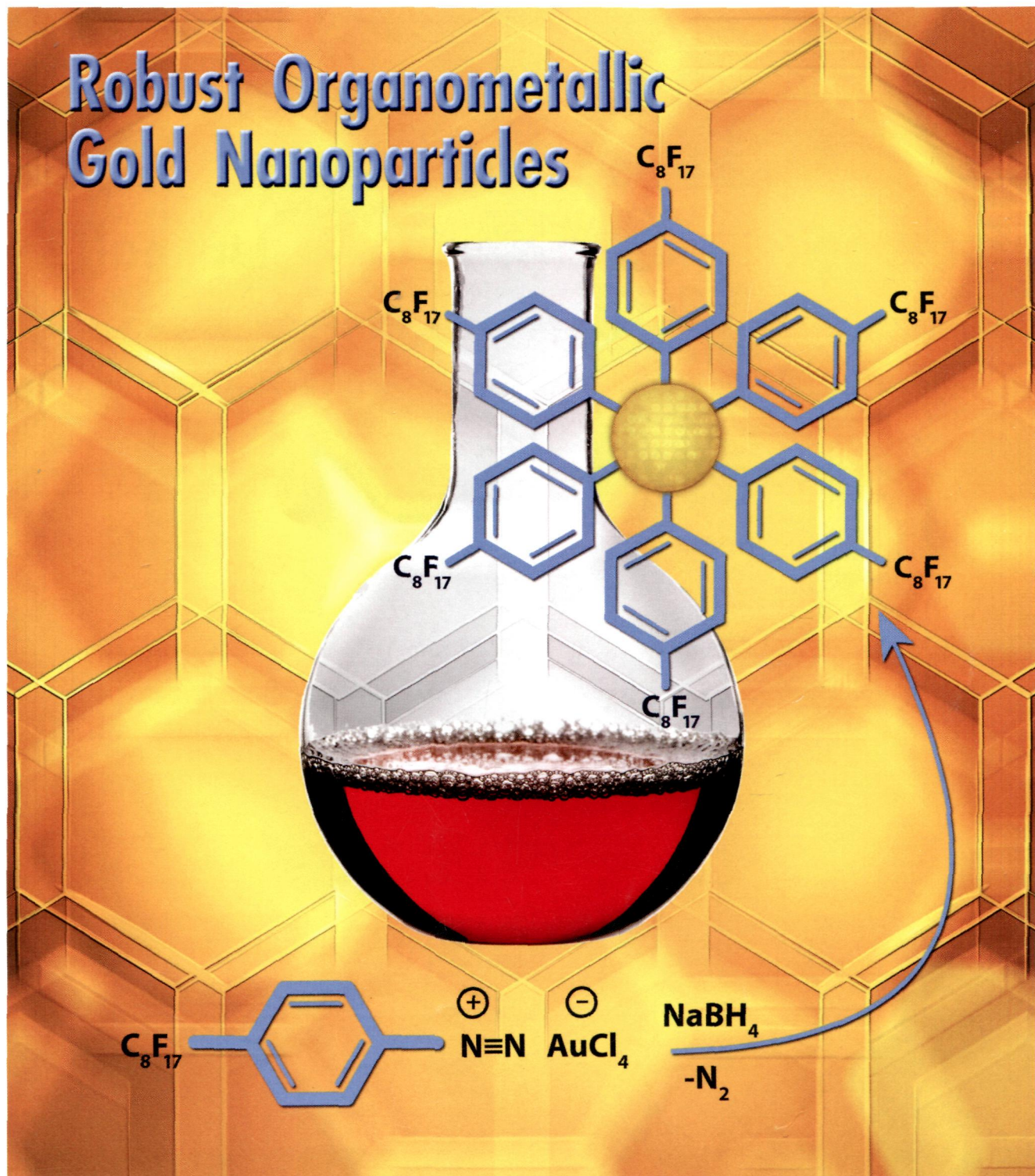


# ORGANOMETALLICS

## Robust Organometallic Gold Nanoparticles



**ON THE COVER:** The cover page symbolizes the recent work by the Mohamed group on the synthesis of robust covalently functionalized gold nanoparticles. In particular, diazonium tetrachloroaurate(III) complexes have been reduced to form ruby red organometallic gold nanoparticles. The structure in the upper right corner shows the gold-carbon nanoparticle structure studied by XPS, NTA, TEM, TGA, and TD-XRD, which was accessed by the sodium borohydride reduction of the gold diazonium salt (lower left). See the paper by Mohamed et al. on pages 439–442.

