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### **Professor of Chemistry Professor of Biomedical Engineering Professor of Chemical Engineering & Material Sciences**

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### **EDUCATION**

B.S., 1987, Peking University, Beijing, China, Chemistry  
M.S., 1990, Peking University, Beijing, China, Polymer Chemistry, W. Cao, advisor  
Ph.D., 1994, University of North Carolina, Chapel Hill, Polymer Chemistry, J. DeSimone, advisor  
Postdoctoral fellow, 1994-5, California Institute of Technology, Biochemistry, F. Arnold, advisor

### **PROFESSIONAL EXPERIENCE**

1994-1995 Research Assistant, Peking University, Beijing, China  
1991-1994 Research Assistant, University of North Carolina, Chapel Hill, North Carolina  
1994-1995 Postdoctoral Research Fellow, Cal Tech, Pasadena, California  
1995-1999 Research Chemist, DuPont Central Research, Wilmington, Delaware  
1999-2000 Senior Research Chemist, DuPont Central Research, Wilmington, Delaware  
2000-2004 Assistant Professor of Chemistry, University of California, Irvine  
2004-2006 Associate Professor of Chemistry, University of California, Irvine  
2004-2006 Associate Professor of Biomedical Engineering, University of California, Irvine  
2006-2007 Visiting Professor, Free University, Berlin, Germany  
2006-present Professor of Chemistry, University of California, Irvine  
2006-present Professor of Biomedical Engineering, University of California, Irvine  
2016 Visiting Professor, University of Tokyo, Japan  
2017 Visiting Professor, Wyss Institute, Harvard University  
2017 Visiting Professor, Koch Institute, MIT

### **AWARDS AND HONORS**

2016 JSPS Invitation Fellowship for Research (long-term), Japan  
2008 Elected Fellow of the American Association for Advancement of Science (AAAS).  
2006-2007 Humboldt Bessel Research Award, Alexander von Humboldt Foundation, Germany  
2005-2010 Camille Dreyfus Teacher-Scholar Award, 2005-2010  
2005 Research Innovation Award, University of California  
2003 Chancellor's Award for Excellence in Undergraduate Research, UCI  
2002-2007 NSF CAREER Award, National Science Foundation  
2002-2003 3M Non-Tenured Faculty Award, 3M Company  
2001-2004 Beckman Young Investigator Award, Arnold & Mabel Beckman Foundation  
2001-2004 DuPont Young Professor Award, DuPont Company  
1992 Dobbins Fellowship, University of North Carolina at Chapel Hill

### **RESEARCH INTERESTS**

1. Develop new catalytic methods for efficient synthesis of polymeric materials
2. Bioinspired design of dynamic polymers including self-healing & malleable polymers, vitrimers
3. Design of functional biomaterials for gene delivery and other biomedical applications

**PUBLICATIONS**

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**Book and Book Chapters (Peer-Reviewed):**

105. "Hyperbranched and Dendritic Polyolefins Prepared by Transition-Metal Catalyzed Polymerization" Guan, Zhibin; Book chapter in "*Hyperbranched Polymers*" Editors: Yan, D.; Gao, C.; and Frey, H., Wiley & Sons, **2011**.
104. "*Metal Catalysis in Olefin Polymerization. Topics in Organometallic Chemistry,*" Vol.26 Editor: Guan, Zhibin; Springer-Verlag, **2009**.
103. "Recent Progress in Late Transition Metal  $\alpha$ -Diimine Catalysts for Olefin Polymerization" Guan, Zhibin;\* Popeney, C.; Book chapter in "Topics in Organometallic Chemistry: Metal Catalysis in Olefin Polymerization", Editor: Guan, Zhibin; Springer-Verlag, **2009**.
102. "Bio-Inspired Supramolecular Design in Polymers for Advanced Mechanical Properties" Guan, Zhibin; Book chapter in "*Molecular Recognition and Polymers: Control of Polymer Structure and Self-Assembly*" Editors: Rotello, V. and Thayumanavan, S.; Wiley & Sons, **2008**.

**Peer-Reviewed Journal Articles:**

101. "Dendritic Peptide Bolaamphiphiles for siRNA Delivery to Primary Adipocytes" Eldredge, A. C.; Johnson, M. E.; Cao, Y.; Zhang, L.; Zhao, C.; Liu, Z.X.; Yang, Q.; Guan, Z. *Biomaterials*, in press.
100. "Silyl Ether as a Robust and Thermally Stable Dynamic Covalent Motif for Malleable Polymer Design" Nishimura, Y.; Chung, J.; Guan, Z. *J. Am. Chem. Soc.* **2017**, *139*, 14881–14884.
99. "Large Continuous Mechanical Gradient Formation via Metal-Ligand Interactions" Neal, J. A.; Oldenhuis, N. J.; Novitsky, A. L.; Samson, E. M.; Thrift, W. J.; Ragan, R.; and Guan, Z. *Angew. Chem.* **2017**, *56*, 15575-15579.
98. "Phosphine-iminoquinoline iron complexes for ethylene polymerization and copolymerization" Zhang, D.; Zhang, Y.; Hou, W.; Guan, Z.; Huang, Z. *Organometallics* **2017**, *36*, 3758-3764.
97. "Antisense oligonucleotide and thyroid hormone conjugates for obesity treatment" Cao, Y.; Matsubara, T.; Zhao, C.; Gao, W.; Peng, L.; Shan, J.; Liu, Z.; Yuan, F.; Tang, L.; Li, P.; Guan, Z.; Fang, Z.; Lu, X.; Huang, H.; Yang, Q. *Scientific Reports* **2017**, *7*, doi:10.1038/s41598-017-09598-z.
96. "Biodegradable dendronized polymers for efficient mRNA delivery" Oldenhuis, N. J.; Eldredge, A. C.; Burts, A. O.; Ryu, K. A.; Chung, J.; Johnson, M. E.; and Guan, Z. *ChemistrySelect* **2016**, *1*, 4413-4417; <http://onlinelibrary.wiley.com/doi/10.1002/slct.201600939/pdf>.
95. "A Focused Library Approach to Discover Discrete Dipeptide Bolaamphiphiles for siRNA Delivery" Eldredge, A. C.; Johnson, M. E.; Oldenhuis, N. J.; and Guan, Z. *Biomacromolecules* **2016**, *17*, 3138-3144; <http://pubs.acs.org/doi/pdf/10.1021/acs.biomac.6b00635>.
94. "Tuning Mechanical Response in Self-Healing Metallopolymer Networks Through Metal-Ligand Complex Geometry and Exchange Dynamics" Mozhdehi, D.; Neal, J. A.; Grindy, S. C.; Cordeau, Y.; Ayala, S.; Holten-Anderson, N.; and Guan, Z. *Macromolecules* **2016**, *49*, 6310-6321; <http://pubs.acs.org/doi/pdf/10.1021/acs.macromol.6b01626>.
93. "Fluorocarbon Modified Low Molecular Weight Polyethylenimine for siRNA Delivery" Johnson, M. E.; Shon, J.; Guan, B. M.; Patterson, J. P.; Oldenhuis, N. J.; Eldredge, A. C.; Gianneschi, N. C.; and Guan, Z. *Bioconjugate Chem.* **2016**, *27*, 1784-1788; <http://pubs.acs.org/doi/pdf/10.1021/acs.bioconjchem.6b00216>.

