

Curriculum Vitae: Wei Zhang, Ph.D.

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EDUCATION

University of Illinois at Urbana-Champaign, Department of Chemistry (2001-2005)
Ph.D. in Chemistry (Thesis Advisor: Professor Jeffrey S. Moore)

Peking University, Department of Polymer Science & Engineering (1996-2000)
B.S. in Chemistry

RESEARCH INTERESTS

Design and synthesis of novel organic functional materials and nanocomposites, including porous materials, organic nanotubes, and carbon nanotube composites; Investigation of their structure-property relationship; Exploration of their potential applications in gas separation, artificial photosynthesis, nanomedicine, chemical sensing, etc.

EMPLOYMENT

University of Colorado at Boulder (08/2008 – Present)
Assistant Professor of Chemistry and Biochemistry

Massachusetts Institute of Technology (03/2006 - 07/2008)
Post-doctoral Associate (Mentor: Professor Timothy M. Swager)

AWARDS AND HONORS

2012 3M Non-Tenured Faculty Award
2011 National Science Foundation (NSF) CAREER Award
2011 Thieme Chemistry Journal Award
2011 New Inventor of the Year, University of Colorado
2009 CRCW Junior Faculty Development Award, University of Colorado
2004 Synthetic Organic Fellowship in Chemistry, University of Illinois
2004 R. C. Fuson Travel Award, University of Illinois
2003 R. C. Fuson Fellowship, University of Illinois
2002 University Fellowship, University of Illinois
2000 Outstanding Graduate in City of Beijing, Beijing, P. R. China

PUBLICATIONS (PEER-REVIEWED)

Independent Career at CU-Boulder

36. Jin, Y.; Yu, C.; Denman, R.; **Zhang, W.*** “Recent Advances of Dynamic Covalent Chemistry: Scope and Applications in 2D and 3D Molecular Architecture Assembly” (invited review), *Chem. Soc. Rev.*, *to be submitted*.

