CURRICULUM VITAE

Fernando J. Uribe-Romo, PhD

Assistant Professor
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A. GENERAL

1. EDUCATION

Post-doctoral

Cornell University, 2011 – 2013
Advisor: Prof. William R. Dichtel
Research topic: *Bottom up synthesis of graphene nanoribbons from conducting polymers*

Graduate

Doctor of Philosophy, Inorganic Chemistry
University of California–Los Angeles, 2006 – 2011
Advisor: Prof. Omar M. Yaghi
Dissertation title: *Design, synthesis and powder diffraction crystallography of porous framework materials*

Undergraduate

Bachelor of Science in Chemistry (Licenciado en Ciencias Químicas)
Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM) 2001 – 2006
Advisors: Prof. Marcelo Videa and Prof. Omar M. Yaghi
Undergraduate thesis title: *Synthesis and characterization of metal-organic frameworks containing open metal sites and study of their sorption properties for gas storage applications*

2. EMPLOYEMENT

University of Central Florida

Department of Woman and Gender Studies, Orlando, FL
Position: Affiliate Faculty (courtesy appointment), 2016 – present
Department of Chemistry, Orlando, FL
Position: Assistant Professor, 2013 – present

Florida Atlantic University

Department of Chemistry and Biochemistry, Boca Raton, FL
Position: Adjunct Professor (courtesy appointment) 2015 – present

Cornell University

Department of Chemistry and Chemical Biology, Ithaca, NY
Position: Postdoctoral Associate, 2011 – 2013

Newcastle University

School of Chemistry. Newcastle upon Tyne, United Kingdom
Position: Visiting Scientist, 2010

University of California, Los Angeles

Department of Chemistry and Biochemistry, Los Angeles, CA
Position: Graduate Teaching Assistant, 2007 – 2010
Position: Graduate Research Assistant, 2006 – 2010

University of Michigan

Department of Chemistry. Ann Arbor, MI.
Position: Visiting Scholar. 2004 and 2005

Instituto Tecnológico y Estudios Superiores de Monterrey, Campus Monterrey

Department of Chemistry. Monterrey, Mexico
Position: Teaching Assistant, 2005 – 2006

Center for Condensed Matter Science (Universidad Nacional Autónoma de Mexico)

Department of Catalysis. Ensenada, Mexico
Position: High School Research Volunteer, 2001

3. HONORS AND AWARDS

- **UCF 2018 Research Incentive Award (RIA)**. Awarded to up to 55 faculty per year, RIA recognizes outstanding research and scholarly work performed by university employees.
- **AAAS Eurekalert** most popular science news record in history of site (886,820 views in 2017).
- **2017 Scialog Fellow**, Research Corporation for Science Advancement. (60 fellows selected every year).
- **2017 TEDx Speaker**. Sedona, AZ.
- **2017 *J. Mater. Chem. A* Emerging Investigator**.
- **Honorific Mention.** "Inspiration Mars Design Contest". The Mars Society, 2014.
- **Margaret C. Etter Student Lecturer Award** on Powder Diffraction Crystallography. American Crystallographic Association, 2010.
- **Testimony of Outstanding Performance**. National Exam of Chemistry (CENEVAL, Mexico), May 2006.

- **Student development award**. ITESM, Campus Monterrey, 2006.
- **Xorge A. Dominguez Scholarship**. ITESM Campus Monterrey. Mexico 2006.
- **National Council of Science and Technology (CONACyT) Scholarship** for Undergraduate Studies. Mexico, 2001 – 2006.
- **2nd Place winner in the 10th National Chemistry Olympics**. Monterrey, Mexico 2001.
- **Baja California State-level Chemistry Olympics Champion**. Tijuana, Mexico 2000.

B. RESEARCH

1. GRANTS

Total funding (since 2013): **$638,103** including credit split.

Funding per faculty (tenure/tenure earning) in Chemistry Department

5 year average: **$408,179** (including credit split)
5 year median: **$160,828** (including credit split)

Proposals Funded

Title: *SusChEM: Earth Abundant Metal-Organic Frameworks for Heterogeneous Visible-Light Organic Photoredox Catalysis*.
Funding Agency: NSF CHE-1665277
Total funded: **$450,000** **Indirect costs:** $113,850
Credit: **70% as PI**
Period: September 1, 2017 – August 30, 2020

Title: *A Combined Analytical, Theoretical, and Synthetic Approach Based on Line Narrowing Spectroscopy for Specific Isomer Determination of Petroleum Oil Spills*
Funding Agency: Golf of Mexico Research Initiative (GoMRI)
Total funded: **$1,523,286** **Total indirect cost:** $451,983
Credit: **20% as co-PI**
Period: January 1, 2016 – December 31, 2018

Title: *Flooded Lead Acid Battery Electrode Characterization*
Funding Agency: AAA Inc.
Total funded: **$13,603** **Indirect costs:** $460
Credit: **100% as PI**
Period: October 1, 2016 – September 30, 2017

Title: *Crystallographically Aligned Two-Dimensional Organic Frameworks for Li-Ion Solid State Electrolytes*.
Funding Agency: UCF ORC In-House Grants
Total funded: **$7,500** as PI
Period: May 1, 2017 – April 30, 2018

Title: *Aniline Containing Framework Materials with Redox Capabilities and Strong Dipoles*
Funding Agency: UCF Burnett Research Scholar
Total funded: **$2,000**
Period: January 1, 2016 – May 30, 2016

Total proposals submitted: 22

2. SCIENTIFIC PUBLICATIONS

Number of paper published at UCF: 13
Total number of papers: 25
h-index: 14 (ISI Web of Science, December 2017, includes publication #1)
Number of patents/patent applications: 5
Total number of citations: 4950 (ISI Web of Science, May 2018) **6248** (Google Scholar, May 2018)

Annotations: * = corresponding author, ^{G} = graduate advisee author, ^{UG} = undergraduate advisee author, ^{PD} = Postdoctoral advisee author.

