Professor Dotsevi Y. Sogah, Ph.D.

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Education

Ph.D.	University of California at Los Angeles (1975 – D. J. Cram))
M.S.	University of California at Los Angeles (1974 – D. J. Cram))
B.Sc. (Hons, Chem)	University of Ghana, Legon, Ghana (1971)
B.Sc. (Chem, Math)	University of Ghana, Legon, Ghana (1970) – First Class

Professional Experience

1991-Present	Professor - Department of Chemistry and Chemical Biology, Cornell University
1990-1991	Research Manager - Du Pont Central Research, Wilmington, Delaware
1984-1990	Research Supervisor - Du Pont Central Research, Wilmington, Delaware
1983-1984	Group Leader - Du Pont Central Research, Wilmington, Delaware
1981-1983	Senior Research Chemist - Du Pont Central Research, Wilmington, Delaware
1978-1980	Research Fellow and Adjunct Professor – Department of Chemistry & Biochemistry, University of California at Los Angeles (UCLA)
1975-1977	Postdoctoral Research Fellow (with Prof. T. C. Bruice)- Department of Chemistry, University of California at Santa Barbara (UCSB)
1971-1975	AFGRAD Post-Graduate Fellow, Department of Chemistry & Biochemistry, UCLA

Honors and Awards

2009	Distinguished Visiting Professor, Universität Bayreuth, 95440 Bayreuth, Germany (September-October, 2009)
2009	*Elite Lecturer*, Elite Macromolecular Science Program, Universität Bayreuth, 95440 Bayreuth, Germany (September 10, 2009)
2002	*Alfred S. Spriggs Distinguished Chemistry Lecturer*, Department of Chemistry, Clark Atlanta University, Atlanta, Georgia, USA (April, 2002)
2002	*Inaugural Cram Memorial Lectures*, Department of Chemistry & Biochemistry, UCLA, Los Angeles, California, USA (March 27-29, 2002)
2001	*Carothers Lecturer*, Central Research & Development, DuPont Company, Wilmington, Delaware, USA (June 20, 2001)
1999	The Netzsch Instruments *Frank Giblin Memorial Award in Polymer Analysis*, Society of Plastics Engineers, USA
1996	*Closs Distinguished Lecturer*, Department of Chemistry, The University of Chicago, Chicago, Illinois, USA (May 2-3, 1996)
1995	*Chair*, Gordon Research Conference on Polymers, Henniker, New Hampshire, USA
1994	*Vice-Chair*, Gordon Research Conference on Polymers, Brewster Academy, New Hampshire, USA

1994-1997	*Member*, National Executive Board, Division Polymer Chemistry, American Chemical Society (ACS)
1994	*Percy Julian Award*, National Organization for Professional Advancement of Black Chemists & Chemical Engineers (NOBCChE)
1994	*Chair*, ACS Awards Canvassing Committee - *Mobil* Polymer Chemistry Award
1994	*Chair*, Membership Committee, Division of Polymer Chemistry, ACS
1994-2001	*Executive Committee Member-at-Large*, Division of Polymer Chemistry, ACS
1992-1994	*Member*, ACS Awards Canvassing Committee - *Mobil* Polymer Chemistry Award
1991	*Distinguished Service Award for Science & Technology*, State of Delaware, USA
1991	*Member*, Visiting Committee, Department of Chemistry, Lee High University, Bethlehem, Pennsylvania, USA
1990	*Distinguished Service Award*, International Society of African Scientists (ISAS)
1988-1999	*Member*, Advisory Board, Clark Atlanta University, Historically Black Colleges and Universities/Minority Institutions Consortium
1989	*Distinguished CUMIRP Lecturer, Center for University of Massachusetts Industrial Research Program*, University of Massachusetts at Amherst, Amherst, Massachusetts, USA
1989	*Distinguished Bayer-Mobay Lecturer*, Department of Chemistry, Cornell University, Ithaca, New York, USA
1989-1990	*Member*, Board of Directors, International Society of African Scientists (ISAS)
1987-1989	*President*, ISAS
1985	Selected as One of America's 100 Brightest Scientists Under 40 (*Science Digest*)
1985	*Rubber Division Award*, American Chemical Society
1974	*Wadell Prize*, University of Ghana

Editorial Boards

2007-2008	Wiley Encyclopedia of Chemical Biology
1994-2000	Journal of Macromolecular Science-Pure and Applied Chemistry
1991-1997	Advisory Editorial Board for Trends in Polymer Science
1989-2009	International Advisory Board for Science and Engineering of Composite Materials
1989-1995	Distinguished Board for Macromolecular Reports
1992-1994	Advisory Editor, IOCD Chemistry Text for African Universities

Select US Government Advisory Boards

2007	*Member,* Steering Committee, National Science Foundation (NSF) Workshop on Complexity and Emergent Phenomena (May 13-15, 2007)
2004–2006	*Member*, Chemical Sciences Roundtable- National Research Council (NRC), National Academy of Sciences (NAS), USA
1995-2001	*Member*, NRC Physical, Mathematics & Engineering Panel for Evaluation of Ford Foundation Postdoctoral and Dissertation Fellowships for Minorities
2000	*Member*, NSF Site Review Team for Columbia University Materials Research Science & Engineering Center (MRSEC) Program
1991-1999	*Member*, Advisory Board for High Performance Polymers and Ceramics Center, Clark Atlanta University, Atlanta, Georgia, USA
1995	*Member*, Steering Committee, United States Army Dendrimer Workshop (July 1995)

1994	*Member*, Office of Naval Research (ONR) Panel on Research Opportunities in Chemistry - State of the Art Study
1991-1994	*Vice-Chair*, NRC Polymer Science & Engineering Committee - State of the Art Study
1989-1992	*Member*, NRC Board on Chemical Sciences and Technology (BCST)
1992	*Member,* NRC Committee on Materials Science and Engineering Panel on Materials Research Opportunities and Needs: Sub-Panels on the Energy Industry and Biomaterials
1990	*Member*, NSF Site Review Team for MRSEC at UMASS (Dec 3-5)
1988-1989	*Member*, NRC Panel of the Board On Science & Technology for International Development (BOSTID) that Drafted the Blueprint for US. Foreign Policy for Science & Technology for International Development for the 1990's –A Presidential Transition Team Document (Presidents R. Reagan/G. H. W. Bush Administrations)
1986	*Member*, NRC Briefing Panel on Thin Films and Interfaces – *Chair*, Biomaterials Sub-Panel for Keyworth, Science Advisor to President R. Reagan.

Memberships on Committees, Advisory Boards and Panels at Cornell University

1991-2000	Department of Chemistry Safety Committee
1991-1999	Department of Chemistry Building and Space Committee
1991-9193	Polymer Outreach Program Technical Committee
1993-9197	Fellowship Board-Physical Sciences – Arts & Sciences
1993-9194	University-Wide Task Force - Strategic Planning Sub-committee
1994-9197	Committee on Affirmative Action – College of Arts & Sciences
1997-2000	Arts & Sciences Undergraduate Admissions
1997-2001	Committee on Diversity, Campus-wide
1997-2006	Executive Committee Member, Cornell Center for Materials Research
1997-2001	Departmental Colloquia Committee, Chemistry and Chemical Biology
1997-2000	Graduate Admissions Committee, Chemistry and Chemical Biology
1998-2001	New Building Committee, Chemistry and Chemical Biology
1999-2001	Building and Space Committee, Chemistry and Chemical Biology
1999-2000	University Faculty Senate
1999-2007	Faculty Senate Minority Education Committee
1999-2005	Polymer Outreach Program and Symposium Committee
2000-0202	Distinguished Named Lectures Committee, Chemistry & Chemical Biology
2000-2001	Long Range Planning Committee, Chemistry & Chemical Biology
2000-2008	Fulbright Scholars Review and Selection Committee
2000-2003	Graduate School Committee on Cornell South African Scholarships
2000-2010	Institute for African Development (IAD) Advisory Board
2000-2007	Executive Committee Member, Cornell Nanobiotechnology Center (NBTC)
2000-2003	The President's Land Grant Panel on Technology Transfer
2000-2003	Cornell Education Policy Committee
2001-2004	Director of Undergraduate Studies, Chemistry and Chemical Biology
2001-2004	Program Coordinator for Molecular Motors Program, NBTC
2001-2006	Nanocomposites Interdisciplinary Research Group (IRG) Co-Leader, CCMR
2001-2005	Coordinator, Polymer Outreach Program, CCMR

