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## **EDUCATION**

National Autonomous University of Mexico

**Ph.D.(Honors), Chemistry**      March 1997

Dissertation Title: "Transannular Interactions in Dithiophosphines and Dithiophosphonates of Metallocanes of As(III) and Sb(III)"

Supervisor: Raymundo Cea-Olivares

National Autonomous University of Mexico

**B.S., Chemistry**      November 1992

Dissertation Title: "Potassium Tetraphenylimidodiphosphinate Complex of 1,4,7,10,13,16-Hexaoxacyclooctadecane. An Inorganic (Carbon-Free) Chelate Ring"

Supervisor: Raymundo Cea-Olivares

## **EMPLOYMENT**

**Mississippi State University, Mississippi State, MS**

Associate Professor      August 2019-present

**Autonomous State University of Morelos, Cuernavaca, Morelos, Mexico**

Adjunct Professor      August 2019-present

Professor      October 1999-August 2019

**Paul Sabatier University**

Visiting Professor      July 2011-February 2012

**University of Kentucky**

Postdoctoral fellow      August 1998-October 1999

Supervisor: David A. Atwood

**University of North Dakota**

Postdoctoral fellow      April 1997-August 1998

Supervisor: David A. Atwood

**University of Victoria**

Research Assistant

March 1996-September 1996

Supervisor: Stephen Stobart

**PUBLICATIONS 86, Citations more than 1200, h-index 21**

1. Trans-Hydroboration–oxidation products in Δ5-steroids via a hydroboration-retro-hydroboration mechanism, J. C. Hilario-Martínez, F. Murillo, J. García-Méndez, D. Eugenia, J. Sandoval-Ramírez, M. A. Muñoz-Hernández, S. Bernès, L. Kürti, F. Duarte, G. Merino, M. A. Fernández-Herrera, *Chem. Sci.*, **2020**, DOI: 10.1039/DOSC01701A.
2. Cationic aluminum complexes supported on tridentate O,N,O platform and activity studies in the Ring Opening Polymerization of ε-caprolactone, Y. K. Sánchez-Romero, N. Lopez, C. Scott, M.-Á. Muñoz-Hernández, *submitted*.
3. Zinc(II) and cadmium(II) complexes, [M( $\text{^tPr}_2\text{P}(\text{X})\text{NC}(\text{Y})\text{NC5H10-\kappa}^2\text{-X,Y}$ ) $_2$ ] (X and Y = O, S), as single source precursors for metal sulfide thin films, V. Flores-Romero, O. L. García-Guzmán, A. Aguirre-Bautista, I. D. Rojas-Montoya, V. García-Montalvo, M. Rivera, O. Jiménez-Sandoval, M. A. Muñoz-Hernández, S. Hernández-Ortega, *New J. Chem.*, **44**, 10367-10379, **2020**, DOI: 10.1039/d0nj01465f.
4. Bi- and Tridentate Stannylyphosphines and Their Coordination to Low-Valent Platinum, J. J. Salazar-Díaz, M. A. Muñoz-Hernández, E. Rufino-Felipe, M. Flores-Alamo, A. Ramírez-Solís. V. Montiel-Palma, *Dalton Trans.*, **48**, 15896-15905, **2019**, DOI: 10.1039/c9dt03317c.
5. Exploiting the Versatility of Phosphinobenzylsilanes for the Stabilization of 14-Electron Rhodium(III) and Iridium(III) Complexes, M. V. Corona-González, J. Zamora-Moreno, M. A. Muñoz-Hernández, L. Vendier, S. Sabo-Etienne, V. Montiel-Palma, *Eur. J. Inorg. Chem.*, 1854–1858, **2019**, DOI: 10.1002/ejic.201900107.
6. Tetranuclear Complexes of Group 12 and 13 Supported on a Polynucleating Ligand and Activity Studies in the ROP of Rac-Lactide, D.-J. Caballero-Jiménez, O.-J. García-de-Jesús, N. Lopez, Y.-G. Reyes-Ortega, M.-Á. Muñoz-Hernández, *Inorg. Chim. Acta*, **489**, 120–125, **2019**, DOI: 10.1016/j.ica.2019.02.007.
7. Modulation of an Anagostic Interaction in SiPSi-Type Pincer Platinum Complexes, J. Zamora-Moreno, F. Murillo, M. Á. Muñoz-Hernández, M. Grellier, S. Pan, S. Jalife, G. Merino, S. Sabo-Etienne, V. Montiel-Palma, *Organometallics*, **37**, 3581-3587, **2018**, DOI: 10.1021/acs.organomet.8b00269.
8. Synthesis and Structural Characterization of Lithium, Sodium and Potassium Complexes Supported by a Tridentate Amino-Bisphenolate Ligand, C. J. Durango-García, E. Rufino-Felipe, M. López-Cardoso, M. Á. Muñoz-Hernández, V. Montiel-Palma, *J. Mol. Struct.*, **1164**, 248-258, **2018**, DOI: 10.1016/j.molstruc.2018.03.079.
9. Isomerization and Luminescent Properties of Schiff Base Aluminum Complexes Containing 1H-pyrrole-2-carbaldehyde Moieties, F. A. Vengoechea-Gómez, M.-Á. Velázquez-Carmona, J. Barroso, G. Merino, M. Á. Muñoz-Hernández, *Inorg. Chim. Acta*, **482**, 535-541, **2018**, DOI:10.1016/j.ica.2018.06.048.
10. Ring-opening Polymerization of *rac*-Lactide by Al(III) and Zn(II) Complexes Incorporating Schiff Base Ligands Derived from Pyrrole-2-carboxaldehyde, E. Rufino-Felipe, N. Lopez, F. A.