Manuscripts submitted

29 Carrasco-Pena, A., Jordan, R., Dieguez, J., Coronado-Rodríguez, A., Ozdemir, V. B., Kwok, K., Orlovskaya, N., Vazquez-Molina, D. A., **Uribe-Romo, F. J.**, Bolon, A., Radovic, M., Grasso, S., Reece, M. Design and development of ring-on-ring jig for biaxial strength testing of brittle ceramic composite materials: ZrB_2-30wt%SiB_6. *Submitted.*

28 Vazquez-Molina, D. A.,^{G} Pope, G. M.,^{UG} Ezazi, A. A.,^{UG} Harper, J. K., **Uribe-Romo, F. J.*** Framework vs. Side-Chain Amphidynamic Behaviour in oligo-(ethylene oxide) Functionalized Covalent–Organic Frameworks. **2018**. *Submitted.*

Publications of work performed since joining UCF

27 Mohammad-Pour, G. S.,^{G} Ly, R.,^{UG} Fairchild, D.,^{G} Bursntine-Towley, A.,^{UG} Vazquez-Molina, D. A.,^{G} Trieu, K. D., Campiglia, A., Harper, J. K.,* **Uribe-Romo, F. J.*** Modular design of highly fluorescent dibenzo- and naphtho- fluoranthenes: Structural rearrangements and electronic properties. *J. Org. Chem.* **2018**. *Accepted.* DOI: 10.1021/acs.joc.8b00891. (**Impact Factor: 4.85**)

26 Wang, L., **Uribe-Romo, F. J.**, Mueller, L., Harper, J. K. Predicting anisotropic thermal displacements for hydrogens from solid-state NMR: A study on hydrogen bonding in polymorphs of palmitic acid. *Phys. Chem. Chem. Phys.* **2018**, *20*, 8475-8487. (**Impact Factor: 4.12**)

25 Vogelsberg, C. S., **Uribe-Romo F. J.**, Lipton, A., Sang, Y., Houk, K. N., Brown, S., Garcia-Garibay, M. A. Ultrafast rotation in an amphidynamic crystalline metal organic framework. *Proc. Natl. Acad. Sci. USA*, **2017**. *114*, 13613-13618. **(Impact Factor: 9.66)**

24 Logan, M. W.,[G] Adamson, J. D.,[UG] Duy, L., **Uribe-Romo F. J.*** Structural stability of *N*-alkyl functionalized titanium metal-organic frameworks in aqueous and humid environments. *ACS Appl. Mater. Interfaces* **2017**. *9*, 44529-44533. **(Impact Factor: 7.50)**

23 Hein, S. J., Dan Lehnherr, D., Arslan, H., **Uribe-Romo F. J.**, Dichtel, W. R. Alkyne Benzannulation Reactions for the Synthesis of Novel Aromatic Architectures. *Acc. Chem. Res.* **2017**. *50*, 2776-2788. **(Impact Factor: 20.26)**

22 Terracciano, A. C., De Oliveira, S., Vazquez-Molina, D. A.,[G] **Uribe-Romo, F. J**, Vasu, S. S., Orlovskaya, N. Thermal and Acoustic Performance of Al_2O_3, MgO–ZrO_2, and SiC Porous Media in a Flow-Stabilized Heterogeneous Combustor. *Energy Fuels* **2017**. *31*, 7552-7561. **(Impact Factor: 3.091)**

21 Logan, M. W.,[G] Ayad, S.,[UG] Adamson, J. D.,[UG] Dilbeck, T., Hanson, K., **Uribe-Romo F. J.*** Systematic Variation of the Optical Bandgap in Titanium Based Isoreticular Metal-Organic Frameworks for Photocatalytic Reduction of CO_2 under Blue Light. *J. Mater. Chem. A* **2017**. *5*, 11854-11863. Invited contribution to a Emergent Investigators Issue **(Impact Factor: 8.87)**

20 Terracciano, A. C., De Oliveira, S., Vazquez-Molina, D. A.,[G] **Uribe-Romo, F. J**, Vasu, S. S., Orlovskaya, N. An Evaluation of Catalytically Active $Ce_{0.8}Gd_{0.2}O_{1.9}$ Coated MgO–ZrO_2 porous ceramic for Heterogeneous Combustion of Methane. *Combustion and flame* **2017**. *180*, *32-39.* **(Impact Factor: 3.59)**

19 Vazquez-Molina, D. A.,[G] Mohammad-Pour, G. S.,[G] Lee, C., Logan, M. W.,[G] Duan, X., Harper, J. K., **Uribe-Romo, F. J*** Mechanically Shaped 2-Dimensional Covalent Organic Frameworks Reveal Crystallographic Alignment and Fast Li-Ion Conductivity. *J. Am. Chem. Soc.* **2016**, *138,* 9767-9770. **(Impact Factor: 13.86)**

18 Powell, J., Kalakewich, K., **Uribe-Romo, F. J.**, Harper, J. K. Solid-state NMR and DFT predictions of differences in COOH hydrogen bonding in odd and even numbered n-alkyl fatty acids. *Phys. Chem. Chem. Phys.* **2016**, *18,* 12541-12549. **(Impact Factor: 4.12)**

17 Logan, M. W.,[G] Lau, Y. A.,[PD] Zheng, Y., Hall, E. A.,[UG] Hettinger, M. A.,[UG] Hosler, M.,[UG] Marks, R. P.,[UG] Rossi, F. M., Yuan, Y., **Uribe-Romo F. J.*** Heterogeneous photoredox synthesis of *N*-hydroxy-oxazolidinones catalysed by metal–organic frameworks. *Catal. Sci. Technol*. **2016**, *6*, 5647-5655. **(Impact Factor: 5.77)**

16 Gao, J.†, **Uribe-Romo, F. J.†**, J, Saathoff, J. D., Arslan, H., Crick, C. R., Hein, S. J., Itin, B., Clancy, P., Dichtel, W. R., Loo, J.-L. Ambipolar Transport in Solution-Synthesized Graphene Nanoribbons. *ACS Nano*. **2016**, *10*, 4847. † = equal contribution. **(Impact Factor: 13.94)**

15 Klonowski, P., Goloboy, J. C., **Uribe-Romo, F. J.**, Sun, F., Zhu, L., Gándara, F., Wills, C., Errington, R. J., Yaghi, O. M., Klemperer, W. G. Synthesis and characterization of the platinum-substituted Keggin anion α-$H_2SiPtW_{11}O_{40}^{4-}$. *Inorg. Chem*. **2014**, *53*, 13239. (**Impact Factor: 4.85**)

14 Arslan, H., **Uribe-Romo, F. J.**, Smith, B. J., Dichtel, W. R. Accessing extended and partially fused hexabenzocoronenes using a benzannulation/cyclodehydrogenation approach. *Chem. Sci.* **2013**, *4*, 3973. (**Impact Factor: 8.67**)

Publications from work performed before appointment at UCF

13 Gándara, F., **Uribe-Romo, F. J.**, Britt, D. K., Furukawa, H.; Lei, L., Cheng, R.; Duan, X., O'Keeffe, M., Yaghi, O. M. Porous, conductive metal-triazolates and their structural elucidation by the charge-flipping method. *Chem. Eur. J.* **2012**, *18*, 10595.

12 **Uribe-Romo, F. J.**, Dichtel, W. R. Two-dimensional materials: polymers stripped down. *Nature Chem.* **2012**, *4*, 245. (News and Views)

11 Strong, V., **Uribe-Romo, F. J.**, Battson, M., Kaner, R. B. Oriented polythiophene nanofibers grown from CdTe quantum dot surfaces. *Small* **2012**, *8*, 1191.