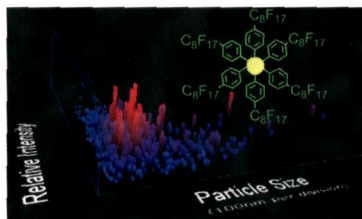
## Communications

### Cover Paper

 439 **5**
[dx.doi.org/10.1021/om400927g](https://doi.org/10.1021/om400927g)

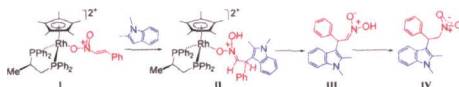
#### Robust Organometallic Gold Nanoparticles

Samuel A. Orefuwa, Mahsa Ravanbakhsh, Sabine N. Neal, Julie B. King, and Ahmed A. Mohamed\*


 443 **5**
[dx.doi.org/10.1021/om401125q](https://doi.org/10.1021/om401125q)

#### Metal–Nitroalkene and *ac*-Nitro Intermediates in Catalytic Enantioselective Friedel–Crafts Reactions of Indoles with *trans*- $\beta$ -Nitrostyrenes

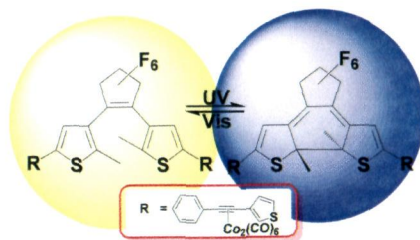
Daniel Carmona,\* Isabel Méndez, Ricardo Rodríguez,\* Fernando J. Lahoz, Pilar García-Orduña, and Luis A. Oro



447 **S**

dx.doi.org/10.1021/om400570c

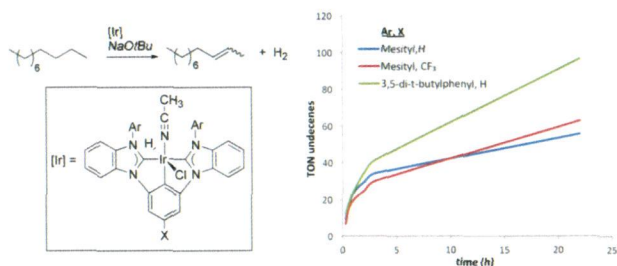
**Incorporating Cobalt Carbonyl Moieties onto Ethynylthiophene-Based Dithienylcyclopentene Switches. 1. Photochemistry**  
 Emma C. Harvey, Jetsuda Areephong, Attilio A. Cafolla, Conor Long, Wesley R. Browne, Ben L. Feringa, and Mary T. Pryce\*

457 **S**

dx.doi.org/10.1021/om4006577

**Acceptorless Alkane Dehydrogenation Catalyzed by Iridium CCC-Pincer Complexes**

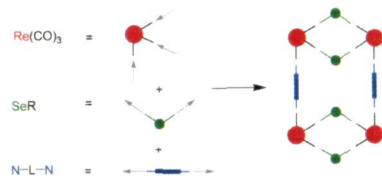
Anthony R. Chianese,\* Myles J. Drance, Kelsey H. Jensen, Samuel P. McCollom, Nevin Yusufova, Sarah E. Shaner, Dimitar Y. Shopov, and Jennifer A. Tendler

465 **S**

dx.doi.org/10.1021/om400673f

**Self-Assembly of Selenium-Bridged Rhenium(I)-Based Metalla Rectangles: Synthesis, Characterization, and Molecular Recognition Studies**

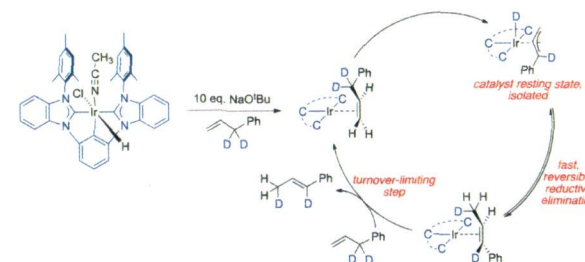
Bala. Manimaran,\* A. Vanitha, M. Karthikeyan, Buthanapalli Ramakrishna, and Shaikh M. Mobin

473 **S**

dx.doi.org/10.1021/om400786r

**Mechanistic Studies of Alkene Isomerization Catalyzed by CCC-Pincer Complexes of Iridium**

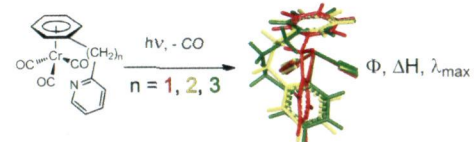
Spring Melody M. Knapp, Sarah E. Shaner, Daniel Kim, Dimitar Y. Shopov, Jennifer A. Tendler, David M. Pudalov, and Anthony R. Chianese\*

