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EDUCATION

Assoc. of Science, 1958, Flint Junior College
B.A. in Chemistry, 1961, University of Michigan, Flint College, (Professor H. Blecker)
M.S. in Chemistry, 1962, Bucknell University (Advisor: Professor H. Heine)
Ph.D., Physical-Organic Chemistry, 1968, Michigan State University
Thesis: NMR Examination of Cyclic Dialkoxy Carbonium Ions (1,3-Dioxolenium Cations)
(Advisor: Professor H. Hart)
Ph.D., Physical Sciences/Technology, 2002, Central Michigan University (Honorary), (Central Michigan University, Board of Regents)

PROFESSIONAL EXPERIENCE

1962-64 Chemist, The Dow Chemical Company, Midland, MI
1964-67 Research Chemist, The Dow Chemical Company
1967-68 Project Leader, The Dow Chemical Company
1968-71 Group Leader, The Dow Chemical Company
1971-76 Research Manager, The Dow Chemical Company
1976-79 Associate Scientist, The Dow Chemical Company
1979-84 Senior Associate Scientist, The Dow Chemical Company
1984-90 Research Scientist, The Dow Chemical Company
1990-91 Research Professor & Senior Research Scientist, Michigan Molecular Institute
Midland, MI
1991-1/00 Research Professor and Director of Nanoscale Chemistry/Architecture, MMI
1992-1/00 Founder, Chief Scientist and Board of Director, Dendritech, Inc., Midland, MI
1995-1/00 Founder, President, Chief Scientist and Board of Directors, Oxazogen, Inc.
1996-1/00 Founding President, Dendritech, Inc., Midland, MI
1996-1/00 Director, ARL/MMI Dendritic Polymer Center of Excellence, Midland, MI
1998-1/00 V. President of Technology, Director of MMI Nanocenter, Chief Scientist, MMI
1998 to date Honorary-Distinguished Visiting Professor, Columbia University, NY, NY
1998-2001 Scientific Director, Center for Biologic Nanotechnology, University of Michigan,
Ann Arbor, MI
2001-2006 Founder, President, Chief Technical Officer and Board of Directors, Dendritic
Nanotechnologies Inc., Mt. Pleasant, MI
2001-2008 Distinguished Research Scientist/Professor, Central Michigan University
2002-2010 Director, National Dendrimer & Nanotechnology Center, Central MI Univ.
2006-2007 Chief Scientific Officer, Dendritic Nanotechnologies, Inc.
2007-2011 Faculty, Univ. of Wisconsin (Off campus), School of Pharmacy, Madison, WI
2008-2010 Faculty, Central Michigan University, Distinguished Professor/Research
Scientist, Department of Chemistry, Mt. Pleasant, MI

2010 to date Founder/CEO, NanoSynthons, Mt. Pleasant, MI
 2012 to date Adjunct Professor, Department of Chemistry, University of Pennsylvania, Philadelphia, PA
 2012 to date Affiliate Professor, Department of Physics, College of Humanities and Sciences, Virginia Commonwealth University, Richmond, VA

RESEARCH INTERESTS/ACTIVITIES

New Macromolecular Architectures – Dendrimers, Dendrons and Dendrigrfts
 Dendritic Supramolecular Chemistry and Self-Assemblies
 Dendritic Macromolecular Mimicry of Globular Proteins
 Applications of Dendritic Architecture in Organic/Hybrid Nano-Devices
 Dendrimer-Metal Nanocomposites – Quantum Dots/Rods
 Dendrimers as Fundamental Building Blocks for the Synthesis of Higher Complexity
 Random Hyperbranched Polymers
 Controlled/Targeted Delivery of Nano-therapies
 Cationic Initiated Polymerizations (oxazoline monomers/polymers)
 Synthetic Nanochemistry/Hard/Soft Super Atoms/Stoichiometric Nanocompounds
 Engineering Critical Nanoscale Design Parameters (CNDPs) for New Emerging Properties
 Dendrimer-Based Nanomedicine and Therapy
 Dendrimer Based Hyperpolarizable Substrates as Terahertz Radiation Generators
 Pyrrolidonylation as an Alternative for Pegylation of Pharmaceuticals
 Nanoperiodic Property Patterns Observed for Hard/Soft Superatoms
 Non-traditional Intrinsic Fluorescent (NTIF) Materials- A New Paradigm Shift

PROFESSIONAL SOCIETY MEMBERSHIPS

American Chemical Society (ACS) (1971-)
 American Chemical Society – Division of Polymer Chemistry
 American Chemical Society – Division of Small Chemical Businesses
 Sigma Xi
 American Association for the Advancement of Science (AAAS) - Fellow (2016)

PROFESSIONAL OFFICES HELD

Michigan Applied Science and Technology Laboratory Scientist Group
 Board Member (1982)
 President (1983)
 Editorial Advisory Board, *Bioconjugate Chemistry* (1999-2013)
 Executive Committee, ACS Subdivision of Advanced Materials and Nanotechnology of the Division of Industrial and Engineering Chemistry (2000-)
 Founding Member and Editorial Advisory Board, *Nano Letters* (2000-04)
 Editorial Advisory Board, Nanotechnology Law & Business
 Associate Editor, *Nanomedicine* (Elsevier) (2006-13)
 Faculty Member, *Faculty 1000 Biology*, London, UK (January 31, 2005--)
 Honorary Editorial Board, *Nanomedicine (Elsevier)* (2013--)
 Advisory Board, CLINAM Foundation, Eur. Foundation for Clinical Nanomedicine (2008--)
 Associate Editor, *Journal of Nanoparticle Research* (Springer) (2012--)
 Editorial Advisory Board, *Current Bionanotechnology* (Bentham Science) (2016--)

Ph.D. Thesis Advisor for:

J. Petersen, "Intrinsically Fluorescent Poly(amidoamine) Dendrimers", Department of Chemistry, University of Copenhagen, Denmark (2013)

S. Mejlsoe, Convergent Synthesis of Multifunctional Poly(amidoamine) Dendrimers and Divergent Synthesis of Polyester and Poly(lysine) Dendrimers, Department of Chemistry, University of Copenhagen, Denmark (2011).

E. Goold, "On the Packing of Cylinders upon a Cylinder: A Simulation Algorithm and a Closed-Form Model," Dept. of Math, Central Michigan University, Mt. Pleasant, MI (2009)

T. Dutta, "Dendrimers Mediated Delivery of Some Antiretroviral Bioactives," Dept. of Pharm. Sciences, Dr. Hari Singh Gour University, Sagar, India (2008).

M. Pittelkow, "On Chiral PAMAM Dendrimers, Naphthalenes and Dynamic Combinatorial Chemistry," Dept. of Chemistry, University of Copenhagen, Denmark (2007).

H.B. Agashe, "Novel Poly(propylene imine) Dendrimer Based Molecular Containers for Delivery of Some Antimalarial Bioactives," Dept. of Pharm. Sciences, Dr. Hari Singh Gour University, Sagar, India (2006).

S. Langereis, "Dendritic MRI Contrast Agents," Eindhoven University, The Netherlands (2005).

A.S. Chauhan "Development of Optimization of Engineered Dendrimer Nanoconstructs for Controlled Delivery of Some Drugs," (Pharm. Sciences), Indian Institute of Chemical Technology, Hyderabad, India (2004).

T. Bosman, "Dendrimers in Action: Structure Dynamics and Functionalization of Poly(propylene imine) Dendrimers," Eindhoven University, The Netherlands (2004).

J. Hu, "Synthesis of Telechelic and Dendritic Graft Polymers," University of Waterloo, Canada (2001).

S. Uppuluri, "Rheological Properties of Dendrimers," Michigan Technological University, Houghton, Michigan USA (1998).

HONORS

1. I.R.-100 Award (1978) - *Development of 2-Ethyl-2-Oxazoline Monomer*. Presented in Chicago, October, 1978. (One of the top 100 technical developments in the U.S. for 1978). "Distinguished Lecture Award." Presented by The Society of Polymer Science, Japan, Kyoto, August, 1984.
2. I.R.-100 Award (1986) - *Development of Poly(2-Ethyl-2-Oxazolines) - PEOX Polymer*. Presented in Chicago, October, 1986. (One of the top 100 technical developments in the U.S. for 1986.)
3. Listed in Who's Who in Technology (1982-Present)
4. Listed in Marquis, Who's Who in The Midwest (1982-Present)
5. Listed in Marquis, Who's Who in America (1984-Present)
6. Listed in Marquis, Who's Who in the World (1984-Present)
7. Sigma Xi Award (1987) - recognized STARBURST® chemistry as most significant contribution for 1985-1987 in Central Michigan area.
8. U.S. Representative to NEDO International Research Team directed toward "New Macromolecular Architecture" sponsored by MITI - Team Members: Higashimura/Sawamoto (Japan), Heitz Germany), Tomalia (U.S.A.) - (1988-1991).
9. R & D - 100 Award (1991) - STARBURST® Dendrimers. Presented in Chicago, September 1991. (One of the top 100 technical developments in the U.S. for 1991).
10. Midland Section ACS Award for Outstanding Achievement and Promotion of the Chemical Sciences (1992).
11. Adjunct Professor, Central Michigan University, Mt. Pleasant, MI (1993-2008).
12. Adjunct Professor, Michigan Technological University, Houghton, MI (1993-).
13. "Fire of Genius" Award. Presented by the Saginaw Valley Patent Law Association (1994).
14. Leonardo da Vinci Prize. Presented by LVMH in Paris, France (July, 1996) and New York, NY (September, 1996).
15. Sigma Xi, Midland Chapter, Best Paper Award, April 8, (1999).
16. Salute to Excellence as a Practitioner of Chemistry in the Present, ACS (Midland Section)

(October 13, 2001).