10 Spitler, E. L., Colson, J. W., **Uribe-Romo, F. J.**, Woll, A. R., Giovino, M. R., Saldivar, A., Dichtel W. R. Lattice expansion of highly oriented 2D phthalocyanine covalent organic framework films. *Angew. Chem. Int. Ed.* **2012**, *51*, 2623.

9 Spitler, E. L., Koo, B. T., Novotney, J. L., Colson, J. W., **Uribe-Romo, F. J.**, Gutierrez, G. D., Clancy, P., Dichtel, W. R. A 2D covalent organic framework with 4.7-nm pores and insight into its interlayer stacking *J. Am. Chem. Soc.* **2011**, *133*, 19416.

8 Furukawa, H., Go, Y. B., Ko, N., Park, Y. K., **Uribe-Romo, F. J.**, Kim, J., O'Keeffe, M., Yaghi, O. M. Isoreticular expansion of metal organic frameworks with triangular and square building units and the lowest calculated density for porous crystals *Inorg. Chem.* **2011**, *50*, 9147.

7 **Uribe-Romo, F. J.**, Doonan, C. J., Furukawa, H., Oisaki, K., Yaghi, O. M. Porous and crystalline covalent organic frameworks constructed from hydrazone condensation. *J. Am. Chem. Soc*. **2011**, *133*, 11478.

6 Bloch, E. D., Britt, D., Lee, C., Doonan, C. J., **Uribe-Romo, F. J.**, Furukawa, H., Long, J. R., Yaghi, O. M. Metal insertion in a microporous metal-organic framework lined with 2,2'-bipyridine *J. Am. Chem. Soc*. **2010**, *132*, 14382.

5 Britt, D., Lee, C., **Uribe-Romo, F. J.**, Furukawa, H., Yaghi, O. M. Ring-opening reactions within porous metal-organic frameworks *Inorg. Chem*. **2010**, *49*, 6387.

4 Phan, A., Doonan, C. J., **Uribe-Romo, F. J.**, Knobler, C. B., O'Keeffe, M., Yaghi, O. M. Synthesis, structure and carbon dioxide capture properties of zeolitic imidazolate

frameworks *Acc. Chem. Res.* **2009**. *43*, 58.

3 **Uribe-Romo, F. J.**, Hunt, J. R., Furukawa, H., Klöck, C., O'Keeffe, M., Yaghi, O. M. A crystalline, imine-linked 3-D porous covalent organic framework *J. Am. Chem. Soc*. **2009**, *131*, 4570.

2 Park, K. S., Ni, Z., Côté, A. P. Choi, J. Y. Huang, R.D., **Uribe-Romo**, **F. J.**, Chae, H. K., O'Keeffe, M., Yaghi, O. M. Exceptional chemical and thermal stability of zeolitic imidazolate frameworks *Proc. Natl. Acad. Sci. USA*, **2006**, *103*, 10186.

1 Grzesiak, A. L., **Uribe, F. J.**, Ockwig, N. W., Yaghi, O. M., Matzger, A. J. Polymer-induced heteronucleation for the discovery of new extended solids *Angew. Chem. Int. Ed.* **2006**, *45*, 2553-2556. (Highlighted as an Editors' Choice in the March 31, 2006 issue of Science Magazine)

Patents

From work performed at UCF

5 "Multivariate metal-organic frameworks for fine-tuning light emission" **Uribe-Romo, F. J.**, Newsome. W., Cordova-Guerrero, J., Mohammad-Pour, G. Provisional Patent Appl. 62/608,942. Submitted December 21, 2017.

4 "Photoredox active titanium-based metal organic frameworks and methods of making and use thereof" **Uribe-Romo, F. J.**, Logan. M. W., Hanson, K., Ayad, S. Provisional Patent Appl. 62/481,268. Submitted April 4, 2017.

3 "Mechanically shaped 2-dimensional covalent organic frameworks". **Uribe-Romo, F. J.**, Vazquez-Molina, D. A., Harper, J. K. Patent Appl. 62/631,139. Submitted July 12, 2016.

From previous work

2 "Graphene nanoribbons, methods of making the same, and uses thereof". Dichtel, W. R., Arslan, H., **Uribe-Romo, F. J.**, WO2012149257. Published November 1, 2012.

1 "Preparation of metal-triazolate frameworks". Yaghi, O. M, **Uribe-Romo, F. J.**, Gándara-Barragán, F., Britt, D. K., WO2012100224 A3. Published October 11, 2012.

Other non-peer reviewed publications

Uribe-Romo, F. J., Rodríguez-López, J., Videa, M. F. El gran futuro de lo más pequeño: Química y Nanotecnología. *Transferencia*, 71, July **2005**. Online February **2007**.

3. PRESENTATIONS AT MEETINGS AND OTHER INSTITUTIONS

Invited Seminar Presentations

28 Uribe-Romo, F. J. *Invited Faculty Talk*. New Sustainable Materials for High Efficiency Artificial Photosynthesis, Lithium Batteries, and LEDs. **UCF College of Sciences Dean's Advisory Board Meeting**. May 2018.

27 Uribe-Romo, F. J. *Invited Presentation*. Creativity, diversity, and student empowerment through scientific research. **UCF 2018 Leadership Empowerment Institute Seminar**. April 2018.

26 Uribe-Romo, F. J. *Invited Seminar Presentation.* Framework materials with complex properties for organic photoredox catalysis and solid-state ionic conductivity. **Universidad de Puerto Rico en Cayey**, 2nd annual Research Symposium, RISE Program, April 2018.

25 Uribe-Romo, F. J. *Invited Seminar Presentation.* Framework materials with complex properties for organic photoredox catalysis and solid-state ionic conductivity. **Georgetown University**, Department of Chemistry, January 2018.

24 Uribe-Romo, F. J. *Invited Seminar Presentation.* Framework materials with complex properties for organic photoredox catalysis and solid-state ionic conductivity. **University of California San Diego**, Department of Chemistry and Biochemistry, December 2017.

23 Uribe-Romo, F. J. *Invited Seminar Presentation.* Framework materials with complex properties for organic photoredox catalysis and solid-state ionic conductivity. **University of California Los Angeles**, Department of Chemistry and Biochemistry, December 2017.

22 Uribe-Romo, F. J. *Invited Seminar Presentation.* Metal-organic frameworks for efficient harvest, conversion, and transport of energy. **Texas A&M University**, Department of Chemistry, November 2017.

21 Uribe-Romo, F. J. *Invited Seminar Presentation.* Metal-organic frameworks for efficient harvest, conversion, and transport of energy. **Georgia Institute of Technology**, Department of Chemistry & Biochemistry, October 2017.

