

# **LeGrande M. Slaughter**

## **Curriculum Vitae (Full)**

Associate Professor of Chemistry

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Department of Chemistry

1155 Union Circle #305070

University of North Texas

Denton, TX 76203-5070

### **I. BACKGROUND**

#### **Education**

B.A., Summa Cum Laude, Drew University, Madison, NJ 1994

Major: Chemistry. Minors: Physics, German

Ph.D., Inorganic Chemistry, Cornell University, 2000

Doctoral Advisor: Professor Peter T. Wolczanski

Postdoctoral, Department of Chemistry, Stanford University, 2000-2002

Research Advisor: Professor James P. Collman

Visiting Postdoctoral Scholar, Technische Universität München, Germany

Summer 2002

#### **Professional Appointments**

Assistant Professor of Chemistry, Oklahoma State University, 8/2002 – 6/2008

Associate Professor of Chemistry, Oklahoma State University, 7/2008 – 8/2013

Associate Professor of Chemistry, University of North Texas, 8/2013 – present

#### **Research Interests**

Transition metal organometallic chemistry; Catalysis;

Structure-activity correlations in catalysis; Synthetic & medicinal applications

#### **Awards and Honors**

Founding Member, Phi Beta Kappa OSU Chapter, 2013

NSF-REU Undergraduate Mentors Travel Award, 2008

Sigma Xi Young Investigator Award, OSU Chapter, 2007

National Science Foundation CAREER Award, 2007

Invited participant, NSF Inorganic Workshop, 2006

EPSCoR Summer Salary Award, 2005

OSU Arts & Sciences Travel Award, 2004, 2007 & 2011

OSU Arts & Sciences Summer Research Award, 2003

Deutscher Akademischer Austausch Dienst Grant for Research in Germany, 2002

Barry M. Goldwater Scholarship, 1992-1994

Phi Beta Kappa National Honor Society, 1993

#### **Affiliations**

American Chemical Society (Inorganic and Organic Divisions)

American Association for the Advancement of Science

Sigma Xi

## II. RESEARCH

### Peer-Reviewed Publications

#### *Independent career (corresponding author\*)*

26. Nanayakkara, Y. S.; Woods, R. M., Breitbach, Z. S.; Slaughter, L. M.; Armstrong, D. W.\* “Enantiomeric separation of isochromene derivatives by high-performance liquid chromatography using cyclodextrin based stationary phases and principal component analysis of the separation data.” *Journal of Chromatography A* **2013**, *1305*, 94-101.
25. Handa, S.; Mathota Arachchige, Y. L. N.; Slaughter, L. M.\* “Access to 2'-substituted binaphthyl monoalcohols via complementary nickel-catalyzed Kumada coupling reactions under mild conditions: Key role of a P,O ligand.” *Journal of Organic Chemistry* **2013**, *78*, 5694-5699.
24. Singh, P.; Raj, R.; Bhargava, G.;\* Hendricks, D. T.; Handa, S.; Slaughter, L. M.; Kumar, V.\* “ $\beta$ -Lactam synthon-interceded diastereoselective synthesis of functionalized octahydroindole-based molecular scaffolds and their *in vitro* cytotoxic evaluation.” *European Journal of Medicinal Chemistry* **2012**, *58*, 513-518.
23. Owusu, M. O.; Handa, S.; Slaughter, L. M.\* “Chugaev-type bis(acyclic diaminocarbenes) as a new ligand class for the palladium-catalyzed Mizoroki-Heck reaction.” *Applied Organometallic Chemistry* **2012**, *26*, 712-717.
22. Sluch, I. M.; Miranda, A. J.; Elbjeirami, O.; Omary, M. A.; Slaughter, L. M.\* “Interplay of metallophilic interactions,  $\pi$ - $\pi$  stacking, and ligand substituent effects in the structures and luminescence properties of neutral Pt<sup>II</sup> and Pd<sup>II</sup> aryl isocyanide complexes.” *Inorganic Chemistry* **2012**, *51*, 10728-10746.
21. Slaughter, L. M.\* “Acyclic aminocarbenes in catalysis.” *ACS Catalysis* **2012**, *2*, 1802-1816. *Invited Perspective (critical review)*.
20. Handa, S.; Slaughter, L. M.\* “Enantioselective alkynylbenzaldehyde cyclizations catalyzed by chiral gold(I) acyclic diaminocarbene complexes that contain weak Au-arene interactions.” *Angewandte Chemie International Edition* **2012**, *51*, 2912-2915. *Designated a Very Important Paper (top 5%). Featured on journal back cover. Highlighted in Angewandte Chemie, Synfacts, and ChemCatChem.*
19. Subramanian, S. S.; Handa, S.; Miranda, A. J.; Slaughter, L. M.\* “Simple silver salts and palladium bis(N-heterocyclic carbene) complexes as complementary catalysts for the Nazarov cyclization.” *ACS Catalysis* **2011**, *1*, 1371-1374.
18. Raj, R.; Mehra, V.; Singh, P.; Kumar, V.; Bhargava, G.; Mahajan, M. P.\*; Handa, S.; Slaughter, L. M. “ $\beta$ -Lactam-synthon-interceded, facile, one-pot, diastereoselective synthesis of functionalized tetra/octahydroisoquinolone derivatives.” *European Journal of Organic Chemistry* **2011**, 2697-2704.