92. "Degradation of Polyethylenes into Liquid Fuels via Cross Alkane Metathesis" Jia, X.; Qin, C.; Friedberger, T.; Guan, Z.; Huang, Z. *Science Advances* **2016**, *2*, 6; <http://advances.sciencemag.org/content/2/6/e1501591.full.pdf>.
91. "In situ Ultra-Small-Angle X-ray Scattering Study Under Uniaxial Stretching of Colloidal Crystal Prepared by Silica Nanoparticles Bearing Hydrogen-Bonding Polymer Grafts" Ishige, R.; Williams, G. A.; Higaki, Y.; Ohta, N.; Sato, M.; Takahara, A.; and Guan, Z. *IUCrJ* **2016**, *3*, 211-218; <http://journals.iucr.org/m/issues/2016/03/00/yc5007/yc5007.pdf>.
90. "Amino Acid Functionalized Dendritic Polyglycerol for Safe and Effective siRNA Delivery" Zeng, H.; Schlesener, C.; Cromwell, O.; Haag, R.; Guan, Z. *Biomacromolecules* **2015**, *16*, 3869-3877; <http://pubs.acs.org/doi/pdf/10.1021/acs.biomac.5b01196>.
89. "Control of hierarchical polymer mechanics with bioinspired metal-coordination dynamics" Grindy, S. C.; Learsch, R.; Mozhdehi, D.; Cheng, J.; Barrett, D. G.; Guan, Z.; Messersmith, P. B.; Holten-Andersen, N. *Nature Materials* **2015**, *14*, 1210–1216; <http://www.nature.com/nmat/journal/v14/n12/pdf/nmat4401.pdf>.
88. "Structure-based Design of Dendritic Peptide Bolaamphiphiles for siRNA Delivery" Zeng, H.; Johnson, M.; Oldenhuis, N.; Tiambing, T.; Guan, Z. *ACS Central Science* **2015**, *1*, 303–312; <http://pubs.acs.org/doi/pdf/10.1021/acscentsci.5b00233>.
87. "Enhanced Glassy State Mechanical Properties of Polymer Nanocomposites via Supramolecular Interactions" Hashemi, A.; Jouault, N.; Williams, G. A.; Zhao, D.; Cheng, K.; Kaisar, J.; Guan, Z.; Kumar, S. K. *Nano Lett.* **2015**, *15*, 5465-5471; <http://pubs.acs.org/doi/pdf/10.1021/acs.nanolett.5b01859>.
86. "Self-healing thermoplastic elastomer brush copolymers having a glassy polymethylmethacrylate backbone and rubbery polyacrylate-amide brushes" Chen, Y.; Guan, Z. *Polymer* **2015**, *69*, 249-254; [http://ac.els-cdn.com/S0032386115002517/1-s2.0-S0032386115002517-main.pdf?\\_tid=d3a1cf16-ce39-11e6-b845-00000aacb35f&acdnat=1483066024\\_6c131e32351b6a3fdee173404fe3d17b](http://ac.els-cdn.com/S0032386115002517/1-s2.0-S0032386115002517-main.pdf?_tid=d3a1cf16-ce39-11e6-b845-00000aacb35f&acdnat=1483066024_6c131e32351b6a3fdee173404fe3d17b).
85. "Forced Unfolding of Single-Chain Polymeric Nanoparticles" Hosono, N.; Kushner, A. M.; Chung, J.; Palmans, A. R. A.; Guan, Z.; Meijer, E. W. *J. Am. Chem. Soc.* **2015**, *137*, 6880-6888; <http://pubs.acs.org/doi/pdf/10.1021/jacs.5b02967>.
84. "Malleable and Self-Healing Covalent Polymer Networks through Tunable Dynamic Boronic Ester" Bonds Cromwell, O.; Chung, J.; Guan, Z. *J. Am. Chem. Soc.* **2015**, *137*, 6492-6495; <http://pubs.acs.org/doi/pdf/10.1021/jacs.5b03551>.
83. "Mechanically robust and self-healable superlattice nanocomposites by self-assembly of "sticky" nanoparticles" Williams, G. A.; Ishige, R.; Chung, J.; Takahara, A.; Guan, Z. *Adv. Mater.* **2015**, *27*, 3934-41; <http://onlinelibrary.wiley.com/doi/10.1002/adma.201500927/pdf>.
82. "Enhancing Mechanical Performance of a Covalent Self-Healing Material by Sacrificial Noncovalent Bonds" Neal, J.; Mozhdehi, Guan, Z. *J. Am. Chem. Soc.* **2015**, *137*, 4846-4850; <http://pubs.acs.org/doi/pdf/10.1021/jacs.5b01601>.
81. "Multivalent dendritic polyglycerolamine with arginine and histidine end groups for efficient siRNA transfection" Mehrabadi, F.; Zeng, H.; Johnson, M.; Schlesener, C.; Guan, Z.; Haag, R. *Beilstein J. Org. Chem.* **2015**, *11*, 763-772; <http://www.beilstein-journals.org/bjoc/content/pdf/1860-5397-11-86.pdf>
80. "Carbon-based cores with polyglycerol shells – the importance of core flexibility for encapsulation of