2002-2004 Cornell Educational Policy Committee - Chair
2002-2007 Program Coordinator, Nanoscale Materials Program, NBTC
2004-2010 Safety Committee, Chemistry and Chemical Biology
2004-2010 Institute for African Development Fellowship Committee
2005-2010 Arts & Sciences Undergraduate Admissions
2005-2010 Health Careers Evaluation Committee
2005-2010 Faculty Industrial Polymer Advisory Group, CCMR
2007-2009 University Faculty Senate
2008-2010 University Conflicts Committee
2010 Teaching Evaluation Committee, Chemistry & Chemical Biology

Industrial Advisory Boards

2009-2010 Scientific Advisory Board/Consultant, Albonia Innovative Technologies, Inc, Vancouver, BC, Canada
1992-2000 Scientific Advisory Board, Toxgon Corporation, Seattle, Washington
1991-2001 Scientific Advisory Board, Conversion Technologies, New Jersey

Consultancies

1991-2007 DuPont Company, Wilmington, Delaware
1992-2000 Hoechst-Celanese, Advanced Technologies Group, Summit, New Jersey
1993-1997 ALCOA, Pittsburgh, Pennsylvania
1994-1996 Dunkirk International – Glass & Ceramics Corporation, Dunkirk, New York
1994-1996 Conversion Technologies, New Jersey
1996-2004 Toxgon Corporation, Seattle, Washington
1996-1997 Avery Denison, Pasadena, California
1997-1998 GelTex Pharmaceuticals, Waltham, Massachusetts
1997-2004 Revlon, Edison, New Jersey
1999-2001 Vistakon (Johnson & Johnson), Jacksonville, FL
1999-2004 AtoChem, King of Prussia, Pennsylvania
2000-2006 Hercules, Inc., Wilmington, Delaware
2004-2007 Arkema, King of Prussia, Pennsylvania
2009-2010 Consultant, Albonia Innovative Technologies, Inc, Vancouver, BC, Canada

Industrial Research Collaborations

1993-1994 Synthesis and Properties of EVOH Copolymers
Du Pont Company, Wilmington, Delaware
1993-1996 Synthesis of High Performance Polymers
Du Pont – Towanda, Pennsylvania
1994-1996 Synthesis of Sequence-Specific Hybrid Polymers
Hoechst-Celanese, Inc., Summit, New Jersey
1994-1997 The Design and Synthesis of Perfluorinated Amphiphilic Polymers"
ALCOA Technical Center, Pittsburgh, Pennsylvania
1996-1997 Synthesis of Novel Adhesives
Avery Denison, Pasadena, California

2000-2005 Nanocomposites Based Upon Polyacrylamides
Hercules Corporation, Wilmington, Delaware

1999-2004 Block and Star Polymers for Coatings Applications
Revlon Corporation, Edison, New Jersey
2001-2004 Polymer/Silicate Nanocomposites
AtoFina Chemicals, King of Prussia, Pennsylvania
2004-2007 Nanocomposites
Arkema, King of Prussia, Pennsylvania
1998-2004 Structured Polymers and Polyacrylate-Silicate Nanocomposites
DuPont Company Yerkes Plant, Buffalo, New York
2001-2004 Polymethacrylate-Silicate Nanocomposites
Atofina Chemicals, King of Prussia, Pennsylvania

International Industrial Collaborations
2002-2004 Polyolefin-Silicate Nanocomposites
Sekisui, Japan
2004-2005 Polymethacrylate-Silicate Nanocomposites
Toyobo, Japan

Professional Memberships
American Chemical Society
National Organization for Professional Advancement of Black Chemists and Chemical Engineers
International Society of African Scientists

PUBLICATIONS

1. "Chiral, Hinged, and Functionalized Multiheterocycles", *J. Am. Chem. Soc.* **1973**, *95*, 2691.

2. Sogah, G. D. Y.; Cram, D. J. "Chromatographic Optical Resolution Through Chiral Complexation of Amino Ester Salts by a Host Covalently Bound to Silica Gel", *J. Am. Chem. Soc.* **1975**, *97*, 1259-1261.

3. Sogah, G. D. Y.; Cram, D. J. "Total Chromatographic Optical Resolutions of α-Amino Acid and Ester Salts Through Chiral Recognition by a Host Covalently Bound to Polystyrene Resin", *J. Am. Chem. Soc.* **1976**, *98*, 3038-3041.

4. "Host-Guest Complexation. 7. The Binaphthyl Structural Unit in Host Compounds", *J. Org. Chem.* **1977**, *42*, 4173.

5. Cram, D. J.; Helgeson, R. C.; Peacock, S. C.; Kaplan, L. J.; Domeier, L. A.; Moreau, P.; Koga, K.; Mayer, J. M.; Chao, Y.; Siegel, M. G.; Hoffman, D. H.; Sogah, G. D. Y. "Host-Guest Complexation. 8. Macrocyclic Polyethers Shaped by Two Rigid Substituted Dinaphthyl or Ditetralyl Units", *J. Org. Chem.***1978**, *43*, 1930-1946.

6. Cram, D. J.; Helgeson, R. C.; Koga, K.; Kyba, E. P.; Madan, K.; Sousa, L. R.; Siegel, M. G.; Moreau, P.; Gokel, G. W.; Timko, J. M.; Sogah, G. D. Y. "Host-Guest Complexation. 9. Macrocyclic Polyethers and Sulfides Shaped by One Rigid Dinaphthyl Unit and

Attached Arms. Synthesis and Survey of Complexing Abilities", *J. Org. Chem.* **1978**, *43*, 2758-2772.

7. Sousa, L. R.; Sogah, G. D. Y.; Hoffman, D. H.; Cram, D. J. "Host-Guest Complexation. 12. Total Optical Resolution of Amine and Amino Ester Salts by Chromatography", *J. Am. Chem. Soc.* **1978**, *100*, 4569-4576.

8. Sogah, G. D. Y.; Cram, D. J. "Host-Guest Complexation. 14. Host Covalently Bound to Polystyrene Resin for Chromatographic Resolution of Enantiomers of Amino Acid and Ester Salts", *J. Am. Chem. Soc.* **1979**, *101*, 3035.

9. Chao, Y.; Weisman, G. R.; Sogah, G. D. Y.; Cram, D. J. "Host-Guest Complexation. 21. Catalysis and Chiral Recognition Through Designed Complexation of Transition States in Transacylations of Amino Ester Salts", *J. Am. Chem. Soc.* **1979**, *101*, 4948.

10. Maskiewicz, R.; Sogah, D.; Bruice, T. C. "Chemiluminescent Reactions of Lucigenin. 1. Reaction with Hydrogen Peroxide", *J. Am. Chem. Soc.* **1979**, *101,* 5347-5354.

11. Maskiewicz, R.; Sogah, D.; Bruice, T. C. "Chemiluminescent Reactions of Lucigenin. 2. Reactions of Lucigenin with Hydroxide Ion and Other Nucleophiles", *J. Am. Chem. Soc.* **1979**, *101,* 5355-5364.

12. Sogah, G. D. Y.; Cram, D. J. "Chiral Crown Complexes Catalyze Michael Additions to Give Adducts in High Optical Yields", *J. Chem. Soc., Chem. Commun.*, **1981**, 625-628.