20 Uribe-Romo, F. J. *Invited Seminar Presentation.* Metal-organic frameworks for efficient harvest, conversion, and transport of energy. **University of Georgia**, Chemistry Department, October 2017.

19 Uribe-Romo, F. J. *Invited Seminar Presentation.* Metal-organic frameworks for efficient harvest, conversion, and transport of energy. **University of Delaware**, Department of Chemistry & Biochemistry, October 2017.

18 Uribe-Romo, F. J. *Invited Presentation.* Synthetic Materials for Artificial Photosynthesis. **TEDx Sedona**. Sedona, AZ, October 2017.

17 Uribe-Romo, F. J. *Invited Seminar Presentation.* Metal-organic frameworks for efficient

harvest, conversion, and transport of energy. **Massachusetts Institute of Technology**, Department of Chemistry, September 2017.

16 Uribe-Romo, F. J. *Invited Seminar Presentation.* Metal-organic frameworks for efficient harvest, conversion, and transport of energy. **University of California Berkeley**, Department of Chemistry, September 2017.

15 Uribe-Romo, F. J. *Invited Seminar Presentation.* Metal-organic frameworks for efficient harvest, conversion, and transport of energy. **University of Texas at Dallas**, Department of Chemistry and Biochemistry, August 2017.

14 Uribe-Romo, F. J. *Invited Seminar Presentation.* Metal-organic frameworks for efficient harvest, conversion, and transport of energy. **University of South Florida**, Department of Chemistry, April 2017.

13 Uribe-Romo, F. J. *Invited Seminar Presentation.* Metal-organic frameworks for efficient harvest, conversion, and transport of energy. **NIST Center for Neutron Research**, NIST, February 2017.

12 Uribe-Romo, F. J. *Invited UCF Science Café Seminar Series.* Tricking crystals to behave as liquids for efficient conversion and use of energy. **UCF College of Sciences / EH&S**, January 2017.

11 Uribe-Romo, F. J. *Invited Seminar Presentation.* Metal-organic frameworks for efficient harvest, conversion, and transport of energy. **NOVA Southeastern University**, Department of Chemistry and Physics, November 2016.

10 Uribe-Romo, F. J. *Invited Seminar Presentation.* Metal-organic frameworks for efficient harvest, conversion, and transport of energy. **Florida Institute of Technology**, Department of Chemistry, September 2016.

9 Uribe-Romo, F. J. *Invited Seminar Presentation.* Metal-organic frameworks for efficient harvest, conversion, and transport of energy. **Florida Atlantic University**, Department of Chemistry, October 2015.

8 Uribe-Romo, F. J. *Invited Skype Seminar Presentation.* Gas adsorption in porous materials. **University of Illinois Urbana-Champaign**, Department of Chemistry, March 2014.

7 Uribe-Romo, F. J. *Seminar Presentation.* Metal-organic frameworks for efficient harvest, conversion, and transport of energy. **University of Central Florida**, Graduate/Undergraduate seminar class, March 2015.

6 Uribe-Romo, F. J. *Invited Seminar Presentation.* Towards new metal-organic and covalent-organic frameworks for artificial photosynthesis, charge transport and nonlinear optics applications. **University of Illinois Urbana-Champaign**, Department of Chemistry, November 2013.

5 Uribe-Romo, F. J. *Invited Skype Seminar Presentation.* New metal-organic and covalent-organic frameworks for artificial photosynthesis, charge transport and nonlinear optics applications. **Instituto Tecnólogico y de Estudios Superiores de Monterrey**, Department of Chemistry, October 2013.

4 Uribe-Romo, F. J. *Seminar presentation.* New metal-organic and covalent-organic frameworks for artificial photosynthesis, charge transport and nonlinear optics applications. **University of Central Florida**, Graduate/Undergraduate seminar class, September 2013.

3 Uribe-Romo, F. J. *Invited Seminar Presentation.* Three, Two, and One Dimensional Covalently Linked Materials: Covalent Organic Frameworks and Graphene Nanoribbons. **University of Central Florida**, Department of Chemistry, January 2013.

2 Uribe-Romo, F. J. *Invited Seminar Presentation.* Three, Two, and One Dimensional Covalently Linked Materials: Covalent Organic Frameworks and Graphene Nanoribbons. **Oregon State University**, Department of Chemistry, November 2012.

1 Uribe-Romo, F. J. *Invited Seminar Presentation.* Three, Two, and One Dimensional Covalently Linked Materials: Covalent Organic Frameworks and Graphene Nanoribbons. **University of Illinois Chicago**, Department of Chemistry, October 2012.

Invited Conference Presentations

8 Uribe-Romo, F. J., *Invited Conference Presentation*. Unraveling the machinery of CO2 photoreduction and water stability in titanium metal-organic frameworks. **255th Annual Meeting of the American Chemical Society**, New Orleans, LA, United States, March 2018.

7 Uribe-Romo, F. J. *Invited Conference Presentation*. Lithium-ion conductivity in crystallographically aligned covalent organic frameworks. **American Crystallographic Association Annual Meeting 2017**, New Orleans, LA. May 2017.

6 Uribe-Romo, F. J. *Invited Conference Presentation*. Titanium Based Isoreticular Metal-Organic Frameworks for Photocatalytic Reduction of CO_2 under Blue Light. **Florida Section of the American Chemical Society FAME Annual Meeting**, Tampa, FL. May 2017.

5 Uribe-Romo, F. J. *Invited Conference Presentation.* Metal Organic Frameworks as Heterogeneous Catalysts for Organic Photoredox Reactions. **Florida Section of the American Chemical Society FAME Annual Meeting**. Tampa, FL. May 2016.

4 Uribe-Romo, F. J., Yaghi, O. M., Dichtel, W. R. *Invited Conference Presentation* Hydrazone-linked and highly oriented films of covalent-organic frameworks. **American Crystallographic Association Annual Meeting**. Boston, MA. August 2012.

3 Arslan, H. Uribe-Romo, F. J., Dichtel, W. R. **244th Annual Meeting of the American Chemical Society**, Philadelphia, PA, United States, August 2012.

2 Uribe-Romo, F. J., Gándara, F., O'Keeffe, M., Yaghi, O. M. *Ab initio* study of the crystal structure of frameworks materials from powder diffraction crystallography using charge-flipping. **American Crystallographic Association Anual Meeting**, Chicago, IL. Unites Stated, July 2010.

1 Yaghi, O. M., Uribe-Romo, F. J., Covalent organic frameworks. **238th Annual Meeting of the American Chemical Society**, Washington, DC, United States, August 2009.