*Independent career (continued)*

17. Subramanium, S. S.; Slaughter, L. M.\* “Direct observation of a carbonylation reaction relevant to CO/alkene copolymerization in a methylpalladium carbonyl complex containing a bis(N-heterocyclic carbene) ligand.” *Dalton Transactions* **2009**, 6930-6933. ***Invited contribution for a special issue on NHC ligands. Designated a “Hot Article”.***
16. Wanniarachchi, Y. A.; Subramanium, S. S.; Slaughter, L. M.\* “Palladium complexes of bis(acyclic diaminocarbene) ligands with chiral N-substituents and 8-membered chelate rings.” *Journal of Organometallic Chemistry* **2009**, 694, 3297-3305.
15. Bunce, R. A.\*; Nammalwar, B.; Slaughter, L. M. “Divergent reactivity in tandem reduction-Michael ring closures of five- and six-membered cyclic enones” *Journal of Heterocyclic Chemistry* **2009**, 46, 854-860.
14. Sluch, I. M.; Miranda, A. J.; Slaughter, L. M.\* “Channeled polymorphs of *cis*-M(CNPh)<sub>2</sub>Cl<sub>2</sub> (M = Pt, Pd) with extended metallophilic interactions.” *Crystal Growth & Design* **2009**, 9, 1267-1270.
13. Slaughter, L. M.\* “‘Covalent self-assembly’ of acyclic diaminocarbene ligands at metal centers.” *Comments on Inorganic Chemistry* **2008**, 29, 46-72. ***Invited review article.***
12. Bunce, R. A.\*; Nago, T.; Sonobe, N.; Slaughter, L. M. “Benzo-fused heterocycles and carbocycles by intramolecular S<sub>N</sub>Ar and tandem S<sub>N</sub>2- S<sub>N</sub>Ar reactions.” *Journal of Heterocyclic Chemistry* **2008**, 45, 551-557.
11. Wanniarachchi, Y. A.; Slaughter, L. M.\* “Reversible chelate ring opening of a sterically crowded palladium bis(acyclic diaminocarbene) complex.” *Organometallics* **2008**, 27, 1055-1062.
10. Wanniarachchi, Y. A.; Kogiso, Y.; Slaughter, L. M.\* “Chiral palladium bis(acyclic diaminocarbene) complexes as enantioselective catalysts for the aza-Claisen rearrangement.” *Organometallics* **2008**, 27, 21-24.
9. Al-Far, A. M.; Slaughter, L. M.\* “*cis-cis-trans*-Bis(acetonitrile- $\kappa N$ )- dichloridobis(triphenylphosphine- $\kappa P$ )-ruthenium(II) acetonitrile disolvate.” *Acta Crystallographica, Section E: Structure Reports Online* **2008**, E64, m184.
8. Sluch, I. M.; Slaughter, L. M.\* “*trans*-Diaquadichloridobis(*N,N*-dimethylformamide- $\kappa O$ )manganese(II).” *Acta Crystallographica, Section E: Structure Reports Online* **2007**, E63, m3095.
7. Bunce, R. A.\*; Schammerhorn, J. E.; Slaughter, L. M. “(±)-2,3-Dialkyl-1,2,3,4-tetrahydroquinoline-3-carboxylic esters by a tandem reduction-reductive amination reaction.” *Journal of Heterocyclic Chemistry* **2007**, 44, 1051-1057.
6. Wanniarachchi, Y. A.; Slaughter, L. M.\* “One-step assembly of a chiral palladium bis(acyclic diaminocarbene) complex and its unexpected oxidation to a bis(amidine) complex.” *Chemical Communications* **2007**, 3294-3296.
5. Bunce, R. A.\*; Schammerhorn, J. E.; Slaughter, L. M. “Catalyst and pressure dependent reductive cyclizations for the diastereoselective synthesis of hexahydropyrrolo-[1,2-*a*]quinoline-5-carboxylic esters.” *Journal of Heterocyclic Chemistry* **2006**, 43, 1505-1511.

