# Skye Fortier

Department of Chemistry
University of Texas at El Paso
Chemistry & Computer Science Bldg (CCSB)
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## EDUCATION

*NSF ACC-F Postdoctoral Research Fellow* October 2011 – May 2013
Indiana University
Advisors: Professor Kenneth G. Caulton and Professor Daniel J. Mindiola
Project: Reactivity and Electronic Properties of Metals Supported by Redox Non-Innocent Ligands

*Doctor of Philosophy in Chemistry* September 2011
University of California, Santa Barbara
Advisor: Professor Trevor W. Hayton
Dissertation: "Synthesis of Alkyls, Alkoxides, Nitrides and Mono-Oxides of Uranium and Investigation of Their Metal-Ligand Bonds"

*Bachelor of Science, Chemistry – summa cum laude* July 2005
University of Texas at El Paso
Advisor: Professor Keith H. Pannell
Thesis: "Oxidative addition of Fe-Si bonds to ($\eta^5$-$C_5H_5$)Fe(CO)$CH_3$"

## AFFILIATIONS

UTEP NSF Partnership for Research and Education in Materials Center Grant Spring 2014 – Present

## APPOINTMENTS

09/19-Present Associate Professor of Chemistry, University of Texas at El Paso
07/13-08/19 Assistant Professor of Chemistry, University of Texas at El Paso

## PROFESSIONAL EXPERIENCE

10/11-05/13 Postdoctoral Researcher, Indiana University
American Competitiveness in Chemistry Postdoctoral Fellow, National Science Foundation
Investigation of redox non-innocent ligands on iron and cobalt
Synthesis of new single molecule magnetic materials

09/06-08/11 Graduate Student Researcher, UCSB
Exploration of uranium coordination chemistry in attempts to better understand the chemistry and bonding interactions of the actinide series
Synthesis of air/moisture sensitive complexes of uranium
Characterization of materials through X-ray crystallographic analysis, Nuclear Magnetic Resonance (NMR) spectroscopy, Superconducting Quantum Interference Device (SQUID) magnetometry, and Cylic Voltammetry

11/08-12/10 NMR Facility Graduate Student Assistant, UCSB

Assisting in the general maintenance and supervision of the NMR spectrometers

On-Call contact for after hours and holiday questions and emergency situations

Routine transfer of He($l$) and $N_2$($l$) cryogens to spectrometers

05/06-08/06 Instructor, UTEP

Conducted two week Organic Chemistry preview course for Hispanic Center of Excellence (HcoE)

Instructed Examkrackers MCAT Organic and General Chemistry courses

05/06-08/06 Research Assistant, UTEP

Synthesis and characterization of silylacetylene based molecular compasses

08/05-05/06 Science Teacher, Irvin High School, El Paso ISD

Chemistry – Grades 11/12

Integrated Physics & Chemistry – Grade 9

03/03-08/05 Research Scholar, UTEP

Employing Group XIV silicon chemistry with Main group elements, namely iron, to produce novel materials. Photolysis and observation of iron-silicon linkages dependent on varying sterics and electron donating/withdrawing groups.

Synthesis and characterization of air/moisture sensitive organometallic complexes.

01/03-08/05 Undergraduate Peer Facilitator, UTEP

Preparation and conduct of lecture based courses including the introduction to basic laboratory skills and experiments

Record and distribute independent attendance and grade reports for respective students

Develop weekly lesson plans

05/04-08/04 Research Intern, Los Alamos National Laboratory

Seaborg Institute for Transactinium Science Fellow

Investigated the degradation of organotin biocides

## FUNDING

- National Science Foundation, Division of Chemistry
  PREC Planning Grant
  Award Number: CHE-2334563
  Award Period: 11/15/2023 – 11/14/2025

- Research Grant
  Welch Foundation
  Award Amount: $300,000
  Award Period: 06/01/2023-05/31/2026

- Research Grant
  Welch Foundation
  Award Amount: $240,000
  Award Period: 06/01/2020-05/31/2023

- Sloan Research Fellowship
  Alfred P. Sloan Foundation
  Award Amount: $65,000
  Award Period: 09/15/2018-09/14/2022

- National Science Foundation, Chemical Synthesis Program
  Award Number: CHE-1664938
  Award Amount: $383,075
  Award Period: 06/01/2017-05/31/2022

- Research Grant
  Welch Foundation
  Award Amount: $195,000
  Award Period: 06/01/2017-05/31/2020

- American Chemical Society, Petroleum Research Fund
  Doctoral New Investigator Grant
  Award Amount: $110,000
  Award Period: 01/01/2017-08/31/2019

- Science and Technology Acquisition and Retention (STARs) Award
  University of Texas System
  Award Amount: $200,000
  Award Period: 07/2013-02/2016

- American Competitiveness in Chemistry Postdoctoral Fellowship
  National Science Foundation
  Award Amount: $200,000
  Award Period: 10/2011-05/2013

## BOOK CHAPTERS

Gomez-Torres, A.; Saucedo, C.; **Fortier, S.*** Arene Complexes of the Group 4 Metals. *Comprehensive Organometallic Chemistry IV*. Meyer, K.; O'Hare, D.; Parkin, G., Eds; Elsevier, Ltd.; **2022**, 502-549. doi: 10.1016/B978-0-12-820206-7.00012-3

Gomez-Torres, A.; Sengupta, D.; **Fortier, S.*** Amidinates, Formamidinates, and Guanidinates. *Comprehensive Coordination Chemistry III*. Constable, E. C; Parkin, G.; Que, L. Eds; Elsevier, Ltd.; **2021**, 366-405. doi: 10.1016/B978-0-08-102688-5.00070-2

Murillo, J.; **Fortier, S.*** Actinides: Pentavalent Organometallics. *Encyclopedia of Inorganic and Bioinorganic Chemistry;* Evans, W. J. and Hanusa, T. P., Eds.; John Wiley & Sons, Ltd.; **2018**. doi:10.1002/9781119951438.eibc2544

## INTELLECTUAL PROPERTY

Detecting and Separating Rare Earth Metal Mixtures, Luna, J. R.; Fortier, S.; Provisional Patent Submission 08/2023, Application No. 63/578,871

Synthesis and Isolation of Crystalline Alkali Metal Arene Radical Anions, Castillo, M.; Fortier, S.; U.S. Patent Number 9,981,991 – Issued 05/29/2018

## PUBLICATIONS

1) MacGregor, F.; Tarula-Marin, J. L.; Metta-Magana, A.; **Fortier, S.;*** A Metallocene cis-Bis(phosphoranocarbene) of Uranium and a Probe of Its Reactivity with Alcohols. *Submitted to Inorganic Chemistry 12/2023 – Manuscript under review.*

   *- Invited Manuscript: Inorganic Chemistry Special Issue*

2) Mena, A.; Luna, J. R.; MacGregor, F.; Noriega-Landa, E.; Metta-Magana, A.; Lee, W.-Y.; **Fortier, S.;*** Photoinduced Cleavage of a Strained N-C Bond in an Iron Complex Supported by Super Bulky Amidinate and Guanidinate Ligands. *Submitted to Inorganic Chemistry 12/2023 – Revised manuscript under review*

3) MacGregor, F.; Metta-Magana, A.; **Fortier, S.;*** Synthesis and characterization of a series of U(IV) trans-bis(phosphaylide)$UX_4$ (X = Cl, Br, I) adducts. *Polyhedron*, 2024, 116821. doi: 10.1016/j.poly.2023.116821

   *– Invited Manuscript: Emerging Investigators in Inorganic Chemistry Special Issue*

