

Steven C. Zimmerman

Roger Adams Professor of Chemistry

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Experience

Academic Appointments

Professor of Biophysics and Computational Biology, 2013-present

Roger Adams Professor of Chemistry, 2004-present

William H. and Janet G. Lycan Professor of Chemistry, 2002-2004

Professor of Chemistry, University of Illinois-Urbana; August, 1994

Associate Professor of Chemistry, University of Illinois-Urbana; August, 1991

Assistant Professor of Chemistry, University of Illinois-Urbana; August, 1985

Administrative Appointments

Chancellor's Advisor on Diversity and Cultural Understanding, 2012-2015 (20%-time appointment)

Head, Department of Chemistry, University of Illinois; 2006-2012

Interim Head, Department of Chemistry, University of Illinois; 1999-2000, 2005-2006

Education

University of Cambridge; Cambridge, England; Postdoctoral, 1983-1985 (with Alan R. Battersby)

Columbia University; New York, New York; Ph.D., 1984; M.A., 1980 (with Ronald Breslow)

University of Wisconsin; Madison, Wisconsin; B.S. with Honors, 1979 (with Hans J. Reich)

Recognition

External Awards and Fellowships

National Science Foundation Special Creativity Award, 2021

Fellow, American Chemical Society, 2009 (Inaugural year)

American Association for the Advancement of Science, 1998

Arthur C. Cope Scholar Award, American Chemical Society, 1997

Buck-Whitney Award, Eastern New York Section of American Chemical Society, 1995

Presidential Young Investigator Award, National Science Foundation, 1988-1993

Alfred P. Sloan Fellowship, 1992-1993

Camille and Henry Dreyfus Teacher-Scholar Award 1989-1992

Cyanamid Academic Award 1990

Eli Lilly Grantee 1989-1992

American Cancer Society Junior Faculty Award, 1986-1989

Additional Recognition

University of Illinois Awards

Larine Y. Cowan Make a Difference Award for Leadership in Diversity, 2015

University of Illinois Awards (cont.)

List of Instructors Ranked as Excellent by their Students: S'94 (Chem 136), F'97 (Chem 431), S'02 (Chem 236), F'02 (Chem 431), F'04 (Chem 532), S'05 (Chem 437), F'10 (Chem 236), F'14 (Chem 236), F'15 (Chem 236), S'16 (Chem 590), S'17 (Chem 236), F'17 (Chem 236), F'18 (Chem 236), S'20 (Chem 437)

Alumni Discretionary Award, College of Liberal Arts and Sciences, 2003

University Scholar Award, 1991-1992

School of Chemical Sciences Teaching Award, 2018, 1994, 1991

Center for Advanced Study Fellowship, University of Illinois, Spring Term 1989

Prior Awards

NSF-NATO Postdoctoral Fellowship, 1983-1984, University of Cambridge

Louis P. Hammett Award, 1983, Columbia University

Graduate Student Teaching Award, 1982, Columbia University

Southern California Oil Fellowship, 1979, University of Wisconsin-Madison

External Activities, Disciplinary Service, and Outreach Activities

Member, Synthetic and Biological Chemistry Study Section, National Institutes of Health, Oct. 2017-2021
External Review Committee, Dept. Chemistry, University of Maryland, College Park, MD, Dec. 11-12, 2019

NOBCCChE National Meeting, 2 Workshops, St. Louis, MO, Nov. 18-21, 2019

External Review Committee, Dept. Chemistry, University of North Carolina, Chapel Hill, NC, Nov. 8-10, 2018

Participant, Society for the Advancement of Chicanos and Native Americans in Science (SACNAS), San Antonio, TX, Oct. 11-13, 2018

Co-Editor of Special Issue of *Beilstein J. Org. Chem.* (with E. Anslyn), "Supramolecular Chemistry at the Interface of Biology, Materials and Medicine," vol. 12, 2016. DOI: [10.3762/bjoc.12.105](https://doi.org/10.3762/bjoc.12.105).

National Science Foundation, Supramolecular Chemistry Panel of the NSF Macromolecular, Supramolecular and Nanochemistry (MSN) program, virtual panel Mar. 3-4, 2016

ACS National Award Selection Committee (ACS Fellows), April 2016

Associate Editor, *Beilstein Journal of Organic Chemistry*, May 2010 - December 2016

External Review Committee, Dept. Chemistry, Purdue University, West Lafayette, IN, Nov. 8-10, 2015

National Institutes of Health, Special Emphasis Panel Ad hoc member ZRG1 BCMB-D (02) 2015/10 - July 16-17, 2015

Myotonic Dystrophy Association, Muscle Walk and Top Community Team fundraising award, Springfield, IL, May 16, 2015

National Science Foundation, Supramolecular Chemistry Panel of the NSF Macromolecular, Supramolecular and Nanochemistry (MSN) program, virtual panel Feb. 19-20, 2015

Coorganizer, Symposium on Supramolecular Chemistry at the Interface of Materials, Biology, and Medicine, PacifiChem 2015

Ad hoc Reviewer for FY14 Peer Reviewed Medical Research Program (PRMRP) for the Department of Defense Congressionally Directed Medical Research Program (CDMRP), Illnesses Related to Radiation Exposure (IRRE) peer review panel, Dec. 10-12, 2014

Participant and speaker at MDA 1st Illinois Muscle Summit, Springfield, IL, Nov. 2014

National Organization of Black Chemists and Chemical Engineers (participant), National Meeting, New Orleans, Sept. 23-25, 2014.

American Chemical Society National Awards Selection Committee, 2014-2017

Co-Editor of Special Issue *Israel J. Chem.* (with A. Schepartz), "Supramolecular Chemistry for Biology, Materials and Medicine," vol. 53, issue 8, 2013. DOI: [10.1002/ijch.201310007](https://doi.org/10.1002/ijch.201310007)

Themed Issue *ChemComm* (with Feihe Huang and Rachel O'Reilly), "Polymer Self-Assembly," 2014

Ad hoc reviewer for NIH Special Emphasis Panel [ZGM1 TWD-X (SC)], Nov. 18, 2013

National Diversity Equity Workshop (NDEW - OXIDE): NIH, NSF, DOE Sponsored Workshop - Arlington, VA, April 15-16, 2013

National Institutes of Health, Special Emphasis Panel Ad hoc member (ZRG1 BCMB-B (02)) - Sept. 9-10, 2012

External Activities, Disciplinary Service, and Outreach Activities (cont.)

National Science Foundation, Supramolecular Chemistry Panel of the NSF Macromolecular, Supramolecular and Nanochemistry (MSN) program, Arlington, VA on March 12-13, 2012

National Science Foundation, Macromolecular and Supramolecular Panel 2 of the Macromolecular, Supramolecular, and Nanochemistry (MSN) program on March 21-22, 2011, Arlington, VA

National Diversity Equity Workshop (NDEW - OXIDE), Arlington, VA, Jan. 24-26, 2011

Coached group of boys from Locust Valley Middle School, Long Island, NY on their project on artificial antibodies for FIRST Lego League competition held in Massapequa Long Island, Feb. 6, 2011

Ad hoc member of NIH Special Emphasis Panel (ZRG1 BCMB-B (02) Biological Chemistry and Macromolecular Biophysics), Feb. 2011

Organizing Committee for 6th Biennial International Conference on Molecularly Imprinted Polymers, MIP2010, New Orleans, LA, Aug. 9-12, 2010.

