

## **Bert D. Chandler, Ph.D.**

### **Education**

Ph.D. in Inorganic Chemistry, University of Minnesota, August 1999

Thesis: The Preparation and Characterization of Highly Dispersed Supported Bimetallic Particle Catalysts from Inorganic and Organometallic Molecular Precursors (Advisor: Prof. Lou Pignolet)

Bachelor of Science in Chemistry, *Summa Cum Laude*, Georgia Southern University, June 1994

### **Professional Employment**

- 6/12 – present Professor; Department of Chemistry, Trinity University, San Antonio, TX.
- 6/07 – 5/12 Associate Professor; Department of Chemistry, Trinity University, San Antonio, TX.
- 8/10 – 12/10 Interim Chair; Department of Chemistry, Trinity University, San Antonio, TX.
- 8/08 – 8/09 Visiting Scientist, Center for Atomic Scale Molecular Design, Dept of Physics, & Center for Sustainable Chemistry and Catalysis, Dept. of Chemistry, Danish Technical University, Lyngby, DK
- 9/01 – 5/07 Assistant Professor; Department of Chemistry, Trinity University, San Antonio, TX.
- 9/99 – 9/01 USC-BASF Research Associate; Department of Chemical Engineering, University of South Carolina, Columbia, SC.
- 6/99 – 8/99 Lecturer; Department of Chemistry, University of Minnesota, Minneapolis, MN.
- 9/94 – 6/99 Teaching/Research Assistant; Department of Chemistry, University of Minnesota, Minneapolis, MN.
- 9/92 – 8/94 Teaching Assistant; Dept. of Chemistry, Georgia Southern University, Statesboro, GA.

### **Honors, Awards, and Distinctions**

- 2007 Henry Dreyfus Teacher-Scholar Award
- 2005 National Science Foundation CAREER Development Award
- 2004 Trinity University Junior Faculty Award for Distinguished Teaching and Research
- 1999 Outstanding Chemistry Teaching Assistant, Dept. of Chemistry, University of Minnesota
- 1994 - 1995 University of Minnesota Graduate School Fellow
- 1994 Georgia Southern University Outstanding Senior Chemistry Major
- 1994 Georgia Southern University Leadership / Service Award
- 1994 Georgia Southern University Award for Excellent Scholarship
- 1993 - 1994 Georgia Southern University Student Government Association Scholarship
- 1993 Georgia Southern University Outstanding Organic Chemistry Student
- 1993 Who's Who Among Students in American Universities and Colleges
- 1992 Undergraduate Award in Analytical Chemistry - ACS Division of Analytical Chemistry
- 1991 CRC Outstanding Freshman Chemistry Student

### **Courses Taught**

- Chemistry 1300: Introduction to Chemistry (2011)
- Chemistry 1318: General Chemistry (2001, 2002; 2004-6, 2012)
- Chemistry 3321: Inorganic Chemistry (2002-8, 2010, 2012)
- Chemistry 4346: Understanding Reaction Mechanisms through Chemical Kinetics (2003-7; 2009-11)
- Chemistry 3101: Chemistry Departmental Seminar (2011-13)
- Chemistry 1118: Introduction to Analytical Methods (2001-3; 2007)
- Chemistry 2119: Laboratory Methods in Organic Chemistry (2011)
- Chemistry 3121: Inorganic Chemistry Laboratory (2012)

Chemistry 3221: Synthesis II (2002-8, 2010)  
Engineering 4191: Problems in Engineering (2011)  
Chemistry 4250: Senior Laboratory (2009, 10, 11)

### **Professional Activities**

Research Corporation

Scientific Advisory Board, 2012-2015

Organic Reactions Catalysis Society (ORCS)

Board of Directors, April 2006 – April 2010; April 2012-2016

Editorial Board, Catalysis of Organic Reactions, 2004 – 2008

Session Chair, 21<sup>st</sup> Conference on the Catalysis of Organic Reactions, April 2006

Session Chair, 20<sup>th</sup> Conference on the Catalysis of Organic Reactions, March 2004

Session Chair, 19<sup>th</sup> Conference on the Catalysis of Organic Reactions, April 2002

Southwest Catalysis Society

President 2013-present

Board of Directors, September 2009 – present

Member, Organizing Committee for the 2007 NACS Conference (Houston)

ORCS Liaison for Southwest Catalysis Club

National Science Foundation

Panelist, DMR Panel, June 2013

Panelist, Chemical Catalysis Panel, November 2011

Panelist, SBIR Panel (Catalytic Technologies), February 2010

Panelist, Graduate Research Fellowship Panel, February 2005

Reviewer 2004 – present

Gold 2009 Conference, Catalysis section

Session Chair

American Chemical Society, Inorganic Chemistry Division

Session Chair, “Catalysis for Sustainable Development” 233<sup>rd</sup> National Mtg, Chicago, IL, March 2007

American Chemical Society, Industrial and Engineering Chemistry Division

Finance Committee Member, 2003 – 2006

Secretary/Treasurer, Green Chemistry and Engineering Subdivision, 2002 – 2006

Memberships: American Chemical Society; North American Catalysis Society; Organic Reactions

Catalysis Society, American Association for the Advancement of Science

### **PhD Thesis Committees**

Anil Gaikwad, University of Amsterdam (Rothenberg Group), February 2009

Kresten Egeblad, Danish Technical University (Christiansen Group), February 2009

Jeppe Rass-Hansen, Danish Technical University (Christiansen Group), November 2008

Ganesh Vijayaraghavan, University of Texas at Austin (Stevenson Group), November 2007

### **Manuscript Reviews (last 10 years):**

Science, Nature, Angewandte Chemie International, J. the American Chemical Society, ACS Nano, Chemistry of Materials, Langmuir, J. Physical Chemistry, J. Catalysis, Macromolecules, ACS Catalysis, ACS Nano, Industrial & Engineering Chemistry Research, Advanced Synthesis & Catalysis, Canadian J. Chemistry, J. Molecular Catalysis A, Applied Catalysis A, Catalysis Today, Current Topics in Catalysis, Catalysis of Organic Reactions, Catalysis Communications, Topics in Catalysis

**Proposal Reviews (last 10 years):**

National Science Foundation, Department of Energy, Technology Foundation STW (Dutch NSF),  
American Chemical Society – Petroleum Research Fund, Research Corporation