35. Zhu, Y.; **Zhang, W.*** "Imine-Linked Porous Polymer Frameworks with High Small Gas (H₂, CO₂, CH₄, C₂H₂) Uptake and CO₂/N₂ Selectivity" *submitted*.
34. Yang, H.; Liu, Z.; **Zhang, W.*** "Novel Multidentate Triphenolsilane-Based Alkyne Metathesis Catalysts: Excellent Functional Group Tolerance and Lifetime" *submitted*.
33. Park, W.*; Emoto, K.; Jin, Y.; Shimizu, A.; Tamma, V.; **Zhang, W.*** "Controlled Self-Assembly of Gold Nanoparticles Mediated by Novel Organic Molecular Cages" *Opt. Mater. Express* **2013**, *3*, 205-215.
32. Jin, Y. Zhu, Y.; **Zhang, W.*** "Development of Organic Porous Materials through Schiff-Base Chemistry" (invited review for the special issue on *Organic Porous Materials*), *CrystEngComm*, **2013**, *15*, in press (DOI: 10.1039/C2CE26394G).
31. Jin, Y.; Jin, A.; McCaffrey, R.; Long, H.; **Zhang, W.*** "Design Strategies for Shape-Persistent Covalent Organic Polyhedrons (COPs) through Imine Condensation/Metathesis" *J. Org. Chem.* **2012**, *77*, 7392-7400.
30. Lohrman, J.; Zhang, C.; **Zhang, W.***; Ren, S.* "Self-Assembled Semiconducting Single-Wall Carbon Nanotube and Covalent Organic Polyhedron (COP)-C₆₀ Nanohybrids for Light Harvesting", *Chem. Commun.* **2012**, *48*, 8377-8379.
29. Okochi, K.; Jin, Y.; **Zhang, W.*** "Highly Efficient One-pot Synthesis of Hetero-sequenced Shape-persistent Macrocycles through Orthogonal Dynamic Covalent Chemistry (ODCC)" *Chem. Commun.* **2013**, *49*, in press (invited contribution to special *2013 Emerging Investigators* issue, DOI: 10.1039/C2CC33078D).
28. Jyothish, K.; Wang, Q.; **Zhang, W.*** "Highly Active Multidentate Alkyne Metathesis Catalysts: Ligand-activity Relationship and Their Applications in Efficient Synthesis of Porphyrin-based Aryleneethynylene Polymers" *Adv. Synth. Catal.* **2012**, *354*, 2073-2078.
27. Zhang, C.-X.; Long, H.; **Zhang, W.*** "A C₈₄ Selective Porphyrin Macrocyclic with an Adaptable Cavity Constructed through Alkyne Metathesis" *Chem. Commun.* **2012**, *48*, 6172-6174 (invited contribution to special *Aromaticity* issue).
26. Jin, Y.; Voss, B. A.; McCaffrey, R.; Baggett, C. T.; Noble, R. D.; **Zhang, W.*** "Microwave-Assisted Syntheses of Highly CO₂-Selective Organic Cage Frameworks (OCFs)" *Chem. Sci.* **2012**, *3*, 874-877.
25. Zhang, C.-X.; Wang, Q.; Long, H.; **Zhang, W.*** "A Highly C₇₀-Selective Shape-Persistent Rectangular Prism Constructed Through One-Step Alkyne Metathesis" *J. Am. Chem. Soc.* **2011**, *133*, 20995-21001.
24. Jyothish, K.; **Zhang, W.*** "Towards Highly Active and Robust Alkyne Metathesis Catalysts: Recent Developments in Catalyst Design" *Angew. Chem. Int. Ed.* **2011**, *50*, 8478-8480.
23. Jin, Y.; Voss, B. A.; Jin, A.; Long, H.; Noble, R. D.; **Zhang, W.*** "Highly CO₂-Selective Organic Molecular Cages: What Determines the CO₂ Selectivity" *J. Am. Chem. Soc.* **2011**, *133*, 6650-6658.
22. Jyothish, K.; **Zhang, W.*** "Introducing Podand Motif to Alkyne Metathesis Catalyst Design: A Highly Active Multidentate Mo(VI) Catalyst Resisting Alkyne Polymerization" *Angew. Chem. Int. Ed.* **2011**, *50*, 3435-3438.
21. Jin, Y.; Zhang, A.; Huang, Y.; **Zhang, W.*** "Shape-Persistent Arylenevinylene Macrocycles (AVMs) Prepared via Acyclic Diene Metathesis Macrocyclization (ADMAC)", *Chem. Commun.* **2010**, *46*, 8258-8260.
20. Jin, Y.; Voss, B.; Noble, R. D.; **Zhang, W.*** "A Shape-Persistent Organic Molecular Cage with High Selectivity in Adsorption of CO₂ over N₂" *Angew. Chem. Int. Ed.* **2010**, *49*, 6348-6351 (highlighted)

by *Nature Chemistry*. <http://www.nature.com/nchem/reshigh/2010/0810/full/nchem.833.html>, and *Synfacts* **2010**, *11*, 1247).

Postdoc Career at MIT

19. **Zhang, W.**; Shaikh, A. U.; Tsui, E. Y.; Swager, T. M. "Cobalt Porphyrin Functionalized Carbon Nanotubes for Oxygen Reduction" *Chem. Mater.* **2009**, *21*, 3234-3241.
18. **Zhang, W.**; Sprafke, J. K.; Ma, M.; Tsui, E. Y.; Sydlík, S. A.; Rutledge, G. C.; Swager, T. M. "Modular Functionalization of Carbon Nanotubes and Fullerenes" *J. Am. Chem. Soc.* **2009**, *131*, 8446-8454.
17. **Zhang, W.**; Swager, T. M. "Functionalization of Single-Walled Carbon Nanotubes and Fullerenes via a Dimethyl Acetylenedicarboxylate-4-Dimethylaminopyridine Zwitterion Approach" *J. Am. Chem. Soc.* **2007**, *129*, 7714-7715.