Ad hoc member of NIH Special Emphasis Panel (Innovator Awards) - Feb. 2010

Ad hoc member of NIH Special Emphasis Panel - mail reviewer, Oct. 2009

Ad hoc member of NIH Special Panel to review EUREKA Proposals, March-April 2008

National Diversity Equity Workshop (NDEW - OXIDE): NIH, NSF, DOE Sponsored Workshop - Excellence Empowered by a Diverse Academic Workforce: Achieving Racial & Ethnic Equity in Chemistry, Arlington, VA, Sept. 24-26, 2007

Coorganizer, Symposium on Organic Approaches to Nanotechnology, American Chemical Society National Meeting, San Francisco, CA, Sept 10-14, 2006

Workshop on Building Strong Chemistry Departments through Gender Equity, co-sponsored by NSF, NIH, and DOE, Arlington, VA, Jan. 29-31, 2006

National Institutes of Health, NIGMS, Young Faculty Mentoring Workshop, Maryland, May, 2006

Chair, 2006 Gordon Research Conference in Organic Structures and Properties (Vice-Chair, 2004)

Coorganizer, Symposium on Molecule-Based Materials, PacifiChem 2005

National Institutes of Health, NIGMS, Young Faculty Mentoring Workshop, Maryland, May, 2005

ACS Organic Division, Executive Committee, Member at Large, 2004-2006

Organizing Committee, International Symposium on Supramolecular Chemistry (ISSC-XIII), University of Notre Dame, July 25-30, 2004

Ad hoc member of Medicinal Chemistry A Study Section, NIH, June 2004

American Chemical Society, Division of Organic Chemistry Graduate Fellowship Review Committee, 1999, 2000 (Chair), 2004, 2005 (Chair)

ACS Cope Scholar Award Canvassing Committee, 2004

Symposium Organizer and Chair, Ronald Breslow Award for Achievement in Biomimetic Chemistry, ACS National Meeting, Anaheim, CA, March 29, 2004

Organizer/Founder, NSF Young Investigator Workshop on Supramolecular Chemistry, Sanibel, FL 1/04

External Ph.D. examiner, Judith van Gorp, Eindhoven Univ. Technol., Netherlands, May 12, 2004

ACS Organic Division, Alternate Councilor, New York, National ACS Meeting, April 2003

Study Section Boundaries Team to design study sections for Biological Chemistry and Macromolecular Biophysics (BCMP) Integrated Review Groups (IRG), NIH, Bethesda, MD, Feb. 2003

Ad hoc member of NIH-NIGMS National Advisory Council, Bethesda, MD, Jan. 2003

Ad hoc member of Special Study Section to Review proposal for Centers of Excellence in Chemical Methodologies and Library Development, NIH, Washington, D.C., June 2002

Ad hoc member of Medicinal Chemistry A Study Section, NIH, Feb. 2002

Member National Institutes of Health, Bioorganic Natural Products Study Section, Oct. '94-June '98

Special Emphasis Study Section Reviewer, National Institutes of Health, March 2001

Editorial Advisory Board, Journal of Supramolecular Chemistry, 2001-2004

Editorial Advisory Board, Supramolecular Chemistry, 2001-2006

Faculty of 1000, Biomimetic Chemistry Section Editor, 2001-2004

NSF-CAREER External Reviewer, 2000

Editorial Advisory Board, Journal of Molecular Recognition, 1994-1998

Observer, IUPAC General Assembly, Commission on Physical Organic Chemistry, Lisbon University, Lisbon, Portugal, August 5-12, 1993

Ad hoc member of Bioorganic Natural Products Study Section, National Institutes of Health, Feb. 1992

University of Illinois Service (major committees and service only)

Chancellor's Task Force on Racism and Social Injustice at the University of Illinois, Working Group 1, Teaching and Scholarship, and subgroup on Faculty/Staff Recruitment and Retention, 2020-2021
Campus Consensual Relationship Policy Task Force, 2019
College of Liberal Arts and Sciences, Strategic Planning Group #3, Diversity and Inclusion, 2019
Campus Awards Committee, 2017-2021
Chair, Director Search, School of Molecular and Cellular Biology, 2017
Graduate Mentoring for Diversity Panelist, Graduate College, Mar. 10, 2017
Chair, I-STEM Review Committee, Provost-mandated program review, 2016
Department of Chemistry, Head Search Committee, 2016
Department of Microbiology, Head Review Committee, Chair, 2015
"How an Organic Chemist Views the World. Small Molecules Serving Chemistry, Biology, Materials and Medicine," UIUC ACS Student Chapter General Meeting, Feb. 18, 2015
American Chemical Society Student Members (ACSSM) Science Cafe, May 4, 2014
College of Liberal Arts and Sciences, Dean Search Committee, 2013-2014
UIUC Senate Committee on Honorary Degrees, 2013-2014
Chancellor's Advisor on Diversity and Cultural Understand / Enhancing Diversity, Gaining Excellence (EDGE) Council, 2012-2015
Created and was instructor of a Preparing Future Faculty Course (Chem 590F), developed in collaboration with Graduate College and partnering with local colleges and universities, S 2012, 2013, 2016
University of Illinois at Urbana-Champaign Senator 2012-2014
Campus Gender Equity Committee, 2011-2013
Stewarding Excellence @ Illinois, Review Committee for the Office of the VCIA, 2010
Search Committee, Director, Beckman Institute, 2009
LAS Dean's Strategic Advisory Review (StAR) Committee, 2009-2011
Office of Technology Management, Advisory Board, Fall 2008
Head, Department of Chemistry, 2006-2012
Interim Head, Department of Chemistry, 2005-2006
Chair, Committee to Perform Five-Year Review of Head of Geology, Spring, 2005
Chair, Department of Chemistry, Graduate Program Review Committee (2004-2005)
Provost's Campus Budget Oversight Committee, 2000-2004
College of Liberal Arts and Sciences, Executive Committee, Fall 2003 (temporary appointment)
Head, Organic Area, Department of Chemistry, 2001-2002
Responsible Conduct of Research Education Committee, 2001-2002
Faculty Search Committee, Department of Civil and Environmental Engineering, 2000-2001
Beckman Institute Coordinating Committee, 1999-2001
School of Chemical Sciences, Executive Committee 1999-2000
Interim Head, Department of Chemistry, 1999-2000
Search Committee, Director of School of Chemical Sciences, 1999
Staff Committee, Department of Chemistry, 1997-1999
Graduate College Executive Committee, 1997-1999
Beckman Institute Program Advisory Board, 1997-1999
Search Committee, Head of Chemistry, 1994

Administrative Accomplishments

Department Head (Interim, 1999, 2005; Permanent, 2006-2012)

Summary. Managed an academic staff of 115 full time equivalents (FTE) with a State budget of \$8.4 M and total expenditures of \$26.7M, including federal research grants and contracts. Staff included 34.5 tenure track faculty, 40 postdoctoral associates, 31 academic professionals, 14 civil servants, and 9 instructional staff. Supervised undergraduate and graduate programs containing 461 and 304 students, respectively. Combined programs delivered nearly 48,000 instructional units per year. Managed 156,684 net assignable square feet of research and teaching space spread across 4 buildings.

Department Head (cont.)