**University Service**

Entrepreneurship Minor Advisory Committee 2011-present  
Intellectual Property Working Group 2011-present  
Faculty Evaluation Committee, 2010-2011  
Pedagogy Center Development Committee, 2010-2011  
Faculty Formal Complaint Committee, Summer 2010  
Chair, Admissions Advisory Committee, 2009-2012  
QEP Selection & Implementation Committees 2006-2008  
Faculty Advisor, Goldwater Scholarship 2003-2007  
Chair, Ad Hoc Committee on Summer Compensation and Related Issues, 2005-2006  
Library Activities Committee, September 2002 – 2005; Chair, 2004-05  
Head Librarian Review Committee, 2005-2006  
Health Professions Advisory Committee, 2004-present  
First Year Advisor, Fall 2002, 2004, 2006, 2009, 2011  
Faculty Advisor, Alpha Lambda Delta Honor Society 2003-2005  
Teaching at Trinity Workshop for New Faculty 2005

**Departmental Service**

Interim Chair, Fall 2010  
Beckman Scholar co-PI (w/ Laura Hunsicker-Wang), 2011-2013  
Coordinator for Summer Research Program, 2003 – 2010  
Seminar Coordinator, 2004, 2005, 2011-present  
1118 Lab Coordinator, Fall 2002, 2003, 2007  
Major Advisor, 2002 - present

**External Funding History** (over \$2,000,000 in external awards)

17. \$65,000 Petroleum Research Fund “Monitoring Changes in Nanoparticle Electronics with Hammett Studies of Dendrimer Templated Supported Au-M Catalysts” 10/13-9/16.
16. \$330,000 National Science Foundation “RUI: Preparation and Characterization of New Heterogeneous Bimetallic Au-M Catalysts for Selective Oxidations and Hydrogenations” 9/13-8/16.
15. \$350,000 National Science Foundation (with Chris Pursell & Rob Rioux, Penn State Univ.) “Quantifying Support Electron Donation with Hammett and CO Adsorption Studies” 9/12-8/15.
14. \$100,000 Jennifer Steele & Bert D. Chandler, Research Corporation Multi Investigator Cottrell College Science Award “Surface plasmon enhanced Forster resonance energy transfer in fluorescent molecules using metal wire gratings”. Award Period: 7/11-6/13.
13. \$96,500 Arnold & Mabel Beckman Foundation (with Laura Hunsicker-Wang) “Beckman Scholars Program in Chemistry & Biology at Trinity University”. Award Period: 5/11-15/14.

12. \$ 280,000 National Science Foundation “RUI: Preparation and Characterization of Dendrimer Templated Au-M Nanoparticles and Catalysts”. 9/1/10-8/31/13.
11. \$60,000 Camille & Henry Dreyfus Foundation – Henry Dreyfus Teacher-Scholar Award. Award Period: 1/08-12/12
10. \$50,000 American Chemical Society – Petroleum Research Fund Undergraduate Faculty Sabbatical Grant “Preparation and Characterization of Supported Nanoparticle Catalysts for Biorenewables Conversion”. Award Period: 8/08-7/09
9. \$108,620 National Science Foundation (with Adam Urbach (PI) and others) “Acquisition of a Circular Dichroism Spectropolarimeter with Stopped-Flow Detection for Undergraduate Research”. Award Period: 8/07-7/10.
8. \$150,000 Welch Foundation: “Dendrimer Templates for Supported Pt, Au, and Pd Bimetallic Catalysts” Award Period: 6/06-5/10.
7. \$57,441 National Science Foundation (co-PI with Brent Shanks, Iowa State University; \$305,000 total award) “Nanostructured Organic-Inorganic Hybrid Catalysts for Biorenewables Conversion”. Award Period: 3/05-2/09.
6. \$415,000 National Science Foundation CAREER Award “Chemical and Catalytic Characterization of Dendrimer Templated Bimetallic Nanoparticles” Award Period: 6/05-5/10. (1<sup>st</sup> CAREER Award in Trinity history)
5. \$150,000 Welch Foundation: “Catalytic Studies of Size and Compositionally Controlled Pt-Au and Pt-Ru Bimetallic Nanoparticles” Award Period: 6/03-5/06. (1<sup>st</sup> Asst. Prof. at Trinity to attract postdoctoral funding)
4. \$21,000 National Science Foundation NIRT Sub-award: “Nanoscale Interdisciplinary Research Teams: Dendrimer-Stabilized Nanoparticles for Next-Generation Catalysts” Award Period: 9/02 – 8/03
3. \$35,000 American Chemical Society – Petroleum Research Fund Type G Start-Up Grant: “Dendrimer Templates for Size and Compositional Control over Supported Bimetallic Catalysts: Platinum Based CO Oxidation Catalysts” Award Period: 1/02 – 8/04
2. \$40,250 Research Corporation Cottrell College Science Award: “PAMAM Dendrimers as Nanoreactors for Size, Composition, and Morphological Control over Supported Au-M Particles” Award Period: 1/02 – 8/04
1. \$72,000 National Science Foundation Major Research Instrumentation Program (w/ M. Bushey): “Acquisition of a Chemisorption-Physisorption Surface Area and Pore Size Analyzer for the Characterization of New Catalytic and Polymeric Materials at Trinity University” Award Period: 9/01 – 8/04

## Color Key for Publications and Presentations

Blue: BDC as Corresponding Author or collaborator

Red: Trinity University Undergraduate Researcher

Green: Trinity University Postdoctoral Fellow

Purple: Primary author or presenter if not BDC, TU Undergraduate, or TU Postdoctoral Fellow.

All Publications have been refereed unless otherwise noted

## Invited Papers and Book Chapters

4. Chandler, BD; Lee, J-K; Kung, HH; & Kung, MC "Use of Dendrimers in Catalysis" Invited book chapter in *Design of Heterogeneous Catalysts. New Approaches based on Synthesis, Characterization, and Modeling* (Umit Ozkan, Ed.), p59-81, **2009**, Wiley-VCH, Weinheim, Germany. **Featured on book cover.**
3. Chandler, BD & Gilbertson, JG "PAMAM Dendrimer Templated Nanoparticle Catalysis" Invited book chapter in *Nanoparticles and Catalysis* (Didier Astruc, Ed.), p129-160, **2008**, Wiley-VCH, Weinheim, Germany.
2. Lang, H; Chandler, BD; "Dendrimer Templates for Supported Nanoparticle Catalysts" Invited chapter in *Nanotechnology in Catalysis* (B. Zhou, Ed.), vol. 3, p 91-113, **2007**, Springer, Seacucus, NJ.
1. Chandler, BD & Gilbertson, JG "Dendrimer-Encapsulated Bimetallic Nanoparticles: Synthesis, Characterization, and Applications to Catalysis" Invited book chapter in "Dendrimer Catalysis" *Topics in Organometallic Chemistry* (Lutz Gade, Ed.), vol. 20, p97-120, **2006**, Springer, Heidelberg, Germany.