Graduate Career at UIUC

16. Suzuki, T.; Lu, Y.; **Zhang, W.**; Moore, J. S.; Mariñas, B.J. "Performance Characterization of Nanofiltration Membranes on Rejection Using Rigid Star Amphiphiles" *Environ. Sci. & Technol.* **2007**, *41*, 6246-6252.
15. **Zhang, W.**; Moore, J. S. "Alkyne Metathesis: Catalysts and Synthetic Application" (review) *Adv. Synth. & Catal.* **2007**, *349*, 93-120.
14. Lu, Y.; Suzuki, T.; **Zhang, W.**; Mi, B.; Mariñas, B. J.; Moore, J. S. "Nanofiltration Membranes based on Rigid Star Amphiphiles" *Chem. Mater.* **2007**, *12*, 3194-3204.
13. Naddo, T.; Che, Y.; **Zhang, W.**; Balakrishnan, K.; Yang, X.; Yen, M.; Zhao, J.; Moore, J. S.; Zang, L. "Detection of Explosives with a Fluorescent Nanofibril Film" *J. Am. Chem. Soc.* **2007**, *129*, 6978-6979.
12. **Zhang, W.**; Lu, Y.; Moore, J. S. "Preparation of a Trisamidomolybdenum(VI) Propylidyne Complex-A Highly Active Catalyst Precursor for Alkyne Metathesis" *Org. Synth.* **2007**, *84*, 163-176.
11. **Zhang, W.**; Cho, H.-M.; Moore, J. S. "Preparation of Carbazole-Based Tetracycle via Precipitation-Driven Alkyne Metathesis" *Org. Synth.* **2007**, *84*, 177-191.
10. **Zhang, W.**; Moore, J. S. "Shape-Persistent Macrocycles: Structures and Synthetic Approaches from Arylene and Ethynylene Building Blocks" (review) *Angew. Chem. Int. Ed.* **2006**, *45*, 4416-4439; *Angew. Chem.* **2006**, *118*, 4524-4548.
9. Balakrishnan, K.; Datar, A.; **Zhang, W.**; Yang, X.; Naddo, T.; Huang, J.; Zuo, J.; Yen, M.; Moore, J. S.; Zang, L. "Nanofibril Self-Assembly of an Arylene Ethynylene Macrocycle" *J. Am. Chem. Soc.* **2006**, *128*, 6576-6577.
8. **Zhang, W.**; Moore, J. S. "Reaction Pathways Leading to Arylene Ethynylene Macrocycles via Alkyne Metathesis" *J. Am. Chem. Soc.* **2005**, *127*, 11863-11870.
7. **Zhang, W.**; Brombosz, S. M.; Mendoza, J. L.; Moore, J. S. "A High-Yield, One-Step Synthesis of *o*-Phenylene Ethynylene Cyclic Trimer via Precipitation-Driven Alkyne Metathesis" *J. Org. Chem.* **2005**, *70*, 10198-10201.
6. **Zhang, W.**; Moore, J. S. "Arylene Ethynylene Macrocycles Prepared by Precipitation-Driven Alkyne Metathesis" *J. Am. Chem. Soc.* **2004**, *126*, 12796-12796.
5. **Zhang, W.**; Moore, J. S. "Synthesis of Poly(2,5-thienyleneethynylene)s by Alkyne Metathesis" *Macromolecules* **2004**, *37*, 3973-3975.
4. **Zhang, W.**; Kraft, S.; Moore, J. S. "Highly Active Trialkoxymolybdenum(VI) Alkylidyne Catalysts Synthesized by a Reductive Recycle Strategy" *J. Am. Chem. Soc.* **2004**, *126*, 329-335.