Major Accomplishments

- Initiated and successfully led the 2005-2011 \$60M Brilliant Futures fundraising campaign for Department of Chemistry with largest single department target at the University of Illinois. Also initiated Vision 2020 campaign to raise \$20M by 2020, with lead gifts secured.
- Major gifts secured from alumni included \$9.75M for Springborn Fellowship Program, \$3M for Richard E. Heckert Endowed Chair and Harold Snyder Graduate Fellowship, \$2.4M for Victor and Janet Buhrke Fund, \$2M for Kenneth L. Rinehart Endowed Chair in Chemistry, and \$1.4M for G. L. Clark Professorship in Chemistry and Buhrke Graduate Fellowship. In 2007-08, largest fundraising total of any unit head at Illinois and three largest unit gifts for University of Illinois.
- Obtained campus funding for and successfully recruited senior faculty members, Sharon Hammes-Schiffer from the Penn State University, Catherine J. Murphy from the University of South Carolina, So Hirata from the University of Florida, John F. Hartwig from Yale University, and Anne M. Baranger from Wesleyan University. Designed and oversaw \$5M laboratory remodeling project to accommodate Hartwig-Baranger pair and the required relocation of six senior faculty offices/laboratories.
- Oversaw completion of \$14M renovation of Chemistry Library and Organic Teaching Laboratories.
- Obtained Provost Office authorization for full renovation of Chem Annex with addition and with Harley-Ellis-Devereaux architects, developed architectural plans.
- Developed a 10-year financial plan to retire \$8.5M inherited Department debt, securing commitment for >\$1M per year in differential tuition to be brought into the Department of Chemistry.
- Over 8 years as Department Head hired or appointed 16 total tenure track faculty in Chemistry with a 1:1 male-female ratio (not including joint appointees). Successfully increased diversity of faculty, students, and staff and improved national ranking (NRC).
- Concerted and successful effort to diversify faculty, staff, and student body along with increasing excellence.
- Negotiated and oversaw cooperative program with Hanoi University of Science (HUS) to train Vietnamese faculty in the teaching of undergraduate chemistry and port the University of Illinois, Department of Chemistry undergraduate curriculum to HUS and then to other Vietnamese National Universities.

ORCID QR Code (ORCID ID: <https://orcid.org/0000-0002-5333-3437>)



Patents

Steven C. Zimmerman, Chun-Ho Wong, Paul J. Hergenrother, Jessie Peh, "New Substituted Triamino-triazine Compounds Useful e.g. For Inhibiting Binding of Muscleblind-like Protein, and Treating Myotonic Dystrophy (Myotonic Dystrophy Type 1) or Treating or Reducing Symptoms of Myotonic Dystrophy, US Patent 8,754,084, 2014.

Steven C. Zimmerman, Long M. Luu, Lien T. T. Nguyen, "Compounds and methods for myotonic dystrophy therapy," US Patent 9,376,421, 2016.

Patents (cont.)

Steven C Zimmerman, Chun-Ho Wong, Paul J Hergenrother, Jessie Peh, "Therapeutic methods and agents for treating myotonic dystrophy," US Patent 9,382,215, 2016.

Larissa M. Q. Reyes, J. Keith Harris, Christopher J. Tucker, Joshua S. Katz, Brittany A. Walker, Steven C. Zimmerman, "Scale Inhibition Treatment of a Water System Involves Introducing Aqueous Scale Inhibiting Composition Into the Water System in Which the Composition Contains Carboxylated Hyperbranched Polyglycerol," Patent WO2017044383-A1.

Hsuan-Chin Wang, Steven C. Zimmerman, and David M. Laganella, "Microcapsule composition useful for releasing hydrophobic liquid, comprises core comprising hydrophobic liquid, and shell comprising reaction product of simple diester diacid chloride monomer and polyamine," US2018116212-A1, 2018.

Keith Harris, Joshua S. Katz, D. M. Laganella, Shampa R. Samanta, Brittany A. Walker, Steven C. Zimmerman, "Protected antimicrobial composition used to add to oil well, water reservoir, natural gas reservoir, paint, film, pressure treated wood, coating, caulk, wall board or plastic comprises substituted 1,1-dimethoxy-propane compounds," Patent US2019062260-A1.

Yugang Bai, Steven C. Zimmerman, Auinash Kalsotra, "New multivalent ligand comprising substituted (1,3,5)triazine compound is rCUG(exp) binder used to reduce symptoms of myotonic dystrophy type 1," Patent WO2019040750-A1.

Publications

1. Steven C. Zimmerman, Anthony W. Czarnik, and Ronald Breslow, "Intramolecular General Base-Acid Catalysis in Transaminations Catalyzed by Pyridoxamine Enzyme Analogues," *J. Am. Chem. Soc.* **1983**, *105*, 1694. DOI: [10.1021/ja00344a069](https://doi.org/10.1021/ja00344a069).
2. Steven C. Zimmerman and Ronald Breslow, "Asymmetric Synthesis of Amino Acids by Pyridoxamine Enzyme Analogues Utilizing General Base-Acid Catalysis," *J. Am. Chem. Soc.* **1984**, *106*, 1490. DOI: [10.1021/ja00317a054](https://doi.org/10.1021/ja00317a054).
3. Steven Charles Zimmerman, "Beta-Eliminations and the Asymmetric Synthesis of Amino Acids by Pyridoxamine Enzyme Analogues Utilizing General Base-Acid Catalysis," Ph.D. thesis, Columbia University, New York, NY, 1984.
4. Wayne Weiner, Jeffrey Winkler, Steven C. Zimmerman, Anthony W. Czarnik, and Ronald Breslow, "Mimics of Tryptophan Synthetase and of Biochemical Dehydroalanine Formation," *J. Am. Chem. Soc.* **1985**, *107*, 4093. DOI: [10.1021/ja00299a064](https://doi.org/10.1021/ja00299a064).
5. Simon P. D. Turner, Michael H. Block, Zhi-Chu Sheng, Steven C. Zimmerman, and Alan R. Battersby, "Syntheses Relevant to Vitamin B₁₂ Biosynthesis: Synthesis of (±)-Faktor-I Octamethyl Ester," *J. Chem. Soc., Chem. Commun.* **1985**, 583. DOI: [10.1039/C39850000583](https://doi.org/10.1039/C39850000583).
6. Michael H. Block, Steven C. Zimmerman, Graeme B. Henderson, Simon P. D. Turner, Steven Westwood, Finian J. Leeper, and Alan R. Battersby, "Syntheses Relevant to Vitamin B₁₂ Biosynthesis: Synthesis of Sirohydrochlorin and of its Octamethyl Ester," *J. Chem. Soc., Chem. Commun.* **1985**, 1061. DOI: [10.1039/C39850001061](https://doi.org/10.1039/C39850001061).
7. Ronald Breslow, Anthony W. Czarnik, Manfred Lauer, Reinhardt Leppkes, Jeffrey Winkler, and Steven C. Zimmerman, "Mimics of Transaminase Enzymes," *J. Am. Chem. Soc.* **1986**, *108*, 1969. DOI: [10.1021/ja00268a040](https://doi.org/10.1021/ja00268a040).
8. Alan R. Battersby, Simon P. D. Turner, Michael H. Block, Zhi-Chu Sheng, and Steven C. Zimmerman, "Synthetic Studies Relevant to Biosynthetic Research on Vitamin B₁₂. Part 8. Synthesis of (±)-Faktor-I-Octamethyl Ester," *J. Chem. Soc., Perkin Trans I* **1988**, 1577. DOI: [10.1039/P19880001577](https://doi.org/10.1039/P19880001577).
9. Steven C. Zimmerman and Craig M. VanZyl, "Rigid Molecular Tweezers: Synthesis, Characterization, and Complexation Chemistry of a Diacridine," *J. Am. Chem. Soc.* **1987**, *109*, 7894-7896. DOI: [10.1021/ja00259a055](https://doi.org/10.1021/ja00259a055).
10. Steven C. Zimmerman, "The Synthesis and Novel Structure of Methyl 7-Phenyl-dibenz[a,j]acridine-14-carboxylate and Methyl 5-Phenyl-benzo[1,2-h:5,4-h']diquinoline-3-carboxylate: Rigid Semi-Helical