Conference Presentations by Students

5 Newsome, W., Uribe-Romo, F.J. *Student Presentation.* Tunable Solid State Fluorescence in Isoreticular Metal Organic Frameworks. **Florida Section of the American Chemical Society FAME Annual Meeting**. Tampa, FL. May 2018.

4 Mohammad-Pour, G. S., Uribe-Romo, F. J. *Student Presentation.* **255th Annual Meeting of the American Chemical Society**, New Orleans, LA, United States, March 2018.

3 Newsome W., Uribe-Romo, F. J., *Student Presentation*. Metal–organic frameworks and their interactions with light. **255th Annual Meeting of the American Chemical Society**, New Orleans, LA, United States, March 2018.

2 Ly, Richard, Uribe-Romo, F. J. *Student Presentation.* Post-synthetic Scholl oxidation for accessing large polycyclic aromatic hydrocarbons as structural component in metal-organic frameworks. **253th Annual Meeting of the American Chemical Society**, San Francisco, CA. April 2017.

1 Logan, M. W. Uribe-Romo, F. J. *Student Presentation.* Robust Metal-Organic Frameworks for Visible-Light-Driven Photoredox Catalysis of *N*-hydroxy oxazolidinones. **Florida Inorganic and Materials Symposium**, September 2016.

Poster Sessions (Including those presented by students)

37 Logan, M., Uribe-Romo, F. J.,* Titanium Based Metal-Organic Frameworks for the Visible Light Photocatalytic Reduction of CO_2. **255th Annual Meeting of the American Chemical Society**, New Orleans, LA, United States, March 2018.

36 Lee, R., Uribe-Romo, F. J.,* Synthesis of Metal Organic Frameworks with Highly Conjugated Linkers. **255th Annual Meeting of the American Chemical Society**, New Orleans, LA, United States, March 2018.

35 Fairchild, F, Uribe-Romo, F. J.,* Towards the Design and Synthesis of Metal-Organic Frameworks for Targeted Separation of Heavy Pollutants. **255th Annual Meeting of the American Chemical Society**, New Orleans, LA, United States, March 2018.

34 Vazquez, D., Uribe-Romo, F. J.,* Lithium-ion conductivity in functionalized COFs. **255th Annual Meeting of the American Chemical Society**, New Orleans, LA, United States, March 2018.

33 Pope, G.M., Uribe-Romo, F. J.* Grafted covalent organic frameworks for fast ionic conductivity. **255th Annual Meeting of the American Chemical Society**, New Orleans, LA, United States, March 2018.

32 Uribe-Romo, F. J.* Lithium ion conductivity in crystallographically aligned covalent-organic frameworks. **Scialog Meeting**. Tucson, AZ, November 2017.

31 Vazquez-Molina, D. A., Uribe-Romo, F. J.* Anisotropic Ordering of Covalent Organic Frameworks for Potential as a Lithium-Ion Electrolyte for Lithium-Ion Batteries. **UCF Graduate Research Forum**. Orlando, FL, April 2017.

30 Logan, M. W., Uribe-Romo, F. J.* Optical Bandgap Control in Titanium Based Isoreticular Metal-Organic Frameworks for Photocatalytic Reduction of CO2 Under Blue Light. **Showcase of Undergraduate Research Excellence**, Orlando, FL, April 2017.

29 Pope G., Uribe-Romo, F. J.* Lithium-Ion Conductivity Studies in Covalent Organic Frameworks Functionalized with oligo(ethylene oxides). **Showcase of Undergraduate Research Excellence**, Orlando, FL, April 2017. **Honorific Mention**.

28 Ly R., Uribe-Romo, F. J.* Post-synthetic Scholl Oxidation for accessing large polycyclic aromatic hydrocarbons as structural component in metal-organic frameworks. **Showcase of Undergraduate Research Excellence**, Orlando, FL, April 2017.

27 Fairchild D., Uribe-Romo, F. J.* Synthesis of Metal Organic Frameworks Utilizing Highly Insoluble Components. **Showcase of Undergraduate Research Excellence**, Orlando, FL, April 2017.

26 Ezazi A., Uribe-Romo, F. J.* Lithium Ion Conductivity in Solid Anionic Covalent Organic Frameworks. **Showcase of Undergraduate Research Excellence**, Orlando, FL, April 2017.

25 Uribe-Romo, F. J.* Vazquez-Molina, D. A., Lee, C., Logan, M. W. Anisotropic crystallographic ordering in bulk covalent organic framework powders. MOF2016: 5th **International Conference on Metal-Organic Frameworks & Open Framework Materials**. Long Beach, CA, September 2016.

24 Vazquez-Molina, D. A., Uribe-Romo, F. J.* Anisotropic crystallographic ordering in bulk covalent organic frameworks. **American Crystallographic Association Annual Meeting**. Denver, CO, June 2016.

23 Tarano, O., Uribe-Romo, F. J.* Iodinated Metal-Organic Frameworks for the Separation of Gases in Spent Nuclear Fuel. **Showcase of Undergraduate Research Excellence**,

Orlando, FL, April 2016.

22 Newsome, W. Uribe-Romo, F. J.* Aniline Containing Metal Organic Frameworks with Redox Activity and Strong Dipoles. **Showcase of Undergraduate Research Excellence**, Orlando, FL, April 2016.

21 Abioye, A., Uribe-Romo, F. J.* Towards a light-driven release/activation of anticancer drugs within metal organic framework materials. **Showcase of Undergraduate Research Excellence**, Orlando, FL, April 2016.

20 Pour, G., Uribe-Romo, F. J.* Postsynthetic cyclodehydrogenation of a large pore zirconium based metal-organic framework. **UCF Graduate Research Forum 2016**. Orlando, FL, April 2016.

19 Vazquez-Molina, D. A., Lum, M. G., Uribe-Romo, F. J.* Towards the preparation of highly and functionalized porous covalent organic frameworks. **UCF Graduate Research Forum 2016**. Orlando, FL, April 2016.

18 Logan, M. W., Lau, Y. A., Zheng, Y., Hettinger, M. A., Marks,R. P., Hosler, M., Yuan, Y., Uribe-Romo, F. J.* Metal organic frameworks as catalysts for organic photoredox transformations. **UCF Graduate Research Forum 2016**. Orlando, FL, April 2016.

17 Pour, G., Uribe-Romo, F. J.* Postsynthetic cyclodehydrogenation of a large pore zirconium based metal-organic framework. **Young Researchers Conference, Alliance for the Diversity in Science and Engineering**. Los Angeles, CA, March 2016.

16 Vazquez-Molina, D. A., Lum, M. G., Uribe-Romo, F. J.* Towards the preparation of highly and functionalized porous covalent organic frameworks. **Young Researchers Conference, Alliance for the Diversity in Science and Engineering**. Los Angeles, CA, March 2016.

