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EDUCATION

Ph.D., NORTHWESTERN UNIVERSITY, September 1996
M.S., NORTHWESTERN UNIVERSITY, December 1993
B.S., LANZHOU UNIVERSITY, June 1992

PROFESSIONAL POSITIONS

- 08/2013-present **Professor, Department of Chemistry, Iowa State University, Ames, Iowa**
08/2008-07/2013 **Associate Professor, Department of Chemistry, Iowa State University, Ames, Iowa**
08/2002-07/2008 **Assistant Professor, Department of Chemistry, Iowa State University, Ames, Iowa**
- Synthesis of environmentally responsive amphiphilic structures and their use in solubilization and molecular transport
 - Preparation of oligomeric structures with tunable, secondary structures and their utilization in sensing, molecular recognition, membrane transport, and catalysis
 - Design and synthesis of hydrophobically driven self-assembling systems for catalysis, light-harvesting, nanochemistry, and drug delivery applications
 - Design and synthesis of enzyme-mimetic catalysts responsive to environmental signals and substrates
 - Organic and inorganic nanostructures for catalysis, molecular recognition, and transport
- 05/1998-07/2002 **Senior Scientist (07/01-07/02), Research Scientist (05/98-07/01), the Procter & Gamble Company, Cincinnati, Ohio**
Preparation and process study of microcellular polymeric foams via high-internal-phase-emulsion (HIPE) polymerization; Synthesis and scale-up of emulsifiers used in HIPE polymerization.
- 10/1996-03/1998 **Postdoctoral Research Associate (with Prof. Steven C. Zimmerman), Department of Chemistry, University of Illinois, Urbana, Illinois**
Synthesis and crosslinking of dendrimers that are cross-linkable at the periphery and cleavable at the core to create large internal cavities.
- 09/1992-09/1996 **Graduate Research Assistant (with Prof. Joseph B. Lambert), Department of Chemistry, Northwestern University, Evanston, Illinois**
Synthesis of the first free silylium cation in condensed phase, a species pursued by organosilicon chemists for over fifty years; Synthesis of the first β -silyl and β -germyl carbocation that are stable at room temperature in solution; Stabilization of carbocations by electron-withdrawing β -phosphonates, phosphine oxides, and phosphine sulfides; Crystal engineering via hydrogen-bonds in a silicon-cored tetrabenzoic acid.

PUBLICATIONS

At ISU

1. Linxing Yao, Xueshu Li, Yan Zhao,* and Tong Wang,* "Cross-linked Micellar Particles for Microalgae Lipid Extraction," **2015**, submitted.