***Independent career (continued)***

4. Moncada, A. I.; Manne, S.; Tanski, J. M.; Slaughter, L. M.\* "Modular chelated palladium diaminocarbene complexes: Synthesis, characterization, and optimization of catalytic Suzuki-Miyaura cross-coupling activity by ligand modification." *Organometallics* **2006**, 25, 491-505.
3. Moncada, A. I.; Tanski, J. M.; Slaughter, L. M.\* "Sterically controlled formation of monodentate versus chelating carbene ligands from phenylhydrazine." *Journal of Organometallic Chemistry* **2005**, 690, 6247-6251. *Invited paper for a special issue on metal carbene chemistry.*
2. Moncada, A. I.; Khan, M. A.; Slaughter, L. M.\* "A palladium Chugaev carbene complex as a modular, air-stable catalyst for Suzuki-Miyaura cross-coupling reactions." *Tetrahedron Letters* **2005**, 46, 1399-1403.
1. Wanniarachchi, Y. A.; Khan, M. A.; Slaughter, L. M.\* "An unusually static, sterically hindered silver bis(N-heterocyclic carbene) complex and its use in transmetalation." *Organometallics* **2004**, 23, 5881-5884.

***Graduate and postdoctoral career (corresponding author\*)***

6. Slaughter, L. M.; Collman, J. P.\*; Eberspacher, T. A.; Brauman, J. I. "Radical autoxidation and autogenous O<sub>2</sub> evolution in manganese-porphyrin catalyzed alkane oxidations with chlorite." *Inorganic Chemistry* **2004**, 43, 5198-5204. *Featured on the cover of the August 23, 2004 issue of Inorganic Chemistry.*
5. Veige, A. S.; Slaughter, L. M.; Lobkovsky, E. B.; Wolczanski, P. T.\*; Matsunaga, N.; Decker, S. A.; Cundari, T. R. "Symmetry and geometry considerations of atom transfer: Deoxygenation of (silox)<sub>3</sub>WNO and R<sub>3</sub>PO (R=Me, Ph, <sup>t</sup>Bu) by (silox)<sub>3</sub>M (M=V, NbL (L=PMe<sub>3</sub>, 4-Picoline), Ta; silox=<sup>t</sup>Bu<sub>3</sub>SiO)." *Inorganic Chemistry* **2003**, 42, 6204-6224.
4. Collman, J. P.\*; Slaughter, L. M.; Eberspacher, T. A.; Strassner, T.; Brauman, J. I. "Mechanism of dihydrogen cleavage by high-valent metal oxo compounds: Experimental and computational studies." *Inorganic Chemistry* **2001**, 40, 6272-6280.
3. Veige, A. S.; Slaughter, L. M.; Wolczanski, P. T.\*; Matsunaga, N.; Decker, S. A.; Cundari, T. R. "Deoxygenations of (silox)<sub>3</sub>WNO and R<sub>3</sub>PO by (silox)<sub>3</sub>M (M = V, Ta) and (silox)<sub>3</sub>NbL (silox = <sup>t</sup>Bu<sub>3</sub>SiO): Consequences of electronic effects." *Journal of the American Chemical Society* **2001**, 123, 6419-6420.
2. Slaughter, L. M.; Wolczanski, P. T.\*; Klinckman, T. R.; Cundari, T. R. "Inter- and intramolecular experimental and calculated equilibrium isotope effects for (silox)<sub>2</sub>(<sup>t</sup>Bu<sub>3</sub>SiND)TiR + RH (silox = <sup>t</sup>Bu<sub>3</sub>SiO): Inferred kinetic isotope effects for RH/D addition to transient (silox)<sub>2</sub>Ti=NSi<sup>t</sup>Bu<sub>3</sub>." *Journal of the American Chemical Society* **2000**, 122, 7953-7975.