- Spacers with Convergent Functional Groups," *Tetrahedron Lett.* **1988**, 983-986. DOI:10.1016/0040-4039(88)85314-0.
11. Steven C. Zimmerman and Katherine D. Cramer, "Stereo-electronic Effects at Carboxylate: A Syn Oriented Model for the Histidine-Aspartate Couple in Enzymes," *J. Am. Chem. Soc.* **1988**, *110*, 5906-5908. DOI: 10.1021/ja00225a056.
 12. Zijian Zeng and Steven C. Zimmerman, "Convenient Synthesis of 9-Alkyl and 9-Arylacridines from [2-(Trimethylsilyl)ethoxy]methyl (SEM) Protected Acridone," *Tetrahedron Lett.* **1988**, 5123-5124.
 13. Steven C. Zimmerman, Craig M. VanZyl, and Gregory S. Hamilton, "Rigid Molecular Tweezers: Preorganized Hosts for Electron Donor-Acceptor Complexation in Organic Solvents," *J. Am. Chem. Soc.* **1989**, *111*, 1373-1381. DOI: 10.1021/ja00186a035.
 14. Steven C. Zimmerman, Katherine D. Cramer, and Adam A. Galan, "Synthesis of 2,4(5)-Bis(2-hydroxymethyl- and 2,4(5)-Bis[2-(hydroxy)ethoxymethyl]imidazole: Precursors of 2,4(5)-Connected Imidazole Crown Ethers," *J. Org. Chem.* **1989**, *54*, 1256-1264. DOI: 10.1021/jo00267a008.
 15. Steven C. Zimmerman, Carol R. Lamberson, Michael Cory, and Terri A. Fairley, "Topologically Constrained Bifunctional Intercalators: A Macrocyclic Diacridine Binds to DNA by Intercalation," *J. Am. Chem. Soc.* **1989**, *111*, 6805-6809. DOI: 10.1021/ja00199a047.
 16. Steven C. Zimmerman, "On the Evaluation of a Small Molecule Mimic of Chymotrypsin," *Tetrahedron Lett.* **1989**, 4357-4358.
 17. Steven C. Zimmerman and Weiming Wu, "Rigid Molecular Tweezers with an Active Site Carboxylic Acid: Exceptionally Efficient Receptors for Adenine," *J. Am. Chem. Soc.* **1989**, *111*, 8054-8055. DOI: 10.1021/ja00202a077.
 18. Steven C. Zimmerman, Milan Mrksich, and Monica Baloga, "Highly Efficient Complexation of a π -Acceptor by a Molecular Tweezer Containing Two π -Donors: The Role of Preorganization," *J. Am. Chem. Soc.* **1989**, *111*, 8528-8530. DOI: 10.1021/ja00204a041.
 19. Michael Cory, Terri A. Fairly, Steven C. Zimmerman, and Carol R. Lamberson, "Studies on Polyfunctional DNA Intercalators," *J. Molec. Graphics* **1989**, *7*, 173-174. DOI:10.1016/0263-7855(89)80030-X.
 20. Katherine D. Cramer and Steven C. Zimmerman, "The Kinetic Effect of a Syn Oriented Carboxylate on a Proximate Imidazole in Catalysis: A Model for the Histidine-Aspartate Couple in Enzymes," *J. Am. Chem. Soc.* **1990**, *112*, 3680-3682. DOI: 10.1021/ja00165a075.
 21. Steven C. Zimmerman and Zijian Zeng, "Improved Binding of Adenine by Increasing the Rigidity of a Synthetic Receptor," *J. Org. Chem.* **1990**, *55*, 4789-4791. DOI: 10.1021/jo00303a006.
 22. James M. Veal, Ying Li, Steven C. Zimmerman, Carol R. Lamberson, Michael Cory, Gerald Zon, and W. David Wilson, "The Interaction of a Macrocyclic Bisacridine with DNA," *Biochemistry* **1990**, *29*, 10918-10927. DOI: 10.1021/bi00501a009.
 23. Steven C. Zimmerman, Zijian Zeng, Weiming Wu, and David E. Reichert "Synthesis of Molecular Tweezers Containing Active Site Functionality," *J. Am. Chem. Soc.* **1991**, *113*, 183-196. DOI: 10.1021/ja00001a027.
 24. Steven C. Zimmerman, Weiming Wu, and Zijian Zeng, "Complexation of Nucleotide Bases by Molecular Tweezers With Active Site Carboxylic Acids: Effects of Microenvironment," *J. Am. Chem. Soc.* **1991**, *113*, 196-201. DOI: 10.1021/ja00001a028.
 25. Steven C. Zimmerman, Jean S. Korthals, and Katherine D. Cramer "Syn and Anti-Oriented Imidazole-Carboxylates as Models for the Histidine-Aspartate Couple in Enzymes," *Tetrahedron* **1991**, 2649-2660. DOI:10.1016/S0040-4020(01)81797-X.
 26. Steven C. Zimmerman, "Rigid Molecular Tweezers and other Nonmacrocyclic Hosts for Complexation of Neutral Guests," in *Frontiers in Bioorganic Chemistry*; H. Dugas, Ed.; Springer-Verlag: New York, 1991, Vol. 2.
 27. Steven C. Zimmerman and Scott R. Wilson, "X-ray Analysis of Methyl 7-Phenyl-dibenz[a,j]acridine-14-carboxylate and Methyl 5-Phenyl-benzo[1,2-h:5,4-h']diquinoline-3-carboxylate," *Acta Crystallogr., Sect. C.: Cryst. Struct. Commun.* **1992**, *48*, 703-706. DOI:10.1107/S0108270191011253.