2. Joseph K. Awino and Yan Zhao,* “Polymeric Nanoparticle Receptors as Mimics of Monoclonal Antibodies for Nonsteroidal Anti-Inflammatory Drugs (NSAIDs),” **2015**, submitted.
3. Gina M. Roberts, Shiyong Zhang, Yan Zhao,* L. Keith Woo,* “Improving Reactivity and Selectivity of Aqueous-Based Heck Reactions by the Local Hydrophobicity of Phosphine Ligands,” **2015**, submitted.
4. Roshan W. Gunasekara and Yan Zhao,* “Conformationally Switchable Water-Soluble Fluorescent Bischolate Foldamers as Membrane-Curvature Sensors,” *Langmuir*, **2015**, *31*, 3919–3925
5. Li-Chen Lee, Chaoxian Xiao, Wenyu Huang, and Yan Zhao,* “Palladium–Gold Bimetallic Nanoparticle Catalysts by ‘Controlled Release’ from Metal-Loaded Interfacially Cross-Linked Reverse Micelles,” *New J. Chem.*, **2015**, *39*, 2459–2466.
6. Roshan W. Gunasekara and Yan Zhao,* “Rationally Designed Cooperatively Enhanced Receptors to Magnify Host–Guest Binding in Water,” *J. Am. Chem. Soc.*, **2015**, *137*, 843–849.
7. Joseph K. Awino and Yan Zhao,* “Water-Soluble Molecularly Imprinted Nanoparticles (MINPs) with Tailored, Functionalized, Modifiable Binding Pockets,” *Chem. –Eur. J.*, **2015**, *21*, 655–661.
8. Premkumar Rathinam Arivalagan and Yan Zhao,* “Interfacial Catalysis of Aldol Reactions by Prolinamide Surfactants in Reverse Micelles,” *Org. Biomol. Chem.*, **2015**, *13*, 770–775.
9. Joseph K. Awino and Yan Zhao,* “Molecularly Imprinted Nanoparticles as Tailor-Made Sensors for Small Fluorescent Molecules,” Invited article by *Chem. Commun.*, **2014**, *50*, 5752–5755.
10. Li-Chen Lee and Yan Zhao,* “Metalloenzyme-Mimicking Supramolecular Catalyst for Highly Active and Selective Intramolecular Alkyne Carboxylation,” *J. Am. Chem. Soc.* **2014**, *136*, 5579–5582.
11. Li-Chen Lee and Yan Zhao,* “Room-Temperature Hydroamination of Alkynes Catalyzed by Gold Clusters in Interfacially Cross-Linked Reverse Micelles,” *ACS Catal.*, **2014**, *4*, 688–691.
12. Geetika Chadha and Yan Zhao,* “Environmental Control of Nucleophilic Catalysis in Aqueous Solution,” *Chem. Commun.*, **2014**, *50*, 2718–2720.
13. Joseph K. Awino and Yan Zhao,* “Rigidity versus Amphiphilicity in Transmembrane Nanopore Formation by Cholate-Based Macrocycles,” *Supramol. Chem*, **2014**, *26*, 302–311.
14. Yan Zhao,* Hongkwan Cho, Lakmini Widanapathirana, and Shiyong Zhang, “Conformationally Controlled Oligocholate Membrane Transporters: Learning through Water Play,” Invited article, *Acc. Chem. Res.* **2013**, *46*, 2763–2772.
15. Yan Zhao,* “Cooperatively Enhanced Receptors for Biomimetic Molecular Recognition,” invited concept paper, *ChemPhysChem*, **2013**, *14*, 3878–3885.
16. Geetika Chadha and Yan Zhao,* “Histidine-Functionalized Water-Soluble Nanoparticles for Biomimetic Nucleophilic/General-Base Catalysis under Acidic Conditions,” *Org. Biomol. Chem.* **2013**, *11*, 6849–6855.
17. Joseph K. Awino and Yan Zhao,* “Protein-Mimetic, Molecularly Imprinted Nanoparticles for Selective Binding of Bile Salt Derivatives in Water,” *J. Am. Chem. Soc.* **2013**, *135*, 12552–12555.
18. Yu-Zhe Chen, Peng-Zhong Chen, Hui-Qing Peng, Yan Zhao,* Hui-Ying Ding, Li-Zhu Wu, Chen-Ho Tung, Qing-Zheng Yang* “Water-Soluble, Membrane-Permeable Organic Fluorescent Nanoparticles with Large Tunability in Emission Wavelengths and Stokes Shifts,” *Chem. Commun.* **2013**, *49*, 5877–5879.
19. Xueshu Li and Yan Zhao,* “Oligocholate Foldamer with ‘Prefolded’ Macrocycles for Enhanced Folding in Solution and Surfactant Micelles,” *Tetrahedron* **2013**, *69*, 6051–6059.
20. Lakmini Widanapathirana and Yan Zhao,* “Tuning Nanopore Formation of Oligocholate Macrocycles by Carboxylic Acid Dimerization in Lipid Membranes,” *J. Org. Chem.* **2013**, *78*, 4610–4614.
21. Yan Zhao,* invited book chapter, “Applications of Metallofoldamers,” In *Metallofoldamers: Supramolecular Architectures from Helicates to Biomimetics*; Galia Maayan, Markus Albrecht, Eds.; Wiley-VCH: Weinheim, **2013**; Chapter 12.
22. Geetika Chadha and Yan Zhao,* “Properties of Surface-Crosslinked Micelles Probed by Fluorescence Spectroscopy and Their Catalysis of Phosphate Ester Hydrolysis,” *J. Colloid Interface Sci.* **2013**, *390*, 151–157.
23. Tuo Wang, Lakmini Widanapathirana, Yan Zhao,* and Mei Hong,* “Aggregation and Dynamics of Oligocholate Transporters in Phospholipid Bilayers Revealed by Solid-State NMR Spectroscopy,” *Langmuir* **2012**, *28*, 17071–17078.
24. Shiyong Zhang and Yan Zhao,* “Artificial Metalloenzymes via Encapsulation of Hydrophobic Transition-Metal Catalysts in Surface Cross-Linked Micelles,” *Chem. Commun.* **2012**, *48*, 9998–10000.
25. Xueshu Li and Yan Zhao,* “Tunable Fusion and Aggregation of Liposomes Triggered by Multifunctional Surface Cross-Linked Micelles,” *Bioconjugate Chem.* **2012**, *23*, 1721–1725.