15 Logan, M. W., Lau, Y. A., Zheng, Y., Hettinger, M. A., Marks,R. P., Hosler, M., Yuan, Y., Uribe-Romo, F. J.* Metal organic frameworks as catalysts for organic photoredox transformations. **Young Researchers Conference, Alliance for the Diversity in Science and Engineering**. Los Angeles, CA, March 2016.

14 Pour, G., Uribe-Romo, F. J.* Postsynthetic cyclodehydrogenation of a large pore zirconium based metal-organic framework. **215th Annual Meeting of the American Chemical Society**. San Diego, CA, March 2016.

13 Vazquez-Molina, D. A., Lum, M. G., Uribe-Romo, F. J.* Towards the preparation of highly and functionalized porous covalent organic frameworks. **215th Annual Meeting of the American Chemical Society**. San Diego, CA, March 2016.

12 Logan, M. W., Lau, Y. A., Zheng, Y., Hettinger, M. A., Marks,R. P., Hosler, M., Yuan, Y., Uribe-Romo, F. J.* Metal organic frameworks as catalysts for organic photoredox transformations. **215th Annual Meeting of the American Chemical Society**. San Diego,

CA, March 2016.

11 Uribe-Romo, F. J.* Logan, M. W., Lau, Y., Zheng, Y., Hosler, M., Marks, R. P., Yuan, Y. Metal organic frameworks as catalysts for organic photoredox transformations. **North America Solid-State Chemistry Conference**. Tallahassee, FL, May 2015.

10 Mohammad, Z. M., Góngora, R., Uribe-Romo, F. J.* Naphthalene and perylene bisimides as light harvesting antennae in new catalysts for artificial photosynthesis. **UCF Showcase of Undergraduate Research Excellence**. Orlando, FL, April 2015. (Honorific mention)

9 Góngora, R., Uribe-Romo, F. J.* Porphyrin and bodipy as light harvesting antennae in new catalysts for artificial photosynthesis. **UCF Graduate Research Forum**. Orlando, FL, March 2015.

8 Logan, M. W., Lau, Y., Hettinger, M., Góngora, R., Jones, C., Zheng, Y., Yuan, Y., Uribe-Romo, F. J.* Metal organic frameworks as catalysts for organic photoredox oxidation of hydroxamic acids. **UCF Graduate Research Forum**. Orlando, FL, March 2015.

7 Uribe-Romo, F. J.,* Logan, M. W., Lau, Y., Zheng, Y., Hosler, M., Marks, R. P., Yuan, Y. Metal organic frameworks as catalysts for organic photoredox transformations. **Gordon Research Conference**. Ventura, CA, February 2015.

6 Logan, M. W., Lau, Y., Zheng, Y., Hosler, M., Marks, R. P., Yuan, Y., Uribe-Romo, F. J.* Metal organic frameworks as catalysts for organic photoredox transformations. **Gordon Research Seminar**. Ventura, CA, February 2015.

5 Uribe-Romo, F. J., Arslan, H., Dichtel, W. R. Bottom-up synthesis of graphene nanoribbons from poly-(*p*-phenylene-ethynylene). **244th Annual Meeting of the American Chemical Society**, Philadelphia, PA, United States, August 2012.

4 Gándara, F., Uribe-Romo, F. J., Britt, D. K., Furukawa, H., O'Keeffe, M., Yaghi, O. M. Metal triazolates as a new family of porous crystals. **241th Annual Meeting of the American Chemical Society**, Anaheim, CA, United States, March 2011.

3 Uribe-Romo, F. J., Furukawa, H., Yaghi, O. M. Synthesis and gas adsorption properties of microporous and mesoporous covalent organic frameworks. **239th Annual Meeting of the American Chemical Society**, San Francisco, CA, United States, March 2010.

2 Uribe-Romo, F. J., Hunt, J. R.; Furukawa, H., O'Keeffe, M., Yaghi, O. M. Reticular synthesis of a porous crystalline 3D covalent imine framework. **238th Annual Meeting of the American Chemical Society**, Washington, DC, United States, August 2009.

1 Uribe-Romo, F. J., Côté, A. P., El-Kaderi, H. M., Furukawa, H., Hunt, J. R., Yaghi, O. M. Design and synthesis of porous, crystalline 2-D covalent organic frameworks. **235th Annual Meeting of the American Chemical Society**, New Orleans, LA, United States, April 2008.

4. MEDIA RELEASES

10 Eckel, N. *083: Reversing Pollution with Fernando Uribe-Romo* [Podcast] BeTheTalk, April 22, 2018. https://www.bethetalk.com/podcast/083-Reversing-Pollution-with-Fernando-Uribe-Romo/

9 Stephens, R. *Could This Toy Help Save our Plant?* [Interview] UCF Today, March 22, 2018, UCF: Orlando, FL, 2018. https://today.ucf.edu/could-this-toy-help-save-our-planet/

8 Martins, P. *Criando Ar Limpo Atraves De Fotosintese Artificial* [Video Interview] Nanotechnologia Do Avesso, August 2017. Nano WebTV: Sao Paulo, Brazil 2017. https://www.youtube.com/watch?v=tp_JFJ25mqY

7 Holmes, J. *UCF professor discover process to clean up dirty air* [News Report] May 9, 2017, WFTV Channel: Orlando, FL 2017. http://www.wftv.com/news/local/ucf-professor-discover-process-to-clean-dirty-air/519368552

6 *Fernando Uribe-Romo on synthetic photosynthesis* [Video] UCF College and Campus News. April 2017. Viewed over 50,000 times: http://youtu.be/cdTuwe2SruA

5 Dormehl, L. *A new way to fake photosynthesis could help to put CO2 back where it belongs* [Online News Report] April 27, 2017, Digital Trends: 2017. https://www.digitaltrends.com/cool-tech/synthetic-material-clean-air-photosynthesis/

4 Reilly K., Fuel from CO2? Experiment brings it a step closer to reality [Online News Report] April 28, 2018 Christian Science Monitor: 2018. https://www.csmonitor.com/Environment/Energy/2017/0428/Fuel-from-CO2-Experiment-brings-it-a-step-closer-to-reality

3 Falk, D. *Can 'Bionic' Leaf solve our climate, energy problems?* [Online News Report] Mach Science May 30, 2017, NBC News: 2017. https://www.ncbnews.com/mach/science/can-bionic-leaf-solve-our-climate-energy-problems-n766031

2 Kotala, Z. *UCF Professor Invents Way to Trigger Artificial Photosynthesis to Clean Air, Produce Energy* [Press Release] UCF College and Campus News. September 1, 2016. https://today.ucf.edu/ucf-invents-way-trigger-artificial-photosynthesis-clear-air-produce-energy-time/
Featured in:
- Reddit.com Visited more than 80,000 times
- Eurekalert (AAAS) Visited more than 886,000 times
- BBC Radio London (interview)
- W Radio Colombia (interview)