485 **S**

dx.doi.org/10.1021/om400928k

**Photochemistry of Chromium Arene Tricarbonyl Complexes with Tethered Pyridinyl and Propenyl Groups: Investigations of the Effect of Ring Size on Chelate Formation, Structure, and Linkage Isomerization**

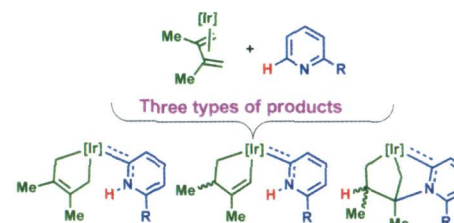
Charles B. Dukell, Roger G. Letterman, Jermaine O. Johnson, James W. Barr, Songnan Hu, Charles R. Rossli, Charles Edwin Webster,\* and Theodore J. Burkey\*

498 **S**

dx.doi.org/10.1021/om400968s

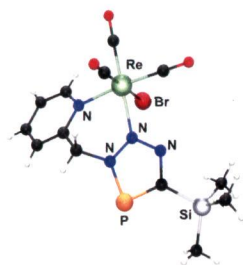
**Tautomerization of Pyridine and 2-Substituted Pyridines to Pyridylidene Ligands by the Iridium(I)-Diene Complex  $Tp^{Me_2}Ir(\eta^4-CH_2=C(Me)C(Me)=CH_2)$**

Florencia Vattier, Verónica Salazar, Margarita Paneque,\* Manuel L. Poveda,\* and Eleuterio Álvarez



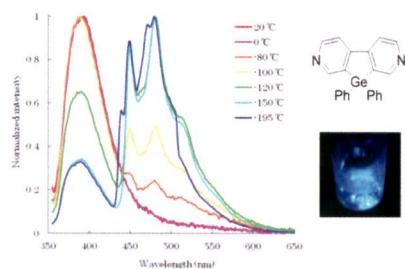
### Triazaphospholes versus Triazoles: An Investigation of the Differences between "Click"-Derived Chelating Phosphorus- and Nitrogen-Containing Heterocycles

Julian A. W. Sklorz, Santina Hoof, Michael G. Sommer, Fritz Weißer, Manuela Weber, Jelena Wiecko, Biprajit Sarkar, and Christian Müller\*



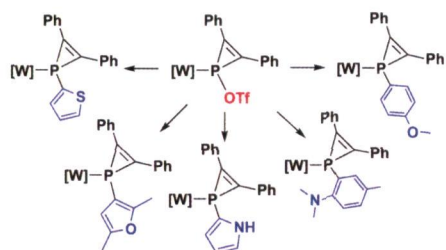
### Synthesis of Group 14 Dipyridinometalloles with Enhanced Electron-Deficient Properties and Solid-State Phosphorescence

Joji Ohshita,\* Kazuya Murakami, Daiki Tanaka, Yousuke Ooyama, Tomonobu Mizumo, Norifumi Kobayashi, Hideyuki Higashimura, Takayuki Nakanishi, and Yasuchika Hasegawa



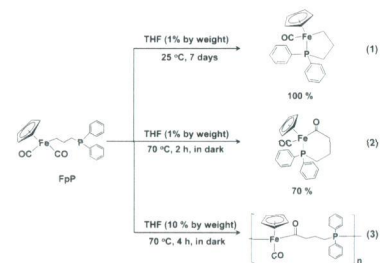
### Electrophilic Aromatic Substitution Reactions of a Tungsten-Coordinated Phosphirenyl Triflate

Arumugam Jayaraman and Brian T. Stenberg\*



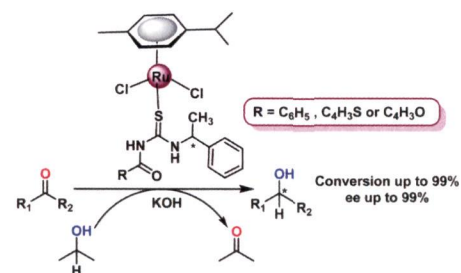
### Synthesis, Cyclization, and Migration Insertion Oligomerization of CpFe(CO)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>PPh<sub>2</sub> in Solution

Kai Cao, Brian Tsang, Yibo Liu, Daniel Chelladural, William P. Power,\* and Xiaosong Wang\*