26. Lakmini Widanapathirana, Xueshu Li, and Yan Zhao,* “Hydrogen Bond-Assisted Macrocyclic Oligocholate Transporters in Lipid Membranes,” *Org. Biomol. Chem.* **2012**, *10*, 5077–5083.
27. Li-Chen Lee and Yan Zhao,* “Interfacially Cross-Linked Reverse Micelles as Soluble Support for Palladium Nanoparticle Catalysts,” *Helvetica Chimica Acta* **2012**, *95*, 863–871.
28. Lakmini Widanapathirana and Yan Zhao,* “Effects of Amphiphile Topology on the Aggregation of Oligocholates in Lipid Membranes: Macrocyclic versus Linear Amphiphiles,” *Langmuir* **2012**, *28*, 8165–8173.
29. Lakmini Widanapathirana and Yan Zhao,* “Aromatically Functionalized Cyclic Tricholate Macrocycles: Aggregation, Transmembrane Pore Formation, Flexibility, and Cooperativity,” *J. Org. Chem.* **2012**, *77*, 4679–4687.
30. Xueshu Li and Yan Zhao,* “Protection/Deprotection of Surface Activity and Its Applications in the Controlled Release of Liposomal Contents,” *Langmuir* **2012**, *28*, 4152–4159.
31. Hui-Qing Peng, Yu-Zhe Chen, Yan Zhao, Qing-Zheng Yang,* Li-Zhu Wu, Chen-Ho Tung, Li-Ping Zhang, Qing-Xiao Tong,* “Artificial Light-Harvesting System Based on Multifunctional Surface Cross-Linked Micelles,” *Angew. Chem. Int. Ed.* **2012**, *51*, 2088–2092.
32. Shiyong Zhang and Yan Zhao,* “Template Synthesis of Subnanometer Gold Clusters in Interfacially Cross-Linked Reverse Micelles Mediated by Confined Counterions,” *Langmuir* **2012**, *28*, 3606–3613.
33. Li-Chen Lee and Yan Zhao,* “Size-Selective Phase-Transfer Catalysis with Interfacially Cross-Linked Reverse Micelles,” *Org. Lett.* **2012**, *14*, 784–787.
34. Shiyong Zhang and Yan Zhao,* “Effects of Micelle Properties on the Conformation of Oligocholates and Importance of Rigidity of Foldamers,” *J. Org. Chem.* **2012**, *77*, 556–562.
35. Shiyong Zhang and Yan Zhao,* “Flexible Oligocholate Foldamers as Membrane Transporters and Their Guest-Dependent Transport Mechanism,” *Org. Biomol. Chem.* **2012**, *10*, 260–266.
36. Shiyong Zhang and Yan Zhao,* “Oligocholate Foldamers as Carriers for Hydrophilic Molecules across Lipid Bilayers,” *Chem.-Eur. J.* **2011**, *11*, 12444–12451.
37. Zhenqi Zhong, Xueshu Li, and Yan Zhao,* “Enhancing Binding Affinity by the Cooperativity between Host Conformation and Host–Guest Interactions,” *J. Am. Chem. Soc.* **2011**, *133*, 8862–8865.
38. Hongkwan Cho and Yan Zhao,* “Cholate-Derived Amphiphilic Molecular Baskets as Glucose Transporters across Lipid Membranes,” *Chem. Commun.*, **2011**, *47*, 8970–8972.
39. Hongkwan Cho and Yan Zhao,* “Translocation of Hydrophilic Molecules across Lipid Bilayers by Salt-Bridged Oligocholates,” *Langmuir* **2011**, *27*, 4936–4944.
40. Shiyong Zhang and Yan Zhao,* “Facile Preparation of Organic Nanoparticles by Interfacial Crosslinking of Reversed Micelles and Template Synthesis of Subnanometer Au-Pt Nanoparticles,” *ACS Nano* **2011**, *5*, 2637–2646.
41. Shiyong Zhang and Yan Zhao,* “Controlled Release from Cleavable Polymerized Liposomes upon Redox and pH Stimulation,” *Bioconjugate Chem.* **2011**, *22*, 523–528.
42. Hongkwan Cho, Lakmini Widanapathirana, and Yan Zhao,* “Water-Templated Transmembrane Nanopores from Shape-Persistent Oligocholate Macrocycles,” *J. Am. Chem. Soc.* **2011**, *133*, 141–147.
43. Jing Wu, Xingang Pan, and Yan Zhao,* “Time-Dependent Shrinkage of Polymeric Micelles of Amphiphilic Block Copolymers Containing Semirigid Oligocholate Hydrophobes,” *J. Colloid Interface Sci.* **2011**, *353*, 420–425.
44. Shiyong Zhang and Yan Zhao,* “Rapid Release of Entrapped Contents from Multi-Functionalizable, Surface Crosslinked Micelles upon Different Stimulation,” *J. Am. Chem. Soc.* **2010**, *132*, 10642–10644.
45. Hongkwan Cho and Yan Zhao,* “Environmental Effects Dominate the Folding of Oligocholates in Solution, Surfactant Micelles, and Lipid Membranes,” *J. Am. Chem. Soc.* **2010**, *132*, 9890–9899.
46. Shiyong Zhang and Yan Zhao,* “Facile Synthesis of Multivalent Water-Soluble Organic Nanoparticles via ‘Surface-Clicking’ of Alkynylated Surfactant Micelles,” *Macromolecules* **2010**, *43*, 4020–4022.
47. Yan Zhao,* “Spacer-Dependant Folding and Aggregation of Oligocholates in SDS Micelles,” *J. Org. Chem.* **2009**, *74*, 7470–7480.
48. Hongkwan Cho, Zhenqi Zhong, and Yan Zhao,* “A DMAP-Functionalized Oligocholate Foldamer for Solvent-Responsive Catalysis,” *Tetrahedron* **2009**, *65*, 7311–7316.
49. Yan Zhao,* “Conformation of Oligocholate Foldamers with 4-Aminobutyroyl Spacers,” *J. Org. Chem.* **2009**, *74*, 834–843.
50. Xingang Pan and Yan Zhao,* “Efficient Construction of Oligocholate Foldamers via Click Chemistry and Their Tolerance of Structural Heterogeneity,” *Org. Lett.* **2009**, *11*, 69–72.
51. Zhenqi Zhong and Yan Zhao,* “Controlling the Conformation of Oligocholate Foldamers by Surfactant Micelles,” *J. Org. Chem.* **2008**, *73*, 5498–5505.