17. Distinguished Visiting Professor, Columbia University, NY (1998-present).
18. Honorary Doctorate and Commencement Speaker, Central Michigan University, December 14, (2002).
19. Society of Polymer Science, Japan (SPSJ)-"Award for Outstanding Achievement in Polymer Science & Technology (2002)". Presented at the 52nd SPSJ Annual Meeting, Nagoya, Japan, May 29, (2003).
20. Appointed Member (Chemical Biology) – "Faculty 1000" (2004-present).
21. The Dow/Karabatsos and Distinguished Alumni Lectureship Award – Michigan State Univ. (2005).
22. Frost & Sullivan, Priostar® Dendrimers – "Innovation of the Year Award" – (Nanomaterials for Advanced Medical Applications Technology), presented in Miami, FL (November 9, 2005).
23. Chairman/Organizer- "Fourth International Dendrimer Symposium"- Central Michigan University, Mt. Pleasant, MI (May 18-21, 2005).
24. Chairman - External Peer Review Panel for Environmental Protection Agency (EPA) "Nanotechnology White Paper", Washington, D.C. (2006).
25. Chairman – NSF Workshop entitled: "Periodic Patterns, Relationships and Categories of Well-Defined Nanoscale Building Blocks," Central Michigan University, Mt. Pleasant, (September 24-25, 2007).
26. Chevron Lectureship, Texas A&M University, College Station, Texas, (March 10, 2009)
27. Linus Pauling Memorial Lecturer, Schnitzer Concert Hall, Portland, Oregon, (March 11, 2010)
28. ACS Eminent Scientist Lecture Award, 240th ACS National Meeting, Boston, MA (August 23, 2010).
29. Thomson Reuters – "Hall of Citation Laureates in Chemistry" (i.e., top 40 most highly cited scientists in the field of chemistry) (October 3, 2011).
30. Louis W. Busse Lectureship, School of Pharmacy, University of Wisconsin, Madison, WI (December 1-2, 2011).
31. 2012 Wallace Carothers Award, Delaware Section, American Chemical Society, Wilmington, DE (April 3, 2012).
32. 2012 William H. Rauscher Lectureship, Rensselaer Polytechnic Institute, Troy, NY (November 6, 2012).
33. An Introduction to the Most Cited Papers in the History of Advanced Drug Delivery Reviews (1987-2012), *Advanced Drug Delivery Reviews*, 64, 1-3 (2012).
34. American Association for the Advancement of Science (AAAS) Fellows Induction at the Annual Meeting, Boston, MA (February 18, 2017).

MAJOR INDUSTRIAL CONTRIBUTIONS

1. Co-developer of AZTEC suntan lotion (nationally distributed personal care product).
2. Co-developer of TOUCH OF SWEDEN hand lotion (nationally distributed personal care product).
3. Discovered the cationic initiated homopolymerization of 2-oxazolines. Led the development and present commercial introduction of oxazoline monomers and polymers (PEOX). (See Publications, Ref. 5).
4. Co-inventor of present commercial process for production of HMEO (hydroxymethylethyloxazoline) and IPO (2-isopropenyl-2-oxazoline).
5. Co-inventor/developer of PEOX brand polymers (polyethyl oxazolines) – presently distributed internationally.
6. Co-inventor of new polymer/high fiber laxative – CITRUCCEL (registered trademark of

Merrell Pharmaceuticals, Inc.) – GlaxoSmithKline internationally distributed product.

7. Discovered STARBURST* DENDRIMERS - a new class of precision macromolecules which allow complete control of size, shape and surface.
8. Discovered COMBBURST* Dendrigrfts - a new macromolecular architecture (see publication ref. 49).
9. Inventor, **Priostar**¹ Dendrimers – a new class of precise dendritic polymers; distributed by Starpharma, Australia, commercially used as an additive with glyphos herbicides to enhance food production.
10. Inventor, **Superfect**², DNA transfection reagent; distributed by Qiagen, Germany, EU.
11. Inventor, **Priofect**³, si-RNA transfection reagent; distributed by EMD Merck, Germany, EU.
12. Inventor, **Stratus**⁴, a cardiology diagnostic for rapid detection of myocardial infarction; distributed by Siemens, Germany, EU.
13. Inventor of >50 US.Patents licensed to Starpharm Limited, Australia that underpin and protect current dendrimer based products such as **VivaGel**⁵(**approved by USA-FDA, 2017**) as a microbicide for the treatment of bacterial vaginosis and **DEP**⁵ a dendrimer based targeted nano-delivery platform for the treatment of cancer (currently Phase I-II clinical trials).
14. Inventor of **Pyrrolidonylation Concept** (PCT/US2015/050062, March 17, 2016) as an alternative for Pegylation Conjugates for enhanced delivery of pharmaceuticals.

1. Trademark of Dendritic Nanotechnologies, Inc. subsidiary of Starpharma, Melbourne, Australia
2. Trademark of Qiagen, AG, Germany, EU.
3. Trademark of EMD Merck, Germany, EU.
4. Trademark of Siemens, Germany, EU.
5. Trademark of Starpharma, Ltd., Australia.

MAJOR PROFESSIONAL CONTRIBUTIONS

1. Published over 242 papers in the areas of dendrimers, dendritic polymers, dendrigrfts, random hyperbranched, oxazoline and functionalized/heterocyclic polymers.
2. Inventor or co-inventor of over 128 U.S. patents.
3. Author of a chapter entitled: "Functional Heterocyclic Monomers" - Marcel Dekker (1974) in *Functional Monomers*, Vol. 2 - Yocum and Nyquist (editors).
4. Author of a chapter entitled: "Alkyleneimine Polymers" - J. Wiley and Sons, N.Y. (1985) in *Encyclopedia of Polymer Science* - Overberger, Marks, Bikales (editors).
5. Author of chapter entitled "Dendritic Macromolecules" - J. Wiley and Sons, N.Y. (1990) in *Encyclopedia of Polymer Science* - Overberger, Marks, Bikales (editors).
6. Author of chapter entitled: "Poly(amines)," Marcel Dekker (1989) in *Handbook of Polymer Synthesis* - Kricheldorf (editor).
7. Author of chapter entitled: "STARBURST® Dendrimers: Size, Shape and Surface Control of Macromolecules" in *Frontiers of Macromolecular Science, 32nd IUPAC Proceedings*, - Blackwell Publications (1989) p. 207-211, T. Saegusa, T. Higashimura, A. Abe (editors).
8. Author of review article entitled: "STARBURST® Dendrimers: Control of Size, Surface and Shape at the Molecular Level" in *Angewandte Chemie Int. Ed.*, 29, (2), 138 (1990).
9. "Genealogically Directed Synthesis: STARBURST®/Cascade Dendrimers and Hyperbranched Structures"; D.A. Tomalia, H.D. Durst; *Topics in Current Chemistry Vol. 165: Supramolecular Chemistry I - Directed Synthesis and Molecular Recognition*; 193-313 (1993); E. Weber (editor), Springer-Verlag Berlin Heidelberg.
10. "Dendrimers and Other Dendritic Polymers," (D.A. Tomalia, J.M.J. Fréchet, eds.) J. Wiley & Sons Ltd., West Sussex (2001).
11. "In Quest of a Systematic Framework for Unifying and Defining Synthetic Nanoscience,"

- D.A. Tomalia, *J. of Nanoparticle Research*, 11, 1251-1310 (2009).
12. "Dendrimers, Dendrons and Dendritic Polymers: Discovery, Applications, the Future," D.A. Tomalia, J.B. Christensen and U. Boas, Cambridge University Press (2012).

OTHER INVITED PROFESSIONAL CONTRIBUTIONS

Television documentary segment entitled: "New Molecular Architecture and Engineering" for British Broadcasting Corporation (BBC) - T. Jolly and A. Bassingdale (Producers), released in 1991. Annual television audience >2,000,000.

"Killer Viruses", De Ontdekking/The Discovery, VARA (Dutch Interview filmed in Mt. Pleasant, MI) aired November 30, (2001) <http://www.vara.nl/ontdekking>.

Television documentary segment entitled: "The Man Who Loved Trees," BBC, 2002.