3. **Zhang, W.**; Kraft, S.; Moore, J. S. "A Reductive Recycle Strategy for the Facile Synthesis of Molybdenum(VI) Alkylidyne Catalysts for Alkyne Metathesis" *Chem. Commun.* **2003**, 832-833.
2. You, L.-C.; Lu, F.-Z.; Li, Z.-C.; **Zhang, W.**; Li, F.-M. "Glucose-Sensitive Aggregates Formed by Poly(ethylene oxide)-*block*-poly(2-glucosyloxyethyl acrylate) with Concanavalin A in Dilute Aqueous Medium" *Macromolecules* **2003**, *36*, 1-4.
1. Fleming, M.; Fisher, P. V.; Gunawardena, G. U.; Jin, Y.; Zhang, C.; **Zhang, W.**; Arif, A. M.; West, F. G. "Solvent Trapping of Photochemically Generated Pyran-4-one-Derived Oxyallyls: A Convenient Cyclopentannulation Method" *Synthesis* **2001**, 1268-1274.

PATENTS

Independent Career at CU-Boulder

7. **Zhang, W.**; Ren, S.; Zhang, C. "Nanohybrid Compositions Comprising Carbon Nanotubes and Covalent Organic Polyhedron-Fullerene Complexes" US Patent Application (04/21/12).
6. **Zhang, W.**; Zhang, C.; Wang, Q. "Fullerene Separation Through Use of Shape-Persistent Cubic Cages" US Patent Application (10/26/11).
5. **Zhang, W.**; Jyothish, K. "Highly Active Multidentate Catalysts for Efficient Alkyne Metathesis" US Patent Application (03/30/2011)
4. **Zhang, W.**; Noble, R. D.; Jin, Y.; Voss, B. A. "Organic Porous Materials Comprising Shape-Persistent Three-Dimensional Molecular Cage Building Blocks" *PCT Int. Appl.* **2011**, WO 2011116359.
3. Yu, M.; **Zhang, W.**; Falconer, J. L.; Noble, R. D. "Anode with Layered Structures for High-Efficiency Dye-Sensitized Solar Cells and Its Fabrication" *U.S. Pat. Appl. Publ.* **2011**, 25pp.

Postdoc Career at MIT

2. Swager, T. M.; **Zhang, W.** "Functionalization of Nanoscale Articles including Nanotubes and Fullerenes" *U.S. Pat. Appl. Publ.* **2008**, 19pp.

Graduate Career at UIUC

1. Zang, L.; Moore, J. S.; Naddo, T.; **Zhang, W.** "Fluorescent Organic Nanofibrils as Sensory Materials for Explosives Detection" *U.S. Pat. Appl. Publ.* **2009**, 48pp.

PRESENTATIONS GIVEN (INDEPENDENT CAREER)

Invited Talks

26. "Development and Applications of Dynamic Covalent Chemistry: From 2-D and 3-D Molecular Architectures to Functional Materials", Columbia University, New York, NY, USA, Jan 2013.
25. "Development and Applications of Dynamic Covalent Chemistry: From 2-D and 3-D Molecular Architectures to Functional Materials", University of Chicago, Chicago, IL, USA, Jan 2013.
24. "Development and Applications of Dynamic Covalent Chemistry: From 2-D and 3-D Molecular Architectures to Functional Materials", Northwestern University, Evanston, IL, USA, Jan 2013.
23. "Development and Applications of Dynamic Covalent Chemistry: From 2-D and 3-D Molecular Architectures to Functional Materials", University of Michigan, Ann Arbor, MI, USA, Nov 2012.
22. "Development and Applications of Dynamic Covalent Chemistry: From 2-D and 3-D Molecular Architectures to Functional Materials", Univ. of New Mexico, Albuquerque, NM, USA, Nov 2012.