52. Eui-Hyun Ryu, HongKwan Cho, and Yan Zhao,* “Catalyzing Methanolysis of Alkyl Halides in the Interior of an Amphiphilic Molecular Basket,” *Org. Lett.* **2007**, *9*, 5147–5150.
53. Zhenqi Zhong and Yan Zhao,* “Cholate-Glutamic Acid Hybrid Foldamer and Its Fluorescent Detection of Zn²⁺,” *Org. Lett.* **2007**, *9*, 2891–2894.
54. Yan Zhao,* “Facial Amphiphiles in Molecular Recognition: From Unusual Aggregates to Solvophobic Driven Foldamers,” *Curr. Opin. Colloid Interface Sci.* **2007**, *12*, 92–97.
55. Yan Zhao* and Jeffrey S. Moore,* invited book chapter, “Foldamers Based on Solvophobic Effects,” In *Foldamers: Structure, Properties, and Applications*; Stefan Hecht, Ivan Huc, Eds.; Wiley-VCH: Weinheim, 2007; Chapter 3.
56. Yibo Zhou, Eui-Hyun Ryu, Yan Zhao,* and L. Keith Woo,* “Solvent-Responsive Metalloporphyrins: Binding and Catalysis,” *Organometallics*, **2007**, *26*, 358–364.
57. Yan Zhao,* Zhenqi Zhong, and Eui-Hyun Ryu, “Preferential Solvation within Nanometer-Sized Hydrophilic Cavities and Its Effect on the Folding of Cholate Foldamers,” *J. Am. Chem. Soc.* **2007**, *129*, 218–225.
58. Eui-Hyun Ryu and Yan Zhao,* “An Amphiphilic Molecular Basket Sensitive to Both Solvent Changes and UV Irradiation,” *J. Org. Chem.* **2006**, *71*, 9491–9494.
59. Yan Zhao* and Zhenqi Zhong, “Detection of Hg²⁺ in Aqueous Solutions with a Foldamer-Based Fluorescent Sensor Modulated by Surfactant Micelles,” *Org. Lett.* **2006**, *8*, 4715–4717.
60. Eui-Hyun Ryu, Jie Yan, Zhenqi Zhong, and Yan Zhao,* “Solvent-Induced Amphiphilic Molecular Baskets: Unimolecular Reversed Micelles with Different Size, Shape, and Flexibility,” *J. Org. Chem.* **2006**, *71*, 7205–7213.
61. Yan Zhao* and Zhenqi Zhong, “Tuning the Sensitivity of a Foldamer-Based Mercury Sensor by Its Folding Energy,” *J. Am. Chem. Soc.* **2006**, *128*, 9988–9989.
62. Eui-Hyun Ryu, Arkady Ellern, and Yan Zhao,* “High Guest Inclusion by 3 β -Amino-7 α ,12 α -Dihydroxycholesterol-24-oic Acid Made Possible by Charge-Assisted Hydrogen Bonds,” *Tetrahedron* **2006**, *62*, 6808–6813.
63. Yan Zhao* and Zhenqi Zhong, “Oligomeric Cholates: Amphiphilic Foldamers with Nanometer-Sized Hydrophilic Cavities,” *J. Am. Chem. Soc.* **2005**, *127*, 17894–17901.
64. Yan Zhao* and Eui-Hyun Ryu, “Solvent-Tunable Binding of Hydrophilic and Hydrophobic Guests by Amphiphilic Molecular Baskets,” *J. Org. Chem.* **2005**, *70*, 7585–7591.
65. Zhenqi Zhong, Jie Yan, and Yan Zhao,* “Cholic Acid-Derived Facial Amphiphiles with Different Ionic Characteristics,” *Langmuir* **2005**, *21*, 6235–6239.
66. Eui-Hyun Ryu and Yan Zhao,* “Efficient Synthesis of Water-Soluble Calixarenes Using Click Chemistry,” *Org. Lett.* **2005**, *7*, 1035–1037.
67. Eui-Hyun Ryu and Yan Zhao,* “Environmentally Responsive Molecular Baskets: Unimolecular Mimics of Both Micelles and Reversed Micelles,” *Org. Lett.* **2004**, *6*, 3187–3189.

