

Eric V. Anslyn
Welch Regents Chair
University Distinguished Teaching Professor

Business Address:

The University of Texas at Austin
Department of Chemistry and Biochemistry
Norman Hackerman Building
100 E. 24th St. A1590
Austin, TX. 78712

Education:

Postdoctoral Work: [12/87-9/89]

Columbia University, New York, New York

Research Advisor: Professor Ronald Breslow

Research: Mechanistic studies of Ribonuclease A mimics. Detailed kinetics analyses of imidazole catalyzed 3'-5' UpU hydrolysis and isomerization. Synthesis and kinetics studies of bis-imidazole β -cyclodextrin catalyzed phosphodiester hydrolyses.

Ph.D., Chemistry: [11/87]

California Institute of Technology, Pasadena, California

Research Advisor: Professor Robert Grubbs

Research: Mechanistic and theoretical studies of olefin metathesis and ring opening metathesis polymerizations catalyzed by group IV and VI metals.

B.S., Chemistry: [5/82]

California State University, Northridge; GPA= 3.97/4.00

Research Advisor: Professor Edward Rosenberg

Research: Mechanistic studies of ligand fluxuations on clusters.

Research Awards, Honors, and Honorary Positions:

James, Flack, Norris Award in Physical Organic Chemistry, from the American Chemical Society, 2018

Howard Hughes Medical Institute Professor, 2018-2023

World Leading Researcher, School of Chemistry and Chemical Engineering, Queen's University Belfast, Ireland, 2017-2020.

1st Czarnik Award Winner, International Molecular Sensors and Molecular Logic Gates, 2016

Saul Winstein Lecturer, UCLA, May 2014

Edward Leete Award, for Outstanding Contributions to Teaching and Research in Organic Chemistry, from The Organic Division of the ACS, Awarded on September 10th, 2013.

Comps Class Project Awardee, Carleton College, Northfield MN.

Izatt-Christensen Award in Macrocyclic and Supramolecular Chemistry, awarded at the 8th ISMSC in Washington DC, July 7th to 11th 2013.

Senior Visiting Fellow of the Institute for Advanced Study, Hong Kong University of Science and Technology, 2013-2014

Ta-shue Chou Award, For Outstanding Achievements in Physical Organic Chemistry, Feb. 21st 2012, Academia Sinica, Taiwan.

Gassman Lecturer, University Minnesota, Oct. 2011

Ramshorn Mark of Excellence, From Dean of the Cockrell School of Engineering, Oct. 29th 2009

Visiting Professor, Institute of Chemical and Engineering Sciences, Singapore, Dec. 15th-19th 2008

Faculty Service Award from the College of Natural Sciences, 2008

Visiting Professor, Hong Kong Baptist University, May 9th -11th 2007

Honorary Professor, East China University of Science and Technology, Induction May 2007

Adjunct Professor, Department of Biochemistry and Molecular Biology, The University of Texas Medical Branch, Galveston

American Association for the Advancement of Science, Election as a Fellow, 2006

Hamilton Textbook Award, from the University Coop. 2006

Cope Scholar Award. Granted from the ACS in Spring 2006.

Dreyfus Teacher-Scholar Award: 1994-1996

Alfred P. Sloan Research Fellow: 1994-1996

Proctor and Gamble University Research Initiative: 1993-1996

Searle Scholar: 1991-1994

Presidential Young Investigator: 1990-1995

Camille and Henry Dreyfus Young Faculty Award: 1989

National Science Foundation Post-Doctoral Fellowship: 1988
Union Carbide Fellow in Catalysis: Academic Year 86-87
Graduated with B.S. Summa Cum Laude: 1982
Analytical Chemistry Award, C.S.U., Northridge: 1980

Teaching Awards:

2010 Regent's Teaching Awardee, Across the entire Univ. Texas System, Aug. 11th 2010
Graduate Teaching Award, UT Austin: 2003
Election to Academy of Distinguished Teachers, UT Austin: 2000
Outstanding Faculty Award, UT Continuing Education: 1999
Jean Holloway Award for Excellence in Teaching: 1999
College of Natural Sciences Teaching Excellence Award: 1995

Work Experience:

Welch Regents Chair of Chemistry, 2014-present
Norman Hackerman Chair of Chemistry, 2002-2014
Chief Scientific Officer, Titralyte, 2012-present
Chief Scientific Officer, Reveal Sciences, 2007-present
Chief Scientific Officer, Beacon Sciences, 2006-present
Norman Hackerman Professorship, University of Texas at Austin, 2000-2011
University Distinguished Teaching Professor, University of Texas at Austin, 2000-present, teaching and independent research.
Professor, University of Texas at Austin, 1999-2000
Associate Professor, University of Texas at Austin, 1995-1999
Assistant Professor, University of Texas at Austin, 1989-1995
Head of Synthetic Organic NMR Facility: Cal. Instit. of Tech. 1984-1987
Responsible for all training, maintenance and special experiment design on a JEOL FX-90 and JEOL GX-400. Extensive experience with 2D NMR, polarization transfer, magnetization transfer and NMR of heavy metals.
Teaching Assistant, Cal. State Univ. Northridge, 1983
Introductory Chemistry Laboratory, both first and second semester.

University of Texas Departmental and University Service:

Associate Chairman, Department of Chemistry, UT Austin, 2016-present
Provost's Experiential Teaching Committee, 2018-2019
Texas Ex's Meeting, "Wine Tasting with Professor Eric Anslyn", Home of the Hemsley's in Houston TX
Chair, Departmental Search Committee for External Chair, 2013-present
Head of the Chemistry Department Graduate Studies Committee, 2013-present
College Natural Sciences, Medical School Planning Committee, 2012-present
Departmental Course and Curriculum Reform Committee, 2011-present
Member, Committee for 210C Laboratory Reevaluation, 2009-2011
Departmental Faculty Awards Committee, 2009-present
Departmental Lecturer Oversight Committee, 2009-present
Member, Committee for Evaluation of Lecturer Position, 2009-2010
Design Committee, Laboratory Research Space for the NHB, 2007-2009
Reviewed Teachings Award Applications: Academy Selection, and Chancellor's Award, Dec. 2008
Chair, Strategic Planning Committee for The Department of Chemistry and Biochemistry, 2007-2008
Committee For Evaluation of Dean Rankin, Spring 2007
AdHoc Tenure and Promotion Committee, Department of Astronomy, Spring 2007
Departmental Tenure and Promotions Committee, 2004-2008
Odyssey Lecture to the Public, April 4, 2007
Hamilton Book Award Committee, 2006
Dean's Committee for Analysis the Space for ESB, 2006
Member Departmental Tenure and Promotions Committee, 2004-2008
Upon invitation, Voltaire's Coffee Discussion Group, "The Mists of Avalon" 2006
Participant, Academy of Distinguished Teachers Reading Roundup Discussion, "The Mists of Avalon", 2003 - present
Academy of Distinguished Teachers Sub-Committee on "Special Courses", 2005
Departmental Awards Committee, 2004-present.
Instructor, Texas Teachers as Scholars, Course on Enzymes, Receptors, and Sensing, Spring 2005.

College of Natural Sciences Tenure and Promotion Committee, 2004-2006
SPAC Committee Member, 2003-2006
Organic Division Coordinator, 2003-present.
Assistant Graduate Student Advisor 1995-present.
Chairman, Graduate Student Recruiting Committee for the Chemistry and Biochemistry Department, 1995-1999.
Chairman, Department of Chemistry Safety Committee, 1993-1999.
College of Natural Sciences Safety Committee, 1995-1999.
Undergraduate Chemistry Student Advising, 1990-1995.
Chairman: Organic Chemistry Seminar Series from 1992-1995.
Lecture to the ACS Student Affiliates, Spring 1999.
Lecture to the ACS Student Affiliates, Fall 1998.
Lecture to the ACS Student Affiliates, Fall 1996.
Lecture to the 1994 Honors Colloquium.
Lecture to The Young Chemists Society, 1993.
Departmental Fellowship Committee, 1992-1995.
Graduate Student Recruitment Committee, 1991.

Professional and Community Service:

Member, External Review Visiting Committee, School of Chemistry, Trinity College Dublin, Nov. 15th to 19th, 2015
Member, External Review Visiting Committee, Department of Chemistry at the University of Minnesota, April 7th-8th, 2014
Guest Speaker, Westminster Retirement Home, Feb. 4th 2013.
Member, Cope Scholar Awards Selection Committee, 2012-2013.
Member, NIH SBCA Study Section, Fall 2012-2016.
DTRA Review, Catalytic Signal Enhancement Work Shop, Arlington VA June 19th, 2012.
ACS National Selection Committee – Arthur C. Cope Scholar Awards 2012
Pioneer Award Study Section, NIH, Spring 2011
Organizer, Symposium Honoring Dr. Phillip Magnus, Southwest Regional ACS Meeting, Austin, Nov. 9th-11th 2011.
New Innovator Award Study Section, NIH, Spring 2010.
International Advisory Board, *Chinese Journal of Chemistry*, 2009-present.
Organizer, International Symposium on Macrocyclic and Supramolecular Chemistry, Las Vegas, July 2008.
Pacific Chem. Symposium Co-Organizer, Dec. 2005.
Pacific Chem. Symposium Co-Organizer, Dec. 2000.
J. Am. Chem. Soc., Manuscript Associate Editor, Oct. 1st 1999 - present.
NIH Medicinal Chemistry A, Study Section Member, 1999-2003.
Supramolecular Chemistry, Editorial Advisory Board, 1999-2004.
J. Supramolecular Chemistry, Editorial Advisory Board, 1999-present.
J. Am. Chem. Soc. Book and Software Associate Editor, 1998-Oct. 1st 1999.
Symposium Co-Organizer: Southwest Regional ACS Meeting 1993.
23rd Macrocyclic Conference Co-Organizer: Oahu Hawaii 1998.
1999 NSF Workshop on Physical Organic Chemistry, Co-organizer.
1998 NSF Workshop on Physical Organic Chemistry, Co-organizer.
1997 NSF Workshop on Physical Organic Chemistry, Co-organizer.
Reviewer of Battelle National Laboratory project on Anion Recognition.
Ad Hoc Member, Bioorganic and Natural Products Study Section, NIH, 1996.
Ad Hoc Member, Medicinal Chemistry A, Study Section, NIH, 1997.