4) Yao, Y.-R.; Zhao, J.; Meng, Q.; Hu, H.-S.; Guo, M.; Yan, Y.; Zhuang, J.; Yang, S.; Fortier, S.; Echegoyen, L.; Schwarz, W. H. E.; Li, J.; Chen, N. Synthesis and Characterization of U≡C Triple Bonds in Fullerene Compounds. *J. Am. Chem. Soc.*, **2023**, *145*, 25440-25449. doi: 10.1021/jacs.3c10042

5) Murillo, J.; Goodwin, C. A. P.; Stevens, L.; **Fortier, S.;*** Guant, A. J.;* Scott, B. L. Synthesis and comparison of iso-structural f-block metal complexes (Ce, U, Np, Pu) featuring $\eta^6$-arene interactions. *Chem. Sci.*, **2023**, *14*, 7438-7446. doi: 10.1039/D3SC02194G

6) Gomez-Torres, A.; Metta-Magana, A. J.; **Fortier, S.*** Synthesis of an Arenide-Masked Scandium Complex Accompanied by Reductively Induced C-H Activation. *Organometallics,* **2022**, *41*, 2891-2896. doi: 10.1021/acs.organomet.2c00409

7) Gomez-Torres, A.; Mavragani, N.; Metta-Magana, A. J.; Murugesu, M.; **Fortier, S.*** Molecular Capacitors: Accessible 6- and 8-electron Redox Chemistry from Dimeric "Ti(I)" and "Ti(0)" Synthons Supported by Imidazolin-2-Iminato Ligands. *Inorg. Chem.*, **2022**, *61*, 16856-16873. doi: 10.1021/acs.inorgchem.2c02881

8) Murillo, J.; Bhowmick, R.; Harriman, K. L. M.; Gomez-Torres, A.; Wright, J.; Miro, P.; Metta-Magana, A. J.; Murugesu, M.; Vlaisavljevich, B.;* **Fortier, S.*** Actinide Arene-Metalate: 2. A Neutral Uranium Bis(Anthracenide) Complex and Elucidation of its Electronic Structure. *Chem. Comm.*, **2022**, *58*, 9112-9115. doi: 10.1039/D2CC03238D

9) Murillo, J.; Panda, D.; Chakrabarti, S.; Hattori, A.; Griego, L.; Chava, V. S. N.; Sreenivasan, S. T.; Ramana, C. V.; **Fortier, S.*** Room temperature synthesis of $UO_{2+x}$ nanocrystals and thin films via hydrolysis of uranium(IV) complexes. *Inorg. Chem. Front.*, **2022**, *9*, 678-685. doi: 10.1039/D1QI01248G

10) Murillo, J.; Bhowmick, R.; Harriman, K. L. M.; Gomez-Torres, A.; Wright, J.; Meulenberg, R. W.; Miro, P.; Metta-Magana, A. J.; Murugesu, M.; Vlaisavljevich, B.;* **Fortier, S.*** Actinide Arene-Metalates: Ion Pairing Effects on the Electronic Structure of the First Unsupported Uranium-Arene Sandwich Complexes. *Chem. Sci.*, 2021, **12**, 13360-13372. doi: 10.1039/D1SC03275E

11) **Fortier, S.;*** Gomez-Torres, A. Review: Redox Chemistry of Discrete Low Valent Titanium Complexes and Low Valent Titanium Synthons. *Chem. Commun.*, **2021**, *57*, 10292-10316. doi: 10.1039/D1CC02772G

    *- Chem. Commun. Feature Article*

12) Staun, S. L.; Kent, G. T.; Gomez-Torres, A.; Wu, G.; **Fortier, S.**; Hayton, T. W.* Reductive Coupling of Xylyl Isocyanide Mediated by Low-Valent Uranium. *Organometallics,* **2021**, *40*, 2934-2938. doi: 10.1021/acs.organomet.1c00365

13) Vishnoi, P.; Zuo, J. L.; Cooley, J. A.; Kautzsch, L.; Gomez-Torres, A.; Murrillo, J.; **Fortier, S.**; Willson, S. D.; Seshadri, R.; Cheetham, A. K. Chemical Control of Spin-Orbit Coupling and Charge Transfer in Vacancy-Ordered Ruthenium(IV) Halide Perovskites. *Angew. Chem. Int. Ed.*, **2020**, *60*, 5184-5188. doi: 10.1002/anie.202013383

14) Harriman, K. L. M.; Murillo, J.; Suturina, E. A.; **Fortier, S.;*** Murugesu, M.* Relaxation Dynamics in See-saw Shaped Dy(III) Single-Molecule Magnets. *Inorg. Chem. Front.*, **2020**, *7*, 4805-4812. doi: 10.1039/D0QI01007C