1. Slaughter, L. M.; Wolczanski, P. T.\* "Ti( $\mu$ :  $\eta^1$ ,  $\eta^1$ -OCMe<sub>2</sub>CH<sub>2</sub>PPh<sub>2</sub>)<sub>3</sub>Rh has a cylindrically symmetric triple bond." *Chemical Communications* **1997**, 2109-2110.

**Citation Metrics (Thomson Reuters ResearcherID B-1268-2008; as of January 2014)**

Career Publications: 32  
Total Citations: 635  
h-index: 15

**Patent Application**

1. Murray, R.A.; Slaughter, L. M.; Prema, D.; Chen, J. "Imino carbene compounds and derivatives, and catalyst compositions made therefrom." U.S. Patent Application No. 20120271018, filed March 2012 (provisional application filed April 2011).

**Conference Presentations, Oral, Invited**

1. TexSyn-1: Green Chemistry, Catalysis and Organic Synthesis in the Lone Star State, Austin, TX, May 2013
2. American Chemical Society Annual Pentasectional (Local) Meeting, Bartlesville, OK, April 2011.
3. American Chemical Society National Meeting, Anaheim, CA, March 2011. *Symposium in honor of Pete Wolczanski's receipt of the ACS Award in Organometallic Chemistry.*
4. Deutscher Akademischer Austausch Dienst/von Humboldt Foundation Alumni Meeting: "Building a Transatlantic Approach to Sustainability", New York, NY, October 2010.
5. NSF Inorganic Chemistry Workshop, Semiahmoo, WA, June 2006.

**Conference Presentations, Oral, Contributed**

1. American Chemical Society National Meeting, Indianapolis, September 2013 (2 presentations).
2. American Chemical Society National Meeting, New Orleans, April 2013.
3. Chirality 2012, Ft. Worth, TX, June 2012.
4. American Chemical Society Annual Pentasectional (Local) Meeting, Norman, OK, April 2010 (2 presentations).
5. American Chemical Society National Meeting, Washington, DC, August 2009.
6. American Chemical Society National Meeting, New Orleans, LA, April 2008.
7. American Chemical Society National Meeting, Boston, MA, August 2007.
8. American Chemical Society National Meeting, San Francisco, CA, September 2006.
9. American Chemical Society Annual Pentasectional (Local) Meeting, Bartlesville, OK, April 2006.
10. American Chemical Society Annual Pentasectional (Local) Meeting, Stillwater, OK, April 2005.
11. American Chemical Society National Meeting, San Diego, CA, March 2005.
12. American Chemical Society Midwest Regional Meeting, Manhattan, KS, October 2004.
13. American Chemical Society Annual Pentasectional (Local) Meeting, Tulsa, OK, October 2004.
14. American Chemical Society Southwest Regional Meeting, Ft. Worth, TX, September 2004.
15. American Chemical Society National Meeting, Philadelphia, PA, September 2004.
16. American Chemical Society National Meeting, Washington, DC, August 2000.
17. American Chemical Society National Meeting, Boston, MA, August 1998.