Short Courses:

Techniques of Sensing, Victoria Canada, July 2006.
Physical Organic Chemistry, Trinity University Dublin, Ireland, June 20th to 22nd, 2007.
Physical Organic Chemistry at University of Kyushu, Fukuoka, May 2008.
Solvation, Chirality, and Bonding Theories, Gassman Lecturer Series, University of Minnesota, Oct. 3rd – 7th 2011.
Substitution versus Elimination, Toho University, Japan, June 26th 2013.
Binding Forces, Supramolecular Interactions, and Acid/Base Analogies, Dow Chemical Company in Springhouse, PE, April 17th, 2014.
More O'Farrell/Jencks Plots and LFERs, Univ. of Oregon May 16th to 20th 2014.

From VBT to MOT and Combining the Two, Shanghai University May 18th, 2015
Bonding, Thermodynamics, Kinetics, and Reaction Coordinates, University of Birmingham, June 27th-29th,
2017

Patents

01. Eric Anslyn and Axel Metzger, "Receptor and method for citrate determination", U.S. Patent No. 6048732, Issued April 11, 2000
02. John McDevitt, Eric Anslyn, Jason Shear and Dean Neikirk, "General signaling protocol for chemical receptors in immobilized matrices," U.S. Patent No. 6589779, Issued July 8, 2003
03. John McDevitt, Eric Anslyn, Jason Shear and Dean Neikirk, "Detection system based on an analyte reactive particle", U.S. Patent No. 6602702, Issued August 5, 2003
04. John McDevitt, Eric Anslyn, Jason Shear and Dean Neikirk, "Method of preparing a sensor array", U.S. Patent No. 6649403, Issued November 18, 2003
05. John McDevitt, Eric Anslyn, Jason Shear and Dean Neikirk, "Sensor Arrays for The Measurement and Identification of Multiple Analytes in Solutions", U.S. Patent No. 6680206, Issued January 20, 2004.
06. John McDevitt, Eric Anslyn, Jason Shear and Dean Neikirk, "Method and Apparatus for The Delivery of Samples to A Chemical Sensor Array", U.S. Patent No. 6713298, Issued March 30, 2004
07. John McDevitt, Eric Anslyn, Jason Shear and Dean Neikirk, "Fluid Based Analysis of Multiple Analytes by A Sensor Array", U.S. Patent No. 6908770, Issued June 21, 2005
08. John McDevitt, Eric Anslyn, Jason Shear, Dean Neikirk and Damon Borich, "Method and Apparatus for The Delivery of Samples to A Chemical Sensor Array", U.S. Patent No. 7022517, Issued April 4, 2006
09. John McDevitt, Eric Anslyn, Jason Shear and Dean Neikirk, "Portable Sensor Array System", U.S. Patent No. 7316899, Issued January 8, 2008
10. Eric Anslyn, J. Frantz Folmer-Andersen and Lei Zhu, "Determining Enantiomeric Excess Using Indicator-Displacement Assays", U.S. Patent No. 7332343, Issued February 19, 2008
11. John McDevitt, Eric Anslyn, Jason Shear and Dean Neikirk, "Fluid Based Analysis of Multiple Analytes by A Sensor Array", U.S. Patent No. 7491552, Issued February 17, 2009
12. Michael Descour, Russell Dupuis, Eric Anslyn and Rebecca Richards-Kortum, "Multimodal Miniature Microscope", U.S. Patent No. 7492535, Issued February 17, 2009
13. Eric Anslyn, Aaron Wright and Zhenlin Zhong, "Synthetic Receptors for The Detection of Analytes", U.S. Patent No. 7514266, Issued April 7, 2009
14. John McDevitt, Eric Anslyn, Jason Shear, Dean Neikirk and Nick Christodoulides, "Method and System for The Analysis of Saliva Using a Sensor Array", U.S. Patent No. 7651868, Issue January 26, 2010
15. Eric V. Anslyn, Jan Frantz Folmer-Andersen and Lei Zhu, "Determining Enantiomeric Excess Using Indicator-Displacement Assays", U.S. Patent No. 7670847, Issued March 2, 2010
16. John McDevitt, Karri Ballard, Pierre Floriano, Nick Christodoulides, Dean Neikirk, Eric Anslyn and Jason Shear, "Integration of Fluids and Reagents Into Self-Contained Cartridges Containing Sensor Elements and Reagent Delivery Systems", U.S. Patent No. 8101431, Issued January 24, 2012
17. John McDevitt, Karri Ballard, Pierre Floriano, Nick Christodoulides, Dean Neikirk, Eric Anslyn and Jason Shear, "Integration of Fluids and Reagents Into Self-Contained Cartridges Containing Sensor Elements", U.S. Patent No. 8105849, Issued January 31, 2012
18. John McDevitt, Eric Anslyn, Jason Shear, Dean Neikirk and Nick Christodoulides, "Method and System for The Detection of Cardiac Risk Factors", U.S. Patent No. 8257967, Issued September 4, 2012

19. Eric V. Anslyn, Karl J. Wallace, "Compositions and Methods for The Detection of Chemical Warfare Agents", U.S. Patent No. 8377712, Issued February 19, 2013

20. Eric V. Anslyn, Youjun Yang, Michelle M. Adams, "Fluorescent Nitric Oxide Probes and Associated Methods", U.S. Patent No. 8637323, Issued January 28, 2014

Research Publications

312) "Self-propagating amplification reactions for molecular detection and signal amplification: Advantages, pitfalls, and challenges" Xiaolong Sun, Doron Shabat, Scott T. Phillips, Eric V. Anslyn *Journal of Physical Organic Chemistry*, **2018**, 31(8), e3827-e3835. DOI: 10.1002/poc.3827.

311) "Photography Coupled with Self-Propagating Chemical Cascades: Differentiation and Quantitation of G- and V-Nerve Agent Mimics via Chromaticity" Xiaolong Sun, Alexander A. Boulgakov, Leilani N. Smith, Pedro Metola, Edward M. Marcotte, Eric V. Anslyn *ACS Central Science*, **2018**, 4(7), 854-861. DOI: 10.1021/acscentsci.8b00193. PMID: 30062113

310) "Di-(2-picolyl)-N-(2-quinolinylmethyl)amine-Functionalized Triarylboron: Lewis Acidity Enhancement and Fluorogenic Discrimination Between Fluoride and Cyanide in Aqueous Solution" Mao-Sen Yuan, Xianchao Du, Zhiqiang Liu, Tianbao Li, Wenji Wang, Eric V. Anslyn, Jinyi Wang *Chemistry. A European Journal*, **2018**, 24(37), 9211-9216. DOI: 10.1002/chem.201800884. PMID: 29709086

309) "Fingerprinting Non-Terran Biosignatures" Sarah S. Johnson, Eric V. Anslyn, Heather V. Graham, Paul R. Mahaffy, Andrew D. Ellington *Astrobiology*, **2018**, 18(7), 915-922. DOI: 10.1089/ast.2017.1712. PMID: 29634318

308) "Optical Analysis of Reaction Yield and Enantiomeric Excess: A New Paradigm Ready for Prime Time" Brenden T. Herrera, Samantha L. Pilicer, Eric V. Anslyn, Leo A. Joyce, Christian Wolf *J. Am. Chem. Soc.*, **2018**, 140(33), 10385-10401. DOI: 10.1021/jacs.8b06607. PMID: 30059621

307) "2,2'-Bipyridine and hydrazide containing peptides for cyclization and complex quaternary structural control" Hernandez, E.; Escamilla, P.R.; Kwon, S.-Y.; Partridge, J.; McVeigh, M.; Rivera, S.; Reuther, J.F.; Anslyn, E.V. *New J. Chem.* **2018**, 42, 8557-8582. DOI: 10.1039/C8NJ00184G

306) "A Versatile Approach to Noncanonical, Dynamic Covalent Single- and Multi-Loop Peptide Macrocycles for Enhancing Antimicrobial Activity" Reuther, James F.; Goodrich, Andrew C.; Escamilla, P. Rogelio; Lu, Tiffany A.; Del Rio, Valarie; Davies, Bryan W.; Anslyn, Eric V. *J. Am. Chem. Soc.*, **2018**, ASAP. PMID: 29466660

305) "Teaching through Research: Alignment of Core Chemistry Competencies and Skills within a Multidisciplinary Research Framework" Eman Ghanem, S. Reid Long, Stacia E. Rodenbusch, Ruth I. Shear, Josh T. Beckham, Kristen Procko, Lauren DePue, Keith J. Stevenson, Jon D. Robertus, Stephen Martin, Bradley Holliday, Richard A. Jones, Eric V. Anslyn, Sarah L. Simmons, *Journal of Chemical Education*, **2018**, 95(2), 248-258. DOI: 10.1021/acs.jchemed.7b00294

304) "Dynamic Covalent Chemistry within Biphenyl Scaffolds: Reversible Covalent Bonding, Control of Selectivity, and Chirality Sensing with a Single System" Ni Cailing; Zha Daijun; Ye Hebo; Hai Yu; Zhou Yuntao; You Lei; Ni Cailing; Ye Hebo; You Lei; Anslyn Eric V *Angewandte Chemie*, **2018**, 57(5), 1300-1305. PubMed ID: 29239090

303) "Arresting 'Loose Bolt' Internal Conversion from -B(OH)₂ Groups is the Mechanism for Emission Turn-On in *ortho*-Aminomethylphenylboronic Acid-Based Saccharide Sensors" Sun, Xiaolong; James, Tony D.; Anslyn, Eric V. *J. Am. Chem. Soc.*, **2018**, 140(6), 2348-2354. PubMed ID: 29360350

302) "Serotonin Analogues as Inhibitors of Breast Cancer Cell Growth" Jose, Jiney; Tavares, Clint D. J.; Ebelt, Nancy D.; Lodi, Alessia; Edupuganti, Ramakrishna; Xie, Xuemei; Devkota, Ashwini K.; Kaoud, Tamer S.; Van Den Berg, Carla L.; Anslyn, Eric V.; Tiziani, Stefano; Bartholomeusz, Chandra; Dalby, Kevin N., *ACS Medicinal Chemistry Letters*, **2017**, 8, 1072-1076