21. "Development and Applications of Dynamic Covalent Chemistry: From 2-D and 3-D Molecular Architectures to Functional Materials", 3M Company, St. Paul, MN, USA, Oct 2012.
20. "Development and Applications of Dynamic Covalent Chemistry: From 2-D and 3-D Molecular Architectures to Functional Materials", University of California at Irvine, Irvine, CA, USA, Oct 2012.
19. "Development and Applications of Dynamic Covalent Chemistry: From 2-D and 3-D Molecular Architectures to Functional Materials", University of California at Berkeley, Berkeley, CA, USA, October 2012.
18. "Development and Applications of Dynamic Covalent Chemistry: From 2-D and 3-D Molecular Architectures to Functional Materials", University of Illinois at Urbana-Champaign (UIUC), Urbana, IL, USA, September 2012.
17. "Development and Applications of Dynamic Covalent Chemistry: From 2-D and 3-D Molecular Architectures to Functional Materials", University of Maryland, College Park, MD, USA, Sep 2012.
16. "Development and Applications of Dynamic Covalent Chemistry: From 2-D and 3-D Molecular Architectures to Functional Materials", Johns Hopkins University, Baltimore, MD, USA, Sep 2012.
15. "Development and Applications of Dynamic Covalent Chemistry: From 2-D and 3-D Molecular Architectures to Functional Materials", Organic Young Academic Investigator Symposium, 244th American Chemical Society (ACS) National Meeting, Philadelphia, PA, USA, August 2012.
14. "Novel Porous Framework Materials Consisting of 3-D Shape-Persistent Organic Molecular Cages", PMSE Young Investigator Symposium, 244th American Chemical Society (ACS) National Meeting, Philadelphia, PA, USA, August 2012.
13. "Design and Applications of Novel Porous Materials based on Covalent Organic Polyhedrons (COPs)", special symposium on "Design and Applications of Organic and Metal-Organic Porous Materials", 244th American Chemical Society (ACS) National Meeting, Philadelphia, PA, USA, August 2012.
12. "Organic Cage Frameworks (OCFs) for Carbon Capture", Northwestern Polytechnical University, Xi'an, China, May 2012.
11. "Development and Applications of Dynamic Covalent Chemistry: From 2-D and 3-D Molecular Architectures to Functional Materials", Dalian University of Technology, Dalian, China, May 2012.
10. "Development and Applications of Dynamic Covalent Chemistry: From 2-D and 3-D Molecular Architectures to Functional Materials", Colorado State University, Fort Collins, CO, USA, April 2012.
9. "Carbon Capture with Highly CO₂-Selective Organic Molecular Cages", Carbon Capture Workshop, Boulder, CO, USA, October 2011.
8. "Application of Dynamic Covalent Chemistry to Materials Development: From 2-D Macrocycles to 3-D Molecular Cages", Fort Lewis College, Durango, CO, USA, September 2011.
7. "Highly CO₂-Selective Organic Molecular Cages for Carbon Capture", special symposium on "Greenhouse Gas Emissions: Control, Conversion and Utilization for Fuels and Energy Production", 242nd American Chemical Society (ACS) National Meeting, Denver, CO, USA, August 2011.
6. "Application of Dynamic Covalent Chemistry to Materials Development: From 2-D Macrocycles to 3-D Molecular Cages", Heilongjiang University, Harbin, China, June 2011.
5. "Application of Dynamic Covalent Chemistry to Materials Development: From 2-D Macrocycles to 3-D Molecular Cages", Jilin University, Changchun, China, June 2011.
4. "Shape-Persistent Organic Molecular Cages for Carbon Capture", PacificChem, Honolulu, HI, USA, December 2010.

3. “Application of Dynamic Covalent Chemistry to Materials Development: From 2-D Macrocycles to 3-D Molecular Cages”, University of South Dakota, SD, USA, November 2010.
2. “3-D Molecular Cages and Graphitic Materials: A Story of Application of Chemistry in Materials Science”, Department of Mechanical Engineering, University of Colorado, CO, USA, April 2010.
1. “Carbon Nanotube Functionalization and Its Application in Electrocatalysis and Photosynthesis”, Liquid Crystal Materials Research Center (LCMRC), University of Colorado, CO, USA, April 2009.