    *– Cover Article*

15) Sengupta, D.; Sandoval-Pauker, C.; Schueller, E.; Encerrado-Manriquez, A. M.; Metta-Magana, A.; Lee, W.-Y.; Seshadri, R.; Pinter, B.;* **Fortier, S.*** Isolation of a Bimetallic Cobalt(III) Nitride and Examination of its Hydrogen Atom Abstraction Chemistry and Reactivity Towards H2. J. *Am. Chem. Soc.*, **2020**, *142*, 8233-8242. doi: 10.1021/jacs.0c00291
16) Yadav, M.; Metta-Magana, A.; **Fortier, S.*** Intra- and Intermolecular Interception of a Photochemically Generated Terminal Uranium Nitride. *Chem. Sci.*, **2020**, *11*, 2381-2387. doi: 10.1039/C9SC05992J
17) Gomez-Torres, A.; Aguilar, J. R.; Saucedo, C.; Jordan, A.; Metta-Magana, A.; Pinter, B.;* **Fortier, S.*** Reversible Oxidative-Addition and Reductive-Elimination of Thiophene from a Titanium Complex and Its Thermally-Induced Hydrodesulfurization Chemistry. *Chem. Comm.*, **2020**, *56*, 1545-1548. doi: 10.1039/C9CC09267F
18) Aguilar-Calderon, J. R.; Murillo, J.; Gomez-Torres, A.; Saucedo, C.; Jordan, A.; Pink, M.; Metta-Magana, A. J.; **Fortier, S.*** Redox Character and Small Molecule Reactivity of a Masked Titanium(II) Synthon. *Organometallics,* **2020**, *39*, 295-311. doi: 10.1021/acs.organomet.9b00637
– *ACS Editors' Choice and Cover Article*
19) Gomez-Torres, A.; Aguilar, J. R.; Encerrado-Manriquez, A. M.; Pink, M.; Metta-Magana, A.; Lee, W.-Y.; **Fortier, S.*** Titanium-Mediated Catalytic Hydrogenation of Monocyclic and Polycyclic Arenes. *Chem. Eur. J.*, **2020**, *26*, 2803-2807. doi: 10.1002/chem.201905466
20) Kent, G. T.; Murillo, J.; Wu, G.; **Fortier, S.**; Hayton, T.W.* Coordination of Uranyl to the Redox-Active Calix[4]pyrrole Ligand. *Inorg. Chem.*, **2020**, *59*, 8629-8634. doi: 10.1021/acs.inorgchem.0c01224
21) Riedhammer, J.; Aguilar, J. R.; Miehlich, M.; Halter, D. P.; Munz, D.; Heinemann, F. W.; **Fortier, S.**; Meyer, K.;* Mindiola, D. J.* Werner-type Complexes of U(III) and (IV). *Inorg. Chem.*, **2020**, *59*, 2443-2449. doi: 10.1021/acs.inorgchem.9b03229
22) Zhang, X.; Li, W.-U.; Chen, X.; Hansen, A.; Grimme, S.; **Fortier, S.**; Sergentu, D.-C.; Duignan, T. J.; Autschbach, J.; Wang, S.; Wang, Y.; Aghdassi, N.; Duhm, S.; Li, X.; Feng, L.; Echegoyen, L.; Li, J.; Schwarz, W.H.; Chen, N. A Diuranium Carbide Cluster Stabilized Inside a $C_{80}$ Fullerene Cage. *Nat. Commun.* **2018**, *9*, 2753. Doi: 10.1038/s41467-018-05210-8
23) Maity, A.K.; Murillo, J.; Pinter, B.;* **Fortier, S.*** A Terminal Iron(IV) Nitride Supported by a Super Bulky Guanidinate Ligand and Examination of Its Electronic Structure and Reactivity. *J. Am. Chem. Soc.* **2017**, *139*, 15691-15700. doi: 10.1021/jacs.7b06919
24) **Fortier, S.;*** Aguilar-Calderon, J. R.; Vlaisavljevich, B.;* Metta-Magana, A.; Goos, A. G.; Botez, C. E. An *N*-Tethered Uranium Arene Complex and the Synthesis of an Unsupported Uranium-Iron Bond. *Organometallics* **2017**, *36*, 4591-4599. doi: 10.1021/acs.organomet.7b00429
– *Invited Manuscript: Organometallic Actinide and Lanthanide Chemistry Special Issue*
25) Cai, W.; Morales-Martinez, R.; Zhang, X.; Najera, D.; Romero, E.; Metta-Magana, A.; Rodriguez-Fortea, A.; **Fortier, S.**; Chen, N.; Poblet, J. M.; Echegoyen, L. Single Crystal Structures and Theoretical Calculations of Uranium Endohedral Metallofullerenes (U@C2n, 2n = 74, 82) Show Cage Isomer Dependent Oxidation States for U. *Chem. Sci.*, **2017**, *8*, 5282-5290. doi:10.1039/c7sc01711a.
26) Bolotaulo, D.; Metta-Magana, A; **Fortier, S.*** F-element metalated dipyrrins: Synthesis and characterization of a family of uranyl bis(dipyrrinate) complexes. *Dalton Trans.* **2017**, *46*, 3284-3294. doi:10.1039/c7dt00150a
27) Aguilar-Calderon, J. R.; Metta-Magana, A.; Noll, B.; **Fortier, S*.** C($sp^3$)-H Oxidative-Addition and Transfer Hydrogenation Chemistry of a Ti(II) Synthon – Mimicry of Late-Metal Type Reactivity. *Angew. Chem. Int. Ed.* **2016**, *55*,14101-14105. doi:10.1002/ange.201607441
28) Castillo, M.; Barreda, O.; Maity, A. K.; Barraza, B.; Lu, J.; Metta-Magana, A.; **Fortier, S.*** Advances in Guanidine Ligand Design: Synthesis of an Imidazolin-2-Iminato Functionalized Guanidinate and Its Properties on Iron. *J. Coord. Chem.* **2016**, *69*, 2003-2014. doi: 10.1080/00958972.2016.1167198
– *Invited Manuscript: Emerging Leaders in Coordination Chemistry Special Issue*
29) Castillo, M.; Metta-Magana, A; **Fortier, S.*** Isolation of Gravimetrically Quantifiable Alkali Metal Arenides Using 18-crown-6. *New J. Chem.* **2016**, *40*, 1923-1926. doi: 10.1039/c5nj02841h
30) **Fortier, S.;*** Veleta, Jose; Pialat, A.; Le Roy, J.; Ghiassi, K.; Olmstead, M. M.; Metta-Magana, A.; Murugesu, M.;* Villagran, D.* $U(bipy)_4$: A Mistaken Case of U(0)? *Chem. Eur. J.* **2016**, *22*, 1931-1936. doi: 10.1002/chem.201504982

31) Maity, A. K.; Metta-Magana, A; **Fortier, S.*** Donor Properties of a New Class of Guanidinate Ligands Possessing Ketimine Backbones: A Comparative Study. *Inorg. Chem.* **2015**, *54*, 10030-10041. doi: 10.1021/acs.inorgchem.5b01815
32) Pinter, B.; Smith, K. T.; Kamitani, M.; Zolnhofer, E. M.; Tran, B. L.; **Fortier, S.**; Pink, M.; Wu, G.; Manor, B. C.; Meyer, K.; Baik, M.-H.; Mindiola, D. J. Cyclo-P3 Complexes of Vanadium: Redox Properties and Origin of the 31P NMR Chemical Shift. *J. Am. Chem. Soc.* **2015**, *137*, 15247-15261. doi: 10.1021/acs.inorgchem.5b01815
33) Wijeratne, G. B.; Zolnhofer, E. M.; **Fortier, S.**; Grant, L. N.; Carroll, P. J.; Chen, C.-H.; Meyer, K.; Kryzstek, J.; Ozarowski, A.; Jackson, T. A.; Mindiola, D. J.; Telser, J. Electronic Structure and Reactivity of a Well-Defined Mononuclear Complex of Ti(II). *Inorg. Chem.* **2015**, *54,10380-10397*. doi: 10.1021/acs.inorgchem.5b01796
34) Maity, A.K; **Fortier, S.**;***** Griego, L.; Metta-Magana, A. Synthesis of a "Super Bulky" Guanidinate Possessing an Expandable Coordination Pocket. *Inorg. Chem.*, **2014**, *53*, 8155–8164 doi: 10.1021/acs.inorgchem.5b01815
35) Searles, K.; **Fortier, S.**;***** Khusniyarov, M.; Chen, C.-H.; Pink, M.; Carroll, P.J.; Sutter, J.; Meyer, K.; Mindiola, D.J.; Caulton, K.G. *A cis*-Divacant Mononuclear Iron(IV) Imide. *Angew. Chem. Int. Ed.* **2014**, *126*, 14363-14367. doi: 10.1002/ange.201407156
36) **Fortier, S.**; Chen, C.-H.; Pink, M.; Le Roy, J.J.; Murugesu, M.; Mindiola, D.J.; Caulton, K.G. A Dinuclear Cobalt Complex Featuring Unprecedented Anodic and Cathodic Redox Switches for Single-Molecule Magnet Activity. *J. Am. Chem. Soc.*, **2013**, *135*, 14670-14678.
37) Lukens, W. W.; Edelstein, N. M.; Magnani, N.; Hayton, T. W.; **Fortier, S.**; Seaman, L. Quantifying the σ and π Interactions between U(V) f Orbitals and Halide, Alkyl, Alkoxide, Amide and Ketimide Ligands. *J. Am. Chem. Soc.* **2013**, *135*, 10742-10754.
38) **Fortier, S.**; Gonzalez del Moral, O.; Chen, C.-H.; Pink, M.; Le Roy, J.J.; Murugesu, M.; Mindiola, D.J.; Caulton, K.G. Probing the redox non-innocence of dinuclear, three-coordinate Co(II) nindigo complexes: not simply ß–diketiminate variants. *Chem. Commun.*, **2012**, *48*, 11082-11084
39) Brown, J.; **Fortier, S.** Wu, G.; Kaltsoyannis, N.; Hayton, T.W. Synthesis, Spectroscopic and Computational Characterization of the Chalcogenido-Substituted Analogues of the Uranyl Ion $[OUE]^{2+}$ (E = S, Se). *J. Am. Chem. Soc.* **2013**, *135*, 5352-5354.
40) Seaman, L.; Hrobarik, P.; Schettini, M. F.; **Fortier, S.**; Kaupp, M.; Hayton, T. W. A Rare Uranyl(VI)-Alkyl Ate Complex $[Li(DME)_{1.5}]_2[UO_2(CH_2SiMe_3)_4]$ and Its Comparison with a Homoleptic Uranium(VI) Hexaalkyl. *Angew. Chem. Int. Ed.* **2013**, *52*, 3259-3263.
41) Crestani, M.G.; Pinter, B.; Olasz, A.; Bailey, B.C.; **Fortier, S.**; Gao, X.; Chen, C.-H.; Baik, M.-H.; Mindiola, D.J. Understanding Competitive Pathways Involving the Dehydroalkoxylation and Dehydrogenation of Ethers by Ti-C Multiple Bonds. *Chem. Sci.* **2013**, *4*, 2543-2550.
42) Brown, J.; **Fortier, S.**; Lewis, R. A.; Wu, G.; Hayton, T.W. A Complete Family of Uranium Chalcogenides $[U(E)(N\{SiMe_3\}_2)_3]^-$ (E = O, S, Se, Te). *J. Am. Chem. Soc.*, **2012**, *134*, 15468-15475.
43) **Fortier, S.**; Kaltsoyannis, N.; Wu, G.; Hayton, T.W. Synthesis and Structure of $U^V(O)[N(SiMe_3)_2]_3$: A Case for Electronic versus Steric Control of Geometry in an Actinide Complex. *Inorg. Chem.*, **2012**, *51*, 1625-1633 .
44) **Fortier, S.**, Kaltsoyannis, N.; Wu, G.; Hayton, T.W. Probing the Reactivity and Electronic Structure of a Uranium(V) Terminal Oxo Complex. *J. Am. Chem. Soc.*, **2011**, *133*, 14224-14227.
45) **Fortier, S.**; Walensky, J. R.; Wu, G.; Hayton, T. W. High Valent Uranium Alkyls: Evidence for the Formation of $U^{VI}(CH_2SiMe_3)_6$. *J. Am. Chem. Soc.*, **2011**, *133*, 11732-11743.
46) **Fortier, S.**; Walensky, J. R.; Wu, G.; Hayton, T. W. Synthesis of a Phosphorano-Stabilized U(IV)-Carbene via One-Electron Oxidation of a U(III)-Ylide Adduct. *J. Am. Chem. Soc.*, **2011**, *133*, 6894-6897.
47) Seaman, L. A.; **Fortier, S.**; Wu, G.; Hayton, T. W. Synthesis of Two Homoleptic Uranium(IV) Amides and a Comparison of Their Oxidation Chemistry. *Inorg. Chem.*, **2011**, *50*, 636-646.
48) **Fortier, S.**; Wu, G.; Hayton, T. W. Synthesis of a Nitrido-Substituted Analogue of the Uranyl Ion, $[N=U=O]^+$. *J. Am. Chem. Soc.* **2010**, *132*, 6888–6889.