13. Sogah, D. Y.; Webster, O. W. "Telechelic Polymers by Group Transfer Polymerization", *Polym. Preprints, (Am. Chem. Soc., Div. Polym. Chem.)* ***1983****, 24 (2)*, 54-55.

14. Webster, O. W.; Hertler, W. R.; Sogah, D. Y.; Farnham, W. B.; RajanBabu, T. V. "Group Transfer Polymerization - Addition Polymerization with Organosilicon Initiators", *Polym. Preprints, (Am. Chem. Soc., Div. Polym. Chem.)* ***1983****, 24 (2)*, 52-53.

15. Sogah, D. Y.; Webster, O. W. "Telechelic Polymers by Group Transfer Polymerization", *J. Polym. Sci., Polym. Lett. Ed.*, **1983**, *21*, 927-931.

16. Webster, O. W.; Hertler, W. R.; Sogah, D. Y.; Farnham, W. B.; RajanBabu, T. V. "Group Transfer Polymerization. 1. A New Concept for Addition Polymerization with Organosilicon Initiators", *J. Am. Chem. Soc.* **1983**, *105,* 5706-5708.

17. Sogah, D. Y.; Hertler, W. R.; Webster, O. W. "Polymer Architecture Control in Group Transfer Polymerization", *Polym. Preprints, (Am. Chem. Soc., Div. Polym. Chem.)* **1984**, *25 (2)*, 3 (1984).

18. Hertler, W. R.; Sogah, D. Y.; Webster, O. W.; Trost, B. M. "Group Transfer Polymerization. 3. Lewis Acid Catalysis", *Macromolecules* **1984**, *17,* 1415-1417.

19. Webster, O. W.; Hertler, W. R.; Farnham, W. B.; RajanBabu, T. V.; Sogah, D. Y. "Synthesis of Reactive-Ended Acrylic Polymers by Group Transfer Polymerization: Initiation with Silyl Ketene Acetals", *J. Macromol. Sci.-Chem.* **1984**, *A21,* 943-960.

20. Sogah, D. Y.; Farnham, W. B. "Group Transfer Polymerization. Mechanistic Studies", in *Organosilicon and Bioorganosilicon Chemistry: Structure, Bonding, Reactivity and Synthetic Application,* Sakurai, H., ed. Ellis Harwood, Ltd.: Chichester, **1985**, Chapter 20, pp 219-230.

21. Cram, D. J.; Sogah, D. Y. "Chiral Complexes Polymerize Methacrylate Esters to Give Helical Polymers That Mutarotate by Uncoiling", *J. Am. Chem. Soc.* **1985**, *107,* 8301-8302.

22. Farnham, W. B.; Sogah, D. Y. "Group Transfer Polymerization. Mechanistic Studies", *Polym. Preprints, (Am. Chem. Soc., Div. Polym. Chem.)* **1986**, *27 (1)*, 167.

23. Hertler, W. R.; Sogah, D. Y. "New Initiators for Group Transfer Polymerization", *Polym. Preprints, (Am. Chem. Soc., Div. Polym. Chem.)* **1986**, *27 (1)*, 165.

24. Sogah, D. Y. "Sequential Silyl Aldol Condensation Gives Silylated Poly(vinyl alcohol)", *Polym. Preprints, (Am. Chem. Soc., Div. Polym. Chem.)* **1986**, *27 (1)*, 163.

25. Sogah, D. Y.; Webster, O. W. "Sequential Silyl Aldol Condensation in Controlled Synthesis of Living Poly(vinyl alcohol) Precursors", *Macromolecules* **1986**, *19,* 1775-1777.

26. Hertler, W. R.; Sogah, D. Y. "Chain Transfer in Group Transfer Polymerization", *Polym. Preprints, (Am. Chem. Soc., Div. Polym. Chem.)* **1987**, *28 (1)*, 108.

27. Dicker, I. B.; Cohen, G. M.; Farnham, W. B.; Hertler, W. R.; Laganis, E. D.; Sogah, D. Y. "Oxyanion Catalysis of Group Transfer Polymerization", *Polym. Preprints, (Am. Chem. Soc., Div. Polym. Chem.)* **1987**, *28 (1),* 106.

28. Sogah, D. Y.; Hertler, W. R.; Webster, O. W.; Cohen, G. M. "Group Transfer Polymerization. Polymerization of Acrylic Monomers", *Macromolecules* **1987**, *20,* 1473-1488.

29. Sogah, D. Y.; Webster, O. W. "Aldol-GTP in Controlled Synthesis of Vinyl Alcohol Polymers", in *Recent Advances in Mechanistic and Synthetic Aspects of Polymerization*, Fontanille, M.; Guyot, A., eds., D. Reidel Publishing Company: **1987**, pp 61-72.

30. Webster, O. W.; Sogah, D. Y. "Recent Advances in the Controlled Synthesis of Acrylic Polymers by Group Transfer Polymerization", in *Recent Advances in Mechanistic and Synthetic Aspects of Polymerization,* Fontanille, M.; Guyot, A., eds., D. Reidel Publishing Company: **1987**, pp 3-21.

31. Hertler, W. R.; RajanBabu, T. V.; Sogah, D. Y. "Group Transfer Polymerization with Polyunsaturated Esters and Silyl Polyenoates", *Polym. Preprints, (Am. Chem. Soc., Div. Polym. Chem.)* **1988**, *29 (2)* 71.

32. Sogah, D. Y. "Ladders, Stars and Combs by Group Transfer Polymerization", *Polym. Preprints, (Am. Chem. Soc., Div. Polym. Chem.)* **1988**, *29 (2)*, 3.

33. Webster, O. W.; Sogah, D. Y. "Group Transfer and Aldol Group Transfer Polymerization", in *Comprehensive Polymer Science,* Pergamon Press: New York, **1988**, vol 4.

34. Webster, O. W.; Sogah, D. Y. "Silicon-mediated or Group Transfer Polymerization", in *Silicon Chemistry,* Corey, Gaspar, eds., Ellis Harwood Ltd.: Chichester, **1988**.

35. Hertler, W. R.; Reddy, G. S.; Sogah, D. Y. "Anion-Catalyzed Reactions of Silyl Ester Polyenolates with Electrophiles", *J. Org. Chem.* **1988**, *53,* 3532-3539.

36. Hertler, W. R., RajanBabu, T. V., Ovenall, D. W., Reddy, G. S.; Sogah, D. Y. "Group Transfer Polymerization with Polyunsaturated Esters and Silyl Polyenolates", *J. Am. Chem. Soc.* **1988**, *110,* 5841-5853.

37. Sogah, D. Y. "Group Transfer Polymerization in Macromolecular Engineering of Vinyl Polymers" in *Frontiers of Macromolecular Science*, Saegusa, T.; Higashimura, T.; Abe, A., eds., Blackwell Scientific Publications: Oxford, **1989**, pp 79-84.

38. Risse, W.; Sogah, D. Y. "Poly(aryl ether ketone)s Containing Phenyl and Removable t-Butyl Substituents". *Polym. Prepr., (Am. Chem. Soc., Div. Polym. Chem.)* **1990**, *31,* 616-7.

39. Dicker, I. B.; Hertler, W. R.; Farnham, W. B.; Cohen, G. M; Laganis, E. D.; Sogah, D. Y. "Oxyanions catalyze GTP to give Living Polymers", *Macromolecules*, **1990**, *23*, 4034.

40. Sogah, D. Y.; Hertler, W. R.; Dicker, I. B.; DePra, P.A.; Butera, J. R. "Catalyzed Silicon-mediated Living Polymerizations. Structure Control, Catalyst Design, and Mechanisms", *Makromol. Chem., Macromol. Symp.* **1990**, *32,* 75-86.