1 Kotala, Z. *UCF Team tricks solid into acting as liquid* [Press Release] UCF College and Campus News, September 1, 2016. UCF: 2016. https://today.ucf.edu/ucf-team-tricks-solid-acting-liquid/
Featured in:
- Phys.org
- Science Newsline Technology
- Florida Research Consortium
- Innovation Toronto
- Follow News
- ACS in the news
- Science Daily
- UCLA Department of Chemistry and Biochemistry News

C. TEACHING

1. CLASSES TAUGHT

Graduate

Solid-State Inorganic Chemistry, CHM 6620 (Fall 2014, 2016)
Format: face-to-face

Undergraduate - higher division

Inorganic Chemistry, CHM 4610 (Spring 2014, 2015, 2016, 2017, 2018)
Format: hybrid (face-to-face and online)

Independent Study, CHM 4906, undergraduate section of CHM 6620, (Fall 2014, 2016)
Format: face-to-face

Undergraduate - lower division

Concepts in Chemistry, CHM 1020 (Summer B 2017)
Format: hybrid (face-to-face and online)

Chemistry Fundamentals I Honors, CHM 2045C (Fall 2013, 2015)
Format: face-to-face

Directed Research

Undergraduate Research, CHM 4912
Graduate Research, CHM 6918, CHM 6908
Doctoral Research, CHM 7919

2. COURSE DEVELOPMENT

Inorganic Chemistry (CHM 4610)

I restructured the syllabus and modernized course content using a new textbook (Miessler, Fisher, Tarr, Inorganic Chemistry, 5th Edition, Pearson), to put strong emphasis in the fundamentals of physical inorganic chemistry *i.e.* **Group Theory, Molecular Orbital Theory, and it applications**. This class was previously taught following a phenomenological/descriptive approach that is now outdated. The class was taught as a combination of PowerPoint slides and whiteboard notes, where all the lecture notes (*ca*. 40) were prepared from scratch. I created an

online section of the class on webcourses that I use to communicate with students, post class slides and notes, to make announcements and discussion topics, indicate homework problems, and to use it as interphase for homework assignment submission. Additionally, I implemented a **writing assignment** where students chose a topic in basic inorganic chemistry and wrote a mini review in a peer review style. Acting as "journal editor", I assigned each student to review two manuscripts, guiding them in the review method. Students had the opportunity to have their manuscripts reviewed by a total of four peers in two rounds of "submission". I found that students really appreciated the style of the activity and helped them to understand the method of writing scientific publications.

Solid-State Inorganic Chemistry (CHM 6620/4906)

I restructured the syllabus to fit a new textbook (West, Solid State Chemistry and its Applications, 2nd Ed., Wiley), which focuses on the basic and advanced topics of modern solid-state chemistry from **crystallographic, atomic, and property driven approach**. The class was taught as a combination of PowerPoint slides and whiteboard notes, where all the lecture notes (*ca*. 10) were prepared from scratch. I implemented a written assignment where each student of the graduate section selected a topic in modern inorganic solid-state chemistry and wrote an **original research proposal**, as a practice for their candidacy exam proposal. Each student presents their proposal in an oral presentation in from of the instructor and the class.

3. RESEARCH STUDENTS AND ADVISEES

* Indicates member of underrepresented groups in science

Postdoctoral Researchers

Dr. Yuen Lau* (Ph.D. UCLA, 2011), February 2014 – July 2014. Project title: *Development of synthetic methodology for photoredox catalysis in metal-organic frameworks*. (Currently Science Analyst at National Science Foundation, Alexandria, VA).

Dr. Jesus Cordova* (Ph.D. UCLA, 2011), October 2014 – December 2015. Project title: *Synthesis of iodinated metal-organic frameworks for the separation of Xe/Kr gas mixtures*. (Currently tenure track faculty at California Lutheran University, Sherman Oaks, CA).

Graduate Students (dissertation)

Matthew W. Logan* PhD Chemistry, Joined Fall 2013. Project title: *Metal-organic frameworks for photoredox catalytic applications.*
Status: Advanced to candidacy in May 2016. Projected graduation date: Summer 2018.

Gavin S. Mohammad-Pour PhD Chemistry, Joined Spring 2015, Project title: *Synthesis of high molecular weight polycyclic aromatic hydrocarbons.*
Status: Advanced to candidacy in May 2017. Projected graduation date: Fall 2018.

Demetrius A. Vazquez* PhD Chemistry, Joined Spring 2016. Project title: *Synthesis of covalent-organic frameworks for solid-state lithium ion electrolytes.*
Status: Advanced to candidacy in May 2018.

Wesley J. Newsome PhD Chemistry, Joined Summer 2016. Project title: *Synthesis of covalent-organic frameworks for tunable white-light emission.*
Status: Joined my research group in Fall 2016.

David Fairchild PhD Chemistry, Joined Summer 2017. Project Title: *Synthesis of metal-organic frameworks for the separation of heavy pollutants.*
Status: Joined my research group in Fall 2017.

Masters Students

Matthew Lum* M.S. Chemistry, Graduated Summer 2015. Project title: *Synthesis of functionalized isoreticular covalent-organic frameworks.*

Undergraduate Students (research mentor)

Angelique Tabbenor* B.S. Chemistry 2018 – present
Alexis Almonte* B.S. Chemistry 2018 – present
Erik Kelsey B.S. Chemistry 2018 – present
Jeremy Nuñez* B.S. Chemistry 2018 – present
Kyle Langlois B.S. Chemistry 2018 – present
Megan Vance* B.S. Chemistry 2018 – present
Matthew Way B.S. Chemistry 2018 – present
Giselle Pombar* B.S. Chemistry 2017 – present
Kwame Meares* B.S. Chemistry 2017 – present
Stav Gare* B.S. Biomedical Sciences 2017 – present
Nathan Aleger* B.S. Chemistry 2017
Juan Gomez* B.S. Chemistry 2017 – 2018
Nazish Mirza* B.S. Chemistry 2017 – 2018
Giovanna Pope* B.S. Chemistry 2016 – 2017 (Currently at UCF)
Richard Ly B.S. Chemistry 2016 – 2017
Zachary Magnuson B.S. Chemistry 2016 (Currently at U. of South Florida)
Andrew Ezazi B.S. Chemistry 2016 – 2017 (Currently at Texas A&M U.)
Karena Edun* B.S. Chemistry 2016 – 2017
David Fairchild B.S. Chemistry 2016 (Currently in my research group at UCF)
Alex Burnstine-Townley B.S. Chemistry 2016 – 2017 (Currently at Teknion U., Israel)
Jeremy Adamson B.S. Biomedical Sciences 2015 – 2018
Ariel Perry-Mills* B.S. Biomedical Sciences 2015 – present
Arturo Anese* B.S. Biomedical Sciences 2015 – present
Elizabeth Hall* B.S. Chemistry 2015 – 2016
Anson Cartwridge B.S. Chemistry 2015 – 2016 (Currently at U. of Florida)
Ben Nordman B.S. Chemistry 2015 – 2016
Oscar Tarano* B.S. Chemistry 2015 – 2016 (Currently at NOVA U.)
Wesley Newsome B.S. Chemistry 2015 – 2016 (Currently in my research group at UCF)
Dayo Abioye* B.S. Biomedical Sciences 2015 – 2016 (Currently at U. of South Florida)
Kyle Sanchez B.S. Biomedical Sciences 2015 – 2016 (Currently at UCF)