**Conference Presentations, Poster**

1. Gordon Research Conference on Organometallic Chemistry, Newport, RI, July 2009.
2. Gordon Research Conference on Organometallic Chemistry, Newport, RI, July 2007.
3. Gordon Research Conference on Organometallic Chemistry, Newport, RI, July 2004.
4. American Chemical Society Southwest Regional Meeting, Oklahoma City, OK, October 2003

**Conference Presentations Given By Students**

1. Aaron Ruch (Ph.D. student), American Chemical Society National Meeting, Indianapolis, September 2013, oral presentation.
2. Sachin Handa (Ph.D., 2013), American Chemical Society National Meeting, Anaheim, CA, March 2011, oral presentation.
3. Sri Subramanium (Ph.D., 2011), American Chemical Society National Meeting, Anaheim, CA, March 2011, oral presentation.
4. Sri Subramanium (Ph.D., 2011), American Chemical Society Annual Pentasectional (Local) Meeting, Norman, OK, April 2010, oral presentation.
5. Anthea Miranda (Ph.D., 2009), American Chemical Society Annual Pentasectional (Local) Meeting, Bartlesville, OK, April 2009, poster presentation.
6. Sri Subramanium (Ph.D. 2011), American Chemical Society Annual Pentasectional (Local) Meeting, Bartlesville, OK, April 2009, poster presentation.
7. Yoshitha Wanniarachchi (Ph.D. 2008), American Chemical Society National Meeting, New Orleans, LA, April 2008, oral presentation.
8. Ilya Sluch (B.S., 2009), American Chemical Society National Meeting, New Orleans, LA, April 2008, poster presentation.
9. Yoshitha Wanniarachchi (Ph.D. 2008), American Chemical Society Annual Pentasectional (Local) Meeting, Bartlesville, OK, April 2006, poster presentation.
10. Sudhakar Manne (M.S., 2005), Oklahoma Research Day State Conference, Edmond OK, November 2005, poster presentation.
11. Sudhakar Manne (M.S., 2005), Oklahoma EPSCoR Annual State Conference, Stillwater, OK, May 2005, poster presentation.
12. Adriana Moncada (M.S., 2005), American Chemical Society Midwest Regional Meeting, Manhattan, KS, October 2004, oral presentation.
13. Sudhakar Manne (M.S., 2005), American Chemical Society Southwest Regional Meeting, Ft. Worth, TX, September 2004, poster presentation.
14. Yoshitha Wanniarachchi (Ph.D., 2008), Oklahoma EPSCoR Annual State Conference, Stillwater, OK, May 2004, poster presentation.

**Invited Seminars: Primarily Undergraduate Universities**

*Texas A&M University-Commerce, April 17, 2009*

*Southeastern Oklahoma State University, Durant, OK, April 16, 2009*

*East Central University, Ada, OK, November 30, 2007*

*University of Central Oklahoma, Edmond, OK, April 7, 2006*

*Midwestern State University, Wichita Falls, TX, February 25, 2005.*

*Cameron University, Lawton, OK, February 23, 2005.*

### **Invited Seminars: Research Universities**

*Wichita State University, Wichita, KS, April 2012  
University of North Texas, Denton, TX, March 2012  
University of Alabama, Tuscaloosa, AL, March 2011  
Texas Christian University, Fort Worth, TX, September 2009  
Kansas State University, Manhattan, KS, November 2007  
University of Florida, Gainesville, FL, September 2007  
Rice University, Houston, TX, September 2007  
Texas A&M University, College Station, TX, September 2007  
University of Kansas, Lawrence, KS, April 2007  
University of North Texas, Denton, TX, April 2004.*