301) "Differential Array Sensing for Cancer Cell Classification and Novelty Detection" Alexandra M. Gade, Margaret K. Meadows, Andrew D. Ellington, and Eric V. Anslyn, *Organic and Biomolecular Chemistry*, **2017**, 15, 9866-9874 DOI: 10.1039/c7ob02174g

- 300) "An Auto-Inductive Cascade for the Optical Sensing of Thiols in Aqueous Media: Application in the Detection of a VX Nerve Agent Mimic." Sun, X.; Anslyn, E. V., *Angew. Chem., Int. Ed.* **2017**, *56*, 9522-9526. DOI: 10.1002/anie.201704472
- 299) "Charged poly(N-isopropylacrylamide) nanogels for use as differential protein receptors in a turbidimetric sensor array." Culver, H. R.; Sharma, I.; Wechsler, M. E.; Anslyn, E. V.; Peppas, N. A., *Analyst*. **2017**, *142*, 3183-3193. DOI: 10.1039/C7AN00787F
- 298) Ghanem, E.; Afsah, S.; Fallah, P. N.; Lawrence, A.; LeBovidge, E.; Raghunathan, S.; Rago, D.; Ramirez, M. A.; Telles, M.; Winkler, M.; Schumm, B.; Makhnejia, K.; Portillo, D.; Vidal, R. C.; Hall, A.; Yeh, D.; Judkins, H.; da Silva, A. A.; Franco, D. W.; Anslyn, E. V. "Differentiation and Identification of Cachaca Wood Extracts Using Peptide-Based Receptors and Multivariate Data Analysis." *ACS Sens.* **2017**, *2*, 641-647. DOI: 10.1021/acssensors.6b00809
- 297) "Recognition of Viologen Derivatives in Water by N-Alkyl Ammonium Resorcinarene Chlorides" Beyeh, N. K.; Jo, H. H.; Kolesnichenko, I.; Pan, F.; Kalenius, E.; Anslyn, E. V.; Ras, R. H. A.; Rissanen, K., *J. Org. Chem.* **2017**, *82*, 5198-5203 DOI: 10.1021/acs.joc.7b00449
- 296) "Boronic Acid Mediated Coupling of Catechols and N-Hydroxylamines: A Bioorthogonal Reaction to Label Peptides" Meadows, M.K.; Roesner, E.K.; Lynch, V.M.; James, T.D.; Anslyn, E.V., *Organic Letters*, **2017**, *19*, 3179-3182. DOI: 10.1021/acs.orglett.7b01198.
- 295) "Dynamic covalent chemistry enables formation of antimicrobial peptide quaternary assemblies in a completely abiotic manner" Reuther, J.F.; Dees, J.L.; Kolesnichenko, I.V.; Hernandez, E.T.; Ukraintsev, D.V.; Guduru, R.; Whiteley, M.; Anslyn, E.V., *Nature Chemistry*, **2017**, Online. DOI: 10.1038/nchem.2847
- 294) "Tuning thiol addition to squaraines by *ortho*-substitution and the use of serum albumin" Diehl, K.L.; Bachman, L.; Anslyn, E.V., *Dyes and Pigments*, **2017**, *141*, 316-324. DOI: 10.1016/j.dyepig.2016.11.060
- 293) "An efficient methodology to introduce o-(aminomethyl)phenyl-boronic acids into peptides: alkylation of secondary amines" Hernandez, E.T.; Kolesnichenko, I.V.; Reuther, J.F.; Anslyn, E.V., *New J. Chem.* **2017**, *41*, 126-133. DOI: 10.1039/c6nj02862d
- 292) "Discovery of a potent inhibitor of MELK that inhibits expression of the anti-apoptotic protein Mcl-A and TNBC cell growth" Edupuganti, R.; Taliaferro, J.M.; Want, Q.; Xie, X.; Cho, E.J.; Vidhu, F.; Ren, P.; Anslyn, E.V.; Bartholomeusz, C.; Dalby, K.N., *Biorganic & Medical Chemistry*, **2017**, *25*, 2609-2616. DOI:10.1016/j.bmc.2017.03.018
- 291) "Disaggregation is a Mechanism for Emission Turn-On of *ortho*-Aminomethylphenylboronic Acid-Based Saccharide Sensors" Chapin, B.M.; Metola, P.; Vankayala, S.L.; Woodcock, H.L.; Mooibroek, T.J.; Lynch, V.M.; Larkin, J.D.; Anslyn, E.V., *J. Am. Chem. Soc.*, **2017**, *139*, 5568-5578. DOI: 10.1021/jacs.7b01755
- 290) "Reversible Macrocyclization of Peptides with a Conjugate Acceptor" Johnson, A.M.; Anslyn, E.V., *Org. Lett.*, **2017**, *19*, 1654-1657. DOI: 10.1021/acs.orglett.7b00451
- 289) "New Autoinductive Cascade for the Optical Sensing of Fluoride: Application in the Detection of Phosphoryl Fluoride Nerve Agents" Sun, X.; Dahlhauser, S.D.; Anslyn, E.V., *J. Am. Chem. Soc.*, **2017**, *139*, 4635-4638. DOI: 10.1021/jacs.7b01008
- 288) "Coupling Activity-Based Detection, Target Amplification, Colorimetric and Fluorometric Signal Amplification, for Quantitative Chemosensing of Fluoride Generated from Nerve Agents" Sun, X.; Reuther J.F.; Phillips, S.T.; Anslyn, E.V., *Chem. Eur. J.*, **2017**, *23*, 3903-3909. DOI: 10.1002/chem.201604474
- 287) "Solution-phase and solid-phase sequential, selective modification of side chains in KDYWEC and KDYWE as models for usage in single-molecule protein sequencing" Hernandez, E.T.; Swaminathan, J.; Marcotte, E.M.; Anslyn, E.V., *New J. Chem.*, **2017**, *41*, 462-469. DOI: 10.1039/c6nj02932a
- 286) "Practical Applications of Supramolecular Chemistry" Kolesnischenko, I.; Anslyn, E.V. *Chem. Soc. Rev.* **2017**, *46*, 2385-2390. DOI: 10.1039/C7CS00078B

- 285) "Thermodynamic Studies of dynamic metal metal ligands with copper(II), cobalt(II), zinc(II) and nickel(II)" Long, S.R.; Lin, C.; Anslyn, E.V., *J. Coord. Chem.*, **2017**, *70*, 1-9 Online. DOI:10.1080/00958972.2016.1262949
- 284) "Rapid Determination of Enantiomeric Excess via NMR Spectroscopy: A Research-Informed Experiment" Fossey, J.S.; Anslyn, E.V.; Brittain, W.D.G.; Bull, S.D.; Chapin, B.M.; Le Duff, C.S.; James, T.D.; Lees, G.; Lim, S.; Lloyd, J.A.C.; Manville, C.V.; Payne, D.T.; Roper, K.A., *J. Chem. Educ.*, **2017**, *94*, 79-84 DOI: 10.1021/acs.jchemed.6b00355
- 283) "Click-fluors": Triazole-linked saccharide sensors" Zhai, W.; Chapin, B.M.; Yoshizawa, A.; Wang, H.; Hodge, S.A.; James, T.D.; Anslyn, E.V.; Fossey, J.S., *Organic Chemistry Frontiers*, **2016**, *3*, 918-928
- 282) "The Bull-James assembly as a chiral auxiliary and shift reagent in kinetic resolution of alkyne amines by the CuAAC reaction" Brittain W.D.G.; Chapin, B.; Zhai, W.; Lynch, V.M.; Buckley, B.R.; Anslyn, E.V.; Fossey, J.S., *Org. Biomol. Chem.*, **2016**, *14*, 10778-10782. DOI:10.1039/c6ob01623e
- 281) "Differential sensing of oils by conjugates of serum albumins and 9,10-distyrylanthracene probes: a cautionary tale" Li, X.; Zamora-Olivares, D.; Diehl, K.L.; Tian, W.; Anslyn, E.V., *J. Supramolecular Chem.*, **2016**, *29*, 308-314. DOI:10.1080/10610278.2016.1228934
- 280) "Structural and Thermodynamic Analysis of a Three-Component Assembly Forming ortho-Iminophenylboronate Esters" Chapin, B.M.; Metola, P.; Lynch, V.M.; Stanton, J.F.; James, T.D.; Anslyn, E.V., *J. Org. Chem.*, **2016**, *81* (18), 8319-8330. DOI: 10.1021/acs.joc.6b01495
- 279) "A racemate-rules effect supramolecular polymer for ee determination of malic acid in the high ee region" Chen, X.; Jiang, Y.; Anslyn, E.V., *Chem. Commun.*, **2016**, *52*, 12669-12671
- 278) "Click and chemically triggered declick reactions through reversible amine and thiol coupling via a conjugate acceptor" Diehl, K.L.; Kolesnichenko, I.V.; Robotham, S.A.; Bachman, J.L.; Zhong, Z.; Brodbelt, J.S.; Anslyn, E.V., *Nature Chem.*, **2016**, *8*, 968-973
- 277) "Four Simultaneously Dynamic Covalent Reactions. Experimental Proof of Orthogonality" Seifert, H.M.; Trejo, K.R.; Anslyn, E.V., *J. Am. Chem. Soc.*, **2016**, *138*, 10916-10924.
- 276) "Physical Organic Chemistry by Any Other Name Would Smell as Sweet" Chapin, B.M.; Anslyn, E.V., *Isr. J. Chem.*, **2016**, *56*, 38-45
- 275) "From substituent effects to applications: enhancing the optical response of a four-component assembly for reporting ee values" Lin, C.; Giuliano, M.W.; Ellis, B.D.; Miller, S.J.; Anslyn, E.V., *Chemical Science*, **2016**, *7*, 4085-4090
- 274) "Synthesis of alanyl nucleobase amino acids and their incorporation into proteins" Talukder, P.; Dedkova, L.M.; Ellington, A.D.; Yakovchuk, P.; Lim, J.; Anslyn, E.V.; Hecht, S.M., *Bioorg. Med. Chem.* **2016**, *24*, 4177-4187
- 273) "Supramolecular Chemistry at the interface of biology, materials and medicine" Anslyn, E.V.; Zimmerman, S.C., *Beilstein J. Org. Chem.*, **2016**, *12*, 1101-1102. PMID: 27340497
- 272) "Model Building Using Linear Free Energy Relationship Parameters-Eliminating Calibration Curves for Optical Analysis of Enantiomeric Excess" Lin, C.; Y.; Lim, S.; Anslyn, E.V., *J. Am. Chem. Soc.*, **2016**, *138*, 8045-8047. PMID: 27304670
- 271) "Synthesis and structural analyses of phenylethynyl-substituted tris(2-pyridylmethyl)amines and their copper(II) complexes" Lim, J.; Lynch, V.M.; Edupuganti, R.; Ellington, A.; Anslyn, E.V., *Dalton Transactions*, **2016**, *45*, 10585 – 10598. PMID: 27264275
- 270) "Art, auto-mechanics, and supramolecular chemistry. A merging of hobbies and career" Anslyn, E.V.; *Beilstein J. Org. Chem.*, **2016**, *12*, 362-376. PMID: 26977197
- 269) "Introduction: Supramolecular Chemistry" Huang, F.; Anslyn, E.V., *Chem. Rev.*, **2015**, *115*, 6999-7000. PMID: 26263840