49) **Fortier, S.**; Zhang, Y.; Sharma, H. K.; Pannell, K. H. Formation of Silicon-Carbon Bonds by Photochemical Irradiation of $(\eta^5\text{-}C_5H_5)Fe(CO)_2SiR_3$ and $(\eta^5\text{-}C_5H_5)Fe(CO)_2Me$ to Obtain $R_3SiMe$. *Organometallics* **2010**, *29*, 1041-1044.

50) **Fortier, S.**; Melot, B.; Wu, G.; Hayton, T. W. Synthesis and Characterization of Several Homoleptic Uranium(IV) Alkyl Complexes. *J. Am. Chem. Soc.* **2009**, *131*, 15512-15521.

51) **Fortier, S.**; Hayton, T. W. Oxo Ligand Functionalization in the Uranyl Ion ($UO_2^{2+}$). *Coord Chem. Rev.* **2010**, *254*, 197-214.

52) **Fortier, S.**; Wu, G.; Hayton, T.W. U(IV) and U(V) azide complexes supported by amide or aryloxide ligands. *Dalton Trans.* **2010**, *39*, 352-544.
    - Article featured in: *Highlights in Chemical Science*, September 2009.

53) **Fortier, S.**; Wu, G.; Hayton, T.W. Synthesis and Redox Chemistry of High-Valent Uranium Aryloxides. *Inorg. Chem.* **2009**, *48*, 3000-3011.

54) **Fortier, S.**; Wu, G.; Hayton, T.W. Synthesis and Characterization of Three Homoleptic Alkoxides of Uranium: $[Li(THF)]_2[U^{IV}(O^tBu)_6]$, $[Li(Et_2O)][U^V(O^tBu)_6]$, and $U^{VI}(O^tBu)_6$. *Inorg. Chem.* **2008**, *47*, 4752-4761

## HONORS AND AWARDS

- Alfred P. Sloan Research Fellowship, September 2018.
- American Competitiveness in Chemistry Postdoctoral Fellowship, National Science Foundation, September 2011.
- Provost's Career Enhancement Postdoctoral Scholarship, University of Chicago, Spring 2011 (*declined*)
- UCSB, Graduate Opportunity Fellowship, October 2009 – June 2010
- UCSB, Robert H. DeWolfe Graduate Teaching Award, 2009
- UCSB, Roche Graduate Teaching Award, 2008
- UCSB, Outstanding Teaching Assistant Award, 2008
- NSF, Graduate Research Fellowship Program, *Honorable Mention*, 2008
- NIH, Minority Access to Research Careers (MARC) Scholar, May 2003 – July 2005
- American Chemical Society Scholar, August 2003 – May 2005
- G.T. Seaborg Institute for Transactinium Science Fellow, May 2004
- UTEP, Department of Chemistry Peer Leader Recognition Award, May 2004

## PRESENTATIONS

- Fortier, Skye. "Molecules to Materials: Examining the Properties of Early Metal and Actinide Complexes." *Invited Talk*. Washington State University, November 2023.
- Fortier, Skye. "Electrons, Electrons Everywhere but Not a Low-Valent Complex to See!" – *Invited Plenary Speaker*. 46th Puerto Rico ACS Section Technical Meeting, Guayanilla, Puerto Rico, November 2023.
- Fortier, Skye. "Molecules to Materials: Examining the Properties of Early Metal and Actinide Complexes." *Invited Talk*. Oklahoma State University, September 2023.
- Fortier, Skye. "Synthesis and Comparison of Iso-structural f-block Metal Complexes (Ce, U, Np, Pu) Featuring $\eta^6$-Arene Interactions." *Invited Talk*. 2023 Actinides Conference, Colorado State University, Golden, CO June 2023.
- Fortier, Skye. "Metal-Arenides as Low-Valent Synthons." *Invited Talk*. University of South Dakota, March 2022.
- Fortier, Skye. "Metal-Arenides as Low-Valent Synthons." *Virtual Invited Talk*. University of Rochester, December 2021.
- Fortier, Skye. "Metal-Arenides as Low-Valent Synthons." *Invited Talk*. Florida State University, November 2021.