Contributed Talks

8. “Novel Organic Porous Materials for Gas Separation”, 239th ACS National Meeting, San Francisco, CA, USA, March 21-25, 2010.
7. “Design of A Novel Alkyne Metathesis Catalyst and Its Applications in Constructing Shape-Persistent Molecular Architectures”, 241st ACS National Meeting, Anaheim, CA, USA, March 27-31, 2011.
6. “Porous Framework Materials Based on the Polymerization of 3D Organic Molecular Cages”, 241st ACS National Meeting, Anaheim, CA, USA, March 27-31, 2011.
5. “Novel 3-D Aromatic Organic Molecular Cages Constructed Through Dynamic Covalent Chemistry”, 14th International Symposium on Novel Aromatic Compounds, Eugene, OR, USA, July 24-29, 2011.
4. “Development of Novel Organic Porous Materials for Carbon Capture Through the Cage-to-Framework Strategy”, 43rd IUPAC World Chemistry Congress, San Juan, PR, August 1-5, 2011.
3. “Porous Materials Based on Structural Tunable 3-D Organic Molecular Cages”, International Symposium: Nanoporous Materials-VI, Banff, Alberta, Canada, August, 2011.
2. “Highly Active Multidentate Alkyne Metathesis Catalysts and Their Applications in 3-D Molecular Cage Synthesis”, 242nd ACS National Meeting, Denver, CO, USA, August, 2011.
1. “Synthesis and Self-Assembly of Novel Shape-Persistent 2-D Macrocycles and 3-D Molecular Cages”, MRS Directed Self-Assembly of Materials Workshop, Nashville, TN, USA, September 2011.

FUNDING SUPPORT

11. “Efficient Molecular Separation Using Polymeric Membranes Integrated with Novel Structure-Tunable Organic Nanocages”; National Science Foundation (NSF) IIP Fundamental Research Program; \$199,998 total costs; 07/01/12–06/30/14; 2 investigators; WZ’s share: \$199,998; role: PI.
10. “Self-Assembly of Reconfigurable By-Design Optical Materials with Molecular-level Control”; Army Research Office (ARO) Self-Assembly Program; \$409,123 total costs; 10/15/12-10/14/15; 2 investigators; WZ’s share: \$210,000; role: co-PI.
9. “Symposium on Design and Applications of Organic and Metal-Organic Porous Materials”, NSF DMR-SSMC Program; \$5,000 total costs; 08/01/12-07/31/13; 1 investigator; role: PI.
8. “High-efficiency Organic Solar Cell”; 3M Company; \$45,000 total costs; 06/01/12-05/31/14; 1 investigator; role: PI.
7. “Biological Applications of Novel Shape-Persistent Three-Dimensional (3-D) Organic Molecular Cages”; Butcher Seed Grant; \$100,000 total costs; 07/01/12-06/30/14; 2 investigators; WZ’s share: \$50,000; role: co-PI.
6. “Development of Novel Facilitated Transport Membranes Consisting of Structure-Tunable Molecular Cages for Efficient Olefin/Paraffin Separation”; American Chemical Society Petroleum Research Fund (ACS PRF); \$100,000 total costs; 09/01/11–08/31/13; 1 investigator; role: PI.