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Invited Lectures/Seminars

371) "Physical Organic Chemistry in the Analytical Sciences" Queen's University Belfast, Belfast Ireland, June 21st, 2018

370) "Differential Sensing, Methods and Application" Queen's University Belfast, Belfast Ireland, June 20th, 2018

369) "Rapid Optical Methods for Enantiomeric Excess Determination", Chirality Conference, Princeton NY, June 12th 2018

368) "Three Tales of Supramolecular Analytical Chemistry" NYU New York NY, April. 4th 2018

367) "Three Tales of Supramolecular Analytical Chemistry" Univ. Oregon, Eugene OR, April. 19th 2018

366) "Three Tales of Supramolecular Analytical Chemistry" Oregon State University, Corvallis OR, April. 18th 2018

365) The James and Jeanette Neckers Lectureship in Chemistry, "Supramolecular Methods for the Rapid Determination of Enantiomeric Excess" Hope College, April 6th 2018

364) The James and Jeanette Neckers Lectureship in Chemistry, "Mimicking the Senses of Taste and Smell" Hope College, April 5th 2018

363) "Three Tales of Supramolecular Analytical Chemistry" Temple University, Philadelphia PA, Feb. 22nd 2018

362) "Single Molecule Sequencing of Unnatural Peptides and Oligomers", 1st Single Molecule Peptide Sequencing Conference, Deftl Holland, December 11th 2017

361) Haines Lectureship, "Three Tales of Supramolecular Analytical Chemistry" University of South Dakota, Nov. 6th 2017, Vermillion SD

360) "Three Tales of Supramolecular Analytical Chemistry" Texas A&M University, College Station TX, Oct. 27th 2017

359) "Supramolecular Methods for the Rapid Determination of Enantiomeric Excess" Canterbury University, Christchurch New Zealand, September 11th, 2017

358) "Supramolecular Methods for the Rapid Determination of Enantiomeric Excess" University of New South Wales, Sydney Australia, September 8th, 2017

357) "Undergraduate Education at the University of Texas at Austin, What's Special About Us?" The Mellor Lecture in Chemical Education, University of New South Wales, Sydney Australia, September 7th, 2017

356) "Dynamic Covalent Bonding: Peptide Quaternary Structures, Click and Declick, and Auto-Induction", ACS Meeting, Washington DC, August 20th, 2017.

355) "Three Tales of Supramolecular Analytical Chemistry" Cambridge University, Cambridge England. June 20th

354) "Three Tales of Supramolecular Analytical Chemistry" Oxford University, Oxford England. June 30th

353) "Three Tales of Supramolecular Analytical Chemistry" University of Parma, Parma Italy. June 26th 2017

352) "Life as an Academic" Gargnano Italian School, Gargnano Italy, June 19th, 2017.

351) "Rapid Supramolecular Methods for Reaction Discovery" Gargnano Italian School, Gargnano Italy, June 18th, 2017.

350) "Three Tales of Supramolecular Analytical Chemistry" University of Padova, Padova Italy. June 15th 2017

349) "Dynamic Covalent Bonding: Peptide Quaternary Structures, Click and Declick, and Auto-Induction" May 17th 2017, CASE Conference, Shanghai Polytechnic University, China.

348) "Three Tales of Supramolecular Analytical Chemistry" East China Normal University, May 15th 2017, Shanghai China

347) "Three Tales of Supramolecular Analytical Chemistry" UIUC, Urbana-Champaign, Ill, April 13th 2017

346) "Mimicking the Senses of Taste and Smell" Kilpatrick Lecture, Illinois Institute of Technology, Chicago Ill, April 10th 2017

345) "Two Tales of Supramolecular Analytical Chemistry" University of Arizona, Tucson AZ, March 31st 2017.

344) "Two Tales of Supramolecular Analytical Chemistry" Santa Clara University, Feb. 3rd 2017.

343) "Rapid Supramolecular Methods for Reaction Discovery" Tianjin University, Feb. 25th 2017, Tianjin China

342) "Mechanistic Studies of Boronic Acid Chemistry", Northwestern University Burn's Celebration, Jan. 23rd, 2017

341) "Two Tales of Supramolecular Analytical Chemistry" Univ. Nebraska, Jan. 13th 2017

340) "DARPA Progress Update", Scripps La Jolla, Dec. 19th, 2016

339) "Supramolecular Methods for the Analysis of Enantiomeric Excess", NYU Abu Dhabi, November 8th, 2016

- 338) "Mimicking the Senses of Taste and Smell", NYU Abu Dhabi, Nov. 7th 2016
- 337) "Two Tales of Supramolecular Analytical Chemistry" University of Basel, October 14th 2016, Basel, Switzerland
- 336) "Two Tales of Supramolecular Analytical Chemistry" EPFL, October 13th 2016, Lausanne, Switzerland
- 335) "Two Tales of Supramolecular Analytical Chemistry" University of Fribourg, October 12th 2016, Fribourg, Switzerland
- 334) "Two Tales of Supramolecular Analytical Chemistry" University of Bern, October 11th 2016, Bern, Switzerland
- 333) "Two Tales of Supramolecular Analytical Chemistry" ETH, October 10th 2016, Zurich, Switzerland
- 332) "Next-Gen Sequencing for Bio-Hints" NASA-Biosignature Workshop, September 8th, Washington DC
- 331) "Short Vignettes of Supramolecular Analytical Chemistry" MSMLG, July 25th, 2016, Bath, UK
- 330) "Optical Methods for Reaction Discovery, From Conception to Practice" ISMSC Conference, July 11th, 2016, Seoul, Korea
- 329) "Supramolecular Chemistry Methods for the Rapid Determination of Enantiomeric Excess Values" ISBBN Conference, May 27th, 2016, Changsha, China
- 328) "Supramolecular Analytical Chemistry" Oklahoma State University, April 7th, 2016, Stillwater, Ok
- 327) "Mimicking the Senses of Taste and Smell" Cal State University, February 17th, 2016, Long Beach, CA
- 326) "Supramolecular Methods for the Rapid Determination of Enantiomeric Excess" Cal State University, February 17th, 2016, Long Beach, CA
- 325) "Supramolecular Analytical Chemistry" Israel Chemical Society, February 9th, 2016, Tel-Aviv, Israel
- 324) "Differential Sensing: Concepts and Applications" Pacific Chem, Dec. 14th, 2015, Honolulu, HI
- 323) "Rapid Supramolecular Methods for Ee Determination" Pacific Chem, Dec. 14th, 2015, Honolulu, HI
- 322) "Three Tales of Supramolecular Analytical Chemistry", Dartmouth College, Oct. 28th, 2015. Hanover CT
- 321) "Rapid Supramolecular Methods for Ee Determination" Merck Pharmaceuticals, Rahway NJ, September 25th, 2015.
- 320) "Rapid Supramolecular Methods for Ee Determination" Boehringer Ingelheim, Ridgefield CT, September 10th, 2015.
- 319) "Differential Sensing: Concepts and Applications" IUPAC-Busan, Korea, August 10, 2015
- 318) "Differential Sensing: Concepts and Applications", University of Birmingham, Birmingham, England, July 20, 2015
- 317) "Rapid Supramolecular Methods for Ee Determination" University of Birmingham, Birmingham, England, July 17, 2015
- 316) "Graduate Student, Post-Doc, Assistant Professor, Getting Tenure, and Beyond: The Life of an Academic Scientist" University of Birmingham, Birmingham, England, July 16, 2015
- 315) "Rapid Supramolecular Method for Ee Determination", CASE Conference, Dublin, Ireland, July 9, 2015
- 314) "Rapid Supramolecular Methods for Ee Determination", Physical Organic Conference, June 23, 2015
- 313) "Methods of Thermodynamic Analysis in Supramolecular Chemistry", NSF Workshop, June 2, 2015
- 312) "Graduate Student, Post-Doc, Assistant Professor, Getting Tenure, and Beyond: The Life of an Academic Scientist" Shanghai University, May 20th, 2015
- 311) "Differential Sensing: Concepts and Applications" Shanghai University, May 19th, 2015
- 310) "Supramolecular Approaches for the Rapid Analysis of Enantiomeric Excess" Zhejiang University, Hangzhou China, May 18th 2015
- 309) "Supramolecular Sensing, a Short Course" Fujian Institute for Research on Structure and Matter, Fuzhou China, May 15th 2015
- 308) "Differential Sensing: Concepts and Applications" Fujian Institute for Research on Structure and Matter, Fuzhou China, May 15th 2015
- 307) "Differential Sensing, An Introduction" 2nd Symposium on Aggregation Induced Emission, Guangzhou China, May 16th 2015
- 306) "Differential Sensing: Concepts and Applications" Wuhan University, Wuhan China, May 14th 2015
- 305) "Differential Sensing: Concepts and Applications" Wuhan University of Science and Technology, Wuhan China, May 13th 2015
- 304) "Differential Sensing: Concepts and Applications" Institute of Biotechnology and NanoScience, Singapore, May 12th 2015
- 303) "Rapid Supramolecular Method for Ee Determination", Massachusetts Institute of Technology, Cambridge, Massachusetts, April 10th, 2015.
- 302) "Differential Sensing, Concepts & Methods", Massachusetts Institute of Technology, Cambridge, Massachusetts, April 9th, 2015.
- 301) "Differential Sensing, Concepts & Methods" Xavier University, New Orleans, Louisiana, Jan. 26th, 2015.
- 300) "Three Tales of Supramolecular Analytical Chemistry", Univ. Melbourne, Melbourne Australia, Dec. 16th 2014.