- Fortier, Skye. “Metal-Arenides as Low-Valent Synthons.” *Invited Talk*. University of Florida, November 2021.
- Fortier, Skye. “Metal-Arenides as Low-Valent Synthons.” *Invited Talk*. Florida International University, October 2021.
- Fortier, Skye. “Chemistry of Photochemically Generated Terminal Uranium Nitrides.” *Virtual Invited Talk*. Angular Momentum Virtual Symposium, July 2020.
- Fortier, Skye. “Metal-Arenides as Low-Valent Synthons.” *Invited Talk*. University of California, Irvine, September 2019.
- Fortier, Skye. “Metal-Arenides as Low-Valent Synthons.” *Invited Talk*. University of Southern California, September 2019.
- Fortier, Skye. “Adventures in Academics and Actinides.” *Invited Talk – UCSB FLAM Summer Undergraduate Intern Program*. University of California, Santa Barbara, July 2019.
- Fortier, Skye. “*N*-Tethered Uranium Arene Complexes.” *Poster Presentation*. Gordon Organometallics Research Conference, Newport, RI, July 2019.
- Fortier, Skye. “Metal-Arenides as Low-Valent Synthons.” *Invited Talk*. University of California, San Diego, May 2019.
- Fortier, Skye. “Metal-Arenides as Low-Valent Synthons.” *Invited Talk*. University of Minnesota, Twin Cities, April 2019.
- Fortier, Skye. “Uranium-Arenes: A Play on Hard-Soft Interactions.” *Invited Talk*. Purdue University, April 2019.
- Fortier, Skye. “Uranium-Arenes: A Play on Hard-Soft Interactions.” *Invited Talk*. University of Missouri, Columbia, March 2019.
- Fortier, Skye. “Metastable Metal Complexes Supported by Guanidinate Ligands.” *Invited Talk*. Princeton, October 2018.
- Fortier, Skye. “Metastable Metal Complexes Supported by Guanidinate Ligands.” *Invited Talk*. University of Pennsylvania, October 2018.
- Fortier, Skye. “Metastable Metal Complexes Supported by Guanidinate Ligands.” *Invited Talk*. University of California, Los Angeles, May 2018.
- Fortier, Skye. “Metastable Metal Complexes Supported by Guanidinate Ligands.” *Invited Talk*. University of California, Santa Barbara, May 2018.
- Fortier, Skye. “Metastable Metal Complexes Supported by Guanidinate Ligands.” *Invited Talk*. University of Texas at Arlington, April 2018.
- Fortier, Skye. “Metastable Metal Complexes Supported by Guanidinate Ligands.” *Invited Talk*. Southern Methodist University, April 2018.
- Fortier, Skye. “Metastable Metal Complexes Supported by Guanidinate Ligands.” *Invited Talk*. University of North Texas, Denton, TX, March 2018.
- Fortier, Skye. “Metastable Metal Complexes Supported by Guanidinate Ligands.” *Invited Talk*. Tulane University, New Orleans, LA, October 2017.
- Fortier, Skye. “Metastable Metal Complexes Supported by Guanidinate Ligands.” *Invited Talk*. Texas A&M, College Station, TX, October 2017.
- Fortier, Skye. “Metastable Metal Complexes Supported by Guanidinate Ligands.” *Invited Talk*. Indiana University, Bloomington, IN, September 2017.
- Fortier, Skye. “Metastable Metal Complexes Supported by Guanidinate Ligands.” *Invited Talk*. University of Connecticut, Storrs, CT, September 2017.
- Fortier, Skye*, Vlaisavljevich, Bess; Murugesu, Muralee. “An *N*-Tethered Uranium-Arene Complex and the Synthesis of Uranium-Metal Bonds.” *Invited Talk*. 28th Rare Earths Conference, University of Iowa, Ames, IA June 2017.
- Fortier, Skye. “New Uranium Compounds for Energy Applications.” Oral Presentation, Materials for Engineering and Emerging Technologies, UTEP, El Paso, TX May 2017.

- Fortier, Skye. "Of Sterics and Electrons: Tales in New Reactivity of Base-Metals." *Invited Talk*. Ft. Lewis College, Durango, CO, October 2016.
- Fortier, Skye. "Of Sterics and Electrons: Tales in New Reactivity of Base-Metals." *Invited Talk*. Loyola University Chicago, Chicago, IL March 2016.
- Fortier, Skye. "New Uranium Compounds for Energy Applications." Oral Presentation, UTEP PREM Program, El Paso, TX December 2015
- Fortier, Skye*; Veleta, Jose; Le Roy, Jennifer; Ghiassi, Kamran B.; Olmstead, Marilyn; Villagran, Dino; Murugesu, Muralee; Metta-Magana, Alejandro. "$U(bipy)_4$: A Mistaken Case of U(0)?" Oral presentation, 249th ACS National Meeting, Denver, CO March 2015
- Fortier, Skye*; Maity, Arnab; Griego, Leonel; Metta-Magana, Alejandro. "A Structural and Chemical Study of Iron supported by "Super Bulky" Guanidinates." Oral presentation, 249th ACS National Meeting, Denver, CO March 2015
- Fortier, Skye. "Titanium Nitrides for Electrode Thin Films." Oral Presentation, UTEP PREM Program, El Paso, TX May 2014
- Fortier, Skye; Gonzalez del Moral, Octavio; Chen, Chun-Hsing; Pink, Maren; Caulton, Kenneth G.; Mindiola, Daniel J. "First Row Metals Supported by non-innocent 'Nindigo' Ligands: New Bimetallic Platforms for Multi-electron Reactivity." Oral presentation, 243rd ACS National Meeting, San Diego, CA, March 2012.
- Fortier, Skye; Wu, Guang; Hayton, Trevor W. "Synthesis and Characterization of a Uranium Nitrido Complex." Oral presentation, 239th ACS National Meeting, San Francisco, CA, March 2010
- Fortier, Skye; Wu, Guang; Hayton, Trevor W. "The Synthesis, Characterization, and Reactivity of Uranium(IV) Homoleptic Alkyl Complexes." Actinides 2009, San Francisco, CA, July 2009
- Fortier, Skye and Hayton, Trevor W. "Alkyl and Azido Complexes of Uranium." Oral Presentation, SoCal Organometallics Meeting, Univeristy of California, Los Angeles, June 2009.
- Fortier, Skye and Hayton, Trevor W. "Alkoxides, Alkyls, and Azides of Uranium." Oral Presentation, SoCal Organometallics Meeting, Univeristy of California, Los Angeles, November 2008.
- Fortier, Skye and Hayton, Trevor W. "Aryloxides of Uranium(VI)." Oral Presentation, SoCal Organometallics Meeting, Univeristy of California, Los Angeles, June 2008.
- Fortier, Skye; Schnaars, David; Hayton, Trevor W. "New Routes to Uranium(IV) Alkoxides." Poster Presentation, R. Daniel Little Symposium, University of California, Santa Barbara, October 2007
- Fortier, Skye; Pannell, Keith H.; Zhang, Yongqiang. "Oxidative addition of Fe-Si bonds to $(\eta^5\text{-}C_5H_5)Fe(CO)CH_3$." Oral presentation, 229th ACS National Meeting, San Diego, CA, March 2005
- Fortier, Skye; Pannell, Keith H.; Zhang, Yongqiang. "Novel synthesis of carbon-silicon bonds." Poster Presentation, 227th ACS National Meeting, Anaheim, CA, March 2004

## STUDENT PRESENTATIONS ( ___ = undergraduate; ____= graduate)

- Tarula-Marin, Jose; MacGregor, Frank; Fortier, Skye.* "Optimization of a Nickel-based Catalyst for the Improved Synthesis of a Bis(aniline)terphenyl Complex." Poster Presentation, UTEP COURI Symposium, El Paso, TX August 2023.
- Lee, Ariel; Oehlsen, Oscar; Fortier, Skye.* "Synthesis of Uranium Aerogels." Poster Presentation, UTEP COURI Symposium, El Paso, TX August 2023.
- Baca, Armando; MacGregor, Frank; Fortier, Skye.* "Synthesis and Characterization of Substituted Ylide Adducts of U(IV) Halides." Poster Presentation, 2023 LSAMP Symposium, University of Texas at El Paso, El Paso, TX, August 2023.
- MacGregor, Frank; Fortier, Skye.* "Synthesis and Reactivity Studies of Bulky U(IV) *trans*-bis(ylide) Adducts Across the Halide Series." Poster Presentation, 2023 Actinides Conference, Colorado State University, Golden, CO June 2023.
- MacGregor, Frank; Fortier, Skye.* "Synthesis and Reactivity Studies of Bulky U(IV) *trans*-bis(ylide) Adducts Across the Halide Series." Poster Presentation, 2023 Annual Biochemistry and Chemistry Day (ABCD), UTEP Department of Chemistry, El Paso, TX, March 2023.
- Murillo, Jesse; Fortier, Skye.* "Instituting Actinide-Arene Interactions by Tethered and Untethered

Synthetic Strategies." *Invited Talk*. Inorganic Actinide Chemistry (IIAC) Group, Los Alamos National Laboratory Isotope, Los Alamos, NM, January 2021.