41. Risse, W.; Sogah, D. Y. "Synthesis of Soluble High Molecular Weight Poly(aryl ether Ketones) Containing Bulky Substituents", *Macromolecules* **1990**, *23,* 4029.

42. Hertler, W. R.; Boettcher, F.P; Sogah, D. Y. "Group Transfer Polymerization on a Polymeric Support", *Macromolecules*, **1990**, *23*, 1264.

43. Sogah, D. Y. "Synthesis, Structure and Properties of Hybrid Oligopeptide-Based Polymers", *Polym. Preprints*, *ACS*, ***31***, 185 (**1990**).

44. D. Y. Sogah and J. F. Harris, "Group Transfer Polymerization of Polyenes", *Polym. Prepr., (Am. Chem. Soc., Div. Polym. Chem.)* **1991**, *32,* 435-436.

45. Sogah, D. Y. "Novel Structures Derived from Living Polymerization Concepts and Mechanisms", *Polym. Preprints, (Am. Chem. Soc., Div. Polym. Chem.)* **1991**, *32*, 307-308.

46. "A Positive, Chemically-Amplified Aromatic Methacrylate Resist Employing the Tetrahydropyranyl Protecting Group", *Chem. Mater.* **1991**, *3,* 1031. [with Taylor, G. N., Stillwagon, L. E., Houlihan, F. M., Wolf, T. M., Hertler, W. R.]

47. "A Positive, Chemically-Amplified Aromatic Methacrylate Resist Employing the Tetrahydropyranyl Protecting Group", *J. Vac. Sci. Tech.* **1991**, *B9*, 3348. [with Taylor, G. N., Stillwagon, L. E., Houlihan, F. M., Wolf, T. M., Hertler, W. R.]

48. Risse, W.; Sogah, D. Y.; Boettcher, F. P. "The Preparation of Poly(Aryl Ether Ketones) By the Use of Trifluoromethanesulfonic Acid", *Makromol. Chem., Macromol. Symp.* **1991**, *44*, 185-193.

49. Hertler, W. R.; Sogah, D. Y.; Raymond, F. A.; Bauer, R. D.; Chang, C. T.; Taylor, G. N.; and Stillwagon, L. E. "Synthesis and Applications of Acid-Labile Acrylic Polymers", *Makromol. Chem., Macromol. Symp.* **1992**, *64*, 137-149.

50. Sogah, D. Y., Kaku, M., Shinohara, K.-I., Rodriguez-Parada, J. M., and Levy, M. "Design, Synthesis, and Surface Activity of Amphiphilic Perfluorinated Oxazolines", *Makromol. Chem., Macromol. Symp.* **1992**, *64*, 49-64.

51. Sogah, D. Y.; "Design and Synthesis of Functional Polymers", *Kobunshi High Polymers*, **1992**, *41*, 90.

52. Kaku, M., Hsiung, H., Levy, M., Rodriquez-Parada, J. M., and Sogah, D. Y.; "Monolayers and Langmuir-Blodgett Films of Poly(N-acylethylenimines)', *Langmuir*, **1992**, *8*, 1239.

53. Sogah, D. Y., Perl-Treves, D., Wong, W.-H., and Zheng, Q. Y.; "De Novo Design and Synthesis of Protein-Based Hybrid Polymers:, Polym. Prepr. (Am. Chem. Soc., Div. Polym. Chem.), **1993**, *34*, 108-9.

54. Sogah, D.Y., Perl-Treves, D., Wong, W.-H., and Zheng, Q.Y.; "De Novo Design and Synthesis of Protein-Based Hybrid Polymers", *Polym. Preprints, ACS*, **34**, 108 (**1993**)

55. Margel, S., Vogler, E. A., Firment, L., Watt, T., Haynie, S., Sogah, D. Y.; "Peptide, Protein and Cellular Interactions with Self-Assembled Monolayer Model Surfaces", *J. Biomed. Mat. Res.* **1993**, *27,* 1463 -1476.

56. Nicholas J. Rodak and Dotsevi Y. Sogah, "Intramolecularly-Linked Oxyanion Group Transfer Polymerization Catalysts", Polym. Prepr. (Am. Chem. Soc., Div. Polym. Chem.), **1994**, *35(2)*, 864-865.

57. Tamaki Nakano and Dotsevi Y. Sogah, "Cyclopolymerization of 2,2'-Bis(methacryloylxymethyl)-1,1'-Binaphthyl. Comparison of Group Transfer (GTP), Anionic, and Free Radical Polymerizations", Polym. Prepr. (Am. Chem. Soc., Div. Polym. Chem.), **1994** *35*, 862-863.

58. Rutger D. Puts and Dotsevi Y. Sogah, "Cyclopolymerization of bis(oxazoline) monomers", Polym. Preprints, Polym. Prepr. (Am. Chem. Soc., Div. Polym. Chem.), **1994**, *35*, 733-734.

59. Jianzhong Shen and Dotsevi Y. Sogah, "Group Transfer Polymerization of 1-Butadienyloxytrialkylsilane", Polym. Prepr. (Am. Chem. Soc., Div. Polym. Chem.), **1994**, *35(2)*, 731-732.

60. Jianzhong Shen, Dotsevi Y. Sogah, Tamaki Nakano, and Nicholas J. Rodak, "Novel Structures Derived From Group Transfer Polymerization", Polym. Prepr. (Am. Chem. Soc., Div. Polym. Chem.), **1994,** *35(2)*, 587-588.

61. Dotsevi Y. Sogah, Daniele Perl-Treves, Wai-Hung Wong, and Qun Yi Zheng, "De Novo Design and Synthesis of Protein-Based Hybrid Polymers", *Macromol. Reports, Part A*, **1994**, *31*, 1003-8.

62. Dotsevi Y. Sogah, Daniele Perl-Treves, N. Voyer and W. F. DeGrado, "Design and Synthesis of Polytripeptide $(LeuGlnPro)_n$ Based Upon the Matrix Protein Amelogenin", *Macromol. Symp. Part A*, **1994**, *88*, 149-163

63. Michael J. Winningham and Dotsevi Y. Sogah, "Evidence for Intramolecular Hydrogen Bonding in β-Alanine Derivatives of 2,8-Dimethylphenoxathiin 4,6-Dicarboxylic Acid. Model Studies for Nucleation of Parallel β-Sheets", *J. Am. Chem. Soc.* **1994***, 116*, 11173-74.

64. Mureo Kaku, Lisa C. Grimminger, Dotsevi Y. Sogah, and Sharon L. Haynie, "New Oxazoline Block Copolymer Lowers Adhesion of Platelets on Polyurethane Surfaces", *J. Polym. Sci. Part A: Polym. Chem.* **1994**, *32*, 2187.

65. Rodriguez-Parada, J. M., Kaku, M., Sogah, D. Y. "Monolayers and Langmuir-Blodgett Films of Poly(N-acylethylenimines) with Hydrocarbon and Fluorocarbon Side Chains", *Macromolecules* **1994**, *27*, 1571-1577.

66. Puts, R. D., Sogah, D. Y. "Facile Alkylation of 2-Methyl-2-Oxazoline: Synthesis of Novel 2-Substituted-2-Oxazolines", *Tet. Letters* **1994**, *35*, 5779.

67. Puts, R. and Sogah, D.Y.; "Cyclopolymerization of Bis(oxazoline) Monomers", *Polym. Prepr. Polym. Chem. Div. ACS,* 35 (2), **(1994)**

68. Shen, J., Sogah, D. Y. "Novel Alternating Copolymers of Controlled Sequence. Regiochemical Control in Aldol Group Transfer Polymerization of Substituted (Butadienyloxy)trialkylsilanes", *Macromolecules* **1994**, *27*, 6996.

69. Puts, R. D., Sogah, D. Y. "The First Report of Cyclopolymerization of Bis(oxazolines) To Give Optically Active Polymacrocycles", *Macromolecules* **1995**, *28*, 390.