- 299) "Three Tales of Supramolecular Analytical Chemistry", Univ. New South Wales, Sydney Australia, Dec. 15th 2014.
- 298) "Differential Sensing, Concepts and Applications" RACI Meeting, Adelaide Australia, Dec. 10th 2014.
- 297) "Differential Sensing, Biological Applications", MSMLG, Shanghai China, Nov. 11th, 2014.
- 296) "Three Tales of Supramolecular Analytical Chemistry", Univ. Utah, Oct. 2nd, 2014.
- 295) "Three Tales of Supramolecular Analytical Chemistry", Michigan State Univ., Sept. 3rd, 2014.
- 294) "Rapid Optical Methods for the Determination of Ee Values", Stereochemistry GRC, RI, July 29th, 2014.
- 293) "Differential Sensing for Wine Classification" ASEV Conference, Austin TX, May 24th, 2014.
- 292) "Three Tales of Supramolecular Analytical Chemistry" University of Rome, Italy, May 18th, 2014.
- 291) "Three Tales of Supramolecular Analytical Chemistry" University Florence, Italy, May 16th 2014.
- 290) "Three Tales of Supramolecular Analytical Chemistry" Parma University, Italy, May 13th 2014.
- 289) "Supramolecular Analytical Chemistry", ISMC 2014, Pavia Italy, Plenary Lecture, May 10th 2014.
- 288) "Three Tales of Supramolecular Analytical Chemistry", Saul Winstein Lecturer, UCLA, May 22nd 2014.
- 287) "Differential Sensing Methods: Mimicking the Senses of Taste and Smell with Supramolecular Chemistry", Boekelheide Lecturer, Univ. of Oregon, May 9th, 2014.
- 286) "Supramolecular Chemistry Approaches for the Rapid Determination of Ee Values", Univ. of Oregon, May 13th, 2014
- 285) "Biological Applications of Supramolecular Analytical Chemistry" Mardi Gras Symposium, Tulane University, Jan. 27th, 2014.
- 284) "Three Tales of Supramolecular Analytical Chemistry", Tulane University, Jan. 17th 2014
- 283) "Supramolecular Analytical Chemistry" University of Geneva, Chemistry Day, Jan. 27th 2014
- 282) "Supramolecular Analytical Chemistry", Chinese Chemical Biology Symposium, East China University of Science and Technology, Shanghai China, Sept. 17th 2013
- 281) "Three Tales of Supramolecular Analytical Chemistry", University of California, Riverside, Sept. 25th 2013
- 280) Izatt Christensen Award Lecture, 8th ISMSC, "Three Tales of Supramolecular Analytical Chemistry" Arlington VA, July 10th, 2013.
- 279) "Supramolecular Analytical Chemistry" Toho University, Toho Japan, June 25th, 2013.
- 278) "Supramolecular Analytical Chemistry" Tsukuba Institute for Material Science, Tsukuba Japan, June 24th 2013.
- 277) "Supramolecular Approaches to Rapid Ee Determination" ISACS 10 Conference, Kyoto Japan, June 20th, 2013.
- 276) "Supramolecular Analytical Chemistry" Penn. State Univ., State College PA, May 28th 2013
- 275) "Supramolecular Analytical Chemistry", Carleton College, Northfield MN, April 19th 2013
- 274) "Supramolecular Analytical Chemistry", U.C. Davis, March 13th 2013
- 273) "Supramolecular Analytical Chemistry", California Institute of Technology, March 11th 2013
- 272) "Supramolecular Analytical Chemistry", Plenary Lecture at the HKUST Symposium on Advances in Biomedical Engineering, Hong Kong, Jan. 12th, 2013.
- 271) "Supramolecular Analytical Chemistry" Chinese University of Hong Kong, Jan. 10th, 2013.
- 270) "Supramolecular Analytical Chemistry" University of Hong Kong, Jan. 9th, 2013.
- 269) "Supramolecular Methods for the Rapid Determination of Enantiomeric Excess" South China University of Technology, Guangzhou China, Jan. 7th, 2013.
- 268) "Supramolecular Analytical Chemistry" International Kyoto Conference on Organic Chemistry (IKCOC-12), Kyoto Japan, Nov. 13th, 2012.
- 267) "Supramolecular Analytical Chemistry" Texas Tech., Lubbock TX, Oct. 3rd 2012.
- 266) "Supramolecular Analytical Chemistry" Univ. of Alabama, Tuscaloosa AL, Sept. 13th, 2012.
- 265) "Supramolecular Analytical Chemistry" University of Arlington, Arlington TX, July 30th 2012.
- 264) "Supramolecular Analytical Chemistry" EWHA University, Seoul Korea, July 13th, 2012.
- 263) "Supramolecular Approach to High-Throughput Ee Analysis" Seoul National University, June 12th, 2012.
- 262) "Supramolecular Analytical Chemistry" MSMLG, Seoul Korea, July 11th, 2012.
- 261) "Supramolecular Approach to High-Throughput Ee Analysis" Chirality Conference, Fort Worth TX, June 11th, 2012.
- 260) "Supramolecular Analytical Chemistry", University Distinguished Lecturer, Hong Kong University of Science and Technology, Hong Kong, April 16th, 2012.
- 259) "Supramolecular Analytical Chemistry", Columbia University, NYC, April 5th, 2012.
- 258) "Supramolecular Analytical Chemistry", ISEOFM2012, Shanghai China, March 11th, 2012.
- 257) "Supramolecular Approaches to High-Throughput Screening of Enantiomeric Excess". Merck Pharmaceutical Rahway NJ, March 21st 2012.
- 256) "Supramolecular Approaches to High-Throughput Screening of Enantiomeric Excess". National Dong Hwa University, Taiwan, Feb. 24th, 2012.
- 255) "Supramolecular Approaches to High-Throughput Screening of Enantiomeric Excess", National Chao Tung University, Taiwan, Feb. 23rd, 2012.

- 254) "Supramolecular Approaches to High-Throughput Screening of Enantiomeric Excess", National Taiwan University, Feb. 22nd, 2012.
- 253) "Supramolecular Analytical Chemistry" Ta-shue Chou Memorial Lectures, Feb. 12st, 2012, Academia Sinica, Taiwan.
- 252) "Supramolecular Rapid EE Analysis" New York University, Jan. 27th, 2012.
- 251) "Supramolecular Analytical Chemistry" Montana State University, Dec. 1st, 2011.
- 250) "Supramolecular Rapid EE Analysis" Southwest Regional ACS Meeting, Austin TX, Nov. 9th 2011.
- 249) "Supramolecular Analytical Chemistry", Pennsylvania State University, Oct. 24th, 2011.
- 248) "Supramolecular Analytical Chemistry" Macalester College, Saint Paul, MN, Oct. 5th, 2011.
- 247) "Supramolecular Rapid EE Analysis" Gassman Lecturer Series, University of Minnesota, Oct. 6th, 2011.
- 246) "Supramolecular Analytical Chemistry" Gassman Lecturer Series, University of Minnesota, Oct. 4th 2011.
- 245) "Triggered Reactions for Creating Optical Responses" Methods and Applications of Fluorescence, Strasbourg France, September 13th, 2011.
- 244) "Supramolecular Chirality and Enantiomeric Excess Determination" University of Birmingham, England, July 11th, 2011
- 243) "Supramolecular Chirality and Enantiomeric Excess Determination" University of Bath, England, July 8th, 2011
- 242) "Supramolecular Chirality and Enantiomeric Excess Determination" 6th ISMSC, Brighton England, July 5th, 2011
- 241) "Patterning Chirality and Enantiomeric Excess" National University Singapore, June 9th, 2011.
- 240) "Pattern Recognition and Supramolecular Chemistry" National University Singapore, June 8th, 2011.
- 239) "Supramolecular Analytical Chemistry" Nan Qiang Lecture, Xiamen University, Xiamen, China, June 6th 2011.
- 238) "Supramolecular Analytical Chemistry" Fujian Institute of Structure and Matter, Fuzhou, China, June 4th 2011.
- 237) "Supramolecular Analytical Chemistry" Zhejiang University, Hangzhou, China, June 1st 2011.
- 236) "Supramolecular Analytical Chemistry" Hong Kong University, Hong Kong, China, May 30th 2011.
- 235) "Supramolecular Analytical Chemistry" Scripps Florida, Jupiter Florida, April 28th 2011.
- 234) "Supramolecular Analytical Chemistry" ETH, Zurich, Switzerland, April 4th, 2011.
- 233) "Biomimetic Sensing" Breslow 80th Birthday Symposium, Anaheim ACS meeting, March 27th, 2011.
- 232) "Supramolecular Analytical Chemistry" University of Toronto, Mississauga, Feb. 29th 2011.
- 231) "Supramolecular Analytical Chemistry" University of Toronto, St. George, Feb. 28th 2011.
- 230) "Supramolecular Analytical Chemistry" 2010-2011 Organic Synthesis Lecturer, U.C. Berkeley, Feb. 7th 2011.
- 229) "Supramolecular Analytical Chemistry" University of Maryland Distinguished Departmental Lecture, Jan. 28th 2011.
- 228) "Mechanistic Studies and Analytical Uses of Boronic Acids" Pacifichem, Honolulu HI, Dec. 20th, 2010.
- 227) "Supramolecular Analytical Chemistry" Pacifichem, Honolulu HI, Dec. 15th 2010.
- 226) "Supramolecular Analytical Chemistry" 2nd MSMLG, Ankara Turkey, October 21st 2010.
- 225) "Supramolecular Analytical Chemistry" EuChemMS Chemistry Conference, Nurnberg, Germany, August 31, 2010.
- 224) "Supramolecular Analytical Chemistry" Sanofi Aventis, Frankfurt, Germany, September 2, 2010.
- 223) "Supramolecular Analytical Chemistry" Aegean Conference, 1st International Conference on Molecular Recognition, Crete, Greece, June 7th 2010.
- 222) "Supramolecular Analytical Chemistry" 33^a Reunao Anual Sociedade Brasileira de Quimica, Aqua di Lindoia, Brazil, May 31st 2010.
- 221) "Supramolecular Analytical Chemistry" University of Sao Paulo, Sao Paulo Brazil, May 28th, 2010.
- 220) "Supramolecular Analytical Chemistry" Burkenstock Conference, Brunnen, Switzerland, May 3rd, 2010
- 219) "Supramolecular Analytical Chemistry" North Carolina St. Univ., Raleigh-Durham, April 23rd 2010
- 218) "Supramolecular Analytical Chemistry" Duke University, Raleigh-Durham, April 22nd 2010
- 217) "Supramolecular Analytical Chemistry" Univ. North Carolina, Chapel Hill NC, April 21st 2010
- 216) "Supramolecular Analytical Chemistry" Southern Methodist University, Dallas TX, Feb. 26th 2010
- 215) "Supramolecular Analytical Chemistry" University of Colorado, Boulder CO, Jan. 25th 2010
- 214) "Problems in the Anslyn Group" NSF Physical Organic Workshop, Austin TX, Jan. 9th 2010
- 213) "Supramolecular Analytical Chemistry" Dains Lecture, Univ. Kansas, Lawrence KS, Dec. 11th 2009
- 212) "Supramolecular Analytical Chemistry" RISE Lecturer, Univ. Puerto Rico, San Juan, Nov. 13th 2009
- 211) "Supramolecular Analytical Chemistry" Univ. Ill. Urbana-Champaign, Oct. 12th 2009
- 210) "Supramolecular Analytical Chemistry" Univ. South Carolina, Columbia S.C. Sept. 11th 2009.
- 209) "Differential Arrays from Peptides, Metals, and Indicators" 10th International Conference on Calixarene Chemistry, Seoul South Korea, July 15th 2009.
- 208) "Supramolecular Analytical Chemistry", University of Warsaw, Warsaw Poland, June 15th 2009.
- 207) "Supramolecular Analytical Chemistry", Bruno-Werelmann-Lecture, University of Essen, Essen Germany, June 15th, 2009.