## Publications

27. Chandler, BD; Abild-Pederson, F, Jiang, T, Nørskov, JK; "Tuning Au Surface Chemistry with Heterometals: A Computational Study" *The Journal of the American Chemical Society*, **in preparation**.
26. Ward, T; Hahn, R; Kendall, S; Pursell, CJ; Chandler, BD; "CO adsorption, CO oxidation, and Toluene Hydrogenation on Au and Pd-Au Catalysts" *ACS Catalysis*, **in revision**.
25. Saavedra, J; Powell, C; Panthi, B; Pursell, CJ; Chandler, BD; "CO Oxidation over a Au/TiO<sub>2</sub> Catalyst: Pretreatment Effects, Catalyst Deactivation, and Carbonates Production" *The Journal of Catalysis*, **2013**, v307 p37-47.
24. Pursell, CJ; Hartshorn, H; Ward, T; Chandler, BD; Boccuzzi, F; "CO Adsorption on Supported Gold Nanoparticle Catalysts: Application of the Temkin Model" *The Journal of Physical Chemistry C*, **2012**, v116 p11117.
23. Chandler, BD; Kendall, S; Doan, H; Korkosz, R; Grabow, LC Pursell, CJ "Bromide Poisoning of Au/Titania Catalysts" *ACS Catalysis*, **2012**, v2 p684-694.
22. Pursell, CJ; Hartshorn, H; Ward, T; Chandler, BD; Boccuzzi, F; "Application of the Temkin Model to the Adsorption of CO on Gold" *The Journal of Physical Chemistry C*, **2011**, v115 p23880-23892.
21. Yau, SH; Varnavski, Oleg; Gilbertson, JD; Chandler, BD; Ramakrishna, G; Goodson, T. "Ultrafast Optical Study of Small Gold Monolayer Protected Clusters: A Closer Look at Emission" *The Journal of Physical Chemistry C*, **2010**, v114 p15979-15985.
20. Chandler, BD; Long, C; Gilbertson, JD; Vijayaraghavan, G; Stevenson, KJ; Pursell, CJ; "Improving Oxygen Activation Over Supported Au Catalysts Through the Controlled Preparation of Bimetallic Ni-Au Nanoparticles" *The Journal of Physical Chemistry C*, **2010**, v114 p11498-11508.
19. Hartshorn, H; Pursell, CJ; Chandler, BD; "Adsorption of CO on Supported Gold Nanoparticle Catalysts: A Comparative Study" *The Journal of Physical Chemistry C*, **2009**, v113 p10718-10725.

18. Hummelshoj, JS et.al.; "DFT based screening of ternary alkali-transition metal borohydrides - a computational materials design project" *The Journal of Chemical Physics*, **2009**, v 131 p014101.
17. Greer RM; Scruggs, BA; May, RA; Chandler, BD; "Patterning High Surface Area Silica with Lysozyme: Adsorption Kinetics, Fluorescence Quenching, and Protein Readsorption Studies to Evaluate the Templated Surface" *Langmuir*, **2009**, v25 p7161-7168.
16. Scruggs, BA; Kilgore, SL; Hruby, SL; Shanks, BL; Chandler, BD; "Preparation and Characterization of Supported Amine Catalysts" *Catalysis of Organic Reactions*, Michael L. Prunier, Ed., CRC Press: Boca Raton, FL, **2009**, pp 339-344.
15. Long, C; Gilbertson, JD; Vijayaraghavan, G; Stevenson, KJ; Pursell, CJ; Chandler, BD; "Kinetic Evaluation of Highly Active Supported Gold Catalysts Prepared from Monolayer Protected Clusters: An Experimental Michaelis-Menten Approach for Determining the Oxygen Binding Constant During CO Oxidation Catalysis" *Journal of the American Chemical Society*, **2008**, v130 p 10103-10115.
14. Crump, CJ; Gilbertson, JD; Chandler, BD; "CO Oxidation and Toluene Hydrogenation by Pt/TiO<sub>2</sub> Catalysts Prepared from Dendrimer Encapsulated Nanoparticle Precursors" *Topics in Catalysis*, **2008**, v49 p233-240.
13. Auten, BJ; Lang, H; Chandler, BD; "Dendrimer Templates for Heterogeneous Catalysts: Bimetallic Pt-Au Nanoparticles on Oxide Supports" *Applied Catalysis B*, **2008**, v81 p225-235.
12. Auten, BJ; Hahn, BP; Vijayaraghavan, G; Stevenson, KJ; Chandler, BD; "Preparation and Characterization of 3 nm Magnetic NiAu Nanoparticles" *Journal of Physical Chemistry C*, **2008**, v112 p5365-5372.
11. Gilbertson, JD; Chandler, BD; "Solid Phase Synthesis of Soluble Nanoparticles with Anchored, Recyclable Dendrimer Templates" *Langmuir*, **2007**, v23, p11239-11245.
10. Korkosz, RJ; Gilbertson, JD; Prasifka, KS; Chandler, BD; "Dendrimer Templates for Supported Au Catalysts" *Catalysis Today*, **2007**, v122, p370-377.
9. Auten, BJ; Crump, CJ; Singh, AR; Chandler, BD; "Dendrimer Templates for Pt and Au Catalysts" *Catalysis of Organic Reactions*, Steve R. Schmidt, Ed., CRC Press: Boca Raton, FL, **2007**, pp 315-323.
8. Hoover, N; Auten, BJ; Chandler, BD; "Tuning Supported Catalyst Reactivity with Dendrimer-Templated Pt-Cu Nanoparticles" *Journal of Physical Chemistry B*, **2006**, v110, p8606-8612.
7. Mueller, J; Cowell, A; Chandler, BD; Sigman, M; "Origin of Enantioselection in Chiral Alcohol Oxidation Catalyzed by Pd[(-)-sparteine]Cl<sub>2</sub>" *Journal of the American Chemical Society*, **2005**, v127, p14817-14824.
6. Singh, A; Chandler, BD; "Activation Conditions for Dendrimer Templated Pt Nanoparticle Catalysts" *Langmuir*, **2005**, v21, p10776-10782.
5. Beakley, LW; Yost, SE; Cheng, R; Chandler, BD; "Nanocomposite Catalysts: Dendrimer Encapsulated Nanoparticles Immobilized in Sol-Gel Silica" *Applied Catalysis A: General*, **2005**, v292, p124-129.
4. Lang, H; May, RA; Iversen, BL; Chandler, BD; "Deposition and Activation of Dendrimer Encapsulated Pt Nanoparticles for Heterogeneous Catalysts" *Catalysis of Organic Reactions*, J.R. Sowa, Ed.; Taylor & Francis Group / CRC Press: Boca Raton, FL, **2005**, pp 243-250.
3. Lang, H; Maldonado, S; Stevenson, K J.; Chandler, BD; "Synthesis and Characterization of Dendrimer Templated Supported Bimetallic Pt-Au Nanoparticles" *Journal of the American Chemical Society*, **2004**, v126, p 12949-12956.
2. Pursell, CJ; Chandler, BD; Bushey, MM "Capillary Electrophoretic Analysis of Cations in Water Samples: An Experiment for the Introductory Laboratory" *Journal of Chemical Education*, **2004**, v81, p1783-1786.
1. Lang, H; May, RA; Iversen, BL; Chandler, BD; "Dendrimer Encapsulated Nanoparticle Precursors to Supported Platinum Catalysts" *Journal of the American Chemical Society*, **2003**, v125, p14832-14836.