OUTSIDE FEATURE ARTICLES

1. "STARBURST® Dendrimers and Arborols" - *Nach. Chem. Tech. Lab.*, 35, Nr. 12, p. 1252-1255, Dec. (1987); author: Prof. Dr. K. Krohn, published from Weinheim, W. Germany.
2. "New Families of Multibranched Macromolecules Synthesized" - *Chemical and Engineering News*, Feb. 22, 1988, p. 19-21, author: W. Worthy.
3. "New Precision Macromolecules Inspired by Trees and Coral" - *Die Zeit*, March 30, 1988, published Hamburg, W. Germany; author: Dr. H. Shulh.
4. "Trekking in the Molecular Forest" - a feature article on STARBURST® Dendrimers; *Science News*, Vol. 138, No. 19, p. 298-300, Nov. 10, 1990; author I. Amato.
5. "Firms Scramble for Macromolecules" - *Chemistry & Industry* (Great Britain) April 15, 1991, p. 268-269; author: J. Alper.
6. "Rising Chemical 'Stars' Could Play Many Roles" - *Science*, Vol. 251, Mar. 29, 1991, p. 1562-1564; author: J. Alper.
7. "STARBURST® Polymers" - *Mechanical Engineering*, Vol. 113, No. 8 Aug. (1991), 60-63.
8. "Monster Molecule Synthesis Tamed" - *Research & Dev. Magazine*, Aug. (1991), 90.
9. "STARBURST® Dendrimers: Molecular-level Control of Size, Shape, Surface Chemistry, Topology and Flexibility" - Chemistry Hot Paper (1991), - *The Scientist*, Oct. 28, (1991), p. 16.
10. "Meet the Molecular Superstars" - *New Scientist Magazine*, Nov. 23, (1991), p. 30-34, (Great Britain).
11. "Dendrimers--Materials by Design" - *Compressed Air Magazine*, June (1992), p. 12-17.
12. "A Sticky Wicket: Conjuring up Formulas for Sealants," *The New York Times*, January 3, (1993).
13. "Novel, Highly Branched Polymers Could be Headed to Market," *Chemical Week*, April 14, (1993), p. 32.
14. "Dendrimers Branch Out into the Marketplace," *Chemical Engineering*, November (1993), p. 51.
15. "Dendrimers: Dream Molecules Approach Real Applications," *Science*, 267, 458, 27 January (1995).
16. Korean Dendrimer article, *Shisa Journal*, February 23, 1995, p. 86.
17. "A Molecule Made to Order," *The Detroit News*, 1E, November 27, (1995).
18. "Dendritech," *Chemical Week*, December 20/27, (1995), p. 39.
19. "Branching Out," *The Dallas Morning News*, 6D, January 1, (1996).
20. "Treelike Molecules Branch Out," *Science News*, 149 (2), 17-32, January 13, (1996).
21. "Molecule Maker," *The Bay City Times*, C1, February 20, (1996).

22. "Persistent Inventor Markets a Molecule," *The Wall Street Journal*, B1, February 26, (1996).
23. "Electronic Dendrimers Built," *Electronic Engineering Times*, 35, March 25, (1996).
24. "Michigan 'Tree Farmer' Makes Mark in Science by Creating New Molecule," *The Ann Arbor News*, C1, March 28, (1996).
25. "Spheres of Influence," *Corporate Detroit*, 14(9), 23-27, September (1996).
26. "Marvel of Man-made Molecules," *The Scotsman*, p. 31, September 9, (1996).
27. "Dendrimers May Change Your Life; First Man-Made 3D Molecule," *Advanced Materials Newsletter*, 18(18), Issue #409, September 23, (1996).
28. "Tomalia 'Branches' Art, Science," *Midland Daily News*, A1, October 3, (1996).
29. "For Scientist, a 'Molecular Tree' Grows in Midland," *Saginaw News*, B1, October 11, (1996).
30. "New Molecule Could Help Environmental Efforts," *Chemecology*, 25 (8), p. 9, October (1996).
31. "MMI Wins Army Research Laboratory Contract for Dendrimer Research," *Polymer News*, 22, 80 (1997).
32. "Shaping Synthetic Metals," C. Wu, *Science News*, 151 (25), 384-385 (21 June 1997).
33. "MMI is Fighting War for the Future," *Midland Daily News*, A1, July 1, (1997).
34. "Just One Word: Dendrimers," *Midland Daily News*, A6, July 20, (1997).
35. "Our Bodies as Battlegrounds," *The Saginaw News*, B2, August 3, (1997).
36. "Midland Project Could Help Fight Biological War," *The Bay City Times*, B2, August 24, (1997).
37. "Delving into Dendrimers," S.C. Stinson, *Chemical & Engineering News*, 75 (38), 28-30 (22 September 1997).
38. "Dendrimers and Dendrons: Controlled Macromolecular Structure According to Dendritic Branching Rules and Principles", D.A. Tomalia, *Leonardo*, 30 (4), 277-278 (1997).
39. "Donald A. Tomalia – Personal Chemistry," D.A. Tomalia, *Chemistry & Industry*, 17, 676, (7 September 1998).
40. "MMI Makes Discovery Involving Dendrimers," *Midland Daily News*, 141, A1, February 7, (1999).
41. "Jewel-Studded Molecular Trees," *Chemical & Engineering News*, 77(6), 33-36, Feb. 8, (1999).
42. "Duo Finds a Behemoth in the Quest for Smallness," *Saginaw News*, A1, February 10, (1999).
43. "Tiny 'Trees'," *Saginaw News*, D1, February 10, (1999).
44. "Dendrimeren, The Beginning of Chemistry," *Chemisch Weekblad*, 15-17, July 17, (1999).
45. "Blossoming of Dendrimers," *Chemical & Engineering News*, 77(44), 27-35, November 1, (1999).
46. "Imaging in 2020: Seeing is Believing," *Chemical & Engineering News*, 77(45), 30-35, November 8, (1999).
47. "The War on Disease Goes Miniature," *Newsweek*, C. Kalb, 89, January 1, 2000.
48. "Nanomedicine Nears the Clinic," *Technology Review*, D. Voss, 60-65, Jan/Feb 2000.
49. "Dendritech Up for Sale," *Midland Daily News*, C. Wade, January 10 (2000).
50. "Dendrimer Nanocomposites – A Revolution of Nanoscale Proportions," L. Balogh, D.A. Tomalia, G.L. Hagnauer, *Chemical Innovation*, 30(3), 19-26, (2000).
51. "Dow Buys Back Dendritech Assets," *Midland Daily News*, C. Wade, A3, March 31 (2000).
52. "'Decoy' Cells Attract, Disarm Viruses Before Infection Occurs Tiny Molecules Act Like Flypaper", *ACS Press Release*, American Chemical Society Meeting, Washington, D.C., August 22, 2000.
53. "Spherical Polymers Bearing Decoy Receptors Can Block Virus-Cell Interaction,"

- Reuters Medical News*, T. Zwillich, August 24 (2000).
54. "Tiny, Man-Made Decoys Outsmart, Disable Viruses," *WebMD Medical News*, L. Maltin, August 25 (2000).
 55. "Stop that Virus," *New Scientist*, A. Cho, 20, August 26 (2000).
 56. "The Future of Drugs Is . . . Exceedingly Tiny?" *Business Week Online*, A. Hall, August 28 (2000).
 57. "Multivalency: Strength in Numbers," *C & EN*, S. Borman, 48-53, October 9, (2000).
 58. "Renowned Molecular Scientist Locating at CMU," *Centraline*, 1, August 27, (2001).
 59. "Dendrimer's Dad Thinks He's Finally Tamed The Money-Munching Molecule" J. Fried, *Smalltimes*, July 26, (2001).
 60. "World-renowned Leader in Biotechnology at CMU," *Science & Tech. Spectrum*, 5(1), Fall (2001).
 61. "Molecular Researcher", *Centralight*, 72, 28, Winter (2002).
 62. "Nanotech Target a Good Idea, Says U.S. Visitor," *Australian Innovation Magazine*, 7, 15, March-May (2002).
 63. "Researcher Says Molecule has Endless Possibilities," *Central Michigan Life*, 72, September 16, (2002).
 64. "Nano-trio sets great store by thinking little" A. Gome, <http://www.brw.com.au>, March 16, (2002).
 65. "\$3.5 Million for CMU in Defense Act," *Midland Daily News*, October 24, (2002).
 66. "U.S. Army Money Could Lead to Surge of Research," *Morning Sun*, 25(205), 1, Nov. 1-2, (2002).
 67. "CMU Get \$3.5 Million for Biotech Research," *InsideCMU*, 1, November 4, (2002).
 68. "Miracle Molecule," *The Saginaw News*, 1, November 24, (2002).
 69. "Dendrimer Creator, CMU to Revolutionize Public, Private Industry," <http://www.newswise.com/articles/2002/12/BIOTECH.CMU.html?sc=wire>, December 4, (2002).
 70. "Dendrimer Scientist, Detroit Businesswoman Pegged as Saturday's Commencement Speakers," *Inside CMU*, December 9, (2002).
 71. "CMU Gets Grant for Nanotechnology," *Midland Daily News*, B5, December 10, (2002).
 72. "CMU, Government and Scientists Collaborate to Develop Biotechnology Applications," *Michigan Front Page*, Detroit, January 17, (2003).
 73. "Michigan researchers, companies scramble to meet new homeland security demands" R. Wisely, *Michigan Small Tech*, March 24, (2003).
 74. "CMU-based dendrimer company joins government-industry coalition aiming to help soldiers survive", S. Pardo, *Michigan Small Tech*, March 31, (2003).
 75. "Building on Dendrimers," *Materials Today*, 20, April (2003).
 76. "CMU research creating coatings to combat the most dangerous chemical agents" S. Pardo, *Michigan Small Tech*, June 23, (2003).
 77. "Clinical trials put dendrimers on course for treating HIV" J. Karoub, *Smalltimes*, September/October (2003).
 78. "State Honors Dendrimer Developer at CMU for Nanotech Research and Economic Impact," Press Release, *Michigan Small Tech*, October 2, (2003).
 79. "Commercializing Nanotechnology", L. Mazzola, *Nat. Biotech*, 21(10), 1137, October (2003).
 80. "Nanochemistry Brings Big Ideas to Drug Development", A. DePalma, *Drug Discovery & Development*, 6(10), p. 47, October (2003).
 81. "CMU Wins \$3 Million in Defense Contracts," *Saginaw News*, B5, October 25, (2003).
 82. News and Views, "Supramolecular Chemistry: Fluorine Makes a Difference," D.A. Tomalia, *Nature Materials*, (2) November (2003).
 83. "Best Defined Nanostructure of the Year: The Dendrimer" D. Forman, J. Karoub, C. Stuart, *Smalltimes*, November/December (2003).
 84. Opinion, "A New Complexity," D. Tomalia, *Materials Today*, p. 72, December (2003).