- 206) "Supramolecular Analytical Chemistry", University of Kiel, Otto Diels Institute of Organic Chemistry, Kiel Germany, June 11th, 2009
- 205) "Supramolecular Analytical Chemistry" Munchener Chemische Gesellschaft Lecture, Ludwig-Maximilians-Universität München, Germany, June 9th, 2009
- 204) "Supramolecular Analytical Chemistry" Taft Memorial Lecture, Univ. California Irvine, April 29th, 2009
- 203) "Supramolecular Analytical Chemistry" New York University, NYC, Feb. 20th 2009
- 202) "Supramolecular Analytical Chemistry" Cambridge University, Cambridge, England, Jan. 15th 2009
- 201) "Supramolecular Analytical Chemistry" University of East Anglia, Norwich, England, Jan. 14th 2009
- 200) "Supramolecular Analytical Chemistry" University of Sheffield, Sheffield England, Jan. 13th, 2009
- 199) "Supramolecular Analytical Chemistry" National Singapore University, Dec. 19th, 2008.
- 198) "Supramolecular Analytical Chemistry" Institute of Chemical and Engineering Sciences, Singapore, Dec. 16th, 2008.
- 197) "Supramolecular Analytical Chemistry" Yale University, Princeton NY, Nov. 5th, 2008.
- 196) "Supramolecular Analytical Chemistry" Sanofi-Aventis, Tucson AR, Oct. 8th, 2008.
- 195) "Supramolecular Analytical Chemistry" University Michigan, Ann Arbor, MI, Sept. 16th 2008
- 194) "Supramolecular Analytical Chemistry" Scripps Institute, San Diego CA., August 13th, 2008.
- 193) "Supramolecular Chemistry and Pattern Recognition" Tohoku University Department of Chemical Engineering, Sendai Japan, June 9th 2008
- 192) "Supramolecular Analytical Chemistry" Tohoku University Department of Chemistry, Sendai Japan, June 9th 2008
- 191) "Supramolecular Analytical Chemistry" University of Kyoto, Kyoto Japan, June 6th 2008
- 190) "Supramolecular Analytical Chemistry" University of Osaka, Osaka, Japan June 5th 2008
- 189) "Supramolecular Analytical Chemistry" University of Kyushu, Fukuoka, Japan, June 3rd 2008
- 188) "Supramolecular Analytical Chemistry" University of Nebraska, Lincoln, May 2nd 2008
- 187) "Supramolecular Analytical Chemistry" Trinity University, San Antonio TX, March 27th 2008
- 186) "Supramolecular Chemistry and Pattern Recognition" New York Academy of Sciences, Symposium on Chemical Neurobiology, Feb. 22nd, 2008.
- 185) "Supramolecular Analytical Chemistry" Indiana University, Dec. 7th, 2007.
- 84) "Supramolecular Analytical Chemistry" Purdue University, Bachmann-Pearce named lecture, Dec. 6th, 2007
- 183) "Supramolecular Analytical Chemistry" University of New Orleans, Oct. 19th, 2007.
- 182) "Supramolecular Analytical Chemistry" Xiamen University, China, Sept. 26th, 2007.
- 181) "Contrasting Selective vs. Differential Sensors" XXXV CSI, Xiamen China, Sept. 24th 2007.
- 180) "Colorimetric Methods for Enantiomeric Excess Determination" Organic Reactions and Process Gordon Conference, July 17th, 2007.
- 179) "Inorganic and Organic Receptors for Analytical Purposes" International Symposium on Photochemical and Photophysical Phenomenon, Dublin Ireland, June 27th, 2007.
- 178) "A Marriage of Supramolecular Chemistry with Pattern Recognition" University of Edinburgh, Scotland, June 19th, 2007.
- 177) "A Marriage of Supramolecular Chemistry with Pattern Recognition" Durham University, England, June 15th, 2007.
- 176) "A Marriage of Supramolecular Chemistry with Pattern Recognition" University of Bath, England, June 13th, 2007.
- 175) "A Marriage of Supramolecular Chemistry with Pattern Recognition" University of Southampton, England, June 11th 2007.
- 174) "Opportunities in the United States for Asians" Hong Kong Baptist University, May 10th, 2007.
- 173) "Supramolecular Analytical Chemistry" Hong Kong Baptist University, May 9th 2007.
- 172) "Supramolecular Analytical Chemistry" International Symposium on Molecular Machines and Sensing", May 7th, Shanghai, China
- 171) "Supramolecular Analytical Chemistry" Bowling Green State University, April 28th, 2007
- 170) "Supramolecular Analytical Chemistry" University of Florida, Gainesville, March 22nd, 2007.
- 169) "Supramolecular Analytical Chemistry" University of Illinois, Carbondale, Feb. 23rd, 2007.
- 168) "Supramolecular Chemistry and Pattern Recognition, A Complementary Match" Frye Lectureship, Univ. Arkansas, Fayetteville, Feb. 12th 2007
- 167) "Supramolecular Chemistry and Pattern Recognition, A Complementary Match" Northwestern University, Jan. 18th, 2007
- 166) "Supramolecular Chemistry and Pattern Recognition, A Complementary Match" Tufts University, Dec. 4th 2006
- 165) "The Power of Differential Receptors Rather Than Selective Receptors" University of Basel, Oct. 30th 2006
- 164) "Supramolecular Chemistry and Pattern Recognition: A Complementary Match" University of Berne, Oct. 31st, 2006
- 163) "Supramolecular Analytical Chemistry" University of Neuchatel, Nov. 1st, 2006.