Zaid Mohammad Chemistry 2013–2015 (Currently at U. of Maryland Baltimore)
Demetrius Vazquez-Molina* B.S. Chemistry 2014 – 2015 (Currently in my research group at UCF)
Michelle Hettinger* B.S. Chemistry, 2014 – 2015
Jeremy Willman B.S. Chemistry 2013 – 2015 (Currently at Texas A&M U.)
Suliman Ayad B.S. Chemistry 2014 – 2015 (Currently at Florida State U.)
Chance Reimer B.S. Biomedical Sciences 2014
Charles Jones B.S. Chemistry, 2014
Matthew Hosler B.S. Biochemistry, 2013 –2014
Randal Marks B.S. Chemistry 2013 – 2014 (Currently at Notre Dame U.)

Post Graduate Advisees

Richard Ly B. S. Chemistry 2017 – 2018 (Currently in U. of South Carolina)
Alex Burnstine-Townley B.S. Chemistry 2016 – 2017 (Currently in Teknion U., Israel)
Monica Rivas* B.S. Chemistry 2014 – 2016 (Currently in U. of Illinois at Chicago)
Suliman Ayad B.S. Chemistry 2014 – 2015 (Currently in Florida State U.)

Informal Postdoctoral Advisees (advise on academic/industrial job search)

Dr. Minh Nguyen Cornell University.
Dr. Kenneth Hernandez-Burgos* University of Illinois Urbana–Champaign.

High School Advisees

Jonathan Sepulveda* Paul J. Hagerty High School, 2017 – present
Pearl Guan* Lake Howell High School, 2017 – 2018.
Aayush Shah Seminole High School, 2017 – present.
Alan Cat Timber Creek High School, 2013 – 2014.

D. SERVICE

1. Outreach

1 **Single Crystal Growing Competition** at Timber Creek High School's Science Club, Fall 2014. Students won 1st and 2nd place at the 2014 National Crystal Growing Competition.
2 **National Crystal Growing Competition**, Southeast regional coordinator and Judge 2015 – present.
3 **UCF STEM day** event participant and demonstrator (2015 – present).
4 **Talk** about research to high school students in Mountain View, CA. May 2017.

2. Journals reviewed

Reviewer for *Journal of the American Chemical Society* (12), *Chemical Science* (3), *Chemistry of Materials* (1), *Journal of Physical Chemistry* (1), *Inorganic Chemistry* (2), *Industrial and Engineering Chemistry Research* (4), *Crystal Engineering Communications* (21), *New Journal of Chemistry* (7), *Physical Chemistry Chemical Physics* (4), *ACS Applied Materials and Interphases* (2), *Chemical Society Reviews* (1), *Chemical Communications* (3), *RSC Advances* (1) *Cryst. Growth & Des.* (1) *J. Mater. Chem. A* (3) *Dalton Trans.* (3)

3. Grant proposals reviewed

Reviewed grant proposals for *ACS Petroleum Research Fund* (3), *NSF Review Panel* (2), *NSF Ad hoc reviewer* (2), *Army Research Office* (1).

4. Professional organizations - membership and leadership

American Chemical Society, Since 2008.
American Crystallographic Association, Since 2009.

Chair Elect 2018. Materials Science Special Interest Group. American Crystallographic Association, 2017.

5. Symposia organization

Symposia organization chair.

(3) American Crystallographic Association Annual Meeting 2018, Toronto, ON - "*Materials for a sustainable future.*"
(2) American Crystallographic Association Annual Meeting 2015, Philadelphia, PA - "*Porous and meso-scale structures.*"
(1) American Crystallographic Association Annual Meeting 2013, Honolulu, HI (July 2013) - "*Materials Discovery.*"

6. Committees

UCF Department of Chemistry

Physical and inorganic chemistry committee (2013-2015)
Safety committee (2013-2015)
Environmental Chemistry faculty search committee (2014-2015)
Materials chemistry faculty search committee (2015-2016)
Graduate curriculum committee (2017-present)

UCF College of Sciences

Graduate curriculum committee (2017-present)

UCF College of Sciences and College of Engineering

Steering Committee of the "Rational design of materials for catalysis and propulsion" Faculty Cluster Initiative (FCI).
Catalysis and propulsion faculty search committee (x5) (2015-2017).

7. Thesis committee member

Anthony Moore	Ph.D. candidacy, UCF Chemistry, December 2014. Advisor: Andres Campiglia
Carlos Diaz	Ph.D. dissertation, UCF Chemistry, May 2015. Advisor: Eloy Hernandez
Zahra Hooshmmand	Ph.D. candidacy, UCF Physics, May 2015 Advisor: Talat Rahman
Warinya Chemnasiri	Ph.D. dissertation, UCF Chemistry, October 2015 Advisor: Eloy Hernandez
Jeffrey Einkauff	Ph.D. dissertation, FAU Chemistry, June 2017

	Advisor: Daniel T. de Lill (FAU Chemistry)
Matthew Logan	Ph.D. candidacy, UCF Chemistry, May 2016 *Committee Chair*
Naseem Udin	Ph.D. candidacy, UCF Physics, December 2016 Advisor: Talat Rahman
Gavin Pour	Ph.D. candidacy, UCF Chemistry, May 2017 *Committee Chair*
Ilia Toli	Ph.D. candidacy, UCF Chemistry, November 2017 Advisor: Shengli Zou
Kathleen McCormac	Ph.D. candidacy, UCF Chemistry, November 2017 Advisor: Melanie Beazley
Alejandro Carrasco-Pena	Ph.D. candidacy, UCF MAE, April 2018 Advisor: Nina Orlovaskaya
Demetrius A. Vazquez-Molina	Ph.D. candidacy, UCF Chemistry, May 2018 *Committee Chair*

8. Student Group Advisor

Alliance for Diversity in Science and Engineering Florida Chapter: Faculty advisor of the newly created graduate student association (2016 – present).