### **Current Research Support**

#### ***National Science Foundation (Chemical Catalysis Program, single PI, unsolicited)***

*Project title:* Harnessing Nonclassical Metal-Arene Interactions to Achieve Enantioselective Catalysis  
*Grant period:* July 2012 – June 2015  
*Award amount:* \$405,000

#### ***Oklahoma Center for the Advancement of Science & Technology, Health Research Program***

*Project title:* Novel Heterocycles Via Ligand-Tunable Gold Catalysis  
*Grant period:* August 2012 – July 2014  
*Award amount:* \$90,000

### **Previous Research Support**

*National Science Foundation CAREER Award (\$560,000; 2007 – 2012)  
Chevron Phillips Manager's Sponsored Research Grant (\$227,400; 2007 – 2011)  
Oklahoma EPSCoR NanoNet Seed Grant (\$42,145; 2004 – 2005)  
Petroleum Research Fund Type G Starter Grant (\$35,000; 2003 – 2005)  
OSU Environmental Institute Energy Research Grant (\$9444, 2003)*

### **Research Facilities Support**

#### ***OSU Core Facilities Support Award***

*Project title:* Single Crystal X-Ray Diffraction Facility Support  
*P.I.* Dr. Stacy D. Benson, P.I.  
*Grant period:* January 2008 – December 2008  
*Award amount:* \$51,000

## **Collaborations**

Daniel Armstrong (UT-Arlington)	Chiral separations
Richard A. Bunce (Oklahoma State U.)	Synthetic applications of catalysis
Thomas R. Cundari (U. of North TX)	Computational modeling
Vipan Kumar (Guru Nanak Dev U., India)	Synthetic methods & crystallography
Rex A. Murray (Chevron Phillips Co.)	Olefin polymerization catalysis
Mohammad A. Omary (U. of North TX)	Metal-based luminescence
Joseph M. Tanski (Vassar College)	X-ray crystallography
Steven E. Wheeler (Texas A&M)	Computational modeling

## **III. TEACHING AND MENTORING**

### **Undergraduate Courses Taught at UNT (# of students; average student evaluation score) Evaluation scale 1-5; 1 best**

General Chemistry for Science Majors (CHEM 1410)	Fall 2013	(207; 1.97)
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### **Undergraduate Courses Taught at OSU (# of students; average student evaluation score) Evaluation scale 0-4; 4 best**

General Chemistry—Honors (CHEM 1314H)	Fall 2012	(44; 3.7/4.0)
General Chemistry II—Honors (CHEM 1515H)	Spring 2013	(41; 3.9/4.0)
General Chemistry for Engineers (CHEM 1414)	Fall 2006	(237; 3.0/4.0)
	Fall 2007	(262; 3.3/4.0)
	Spring 2009	(146; 3.3/4.0)
	Spring 2010	(180; 3.5/4.0)
	Summer 2012	(16; no eval)
Descriptive Inorganic Chemistry (CHEM 3353)	Spring 2004	(22; 3.4/4.0)
	Spring 2005	(14; 3.8/4.0)
	Spring 2006	(18; 3.5/4.0)
	Spring 2007	(18; no eval)
	Spring 2008	(21; 3.7/4.0)
	Spring 2011	(16; 3.3/4.0)
	Spring 2012	(13; 3.5/4.0)

### **Graduate Courses Taught at OSU (# of students; average student evaluation score) Evaluation scale 0-4; 4 best**

Advanced Inorganic Chemistry I (CHEM 5260, OSU)	Fall 2003	(16; 3.8/4.0)
	Fall 2004	(29; 3.5/4.0)
	Fall 2009	(20; 3.4/4.0)
	Fall 2011	(21; 3.5/4.0)
Solid-State Chemistry (CHEM 5283, OSU)	Spring 2003	(15; 3.5/4.0)
Special Topics: Organometallic Chemistry (CHEM 6650)	Fall 2002	(6; 3.9/4.0)
	Fall 2005	(7; 3.5/4.0)
	Fall 2008	(3; 4.0/4.0)
	Fall 2010	(10; 3.3/4.0)