28. Thomas J. Murray and Steven C. Zimmerman, "New Triply Hydrogen Bonded Complexes with Highly Variable Stabilities," *J. Am. Chem. Soc.* **1992**, *114*, 4010-4011. DOI: [10.1021/ja00036a079](https://doi.org/10.1021/ja00036a079).
29. Steven C. Zimmerman and Brook F. Duerr, "Controlled Molecular Aggregation 1. Cyclic Trimerization via Hydrogen Bonding," *J. Org. Chem.* **1992**, *57*, 2215-2217. DOI: [10.1021/jo00034a005](https://doi.org/10.1021/jo00034a005).
30. Steven C. Zimmerman and Zijian Zeng, "Novel N-10 to C-4 Oxygen Migration in the Acridine Ring System," *Heterocycles* **1992**, *34*, 675-677. DOI: [10.3987/COM-92-5976](https://doi.org/10.3987/COM-92-5976).
31. Alan R. Battersby, Michael H. Block, Finian J. Leeper, and Steven C. Zimmerman, "Synthetic Studies Relevant to Biosynthetic Research on Vitamin B₁₂. Part 11. Modification of the East and West Building Blocks and Study of Different Assembly Methods for Synthesis of Isobacteriochlorins," *J. Chem. Soc., Perkin Trans I* **1992**, 2189. DOI: [10.1039/P19920002189](https://doi.org/10.1039/P19920002189).
32. Steven C. Zimmerman, Kurt W. Saionz, and Zijian Zeng, "Chemically Bonded Stationary Phases using Synthetic Hosts Containing Aromatic Binding Clefs: HPLC Analysis of Nitro Polycyclic Aromatic Hydrocarbons," *Proc. Natl. Acad. Sci. (USA)* **1993**, *90*, 1190-1193. DOI: [10.1073/pnas.90.4.1190](https://doi.org/10.1073/pnas.90.4.1190).
33. Steven C. Zimmerman, Monica H. Baloga, Brook F. Duerr, Edward E. Fenlon, and Thomas J. Murray, "Multiply Hydrogen Bonded Complexes for Constructing New Supramolecular Assemblies," *Polym. Prepr., (Am. Chem. Soc. Div. Polym. Chem.)* **1993**, *34*, 94-95.
34. Steven C. Zimmerman, "Rigid Molecular Tweezers as Hosts for the Complexation of Neutral Guests," in *Topics in Current Chemistry*; E. Weber, Ed.; Springer-Verlag: Berlin, **1993**, 165 (Supramolecular Chemistry I), 71-102 (Chpt 2).
35. Edward E. Fenlon, Thomas J. Murray, Monica H. Baloga, Steven C. Zimmerman "Convenient Synthesis of 2-Amidonaphthyridines, Building Blocks for Hydrogen Bond Mediated Host-Guest Complexation and Self-Assembly," *J. Org. Chem.* **1993**, *58*, 6625-6628. DOI: [10.1021/jo00076a021](https://doi.org/10.1021/jo00076a021).
36. Steven C. Zimmerman and Thomas J. Murray, "New Supramolecular Architectures Using Hydrogen Bonding," *Philos. Trans. R. Soc. Lond., Series A* **1993**, *345*:1674, 49-56.
37. Steven C. Zimmerman and Thomas J. Murray, "New Supramolecular Architecture based on Hydrogen Bonding," in *Computational Approaches in Supramolecular Chemistry*, NATO ASI Series, Vol. 426; Ed., G. Wipff; Kluwer: Amsterdam, **1994**; pp 109-115.
38. Steven C. Zimmerman and Thomas J. Murray, "Doubly Hydrogen Bonded Complexes Containing the AA·DD, AA·DDD, and AAA·DD Motifs: The Role of Three Centered (Bifurcated) Hydrogen Bonding," *Tetrahedron Lett.* **1994**, 4077-4080. DOI: [10.1016/S0040-4039\(00\)73116-9](https://doi.org/10.1016/S0040-4039(00)73116-9).
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192. "A Single-Chain Nanoparticle Delivers a Partner Enzyme for Concurrent and Tandem Catalysis in Cells," Junfeng Chen, Ke Li, Jiseon "Lucy" Shon, *J. Am. Chem. Soc.* **2020**, *142*, 4565-4569. DOI: [10.1021/jacs.9b13997](https://doi.org/10.1021/jacs.9b13997).
193. "Base-Triggered Self-Amplifying Degradable Polyurethanes with the Ability to Translate Local Stimulation to Continuous Long-Range Degradation," Yanhua Xu, Samya Sen, Qiong Wu, Xujia Zhong, Randy H. Ewoldt, and Steven C. Zimmerman, *Chem. Sci.* **2020**, *11*, 3326-3331. DOI: [10.1039/c9sc06582b](https://doi.org/10.1039/c9sc06582b).
194. "Assessing the Feasibility and Stability of Uracil Base Flipping in RNA-Small Molecule Complexes Using Molecular Dynamics Simulations," Lauren D. Hagler, Sarah E. Bonson, Philip A. Kocheril, and Steven C. Zimmerman, *Can. J. Chem.* **2020**, *98*, 261-269. DOI: [10.1139/cjc-2019-0421](https://doi.org/10.1139/cjc-2019-0421).
195. "Intramolecularly Cross-linked Polymers. From Structure to Function with Applications as Artificial Antibodies and Artificial Enzymes," Junfeng Chen, Edzna S. Garcia, Steven C. Zimmerman, *Acc. Chem. Res.* **2020**, *53*, 1244–1256. DOI: [10.1021/acs.accounts.0c00178](https://doi.org/10.1021/acs.accounts.0c00178).
196. "Structural Basis for Targeting T:T mismatch with Triaminotriazine-Acridine Conjugate Induces a U Shaped Head to Head Four-Way Junction in CTG Repeat DNA," Ching-Ming Chien, Pei-Ching Wu, Roshan Satange, Cheng-Chun Chang, Zi-Lun Lai, Steven C. Zimmerman, Ming-Hon Hou, *J. Am. Chem. Soc.* **2020**, *142*, 11165-11172. DOI: [10.1021/jacs.0c03591](https://doi.org/10.1021/jacs.0c03591).

197. "A Bioorthogonal Small Molecule Selective Polymeric "Clickase," Junfeng Chen, Ke Li, and Sarah E. Bonson, *J. Am. Chem. Soc.* **2020**, *142*, 13966–13973. DOI: [10.1021/jacs.0c06553](https://doi.org/10.1021/jacs.0c06553).
198. "Nonionic Surfactant Properties of Amphiphilic Hyperbranched Polyglycerols," Brenda Andrade, Samuel N. Knewstubb, Keith Harris, Christopher J. Tucker, Joshua S. Katz, and Steven C. Zimmerman, *Langmuir* **2020**, *36*, 10103–10109. DOI: [10.1021/acs.langmuir.0c01349](https://doi.org/10.1021/acs.langmuir.0c01349).
199. "Construction From Destruction Using a Photo-Triggered Self-Propagating Degradable Polyurethane as a One-Pot Epoxy," Yanhua Xu, Ephraim Morado, and Steven C. Zimmerman, *Polymer Chem.* **2020**, *11*, 6215–6220. DOI: [10.1039/D0PY00779J](https://doi.org/10.1039/D0PY00779J).
200. "Expanded DNA and RNA Trinucleotide Repeats in Myotonic Dystrophy Type 1 Select Their Own Multitarget, Sequence-Selective Inhibitors," Lauren D. Hagler, Long M. Luu, Marco Tonelli, JuYeon Lee, Sam Hayes, Sarah E. Bonson, J. Ignacio Vergara, Samuel E. Butcher, and Steven C. Zimmerman, *Biochemistry* **2020**, *59*, 3463–3472. DOI: [10.1021/acs.biochem.0c00472](https://doi.org/10.1021/acs.biochem.0c00472).
201. "Electrochemical CO₂-to-Ethylene Conversion on Polyamine-Incorporated Cu Electrodes," Xinyi Chen, Junfeng Chen, Nawal M. Alghoraibi, Danielle A. Henckel, Ruixian Zhang, Uzoma O. Nwabara, Paul J. A. Kenis, Steven C. Zimmerman, and Andrew A. Gewirth, *Nat. Catal.* **2020**, DOI: [10.1038/s41929-020-00547-0](https://doi.org/10.1038/s41929-020-00547-0).
202. "A Resistance-Resistant Antimicrobial Oligoamidine with Dual-Selective Mechanisms of Action," Silei Bai, Kailing Yang, Jianxue Wang, Yangfan Xu, Junfeng Song, Yuanxin Gu, Zhen Chen, Min Wang, Carolyn Shoen, Brenda Andrade, Michael Cynamon, Kai Zhou, Hui Wang, Qing-Yun Cai, Eric Oldfield, Steven C. Zimmerman, Yugang Bai, and Xinxin Feng, *Sci. Adv.* **2021**, accepted for publication.
203. "Cell Delivery Agent as Drug. A Multitarget Agent Delivers an Antisense Oligonucleotide for Synergistic Activity in Myotonic Dystrophy Type 1," Li, K.; Chembazhi, U. V.; Bonson, S. E.; Chen, J.; Dewald, Z.; Bai, Y.; Kim, D.; Kocheril, P. A.; Chen, J.; Kalsotra, A. and Zimmerman, S. C., under revision.
204. "CAG RNAs Induce DNA Damage and Apoptosis by Silencing NUDT16 Expression in Polyglutamine Degeneration," Peng, S.; Guo, P.; Lin, X.; An, Y.; Sze, K. H.; Lau, M. H. Y.; Chen, Z. S.; Wang, Q.; Li, W.; Sun, J. K.; Chan, T.-F.; Lau, K.-F.; Ngo, J. C. K.; Kwan, K. M.; Wong, C.-H.; Lam, S. L.; Zimmerman, S. C.; Tuccinardi, T.; Zuo, Z.; Au-Yeung, H. Y.; Chow, H.-M.; and Chan, H. Y. E., submitted.