85. "DNT earns two U.S. patents for dendrimers" *Inside CMU*, December 8 (2003).
86. "Branching Out in Nanotech," *Michigan Business Report*, 2(1), 16-17 (2004).
87. Tiny Nanoparticles Making Big Name for CMU, *Science & Technology Spectrum*, CMU, 8(2), 1, Spring 2005.
88. "Local Scientist Working with FDA on Regulation," C. Wade, *Midland Daily News*, A6, April 26 (2005).
89. "Dendritic Makes 'Dream Discovery'," W. Shoemaker, Vol. 148 (18), A1, May 18 (2005).
90. "Miracle Molecule," K. King, *Saginaw News*, D1, May 25 (2005).
91. "Mt. Pleasant Company Achieves Breakthrough," P. Defibaugh, *Morning Sun*, A1, May 30 (2005).
92. "Dendritic NanoTechnologies, Inc.," *Chemistry & Biology*, A. McCarthy, 12, 499-501, (2005).
93. "Company: New Technology Can Help Identify Tumors," C. Wade, *Midland Daily News*, A3, November 1, (2005).
94. "Dendrimer Nanotechnology: Emerging Applications in Commercial Biotechnology," R. Berry, *BioProcess International*, 3(11), 50-58, December (2005).
95. "Mobilizing Nanomedicine Technologies," K.J. Morrow, Jr., *Genetic Engineering News*, 25(21), 1, December (2005).
96. "Starpharma Acquires Dendritic Nanotechnologies," *Drug Discovery News*, 6, November 2006.
97. "The Yin and Yang of the Nanotech World," *X-ology*, August 13, 2007.
98. "Poised to Branch Out," V. Marx, *Nature Biotechnology*, 27(7), (2008).
99. "Ambitious Nanoscience – Distinguished CMU Dendrimer Researcher Taking World Stage", *Central Michigan University Spectrum*, 12 (1), 10-11, Spring (2009).
100. "Thomson Reuters Makes Nobel Laureate Predictions," M. Karplus, R&D, September 21, (2011).
101. "Former CMU Researcher Finalist for Nobel Prize in Chemistry," M. Ranzenberger, *The Morning Sun*, October 3, 2011.
102. "Dr. Donald A. Tomalia Receives 2012 Carothers Award," *The Midland Chemist*, 49(3), 8, June (2012).
103. "[Developing Superatom Science](#), J. Kemsley, "Chemical & Engineering News," pp. 24-25, April 15, (2013).
104. "Ten Penn Professors Named AAAS Fellows for 2016," November 21, (2016).
<https://news.upenn.edu/news/ten-penn-professors-named-aaas-fellows-2016>
105. Dr. Donald A. Tomalia Inducted as AAAS-Fellow (Feb.18, 2017).
106. "Donald A. Tomalia Named a Fellow of AAAS," *Midland Chemist*, 54(5), pp. 6-9, May (2017).

PROFESSIONAL ACTIVITIES - Invited Lectures

1. **Japan Society of Polymer Science – International Colloquium**; "Advances in Oxazoline Chemistry," Kyoto University, Kyoto, Japan, August 1977.
2. **Japan Synthetic Rubber Company**, "Advances in Oxazoline Chemistry," Yokohoma, Japan, August 1977.
3. **Bucknell University**, Department of Chemistry, "Recent Advances in Oxazoline Chemistry," Lewisburg, PA, February 1978.
4. **Japan Society of Polymer Science – "5th International Cationic Polymerization Symposium," "Cationic Polymerization of Heterocyclic Systems,"** Kyoto University Japan, May 1980.
5. **American Chemical Society**, 14th Central Regional Meeting, "2-Oxazolines as Chemical Equivalents for Aziridine," Midland, Michigan, June 1982.

6. **Flory-Pauling Macromolecular Conference (Gordon Conference)** – Frontiers in Synthetic Polymer Chemistry, "Starburst® Macromolecules," Santa Barbara, CA, January 1983.
7. **Akron Polymer Lecture Series**, "A New Class of Polymers: Starburst®/Dendritic Macromolecules," Akron, OH, April 1984.
8. **American Chemical Society Great Lakes/Central Regional Meeting**, "A New Class of Polymers: Starburst®/Dendritic Macromolecules," Kalamazoo, MI, May 1984.
9. **Japan Society of Polymer Science** – "1st International Polymer Conference," "A New Class of Polymers: Starburst®/Dendritic Macromolecules," Kyoto University, Japan, August 1984.
10. **Asahi Chemical Company**, "A New Class of Polymers: Starburst®/Dendritic Macromolecules," Tokyo, Japan, August 1984.
11. **Japan Synthetic Rubber Company**, "A New Class of Polymers: Starburst®/Dendritic Macromolecules," Yokohama, Japan, August 1984.
12. **Toray Chemical Company**, "A New Class of Polymers: Starburst®/Dendritic Macromolecules," Kyoto, Japan, August 1984.
13. **Fuji Film Company**, "A New Class of Polymers: Starburst®/Dendritic Macromolecules," Odarwa, Japan, August 1984.
14. **University of Michigan**, Randall Laboratories, Department of Physics, "Fractal Character and Symmetry Properties of STARBURST® Dendrimers," Ann Arbor, MI, October 1984.
15. **The 1984 International Chemical Congress of Pacific Basin Societies** (U.S., Japan, Canada), "Highly Branched Systems Involving Oxazolines," Honolulu, HI, December 1984.
16. **U.S. Army Chemical Research Development Center**, "A New Class of Polymers: Starburst®/Dendritic Macromolecules," Aberdeen Proving Ground, MD, May 1985.
17. **6th Biennial Carl S. Marvel Symposium** – Advances in Synthetic Polymer Chemistry, "A New Class of Polymers: Starburst®/Dendritic Macromolecules," Tucson, AZ, March 1985.
18. **Cornell University**, National Submicron Laboratory, "Starburst® Dendrimers: Direct Observation of Molecules by Electronmicroscopy," Ithaca, NY, July, 1985.
19. **Michigan State University**, Department of Chemistry, "A New Class of Polymers: Starburst®/Dendritic Macromolecules," East Lansing, MI, October 1985.
20. **Eastman-Kodak Company**, Weissberger-Williams Lecture Series, "A New Class of Polymers: Starburst®/Dendritic Macromolecules," Rochester, NY, November 1985.
21. **Proctor & Gamble Company**, Miami Valley Research Laboratories, "A New Class of Polymers: Starburst®/Dendritic Macromolecules," Cincinnati, OH, January 1986.
22. **University of Chicago**, Department of Chemistry, "Starburst®/Dendrimers: Construction of Precision Macromolecules," Chicago, IL, February 1986.
23. **PPG Industries**, R&D Laboratories, "A New Class of Polymers: Starburst®/Dendritic Macromolecules," Barberton, OH, March 1986.
24. **Scripps Institute**, Department of Molecular Biology, "Starburst®/Dendrimers: Control of Size, Surface and Shape and the Molecular Level," LaJolla, CA, June 1986.
25. **DARPA Materials Research Council Conference**-Molecular Self Organizations, "A New Class of Polymers: Starburst®/Dendritic Macromolecules," LaJolla, CA, July, 1986.
26. **Technology Catalysts, Inc.**, "A New Class of Polymers: Starburst®/Dendritic Macromolecules," Washington, DC, August 1986.
27. **DuPont Company**, Central Research Labs, "A New Class of Polymers: Starburst®/Dendritic Macromolecules," Wilmington, DE, September 1986.
28. **California Institute of Technology**, Department of Chemistry, "A New Class of Polymers: Starburst®/Dendritic Macromolecules," Pasadena, CA, October 1986.
29. **Lawrence Livermore National Laboratories**, "A New Class of Polymers: Starburst®/Dendritic Macromolecules," Livermore, CA, October 1986.
30. **3M Corporation**, Central Research Labs, "Starburst®/Dendrimers: Control of Size,