- 162) "Combining Supramolecular Chemistry with Chemometrics" University of Fribourg, Nov. 2nd 2006.
- 161) "Teaching Supramolecular Chemistry New Tricks" University of Lausanne, EPFL, Nov. 3rd 2006
- 160) "A Marriage of Supramolecular Chemistry with Pattern Recognition" ACS Meeting, Fall 2006, San Francisco, Cope Scholar Award Presentation
- 159) "Practical Sensing Applications" Merck Pharmaceuticals, August 17th, 2006. Rahway NJ
- 158) "A Marriage of Supramolecular Chemistry with Pattern Recognition" June 26th, 2nd ISMSC, Victoria Canada.
- 157) "Supramolecular Chemistry and Pattern Recognition: A Complementary Match", June 16th. 2006, Oviedo Universidad. Oviedo, Spain.
- 156) "Supramolecular Chemistry and Pattern Recognition: A Complementary Match", June 14th, 2006 Autonomica Quimica. Madrid, Spain.
- 155) "Supramolecular Chemistry and Pattern Recognition: A Complementary Match", June 12th, 2006, Institute Catala d'Investigacio Quimica, Tarragona, Spain.
- 154) "Supramolecular Chemistry and Pattern Recognition: A Complementary Match" June 9th, 2006, Valencia Universidad, Valencia Spain.
- 153) "Supramolecular Chemistry and Pattern Recognition: A Complementary Match", June 7th, 2006, Universidad de Illes Balears, Mallorca Spain.
- 152) "Supramolecular Chemistry and Pattern Recognition: A Complementary Match", Apr. 13th 2006, Northeastern Univ. Boston, MA.
- 151) "Supramolecular Chemistry and Pattern Recognition: A Complementary Match", Mar. 10th 2006, Iowa State Univ., Ames, IO.
- 150) "Supramolecular Chemistry and Pattern Recognition: A Complementary Match", Feb. 9th 2006, Univ. Arizona, Tucson, AZ.
- 149) "Supramolecular Chemistry and Pattern Recognition: A Complementary Match", Jan. 12th 2006, Univ. Tennessee, Knoxville TN.
- 148) "A Marriage of Supramolecular Chemistry and Pattern Recognition", Jan. 9th 2006, Structural and Functional Organic Chemistry GRC, Santa Ynez CA.
- 147) "Physical Organic Chemistry of Molecular Recognition Processes", Dec. 18th, Pacific Chem., Honolulu, HI.
- 146) "A Marriage of Supramolecular Chemistry and Pattern Recognition", Dec. 17th, Pacific Chem., Honolulu, HI.
- 145) "Structural and Functional Assays for Boronic Acids", Dec. 15th, Pacific Chem., Honolulu, HI.
- 144) "Supramolecular Chemistry and Pattern Recognition: A Complementary Match, Nov. 14th, Univ. of Toledo, Toledo Ohio.
- 142) "Supramolecular Chemistry and Pattern Recognition: A Complementary Match", Oct. 10th, Wuhan University, Wuhan, China.
- 141) "Supramolecular Chemistry and Pattern Recognition: A Complementary Match", Sept. 15th, Washington University, St. Louis MO.
- 140) "Organic Chemistry Approaches to Single and Multi Analyte Sensing" June 16th, University of Turku, Finland.
- 139) "Organic Chemistry Approaches to Single and Multi Analyte Sensing" June 13th, Symposium on Synthetic Receptors, Lund Sweden.
- 138) "Organic Chemistry Approaches to Single and Multi Analyte Sensing" May 28th, Merck Pharmaceuticals, Rahway NJ.
- 137) "Organic Chemistry Approaches to Single and Multi Analyte Sensing" April 15^h, University of Zurich.
- 136) "Organic Chemistry Approaches to Single and Multi Analyte Sensing" April 14th, University of Geneva.
- 135) "Organic Chemistry Approaches to Single and Multi Analyte Sensing" April 12th, Swiss School on Supramolecular Chemistry.
- 134) "Organic Chemistry Approaches to Single and Multi Analyte Sensing" March 9th, Univ. Mass. Amherst.
- 133) "Organic Chemistry Approaches to Single and Multi Analyte Sensing" March 8th 2005, Brown University.
- 132) "Organic Chemistry Approaches to Single and Multi Analyte Sensing" Nov. 17th, Cal. State Univ. Northridge.
- 131) "A Marriage of Supramolecular Chemistry and Pattern Recognition" Nov. 4th, Brauman-Bell Lecture, Baylor College of Dentistry, Dallas TX.
- 130) "A Marriage of Supramolecular Chemistry and Pattern Recognition" Oct. 8th, Marquette University.
- 129) "A Marriage of Supramolecular Chemistry and Pattern Recognition" Sept. 8th 2004, SCT meeting, Prague, Czech Rep..
- 128) "A Marriage of Supramolecular Chemistry and Pattern Recognition" July 27th, XII ISSC, Notre Dame University.
- 127) "Organic and Organometallic Approaches to Molecular Sensing" July 12th, University of Bristol, England.
- 126) "Organic and Organometallic Approaches to Molecular Sensing" July. 8th, Bioanalytical Gordon Conference, Queen's College Oxford England.
- 125) "Organic and Organometallic Approaches to Molecular Sensing" July. 5th, Organic Mechanisms Conference, University College Dublin Ireland.
- 124) "Organic and Organometallic Approaches to Molecular Sensing" July. 2nd, Trinity College Dublin Ireland.
- 123) "Organic and Organometallic Approaches to Molecular Sensing" July. 1st, Queen's College Belfast Ireland.

- 122) "Organic and Organometallic Approaches to Molecular Sensing" June. 14th, Bioorganic Gordon Conference, Protor Academy.
- 121) "Organic and Organometallic Approaches to Molecular Sensing" June. 1st, London Ontario Canada, Canadian Chemical Society Meeting.
- 120) "Organic and Organometallic Approaches to Molecular Sensing" Mar. 31st, Simon Fraser Univ.
- 119) "Organic and Organometallic Approaches to Molecular Sensing" Mar. 30th, Univ. British Columbia.
- 118) "Organic and Organometallic Approaches to Molecular Sensing" Mar. 29th, Univ. of Victoria.
- 117) "Organic and Organometallic Approaches to Molecular Sensing" Mar. 28th, Anaheim ACS meeting.
- 116) "Organic and Organometallic Approaches to Molecular Sensing" Mar. 19th, University of Houston.
- 115) "Organic and Organometallic Approaches to Molecular Sensing" Jan. 27th, Laval University.
- 114) "RNA Hydrolysis and Catalysis of Cleavage" Jan. 26th, Laval University.
- 113) "Uses of Indicator-Displacement Assays", Jan. 15th, 2004, Sundial Beach Resort, NSF Young Supramolecular Chemist Conference.
- 112) "Organic Chemistry Approaches to Single and Multi-Analyte Sensing" Dec. 8th, U.C.S.D.
- 113) "Organic Chemistry Approaches to Single and Multi-Analyte Sensing" Nov. 3rd, Halliburton Corporation.
- 112) "Organic Chemistry Approaches to Single and Multi-Analyte Sensing" University of Montana, Oct. 20th
- 111) "Organic Chemistry Approaches to Single and Multi-Analyte Sensing" Oct. 17th Montana State University
- 110) "Organic Chemistry Approaches to Molecular Sensing", Sept. 18th, Georgia Tech.
- 109) "Organic Chemistry Approaches to Molecular Sensing" Sept. 8th, NYC ACS Meeting Symposium on Supramolecular Chemistry.
- 108) "Organic Chemistry Approaches to Molecular Sensing" April 28th, Astra Zeneca.
- 107) "Organic Chemistry Approaches to Molecular Sensing" April 28th, U. Alberta.
- 106) "The Power of Supramolecular Chemistry in Sensing" Jan. 30th, New Mexico State Univ.
- 105) "Organic Structures for Chemical Sensing" Dec. 4th, Texas Tech University
- 104) "Artificial Phosphodiesterases", Dec. 3rd, Texas Tech University
- 103) "Organic Structures for Chemical Sensing" Sept. 23rd, University of Pennsylvania.
- 102) "Organic Structures for Chemical Sensing" Sept. 6th UT Arlington 2002 Boston ACS Meeting.
- 101) "Organic Structures for Chemical Sensing" Aug. 18th 2002 Boston ACS Meeting.
- 100) "Organic Chemistry Approaches to Single and Multi-Analyte Sensing" May 23rd, 2002 North Dakota State University
- 99) "Organic Chemistry Approaches to Single and Multi-Analyte Sensing" April 11th, 2002 Notre Dame University.
- 98) "The Impact of Array Sensors on Supramolecular Chemistry" Symposium Honoring Roger Tsien, ACS Meeting, April 9th, 2002. Orlando FL.
- 97) "Organic Chemistry Approaches to Single and Multi-Analyte Sensing" Jan. 24th, 2002 Clemson University.
- 96) "Organic Chemistry Approaches to Single and Multi-Analyte Sensing" Dec. 7th, 2001 University of Reno.
- 95) "Organic Chemistry Approaches to Single and Multi-Analyte Sensing" Nov. 8th, 2001 University of Utah.
- 94) "Organic Approaches to Sensor Development" NATO Conference on Sensing, Prague, Czech Rep. Sept 1st 2001.
- 93) "Anion Receptors", Chicago ACS meeting, Anion recognition symposium, Aug. 27th 2001.
- 92) "Organic Chemistry Approaches to Single and Multi Analyte Sensing", LSU, May 4th, 2001.
- 91) "Organic Chemistry Approaches to Single and Multi Analyte Sensing", Pharmacopeia, Mar. 22nd, 2001.
- 90) "Sensing in the Anslyn Group", Breslow Birthday Symposium, Mar. 23rd, New York.
- 89) "Application of Nano Technology to Diagnostics", AADR Conference, Chicago, Mar. 9th 2001.
- 88) "Organic Chemistry Approaches to Single and Multi Analyte Sensing", Colorado St. Univ., Jan. 23rd, 2001.
- 87) "Organic Chemistry Approaches to Single Analyte and Multianalyte Sensing", Pacific Chem., Honolulu Hawaii, Dec, 12th 2000
- 86) "Differential vs. Selective Sensing, a Fertile Ground for Combinatorial Chemistry", Conference on Combinatorial Chemistry in Molecular Recognition, Saarbrucken Germany, Dec. 9th 2000.
- 85) "Organic Chemistry Approaches to Single Analyte and Multianalyte Sensing", Rochester University, Sept. 30th 2000
- 84) "Single and Multi Analyte Sensing", ISSC 2000, Aug. 2nd, Fukuoka Japan
- 83) "Organic Chemistry Approaches to Single Analyte and Multianalyte Sensing", Rochester University, Sept. 29th 2000.
- 82) "Organic Chemistry Approaches to Single Analyte and Multianalyte Sensing", UT Southwestern Medical School
- 81) "Designed and Combinatorial Receptors", University of Pavia, Italy, April 18th, 2000.
- 80) "Designed and Combinatorial Receptors", University of Parma, Italy, April 17th, 2000.
- 79) "The Mammalian Sense of Taste, and Mimics Thereof" Germany Agricultural Society Conference, April 13th, 2000, Cologne.
- 78) "Designed and Combinatorial Receptors", University of Bonn, Germany, April 10th, 2000.
- 77) "Designed and Combinatorial Receptors", University of Munich, Germany, April 14th, 2000.