- hydrophobic guests” Lukowiak, M. C.; Ziem, B.; Achazi, K.; Gunkel-Grabole, G.; Popeney, C. S.; Thota, B. N. S.; Böttcher, C.; Krueger, A.; Haag, R.; Guan, Z. *J. Mater. Chem. B* **2015**, *3*, 719-722; <http://pubs.rsc.org/en/content/articlepdf/2015/tb/c4tb01858c>.
79. “Bioinspired design of multiphase polymers to mimic mechanical properties of human skin” Wang, Z. K.; Jiang, F.; Zhang, Y. Q.; You, Y. Z.; Wang, Z. G.; Guan, Z. *ACS Nano* **2015**, *9*, 271 – 278; <http://pubs.acs.org/doi/pdf/10.1021/nn506960f>.
78. “Self-Healing Multiphase Polymers via Dynamic Metal-Ligand Interactions” Mozhdehi, D.; Ayala, S.; Cromwell, O. R.; Guan, Z. *J. Am. Chem. Soc.* **2014**, *136*, 16128–16131; <http://pubs.acs.org/doi/pdf/10.1021/ja5097094>.
77. “Direct correlation of single-molecule properties with bulk mechanical performance for the biomimetic design of polymers” Chung, J.; Kushner, A. M.; Weisman, A. C.; Guan, Z. *Nature Materials* **2014**, *13*, 1055 – 1062; <http://www.nature.com/nmat/journal/v13/n11/pdf/nmat4090.pdf>.
76. “From Racemic Alcohols to Enantiopure Amines: Ru-Catalyzed Diastereoselective Amination” Oldenhuis, N. J.; Dong, V. M.; Guan, Z. *J. Am. Chem. Soc.* **2014**, *136*, 12548 – 12551; <http://pubs.acs.org/doi/pdf/10.1021/ja5058482>.
75. “Catalytic acceptorless dehydrogenations: Ru-Macho catalyzed construction of amides and imines” Oldenhuis, N. J.; Dong, V. M.; Guan, Z. *Tetrahedron* **2014**, *70*, 4213 – 4218; [http://ac.els-cdn.com/S0040402014004475/1-s2.0-S0040402014004475-main.pdf?\\_tid=9c70f2b8-ce3b-11e6-b6d7-00000aacb361&acdnat=1483066790\\_c7f2c400432ff8251723c1f667360ccb](http://ac.els-cdn.com/S0040402014004475/1-s2.0-S0040402014004475-main.pdf?_tid=9c70f2b8-ce3b-11e6-b6d7-00000aacb361&acdnat=1483066790_c7f2c400432ff8251723c1f667360ccb).
74. “Ruthenium(IV) complexes for ethylene insertion polymerization” Friedberger, T.; Ziller, J.W.; Guan, Z. *Organometallics* **2014**, *33*, 1913–1916; <http://pubs.acs.org/doi/pdf/10.1021/om5001343>.
73. “Multivalent hydrogen bonding block copolymers self-assemble into strong and tough self-healing materials” Chen, Y.; Guan, Z. *Chem. Commun.* **2014**, *50*, 10868 – 10870; <http://pubs.rsc.org/en/content/articlepdf/2014/cc/c4cc03168g>.
72. “Surfactant-free Synthesis of Biodegradable, Biocompatible, and Stimuli-responsive Cationic Nanogel Particles” Urakami, H.; Hentschel, J.; Seetho, K.; Zeng, H.; Chawla, K.; Guan, Z. *Biomacromolecules* **2013**, *14*, 3682 – 3688; <http://pubs.acs.org/doi/pdf/10.1021/bm401039r>.
71. “Design of Supramolecular Amino Acids to Template Peptide Folding” Mozhdehi, D.; Guan, Z. *Chem. Comm.* **2013**, *49*, 9950 – 9952; <http://pubs.rsc.org/en/content/articlepdf/2013/cc/c3cc45419c>.
70. “Multifunctional Dendronized Peptide Polymer Platform for Safe and Effective siRNA Delivery” Zeng, H.; Little, H. C.; Tiambeng, T. N.; Williams, G. A.; Guan, Z. *J. Am. Chem. Soc.* **2013**, *135*, 4962 – 4965; <http://pubs.acs.org/doi/pdf/10.1021/ja400986u>.
69. “Direct observation of a cationic ruthenium complex for ethylene insertion polymerization” Camacho-Fernandez, M. A.; Yen, M.; Ziller, J. W.; Guan, Z. *Chem. Sci.* **2013**, *4*, 2902 – 2906; <http://pubs.rsc.org/en/content/articlepdf/2013/sc/c3sc50676b>.
68. “Self-assembly of core–shell nanoparticles for self-healing materials” Chen, Y.; Guan, Z. *Polym. Chem.* **2013**, *4*, 4885-4889; <http://pubs.rsc.org/en/content/articlepdf/2013/py/c3py00078h>.
67. “Maintaining Functional Islets through Encapsulation in an Injectable Saccharide-Peptide Hydrogel” Liao, S. W.; Rawson, J.; Omori, K.; Ishiyama, K.; Mozhdehi, D.; Oancea, A.; Ito, T.; Guan, Z.; Mullen, Y. *Biomaterials* **2013**, *34*, 3984 – 3991; [http://ac.els-cdn.com/S0142961213001762/1-s2.0-S0142961213001762-main.pdf?\\_tid=05f35338-ce3d-11e6-b1f5-00000aab0f26&acdnat=1483067397\\_8d3ba539e7310cd450d9894c2dbd36cb](http://ac.els-cdn.com/S0142961213001762/1-s2.0-S0142961213001762-main.pdf?_tid=05f35338-ce3d-11e6-b1f5-00000aab0f26&acdnat=1483067397_8d3ba539e7310cd450d9894c2dbd36cb).

66. "Self-healing Supramolecular Block Copolymers" Hentschel, J.; Kushner, A. M.; Ziller, J.; Guan, Z. *Angew. Chem., Int. Ed.* **2012**, *51*, 10561 – 10565 (*selected as hot paper by the editor*); <http://onlinelibrary.wiley.com/doi/10.1002/anie.201204840/epdf>.
65. "Olefin Metathesis for Effective Polymer Healing via Dynamic Exchange of Strong Carbon-Carbon Double Bonds" Lu, Y.-X.; Guan, Z. *J. Am. Chem. Soc.* **2012**, *134*, 14226–14231 (*Highlighted by C&EN News*); <http://pubs.acs.org/doi/pdf/10.1021/ja306287s>.
64. "Multiphase Design of Autonomic Self-Healing Thermoplastic Elastomers" Chen, Y.L.; Kushner, A. M.; Williams, G. A.; Guan, Zhibin. *Nature Chem.* **2012**, *4*, 467 – 472 (*Highlighted by C&EN News and Nature Chem.*); <http://www.nature.com/nchem/journal/v4/n6/pdf/nchem.1314.pdf>.
63. "Making Insoluble Polymer Networks Malleable via Olefin Methathesis" Lu, Y.-X.; Tournilhac, F.; Leibler, L.; Guan, Z. *J. Am. Chem. Soc.* **2012**, *134*, 8424 – 8427 (*Highlighted in JACS Spotlights*); <http://pubs.acs.org/doi/pdf/10.1021/ja303356z>.
62. "Modulation of Chondrocyte Behavior Through Tailoring Functional Synthetic Saccharide-Peptide Hydrogels" Chawla, K.; Yu, T.-B.; Stutts, L.; Yen, M.; Guan, Z. *Biomaterials* **2012**, *33*, 6052 – 6060; [http://ac.els-cdn.com/S0142961212004978/1-s2.0-S0142961212004978-main.pdf?\\_tid=6a4a35a4-ce3d-11e6-9eb2-00000aacb35d&acdnat=1483067565\\_921280cba1802b5782d9bc7c6f8d87ae](http://ac.els-cdn.com/S0142961212004978/1-s2.0-S0142961212004978-main.pdf?_tid=6a4a35a4-ce3d-11e6-9eb2-00000aacb35d&acdnat=1483067565_921280cba1802b5782d9bc7c6f8d87ae).
61. "Synthesis of "Necklace" Polymers by Chain-Walking Polymerization" Sun, G.; Hentschel, J.; Guan, Z. *ACS Macro Lett.* **2012**, *1*, 585 – 588; <http://pubs.acs.org/doi/pdf/10.1021/mz300069h>.
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59. "Clicked" Fluoropolymer Elastomers as Robust Materials for Potential Microfluidic Device Applications" Yang, Y.W.; Hentschel, J.; Chen, Y.C.; Lazari, M.; Zeng, H.X.; van Dam, R.M.; and Guan, Zhibin. *J. Mater. Chem.* **2012**, *22*, 1100 – 1106 (*selected as hot paper by the editor*); <http://pubs.rsc.org/en/content/articlepdf/2012/jm/c1jm14131g>.
58. "Modular Design in Natural and Biomimetic Soft Materials" Kushner, A. M.; Guan, Zhibin. *Angew. Chem. Int. Ed.* (invited review), **2011**, *50*, 9026 – 9057; <http://onlinelibrary.wiley.com/doi/10.1002/anie.201006496/epdf>.
57. "Systematic Investigation of Ligand Substitution Effects in Cyclophane-Based Ni(II) and Pd(II) Olefin Polymerization Catalysts" Popeney, C. S.; Levins, C. M.; Guan, Zhibin. *Organometallics*, **2011**, *30*, 2432-2452; <http://pubs.acs.org/doi/pdf/10.1021/om200193r>.
56. "Direct Synthesis of Polyamides via Catalytic Dehydrogenation of Diols and Diamines" Zeng, H.; Guan, Zhibin. *J. Am. Chem. Soc.* **2011**, *133*, 1159-1161; <http://pubs.acs.org/doi/pdf/10.1021/ja106958s>.
55. "Biodegradable and Biocompatible Synthetic Saccharide-Peptide Hydrogels for Three-Dimensional Stem Cell Culture" Chawla, K.; Yu, T.-B.; Liao, S. W.; Guan, Zhibin. *Biomacromolecules* **2011**, *12*, 560-567; <http://pubs.acs.org/doi/pdf/10.1021/bm100980w>.
54. "Synthesis and Investigation of Core-shell Dendritic Nanoparticles with Tunable Thermosensitivity" Sun, G.; Guan, Zhibin. *Macromolecules* **2010**, *43*, 9668–9673; <http://pubs.acs.org/doi/pdf/10.1021/ma1017617>.