### **Invited Presentations and Seminars**

26. "Dendrimer Templates for Supported Au Catalysts" Western Washington University, Department of Chemistry, March 1, 2013.
25. "Dendrimer Templates for Supported Au Catalysts" University of Texas at Arlington, Department of Chemistry, December 7, 2012.
24. "Dendrimer Templates for Supported Au Catalysts" Louisiana State University, Department of Chemistry, November 19, 2012.
23. "Dendrimer templates and catalyst metrics for supported Au and Au-M catalysts" Advanced Metal Nanostructures for Catalysis Symposium, Inorganic Division, 244<sup>th</sup> ACS National Meeting, Philadelphia, PA August 21, 2012.
22. "Dendrimer Templates for Supported Au Catalysts" Rice University, Department of Chemistry, September 28, 2011.
21. "Dendrimer Templates for Supported Au Catalysts" Symposium on Chemically Synthesized Nanoparticles for Catalysis, Argonne National Laboratory, April 29, 2011.
20. "Heterogeneous Catalysts from Au and Au-M Nanoparticles: Preparation, Characterization, and Michaelis-Menten Kinetics of Low-Temperature CO Oxidation" Iowa State Univ., October 14, 2010.
19. "Dendrimer Templates for New Au and Au-Based Heterogeneous Catalysts" Max-Planck-Institut für Kohlenforschung, Mülheim, Germany, July 30, 2009.
18. "Dendrimer Templates for New Supported Au and Au-Ni Catalysts" Department of Chemistry, University of Milano, Milano, Italy May 20, 2009.
17. Dendrimer Templates for New Supported Au and Au-Ni Catalysts" Danish Chemical Society, Copenhagen, Denmark, March 31, 2009.
16. "Dendrimer Templates for New Supported Au and Au-Ni Catalysts" Laboitoire for Surface Chemie, Pierre & Marie Curie Institute, Paris, France, March 9, 2009.
15. "Dendrimer Templates for Supported Catalysts" Department of Applied Chemistry, Martin-Luther Wittenburg University, Halle, Germany, December 16, 2008.
14. "Dendrimer Templates for New Supported Au Catalysts: Preparation, Characterization, and CO Oxidation Kinetics" Department of Physics, University of Aarhus, Aarhus, Denmark, October 9, 2008.
13. "Dendrimer Templates for Supported Catalysts" Department of Chemistry, Copenhagen University, Copenhagen, Denmark September 26, 2008.
12. "Dendrimer Templates for Supported Nanoparticle Catalysts" Center for Green Chemistry and Catalysis, Technical University of Denmark, Copenhagen, Denmark September 5, 2008.
11. "Dendrimer Templates for Supported Nanoparticle Catalysts" Inorganic Chemistry Gordon Research Conference (Kim A. Johnson, Chair), Salve Regina University, Newport, RI, July 14, 2008.
10. "Integrating teaching and research at Trinity University" Oral Presentation at the 235<sup>th</sup> National Meeting of the American Chemical Society. New Orleans, LA April 2008.
9. "Dendrimer Templates for Supported Gold Catalysts" Chemistry Departmental Seminar, Texas Christian University, Fort Worth, TX, March 4, 2008.
8. "Dendrimer Templates for Supported Gold Catalysts" Chemistry Departmental Seminar, University of Houston, Houston, TX, February 12, 2008.

7. "CO Oxidation over Au and NiAu Supported Nanoparticles: Tuning the Catalytic Activity of Au" SW Regional American Chemical Society Meeting, Lubbock, TX, November 5, 2007.
6. "Dendrimer Templates for Supported Catalysts" North American Production Facility, Degussa Catalysts, Calvert City, KY, October 19, 2007.
5. "Dendrimer Templates for Supported Catalysts" Annual Meeting of the Southwest Catalysis Society, Rice University, Houston, TX, March 17, 2006.
4. "Dendrimer Templates for Supported Catalysts" Westhollow Research Center, Shell Global Solutions, Houston, TX, December 8, 2005.
3. "Dendrimer Encapsulated Nanoparticle Precursors to Heterogeneous Catalysts" Joint SE/SW Regional American Chemical Society Meeting, Memphis, TN, November 3, 2005.
2. "Dendrimer Routes to Compositionally Controlled Bimetallic Nanoparticle Catalysts" Chemistry Department Seminar at Texas Christian University, October 19, 2004.
1. "Dendrimer Routes to Compositionally Controlled Bimetallic Nanoparticle Catalysts" Chemistry Department Seminar at the University of Texas San Antonio, October 4, 2004.