- Alcantara, Gustavo; Fortier, Skye*. "Pursuit of a terminal uranium nitride" Poster presentation, 2020 Texas Academy of Science Annual Meeting, Stephen F. Austin State University, Nacogdoches, TX, February 2020
- Gómez-Torres, Alejandra; Fortier, Skye*. "Reduction chemistry of electron-rich titanium platforms and their catalytic activity towards the hydrogenation of monocyclic and polycyclic arenes". Oral presentation, 2019 ACS Southwest and Rocky Mountain Regional Meeting, El Paso, TX, November 2019.
- Murillo, Jesse; Fortier, Skye*. "Unsupported Uranium-Arene Interactions in Sandwich type Complexes" Oral Presentation, 2019 ACS Southwest and Rocky Mountain Regional Meeting, El Paso, TX, November 2019.
- Sengupta, Debabrata; Fortier, Skye*. "Methods for the Synthesis and Stabilization of Late 3D-Metal Nitrides." Oral Presentation, 2019 ACS Southwest and Rocky Mountain Regional Meeting, El Paso, TX, November 2019.
- Yadav, Munendra; Fortier, Skye*. "N-tethered Uranium-Arene Complexes" Oral Presentation, 2019 ACS Southwest and Rocky Mountain Regional Meeting, El Paso, TX, November 2019.
- Mena, Asiel; Sengupta, Debabrata; Fortier, Skye*. "In Pursuit of Low-Coordinate Iron Nitrides." Poster Presentation, 2019 ACS Southwest and Rocky Mountain Regional Meeting, El Paso, TX, November 2019.
- Gomez-Torres, Alejandra; Fortier, Skye*. "Titanium-Mediated Catalytic Hydrogenation of Monocylic and Polycyclic Arenes." Poster Presentation, NSF Pathways to the Workforce Workshop, University of California, Santa Barbara, August 2019.
- Murillo, Jesse; Fortier, Skye*." Single Molecule Magnetic Behavior of a Near Linear *N*,*N*'-Bidentate Dy Complex." Poster Presentation, NSF Pathways to the Workforce Workshop, University of California, Santa Barbara, August 2019.
- Hattori, Alex; Murillo, Jesse; Fortier, Skye*. "Synthesis and Preparation of $UO_2$ for Thin Film Photovoltaics." Poster Presentation, UTEP COURI Symposium, El Paso, TX August 2019.
- Sengupta, Debabrata; Fortier, Skye*. "Methods of the Synthesis and Stabilization of Late 3d-Metal Nitrides." Poster Presentation, Gordon Organometallics Research Conference, Newport, RI, July 2019.
- Jacintomoreno, Anwar; Fortier, Skye*. "DIPPNHO Coordination Survey Across Selected First Row Transition Metal Chlorides" Oral Presentation, UTEP Chemistry Day Presentation, El Paso, TX April 2019
- Zhang, Yuyan; Aguilar, Rolando; Fortier, Skye*. "Titanium Mediated Hydrogenation Chemistry." Poster Presentation, UTEP COURI Symposium, El Paso, TX August 2018.
- Atkin, Pyper; Richards, Jeffrey; Fortier, Skye*. "Synthesis and Characterization of Imidazolin-2-iminato Complexes of Iron." Poster Presentation, UTEP COURI Symposium, El Paso, TX August 2018.
- Baeza, Miguel; Aguilar, Rolando; Fortier, Skye*. "Synthesis of Titanium Complexes Supported by Imidazolin-2-Iminato Ligands." Poster presentation, 255$^{th}$ ACS National Meeting, New Orleans, LA March 2018
- Jordan, Aldo; Aguilar, Rolando; Fortier, Skye*. "Reactivity Study of a Masked Ti(II) Complex." Poster presentation, 255$^{th}$ ACS National Meeting, New Orleans, LA March 2018
- Baeza, Miguel; Aguilar, Rolando; Fortier, Skye*. "Synthesis of Titanium Complexes Supported by Imidazolin-2-Iminato Ligands." Poster Presenation, UTEP COURI Symposium, El Paso, TX August 2017.
- Tarrab, Casey; Aguilar, Rolando; Fortier, Skye*. "Synthesis and Characterization of N-heterocyclic Olefin Ligated Early Transition Metal Coordination Complexes." Poster Presentation, UTEP COURI Syposium, El Paso, TX August 2017.
- Romero, Eduardo; Bolotaulo, Duer; Fortier, Skye*. "Dipyrrinate Ligands for the Synthesis of Antiaromatic Nickel Norcorroles." Poster Presenation, UTEP COURI Symposium, El Paso, TX April 2017.

- Chuanxin, Xiao; Aguilar, Rolando; Buck, David; Fortier, Skye*. "Strategic Ligand Design to Stabilize Low-Valent Titanium." Poster Presentation, UTEP COURI Symposium, El Paso, TX August 2016
- Bolotaulo, Duer; Fortier, Skye*. "New Uranyl Compounds for Potential Energy Applications." Oral Presentation, Texas PREM Meeting, Texas State University, San Marcos, TX July 2016
- Barreda, Omar; Castillo, Max; Barraza, Brian; Fortier, Skye*. "Imidazolin-2-iminatos: A Highly Electron Donating and Modular Ligand Class." Poster Presentation, UTEP COURI Symposium, El Paso, TX April 2016
- Jacintomoreno, Anwar; Bolotaulo, Duer; Griego, Leonel; Fortier, Skye*. "New Uranium Compounds for Energy Applications." Poster Presentation, UCSB MROP Fall Meeting, Santa Barbara, CA November 2015
- Xu, Yang; Aguilar, Rolando; Barraza, Brian; Fortier, Skye*. "Systematic Ligand Substituent Variation and its Effects on Low-Valent Titanium." Poster Presentation, UTEP COURI Symposium, El Paso, TX July 2015
- Barreda, Omar; Castillo, Max; Barraza, Brian; Metta-Magana, Alejandro; Fortier, Skye*. "Synthesis of Bismuth Complexes with Redox Reactivity for Small Molecule Activation." Poster presentation, UTEP COURI Symposium, El Paso, TX April 2015
- Griego, Leonel; Maity, Arnab; Fortier, Skye*; Metta-Magana, Alejandro. "Super bulky guanidinates for the support of low-coordinate metal complexes and application in dye-sensitized solar cells." Poster Presentation, UTEP COURI Symposium, El Paso, TX April 2015
- Griego, Leonel; Maity, Arnab; Fortier, Skye*; Metta-Magana, Alejandro. ""Super Bulky" Guanidinates for the Support of Low-Coordinate Metal Complexes." Poster presentation, 249th ACS National Meeting, Denver, CO March 2015
- Barraza, Brian; Lu, Jeffrey; Aguilar, Rolando; Fortier, Skye*; Metta-Magana, Alejandro. "Synthesis and Characterization of a New Guanidinate-Guanidinate Ligand Featuring an Imidazolin-2-Iminate backbone." Poster presentation, 249th ACS National Meeting, Denver, CO March 2015
- Castillo, Max; Barreda, Omar; Fortier, Skye*. "Synthesis of Novel Bismuth Complexes with Redox Activity for Small Molecule Activation." Poster presentation, 249th ACS National Meeting, Denver, CO March 2015
- Aguilar, Rolando; Fortier, Skye*; Metta-Magana, Alejandro. "Synthesis, Characterization and Reactivity Study of a Masked "Ti(II)" Complex." Oral presentation, 249th ACS National Meeting, Denver, CO March 2015
- Maity, Arnab; Griego, Leonel; Fortier, Skye*; Metta-Magana, Alejandro. "Synthesis, Characterization and Coordination Chemistry of a New Guanidinate Ligand Class Possessing Ketimine Backbones." Oral presentation, 249th ACS National Meeting, Denver, CO March 2015
- Castillo, Max; Barreda, Omar; Aguilar, Rolando; Metta-Magana, Alejandro, Fortier, Skye*. "Synthesis of Novel Bismuth Complexes with Redox Activity for Small Molecule Activation." Poster presentation, UTEP Graduate Student Research Expo, El Paso, TX November 2014
- Lu, Jeffrey; Maity, Arnab; Fortier, Skye*. "Synthesis of Guanidine-Guanidinates as Highly Electron-Donating Ligands." Poster Presentation, UTEP COURI Symposium, El Paso, TX July 2014
- Griego, Leonel; Maity, Arnab; Fortier, Skye*; Metta-Magana, Alejandro. ""Super Bulky" Guanidinates for the Synthesis of Molecular Titanium Nitrides as Well-Defined Precursors for Titanium Nitride Semiconducting Thin Films." Poster presentation, UTEP COURI Symposium, El Paso, TX April 2014