53. "Helical Polymeric Foldamers via Intramolecular Hydrogen-Bonding" Lu, Y. X.; Li, Z.-T.; Guan, Zhibin. *Chem. Comm.* **2010**, *46*, 9019-9021; <http://pubs.rsc.org/en/content/articlepdf/2010/cc/c0cc03689g>.
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50. "Recent Progress of Catalytic Polymerization for Controlling Polymer Topology" Guan, Zhibin. *Chem-Asian J.* **2010**, *5*, 1058-1070. (Invited Focus Review); <http://onlinelibrary.wiley.com/doi/10.1002/asia.200900749/epdf>.
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47. "Bioinspired Modular Synthesis of Elastin-Mimic Polymers To Probe the Mechanism of Elastin Elasticity" Chen, Y.; Guan, Zhibin. *J. Am. Chem. Soc.* **2010**, *132*, 4577-4579; <http://pubs.acs.org/doi/pdf/10.1021/ja9104446>.
46. "Effect of Ligand Electronics on the Stability and Chain Transfer Rates of Substituted Pd(II)  $\alpha$ -Diimine Catalysts" Popeney, C. S.; Guan, Zhibin. *Macromolecules* **2010**, *43*, 4091-4097; <http://pubs.acs.org/doi/pdf/10.1021/ma100220n>.
45. "De Novo Design of Saccharide-Peptide Hydrogels as Synthetic Scaffolds for Tailored Cell Responses" Liao, S.; Yu, T.-B.; Guan, Zhibin. *J. Am. Chem. Soc.*, **2009**, *131*, 17638-17646; <http://pubs.acs.org/doi/pdf/10.1021/ja907097t>.
44. "Phage Wrapping with Cationic Polymers Eliminates Nonspecific Binding between M13 Phage and High p/ Target Proteins" Lamboy, J. A.; Arter, J. A.; Knopp, K. A.; Der, D.; Overstreet, C. M.; Palermo, E. F.; Urakami, H.; Yu, T.-B.; Tezgel, O.; Tew, G. N.; Guan, Z.; Kuroda, K.; Weiss, G. A. *J. Am. Chem. Soc.* **2009**, *131*, 16454-16460; <http://pubs.acs.org/doi/pdf/10.1021/ja9050873>.
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42. "A Biomimetic Modular Polymer with Tough and Adaptive Properties" Kushner, A. M.; Vossler, J. D.; Williams, G. A., and Guan, Zhibin. *J. Am. Chem. Soc.* **2009**, *131*, 8766-8768; <http://pubs.acs.org/doi/pdf/10.1021/ja9009666>.
41. "Nickel(II) and Palladium(II) Polymerization catalysts Bearing a Fluorinated Cyclophane Ligand: Stabilization of the Reactive Intermediate" Popeney, C.; Guan, Zhibin. *Organometallics* **2009**, *28*, 4452-4463; <http://pubs.acs.org/doi/pdf/10.1021/om900302r>.
40. "Cycloaddition-Promoted Self-Assembly of a Polymer into Well-Defined  $\beta$ -Sheet and Hierarchical Nanofibrils" Yu, T. B.; Bai, Z.; Guan, Zhibin. *Angew. Chem., Int. Ed.* **2009**, *48*, 1097-1101; <http://onlinelibrary.wiley.com/doi/10.1002/anie.200805009/epdf>.

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## Commentaries and Highlights of Guan Group Research:

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13. The paper on H-bonding self-healing polymers – “Multiphase Design of Autonomic Self-Healing Thermoplastic Elastomers”, Yulin Chen, Aaron M. Kushner, Gregory A. Williams and Zhibin Guan, *Nature Chem.* **2012**, *4*, 467 – 472, was highlighted by *Chemical & Engineering News*, *Nature Chemistry*, Department of Energy, **2012**: (<http://cen.acs.org/articles/90/i14/Polymer-Heal-Thyself.html>, <http://science.energy.gov/bes/highlights/2012/bes-2012-04-c/>).
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11. The  $\beta$ -sheet nanofibril communication, (“Cycloaddition-Promoted Self-Assembly of a Polymer into Well-Defined  $\beta$  Sheets and Hierarchical Nanofibrils,” Ting-Bin Yu, Jane Z. Bai, and Zhibin Guan, *Angew. Chem., Int. Ed.* **2009**, *48*, 1097 –1101) was selected by *Angewandte Chemie* as a Hot Paper and by SYNFACTS as a high impact paper.
10. “Hybrid Sugar-Peptide Copolymers” *Chemical & Engineering News* **2005**, September 26, 83(39), page 37 (<http://pubs.acs.org/cen/news/83/i39/8339hybrid.html> & <http://pubs.acs.org/subscribe/journals/cen/83/i39/html/8339scic.html>).
9. “Novel Saccharide–Peptide Hybrid Polymers Show Potential for Biomedical Applications” *MRS Bulletin* **2005**, December, 927; in the Research/Researcher section.
8. “Completely Biological, yet Artificial” *Science, Technology, Physics, Space News*, September 14, 2005 (<http://www.physorg.com/news6490.html>).
7. “Completely Biological, yet Artificial” *Chemie.De Information Services*, Germany, September 14, 2005 (<http://www.chemie.de/news/e/48953/>).
6. “Synthetische Polymere mit Bioqualität (report in German)” Rhombos Verlag Publisher, Germany, September 18, 2005 (<http://www.rhombos.de/shop/a/show/story/?569>).
5. “Nanocarrier Made in One Pot” *Chemical & Engineering News* **2004**, March 1, 82(9), page 27 (<http://pubs.acs.org/subscribe/journals/cen/82/i09/html/8209scic.html>).
4. “Made to Resist” *Science* **2003**, *301*, 279; in the Editors' Choice: Highlights of the recent literature section (<http://www.sciencemag.org/content/vol301/issue5631/twil.dtl>).
3. “Functionalizable, Biodegradable, and Protein-Resistant Polymer Fabricated” *Materials Research Society (MRS) Bulletin* **2003**, October, 697; in the Research/Researcher section.
2. “New Glucose Test on the Way for Diabetes” *Science News*, March 29, 1997 ([http://www.sciencenews.org/pages/sn\\_arc97/3\\_29\\_97/fob4.htm](http://www.sciencenews.org/pages/sn_arc97/3_29_97/fob4.htm)).
1. “Fluoropolymers made in carbon dioxide” the *Wall Street Journal*.

**PROFESSIONAL SERVICE**

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**External professional service:**

- Oversea Expert of the Chinese Academy of Sciences (2015 - )
- Elected Chair for *Bioinspired Materials Gordon Research Conference* (2016)
- Editorial Board Member, Chinese Journal of Polymer Science, Springer (2016 - )
- Editorial Board Member, Bio-Inspired Nanotechnology, Publishing House of Sciences (2015 - )
- Associate Editor: *Science China*, Beijing, China (2012 – present).
- International Advisory Board Member of the “*International Symposium on Polymer Chemistry*” (2012 – present).
- Program review panel member for Beckman Young Investigator Award program, 2016.
- Co-organizer (with Professor Ximin He, Wilhelm Huck, Stefan Zauscher) for the “Bioinspired Dynamic Materials—Synthesis, Engineering and Applications” symposium, 2016 MRS Spring National Meeting, Phoenix, AZ; March 28 – April 1, 2016.
- Co-organizer (with Professor Chad Mirkin and Dr. Timothy Merkel) for the Kathryn C. Hach Award for Entrepreneurial Success symposium in honor of Joseph DeSimone, the 248<sup>th</sup> ACS Fall National Meeting, San Francisco, CA; August 2014.
- International Advisory Board Member of the *The 3<sup>rd</sup> International Conference “Smart Materials Structures Systems”* (CIMTEC 2008), Sicily, Italy.
- Key organizer (with Professor Stuart Rowan) for the special symposium on “*Supramolecular Chemistry for Organic Materials Design*”, the 242<sup>nd</sup> ACS Spring National Meeting, Denver, CO; April 2011.
- Co-organizer (with Dr. Tao Xie, Yakai Feng, Andreas Lendlein) for the special symposium on “*Multifunctional Polymer-based Materials*”, the 2011 MRS Fall National Meeting, Boston, MA; November 2011.
- Session chairs for numerous ACS, MRS, Gordon Conferences, and other special symposia.
- Editor of the book titled “*Topics in Organometallic Chemistry: Metal Catalysis in Olefin Polymerization*”, Springer-Verlag, 2009.
- Co-editor (with Dr. Tao Xie, Yakai Feng, Andreas Lendlein) on the book titled “*Multifunctional Polymer-Based Materials: Volume 1403 (MRS Proceedings)*”, MRS Publisher, 2012.
- Served as reviewers for various grant proposals for NSF, NIH, PRF, and DOE, etc, NSF panelist, ad hoc member on various NIH study sections, reviewers for international scientific journals, such as *Science*, *Nature Chemistry*, *Nature Communication*, *PNAS*, *Journal of the American Chemical Society*, *Angewandte Chemie*, *Chemical Science*, *Advanced Materials*, *Organometallics*, *Macromolecules*, etc.

**UCI internal service:**

- External Faculty Award Committee
- Materials Faculty Search Committee
- Inorganic Faculty Recruiting Committee
- Materials Characterization Facility (2003-present)
- Taft Memorial Lectureship (2003-2007, chair for 2005)
- TA and Undergraduate Awards committee

- Industrial Recruiting and Liaison Committee
- Safety Advisory Committee
- PS Stores Oversight Committee
- Upper Division Labs Oversight Committee
- Organic Chemistry (Chem 51 and 52) Committee
- Chem 51 Curriculum Revision Committee
- Co-PI on multiple external instrumentation grants (such as NMR, X-Ray, Materials Characterization Facilities)
- Graduate Admissions and Graduate Recruiting Committee (2003 - 2004)
- Served on numerous Advancement to Ph.D. Candidacy Committee, Doctoral Defense Committee, Masters Thesis Committee