### **Presentations from Teaching and Scholarship at Trinity**

30. Saavedra, J, Panthi, B, Pursell, CJ; Chandler, BD; "Kinetics Studies on Au CO Oxidation Catalysts: Understanding the Effects of Water, Carbonates, and Deuterium Isotopes" Oral Presentation at the North American Catalysis Society. Louisville, KY, June 2013.
29. Saavedra, J, Panthi, B, Pursell, CJ; Chandler, BD; "FTIR studies for Au/TiO<sub>2</sub> catalyst used in CO oxidation: Effect of activation conditions in reactivity and deactivation" Poster Presentation at Southwest Catalysis Society Spring Symposium, Houston, TX, April 2013.
28. Panthi, B, Saavedra, J, Pursell, CJ; Chandler, BD; "Thiol poisoning studies in selective alcohol oxidation: Evaluating the number of active sites on traditional and dendrimer templated supported Au nanoparticle catalysts" Poster Presentation at Southwest Catalysis Society Spring Symposium, Houston, TX, April 2013.
27. Saavedra, J, Panthi, B, Pursell, CJ; Chandler, BD; "FTIR studies for Au/TiO<sub>2</sub> catalyst used in CO oxidation: Effect of activation conditions in reactivity and deactivation" Oral Presentation at the 245<sup>th</sup> National Meeting of the American Chemical Society. New Orleans, LA, April 2013.
26. Panthi, B, Saavedra, J, Pursell, CJ; Chandler, BD; "Thiol poisoning studies in selective alcohol oxidation: Evaluating the number of active sites on traditional and dendrimer templated supported Au nanoparticle catalysts" Oral Presentation at the 245<sup>th</sup> National Meeting of the American Chemical Society. New Orleans, LA, April 2013.
25. Chandler, BD; "Heterogeneous Catalysis Research at Trinity University" Oral Presentation at the 245<sup>th</sup> National Meeting of the American Chemical Society. New Orleans, LA, April 2013.
24. Saavedra, J, Panthi, B, Powell, C, Pursell, CJ; Chandler, BD; "Activation Conditions and in-situ FTIR Studies for Au/TiO<sub>2</sub> CO Oxidation Catalysts" Poster Presentation at the Gordon Research Conference on Catalysis. New London, NH, June 2012..
23. Chandler, BD; Pursell, CJ; Gilbertson, JD; Long, CG; Hartshorn, H; Korkosz, RJ; "Old Tricks for New Dogs: Kinetics & Thermodynamics Studies of CO Oxidation over Au and Ni-Au Catalysts" Poster Presentation at the Gordon Research Conference on Catalysis. New London, NH, June 2010.
22. Chandler, BD; Pursell, CJ; Gilbertson, JD; Long, CG; Hartshorn, H; Korkosz, RJ; "Old Tricks for New Dogs: Kinetics & Thermodynamics Studies of CO Oxidation over Au and Ni-Au Catalysts" Poster Presentation at the Gordon Research Conference on Catalysis. Biddeford, ME, June 2010.



21. Chandler, BD; Pursell, CJ; Gilbertson, JD; Long, CG; Hartshorn, H; Korkosz, RJ; “Tuning and Understanding Oxygen Activation by Au with Supported Bimetallic NiAu Nanoparticles” Oral Presentation at Gold 2009: New Industrial Applications for Gold. Heidelberg, Germany, July 2009.
20. Long, CG; Korkosz, RJ; Hartshorn, H; Pursell, CJ; Chandler, BD “Tuning and Understanding Oxygen Activation by Gold: Synthesis and Characterization of New Au and Ni-Au Catalysts” Oral Presentation at the 21<sup>st</sup> Meeting of the North American Catalysis Society, San Francisco, CA, June 2009.
19. Long, CG; Gilbertson, JD; Pursell, CJ; Chandler, BD “Templated Au/TiO<sub>2</sub> & NiAu/TiO<sub>2</sub> Catalysts: Measuring O<sub>2</sub> Binding During CO Oxidation Catalysis” Poster Presentation at the Gordon Research Conference on Catalysis. New London, NH, June 2008.
18. Scruggs, BA; Kilgore, SL; Shanks, BH; Chandler, BD “Micellar templates and spectroscopic rulers for synthesis and characterization of site-isolated inorganic catalysts” Oral Presentation at the 22<sup>nd</sup> Conference on the Catalysis of Organic Reactions. Richmond, VA, April 2008.
17. Scruggs, BA; Kilgore, SL; Greer, RM; Pickett, T; Chandler, BD “Surface Templating for Supported Amine Catalysts” Oral Presentation at the 235<sup>th</sup> National Meeting of the American Chemical Society. New Orleans, LA, April 2008.
16. Long, CG; Gilbertson, JD; Chandler, BD “Low temperature CO oxidation kinetics by dendrimer templated supported Au catalysts” Oral Presentation at the 234<sup>th</sup> National Meeting of the American Chemical Society. Boston, MA, August 2007.
15. Long, CG; Gilbertson, JD; Chandler, BD “Dendrimer templates for supported Au and Au-M (M=Ni, Cu, Co) CO oxidation catalysts” Oral Presentation at the 234<sup>th</sup> National Meeting of the American Chemical Society. Boston, MA, August 2007.
14. Long, CG; Gilbertson, JD; Auten, B; Korkosz, R; Crump, CJ; Chandler, BD “Low temperature CO oxidation kinetics by dendrimer templated supported Au catalysts” Oral Presentation at the 20<sup>th</sup> Meeting of the North American Catalysis Society, Houston, TX, June 2007
13. Gilbertson, JD; Chandler, BD “Synthesis of Mono- and Bimetallic Nanoparticle Catalysts Utilizing Solid Phase Dendrimer Templates” Poster Presentation at the 20<sup>th</sup> Meeting of the North American Catalysis Society, Houston, TX, June 2007.
12. Gilbertson, JD; Long, CG; Auten, B; Korkosz, R; Crump, CJ; Chandler, BD “Dendrimer Templates for Supported Au and Bimetallic Au Catalysts” Oral Presentation at the 20<sup>th</sup> Meeting of the North American Catalysis Society, Houston, TX, June 2007.
11. Chandler, BD; Long, CG; Gilbertson, JD; “Low temperature CO oxidation kinetics by dendrimer templated supported Au catalysts” Oral Presentation at the 233<sup>rd</sup> National Meeting of the American Chemical Society. Chicago, IL March 2007.
10. Gilbertson, JD; Korkosz, R; Chandler, BD; “Highly active supported Au nanoparticles synthesized from anchored PAMAM dendrimers” Oral Presentation at the 232<sup>nd</sup> National Meeting of the American Chemical Society. San Francisco, CA. September 2006.
9. Chandler, BD; Gilbertson, JD; Auten, BJ; Crump, CJ “Dendrimer Templated Au and Au-M Nanoparticles: New Models for Au-based Catalysts” Oral Presentation at Gold 2006: New Industrial Applications for Gold. Limerick, Ireland, September 2006.
8. Chandler, BD “Protein Templates for Oxide Surfaces” Poster Presentation at the Gordon Research Conference on Catalysis. New London, NH, June 2006.
7. Auten, B; Hoover, N; Singh, A; Chandler, BD “Dendrimer Templates for Pt and Au Catalysts” Oral Presentation at the 21<sup>st</sup> Conference on the Catalysis of Organic Reactions. Orlando, FL, April 2006.