70. Nakano, T., Sogah, D. Y. "Toward Control of Stereochemistry in GTP by a Rational Monomer Design. Cyclopolymerization of 2,2'-Bis(methacryloylxymethyl)-1,1'-Binaphthyl", *J. Am. Chem. Soc.* **1995**, *117*, 534.

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68. "Group Transfer Polymerization in the Synthesis of Optically Active Polymers", **XXVII Organosilicon Symposium**, Renslaer Polytechnic Institute, Troy, NY, March 18-19, 1994.

69. "Synthesis of Sequence Controlled Polymers by Adol-GTP", **XXVII Organosilicon Symposium**, Renslaer Polytechnic Institute, Troy, NY, March 18-19, 1994.

70. "Synthesis of Sequence Controlled Polymers by Aldol-Group Transfer Polymerization", **XXVII Organosilicon Symposium**, Renslaer Polytechnic Institute, Troy, New York, March 18-19, 1994

71. Symposium Organizer: **"Olefin and Diolefin Catalysis Symposium"**, **Fourth Pacific Polymer Conference**, Kola, Kauai, Hawaii, December 12-16, 1995

72. "Stereochemical Control in Group Transfer Polymerizations Using Cyclopolymerization Techniques", **1995 International Chemical Congress on the Pacific Basin Societies**, Honolulu, Hawaii, December 17-22, 1995

73. "Design and Synthesis of New Nitroxyl Radicals and their Effect on Free Radical Polymerization of Styrene", **Fourth Pacific Polymer Conference**, Kola, Kauai, Hawaii, December 12-16, 1995

74. "Stereo- and Regiochemical Control in Group Transfer Polymerizations" **209th ACS National Meeting**, Anaheim, CA, April 2-6, 1995

75. Symposium Organizer: "**Polymer Synthesis with Organometallic Complexes Symposium", 210th ACS National Meeting**, Chicago, Illinois, August 20-24, 1995

76. "Design and Synthesis of Peptide-based Hybrid Polymers Containing β-sheets as Silk Polymer Models", **Hoechst-Celanese Research Division Symposium on Silk Polymers**, Summit, New Jersey, March 24, 1995

77. "Science And Technology versus Development Problems in Africa. A Case for University-Government-Industry Partnership", **6th International Chemistry Conference in Africa**, Accra, Ghana, July 31-August 4, 1995

78. "Stereo- and Regiochemical Control in Group Transfer Polymerization", **International Symposium on Synthetic Polymer Chemistry: Applied Polymer Science Award Symposium Honoring J. P. Kennedy**, **ACS National Meeting**, Anaheim, CA, April 3-4, 1995

79. "Control of Living Free Radical Polymerization by a New Chiral Nitroxide and Implications for the Polymerization Mechanism" **Symposium on Macromolecules**, **1996 NOBCChE Conference**, Detroit, Michigan, April 8-13, 1996

80. "Design and Synthesis of A Multifunctional Initiator Containing Orthogonal Reactive Sites. A Novel Approach to Synthesis of Complex Structures Using Multiple Living Polymerization Methods", **International Meeting for Molecular Design Specialists,** Yokohama, Japan, August 9, 1996.

81. "'Towards Control of stereochemistry and chirality in methacrylate polymers', **Mario Farina Memorial Symposium, 212th American Chemical Society Annual Meeting**, Orlando, Florida, August 25-29, 1996

82. "Crystalline modules for protein-based polymers: Synthesis and conformational analysis of β-sheet oligopeptides as monomers", **212th American Chemical Society Annual Meeting**, Orlando, Florida, August 25-29, 1996

83. "Architectural Control of Polymers. Structure-Property Relations of Polymers Containing U-Turn Moiety", **Gordon Research Conference on Polymers**, New England College, Henniker, New Hampshire, June 23-28, 1996.

84. "Use of Templates to Control Stereochemistry in Vinyl Polymerization via Cyclopolymerization", **Gordon Research Conference on Polymers**, New England College, Henniker, New Hampshire, June 23-28, 1996.

85. "A Multifunctional Initiator Suitable for Simultaneous Anionic, Free Radical and Cationic Polymerizations", **Gordon Research Conference on Polymers**, New England College, Henniker, New Hampshire, June 23-28, 1996.

86. "Stereochemical Control in Group Transfer Polymerizations", **Gordon Research Conference on Polymers**, New England College, Henniker, NH, June 25-30, 1995

87. "Asymmetric Initiation in Stable Free Radical Mediated Polymerization", **Gordon Research Conference on Polymers**. Centre Culturel Les Fontaines, Chantilly, France, June 29-July 4, 1997

88. "A Biomolecular Lego Modular Method for the Synthesis of Biopolymers and Environmental Benign Materials", **NOBCChE '97**, Orlando, Florida, March 23-28, 1997

89. "A Modular Approach to Polymer Architecture Control via Catenation of Biomolecular LEGO® Sets: Polymers Containing Templated β-Sheets", **213th ACS National Meeting**, San Francisco, CA, April 13-17, 1997

90. "Chiral Dendrimers. Direct Glycosidation of Glycals to Give Linear and Dendritic Glycopolymers", **213th ACS National Meeting**, San Francisco, CA, April 13-17, 1997

91. "Can Synthetic Polymers Be Induced To Fold Like Natural Polymers", **30th Central Regional Meeting of the ACS (Cleveland Section)**, May 27-29, 1998

92. "Living Free Radical Polymerization", **Gordon Research Conference on Polymers**, Henniker, NH, July 1998

93. "Control of Chirality in Synthetic Polymers", **Symposium on Chiral Polymers**, Division of Polymer Chemistry, **217th ACS National Meeting**, Anaheim, CA, March 21-25, 1999

94. "One Step Block Copolymerization By Simultaneous Initiation of Two or More Polymerization Mechanisms", **Symposium on Synthesis of Novel Polymeric Materials**,

Division of Polymeric Materials Science and Engineering, **217th ACS National Meeting**, Anaheim, CA, March 21-25, 1999

95. "Bioinspired Advanced Materials: Design, Synthesis and Properties of Silk-Based Peptide-Hybrid Polymers", **Symposium on Bioinspired Materials**, Biotechnology Secretariat, **217th ACS National Meeting**, Anaheim, CA, March 21-25, 1999

96. "Solid Sate FTIR Analysis of Hydrogen-Bonded Domains in Synthetic Biopolymer Hybrid Silk-Like Materials", Society of Plastics Engineers, - ANTEC 99, **Symposium on "Plastics Bridging the Millennia**" May 2-6, 1999, New York, NY

97. "Block Copolymerization via Macromolecular Engineering: Simultaneous Initiation of Two or More Living Polymerizations", **APME 99**, August 1-5, 1999, Williamsburg, VA

98. "Dispersed and Intercalated Polymer/Inorganic Nanocomposites". **1st International Symposium for Materials Science Based on Molecular Design - Approach to the 21st Century** - October 28-29, 1999, Shin-Yokohama, Japan

99. "Controlling Polymer Architecture through Living Polymerizations", **7th Frank Warren Conference on Organic Chemistry**, Jan 16-19, 2000, Aventura Spa, Warmbaths, Northern Province, South Africa

100. "Recent Developments in Dispersed Polymer/Inorganic Nanocomposites", **3rd International Symposium for Materials Science Based on Molecular Design**, Fukuoka, Kyushu, Japan, May 17-19, 2001

101. "Cyclopolymerization of Templated Bis(methacrylates) Derived from Asymmetric Diels-Alder Reactions", **221st ACS National Meeting**, San Diego, CA, April 1-5, 2001

102. "Polystyrene Star Nanostructures with Molybdenum and Tungsten Clusters Core", **221st ACS National Meeting**, San Diego, CA, April 1-5, 2001

