Insertions

José-Antonio García-López, María-José Oliva-Madrid, Isabel Saura-Llamas,* Delia Bautista, and José Vicente*

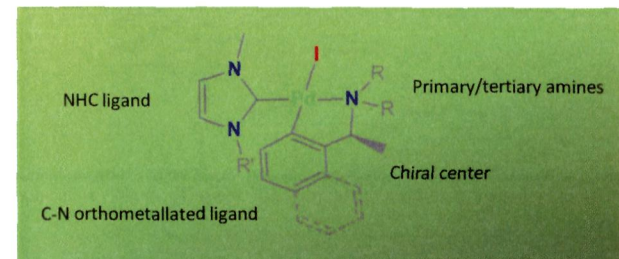
[[Au(NHC)]₂(μ -OH)][BF₄]: Silver-Free and Acid-Free Catalysts for Water-Inclusive Gold-Mediated Organic Transformations

Adrián Gómez-Suárez, Yoshihiro Oonishi, Sebastien Meiries, and Steven P. Nolan*



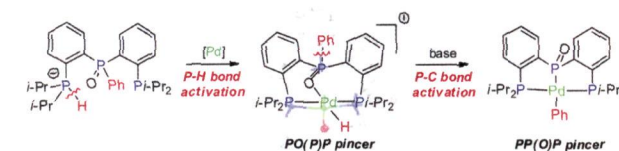
Chiral Palladacycles with N-Heterocyclic Carbene Ligands as Catalysts for Asymmetric Hydrophosphination

Sara Sabater, Jose A. Mata,* and Eduardo Peris



Chelating Assistance of P–C and P–H Bond Activation at Palladium and Nickel: Straightforward Access to Diverse Pincer Complexes from a Diphosphine–Phosphine Oxide

Eric J. Derrah, Carmen Martin, Sonia Mallet-Ladeira, Karinne Miqueu, Ghenwa Bouhadir,* and Didier Bourissou*



Notes

Diruthenium Alkynyl Compounds with Phosphonate Capping Groups

Steven P. Cummings, Julia Savchenko, Phillip E. Fanwick, Anastasia Kharlamova, and Tong Ren*