6. Lang, H; Auten, B; Hoover, N; Chandler, BD “Deposition and Activation of Dendrimer Encapsulated Pt Nanoparticles for Heterogeneous Catalysts” Oral Presentation at the 19<sup>th</sup> Meeting of the North American Catalysis Society in Philadelphia, PA, May 2005.
5. Chandler, BD “Dendrimer Routes to Supported Nanoparticle Catalysts” Poster Presentation at the Gordon Research Conference on Catalysis. New London, NH, June 2004.
4. Lang, H; Singh, A; May, RA; Iversen, BL Chandler, BD “Deposition and Activation of Dendrimer Encapsulated Pt Nanoparticles for Heterogeneous Catalysts” Oral Presentation at the 20<sup>th</sup> Conference on the Catalysis of Organic Reactions. Hilton Head, SC, March 2004.
3. Lang, H; Chandler, BD; “Dendrimer Templates for New Pt-Au Catalysts” Oral Presentation at the Gold 2003 Conference, hosted by the World Gold Council. Vancouver, BC, September 2003.
2. Lang, H; Iversen, BL; May, RA; Chandler, BD; Deutsch, DS; Sotito, L; Amiridis, MD; “Dendrimer Templates for Compositional Control of Bimetallic Catalysts” Oral Presentation at the 18<sup>th</sup> Meeting of the North American Catalysis Society in Cancun, Mexico, June 2003.
1. Lang, H; May, RA; Iversen, BL Chandler, BD “Preparation and Characterization of Nanocomposite Based Heterogeneous Catalysts: Effects of Nanocomposite Preparation Methods on Particle Properties” Oral presentation at the 225<sup>th</sup> National Meeting of the American Chemical Society. New Orleans, LA. March 2003

#### **Undergraduate Student Presentations at National Meetings (items 1-9 completed pre-tenure)**

17. Tibbitts, L; Chandler, BD “Hammett Studies of Benzyl Alcohol Oxidation over Supported Au Catalysts” Poster Presentation at the Southwest Catalysis Society Spring Symposium, Houston, TX, April 2013.
16. Tibbitts, L; Chandler, BD “Hammett Studies of Benzyl Alcohol Oxidation over Supported Au Catalysts” Poster Presentation at the 245<sup>th</sup> National Meeting of the American Chemical Society. New Orleans, LA, April 2013.
15. Korkosz, RJ; Chandler, BD “Dendrimer Templates for Supported Au Catalysts” Poster Presentation at the 237<sup>th</sup> National Meeting of the American Chemical Society. Salt Lake City, UT, March 2009.
14. Hartshorn, H; Pursell, CJ; Chandler, BD “Adsorption of CO on Supported Gold Nanoparticle Catalysts: A Comparative Study” Poster Presentation at the 237<sup>th</sup> National Meeting of the American Chemical Society. Salt Lake City, UT, March 2009.
13. Scruggs, BA; Kilgore, SL; Shanks, BH; Chandler, BD “Micellar templates and spectroscopic rulers for synthesis and characterization of site-isolated inorganic catalysts” Oral Presentation at the 235<sup>th</sup> National Meeting of the American Chemical Society. New Orleans, LA April 2008.
12. Scruggs, BA; Kilgore, SL; Shanks, BH; Chandler, BD “Micellar templates and spectroscopic rulers for preparing and characterizing supported catalysts on inorganic oxides” Poster Presentation at the 235<sup>th</sup> National Meeting of the American Chemical Society. New Orleans, LA April 2008.
11. Kilgore, SL; Scruggs, BA; Shanks, BH; Chandler, BD “Synthesis and characterization of new heterogeneous diacid catalysts” Poster Presentation at the 235<sup>th</sup> National Meeting of the American Chemical Society. New Orleans, LA April 2008.
10. Scruggs, B; Greer, R; Gilbertson, JD; Chandler, BD “Protein Templates & Spectroscopic Rulers for Silica Surfaces” Poster Presentation at the 20<sup>th</sup> Meeting of the North American Catalysis Society, Houston, TX, June 2007.
9. Auten, B. & Chandler, BD “Dendrimer Templated Magnetic Au-Ni Nanoparticles” Poster presentation at the Arnold and Mabel Beckman Foundation Conference. Irving, CA. July 2006.

8. **Crump, C. & Chandler, BD** "Activation Studies of Dendrimer Templated Pt/TiO<sub>2</sub> Nanoparticles" Poster presentation during the Undergraduate Symposium of the 231<sup>st</sup> National Meeting of the American Chemical Society. Atlanta, GA. March 2006.
7. **Auten, B. & Chandler, BD** "Dendrimer Templates for Supported Metal Catalysts: CO Oxidation Catalysis by Bimetallic Sites" Poster presentation during the Undergraduate Symposium of the 231<sup>st</sup> National Meeting of the American Chemical Society. Atlanta, GA. March 2006.
6. **Greer, R. & Chandler, BD** "Lysozyme Templates for Silica Surfaces" Poster presentation at the Arnold and Mabel Beckman Foundation Conference. Irving, CA. July 2005.
5. **Singh, A. & Chandler, BD** "A Study of Oxidation Treatments and the Activity of Dendrimer Templated Pt Nanoparticles" Poster presentation during the Undergraduate Symposium of the 229th National Meeting of the American Chemical Society. San Diego, CA. March 2005.
4. **Hoover, N. & Chandler, BD** "Pt-Cu Catalysts" Poster presentation during the Undergraduate Symposium of the 228th National Meeting of the American Chemical Society. Philadelphia, PA. August 2004.
3. **Greer, R. & Chandler, BD** "Templated Oxide Supports Using Alkylalkoxysilanes and Hen Egg Lysozyme" Poster presentation during the Undergraduate Symposium of the 228th National Meeting of the American Chemical Society. Philadelphia, PA. August 2004.
2. **May, RA; Lang, H; Chandler, BD** "CO Oxidation with Nanocomposite Based Heterogeneous Catalysts" Poster presentation during the Undergraduate Symposium of the 225th National Meeting of the American Chemical Society. New Orleans, LA. March 2003.
1. **Iversen, BL; Lang, H; Chandler, BD** "Toluene Hydrogenation with Nanocomposite Based Heterogeneous Catalysts" Poster presentation during the Undergraduate Symposium of the 225th National Meeting of the American Chemical Society. New Orleans, LA. March 2003.