103. "Cyclopolymerization of Bis(methacrylates) Incorporating Binaphthyl Moiety", **221st ACS National Meeting**, San Diego, CA, April 1-5, 2001

104. Session Chair, **Symposium on Functional Polymers and Dendrimers: From Synthesis to Applications. 221st ACS National Meeting**, San Diego, CA, April 1-5, 2001

105. "Recent Advances in the Synthesis of Polymer-Silicate Nanocomposites", **Carothers Lectures**, DuPont Company, Wilmington, DE, June 20, 2001

106. "Nano Domain Formation in Designer Hybrid Proteins", Invited Lecture, **Nanotechnology /Biotechnology Convergence Conference**, Stamford, CT, May 6-7, 2002

107. "Design and Synthesis of Tough Bio-molecular Materials based on Spider and *Bombyx mori* Silks", Invited Lecture, **TechTextile Conference, New & Emerging Technologies Symposium**, Atlanta, GA, April 8-10, 2002

108. "Polymers in Nanotechnology: From Nanocomposites to Nanobiotechnology", **DuPont Nanotechnology Conference**, Chesapeake, MD, October 20-22, 2002

109. "Nano Domain Formation in Designer Hybrid Proteins", **ACS National Meeting,** Boston MA, August 18-22, 2002

110. "Unnatural Functional Biopolymers Inspired by Nature", **ACS National Meeting,** Boston, MA, August 18-22, 2002

111. "Nanometer Scale Biosensors for Antibody Detection", **International Workshop on NanoBioChemistry 2002**, Taipei, Taiwan ROC, September 5-6, 2002

112. "Polymer-Inorganic Nanocomposites. Architecture and Structure Control", **International Symposium on Polymer Chemistry PC'03**, Changchun, China, May 25-28, 2003

113. "Architecture and Nanostructure Control in Polymer/Inorganic nanocomposites", **Gordon Research Conference on Polymers**, Mount Holyoke College, MA, June 15-20, 2003

114. "Synthesis of Novel Cycloaliphatic Acrylic Copolymers by GTP and their Application as 193-nm Resist", **Warwick 2002**, Warwick, UK, July 28-August 1, 2002

115. "Synthesis of Novel Cluster-Polymer Nanocomposites", **226th ACS National Meeting**, New York, NY, September 7-11, 2003

116. "Synthesis and Characterization of Exfoliated Polyacrylamide/Silicate Nanocomposite ", **226th ACS National Meeting**, New York, NY, September 7-11, 2003

117. "A Nanoscale Biosensor Based on Controlled Surface Array of an IgE-Specific Receptor", **Bio-Micro-Nanosystems Conference of the American Society for Microbiology**, New York, July 7, 2003

118. "Recent Advances in the Synthesis of Polymer-Silicate Nanocomposites", **Rohm and Haas Macromolecules Symposium at the NOBCChE Conference**, April 12-16, 2003; Indianapolis, IN

119. "Bioactive polymers patterned on chips specifically and reversibly bind IgE", **227th ACS National Meeting**, Anaheim CA.

120. "Functionalization of nanoscopic features", **227th ACS National Meeting**, Anaheim, CA.

121. "Design and synthesis of biomolecular materials based on spider and Bombyx mori silks", **228th ACS National Meeting**, Philadelphia PA

122. "Nitroxide-mediated living radical polymerization from carbon nanotubes", **228th ACS National Meeting**, Philadelphia PA

123. "Exfoliated polymer layered silicate nanocomposites via in situ living radical polymerization", **228th ACS National Meeting**, Philadelphia PA

124. "Nano-patterned and layered synthetic-biological materials assembled upon polymer brushes via biotin/streptavidin recognition", **228th ACS National Meeting**, Philadelphia PA

125. "Nanocomposites. Design principles, synthesis, architecture control and utilities", **228th ACS National Meeting**, Philadelphia, PA.

126. "Biotin/Streptavidin recognition on polymer brushes and self-assembled monolayers", **229th ACS National Meeting**, San Diego, CA, March 13-17, 2005

127. "Patterned polymer brushes from molded polymer surfaces", **230th ACS National Meeting**, Washington, DC, Aug. 28-Sept. 1, 2005

128. "Biofunctionalization of Patterned Surfaces: Molecular Recognition on Nanoscopic Features", **International Symposium on Polymeric Materials, Bayreuth Polymer Symposium (BPS'05)**, Bayreuth, Germany, September 18-20, 2005

129. "Synthesis and characterization of block copolymers based on Bombyx mori silk", **232nd ACS National Meeting**, San Francisco, CA, United States, Sept. 10-14, 2006.

130. "Nitroxide mediated radical polymerization from multi-walled carbon nanotubes and applications in biological recognition in aqueous medium", **232nd ACS National Meeting**, San Francisco, CA, United States, Sept. 10-14, 2006

131. "Surface-Initiated Living Polymerization for Molecular Recognition on Functionalized Nanoparticles and Nanotubes", **Third International Symposium on Polymer Chemistry**, Hefei, China, June 15-19, 2008

132. "Examining the livingness and nitroxide radical exchange of nitroxide mediated-radical polymerization from carbon nanotube surfaces", **237th ACS National Meeting, Salt Lake City, UT**, March 22-26, 2009

133. "Recent advances in the Synthesis and Functionalization of Metal Nanoparticles", **International Symposium on Polymeric Materials, Bayreuth Polymer Symposium (BPS'09)**, Bayreuth, Germany, September 13-15, 2009

INVITED AND PLENARY TALKS - *Universities And Industrial Companies*

	Location	Date	Title
1.	Texas A&M, College Station, TX	October, 1983	Group Transfer Polymerization - Silyl Ketene Acetals in Controlled Conjugate Addition Reactions
2.	UCLA, Los Angeles, CA	October, 1983	Group Transfer Polymerization - Silyl Ketene Acetals in Novel Infinite Sequential Conjugate Addition Reactions
3.	Univ of Southern Calif., Los Angeles, CA	October, 1983	Silyl Transfer Reactions: A Novel Approach to Controlled Synthesis of Macromolecules
4.	Univ. of California, Berkeley, CA	October, 1983	Group Transfer Polymerization - A New Silicon-Mediated Process for Controlled Synthesis of Macromolecules
5.	Ohio State University, Columbus, OH	February, 1984	Group Transfer Polymerization
6.	Univ. of Tokyo, Tokyo, Japan	September, 1984	Silicon-Mediated Organic Transformations
7.	Howard University, Washington, DC	October, 1984	Group Transfer Polymerization. A New Process Utilizing Organosilicon Reagents to Control Molecular Structure
8.	Atlanta University, Atlanta, GA	March, 1985	Group Transfer Polymerization. A New Process Utilizing Organosilicon Reagents to Control Molecular Structure
9.	Hampton University, Hampton, Virginia	October, 1985	Group Transfer Polymerization. A New Process Utilizing Organosilicon Reagents to Control Molecular Structure
10.	Univ of Southern Calif., Los Angeles, CA	November, 1985	Recent Advances in the Synthesis of Polymers