- 76) "Mimicking the Mammalian Sense of Taste", Spring ACS Meeting, San Francisco, ACS Symposium on Taste and Smell.
- 75) "Organic Chemistry Approaches to Single Analyte and Multianalyte Sensing", Penn. State University, Mar. 13th, 2000.
- 74) "Designed and Combinatorial Receptors", Gordon Research Conference on Sensors, Jan. 25th 2000, Ventura Ca.
- 73) "Organic Chemistry Approaches to Single Analyte and Multianalyte Sensing", University of North Carolina, Chapel Hill, Dec. 2nd 1999
- 72) "Organic Chemistry Approaches to Single Analyte and Multianalyte Sensing", North Carolina State University, Dec. 1st 1999
- 71) "Organic Chemistry Approaches to Single Analyte and Multianalyte Sensing", Arizona State University, Feb. 3rd 2000.
- 70) "Organic Chemistry Approaches to Single Analyte and Multianalyte Sensing", University Miss. St. Louis, Nov. 8th 1999.
- 69) "Organic Chemistry Approaches to Single Analyte and Multianalyte Sensing", Washington University, Nov. 8th 1999.
- 68) "Organic Chemistry Approaches to Single Analyte and Multianalyte Sensing", Texas A&M University, Sept. 10th 1999.
- 67) "Organic Chemistry Approaches to Single Analyte and Multianalyte Sensing", University of Texas at Austin, Oct. 14th 1999.
- 66) "Organic Chemistry Approaches to Single Analyte and Multianalyte Sensing", Carnegie Mellon University, Apr. 19th, 1999.
- 65) "Organic Approaches to Single Analyte and Multianalyte Sensing", University of Missouri, Kansas City, Feb. 24th, 1999
- 64) "From Single Analyte to Multi-Analyte Sensing Methodologies, Synthetic Receptors put to a Practical Use," ISPE Conference, Jan. 26th 1999
- 63) "From Single Analyte to Multi-Analyte Sensing Methodologies, Synthetic Receptors Put to a Practical Use", Virginia Commonwealth University, Nov. 10th, 1998
- 62) "From Single Analyte to Multi-Analyte Sensing Methodologies, Synthetic Receptors put to a Practical Use," University of Delaware, Oct. 27th, 1998
- 61) "From Single Analyte to Multi-Analyte Sensing Methodologies, Synthetic Receptors put to a Practical Use," Montana State University, Oct. 19th, 1998
- 60) "From Single Analyte to Multi-Analyte Sensing Methodologies, Synthetic Receptors put to a Practical Use", University of Montana, Oct. 16th, 1998
- 59) "From Single Analyte to Multi-Analyte Sensing Methodologies, Synthetic Receptors put to a Practical Use", NSF Workshop on Physical Organic Chemistry, June 1998
- 58) "The Site of Cleavage of Pyranosides, and New Sensing Methodologies" Wichita State University. Feb. 4th 1997.
- 57) "Supramolecular Catalysis: Reaction Mechanisms," Fifth Chemical Congress of North America, Cancun Mexico, Nov. 1997.
- 56) "Physical Organic Chemistry of Catalysis and Sensing", Scripps Institute for Chemical Sciences, La Jolla, CA, Oct. 24th 1997
- 55) "Sensor Based upon Synthetic Receptors", NSF Workshop on Physical Organic Chemistry, June 1997, Gold Lake Colorado
- 54) "Artificial Receptors as Catalysis and Sensors", Procter and Gamble Corp. May 1997
- 53) "Catalysts, Sensors, Mechanistic Probes: Molecular Recognition in Action." University of Oita, Oita Japan, Jan. 1997
- 52) "Catalysts, Sensors, Mechanistic Probes: Molecular Recognition in Action," University of Kyushu, Kyushu Japan, 1997
- 51) "Catalysts, Sensors, Mechanistic Probes: Molecular Recognition in Action." Kurume Research Center, Kurume Japan, Jan. 1997
- 50) "Catalysts, Sensors, Mechanistic Probes: Molecular Recognition in Action," University of Hiroshima, Hiroshima Japan, Jan. 1997
- 49) "Catalysts, Sensors, Mechanistic Probes: Molecular Recognition in Action." Ministry of Science and Education, Tsukuba Japan, Jan. 1997
- 48) "Enzymatic and Solution Acetal Hydrolysis Mechanisms," NSF Workshop, Squam Lake, NH. July 1996.
- 47) "Supramolecular Catalysis of Phosphoryl and Glycosyl Transfers", University of Arkansas, Fayetteville, Ark. Jan. 15th 1996
- 46) "Guanidinium Catalyzed Phosphoryl Transfers", Pacific Chemistry Conference, Dec. Honolulu, HA. 18th 1995.
- 45) "Methods in Combinatorial Libraries of RNA and Oligomeric Guanidiniums", Southwest Regional ACS Meeting Memphis Nov. 1995.

- 44) "Methods in Combinatorial Libraries of RNA and Oligomeric Guanidiniums", Proctor and Gamble Corp. Cincinnati OH Sept. 25th 1995.
- 43) "Endocyclic vs. Exocyclic Cleavage of Pyranosides", NATO Conference on Bioorganic Chemistry, Johnstown, PA. May 18th 1995.
- 42) "Catalysis of Glycosyl and Phosphoryl Transfers", Purdue University, May 1st 1995.
- 41) "A Phosphorane pK_a Determined via Pulse Radiolysis", ACS Meeting, Anaheim CA, April 1995.
- 40) "Mechanistic Aspects of Supramolecular Catalysis", Syracuse University, Syracuse, NY, Jan. 24th 1995.
- 39) "Mechanistic Aspects of Supramolecular Catalysis", Clinical Diagnostic Systems Incorporated, Rochester N.Y. Jan. 26th 1995.
- 38) "Mechanistic Aspects of Supramolecular Catalysis", Rochester University, Rochester, NY, Jan. 27th 1995.
- 37) "Mechanistic Aspects of Supramolecular Catalysis", McGill University, Montreal, Quebec, Canada, Oct. 4th 1994.
- 36) "Mechanistic Aspects of Supramolecular Catalysis", University of Montreal, Montreal, Quebec, Canada, Oct. 5th 1994.
- 35) "Mechanistic Aspects of Supramolecular Catalysis", Sherbrooke University, Sherbrooke, Quebec, Canada, Oct. 3rd 1994.
- 34) "Mechanistic Aspects of Supramolecular Catalysis", Eli Lilly Corp. Indianapolis, IN, June 30th 1994.
- 33) "Mechanistic Aspects of Supramolecular Catalysis", University of Wisconsin, Madison, May 19th 1994.
- 32) "Artificial Restriction Endonucleases", Searle Scholars Conference, Chicago, May 16th 1994.
- 31) "Mechanistic Aspects of Supramolecular Catalysis", Massachusetts Institute of Technology, Boston MA. May 9th 1994.
- 30) "Mechanistic Aspects of Supramolecular Catalysis", Polaroid Corporation, Boston MA. May 6th 1994.
- 29) "Mechanistic Aspects of Supramolecular Catalysis", University of Illinois, Urbana-Champaign, IL. May 4th 1994.
- 28) "Mechanistic Aspects of Supramolecular Catalysis", University of Pennsylvania, Philadelphia Penn. May 2nd 1994.
- 27) "Mechanistic Aspects of Supramolecular Catalysis" Smith-Kline, Beecham, Philadelphia Penn. April 29th 1994.
- 26) "Mechanistic Aspects of Supramolecular Catalysis Stanford University", Palo Alto, CA. April 20th 1994.
- 25) MARION MERRILL DOW LECTURE "Mechanistic Aspects of Supramolecular Catalysis", University of California, Berkeley CA. April 19th 1994.
- 24) "Mechanistic Aspects of Supramolecular Catalysis", University of California, Los Angeles CA. April 14th 1994.
- 23) "Mechanistic Aspects of Supramolecular Catalysis", California Institute of Technology, Pasadena CA. April 13th 1994.
- 22) "Mechanistic Aspects of Supramolecular Catalysis", Texas A & M University, Dec. 9th 1993.
- 21) "Mechanistic Aspects of Supramolecular Catalysis", Alcon Corp. Dec. 8th, 1993.
- 20) "Organic Catalysts for RNA Hydrolysis", Genta Incorporation, San Diego, CA August 10th 1993.
- 19) "Catalysis of Phosphodiester Hydrolysis by Bis-Guanidinium Receptors", XVIII International Symposium on Macrocyclic Chemistry, University of Twente, Netherlands, July 1993.
- 18) "Polyazaclefts for Molecular Recognition and Catalysis", Strasbourg University, France, July 1993.
- 17) "Polyazaclefts for Molecular Recognition and Catalysis", University of Munich, July 1993.
- 16) "Phosphodiester Hydrolysis Catalysts", 76th Canadian Chemical Conference, Sherbrooke, Quebec, June 1993.
- 15) "Physical Organic Studies of Biological Relevance", NSF Reactive Intermediates Conference, Lake Tahoe, June 1993.
- 14) "Polyaza Clefts for Molecular Recognition and Catalysis", New York University, March 5th 1993.
- 13) "Phosphodiester Hydrolysis Catalysts", ICI Pharmaceuticals, March 8th 1993.
- 12) "Polyaza Clefts for Molecular Recognition and Catalysis", SUNY Stony Brook, March 4th 1993.
- 11) "Polyaza Clefts for Molecular Recognition and Catalysis", Columbia University, March 3rd 1993.
- 10) "Molecular Recognition of Carbohydrates, Enolates, and Phosphodiesters", U.T. Arlington, Nov. 1992.
- 9) "Molecular Recognition of Carbohydrates, Enolates, and Phosphodiesters", Carnegie Mellon University, Nov. 1992.
- 8) "Complexation of Reactive Intermediates", XVII International Symposium Macrocyclic Chemistry, Provo, UT August 1992.
- 7) "Molecular Recognition of Carbohydrates, Enolates, and Phosphodiester", Hiroshima University, July 1992.
- 6) "Molecular Recognition of Carbohydrates, Enolates, and Phosphodiesters", Tokyo Institute of Technology, July 1992.
- 5) "General Acid Catalysts for Phosphodiester Cleavage", XIII International Symposium of Molecular Recognition and Inclusion, July 26th 1992, Kyoto Japan.
- 4) "Phosphodiester Receptors for a Variety of Solvents", Short Talk, Bioorganic Gordon Conference, Plymouth State College, June 1992.
- 3) "Polyaza Clefts for Molecular Recognition Purposes", University of Houston, April 3rd 1992.

- 2) "Synthesis of Polyazaclefts for Bioorganic Studies", Princeton University, April 26th 1991.
- 1) "Ribonuclease A Mimics", The University of Texas at Dallas, Nov. 31st 1990.