## COURSES TAUGHT

- Periodic Table, Undergraduate, CHEM 2361, Spring 2024
- Inorganic Chemistry, Undergraduate, CHEM 4365, Fall 2023
- Inorganic Chemistry Laboratory, Undergraduate, CHEM 4165, Fall 2023
- Periodic Table, Undergraduate, CHEM 2261, Spring 2023
- Inorganic Chemistry, Undergraduate, CHEM 4365, Fall 2022
- Inorganic Chemistry Laboratory, Undergraduate, CHEM 4165, Fall 2022

- Periodic Table, Undergraduate, CHEM 2261, Spring 2022
- Inorganic Chemistry, Undergraduate, CHEM 4365, Fall 2021
- Inorganic Chemistry Laboratory, Undergraduate, CHEM 4165, Fall 2021
- Periodic Table, Undergraduate, CHEM 2261, Spring 2021
- Inorganic Chemistry, Undergraduate, CHEM 4365, Fall 2020
- Inorganic Chemistry Laboratory, Undergraduate, CHEM 4165, Fall 2020
- Periodic Table, Undergraduate, CHEM 2261, Spring 2020
- Inorganic Chemistry, Undergraduate, CHEM 4365, Fall 2019
- Inorganic Chemistry Laboratory, Undergraduate, CHEM 4165, Fall 2019
- Periodic Table, Undergraduate, CHEM 2261, Spring 2019
- Contemporary Topics in Inorganic Chemistry, Graduate, CHEM 5369/6369, Fall 2018
- Inorganic Chemistry, Undergraduate, CHEM 4365, Fall 2018
- Periodic Table, Undergraduate, CHEM 2261, Spring 2018
- Inorganic Chemistry, Undergraduate, CHEM 4365, Fall 2017
- Periodic Table, Undergraduate, CHEM 2261, Spring 2017
- Inorganic Chemistry, Undergraduate, CHEM 4365, Fall 2016
- Periodic Table, Undergraduate, CHEM 2261, Spring 2016
- Inorganic Chemistry, Undergraduate, CHEM 4365, Fall 2015
- Contemporary Topics in Inorganic Chemistry, Graduate, CHEM 5369/6369, Fall 2014
- Inorganic Chemistry, Undergraduate, CHEM 4365, Fall 2014
- Graduate Seminar, Graduate, CHEM 5195/6194, Fall 2014
- Inorganic Chemistry, Undergraduate, CHEM 4365, Fall 2013

## STUDENTS SUPERVISED

### Undergraduates

- Miguel Burciaga, Decuember 2023 - Present
- Armando Baca, Summer 2023 - Present
- Matthew Jones, Fall 2022 - Present
- Alan Murguia, Fall 2023, Graduated 12/2023
- Emily Perez, Fall 2021 – Spring 2022, Graduated 05/2022
- Chris Espinoza, Fall 2020 – Spring 2021, Graduated 05/2021
- Ashley Solano, Fall 2020 – Spring 2021, Graduated 05/2021
- Alexsis Castillo, Fall 2020 – Spring 2021, Graduated 05/2021
- Abigail Gallegos, Fall 2019 – Fall 2020, Graduating 05/2022
- Gustavo Alcantara, Summer 2018 – Summer 2020, Graduated 05/2020
- Ivan Arvizo, Summer 2018 – Spring 2020, Graduated 05/2020
- Miguel Baeza, Summer 2016 – Spring 2018, Graduated 05/2018
- Aldo Jordan, Fall 2015 – Spring 2018, Graduated 05/2018
- Brenda Ontiveros, Summer 2015 – Spring 2017, Graduated 05/2017
- Anwar Jacintomoreno, Summer 2015 – Fall 2015, Graduated 05/2017
- Omar Barreda, Fall 2014 – Summer 2016, Graduated 05/2016
- Brian Barraza, Spring 2014 – Summer 2015, Graduated 05/2015
- Leonel Griego, Spring 2014 – Summer 2015, Graduated 05/2015

## Graduate

- Oscar Oehlsen, Ph.D. Program, Spring 2022-Present
- Juan Ricardo Luna, Ph.D. Program, Fall 2021-Present
- Frank MacGregor, Ph.D. Program, Fall 2021-Present
- Asiel Mena, Ph.D. Program, Fall 2018-Fall 2023, Dissertation: "Sterically Encumbering Ligands for the Synthesis and Stabilization of Iron Nitrides and Iron Oxo Complexes." - Graduated
- Alejandra Gomez-Torres, Ph.D. Program, Fall 2017-Summer 2022, Dissertation: "Synthesis, Characterzation, and Reactivity Studies of Highly Reduced Early-Metal Complexes Supported by Imidazolin-2-Iminato Ligands." - Graduated
- Anwar Jacintomoreno, M.S. Program, Spring 2018-Fall 2020 - Graduated
- Jesse Murillo, Ph.D. Program, Fall 2016-Summer 2021, Dissertation: "Synthesis and Study of F-block Complexes Containing Metal-Arene Interactions." - Graduated
- Rolando Aguilar, M.S./Ph.D. Program Fall 2013 – Summer 2019, Thesis: "Synthesis, Characterization, and Reactivity Studies of a Masked Titanium(IV) Complex." – Graduated.
- Maximiliano Castillo, M.S. Program Fall 2014 – Summer 2016, Thesis: "Gravimetrically Characterizable Common Alkali Reducing Agents and Ligand Design of New Electron Rich Guanidinate." – Graduated.
- Duer Bolotaulo, M.S. Program Fall 2014 – Fall 2016, Thesis: "Synthesis, Characterization, and Photochemical Properties of Uranyl Dipyrinnates." – Graduated.