Presentations/Workshops (*Indicates plenary, named, or distinguished lecture)

1988

- *19th NSF Workshop on Organic Synthesis and Natural Product Chemistry; Minary Conference Center, New Hampshire, July 20-24
- CIBA-GEIGY Corporation, Summit, New Jersey, Aug. 22
- General Electric Corporation, Schenectady, New York, Sept. 8
- Purdue University, West Lafayette, Indiana, Sept. 27
- Wabash College, Crawfordsville, Indiana, Oct. 4
- University of Missouri, Columbia, Missouri, Nov. 4
- ICI-Stuart Pharmaceutical Company, Philadelphia, Pennsylvania, Nov. 15

1989

- Upjohn Company, Kalamazoo, MI, Feb. 14
- Biomega Inc., Montreal, Canada, March 2
- McGill University, Montreal, Canada, March 3
- Merck-Frosst Company, Montreal, Canada, March 6
- *8th NSF Workshop on Reactive Intermediates; Quail Roost Conf. Center, Raleigh-Durham, NC, May 13-15
- Sandoz Company, May 19
- Burroughs Wellcome Company, May 23
- Ohio State University, Columbus, Ohio, June 8
- *NSF-SERC Workshop on Molecular Recognition, Rutland Water, England, Oct. 20-24
- Yale University, New Haven, Connecticut, Nov. 1
- University of Wisconsin-Madison, Madison, Wisconsin, Nov. 9
- Indiana-Purdue University Indianapolis, Indianapolis, Dec. 6

University of Illinois-Chicago School of Pharmacy, Chicago, IL, Dec. 14

1990

Indiana University Bloomington, Indiana, Jan. 29

California Institute of Technology, Pasadena, California, Feb. 8

University of California, Irvine, California, Feb. 9

University of California, Riverside, California, Feb. 10

Merck Sharpe and Dohme Research Laboratories, West Point, PA, April 3

*Naff Symposium on Chemistry and Molecular Biology, University of Kentucky, Lexington, April 16

*Bioorganic Special Topics Course, University of Minnesota, Minneapolis, MN, April 17-24, (6 lectures)

University of Chicago, Chicago, Illinois, May 11

University of California, San Diego, California, May 14

Hoffmann-LaRoche Inc., Nutley, New Jersey, Oct. 4

University of Washington, Seattle, Washington, Oct. 26

University of Alberta, Edmonton, Alberta, Canada, Oct. 29

University of British Columbia, Vancouver, Canada, Oct. 30

University of California-Berkeley, Berkeley, California, Nov. 20

1991

Searle Co., Skokie, IL, Feb. 5

* ACS National Meeting, Molecular Recognition Symposium, Atlanta, GA, April 15

*Great Lakes Regional ACS Meeting, Symposium on Bioorganic Mechanism, Indianapolis, IN, May 29-30

*13th International Congress of Heterocyclic Chemistry, Oregon State University, Corvallis, OR, Aug. 11-16

Columbia University, Breslow 60th Birthday Symposium, August 24

Boehringer-Ingelheim, Connecticut, Sept. 5

University of Notre Dame, West Bend, IN, Oct. 3

State University of New York, Stony Brook, New York, Nov. 14

American Cyanamid, Lederle Laboratory, Pearl River, New York, Nov. 15

University of Missouri, St Louis, Missouri, Nov. 18

University of Delaware, Newark, Delaware, Dec. 11

1992

University of Illinois-Chicago, Chicago, Illinois, March 17

Indiana State University, Terre Haute, IN, Feb. 17

*Fifth Biennial Lilly Grantee Symposium, Indianapolis, Indiana, Feb. 24-25

*National Meeting of American Chemical Society, "Symposium on Emil Fischer: 100 Years of Carbohydrate Chemistry," San Francisco, CA, April 5-10

Illinois State University, Bloomington, IL, April 24

University of Rochester, Rochester, NY, May 13

*Gordon Research Conference on Heterocyclic Compounds, New Hampton, New Hampshire, July 6-10

*11th IUPAC Conference on Physical Organic Chemistry, Ithaca College, New York, August 2-7

*National Academy of Sciences Molecular Recognition Symposium, Washington D.C., Sept. 10-11

Cambridge University, England, Battersby Retirement Symposium, Sept. 25

University of Nijmegen, Nijmegen, Netherlands, Sept. 29

University of Twente, Enschede, Netherlands, Sept. 30

Texas A & M University, College Station, TX, Oct. 15

University of Texas, Austin, TX, Oct. 16

Washington State University, Pullman, WA, Nov. 16

1993

*13th Enzyme Mechanisms Conference, Key Largo, Florida, Jan. 6-10

University of Toronto, Toronto, Ontario, Feb. 5

University of Michigan, Ann Arbor, MI, March 3

*National Meeting of the American Chemical Society, "Symposium on New Macromolecular Architectures and Supramolecular Polymers," Denver, CO, March 28-April 2

Stanford University, Palo Alto, CA, April 21

Princeton University, Princeton, NJ, April 23

- *Royal Society of Chemistry Discussion Meeting: The Chemistry of Biological Molecular Recognition," London, England, April 28-29
Merck Sharp and Dohme, Harlow, England, April 30
- *IUPAC General Assembly, Commission on Physical Organic Chemistry (observer), Lisbon University, Lisbon, Portugal, August 5-12
- *NATO Advanced Research Workshop on Computational Approaches to Supramolecular Chemistry, Strasbourg, France, Sept. 1-5
Michigan State University, East Lansing, Michigan, Oct. 7
Loyola University, Chicago, IL, Oct. 14
Upjohn Company, Kalamazoo, Michigan, Nov. 18

1994

- *35th IUPAC International Symposium on Macromolecules, (MacroAkron '94) Akron, OH, July 11-15
- *Royal Society of Chemistry, Perkin Division Symposium on Recognition Processes, Birmingham, England, July 24-29
Purdue University, West Lafayette, Indiana, Nov. 15

1995

- Chicago Section American Chemical Society, Jan. 20
Chemical Society of Zürich, Eidgenössische Technische Hochschule, Zürich, Switzerland, Feb. 8
Duke University, Raleigh-Durham, NC, Feb. 17
Columbia University, New York, N.Y., March 2
University of South Florida, Tampa, FL, March 9
Northeastern New York American Chemical Society, Troy, NY, March 15
Abbott Laboratories, North Chicago, Illinois, March 28
Case Western Reserve University, Cleveland, OH, April 13
University of Pittsburgh, Pittsburgh, PA, Nov. 2
University of Illinois-Chicago, Chicago, IL, Nov. 7
Florida State University, Organic Division Seminar, Tallahassee, FL, Dec. 7
Florida State University, Departmental Colloquium, Tallahassee, FL, Dec. 8

1996

- Weizmann Institute of Science, Rehovot, Israel, Organic and Materials Joint Colloquium, April 5
- *Bioorganic Gordon Conference, Plymouth State College, Plymouth, N.H., June 23-28
- *The 1996 Josef Fried Symposium of Bioorganic Chemistry, University of Chicago, Chicago, IL, Sept. 21
- *Joint Symposium on Supermolecules and Nano-Organized Systems, Kyushu University, Fukuoka, Japan, Dec. 5-6

1997

- Boston University, Boston, MA, March 17
- *American Physical Society Meeting, Kansas City, MO, March 21
Iowa State University, Trapp Lecture Series, Ames, IA, April 11
Scripps Research Institute, La Jolla, CA, April 29
- *Arthur C. Cope Scholar Award Address, 214th ACS National Meeting, Las Vegas, NV, Sept. 7-11
Cincinnati Section of ACS, Cincinnati, OH, Dec. 3