11. UCLA, Los Angeles, CA	November, 1985	Synthesis of Macromolecules Using Silicon-Mediated Reactions
12. Cambridge University, Cambridge, UK	September 12, 1986	Functionalized Polymers by Group Transfer Polymerization
13. Univ. Pierre et Marie Curie, Paris, France	May, 1987	Silicon-Mediated Polymerizations
14. Univ. des Sci. et Techniques, Montpellier, France	May, 1987	Silane-Catalyzed Ring-Opening Polymerization
15. University of Melbourne, Melbourne, Australia	August, 1987	Control of Polymer Architecture by Group
16. University of Queensland, St. Lucia, Australia	August, 1987	Recent Advances in Group Transfer Polymerization and Aldol Group Transfer Polymerization
17. Univ of Southern Calif., Los Angeles, CA	December, 1987	Recent Advances in Living Polymerizations
18. UCLA, Los Angeles, CA	December, 1987	Recent Advances in Living Polymerizations
19. California Inst. of Technology, Pasadena, CA	December, 1987	Recent Advances in Living Polymerizations
20. Hebrew University, Israel	March, 1988	Kinetic and Mechanistic Investigation of Anion-Catalyzed Organic Transformations Involving Silyl Enol Ethers and Silyl Ketene Acetals
21. Bar-Ilan University, Bar-Ilan, Israel	March, 1988	Silicon-Mediated Reactions Applied to Synthesis of Organic Macromolecules. Stereochemistry, Architecture Control and Mechanisms
22. Tel-Aviv University, Tel-Aviv, Israel	March, 1988	Silicon-Mediated Reactions Applied to Synthesis of Organic Macromolecules. Stereochemistry, Architecture Control and Mechanisms
23. The Weizmann Institute, Rehoboth, Israel	March, 1988	Controlled Synthesis of Cylindrical-, Star-, Ladder-, and Comb-Shaped Macromolecules Using Group Transfer Polymerization

24. Cornell University, Ithaca, NY	May, 1988	Control of Macromolecular Structures Using Organo-Silicon Reagents
25. Atlanta University, Atlanta, GA	February 1989	Design and Synthesis of Functional Organic Macromolecules
26. Polytechnic. Univ. of NY, Brooklyn, NY	March 1989	Design and Synthesis of Functional Organic Macromolecules
27. Penn State Univ., State College, PA	April 1989	Ladder Polymers
28. University of Florida, Gainesville, FL	November 1989	Preparation of Well Defined Organic Material Surfaces
29. Lehigh University, Bethlehem, PA	March 1990	Macromolecular Engineering. Design, Synthesis and Structure Control of Novel Macromolecules
30. Central Michigan University, Mount Pleasant, Michigan	April 1990	Design and Synthesis of Functional Macromolecules
31. University of Wisconsin, Department of Chemistry, Madison, WI	April 1990	Design and Synthesis of Functional Organic Macromolecules
32. Oberlin College, Oberlin, Ohio	October 1991	Chemical Approaches to Macromolecular Synthesis. Design, Synthesis and Molecular Recognition
33. University of Massachusetts at Lowell, Lowell, Mass	November 1991	Design, Synthesis and Surface Properties of Novel Fluorinated Oxazoline Polymers
34. WL Gore & Associates, Wilmington, DE	August 25, 1992	Design, Synthesis and Surface Properties of Novel Fluorinated Oxazoline Polymers
35. Rensselaer Polytechnic Inst., Troy, NY	October 1992	De Novo Design and Synthesis of Bio-Organic Hybrid Polymers
36. Hampton University, Hampton, Virginia	April 15, 1993	Polymers of Controlled Architecture and Topology. Synthesis and Properties
37. Univ. College, Dublin, Ireland	Oct. 12, 1993	Bioorganic Hybrid Polymers
38. Univ of North Carolina - Chapel Hill, NC	Dec 7, 1993	Recent Advances in Group Transfer Polymerization

39. UCLA, Los Angeles, CA	March 11-12, 1994	Design, Synthesis and Conformations of Peptide-Based Polymers
40. Carleton Univ., Ottawa, Canada	May 3, 1994	Synthesis and Properties of Peptidomimetic Polymers Containing Synthetic Reverse Turns
41. Eastman Chemical Research Laboratories, Kingsport, Tennessee	September 26, 1994	Biomimetic Polymers of Controlled Architecture and Topology. Design, Synthesis and Properties
42. University of Michigan, Ann Arbor, MI	October 27-28, 1994	Biomimetic Polymers of Controlled Architecture and Topology. Design, Synthesis and Properties
43. Hoechst-Celanese Research Division Symposium on Silk Polymers, Summit, New Jersey	March 24, 1995	Design and Synthesis of Peptide-based Hybrid Polymers Containing β-sheets as Silk Polymer Models
44. Akzo Nobel Central Research, Dobbs Ferry, New York	August, 1994	Molecular Recognition in Polymer Imprinting
45. ALCOA Technical Center, Pittsburgh, PA	March 26, 1995	Synthesis of Fluorinated Amphiphilic Polymers
46. Dow, Midland, MI	April 23, 1995	Living Free Radical Polymerization
47. Permeable Technologies, Inc, Morganville, NJ	Nov 21-22, 1995	Polymer Architecture by Group Transfer Polymerization
48. Department of Chemistry, Brandeis University, Waltham, Mass	January 22, 1996	Nucleation and Propagation of Parallel and Antiparallel β-sheets using rigid b-turn mimics
49. Rohm & Haas, PA	March 6-7, 1996	Recent Advances in Living Vinyl Polymerizations and Applications in Polymer Architecture Control
50. BF Goodrich, Brecksville, Ohio	June 17, 1996	A Multifunctional Universal Initiator Suitable for Simultaneous Use of Anionic, Free Radical and Cationic Polymerizations
51. Hoechst-Celanese, Corpus Christi, Texas	June 12, 1996	Multifunctional Initiator for Polymerization

52. Closs Distinguished Lecture, Department of Chemistry, The University of Chicago, Chicago, Illinois	May 3, 1996	Controlling Stereoregularity and Chiroptical Properties of Vinyl Polymers Using Templates
53. Ethicon, Inc., Somerville, NJ	February 14, 1997	Approaches To Polymer Architecture Control
54. Xerox Corporation, Rochester, NY	March 12, 1997	Functional Block and Double Comb/Graft Copolymers via A Universal Initiator Using Consecutive Multiple Living Polymerizations
55. Georgia Institute of Technology, Atlanta, GA	March 20-23, 1997	Polymer Architecture Control
56. Department of Chemistry, Lehigh University, Lehigh, PA	August 28-29, 1999	Nanoscale Organic/Inorganic Materials
57. Ethicon, Inc., Somerville, NJ	September 16, 1997	Biodegradable Polymers
58. Hamilton College, Hamilton, NY	October 19, 1997	LEGO® set Approach to Design and Synthesis of Materials of Practical Importance. From Small Molecules to Polymers
59. University of Pennsylvania, Philadelphia, PA	April 5, 1999	Silk-Like Materials Containing Templated Parallel and Antiparallel β-Sheets
60. Corning Corporation, Corning, NY	November 12, 1998	Control Of Silicate-Organic Nanocomposite Structure Through Living Polymerization
61. University of Cape Coast, Cape Coast, Ghana	July 1998	Bioinspired Polymers
62. University of Ghana, Legon, Ghana	April, 1998	Living Free Radical Polymerization
63. Department of Chemistry, Lehigh University, Lehigh, PA	August 28-29, 1999	Nanoscale Organic/Inorganic Materials
64. Revlon Research Center, Edison, NJ	March 14, 1999	Controlling Polymer Architecture Through One-Pot Chemistry
65. Elf Ato-Chem, King of Prussia, PA	May 11, 1999	Nanoscale Organic-Inorganic Materials