## Postdoctoral Associate

- Dr. Debabrata Sengupta, August 2018 – August 2020.
- Dr. Munendra Yadav, March 2018 – August 2020.
- Dr. Arnab K. Maity, September 2013 – April 2016, "Study of Iron Guanidinates." Contributions include three authored publications and two manuscripts in preparation

## Student Exchanges

- Jeffrey Lu, Undergraduate, University of California, Santa Barbara, Summer 2014
- Yang Xu, Undergraduate, Beijing Normal University, China, Summer 2015
- Xiao Chuanxin, Undergraduate, Beijing Normal University, China, Summer 2016
- Joseph Lindley, Graduate, Newcastle University, UK, Fall 2015 – Summer 2016
- Casey Tarrab, Undergraduate, University of California, Santa Barbara, Summer 2017
- Yuyan Zhang, Undergraduate, Beijing Normal University, China, Summer 2018
- Alex Hattori, Undergraduate, University of California, Santa Barbara, Summer 2019
- Nick Eckles, Undergraduate, University of California, Santa Barbara, Summer 2021
- Dan Le, Undergraduate, University of California, Santa Barbara, Summer 2021
- Ariel Lee, Undergraduate, University of California, Santa Barbara, Summer 2023
- Armando Baca, Undergraduate, LSAMP Program, El Paso Community College, Summer 2023
- Jose Luis Tarula-Marin, Post-Bac, UTEP SUREChem Program, Autonomous University of Juarez City, Summer 2023

# STUDENT ADVISORY COMMITTEES

## Ph.D. Dissertation Committee Member

- Peter Girnt, Fall 2022 – Present, Vukovic Laboratory, Dept. of Chemistry
- Daniel Gomez Bustos, Fall 2022 – Present, Sreenivasan Laboratory, Dept. of Chemistry
- Christian Sandoval Pauker, Fall 2022 – Present, Villagran Laboratory, Dept. of Chemistry
- Luis M. Martinez, Spring 2020 – Present, Singamaneni Laboratory, Dept. of Physics

- Mariana Marcos, Fall 2019 – Spring 2022, Villagran Laboratory, Dept. of Chemistry- *Graduated*
- Yulu Ge, Spring 2017 – Fall 2022, Villagran Laboratory, Dept. of Chemistry - *Graduated*
- Elkin Romero, Fall 2019 – Spring 2021, Zhu Laboratory, Dept. of Chemistry – *Graduated*
- Nanthakishore Makeswaran, Fall 2020-Spring 2021, Chintalapalle Laboratory, Dept. of Mechanical Engineering - *Graduated*
- Tariqul Islam, Fall 2013 – Spring 2019, Noveron Laboratory, Dept. of Chemistry - *Graduated*
- Edison Castro, Fall 2014 – Spring 2018, Echegoyen Laboratory, Dept. of Chemistry - *Graduated*
- Danisha Rivera, Fall 2015, Echegoyen Laboratory, Dept. of Chemistry - *Graduated*
- Karen Ventura, Fall 2015 – Summer 2018, Villagran Laboratory, Dept. of Chemistry - *Graduated*
- Nancy Rodriguez, Fall 2014 – Present, Villagran Laboratory, Dept. of Chemistry - *Graduated*
- Yanyu Xu, Fall 2014 – Fall 2018, Villagran Laboratory, Dept. of Chemistry - *Graduated*
- Paulina Quinonez, Spring 2017, Pannell Laboratory, Dept. of Chemistry - *Graduated*
- Mirella Vargas, Fall 2015, Chintalapalle Laboratory, Dept. of Mechanical Engineering - *Graduated*

## M.S. Thesis Committee Member

- Demetrio Hernandez, Fall 2023 – Present, Dept. of Philosophy
- Catalina Suarez, *Graduated Summer 2017*, Echegoyen Laboratory, Dept. of Chemistry
- Karen Ventura, Defended Summer 2015 – *Entered UTEP Ph.D. Program Fall 2016*, Villagran Laboratory, Dept. of Chemistry
- Nathalie Valdez, *Graduated Fall 2015*, Villagran Laboratory, Dept. of Chemistry
- Stephanie Moreno, *Graduated Summer 2015*, Kirken Laboratory, Dept. of Biological Science

## Undergraduate Thesis Committee Member

- Jose Veleta, MARC Student, *Graduated Summer 2013*, Villagran Laboratory, Dept. of Chemistry
- Javier Grajeda, MARC Student, *Graduated Summer 2013*, Villagran Laboratory, Dept. of Chemistry
- Maripaz Calderon, MARC Student, *Graduated Summer 2013*, Villagran Laboratory, Dept. of Chemistry
- Jacob Prat, MARC Student, *Graduated Summer 2016*, Villagran Laboratory, Dept. of Chemistry
- Daniel Najera, MARC Student, *Graduate Summer 2017*, Echegoyen Laboratory, Dept. of Chemistry

## SYNERGISTIC ACTIVITIES

- Assistant Chair, UTEP Department of Chemistry and Biochemistry, Fall 2019 – Present
- Doctoral Program Co-Director, UTEP Department of Chemistry and Biochemistry, Spring 2019 – Present
- Faculty Supervisor for X-ray facility manager Dr. Alejandro Metta, Fall 2019 - Present
- Chair, Organometallics and Coordination Chemistry 1 Session, 28$^{th}$ Rare Earth Research Conference, June 2017, Iowa State University, Des Moines, IA
- Chair, Organometallic Chemistry Session, Division of Inorganic Chemistry, 249$^{th}$ National Meeting of the American Chemical Society, March 2015, Denver, CO
- Faculty Advisor, To Write Love on Her Arms – UTEP Student Chapter, 08/2013 – 08/2014
- Departmental and Institutional Committees
    - Welch Endowed Chair Search Committee, Chair, 08/2022 - Present
    - Graduate Student Admissions Committee, 08/2014 – Present
    - College of Science Curriculum Committee, 01/2023 – Present
    - Single Crystal X-ray Diffraction Instrumentation and Facility Committee, 07/2019 – Present
    - Core Instrumentation Committee, Fall 2021 – Present

    - Space Committee, Fall 2021 – Present
    - Faculty Search Committee, Chair, Department of Chemistry, Fall 2022 – Spring 2023
    - Faculty Search Committee, Member, Department of Chemistry, Fall 2021 – Spring 2022
    - Faculty Search Committee, Member, Department of Chemistry, Fall 2020 – Spring 2021
    - Department Chair Search Committee, Member, Department of Chemistry, Fall 2018 – Spring 2019
    - Environmental Science Program Steering Committee, 07/2015 – 05/2018
    - NMR Instrumentation and Facility Committee, 08/2013 – 12/2015
    - Faculty Search Committee, Member, Department of Chemistry, Fall 2014 – Spring 2015
- Journal Reviewer:
    - Journal of the American Chemical Society
    - Chemical Science
    - Angewandte Chemie International Edition
    - European Journal of Chemistry
    - Inorganic Chemistry
    - Organometallics
    - Inorganic Chemistry Frontiers
    - Dalton Transactions
    - Langmuir
    - Polyhedron
    - Journal of Coordination Chemistry
    - Molecules
- Proposal Reviewer:
    - National Science Foundation
    - Department of Energy
    - ACS Petroleum Research Fund
- Student Outreach Presentations
    - "Success and Careers in Chemistry." Presentation to El Paso Community College (EPCC) General Chemistry Students – Rio Grande Campus, 07/14/2016
    - "Success and Careers in Chemistry." Presentation to El Paso Community College (EPCC) General Chemistry Students – Rio Grande Campus, 04/06/2015
    - "Success and Careers in Chemistry." Presentation to El Paso Community College (EPCC) General Chemistry Students – Rio Grande Campus, 11/19/2014
    - "An Academic's Career Path: A Personal Point of View." Presentation to UTEP Minority Access to Research Careers (MARC) students, 10/14/2013
    - "An Academic's Career Path: A Personal Story." Presentation to UTEP NSF Undergraduate STEM Students, 10/16/2013
    - "Applying for and Choosing a Graduate Program." Presentation to UTEP ACS-Student Affiliates, 10/07/2013
- Miscellaneous
    - Acting Department Chair, 08/08/2015 – 08/17/2015
    - Acting Graduate Student Advisor, 08/2014 and 08/2017

## PROFESSIONAL MEMBERSHIPS

- American Chemical Society, August 2003 – Present
- American Chemical Society – Student Affiliates, UTEP Chapter, August 2002 – August 2005