- Surface and Shape and the Molecular Level," Minneapolis/St. Paul, MN, November 1986.
31. **University of Massachusetts**, Department of Polymer Science, "Starburst® Dendrimers: Building Blocks for the Construction of "Starburst® Polymers," Amherst, MA, December 1986.
 32. **Institute de Charles Sadron**, (a) "Synthetic Polymers Derived from Oxazolines" and (b) "Starburst® Dendrimers: Construction of Precision Macromolecules," Strasbourg, France, April, 1987.
 33. **Merrell-Dow Research**, R&D Laboratories, "Starburst® Dendrimers: Control of Size, Surface and Shape and the Molecular Level," Strasbourg, France, April 1987.
 34. **College de France**, "Starburst® Dendrimers: Control of Size, Surface and Shape and the Molecular Level," Paris, France, April 1987.
 35. **Bürgenstock EUCHEM Conference on Stereochemistry**, "Starburst® Dendrimers: Control of Size, Surface and Shape and the Molecular Level," Bürgenstock, Switzerland, May 1987.
 36. **Gordon Research Conference**, Micellar and Macromolecular Catalysis, "Starburst® Dendrimers: Covalently Fixed Unimolecular Assemblages Reminiscent of Spherical Molecules," Plymouth College, Plymouth, NH, July 1987.
 37. **Michigan State University**, Department of Chemistry, "Starburst® Dendrimers: Control of Size, Surface and Shape and the Molecular Level," E. Lansing, MI, October 1987.
 38. **University of Michigan**, Department of Macromolecular Science, "Starburst® Dendrimers: Building Blocks for the Construction of Uniform Domain Macromolecular Assemblies," Ann Arbor, MI, October 1987.
 39. **Columbia University**, Department of Chemistry, "Starburst® Dendrimers: Control of Size, Surface and Shape and the Molecular Level," New York, NY, October 1987.
 40. **American Chemical Society**, 20th Central Regional Meeting, "Starburst® Dendrimers: Control of Size, Surface and Shape and the Molecular Level," Univ. of W.Va., June, 1988.
 41. **Gordon Research Conference**, Polymers, "Starburst® Dendrimers: Building Blocks for the Construction of Uniform Domain Macromolecular Assemblies," Colby College, NH, June 1988.
 42. **ETH**, Pino Symposium, "Starburst® Dendrimers: Building Blocks for the Construction of Uniform Domain Macromolecular Assemblies," Zurich Switzerland, July 1988.
 43. **Japan Synthetic Rubber**, Central Research Laboratory, "Starburst® Dendrimers: Construction of Uniform Domain Macromolecular Assemblies," Yokohama, Japan, August 1988.
 44. **Mitsubishi Chemical Co.**, Corporate R&D, "Starburst® Dendrimers: Building Blocks for the Construction of Uniform Domain Macromolecular Assemblies," Tokyo, Japan, August 1988.
 45. **Suntory Research Institute**, (Prof. K. Nakanishi, Director), "Starburst® Dendrimers: Control of Size, Surface and Shape and the Molecular Level," Osaka, Japan, August 1988.
 46. **IUPAC Macro 88**, Polymer Symposium, "Starburst® Dendrimers: Building Blocks for the Construction of Uniform Domain Macromolecular Assemblies," Kyoto, Japan, August 1988.
 47. **Unitika Corporation**, Central Research Laboratories, "Starburst® Dendrimers: Control of Size, Surface and Shape and the Molecular Level," Osaka, Japan, August 1988.
 48. **Central Michigan University**, Department of Chemistry, "Starburst® Dendrimers: Control of Size, Surface and Shape and the Molecular Level," Mt. Pleasant, MI, September 1988.
 49. **Syracuse University**, Department of Chemistry, "Starburst® Dendrimers: Control of Size, Surface and Shape and the Molecular Level," Syracuse, NY, October 1988.
 50. **Rensselaer Polytechnic**, Department of Chemistry, "Starburst® Dendrimers: Control of Size, Surface and Shape and the Molecular Level," Albany, NY, October 1988.
 51. **Rutgers University**, Department of Chemistry, "Starburst® Dendrimers: Control of

- Size, Surface and Shape and the Molecular Level," New Brunswick, NJ, November 1988.
52. **Mobil R&D**, Central Research, "Starburst® Dendrimers: Control of Size, Surface and Shape and the Molecular Level," Princeton, NJ, November 1988.
 53. **Armstrong World Industries**, R&D Laboratories, "Starburst® Dendrimers: Control of Size, Surface and Shape and the Molecular Level," Lancaster, PA, November 1988.
 54. **Squibb Pharmaceutical**, R&D Laboratories, "Starburst® Dendrimers: Control of Size, Surface and Shape and the Molecular Level," New Brunswick, NJ, November 1988.
 55. **Ohio State University**, Department of Chemistry, "Starburst® Dendrimers: Control of Size, Surface and Shape and the Molecular Level," Columbus, OH, March 1989.
 56. **Columbia University**, Langmuir Conference, "Starburst® Dendrimers: Covalently Fixed Unimolecular Assemblages Reminiscent of Spherical Molecules," New York, NY, May 1989.
 57. **Kyushu University**, Department of Chemistry, "Starburst® Dendrimers: Control of Size, Surface and Shape and the Molecular Level," Fukuoka, Japan, March 1989.
 58. **Kunitake Institute of Molecular Architecture**, "Starburst® Dendrimers: Control of Size, Shape, Surface, Topology and Flexibility at the Molecular Level," Fukuoka, Japan, March 1989.
 59. **Kyoto University**, Department of Engineering and Science, "Starburst® Dendrimers: Control of Size, Surface and Shape and the Molecular Level," Kyoto, Japan, March 1989.
 60. **The Dow Chemical Company**, Texas Division Organic Symposium, Plenary Lecture, "Starburst® Dendrimers: Control of Size, Surface and Shape and the Molecular Level," Freeport, TX, June 1989.
 61. **American Cyanamid**, 14th Cyanamid Polymer Workshop, Plenary Lecture, "Starburst® Dendrimers: Control of Size, Surface and Shape and the Molecular Level," Park Ridge, NJ, October 1989.
 62. **U.S. Army Chemical R&D and Engineering Conference on Chemical Defense Research**, Plenary Lecture, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topology and Flexibility from Atoms to Macroscopic Matter," Edgewood, MD, November 1989.
 63. **National Academy of Science Committee: Strategic Planning and Development**, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topology and Flexibility from Atoms to Macroscopic Matter," Washington, DC, November 1989.
 64. **NEDO Global Research Team**, Second Workshop, Chairman, "New Macromolecular Architecture in COMBBURST™ Systems," Maui, HI, December 1989.
 65. **Dupont Company**, Central Research, "Mimicry of Atomic Architecture at the Molecular Level," Wilmington, DE, March 1990.
 66. **199th National American Chemical Society Meeting**, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topology and Flexibility from Atoms to Macroscopic Matter," Boston, MA, April 1990.
 67. **22nd American Chemical Soc.**, Great Lakes Regional Meeting, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topology and Flexibility from Atoms to Macroscopic Matter," University Center, MI, June 1990.
 68. **University of South Dakota**, School of Mines and Technology, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topology and Flexibility from Atoms to Macroscopic Matter," Rapid City, SD, July 1990.
 69. **33rd IUPAC Conference**, Macromolecules, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topology and Flexibility from Atoms to Macroscopic Matter," Montreal, Canada, July 1990.
 70. **NEDO Global Research**, 3rd Workshop, "COMBBURST™ Dendrimers A New Macromolecular Architecture," Marburg, Germany, September 1990.
 71. **Marburg University**, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topology and Flexibility from Atoms to Macroscopic Matter," Marburg, Germany, September 1990.
 72. **University of Toronto**, "Starburst® Dendrimers: Control of Size, Shape, Surface,

- Chemistry, Topolgy and Flexibility from Atoms to Macroscopic Matter," Toronto, Canada, October 1990.
73. **Xerox (Canada)**, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topolgy and Flexibility from Atoms to Macroscopic Matter," Mississauga, Ontario, Canada, October 1990.
 74. **A.T. & T. Bell Labs**, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topolgy and Flexibility from Atoms to Macroscopic Matter," Murray Hill, NJ, November 1990.
 75. **Air Products Corp.**, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topolgy and Flexibility from Atoms to Macroscopic Matter," Allentown, PA, January 1991.
 76. **Queen's College**, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topolgy and Flexibility from Atoms to Macroscopic Matter," Queens, NY, March 1991.
 77. **Columbia University**, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topolgy and Flexibility from Atoms to Macroscopic Matter," New York, NY, March 1991.
 78. **Cornell University**, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topolgy and Flexibility from Atoms to Macroscopic Matter," Ithaca, NY, April 1991.
 79. **Cytogen Corporation**, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topolgy and Flexibility from Atoms to Macroscopic Matter," Princeton, NY, April 1991.
 80. **Moretonhampstead High Polymer Conference**, "STARBURST® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topolgy and Flexibility from Atoms to Macroscopic Matter," Moretonhampstead, UK, May 1991.
 81. **Tanaguchi Conference**, Precision Macromolecular Architecture, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topolgy and Flexibility from Atoms to Macroscopic Matter," Kyoto, Japan, May 1991.
 82. **NEDO Global Research Conference** – Final Summary, "COMBBURST™ and Porcupine Dendrimers," Kyoto, Japan, May 1991.
 83. **Unitika Corporation**, "Recent Advances in Starburst® Chemistry," Uji, Japan, May 1991.
 84. **Great Lakes Polymer Conference**, AKZO Research Center, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topolgy and Flexibility from Atoms to Macroscopic Matter," Birmingham, MI, June 1991.
 85. **European Research Conference**, "Supramolecular Chemistry", J.M. Lehn – Organizer, "Supramolecular Aspects of Starburst® Dendrimers Chemistry," Strasbourg, France, July 1991.
 86. **Abbott Research Labs**, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topolgy and Flexibility from Atoms to Macroscopic Matter Biomedical Aspects," Chicago, IL, August 1991.
 87. **French Chemical Society**, High Polymers Conference, "Starburst® Dendrimers and Macromolecular Architecture," Strasbourg, France, September 1991.
 88. **Guerbet, Inc.**, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topolgy and Flexibility from Atoms to Macroscopic Matter," Paris, France, September 1991.
 89. **Johnson-Johnson Laboratories**, "STARBURST® Dendrimers as Unimolecular Compartments for Controlled and Targeted Delivery," New Brunswick, NJ, October 1991.
 90. **Estée Lauder Corp.** Laboratories, "Starburst® Dendrimers as Unimolecular Compartments for Controlled and Targeted Delivery," Melville, NY, October 1991.
 91. **Bristol Myers-Squibb Laboratories**, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topolgy and Flexibility from Atoms to Macroscopic Matter – Biomedical Aspects," Princeton, NJ, November 1991.