**INVITED LECTURES**

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215. University of British Columbia, Vancouver, Canada, March 27, 2018.
214. Fudan University, Department of Chemistry, Shanghai, China, December 18, 2017.
213. 15th Pacific Polymer Conference (**PPC-15**), Xiamen, China; December 10-14, 2017.
212. Yale, Department of Chemical Engineering, New Haven, CT, December 6, 2017.
211. University of Colorado, Boulder, Department of Chemistry, CO, November 13, 2017.
210. MIT, PPSM Seminar, Cambridge, MA, September 6, 2017.
209. Brandeis University, Department of Chemistry, Waltham, MA, September 5, 2017.
208. "POLY: Polymer Mechanochemistry" Symposium, 254<sup>th</sup> ACS National Meeting, Washington D.C., August 21, 2017.
207. "PMSE: Dynamic Chemistry in Polymer Materials" Symposium, 254<sup>th</sup> ACS National Meeting, Washington D.C., August 20, 2017.
206. DOE Biomolecular Materials Meeting, Gaithersburg, MD; August 15-17, 2017.
205. MIT, Kochi Institute, Cambridge, MA, July 18, 2017.
204. Harvard University, Wyss Institute, Cambridge, MA, June 15, 2017.
203. Harvard University, Squishy Physics Seminar, Cambridge, MA, June 7, 2017.
202. University of Tokyo, Department of Chemistry, Hongo, Japan, April 17, 2017.
201. University of Tokyo, Kashiwa Campus, Japan, April 13, 2017.
200. University of Tokyo, Department of Chemistry and Biotechnology, Hongo, Japan, April 10, 2017.
199. Keio University, Tokyo, Japan, March 27, 2017.
198. Keio University, Tokyo, Japan, March 27, 2017.
197. RIKEN, Wako, Saitama, Japan, March 24, 2017.
196. Waseda University, Tokyo, Japan, March 22, 2017.
195. Kuraray Company, Tsukuba, Japan, March 14, 2017.
194. Tokyo Institute of Technology, Ookayama, Tokyo, Japan, March 8, 2017.
193. The 11<sup>th</sup> Annual Conference on Nanobiotechnology, Kawasaki, Japan, February 27-28, 2017.
192. National Institute for Materials Science (NIMS), Tsukuba, Japan, February 23, 2017.
191. Ajinomoto Company, Kawasaki, Japan, February 17, 2017.
190. Hokkaido University, Sapporo, Japan, February 07, 2017.
189. Kyushu University, Fukuoka, Japan, December 16-19, 2016.
188. The 11<sup>th</sup> SPSJ International Polymer Conference (IPC2016), Fukuoka, Japan, December 13-15, 2016.
187. Nagoya University, Nagoya, Japan, December 7-10, 2016.
186. The 2016 International Workshop on Supramolecular Chemistry and Functional Materials, Riken CEMSupra2016, Tsumagoi, Gunma, Japan, December 4-7, 2016.
185. Tokyo Institute of Technology, Suzukakedai, Tokyo, Japan, December 1-2, 2016.
184. Osaka University, Osaka, Japan, November 14-15, 2016.
183. Kyoto University, Kyoto, Japan, November 7-13, 2016.
182. Fudan University, Shanghai, China, October 17, 2016.
181. Shanghai Institute of Technology, Shanghai, China, October 14, 2016.
180. East China Normal University, Shanghai, China, October 13, 2016.
179. Shanghai Institute of Applied Physics, Chinese Academy of Sciences, Shanghai, China, October 12, 2016.
178. International Conference on Scanning Probe Microscopy on Soft and Polymeric Materials (SPM-on-SPM 2016), Changchun, Jilin, August 26-29, 2016.
177. Adolphe Merkel Institute, Fribourg, Switzerland, July 1, 2016.
176. École Polytechnique Fédérale, Lausanne, Switzerland, June 30, 2016.
175. Virginia Tech, Blacksburg, VA, April 06, 2016.
174. California State University, Los Angeles, CA, April 29, 2016.
173. "POLY: Supramolecular Polymers: From Structure to Advanced Functionality" Symposium, 251<sup>st</sup> ACS National Meeting, San Diego, CA, March 15, 2016.
172. "PMSE: Polyethylene" Symposium, 251<sup>st</sup> ACS National Meeting, San Diego, CA, March 15, 2016.
171. "Advances in Bioinspired and Biomedical Materials" Symposium, PACIFICHEM 2015, Honolulu, Hawaii, December 19, 2015.
170. "Dynamic, Reversible, and Self-healing Materials" Symposium, PACIFICHEM 2015, Honolulu, Hawaii, December 19, 2015.

169. University of California – Irvine, Chemistry Department External Advisory Board Meeting, October 1, 2015.
168. University of California – Santa Barbara, keynote speaker for BMSE Retreat, September 18, 2015.
167. Zhejiang University, Hangzhou, China, July 22, 2015.
166. Peking University, Beijing, China, keynote speaker at the graduation ceremony, July 14, 2015.
165. 5<sup>th</sup> International Conference on Self-healing Materials, Durham, N.C., plenary speaker, June 22-24, 2015.
164. IAS Focused Program on Biomaterials for Medical Applications, Hong Kong, April 20-23, 2015.
163. University of California-Berkeley, Berkeley, CA, March 6, 2015.
162. University of Arizona, Tuscon, AZ, January 29, 2015.
161. University of California – Irvine, Physical Science Leadership Council Meeting, January 7, 2015.
160. Shanghai Institute of Organic Chemistry, Chinese Academy of Science, Shanghai, China, December 17-20, 2014.
159. Case Western Reserve University, Cleveland, OH, November 14, 2014.
158. City of Hope Medical Center, Duarte, CA, September 8, 2014.
157. “Functional Supramolecular Polymers” Symposium, 248<sup>th</sup> ACS National Meeting, San Francisco, CA, August 12, 2014.
156. Bioinspired Materials Gordon Research Conference (invited speaker), Sunday River Resort, Newry, ME, June 22-27, 2014.
155. EUPOC Conference on “Precision Polymers: Synthesis, Folding and Function”, Gargnano, Lago di Garda (BS), Italy; May 25 – 29, 2014.
154. University of Wisconsin, Madison, WI, May 5, 2014.
153. University of Montreal, Montreal, Canada, April 10, 2014.
152. “Structure for Function: Rational Design of New Functional Polymeric Materials” Symposium, 247<sup>th</sup> ACS National Meeting, Dallas, TX, March 18, 2014.
151. TsingHua University, TsingHua XueTang Lecture, Beijing, China, October 18, 2013.
150. Asian Polyolefin Workshop - APO 2013 (Keynote Speaker), Beijing, China, October 16, 2013.
149. China Polymer Congress 2013 (Plenary Speaker), Shanghai World Expo Center, Shanghai, China, October 12-16, 2013.
148. Kyowa Hakko Kirin California, Inc., La Jolla, CA, September 17, 2013
147. “Sequence-Controlled Polymers” Symposium, 246<sup>th</sup> ACS National Meeting, Indianapolis, IN, September 9, 2013.
146. DOE Biomolecular Materials Meeting, Gaithersburg, MD; August 19-21, 2013.
145. Polymers Gordon Research Conference (invited speaker), Mount Holyoke College, South Hadley, MA, June 9-14, 2013.
144. University of California Technology Transfer Forum, San Francisco, CA, April 2, 2013.
143. Shanghai Institute of Organic Chemistry (SIOC), Chinese Academy of Sciences, Shanghai, China, April 19, 2013.
142. University of Science and Technology of China (USTC), Hefei, China, April 17, 2013.
141. Zhejiang University, Hangzhou, China, April 12, 2013.
140. California State University, Long Beach, Long Beach, CA, February 13, 2013.
139. Homogeneous Catalysis for Alkanes and Alkenes, China-SIOC, Xiamen, Fujian Province, China, December 17-20, 2012.
138. Shanghai University, Shanghai, China, December 17, 2012.
137. USA-Japan Polymer Synthesis Seminar, Santa Barbara, CA, December 1-4, 2012.
136. University of California, San Diego, CA, November 21, 2012.
135. DuPont Research & Development, Shanghai, China, September 3-5, 2012.
134. “IPRIME: Supramolecular Polymers Workshop”, University of Minnesota, Minneapolis, MN, May 29-30, 2012.
133. University of California, Merced, Merced, CA, April 13, 2012.
132. Sandia National Laboratory, Livermore, CA, April 11, 2012.
131. “Glycopeptide Polymers” Symposium, 243<sup>rd</sup> ACS National Meeting, San Diego, CA, March 26, 2012.
130. “New Frontiers in Stimuli-Responsive Supramolecular Assemblies” Symposium, 243<sup>rd</sup> ACS National Meeting, San Diego, CA, March 27, 2012.
129. Free University Berlin, SFB Seminar, Berlin, Germany, September 27, 2011.
128. Eindhoven Technical University, Eindhoven, Netherlands, September 23, 2011.