Prior to ISU

68. Laura G. Schultz, Yan Zhao, and Steven C. Zimmerman, “Synthesis of Cored Dendrimers with Internal Crosslinks,” *Angew. Chem. Int. Ed.* **2001**, *40*, 1962–1966.
69. Joseph B. Lambert, Yan Zhao, and S. Mark Zhang, “Preparation of the Tricoordinate Silyl Cation,” *J. Phys. Org. Chem.*, **2001**, *14*, 370–379.
70. Joseph B. Lambert, Yan Zhao, Hongwei Wu, Winston C. Tse, and Barbara Kuhlmann, “The Allyl Leaving Group Approach to Tricoordinate Silyl, Germyl, and Stannyl Cations,” *J. Am. Chem. Soc.* **1999**, *121*, 5001–5008.
71. Joseph B. Lambert, Yan Zhao, and Hongwei Wu, “ β -Silyl and β -Germyl Carbocations Stable at Room Temperature,” *J. Org. Chem.*, **1999**, *64*, 2729–2736.
72. Joseph B. Lambert, Yan Zhao, Robert W. Emblidge, Lourdes A. Salvador, Xiaoyang Liu, Jeung-Ho So, and Erik C. Chelius, “The β Effect of Silicon and Related Manifestations of σ Conjugation,” *Acc. Chem. Res.*, **1999**, *32*, 183–190.
73. Joseph B. Lambert, Charlotte L. Stern, Yan Zhao, Winston Tse, Catherine E. Shawl, Kirk T. Lentz, and Lidia Kania, “Torsional Distortions in Trimesitylsilanes and Trimesitylgermanes,” *J. Organomet. Chem.* **1998**, *568*, 21–31.
74. Thomas Müller, Yan Zhao, and Joseph B. Lambert, “Computational Evidence for a Free Silylium Ion,” *Organometallics* **1998**, *17*, 278–280.
75. Joseph B. Lambert, Yan Zhao, and Charlotte L. Stern, “Two-dimensional Lattice of Superboats Composed of Silicon-Centered Tetrahedra,” *J. Phys. Org. Chem.* **1997**, *10*, 229–232.