#### **Undergraduate Presentations at Regional Meetings and Minisymposia (1-18 pre-tenure)**

24. **Hahn, R, Pursell, CJ, & Chandler, BD** "Cyclohexene Hydrogenation over Supported Au and Pd-Au Catalysts" Oral Presentation at the Minisymposium on Dendrimer Encapsulated Nanoparticles and Catalysts, University of Texas at Austin, July 27, 2011.
23. **Tibbitts, L & Chandler, BD** "Hammett Studies of Benzyl Alcohol Oxidation over Supported Au Catalysts" Oral Presentation at the Minisymposium on Dendrimer Encapsulated Nanoparticles and Catalysts, University of Texas at Austin, July 27, 2011.
22. **Castillo, C & Chandler, BD** "Synthesis of Dendrimer Encapsulated Au Nanoparticles" Oral Presentation at the Minisymposium on Dendrimer Encapsulated Nanoparticles and Catalysts, University of Texas at Austin, July 27, 2011.
21. **Ward, T, Pursell, CJ, & Chandler, BD** "CO Adsorption on Supported Au and Pd:Au Catalysts: An Infrared Spectroscopic Study" Oral Presentation at the Minisymposium on Dendrimer Encapsulated Nanoparticles and Catalysts, University of Texas at Austin, July 27, 2011.
20. **Kilgore, S; Pickett, T, & Chandler, BD** "Synthesis and Characterization of New Heterogeneous Acid-Base Catalysts" Oral Presentation at the 3<sup>rd</sup> Meeting on Catalyst Design for Biorenewables Conversion, Iowa State University, July 30, 2007.
19. **Scruggs, B. & Chandler, BD** "Designer Templates and Spectroscopic Rulers for Oxide Supported Catalysts" Oral Presentation at the 3<sup>rd</sup> Meeting on Catalyst Design for Biorenewables Conversion, Iowa State University, July 30, 2007.

18. Kilgore, S & Chandler, BD "Synthesis and Characterization of New Diacid Catalysts for Biorenewables Conversion" Oral Presentation at the 2<sup>nd</sup> Meeting on Catalyst Design for Biorenewables Conversion, Iowa State University, August 8, 2006.
17. Scruggs, B. & Chandler, BD "CTAB Micelles: New Designer Templates for Oxide Supported Catalysts" Oral Presentation at the 2<sup>nd</sup> Meeting on Catalyst Design for Biorenewables Conversion, Iowa State University, August 8, 2006.
16. Crump, C. & Chandler, BD "Activation Studies of Dendrimer Templated Pt/TiO<sub>2</sub> Nanoparticles" Oral Presentation at the 3<sup>rd</sup> Minisymposium on Dendrimer Templated Catalysts and Electrocatalysts, University of Texas at Austin, August 24, 2005.
15. Auten, B. & Chandler, BD "Dendrimer Templated Bimetallic Au-Ni Nanoparticles" Oral Presentation at the 3<sup>rd</sup> Minisymposium on Dendrimer Templated Catalysts and Electrocatalysts, University of Texas at Austin, August 24, 2005.
14. Baylan, J. & Chandler, BD "Nanostructured Organic-Inorganic Hybrid Catalysts for Biorenewables Conversion" Oral Presentation at the 1<sup>st</sup> Meeting on Catalyst Design for Biorenewables Conversion, Iowa State University, August 12, 2005.
13. Scruggs, B. & Chandler, BD "Polypeptide Templates for Oxide Surfaces" Oral Presentation at the 1<sup>st</sup> Meeting on Catalyst Design for Biorenewables Conversion, Iowa State University, August 12, 2005.
12. Singh, A. & Chandler, BD "A Study of Oxidation Treatments and the Activity of Dendrimer Templated Pt Nanoparticles " 2<sup>nd</sup> Minisymposium on Dendrimer Encapsulated Catalysts, Trinity University, July 26, 2004.
11. Perez, M. & Chandler, BD "Dendrimer Route to Magnesia Supported Gold Nanoparticles" Oral Presentation at the 2<sup>nd</sup> Minisymposium on Dendrimer Encapsulated Catalysts, Trinity University, July 26, 2004.
10. Isenberg, J. & Chandler, BD "Protection/Deprotection Chemistry in Pharmaceutical Syntheses Over Heterogeneous Bimetallic Catalysts" Oral Presentation at the 2<sup>nd</sup> Minisymposium on Dendrimer Encapsulated Catalysts, Trinity University, July 26, 2004.
9. Hoover, N. & Chandler, BD "Dendrimer Encapsulated Pt-Cu Bimetallic Nanoparticle Catalyst Preparation: Methods and Activity Studies" Oral Presentation at the 2<sup>nd</sup> Minisymposium on Dendrimer Encapsulated Catalysts, Trinity University, July 26, 2004.
8. Cheng, R. & Chandler, BD "Toluene Hydrogenation by Dendrimer Templated Nanoparticles Immobilized in Sol-Gel Matrices" Oral Presentation at the 2<sup>nd</sup> Minisymposium on Dendrimer Encapsulated Catalysts, Trinity University, July 26, 2004.
7. Auten, B. & Chandler, BD "CO Oxidation Catalysis by Supported Platinum-Gold Nanoparticles " Oral Presentation at the 2<sup>nd</sup> Minisymposium on Dendrimer Encapsulated Catalysts, Trinity University, July 26, 2004.
6. Yost, S. & Chandler, BD "Dendrimer Encapsulated Nanoparticles Encapsulated in Sol-Gel Silica" Oral Presentation at the 1<sup>st</sup> Minisymposium on Dendrimer Encapsulated Catalysts, Texas A&M University, January 15, 2004.
5. Singh, A. & Chandler, BD "Optimizing Activation Conditions for a New Supported Platinum Catalyst" Oral Presentation at the 1<sup>st</sup> Minisymposium on Dendrimer Encapsulated Catalysts, Texas A&M University, January 15, 2004.
4. May, RA & Chandler, BD "Supramolecular and Biochemical Templating of Oxide Surfaces" Oral Presentation at the 1<sup>st</sup> Minisymposium on Dendrimer Encapsulated Catalysts, Texas A&M University, January 15, 2004.
3. Hoover, N. & Chandler, BD "Dendrimer Routes to Supported Bimetallic Pt-Cu Catalysts" Oral Presentation at the 1<sup>st</sup> Minisymposium on Dendrimer Encapsulated Catalysts, Texas A&M University, January 15, 2004.

2. May, RA; Lang, H; Chandler, BD “CO Oxidation with Nanocomposite Based Heterogeneous Catalysts” Poster presentation at the Texas A&M University Industry-University Cooperative Chemistry Program. College Station, TX. November 2004.
1. May, RA; Lang, H; Chandler, BD “CO Oxidation with Nanocomposite Based Heterogeneous Catalysts” Poster presentation at the Baylor Undergraduate Chemistry Research Symposium. Waco, TX. April 2003. Poster won 1<sup>st</sup> place in Analytical, Inorganic, and Physical Chemistry Division.