92. **Federation of Society for Coatings Technology**, "Starburst® Dendrimers Macromolecular Architecture," Toronto, Canada, November 1991.
93. **Baxter Diagnostics**, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topolgy and Flexibility from Atoms to Macroscopic Matter – Biomedical Aspects," Miami, FL, January 1992.
94. **Florida Advanced Materials Chemistry Conference**, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topolgy and Flexibility from Atoms to Macroscopic Matter," Palm Coast, FL, February 1992.
95. **Rohm & Haas Laboratories**, "Starburst® Dendrimers and New Macromolecular Architecture," Spring House, PA, February 1992.
96. **Delta College**, "Starburst® Dendrimers: Control of Size, Shape and New Macromolecular Architecture," University Center, MI, February 1992.
97. **Argonne National Labs**, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topolgy and Flexibility from Atoms to Macroscopic Matter – Biomedical Aspects," Argonne, IL, March 1992.
98. **203rd American Chemical Society National Meeting**, "COMBBURST™ Dendrimers – A New Macromolecular Architecture," San Francisco, CA, April 1992.
99. **Molecular Biosystems, Inc.**, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topolgy and Flexibility from Atoms to Macroscopic Matter – Biomedical Aspects," San Diego, CA, April 1992.
100. **Scripps Research Institute**, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topolgy and Flexibility from Atoms to Macroscopic Matter – Biomedical Aspects," LaJolla, CA, April 1992.
101. **California Institute of Technology**, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topolgy and Flexibility from Atoms to Macroscopic Matter – Advanced Materials Aspects," Pasadena, CA, April 1992.
102. **University of Southern California**, "Starburst® Dendrimers: Control of Size, Shape, Surface, Chemistry, Topolgy and Flexibility from Atoms to Macroscopic Matter," Los Angeles, CA, April 1992.
103. **24th Reaction Mechanisms Conf.**, University of Maine, "Sterically Induced Stoichiometries (SIS) of Starburst®/Cascade Dendrimer Surfaces," Orono, ME, June, 1992.
104. **1992 OGAMM Meeting**, (U.S. Air Force Research), "Starburst® Dendrimers: Building a New Nanoscopic Chemistry Set," San Diego, CA, July 1992.
105. **Emory University**, "Starburst® Dendrimers: Fundamental Building Blocks for a New Nanoscopic Chemistry Set," Atlanta, GA, October 1992.
106. **Royal Dutch and Belgium (Flemisch) Chemical Society Symposium**, "Starburst®/Cascade Dendrimers Fundamental Building Blocks for a New Nanoscopic Chemistry Set," Antwerp, Belgium, November 1992.
107. **Koninklijke/Shell-Laboratorium Research**, "Starburst®/Cascade Dendrimers Fundamental Building Blocks for a New Nanoscopic Chemistry Set," Amsterdam, The Netherlands, November 1992.
108. **University of Nijmegen**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set Fundamental Building Blocks for a New Nanoscopic Chemistry Set," Nijmegen, The Netherlands, November 1992.
109. **Eindhoven University**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set Fundamental Building Blocks for a New Nanoscopic Chemistry Set," Eindhoven, The Netherlands, November 1992.
110. **Dutch State Mines (DSM)**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set Fundamental Building Blocks for a New Nanoscopic Chemistry Set," Geleen, The Netherlands, November 1992.
111. **Aqualon**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set Fundamental Building Blocks for a New Nanoscopic Chemistry Set,"

- Wilmington, DE, December 1992.
112. **Baxter Diagnostics Inc.**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set Fundamental Building Blocks for a New Nanoscopic Chemistry Set," Miami, FL, December 1992.
 113. **Baxter Healthcare Corporation**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," Round Lake, IL, January 1993.
 114. **Unitika R & D Center**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," Kyoto, Japan, January 1993.
 115. **Japan Science Foundation**, 12th Science & Tech. Forum, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," Hikone, Japan, January 1993.
 116. **Norsk Hydro**, "Starburst® Dendrimers: Building Block in a New Nanoscopic Chemistry Set," Oslo, Norway, February 1993.
 117. **Schering AG** Germany, "Starburst® (Cascade) Dendrimers. An Overview of the Technology Applications in Medical Therapy," Berlin, Germany, March 1993.
 118. **Baxter Affinity Workshop**, "Starburst®/Cascade Dendrimers. An Overview of the Technology and Potential Application for Affinity Chromatography," Scottsdale, AZ, March 1993.
 119. **Baxter Diagnostics Inc.**, "Starburst® Dendrimers. Building Blocks in a New Nanoscopic Chemistry Set," Miami, FL, March 1993.
 120. **University of Rochester**, "Starburst® (Cascade) Dendrimers: Building a New Nanoscopic Chemistry Set," Rochester, NY, March 1993.
 121. **205th American Chemical Soc. National Meeting**, "Synthesis by the Divergent Dendron/Divergent Core Anchoring Methods," March 1993.
 122. **University of Minnesota**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," Minneapolis, MN, May 1993.
 123. **John K. Stille Symposium**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," Fort Collins, CO, June 1993.
 124. **33rd National Organic Chemistry Symposium**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," Bozeman, MT, June 1993.
 125. **Gordon Research Conference**, Organic Reactions & Processes, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," New Hampton, NH, July 1993.
 126. **Markem Corporation**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," Keene, NH, July 1993.
 127. **Japan National Patent Office**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," Tokyo, Japan, August 1993.
 128. **National Starch & Chemical Co.**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," Bridgewater, NJ, August 1993.
 129. **Unilever Research U.S., Inc.**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," Edgewater, NJ, August 1993.
 130. **Boehringer Mannheim Corporation**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," Indianapolis, IN, September 1993.
 131. **Fifth Science & Technology Conference**, Baxter Healthcare Corporation, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," Anaheim, CA, September 1993.
 132. **Frontiers in Polymerization International Conference, University of Liège**, "New Macromolecular Architecture: Building Blocks for a Nanoscopic Chemistry Set," Liège, Belgium, October 1993.
 133. **European Patent Office**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," Munich, Germany, October 1993.
 134. **Boehringer Mannheim GmbH**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," Penzberg, Germany, October 1993.

135. **Japan National Patent Office**, "Were Cascade Polymers Ever Synthesized? Reexamination of the Vögtle Process," Tokyo, Japan, December 1993.
136. **ICI - The Glidden Company**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," Strongsville, OH, March 1994.
137. **Akron Polymer Lecture**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," Akron, OH, March 1994.
138. **U.S. Patent Academy**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," Washington, DC, March 1994.
139. **Wright Patterson AFB**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," Wright Patterson AFB, OH, March 1994.
140. **Revlon Research Center, Inc.**, "An Overview of Starburst®/COMBBURST Dendrimers: Potential Uses in Personal Care Applications," Edison, NJ, March 1994.
141. **S.C. Johnson Wax**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," MMI, April 1994.
142. **ILC Dover**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," MMI, May 1994.
143. **IDEXX Laboratories, Inc.**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," Westbrook, ME, May 1994.
144. **MacroAkron '94**, 35th IUPAC International Symp. On Macromolecules, University of Akron, "Genealogically Directed Polymerizations (Syntheses)," Akron, OH, July 1994.
145. **European Patent Office**, "Starburst® Dendrimers Overview," London, England, September 1994.
146. **NATO-ARW, Supramolecular Stereochemistry**, "Dendrimers – Nanoscopic Supermolecules According to Dendritic Rules and Principles," Reykjavik, Iceland, September 1994.
147. **Dendritech Scientific Advisory Board Meeting**, Dearborn, MI, "Starburst® Dendrimer Technology Overview," Dearborn, MI, September 1994.
148. **Artificial Self-Assembling Systems for Gene Transfer Conference**, "Dendrimers – Nanoscopic Supermolecules According to Dendritic Rules and Principles," Harvard Club, Boston, MA, October 1994.
149. **South Dakota State University**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," Brookings, SD, October 1994.
150. **Seaflower Associates, Inc.**, "Starburst® Dendrimers Technology Overview," Dendritech, Inc., November 1994.
151. **Life Technologies, Inc.**, "Starburst® Dendrimers: Nanoscopic Building Blocks Suitable for Gene Transfection and Other Biomedical Applications," Gaithersburg, MD, November 1994.
152. **5th SPSJ International Polymer Conference**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," Osaka, Japan, November 1994.
153. **Odajima Patent Office**, "Starburst® Dendrimer Technology Overview," Tokyo, Japan, December 1994.
154. **Columbia University**, "Starburst®/Cascade Dendrimers: Fundamental Building a New Nanoscopic Chemistry Set," New York, NY, December 1994.
155. **The Dow Chemical Co.**, "Nanoscoopic Supermolecules – Controlled Three Dimensional Dendritic Polymers," Midland, MI, January 1995.
156. **Pfizer, Inc.**, "Starburst® Dendrimers: Nanoscopic Building Blocks Suitable for Gene Transfection and Other Biomedical Applications," Groton, CT, January 1995.
157. **Asilomar Conference**, "Nanoscoptic Supermolecules – Controlled Three Dimensional Dendritic Polymers," Pacific Grove, CA, February 1995.
158. **ACS Meeting**, "Starburst® Dendrimers: Fundamental Building Blocks for a New Nanoscopic Chemistry Set," Cincinnati, OH, February 1995.
159. **Dow Corning Corporation**, "STARBURST®/Cascade Dendrimers: Fundamental Building Blocks for a New Nanoscopic Chemistry Set," Midland, MI, February 1995.