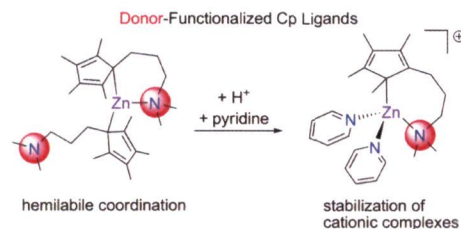
### Chiral ( $\eta^6$ -*p*-Cymene)ruthenium(II) Complexes Containing Monodentate Acylthiourea Ligands for Efficient Asymmetric Transfer Hydrogenation of Ketones

Mani Mary Sheeba, Manoharan Muthu Tamizh, Louis J. Farrugia, Akira Endo, and Ramasamy Karvembu\*



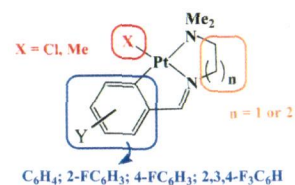
### Neutral and Cationic Zinc Complexes with N- and S-Donor-Functionalized Cyclopentadienyl Ligands

Maren A. Chilleck, Thomas Braun,\* Beatrice Braun, and Stefan Mebs



**Platinum(II) Compounds Containing Cyclometalated Tridentate Ligands: Synthesis, Luminescence Studies, and a Selective Fluoro for Methoxy Substitution**

Albert Gandioso, Jennifer Valle-Sistac, Laura Rodríguez,\* Margarita Crespo,\* and Mercè Font-Bardía



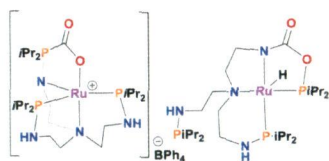
**Combined Experimental/Computational Study of Iridium and Palladium Hydride PP(O)P Pincer Complexes**

Carmen Martin, Sonia Mallet-Ladeira, Karinne Miqueu,\* Ghenwa Bouhadir,\* and Didier Bourissou\*



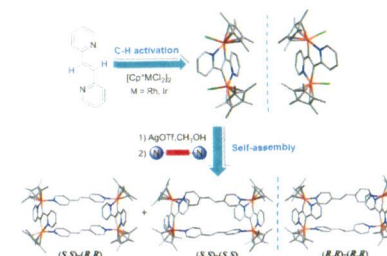
**Synthesis and Reactivity of Ruthenium Hydride Complexes Containing a Tripodal Aminophosphine Ligand**

Michael J. Sgro, Fatme Dahcheg, and Douglas W. Stephan\*



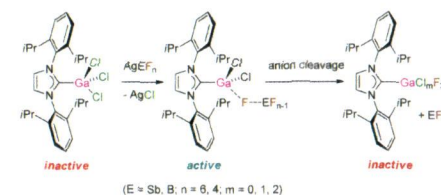
**Isomers of Cyclometalated Macrocycles Constructed through Olefinic C–H Activation**

Long Zhang, Hao Li, Lin-Hong Weng, and Guo-Xin Jin\*



**Structure, Stability, and Catalytic Activity of Fluorine-Bridged Complexes IPr-GaCl<sub>2</sub>(μ-F)EF<sub>n-1</sub> (EF<sub>n-1</sub> = SbF<sub>6</sub><sup>-</sup>, PF<sub>6</sub><sup>-</sup>, or BF<sub>4</sub><sup>-</sup>)**

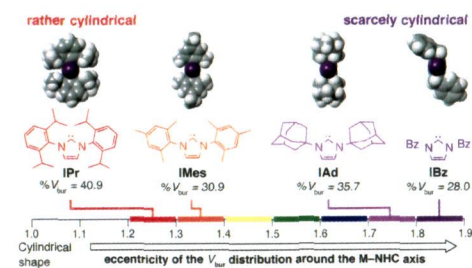
Christophe Bour,\* Julien Monot, Shun Tang, Régis Guillot, Jonathan Farjon, and Vincent Gandon\*



## Notes

**Learning about Steric Effects in NHC Complexes from a 1D Silver Coordination Polymer with Fréchet Dendrons**

Alba M. Ortiz, Pilar Gómez-Sal, Juan C. Flores,\* and Ernesto de Jesús\*



Short Survey of the Chemical Reduction Behavior of the Base-Stabilized Iron Dichloroboryl Complexes  $[(\eta^5\text{-C}_5\text{Me}_5)\text{Fe}(\text{CO})_2\text{BCl}_2(\text{LB})]$

Holger Braunschweig,\* Alexander Damme, Rian D. Dewhurst, Thomas Kramer, Ivo Kruppenacher, and Ashwini K. Phukan