66. Revlon Research Center, Edison, NJ	June 10, 1999	Group Transfer Polymerization for Applications in Coatings and Nail Enamel
67. Nara Institute of Science and Technology, Nara, Japan	October 24, 1999	Controlling Polymer Architecture Through One-Pot Chemistry
68. Department of Chemistry, Kyoto University, Kyoto, Japan	October 25, 1999	Controlling Polymer Architecture Through One-Pot Chemistry
69. The University of Stellenbosch, Stellenbosch, South Africa	January 20, 2000	Polymer Inorganic Nanocomposites
70. Plascon Paints (Pty) Ltd., Stellenbosch, South Africa	January 20, 2000	Polymer Inorganic Nanocomposites
71. University of Natal, Durban, South Africa	January 22, 2000	Chiral Materials with Defined Helical Conformations
72. SASOL Corporation, Sasolburg, South Africa	January 24, 2000	Dispersed and Intercalated Polymer / Inorganic Nanocomposites
73. POLIFIN, Johannesburg, South Africa	January 25, 2000	Polymer / Inorganic Nanocomposites
74. Hercules Corporation, Wilmington, DE	October 9 2002	Dispersed and Intercalated Polymer/Inorganic Nanocomposites
75. Ciba Specialty Chemicals, Tarrytown, NY	November 6, 2000	Dispersed Polymer/Clay nanocomposites via in Situ Polymerization
76. Department of Chemistry, University of Connecticut, Storrs, CT	March 2, 2001	Nanostructure Formation in Peptide-Based Polymers
77. Mitsubishi Research center, Yokohama, Japan	May 14, 2001	Dispersed and Intercalated Polymer/Inorganic Nanocomposites
78. Department of Chemistry, Graduate School of Engineering Science, Osaka University, Toyonaka, Osaka, Japan	May 15, 2001	Control of Chirality and Helicity in Synthetic Polymers
79. Sekisui Minase Research Center, Osaka, Japan	May 15, 2001	Polymers for the Microelectronic Industry: Design and Synthesis of Organic Polymeric Resists
80. Sekisui Minase Research Center, Osaka, Japan	May 15, 2001	Dispersed and Intercalated Polymer/Inorganic Nanocomposites

81. Department of Polymer Chemistry, Graduate School of Engineering, Kyoto University, Kyoto, Japan	May 16, 2001	Polymer-Silicate Nanocomposites via in situ Living Polymerization
82. Department of Applied Chemistry, Graduate School of Engineering, Nagoya University, Furo-cho, Chikusa-ku, Nagoya, Japan	May 16, 2001	Control of Chirality and Helicity in Synthetic Polymers
83. Carothers Lectures, DuPont Company, Wilmington, DE	June 20, 2001	Recent Advances in the Synthesis of Polymer-Silicate Nanocomposites
84. Atofina Chemicals, King of Prussia, PA	December 11, 2001	Recent Advances in the Synthesis of Polymer-Silicate Nanocomposites
85. Department of Chemistry & Biochemistry, UCLA, Cram Memorial Lectures, Los Angeles, CA	March 27-29, 2002	Control of chirality and helicity in synthetic polymers
86. Alfred S. Spriggs Distinguished Chemistry Lecture-2002 Spring Series, Department of Chemistry, Clark Atlanta University, Atlanta, GA.	April, 2002	Control of chirality and helicity in synthetic polymers
87. Rohm and Haas Macromolecules Symposium at the NOBCChE Conference, Indianapolis, IN	April 12-16, 2003	Recent Advances in the Synthesis of Polymer-Silicate Nanocomposites
88. Department of Chemistry, UC-Irvine, CA	August 1, 2003	Nanocomposites: Is Small Always Better
89. Atofina Chemicals, King of Prussia, PA	Nov. 18, 2003	Advances in the Synthesis of Polymer-Silicate Nanocomposites
90. Arkema, King of Prussia, PA	August 23, 2005	Nanoparticles Functionalization for Co-Assembly
91. Johns Hopkins University, Department of Materials Science, Baltimore, Md	October 18, 2006	Approaches to Functionalization of Nanoparticles: From Layered Silicates to Quantum dots to Carbon Nanotubes
92. Department of Chemistry, University of Ghana at Legon, Accra, Ghana	August 16-17, 2007	Recent Advances in Nanocomposites
93. Department of Chemistry, University of Ghana at Legon, Accra, Ghana	Nov 10, 2008	Recent Advances in Nanotechnology: From Layered Silicates to Quantum dots to Carbon Nanotubes
94. Elite Macromolecular Science Program, Universität Bayreuth, 95440 Bayreuth, Germany	September 10, 2009	Polymer-Inorganic Nanocomposites. Architecture and Structure Control

95. Corning Corporation, Corning, New York,	May 27, 2010	Approaches to Functionalization of Nanoparticles: From Layered Silicates to Quantum dots to Carbon Nanotubes

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Teaching Experience - Cornell University

Course Numbers and Titles

Chem 103 – General Chemistry (Fall 92, Fall 95, Fall 96, Fall 97)
Chem 206 – General Chemistry (Fall 98, Fall 99, Fall 2000)
Chem 251 - Introductory Experimental Organic Chemistry (Spring 95)
Chem 358 (now 3580) – Organic Chemistry for the Life Sciences (Spring 91, Spring 92, Spring 93, Spring 2007, Spring 2008, Spring 2009, Spring 2010)
Chem 498 – Honors Seminar (Spring 2001)
Chem 670 (now 6700) – Fundamental Principles of Polymer Chemistry (Fall 2001, Fall 2002, Fall 2003, Fall 2004, Fall 2005, Fall 2006)
Chem 671 (now 6710) –Advanced Polymer Synthesis (Spring 94, Spring 96, Spring 97, Spring 99, Spring 2000, Spring 2002, Spring 2003, Spring 2005, Spring 2006)
Chem 762 – Special Topics in Polymer Science with emphasis on Polymer Physical Chemistry (Fall 93, Fall 94)

Courses Initiated and Developed at Cornell University

Chem 762 – Special Topics in Polymer Science with emphasis on Polymer Physical Chemistry – initiated and developed the course
Chem 670 (now 6700) – Fundamental Principles of Polymer Chemistry – initiated and developed the course

Teaching Experience Elsewhere

Visiting and Adjunct Professorships

1998	Department of Chemistry, University of Ghana, Legon, Ghana, Spring Semester 1998 – Sabbatical
1984	Chemistry Department, Columbia University, New York (Spring, 1984): "Organometallics in Organic Transformations" - Graduate level course (Course Coordinator: Prof. J. K. Barton).
1984	Chemistry and Chemical Engineering Departments, Massachusetts Institute of Technology (MIT), Cambridge, Massachusetts (Winter, 1984): "New Developments in Macromolecular Synthesis. Group Transfer Polymerization" - Graduate level course (Course Coordinator: Prof. U. W. Suter).
1978-1980	Department of Chemistry and Biochemistry, UCLA (1978-80): "Organic and Bioorganic Chemistry: Organic Structures and Reactions" – Sophomore Organic for mostly Premeds; "Bio-organic Structures and Reactions" - Introductory Biochemistry.

Teaching Associate – University of California at Los Angeles

1972-1974 General Chemistry - Winter Term 1974 and Spring Term 1974.
Intermediate Organic Chemistry - Winter 1973, Spring 1973, Spring 1972 and Fall 1972.

Colloquia, Tutorials, and American Chemical Society Short Courses

1990 5th International Colloquium on Macromolecular Engineering, Akron, OH, Fall 1989 (Coordinator: Prof. J. P. Kennedy)

1989 4th International Colloquium on Macromolecular Engineering, Akron, OH, Fall 1989 (Coordinator: Prof. J. P. Kennedy)

1988 3rd International Colloquium on Macromolecular Engineering, Akron, OH, Fall 1988 (Coordinator: Prof. J. P. Kennedy).

1988 Tutorial Lecture Series: "Introduction to Living Polymerizations and Synthesis of Polymers with Controlled Structures" held in conjunction with the International Symposium on "Synthesis of Controlled Polymer Structures Through Living Polymerization" at 196th ACS National. Meeting, Los Angeles, CA, September 24, 1988 (Coordinator: Prof. R. Quirk).

1988 Macromolecular Science Colloquia - Graduate Seminar Course, Spring Semester, Case-Western Reserve University, Cleveland, OH, Winter 1988 (Course Coordinator: Prof. V. Percec).

1987 2nd International Colloquium on Macromolecular Engineering, Akron, OH, Fall 1987 (Coordinator: Prof. J. P. Kennedy).

1986 1st International Colloquium on Macromolecular Engineering, Akron, OH, Fall 1986 (Coordinator: Prof. J. P. Kennedy)