160. **Akzo Nobel**, "Starburst®/Cascade Dendrimers: Fundamental Building Blocks for a New Nanoscopic Chemistry Set," Dobbs Ferry, NY, March 1995.
161. **1st International Dendrimer Technology Workshop** Sponsored by the U.S. Army Research Office, "Dendrimer Technology – A Brief Overview and Recent Advances," Research Triangle Park, NC, March 1995.
162. **Lubrizol**, "Application of Dendrimers and Hyperbranched Polymers in Nanotribology," Wickliffe, OH, April 1995.
163. **New Organic Chemistry for Polymer Synthesis – ACS Workshop**, "Dendrimers as Nanoscopic Building Blocks: Nano-compounds and Clusters," Santa Fe, NM, May 1995.
164. **Columbia University**, "Dendrimers as Gene Transfection Agents," New York, NY, June 1995.
165. **Unilever Research U.S., Inc.**, "Dendrimers as Gene Transfection Agents," Edgewater, NJ, June 1995.
166. **Gordon Research Conference Ion Containing Polymers**, "An Overview of Starburst® Dendrimer Technology and Applications," New London, NH, July 1995.
167. **Procter & Gamble**, "An Overview of Starburst®/Combburst™ Dendrimers: Potential Uses as Scaffolding, Carriers and Compartments," Cincinnati, OH, July 1995.
168. **210th National ACS Meeting**, "Dendritic Macromolecules: A Fourth Major Class of Macromolecular Architecture," Chicago, IL, August 1995.
169. **NATO Advanced Research Workshop on Modular Chemistry**, "Dendrimers: Nanoscopic Modules for the Construction of Higher Ordered Complexity," Estes Park, CO, September 1995.
170. **Second Annual Artificial Self-Assembly Systems for Gene Transfer Conference** (Chairman), "Starburst® PAMAM Dendrimers as Synthetic Transfection Vectors – Structural Design and Strategies," Wakefield, MA, September 1995.
171. **University of Detroit**, "Dendritic Macromolecules: A Fourth New Major Class of Polymer Architecture," Detroit, MI, October 1995.
172. **Trinity College**, Dublin, Ireland, "Dendritic Macromolecules: A Fourth New Major Class of Polymer Architecture," MMI, October 1995.
173. **51st ACS Fall Scientific Mtg.** (Chairman), "Dendritic Macromolecules: A Fourth New Major Class of Polymer Architecture," Delta College, University Center, MI, November 1995.
174. **Council for the Advancement of Science Writing**, Inc., 33rd Annual New Horizons in Science Briefing, "Dendrimers: New Polymers, New Prospects," Durham, NC, November 1995.
175. **Case Western Reserve University**, "Dendritic Macromolecules: A Fourth New Major Class of Polymer Architecture," Cleveland, OH, October 1995.
176. **ICN Pharmaceuticals**, "Dendrimers and Their Biomedical Applications," Costa Mesa, CA, November 1995.
177. **Vical Inc.**, "Starburst® Dendrimers as Synthetic Gene Delivery Vectors," San Diego, CA, January 1996.
178. **Dade International**, "Overview of Starburst® Dendrimers as Biomedical Applications," Miami, FL, January 1996.
179. **Asilomar Conference**, "Dendritic Polymers: A New Class of Polymer Architecture," Pacific Grove, CA, February 1996.
180. **Monsanto**, "Dendritic: Nanoscopic Supermolecules According to Dendritic Rules & Principles," St. Louis, MO, February 1996.
181. **Guerbet**, "Dendritic Polymers: A New Class of Polymer Architecture," Paris, France, February 1996.
182. **Abbott Laboratories**, "Nanoscopic Building Blocks Suitable for Gene Transfection and Other Biomedical Applications," Abbott Park, IL, March 1996.
183. **Materials Research Society** (a) "Dendrimers – Nanoscopic Supermolecules According to Dendritic Rules & Principles" and (b) "Dendrigrfts – Nanoscopic Megamolecules: A

- New Structure Controlled Macromolecular Architecture," San Francisco, CA, April 1996.
184. **SAIC**, "Dendrons, Dendrimers and Dendrigrfts-Science, Technology and Current Applications," McLean, VA, April 1996.
 185. **Cornell** Polymer Symposium, "Dendritic Polymers: From Dendrimers to Dendrigrfts," Ithaca, NY, May 1996.
 186. **Self-Assembling Systems Conference**, "Dendrimers, Dendrigrfts and Other Dendritic Systems: Structure Controlled Architectures and Self-Assembly," Boston, MI, June 1996.
 187. **Army Research Laboratory**, "Design Preparation and Evaluation of Dendritic Polymers for Advanced Applications in Materials Science and Technology," Chestnut Run, DE, June 1996.
 188. **Patricof & Co.**, "Dendrimer Technology Overview & Commercialization," New York, NY, June 1996.
 189. **SAIC**, "Dendrimers-Science, Technology and Current Applications," McLean, VA, July 1996.
 190. **Belgian Organic Synthesis Symposium (BOSS-6)**, "Dendrons, Dendrimers and Dendrigrfts: Structure Controlled Macromolecules According to Dendritic Rules and Principles," Gent, Belgium, July 1996.
 191. **University of Leuven**, "Dendritic Macromolecules: A Fourth Major Class of Polymer Architecture," Leuven, Belgium, July 1996.
 192. **University of London**, "Dendrimers, Dendrigrfts and Other Structure Controlled Architectures and Self Assembly," London, England, July 1996.
 193. **Bisco, Inc.**, "Dendrimers, Dendrigrfts and Other Dendritic Systems: A Fourth New Major Class of Polymer Architecture," Itasca, IL, July 1996.
 194. **Second Dendritic Polymer Workshop**, "Dendritic Macromolecules – A Fourth Major Class of Polymer Architecture: New Properties Driven by Architecture," MMI, October 1996.
 195. **Virginia Polytechnic Institute & State University**, "Dendritic Macromolecules – A Fourth Major Class of Polymer Architecture: New Properties Driven by Architecture," Blacksburg, VA, November 1996.
 196. **Merck Research Laboratories**, "Dendrons, Dendrimers and Dendrigrfts: Structure Controlled Macromolecules According to Dendritic Rules and Principles," Rathway, NJ, December 1996.
 197. **Monsanto Nanotechnology Symposium**, "Dendrons, Dendrimers and Dendrigrfts: Structure Controlled Macromolecules According to Dendritic Rules and Principles," St. Louis, MO, December 1996.
 198. **Univ. of Southern California**, "The Nanochemistry of Metallodendrimers", Los Angeles, CA, February 1997.
 199. **Rhone-Poulenc Rorer**, (a) "Dendrons, Dendrimers and Dendrigrfts: Structure Controlled Macromolecules as Scaffolding/Containers for Delivery of DNA or Small Molecules," (b) "Use of Dendrimers in Combinatorial Chemistry," Collegeville, PA, February 1997.
 200. **Philadelphia Organic Chemists Club**, "Dendrons, Dendrimers and Dendrigrfts: Structure Controlled Macromolecules According to Dendritic Rules and Principles," Philadelphia, PA, February 1997.
 201. **Rutgers University**, "Dendrons, Dendrimers and Dendrigrfts: New Polymeric Architectures for Biopolymeric Applications," Piscataway, NJ, March 1997.
 202. **American Physical Society Meeting**, "Dendrons, Dendrimers and Dendrigrfts: Structure Controlled Macromolecules According to Dendritic Rules and Principles," Kansas City, MO, March 1997.
 203. **Second International Symposium on Polymer Therapeutics**, "Dendrons, Dendrimers and Dendrigrfts: Structure Controlled Macromolecules as Scaffolding/Containers for Delivery of DNA or Small Molecules," Kumamoto, Japan, April 1997.

204. **GlaxoWellcome**, "Dendrons, Dendrimers and Dendrigrfts: Structure Controlled Macromolecules as Scaffolding/Containers for Delivery of DNA or Small Molecules," Hertfordshire, UK, June 1997.
205. **College de France**, "Skeletal Macromolecular Isomerism: A Comparison of Dendritic Polymer Properties to those of Classical Macromolecular Architectures," Paris, France, June 1997.
206. **Monsanto**, "Skeletal Macromolecular Isomerism: A Comparison of Dendritic Polymer Properties to those of Classical Macromolecular Architectures," MMI, July 1997.
207. **Monsanto**, "Review of PEOX: History, Polymer Features and Benefits, etc.," MMI, August 1997.
208. **214th ACS National Meeting**, "Skeletal Macromolecular Isomerism: A Comparison of Dendritic Polymer Properties to those of Classical Macromolecular Architectures," Las Vegas, NV, September 1997.
209. **California Institute of Technology**, "The Biological and Synthetic Control of Macromolecular Structures," Pasadena, CA, September 1997.
210. **Army Research Laboratory Research Fellows**, "Skeletal Macromolecular Isomerism: A Comparison of Dendritic Polymer Properties to those of Classical Macromolecular Architectures," Aberdeen, MD, September 1997.
211. **Columbia University**, "Skeletal Macromolecular Isomerism: A Comparison of Dendritic Polymer Properties to those of Classical Macromolecular Architectures," New York, NY, October 1997.
212. **The University of Michigan**, "Skeletal Macromolecular Isomerism: A Comparison of Dendritic Polymer Properties to those of Classical Macromolecular Architectures," Ann Arbor, MI, October 1997.
213. **3rd Int. Symposium Polymer Therapeutics**, University of London, Chairman, London, England, January 1998.
214. **Swedish Patent Office**, "Evolution of Macromolecular Architecture to the Fourth New Major Class: Dendritic Polymers," Stockholm, Sweden, January 1998.
215. **UCLA**, "The Biological and Synthetic Control of Macromolecular Structures (A Comparison of Strategies)," Los Angeles, CA, February 1998.
216. **Gordon Conference on Drug Carriers in Medicine and Biology**, "Dendrons, Dendrimers and Dendrigrfts: Structure Controlled Macromolecules as Scaffolding/Containers for Delivery of DNA or Small Molecules," Ventura, CA, February 1998.
217. **W.A. Goddard Symposium**, California Institute of Technology, "Molecular Morphogenesis of Dendrimers: Periodic Propertiers Leading to Metal Nanoscomposite Constructions," Pasadena, CA, March 1998.
218. **Sun Chemical Company**, "Dendritic Macromolecules: A Fourth Major Class of Polymer Architecture - New Properties Driven by Architecture," Carlstadt, NJ, April 1998.
219. **American Society for Artificial Internal Organs (ASAIO)**, "Dendrimers as Biomaterials," New York, NY, April 1998.
220. **28th Spring Synthesis Symposium**, Ottawa-Carleton Chem. Inst., "The Biological Control and Synthetic Control of Macromolecular Structures," Ottawa, Canada, May 1998.
221. **30th ACS Central Regional Mtg.**, "Architectural Copolymers: Rod Shaped, Cylindrical Dendrimers," Cleveland, OH, May 1998.
222. **Gordon Research Conference Polymer East**, "The Role and Origin of Dendritic Archicture in Metallocene Catalyzed Polymerizations," Henniker, NH, June 1998.
223. **21st Army Science Conference**, "The Use of Dendritic Architecture for the Detection and Pacification of Biological Weapons," Norfolk, VA, June 1998.
224. **Nanotechnology for the Soldier System Conference**, "Dendritic Nanoarchitecture for the 21st Century Soldier," Cambridge, MA, July 1998.
225. **54th ACS Fall Scientific Mtg.**, Saginaw Valley State Univ., "Dendritic Polymer Technology: Past, Present and Future," University Center, MI, October 1998.