Vengoechea-Gómez, L.-G. Guerrero-Ramírez, and M.-Á. Muñoz-Hernández, *Applied Organomet. Chem.*, 32:e4315, **2018**. DOI: 10.1002/aoc.4315.

11. Lithium Complexes Derived of Benzylphosphines: Synthesis, Characterization and Evaluation in the ROP of *rac*-Lactide and  $\epsilon$ -Caprolactone, Rufino-Felipe, E.; Muñoz-Hernández, M. A., Montiel-Palma, V., *Molecules*, 23, 82, **2018**, DOI: 10.3390/molecules23010082.
12. Alkyl Al, Ga and Zn Complexes Chelated by Mono-O-thiocarbamate-phenol Ligands: Synthesis, Characterization and Activity as Diels-Alder Catalysts, P.-de-la Cruz-Burelo, J. Caballero-Jiménez, V. Montiel-Palma, M.-Á. Muñoz, *Inorg. Chim. Acta*, 473, 236-244, **2018**, DOI: 10.1016/j.ica.2017.12.031.
13. Stabilization of *Trans* Disilyl Coordination at Square Planar Platinum Complexes, C. A. Cuevas-Chávez, J. Zamora-Moreno, M. A. Muñoz-Hernández, C. Bijani, S. Sabo-Etienne, V. Montiel-Palma, *Organometallics*, 375, 720-728, **2017**, DOI: 10.1021/acs.organomet.7b00566.
14. A Family of Rhodium and Iridium Complexes with Semirigid Benzylsilyl Phosphines: From Bidentate to Tetradentate Coordination Modes, M. V. Corona-González, J. Zamora-Moreno, C. A. Cuevas-Chávez, E. Rufino-Felipe, E. Mothes-Martin, Y. Coppel, M. A. Muñoz-Hernández, L. Vendier, M. Flores-Alamo, M. Grellier, S. Sabo-Etienne, V. Montiel-Palma, *Dalton Trans.*, 46, 8827–8838, **2017**, DOI: 10.1039/C7DT00727B.
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21. Synthesis and Characterization of New Types of Aluminum and Gallium Complexes Stabilized by Bifunctional Ligands, F. A. Vengoechea-Gómez, S. A. Cortes-Llamas, M.-Á. Muñoz-Hernández, *Main Group Chem.*, 13, 271-281, **2014**, DOI: 10.3233/MGC-140140.
22. Phosphinodi(benzylsilane)  $\text{PhP}\{(\text{o-C}_6\text{H}_4\text{CH}_2)\text{SiMe}_2\text{H}\}_2$ : a versatile "PSi<sub>2</sub>H<sub>x</sub>" pincer-type ligand at ruthenium, V. Montiel-Palma, M.A. Muñoz-Hernández, C.A. Cuevas-Chavez, L. Vendier, M. Grellier, S. Sabo-Etienne, *Inorg. Chem.*, 52, 9798-9806, **2013**, DOI: 10.1021/ic400703r.
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26. Synthesis and characterization of aluminum complexes incorporating Schiff base ligands derived from pyrrole-2-carboxaldehyde, H. F. Saucedo-Azpeitia, S. A. Cortes-Llamas, F. A. Vengoechea-Gómez, E. Rufino-Felipe, N. T. Crespo-Velasco, M.-Á. Muñoz-Hernández, *Main Group Chem.*, 10, 127-140, **2011**, DOI:10.3233/MGC-2011-0043.
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