76. Joseph B. Lambert and Yan Zhao, "The Trimesitylsilylium Cation," *Angew. Chem. Int. Ed.* **1997**, *36*, 400–401; *Angew. Chem.* **1997**, *109*, 389–391 (highlighted in *C&E News*, January 6, 1997, page 7–8; *Science* **1997**, *275*, 39–40; *Chemtracts* **1997**, *10*, 841–843; *Angew. Chem. Int. Ed.* **1997**, *36*, 1277–1280).
77. Joseph B. Lambert and Yan Zhao, "A Stable β -Silyl Carbocation," *J. Am. Chem. Soc.* **1996**, *118*, 7867–7868 (highlighted in *C&E News*, August 26, 1996, page 31).
78. Joseph B. Lambert and Yan Zhao, " β Effect of Phosphorus Functionalities," *J. Am. Chem. Soc.* **1996**, *118*, 3156–3167.
79. Joseph B. Lambert, Robert W. Emblidge, and Yan Zhao, "Participation of the β Phosponate Group in Carbocation Formation," *J. Org. Chem.* **1994**, *59*, 5397–5403.

PATENTS

1. Bryn Hird, Edward J. Urankar, Brian B. Filippini, Richard M. Lange, Bryan A. Grisso, and Yan Zhao, "Foam Materials and High Internal Phase Emulsions Made Using Oxidatively Stable Alkenyl Succinate Derivative Emulsifiers," U.S. 764562, 2002.
2. John C. Dyer, R. Joseph McChain, and Yan Zhao, "Rapid Preparation of Foam Materials from High Internal Phase Emulsions," U.S. 6365642, 2002.
3. Arman Ashraf and Yan Zhao, "Radiation Curable Low Stress Relaxation Elastomeric Materials," WO 2004005398, 2004.
4. Yan Zhao, "Environmentally Sensitive Foldable Oligomers," U.S. 7,960,439; 2011.
5. Yan Zhao, "Nanoparticles and Nanoparticle Compositions," WO 2011130114; 2011.
6. Yan Zhao, "Particles Including Cleavable Groups and Compositions," U.S. 61/772,860; 2013.