**Current Postdoctoral Advisee**

Sri S. Subramanium	8/13 – 8/14; at OSU on 1-year fellowship from home
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**Recent Postdoctoral Advisees**

Jinhui Chen	10/09 – 6/10	
Dipesh Prema	8/07 – 7/09	Thompson Rivers Univ., BC, Canada

**Current Graduate Advisees**

Yohan Mathota Arachchige	Ph.D. student, 5 <sup>th</sup> year	10/09 – present
Aaron Ruch	Ph.D. student, 3 <sup>rd</sup> year	8/11 – present
Sarah Khani	Ph.D. student, 1 <sup>st</sup> year	11/13 – present
Philip Duong	Ph.D. student, 1 <sup>st</sup> year	11/13 – present

**Recent Graduate Advisees (career total: 4 Ph.D. dissertations, 3 M.S. theses)**

Sachin Handa	Ph.D. 2013	Postdoc, UC Santa Barbara
Sri S. Subramanium	Ph.D. 2011	Lecturer, Univ. of Kelaniya, Sri Lanka
Anthea J. Miranda	Ph.D. 2009	Seeking industrial jobs in India
Yoshitha A. Wanniarachchi	Ph.D. 2008	Postdoctoral scientist at MIT; Now at Pfizer Nebraska
Millicent O. Owusu	M.S. 2006	Empl. at Corning, Inc., Corning NY
Adriana I. Moncada	M.S. 2005	Ph.D. Texas A&M, 2010; Now at Dow Chemical, Michigan
Sudhakar Manne	M.S. 2005	Takeda Global Research, Chicago

**Undergraduate and High School Research Students**

Justin Leung	TAMS student	11/13 - present
Maeghan Murie-Harting	REU Supplement Awardee	5/13 – 8/13
James Le	Freshman Research Scholar, Niblack Research Scholar	
Aaron Ruch	Undergraduate Research Assistant	1/10 – 8/11
Shanetha Collier	Honors Thesis; B.S. 2009	6/10 – 8/11
Chris G. Palmer	REU student, NSU-Tahlequah	2/09 – 5/09
Ilya Sluch	High School Summer Intern '05, Freshman Research Scholar, Wentz Scholar, REU Student, Honors Thesis; B.S. 2009	5/09 – 8/09
Amanda Miller	REU student, Outreach Assistant	9/06 – 8/09
Chase Winkel	RA and Outreach Assistant	5/08 – 8/08
Tahereh Hajimirzaei	Niblack Research Scholar	5/07 – 12/07
Yuri Kogiso	M.S. Ohio State, 2008	9/05 – 8/06
Tamiko Uomori	B.S., 2004	8/03 – 5/05
Lindy Dewlen	B.S. 2005	1/04 – 5/04
Michelle Ward	B.S. 2005, then OU Medical School	5/04 – 8/04
Deirdre Sidner	B.S. 2003	9/03 – 4/04
		9/02 – 5/03

## Awards Won By Student Advisees

### *Graduate Students*

Sachin Handa	OSU Distinguished Graduate Fellowship, 2012
Yohan Mathota Arachchige	Dermer Award for Outstanding Graduate Student, 2012
Sri Subramanium	OSU Graduate Research Excellence Award, 2012
	Dermer Award for Outstanding Graduate Student, 2008
Yoshitha Wanniarachchi	Travel Award, ACS Div. of Inorganic Chem., 2008
	Outstanding Poster, ACS Pentasectional Meeting, 2006
	Dermer Award for Outstanding Graduate Student, 2004

### *Undergraduate Students*

Michelle Ward	Wentz Research Project Scholarship, 2003 – 2004
Tahereh Hajimirzaei	Niblack Research Scholar, 2005 – 2006
Amanda Miller	Hach Scientific Foundation Chemistry Teachers' Scholarship, 2008 – 2009
Ilya Sluch	Freshman Research Scholar, 2006 – 2007
	Best Oral Presentation, Freshman Research Scholar Symposium, 2007
	Wentz Research Project Scholarship, 2007 – 2008
	ACS Oklahoma Section Travel Award (to ACS National Meeting, New Orleans), 2008
	NSF-REU Chemistry Leadership Travel Award, 2008
	Barry M. Goldwater Scholarship, 2008
	Outstanding Graduate, OSU College of A&S, 2009