1998

- University of Wisconsin, Madison, WI, May 5, 1998
- *Margaret C. Etter Memorial Lecture, Department of Chemistry, University of Minnesota, Minneapolis, MN, May 22
- *23rd International Symposium on Macrocyclic Chemistry (XXIII ISMC), Turtle Bay, Hawaii, June 7-12
- *16th National Organic Chemistry Conference of the Royal Australian Chemical Institute, Fairmont Resort, NSW, Australia, July 12-17
- *4th European Research Conference on Supramolecular Chemistry (Topic: Advanced Materials), Rolduc, Netherlands, Sept. 10-15
33rd Midwest Region ACS Meeting, Wichita, KS, Nov. 3-6
Universität Essen, Essen, Germany, Nov. 9
Universität Bochum, Bochum, Germany Nov. 10

Bristol Myers Squibb, Princeton, NJ, Dec. 4

*University of California-Irvine Symposium on Synthetic Organic Chemistry, Irvine, CA, Dec. 11-12

1999

*62nd Okazaki Conference (Structural Hierarchy in Molecular Science. From Nano and Meso Structures to Micro Structures), Okazaki, Japan, Jan. 10-13

Nattick Army Research Laboratory, Nattick, MD, Jan. 25

State University of New York-Stony Brook, Stony Brook, NY March 9

Trinity University, San Antonio, TX, March 23

University of Arizona, Tucson, AZ, May 17

Columbia University, New York, NY, April 8

Virginia Tech, Blacksburg, VA, April 30

ARO-MURI Review, Aberdeen Proving Grounds, MD, May 9-10

*1st International Symposium on Dendrimers, Frankfurt, Germany, Oct. 3-4

Ohio State University, Columbus, OH, Nov. 4

Brandeis University, Waltham, MA, April 10

Yale University, New Haven, CT, April 12

2000

ARO-MURI Review, Edgewood, MD, Sept. 20-21

University of Wisconsin-Milwaukee, Milwaukee, WI, Oct. 2

*Moffatt Lecture in Organic Chemistry, University of British Columbia, Canada, Oct. 16

Simon Fraser University, British Columbia, Canada, Oct. 18

University of Houston, Houston, TX, Oct. 31

Rice, University, Houston, TX, Nov. 1

Texas A&M University, College Station, TX, Nov. 2

University of Pennsylvania, Philadelphia, PA, Nov. 13

DuPont Pharmaceuticals, PA, Nov. 14

University of Chicago, Chicago, IL, Nov. 27

*Symposium on Dendrimer and Hyperbranched Polymers, PacifiChem 2000, Honolulu Hawaii, Dec. 11-14

2001

State University of New York, Buffalo, NY, Jan. 19

Detroit Mercy College, Detroit, MI, Feb. 6

R. Breslow 70th Birthday Symposium, Columbia University, New York, NY, March 24

Frontiers in Chemistry, Case Western Reserve University, Cleveland, OH, March 29

New York University, New York, NY, Oct. 5

Purdue University, West Lafayette, IN, Nov. 13

2002

University of Texas, Austin, TX, April 19

University of Southern Illinois, Carbondale, IL, May 1

Great Lakes ACS Regional Meeting, Minneapolis, MN, June 2-4

*Gordon Research Conf., Organic Structures and Properties, Spring-8, Hyogo, Japan, July 28-Aug. 2

*12th International Symposium on Supramolecular Chemistry (ISSC-XII), Eilat, Israel, Oct. 6-11

University of Maryland, College Park, Nov. 14, 2002

Indiana University, Bloomington, IN, Nov. 18, 2002

North Dakota State University, Fargo, ND, Dec. 5, 2002

2003

UCLA, Los Angeles, CA, Jan. 16

Georgia Institute of Technology, Atlanta, GA, March 6

Washington University, Symposium for George Gokel's St. Louis Section ACS Award, St. Louis, April 11

University of Virginia, Charlottesville, VA, April 25

*226th ACS National Meeting, Organic Division, New York, NY, Sept 8

*226th ACS National Meeting, Polymer Division, New York, NY, Sept 10

*International Dendrimer Symposium 3 (IDS-3), Sept. 17-20, Berlin, Germany.

11th Foresight Institute Conference on Molecular Nanotechnology, Oct. 9-11, San Francisco, CA.

University of Arkansas, Little Rock, AR, Oct. 27.
Princeton University, Princeton, NJ, Nov. 6.
DuPont Central Research, 2003 Pedersen Seminar Series, Wilmington, DE. Nov. 19
Fall Meeting, Material Research Society (MRS), Boston, MA, Dec. 1-5

2004

Vanderbilt University, Nashville, TN, March 3
Northwestern University, Evanston, IL, Feb. 13
Eindhoven University of Technology, Netherlands, May 12-13
University of Iowa, Iowa City, IA, Nov. 12
Nanohour Talk, Beckman Institute, University of Illinois, Dec. 3
*Merck Frosst Lecture, University of Alberta, Alberta, Canada, Dec. 6

2005

*Distinguished Visiting Professor, University of Florida, Gainesville, FL, 11-12
University of Dortmund, Dortmund, Germany, Jan 31
*Abbott Lecturer, Montana State University, Bozeman, MT, March 4
ICI-National Starch and Chemical Company, Bridgewater, NJ, April 4
Rohm and Haas Company, Springhouse, PA, April 5
4th Intl Dendrimer Symp., Central Michigan University, Mount Pleasant, MI, May 18-21
2005 USA-Japan Forum: Advances in Polymer Chemistry and Their Impacts Upon Society, South Lake Tahoe, CA, June 24-28
Ben Gurion University, Beer Sheeba, Israel, July 24
Molecular Recognition with Polymeric Materials symposium, National ACS Meeting, Washington, DC, Aug. 28 – Sept. 1, 2005
Symposium on Biomineralization and Bio-Inspired Chemistry, PacifiChem, Honolulu, HI, Dec. 15-20.
Symposium on Molecule Based Materials, PacifiChem, Honolulu, HI, Dec. 15-20

2006

University of Texas at Arlington, Arlington, TX, Feb. 16
Florida State University, Tallahassee, FL, March 17
University of Michigan, Ann Arbor, MI, March 28
NIH Mentoring Workshop, Washington, D.C., May 10-14
International Symposium on Supramolecular and Macrocyclic Chemistry, Vancouver, British Columbia, Canada June 25-30
Organic Approaches to Nanotechnology symposium, National ACS Meeting, San Francisco, CA, Sept. 12
*VII Congreso Internacional De Quimica Aplicada, Sociedad de Alumnos de Licenciado en Ciencias Químicas del Tecnológico de Monterrey, Monterrey, Mexico, Sept. 20-22
University of Puerto Rico, Rio Piedras, San Juan, PR, Nov. 15
Peking University, Department of Polymer Science and Engineering, Peking, China, Dec. 20
Tsinghua University, Department of Chemistry, Peking, China, Dec. 21
ShangHai Institute of Organic Chemistry, ShangHai, China, Dec. 22

2007

*Robert Lutz Lecturer, University of Virginia, Charlottesville, VA, Feb. 2
*Davis Lecturer, University of South Carolina, Charleston, SC, Feb. 23
*UC Irvine-Pfizer Symposium on Organic Chemistry, University of California-Irvine, CA, March 3
Centre for Self-Assembled Chemical Structures Lecturer, McGill University, Toronto, Canada, March 14
Concordia University, Montreal, Canada, March 15
Ronald Breslow Award for Achievement in Biomimetic Chemistry: Symposium in Honor of François Diederich; ACS National Meeting, Chicago, IL March 25-29
Nanostructures from Block Copolymers and Supramolecular Polymers; ACS National Meeting, Chicago, IL March 25-29.
Rohm and Haas Company, Springhouse, PA, May 2.
ICI-National Starch and Chemical Company, Bridgewater, NJ, May 3
NIH, NSF, DOE Sponsored Workshop - Excellence Empowered by a Diverse Academic Workforce: Achieving Racial & Ethnic Equity in Chemistry, Arlington, VA, Sept. 24-26
New York University, New York, NY, Nov. 2