127. CNRS-ESPCI, Paris Tech, Paris, France, September 21, 2011.
126. CNRS-Strasbourg, Institute Charles Sadron, Strasbourg, France, September 20, 2011.
125. "Bayreuth Polymer Symposium", Bayreuth, Germany, September 11-13, 2011.
124. University of Konstanz, Germany, September 10, 2011.
123. ETH - Zurich, Material Science, Zurich, Switzerland, September 8, 2011.
122. "Mark Young Scholar Award: Symposium in Honor of Javid Rzayev" 242<sup>nd</sup> ACS National Meeting, Denver, CO, August 29, 2011.
121. "Polyolefin Synthesis and Functionalization Symposium", Exxon-Mobile Corporate Strategic Research, Clinton, NJ, June 14-16, 2011.
120. Northwestern University, Evanston, IL, May 5, 2011.
119. Lawrence Berkeley National Laboratory, Berkeley, CA, April 12, 2011.
118. "Biomaterials Conference", University of California, Irvine, January 29, 2011.
117. University of California, San Diego, November 8, 2010.
116. Fudan University, Shanghai, China, September 14-15, 2010.
115. "International Symposium on Multi-Dimensional Supramolecular Chemistry (ISMDSC)", Beijing, China, September 10-11, 2010.
114. Peking University, Beijing, China, September 10-13, 2010.
113. TsingHua University, Beijing, China, September 9, 2010.
112. "33<sup>rd</sup> Reaction Mechanisms Conference", Amherst, Massachusetts, June 23-26, 2010.
111. "TechConnect World Conference and Expo: Nanotech Conference", Anaheim, CA, June 21-24, 2010.
110. "Symposium on Force Spectroscopy on Macromolecules: From Single Molecules to Materials", 93<sup>rd</sup> Canadian Chemistry Conference (CSC2010), Toronto, Ontario, Canada, May 30, 2010.
109. Louisiana State University, Baton Rouge, LA, May 7, 2010.
108. Tulane University, New Orleans, LA, May 6, 2010.
107. "Engineering the Biology-Materials Interface" Symposium, 239<sup>th</sup> American Chemical Society National Meeting, San Francisco, CA, March 22, 2010.
106. University of California, Santa Barbara, CA, January 27, 2010.
105. University of Buffalo, Buffalo, New York, November 19, 2009.
104. Syracuse University, Syracuse, New York, November 18, 2009.
113. DOE Biomolecular Materials Contractor's Meeting - 2009, Warrenton, VA; October 13, 2009.
112. Advances in Polyolefins 2009, Santa Rosa, CA, September 20-23, 2009.
111. 2<sup>nd</sup> International Conference on Self-Healing Materials Symposium, Chicago, IL, June 29, 2009.
110. National TsingHua University, Taiwan, June 24, 2009.
109. National Chiao Tung University, Taiwan, June 23, 2009.
108. National Taiwan University, Taipei, Taiwan, June 22, 2009.
107. From Molecular Biology to Human Therapies Symposium, Beckman Center, Irvine, CA, April 20, 2009.
106. Washington University, St. Louis, MO, March 12, 2009.
105. International Specialty Products (ISP), Inc., November 20, 2009.
104. MIT, Boston, November 19, 2008.
103. IBM Almaden Research Center, San Jose, CA, September 26, 2008.
102. NATO Symposium on New Smart Materials via Metal Mediated Macromolecular Engineering, Antalya, Turkey, August 31 – September 7, 2008.
101. Controlled/Living Radical Polymerization Symposium, 236<sup>th</sup> American Chemical Society National Meeting, Philadelphia, August 18, 2008.
100. Invited speaker at the Organic Structures and Properties Gordon Research Conference, Il Ciocco, Italy, April 27 – May 2, 2008.
99. University of Akron, Ohio, March 24, 2008.
98. University of California, Santa Cruz, March 3, 2008.
97. University of California, San Diego, February 15, 2008.
96. Peking University, Xingda Lecture, Beijing, China, December 21, 2007.
95. Institute of Chemistry, Chinese Academy of Sciences, Beijing, China, December 20, 2007.
94. TsingHua University, Beijing, China, December 19, 2007.
93. Shanghai Institute of Organic Chemistry, Shanghai, China, December 17, 2007.
92. Shanghai Jiaotong University, Shanghai, China, December 14, 2007.
91. Purdue University, West Lafayette, IN, September 18, 2007.