## Graduate Advisory Committees (Past and Present)

Masters Committees (Chemistry)	8
Masters Committees (Physics)	2
Doctoral Committees (Chemistry)	36

## IV. SERVICE AND EXTENSION

### Departmental Committees and Special Assignments

<i>UNT</i>	
Graduate Recruiting Committee	Sept 2013 – present
<i>OSU</i>	
Faculty Search Committee	2002 – 2004, 2006 – 2007
Promotion and Tenure Committee	2003 – 2004, 2008 – 2009, 2012 – 2013
Graduate Affairs Committee	2003 – 2005, 2010 – 2013
Safety Committee	2004 – 2008
Awards Committee	2005 – 2007
Curriculum Committee (ACS/CPT)	2008 – 2010
Department Chair Search Committee	2008 – 2009

**Departmental Committees and Special Assignments, continued**

Facilities/Space Committee	2010 – 2013
Graduate Coordinator/Admissions Chair	2009 – 2013
Manager, OSU X-Ray Diffraction Facility	2011 – 2013

**University Committees**

OSU Graduate Faculty Group 3 Membership Committee, 2009

**Service in Professional Organizations**

Secretary, Sigma Xi, OSU Chapter, 2009-2011  
Founding Member, Phi Beta Kappa OSU Chapter, 2013

**Session Chair at Professional Meetings**

Organometallic Synthesis Oral Presentation Session, ACS National Meeting,  
Boston (August 2007)  
Organometallic Catalysis Oral Presentation Session, ACS National Meeting,  
Washington, DC (August 2009)  
Organometallic Catalysis Oral Presentation Session, ACS National Meeting,  
Indianapolis (September 2013; fill-in for absent chair)

**Peer Review, Granting Agencies**

Petroleum Research Fund	(7)
National Science Foundation	(12)
Louisiana State Board of Regents Support Fund	(1)

**Peer Review, Journals**

<i>Acta Crystallographica</i>	(1)
<i>Advanced Synthesis &amp; Catalysis</i>	(1)
<i>Angewandte Chemie</i>	(7)
<i>Applied Organometallic Chemistry</i>	(2)
<i>Chemical Communications</i>	(5)
<i>Chemical Reviews</i>	(1)
<i>ChemSusChem</i>	(1)
<i>Coordination Chemistry Reviews</i>	(1)
<i>Dalton Transactions</i>	(15)
<i>European Journal of Inorganic Chemistry</i>	(1)
<i>Inorganic Chemistry</i>	(2)
<i>Journal of the American Chemical Society</i>	(3)
<i>Journal of Organometallic Chemistry</i>	(3)
<i>Organometallics</i>	(18)
<i>Pure &amp; Applied Chemistry</i>	(1)
<i>Tetrahedron Letters</i>	(2)

### **Textbook Review**

Shriver & Atkins *Inorganic Chemistry*, 5<sup>th</sup> Ed. 2008

### **Educational Outreach**

Judge, Oklahoma EPSCoR Virtual Science Fair  
*Cyber-enabled statewide event for students grades 4-12.*  
April 2005

Invited participant and speaker, Career Awareness Day, Cameron University  
*Student-organized event to introduce undergraduates to career opportunities in science.*

February 2005, February 2007

Catalyzing Discovery—an Interactive Laboratory Exercise  
*Organized interactive lab/lecture to introduce rural high schools students to research through hands-on experiments with polymerization catalysts*  
2005 – 2012 with funding from Chevron Phillips and NSF CAREER award.

Cyberspace Research Summit (CReS)  
*Outreach program to introduce rural high school students to the benefits of scientific research through Web-enabled videoconference interactions with industrial and academic scientists.*  
Supported by NSF CAREER award (2007-2012).