### Publications from Teaching and Scholarship Prior to Trinity

1. Aubart, MA; Chandler, BD; Gould, RAT; Krogstad, DA; Schoondergang, MFJ; Pignolet, LH “Dihydrogen Activation by Mixed Pt- and Pd-Au Cluster Compounds. Homogeneous Catalytic H<sub>2</sub>-D<sub>2</sub> Equilibration.” *Inorganic Chemistry*, **33**, 3724 (1994).
2. Chandler, BD; Schabel, AB; Rubinstein, LI; Pignolet, LH “Alkane Conversion and Arene Hydrogenation by Platinum Based Catalysts Prepared from Supported Molecular Precursors: Effects of Phosphorus and Gold.” in *Catalysis of Organic Reactions*, Frank E. Herkes ed. Marcel Dekker, Inc., New York, 1998.
3. Chandler, BD; Rubinstein, LI; Pignolet, LH “Alkane Dehydrogenation with Silica Supported Pt and Pt-Au Catalysts Derived from Phosphine Ligated Precursors” *J Mol Catal A*, **133**(3) (1998) 267-282.
4. Chandler, BD; Schabel, AB; Blanford, CF Pignolet, LH “The Preparation and Characterization of Supported Bimetallic Pt-Au Particle Catalysts from Molecular Cluster and Chloride Salt Precursors”. *J. Catal*, **187**, 367-383 (1999).
5. Chandler, BD; Schabel, AB; Pignolet, LH “Highly Dispersed Supported Bimetallic Pt-Au and Pt-Cu Catalysts Prepared from Molecular Cluster Precursors”. *J. Catal*, **193**, 186-198 (2000).
6. Chandler, BD; Schabel, AB; Pignolet, LH “Hydrogen Chemisorption and Toluene Hydrogenation by Highly Dispersed Bimetallic Particle Catalysts” *J. Phys. Chem. B*, 105 (1) 149-55, 2001.
7. Chandler, BD and Pignolet, LH “Infrared Spectroscopic Studies of CO Adsorbed on Highly Dispersed Bimetallic Particle Catalysts”. *Catal. Today*, **65**, 39-50 (2001).
8. Mihut, C; Chandler, BD; Amiridis, MD “Bimetallic Pt-Au Cluster-Derived Catalysts for the Selective Catalytic Reduction of NO by Propylene” *Catal. Commun.*, 3, 91-97 (2002).
9. Deutsch, DS; Lafaye, G; Liu, D; Chandler, BD; Williams, CT; Amiridis, MD “Decomposition and Activation of Pt-Dendrimer Nanocomposites on a Silica Support” *Catal. Lett.*, **97**, 139-143 (2004).

### Presentations from Teaching and Scholarship Prior to Trinity

1. Krogstad, D.A.; Chandler, B.D.; Gould, R.A.T.; Pignolet, L.H. “H<sub>2</sub>-D<sub>2</sub> Equilibration by Phosphine Stabilized Pt-Au Cluster Compounds.” Presentation at the 206th National Meeting of the American Chemical Society. Chicago, IL. August 1993.
2. Rubinstein, L.I.; Krogstad, D.A.; Chandler, B.D.; Pignolet, L.H. “Mechanistic Study of Hydrogen Activation By Phosphine Stabilized Pt-Au Clusters.” Presentation at the 210th National Meeting of the American Chemical Society. Chicago, IL. August 1995.
3. Wyatt, S.R.; Chandler, B.D.; Pignolet, L.H. “Inorganic Molecular Precursors for Supported Bimetallic Catalysts.” Undergraduate presentation at the Undergraduate Symposium of the 213th National Meeting of the American Chemical Society. San Francisco, CA. April 1997.



4. [Chandler, BD](#); [Rubinstein, LI](#); Wyatt, S; Zerbe, D; Graf, IVG; Bacon, JW; Pignolet, LH “Pt and Pt-Au Catalysts Prepared from Phosphine Ligated Mono- and Bimetallic Precursors on Silica Supports” Presentation at the 15th Meeting of the North American Catalysis Society. Chicago, IL. May 1997.
5. [Chandler, BD](#); Schabel, AB; Rubinstein, LI; Pignolet, LH “Alkane Conversion and Arene Hydrogenation by Platinum Based Catalysts Prepared from Supported Molecular Precursors: Effects of Phosphorus and Gold” Presentation at the 17th Conference of the Organic Catalysis Society. New Orleans, LA. March 1998.
6. [Chandler, BD](#); Schabel, AB; Pignolet, LH “The Preparation and Characterization of Highly Dispersed Bimetallic Pt-Au and Pt-Cu Particle Catalysts from Molecular Bimetallic Precursors.” Presentation at the 16th Meeting of the North American Catalysis Society. Boston, MA. June 1999.
7. [Chandler, BD](#); Krishnamoorthy, S; Lichtenberger, JM; Amiridis, MD; “On the Mechanism of Catalytic Oxidation of Chlorinated Aromatic Compounds over Supported Transition Metal Oxide Catalysts”. Presentation at the 220th National Meeting of the American Chemical Society. Washington, D.C. August 2000.
8. [MD Amiridis](#) and [BD Chandler](#). “Methyl Acetylene and Carbonyl Sulfide Removal by Commercial BASF Purification Catalysts and Support of BASF Field Operations” Seminar Presentation at BASF Corporate Headquarters. Ludwigshafen, Germany. September 2000. (not refereed).
9. [Mihut, C](#); [Chandler, BD](#); Amiridis, MD “Supported Pt-Au Cluster Derived Catalysts for the Selective Catalytic Reduction of Nitrogen Oxides by Propylene” Oral presentation at 2000 Annual Meeting of the American Institute of Chemical Engineers. Los Angeles, CA. November 2000.
10. [Mihut, C](#); [Chandler, BD](#); Amiridis, MD “Supported Pt-Au Cluster Derived Catalysts for the Selective Catalytic Reduction of Nitrogen Oxides by Propylene” Poster presentation at 2000 Annual Meeting of the American Institute of Chemical Engineers. Los Angeles, CA. November 2000.
11. [Mihut, C](#); [Chandler, BD](#); [Amiridis, MD](#); Descorme, C; Duprez, D. “Supported Pt-Au Cluster Derived Catalysts for the Selective Catalytic Reduction of Nitrogen Oxides by Propylene” Presentation at the 17th Meeting of the North American Catalysis Society. Toronto, ON. June 2001.
12. [Deutsch, DS](#); [Lang, H](#); Chandler, BD; Amiridis, MD “Dendrimer-Stabilized Nanoparticles for Next Generation Catalysts” Poster Presentation at the 2002 Meeting of the Southeast Catalysis Society, Asheville, NC. April 2002.
13. [Deutsch, DS](#); [Lang, H](#); Chandler, BD; Altomare, D; Balbuena, P; Amiridis, MD “Dendrimer-Stabilized Nanoparticles for Next Generation Catalysts” Oral Presentation at the 2002 Fall Meeting of the American Institute of Chemical Engineers, Indianapolis, IN. November 2002.