90. National Starch Chemical, Central Research, Bridgewater, NJ, September 6, 2007.
89. University of Delaware, Newark, DE, September 5, 2007.
88. DuPont Central Research, Experimental Station, Wilmington, DE, September 4, 2007.
88. University of Bayreuth, Bayreuth, Germany, March 8, 2007.
87. Humboldt University, Berlin, Germany, March 5, 2007.
86. Max-Planck-Institut für Kohlenforschung, Mülheim/Ruhr, Germany, February 27, 2007.
85. Center for Biomaterials, Institute for Polymer Research, Teltow, Germany, February 22, 2007.
84. Max-Planck-Institut für Colloids and Interfaces, Potsdam, Germany, February 14, 2007.
83. Dutch Polymer Day, Lunteren, Netherlands, February 5-6, 2007.
82. BASF Aktiengesellschaft, Ludwigshafen, Germany, January 22, 2007.
81. Institute of Polymer Research, IPF, Dresden, Germany, December 20, 2006.
80. ETH - Zurich, Material Science, Switzerland, December 13, 2006.
79. University of Mainz and Max-Planck-Institut für Polymer, Mainz, Germany, December 5-6, 2006.
78. University of Konstanz, Germany, November 30, 2006.
77. Free University Berlin, Department of Chemistry, Germany, November 14, 2006.
76. Imperial College London, Department of Chemistry, London, UK, November 9, 2006.
75. Cambridge University, Department of Chemistry, Cambridge, UK, October 26, 2006.
74. Technical University of Munich – Department of Chemistry, Munich, Germany, October 6, 2006.
73. PolyMaterials, Inc., Munich, Germany, October 5, 2006.
72. Technical University of Munich – Medical School, Munich, Germany, October 4, 2006.
71. Oxford University, Department of Chemistry, Oxford, UK, August 4, 2006.
70. Macro 2006 International Conference on Polymer Synthesis, Warwick, UK, July 31-August 3, 2006.
69. National Dutch Graduate School of Polymer Science and Technology, Netherlands, June 17, 2006.
68. International Symposium on Polymer Chemistry (PC'2006), Dalian, P. R. China, June 7-11, 2006.
67. Indiana University, IN, May 12, 2006.
66. Symposium on Molecular Motors, Nanomechanics and Engineered Hybrid Systems, US Materials Research Society Annual Meeting, San Francisco, CA, April 19-20, 2006.
65. University of Washington, Seattle, WA, February 28, 2006.
64. Discussion Leader at the Organic Structures and Properties Gordon Research Conference, Santa Ynez Valley, CA, January 8-13, 2006.
63. Synergy between Organic and Polymer Chemistry Symposium, PACIFICHEM 2005, December 18, 2005.
62. US-Japan Nanobiotechnology Workshop, University of Tokyo, Tokyo Institute of Technology, Kyoto University, and Osaka University, December 8-15, 2005.
61. Advances in Polyolefin Conference, Sonoma Valley, CA, September 25-28, 2005.
60. The 4<sup>th</sup> Annual California Tissue Engineering Meeting, Irvine, CA, September 16-17, 2005.
59. DOE/BES Biomolecular Materials Program Meeting, Airlie Conference Center, Warrenton, Virginia, August 26, 2005.
58. Fracture and Relaxations in Polymer Solids Symposium, 230<sup>th</sup> American Chemical Society National Meeting, Washington, D.C., August 29, 2005.
57. Molecular Recognition Using Polymers Symposium, 230<sup>th</sup> American Chemical Society National Meeting, Washington, D.C., August 28, 2005.
56. Discussion Leader at the Polymer (East) Gordon Research Conference, Mount Holyoke College, MA, June 19-24, 2005.
55. Creative Invention Award Symposium, 229<sup>th</sup> American Chemical Society National Meeting, San Diego, March 15, 2005.
54. Biomimetic Polymers Symposium, 229<sup>th</sup> American Chemical Society National Meeting, San Diego, March 16, 2005.
53. Cornell University, Ithaca, NY, March 28, 2005.
52. NSF Workshop on U.S.–Japan Young Scientists Symposium on Bionanotechnology, Northwestern University, March 7-8, 2005.
51. NSF Workshop on Molecular Basis of Life Processes (MBLP), Oakridge National Laboratory, TN, October 28-30, 2004.
50. University of Illinois, Urbana Champagne, IL, October 21, 2004.
49. Oral presentation at the Annual Beckman Young Investigator Symposium, Beckman Center, August 28, 2004.

48. International Workshop on Branched Polymers for Performance, Williamsburg, Virginia, May 23-26, 2004.
47. University of Massachusetts at Amherst, MA, April 30, 2004.
46. University of Chicago, Chicago, IL, April 9, 2004.
45. Northwestern University, Evanston, IL, April 8, 2004.
44. 227<sup>th</sup> American Chemical Society National Meeting, Anaheim, CA, March 28-April 1, 2004.
43. New York University, New York City, NY, March 25, 2004.
42. John Hopkins University, Baltimore, Maryland, March 24, 2004.
41. University of California, Los Angeles, CA, February 26, 2004.
40. NSF Supramolecular Chemistry Workshop, Sanibel Island, FL, January 10-14, 2004.
39. University of North Carolina at Chapel Hill, NC, January 9, 2004.
38. Duke University, NC, January 8, 2004.
37. North Carolina State University, Raleigh, NC, January 8, 2004.
36. Dow Chemical Company – Univation Technologies, Piscataway, NJ, December 5, 2003.
35. Rohm & Haas Company, Spring House, PA, December 4, 2003.
34. Materials Research Society National Meeting, Boston, MA, December 1-5, 2003.
33. University of California, Riverside, CA, November 21, 2003.
32. University of California, Santa Barbara, CA, November 19, 2003.
31. Stanford University, Palo Alto, CA, October 22, 2003.
30. Polymer Symposium at the 38<sup>th</sup> Western Regional ACS Meeting, Long Beach, CA, October 16, 2002.
29. Advances in Polyolefins Conference, Sonoma Valley, CA, October 5-8, 2003.
28. The 7<sup>th</sup> International Symposium on Polymers for Advanced Technologies Conference, Fort Lauderdale, FL, September 21-23, 2003.
27. The 3<sup>rd</sup> International Symposium on Dendrimer and Hyperbranched Polymers, Berlin, Germany, September 17-21, 2003.
26. The Institute of Polymer Research, Dresden, Germany, September 16, 2003.
25. University of Dortmund, Dortmund, Germany, September 15, 2003.
23. Max-Planck-Institute at Mulheim, Germany, September 12, 2003.
23. Max-Planck-Institute at Mainz, Germany, September 10-11, 2003.
22. The 226<sup>th</sup> American Chemical Society National Meeting, New York City, September 8, 2003.
21. Tutorial Lecture presented at the 226<sup>th</sup> American Chemical Society National Meeting, New York City, September 7, 2003.
20. Massachusetts Institute of Technology, Cambridge, MA, August 15, 2003.
19. New England BioLabs, Inc., Boston, MA, August 14, 2003.
18. National Science Foundation Physical Organic Workshop, Newport, RI, August 10-14, 2003.
17. The 9<sup>th</sup> Annual German-American Beckman Frontiers of Science Symposium, Beckman Center, Irvine, CA, June 5-7, 2003.
16. DOD Multidisciplinary University Research Initiative (MURI) Workshop, Baltimore, Maryland, May 27-28, 2003.
15. US-Japan Symposium on Advanced Polymer Chemistry for the 21<sup>st</sup> Century, Nagoya City, Japan, December 7-10, 2002.
14. Sumitomo Chemical Company, Chiba, Japan, December 5, 2002.
13. University of Redlands, Redlands, CA, October 22, 2002.
12. Physical and Materials Chemistry Symposium at the NW Regional ACS Meeting, Spokane, Washington, June 19-22, 2002.
11. The 223<sup>rd</sup> American Chemical Society National Meeting, Orlando, Florida, April 9, 2002.
10. Gordon Research Conference: Chemistry of Supramolecules and Assemblies, Connecticut College, CT, August 1, 2001.
9. The 24<sup>th</sup> Asilomar Conference on Polymeric Materials, Pacific Grove, CA, February 5, 2001.
8. UCI Department of Chemical Engineering, October 2000.
7. The NSF Materials Chemistry Workshop, Timberline Lodge, Oregon, October 2000.
6. The 6<sup>th</sup> US/Germany Polymer Symposium, Northwestern University, August 2000.
5. University of Virginia, Charlottesville, VA, July 2000.
4. U.S. Army Research Laboratory, Aberdeen, MA, July 2000.
3. California Institute of Technology, Pasadena, CA; October 28, 1999.
2. Drexel University, Philadelphia, PA, October 13, 1999.

1. 217<sup>th</sup> American Chemical Society National Meeting, Anaheim, CA, March 21-25, 1999.