Tulane University, New Orleans, Nov. 26

2008

University of Utah, Salt Lake City, UT, Feb. 21

235th ACS National Meeting, Symposium on Chemical Evolution II: From Origins of Life to Modern Society, New Orleans, LA, April 6-10

Hanoi University of Science, Ha Noi, Vietnam, Aug. 3

Chinese University of Hong Kong, Hong Kong, Aug. 4

University of North Carolina, Chapel Hill, NC, Sept. 19

University of Pennsylvania, Philadelphia, PA, Nov. 3

2009

Southern University, Baton Rouge, LA, Jan. 29

Louisiana State University, Baton Rouge, LA, Jan. 30

International Dendrimer Symposium, Stockholm, Sweden, June 14-18

Freie Universität Berlin, Germany, Oct. 2

2010

*Kilpatrick Lecture Series, Symposium on "Recent Advances in Polymer Science and Engineering," Illinois Institute of Technology, Feb. 19

Weizmann Institute, Rehovot, Israel, March 7

*"Highs in Chemistry and Biology Conference," Dead Sea, Israel, March 9-11.

Hanoi University of Science, Ha Noi, March 24

National University of Singapore, Singapore, March 26

*Earl H. and Marian A. Beling Lecture in the Department of Chemistry, Illinois Wesleyan University, Bloomington, IL, April 5

*93rd Canadian Chemistry Conference, Canadian Society for Chemistry, Toronto, Ontario, Canada, May 29-June 2

*NSF Workshop on Macromolecular, Supramolecular and Nanochemistry, Arlington, VA, June 14-16.

*Macro2010, 'Polymer Science in the Service of Society,' 43rd IUPAC World Polymer Congress, Glasgow, Scotland, July 11-16

240th ACS National Meeting, Boston, MA Aug. 22-25

Emory University, Atlanta, GA, Sept. 21

University of Georgia, Athens, GA, Sept. 22

Korean Chemical Society Meeting, Oct. 14-15, Daegu, Korea

Yonsei University Symposium, Oct. 16, Seoul, Korea

PacifiChem 2010, Symposium on Supramolecular Catalysis, Honolulu, HI, Dec. 15-20

2011

National Diversity Equity Workshop, Washington, DC, Jan. 24-26

241st ACS National Meeting, Symposium on "Recent Progress in Catalytic and Biomimetic Chemistry," Anaheim, CA, (Breslow Retirement Symposium), March 27-31

University of Michigan, Ann Arbor, MI, April 8

University of Toronto, Canada, April 15

Symposium on Supramolecular Materials, 94th Canadian Chemistry Conference and Exhibition (CSC 2011), Montreal, Quebec, June 5-9

*6th International Symposium on Macrocyclic and Supramolecular Chemistry (6-ISMSC) to be held at the University of Sussex, Brighton, UK July 3-9

242nd ACS National Meeting, Denver, CO - Symposium on "Supramolecular Chemistry for Organic Materials Design," Aug. 28-Sept. 1

2012

243rd ACS National Meeting, Symposium in Memory of Dr. David Y. Gin, San Diego, CA, March 25-29

Alpha Chi Sigma Chemistry Fraternity, Faculty Chat, University of Illinois, Urbana, IL, April 10

Fudan University, Shanghai, China, May 9

Zhejiang University, Hangzhou China, May 12
Northwest University, Xi'an, China, May 14

2013

246th ACS National Meeting, Supramolecular Nanomaterials Symposium, Indianapolis, IN, Sept. 9
Dow Chemical Company, Midland MI, Nov. 13
National Science Camp of Kishore Vaigyanik Protsahan (KVPY) speaker/participant, Indian Institute of Science, Bangalore, India, December 5-7
Department of Chemistry, Indian Institute of Science, Bangalore, India, Dec. 8

2014

Novartis Pharmaceutical Company, Cambridge, MA, January 28
Purdue University, West Lafayette, IN, March 4
9th International Symposium on Macrocyclic and Supramolecular Chemistry (ISMSC-9), Shanghai, China, June 7-11.
Xinjiang Technical Institute of Physics & Chemistry CAS, Ürümqi, Xinjiang, China, June 12
Xinjiang Technical Institute of Engineering, CAS, Ürümqi, Xinjiang, China, June 13
American Chemical Society National Meeting, San Francisco, CA, August 10-14
MDA 1st Illinois Muscle Summit, Springfield, IL, November 15
Myotonic Dystrophy and the Brain: Brainstorming DM Symposium, University of Florida Center for Neurogenetics, Gainesville, FL, Dec. 15,16

2015

249th ACS National Meeting, Denver, CO, March 22-26
NSF Workshop on Accelerating our Understanding of Supramolecular Chemistry in Aqueous Solutions, Washington DC, May 30th – June 4th
Ben Gurion University, Beer Sheva, Israel, Sept. 15
Hanoi University of Science, Hanoi, Vietnam, Dec. 8
Pacifichem 2015, Honolulu, HI, Dec. 15

2016

University of Texas at Austin, Austin, TX, March 4
Myotonic Dystrophy Association Muscle Summit, Chicago, IL, March 11
251st ACS National Meeting in San Diego, CA from March 13-17
Tohoku University, Sendai, Japan, Sept. 20
A3RONA2016, (Asian 3 Roundtable on Nucleic Acids, Fukuoka 2016), Fukuoka, Japan, Sept. 22-24
ISNAC2016 (The 43rd International Symposium on Nucleic Acids Chemistry), Nishi-ku, Kumamoto, Japan, Sept. 27-29
Technion – Israel Institute of Technology, Haifa, Israel, Dec. 1
The 1st Adama – BGU symposium, Ben Gurion University, Beer Sheva, Dec. 5
Tel Aviv University, Tel Aviv, Israel, Dec. 11

2017

Duke University, Raleigh, NC, Jan. 31
David Y. Gin Symposium, Memorial Sloan-Kettering Cancer Institute, New York, NY, March 27
National Cancer Institute-Frederick, Chemical Biology Laboratory, Frederick, MD, April 13
Tsinghua University, Peking, China, May TA
Share The Vision, Office of Technology Management, University of Illinois, Urbana, IL, Sept. 21
Pfizer-Sponsored Symposium on RNA-Small Molecule Interactions, New York Academy of Sciences, NY, Sept. 26

2018

Bioorganic Chemistry Gordon Research Conference, Proctor Academy, Andover, NH, June 10-15

13th International Symposium on Macrocyclic and Supramolecular Chemistry (ISMSC), Quebec City, Canada, July 8–13

University of Delaware, Newark, DE, Sept. 12

Washington University Saint Louis, Saint Louis, MO, Nov. 1

University of Pennsylvania, Philadelphia, PA, Nov. 5

NanoThailand 2018, Bangkok, Thailand, Dec. 13

2019

U.S. Army Research Office workshop on “Encapsulated Trigger-Release Chemistry for Sustainable End of Life Cycle Product Management,” University of Rhode Island, Kingston, RI, April 9-10

Gordon Research Conference on Nucleosides, Nucleotides and Oligonucleotides, Salve Regina University, Newport, Rhode Island, June 23-28

Telluride Conference on Aqueous Supramolecular Chemistry, Aug. 5-8.

ACS National Meeting, San Diego, CA, Aug. 25-29

BGU-UBA Symposium, Buenos Aries, Argentina, Sept. 9-11

NOBCChe St. Louis Union Station November 18-21

POLY workshop on “Next Generation Smart Materials,” Savannah, GA, Dec. 15-18

2020

Iowa State University, Ames, IA, January 31