5. “Self-Assembled 3D Bulk Nanocomposites with Molecular Control: Macro Engineering by Nano Design”; Defense Advanced Research Projects Agency (DARPA) COMPASS Program; \$309,639 total costs; 07/01/11–06/30/12; 2 investigators; WZ’s share: ca. \$161,000; role: co-PI.
4. “CAREER: An Integrated Materials Nanoscience Education and Research Program: Studying a Novel Class of Cage Framework Materials (CFMs)”, NSF DMR-SSMC Program; \$550,000 total costs; 04/01/11–03/31/16; 1 investigator; role: PI.
3. “Novel Thin Composite Membranes Consisting of 3D Organic Molecular Cages and Polymerized Ionic Liquids for Efficient CO₂ Capture”; NSF Membrane Science and Technology (MAST) Center; \$130,000 total costs, 01/01/11–12/31/13; 2 investigators; WZ’s share: \$130,000; role: PI.
2. “High-Efficiency, Dye-Sensitized Solar Cells”, NSF CBET Energy for Sustainability Program, \$300,000 total costs; 08/01/10–07/31/13; 4 investigators; WZ’s share: ca \$145,000; role: co-PI.
1. “Development of Novel Organic Porous Materials for Gas Separation”, CU Innovative Seed Grant; \$43,750 total costs; 08/01/10–07/31/11; 1 investigator; role: PI.

TEACHING RECORD

3. Guided undergraduate and high school students in organic functional materials research. The work on organic cage frameworks led to a publication (*Chem. Sci.* **2012**, 3, 874-877) co-authored by Clyde Baggett, an undergraduate (African-American) student, who also presented his research at the 2009 Annual Biomedical Research Conference for Minority Students. Kerry Betz (Fall of 2010 and Spring of 2011), a senior student from local Fairview High School, participated in a series of science fairs, presenting her research on developing novel organic functional molecular cages from the PI’s group, and she has received many awards/recognition, such as a Roche Colorado Best in Show Award with a No. 1 ranking in the BVSD regional science fair, a 3rd place in Colorado Science and Engineering Fair. She also received a Tuition Scholarship Award in the National Science and Engineering Fair and participated in the International Science and Engineering Fair in May 2011.
2. Taught Organic Chemistry I and II for non-majors (CHEM 3311 and 3331, undergraduate-level, 65-190 students). A good number of examples using organic chemistry to develop important and new materials (some examples are from the PI’s lab) were used to showcase the power of this discipline in the real world. Such an approach greatly inspired the students’ interest in the course materials, which significantly enhanced their learning motivation. The PI has received twice a very good overall instructor score of 5.3 out of 6.0 through teaching evaluation.
1. Developed a new graduate course from scratch: *Organic Functional Materials: Structures and Properties* (CHEM 4261/5261, double listed for both graduate and senior undergraduate students), which served to educate and train the students on the fundamental principles in functional organic materials design, synthesis and property characterization. For the four-year teaching of this new course (2008-2011), the PI received overall instructor scores of 4.9, 5.1, 5.4 and 5.5 out of 6.0, respectively, demonstrating a good success in introducing the new Materials and Nanoscience program into our curriculum.

PROFESSIONAL SERVICE

- Local host for the 41st National Organic Chemistry Symposium (NOS), Boulder, 2009.
- Symposium session chair on 241st, 242nd and 244th ACS National Meetings.
- Key organizer (with Prof. William Dichtel from Cornell) for the special symposium on “Design and Applications of Organic and Metal-Organic Porous Materials”, 244th ACS National Meeting, Philadelphia, PA, August 2012.

- Faculty representative on the special workshop designed for postdocs seeking a faculty position in academia, ACS Division of Graduate Education, August, 2011.
- Served as reviewer for NSF, ACS PRF, USDA and ASEE grant proposals, NSF panelist, reviewer for international scientific journals, such as *Journal of American Chemical Society*, *Angewandte Chemie*, *Chemical Science*, *Chemical Communication*, *Chemistry-A European Journal*, etc.
- Graduate student advisor for Materials and Nanoscience program, Department of Chemistry and Biochemistry, CU-Boulder, of 2008/9, 2009/10, 2010/11, and 2011/12.
- Chair of graduate recruiting/admission in the Department of Chemistry and Biochemistry, 2008-2012.
- Safety committee member, Department of Chemistry and Biochemistry, CU-Boulder, 2010-2012.

AFFILIATIONS

American Chemical Society, Materials Research Society