INVITED SEMINARS & LECTURES

1. NSF Workshop on Physical Organic Chemistry, October 27 to November 1, 2006, UCLA Conference Center.
2. Departmental Seminar, Department of Chemistry, University of Iowa, Iowa City, Iowa, February 9, 2007.
3. Departmental Seminar, Department of Chemistry, Kansas State University, Manhattan, Kansas, February 22, 2007.
4. Departmental Seminar, Department of Chemistry, Rice University, Houston, Texas, March 16, 2007.
5. Organic Seminar, Department of Chemistry, Duke University, Durham, North Carolina, March 19, 2007.
6. Departmental Seminar, Department of Chemistry, Emory University, Atlanta, Georgia, April 18, 2007.
7. Departmental Colloquium, Department of Chemistry, Northwestern University, Evanston, Illinois, May 8, 2007.
8. Departmental Seminar, Department of Chemistry, University of Illinois, Chicago, Illinois, May 9, 2007.
9. Organic Seminar, Department of Chemistry, Ohio State University, Columbus, Ohio, May 17, 2007.
10. Departmental Colloquium, Department of Chemistry, University of Cincinnati, Cincinnati, Ohio, May 18, 2007.
11. Departmental Colloquium, Department of Polymer Science and Engineering, Beijing University, Beijing, China, May 29, 2007.
12. Colloquium, College of Chemistry and Chemical Engineering, Lanzhou University, Lanzhou, China, June 12, 2007.
13. Young Investigators Symposium, ACS Meeting, Boston, August 19, 2007.
14. Organic Seminar, Department of Chemistry, Iowa State University, Ames, Iowa, October 5, 2007.
15. Symposium on Chemistry of Supramolecular Assemblies, ACS 39th Central Regional Meeting, Columbus, Ohio, June 13, 2008
16. Department of Chemistry, Hamline University, Saint Paul, Minnesota, September 17, 2008
17. Department of Chemistry, St. Olaf College, Northfield, Minnesota, September 18, 2008
18. Department of Chemistry and Biochemistry, University of Northern Iowa, Cedar Falls, Iowa, October 16, 2008.
19. Department of Chemistry, Western Illinois University, Macomb, IL, May 1, 2009.
20. Shanghai Institute of Organic Chemistry, Shanghai, China, June 3, 2009.
21. Department of Chemistry, Fudan University, Shanghai, China, June 4, 2009.
22. Symposium on Supra-Molecular Chemistry I, 2009 Midwest Regional Meeting, Iowa City, IA, October 21, 2009.
23. Lambert Symposium, Northwestern University, Evanston, Illinois, May 8, 2010.
24. 1st Annual World Congress of Catalytic Asymmetric Synthesis-2010, Beijing, China, May 20, 2010.
25. Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, Beijing, China, May 21, 2010.
26. Department of Chemistry, Indiana University, Bloomington, IN, April 12, 2011.
27. Departments of Chemistry, Purdue University, West Lafayette, IN, April 13, 2011.

28. Department of Chemistry, National Taiwan Normal University, Taipei, Taiwan, June 1, 2011.
29. Institute of Chemistry, Academia Sinica, Taipei, Taiwan, June 2, 2011.
30. Department of Chemistry, National Taiwan University, Taipei, Taiwan, June 3, 2011.
31. Institute of Chemistry, Chinese Academy of Sciences, Beijing, China, June 21, 2011.
32. Department of Chemistry and Biochemistry, University of Notre Dame, Notre Dame, IN, August 25, 2011.
33. Department of Chemistry, University of Iowa, Iowa City, Iowa, January 27, 2012.
34. Department of Chemistry, National University of Singapore, Singapore, May 7, 2012.
35. Department of Chemistry, Chinese University of Hong Kong, Hong Kong, May 9, 2012.
36. Department of Chemistry, University of Hong Kong, Hong Kong, May 10, 2012.
37. School of Chemistry and Chemical Engineering, Sun Yat-Sen University, Guangzhou, China, May 14, 2012.
38. School of Chemical Engineering and Environmental Engineering, Beijing Institute of Technology, Beijing, China, May 25, 2012.
39. Wuxi AppTec (Tianjin) Co., Ltd., Tianjin Economic-Technological Development Area, Tianjin, China, May 28, 2012.
40. Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, Beijing, China, May 29, 2012.
41. Department of Chemistry, Iowa State University, Ames, Iowa, October 12, 2012
42. School of Chemistry and Chemical Engineering, Lanzhou University, Lanzhou, China, June, May 13, 2013
43. School of Chemistry and Chemical Engineering, Lanzhou University, Lanzhou, China, June, May 14, 2013
44. School of Chemistry and Chemical Engineering, Sichuan University, Chengdu, China, June, May 17, 2013
45. The 8th International Symposium on Macrocyclic and Supramolecular Chemistry, Arlington, VA, July 8, 2013
46. Symposium on Supramolecular Nanomaterials, 2013 ACS National Meeting, Indianapolis, IN, September 9, 2013
47. Department of Chemistry and Biochemistry, University of Maryland, College Park, MA, September 26, 2013
48. Symposium on Crystal Engineering & Supramolecular Chemistry, 2013 ACS MWRM, Springfield, MO, October 18, 2013
49. Department of Chemistry, University of Connecticut, Storrs, CT, March 26, 2014
50. Symposium on Frontiers in Molecular Recognition and Function, Beijing, China June 6, 2014
51. The 9th International Symposium on Macrocyclic and Supramolecular Chemistry, Shanghai, China, June 8, 2014
52. Department of Chemistry, University of Illinois, Urbana-Champaign, November 24, 2014