226. **Brookhaven National Lab**, "Dendritic Polymer Properties and Macromolecular Architecture," Brookhaven, NY, November 1998.
227. **Columbia University Class "Soft Condensed Matter"**, "Structure Controlled Macromolecules in the Nanoscale Region – Dendrons, Dendrimers, Tecto(dendrimer) Core-Shell Molecules," New York, NY, November 1998.
228. **Materials Research Society Fall Meeting**, "Dendritic Macromolecules: A Fourth Major Class of Polymer Architecture – New Properties Driven by Architecture," Boston, MA, December 1998.
229. **217th ACS National Mtg.**, "Core-Shell Tecto(Dendrimers): Direct Covalent Synthesis vs. Self-Assembly/Covalent Bond Formation," Anaheim, CA, March 1999.
230. **University of Amsterdam**, "Dendritic Macromolecules: A Fourth Major Class of Polymer Architecture – New Properties Driven by Architecture," Amsterdam, The Netherlands, June 1999.
231. **University of Utrecht**, "Dendritic Macromolecules: A Fourth Major Class of Polymer Architecture – New Properties Driven by Architecture," Utrecht, The Netherlands, June 1999.
232. **Eindhoven University**, "Dendritic Macromolecules: A Fourth Major Class of Polymer Architecture – New Properties Driven by Architecture," Eindhoven, The Netherlands, June 1999.
233. **1999 Macromolecular Drug Delivery Conference**, "The Use of Dendrimers in Macromolecular Delivery," Breckenridge, CO, July 1999.
234. **218th ACS National Mtg.**, "Unimolecular Regular/Inverse Micelles Based on Dendritic Architecture," New Orleans, LA, August 1999.
235. **218th ACS National Mtg.**, Young Chemists Committee, 25th Anniv. Presentation, Biotechnology in the New Millennium, "Dendritic Polymer Technology: An Enabling Science for Gene Transfection, Drug Delivery and Other Biotechnology Applications," New Orleans, LA, August 1999.
236. **Louisiana State Univ. Medical School** – Louisiana Alliance for Biotechnology, Biotechnology in the New Millennium, "Dendritic Polymer Technology: An Enabling Science for Gene Transfection, Drug Delivery and Other Biotechnology Applications," New Orleans, LA, August 1999.
237. **The 5th Int. Symposium on Polymers for Adv. Tech. (PAT-99)**, "Core-Shell Tecto(Dendrimers): A New Class of Regio-specifically Cross-linked Polymers," Tokyo, Japan, September 1999.
238. **Imaging in 2020 Conference**, "The Use of Dendrimers in Biomedical Targeting and Imaging Applications," Jackson Hole, WY, September 1999.
239. **1st International Dendrimer Symposium**, "Dendrimers as Fundamental Building Blocks for the Synthesis of Higher Ordered Complexity," Frankfurt, Germany, October 1999.
240. **Ciba**, "Dendritic Polymers: New Properties Driven by a Fourth Major Class of Polymer Architecture," Basel Switzerland, October 1999.
241. **University of Michigan**, College of Pharmacy, "The Use of Dendrimers in Macromolecular Delivery," Ann Arbor, MI, February 16, 2000.
242. **Advanced Optical Imaging For Modern Medicine & Biology II**, "Dendrimers as Nanoscale Containers and Scaffolding for Biomedical Targeting and Imaging Applications," Berlin, Germany, June 15, 2000.
243. **National Cancer Institute**, "Dendrimer-Based Nanodevices for Non-Invasive Interrogation/Therapy of Cancer," Washington, DC, June, 28, 2000.
244. **15th IUPAC Conference on Physical Organic Chemistry**, "Dendrimer as Reactive Modules for the Synthesis of New Structure Controlled, Higher Complexity—Megamers," Göteborg, Sweden, July 13, 2000.
245. **University of Michigan School of Medicine**, Nuclear Medicine Department, "Dendritic Polymers: New Properties Driven by a Fourth Major Class of Polymer Architecture," Ann

- Arbor, MI, August 29, 2000.
246. **Polycondensation 2000**, "Architecturally Driven Properties Based on the Dendritic State," Tokyo Institute of Technology, Tokyo, Japan, September 18, 2000.
 247. **2nd Nagoya RCMS Int. Conf.**, Nagoya University, "Catenation and Self Assembly of Dendrimers to Form New Nanoscale Structures: Megamers," Nagoya, Japan, September 22, 2000.
 248. **BioMEMS & Biomedical, Nanotechnology World 2000**, "Dendritic Architecture and Strategies for the Systematic Synthesis of Nanostructures," Columbus, OH, September 25, 2000.
 249. **ACS Masters Class on Nanotechnology**, "Nanomania: There's Still Room at the Bottom," Washington, DC, October 13, 2000.
 250. **University of Michigan**, College of Engineering, "Architecturally Driven Properties Based on the Dendritic State," Ann Arbor, MI, October 17, 2000.
 251. **Wayne State University**, Department of Chemistry, "Dendrimers as Macromolecular Modules for the Synthesis of New Nanoscale Structures: Megamers," Detroit, MI, November 1, 2000.
 252. **Abbott Labs**, "The Use of Dendrimers in Nanomedicine/Drug Delivery," North Chicago, IL, November 10, 2000.
 253. **Knowledge Foundation Conf.**, "The Commercialization of Controlled Polymer Synthesis, "Macromolecular Structure Control Using Dendritic Polymerization Principles," Cambridge, MA, December 4, 2000.
 254. **PACIFICHEM 2000**, "Dendrimers as Macromolecular Building Blocks for the Synthesis of New Structure Controlled Complexity - Megamers," Honolulu, HI, December 17, 2000.
 255. **221st American Chemical Society National Meeting**, "Dendrimers as Macromolecular Modules for the Synthesis of New Nanoscale Structures: Megamers," San Diego, CA, April 1, 2001.
 256. **Queensland University of Technology**, "Nanotechnology: A 21st Century Revolution," Brisbane, Australia, May 3, 2001.
 257. **Montreal 2001**, 84th CSC Conference, "Dendrimers as Macromolecular Modules for the Synthesis of New Nanoscale Structures: Megamers," Montreal, Canada, May 30, 2001.
 258. **ACS ProSpectives Conference**, Biological Applications of Nanotechnology, "Dendrimers - Synthetic Nano-Containers and Scaffolding for Biological Applications," Berkeley, CA, June 6, 2001.
 259. **Central Michigan University**, Chemistry Department, "Nanotechnology: The Role of Dendrimers in the 21st Century," Mt. Pleasant, MI, June 8, 2001.
 260. **JASON Conference (DARPA)**, "Understanding Nanoscale Rules at the Interface Between Biological and Synthetic Structures," San Diego, CA, July 10, 2001.
 261. **IBC Conference**, "Poly(amidoamine) (PAMAM) Dendrimers: From Biomimicry to Drug Delivery and Nanomedical Applications," San Diego, CA, July 17, 2001.
 262. **Gordon Research Conference**, Session Chairman: Chemistry of Supramolecules and Assemblies, New London, CT, July 29-August 3, 2001.
 263. **University of Tokyo**, "Nanoscale Rules Associated with the Self-Assembly of Dendrimers and Biological Structures," Tokyo, Japan, October 13, 2001.
 264. **2nd International Dendrimer Symposium**, "Application of Dendrimers in Nanomedicine/Drug Delivery," Tokyo, Japan, October 16, 2001.
 265. **Rohm & Haas**, "Nanotechnology: The Role of Dendrimers in the First Decade of the 21st Century," Spring House, PA, January 10, 2002.
 266. **Melbourne Club**, Nanotechnology Beyond Biotech, "Nanotechnology in the 21st Century," Melbourne, Australia, February 11, 2002.
 267. **Australian National University**, "Nanotechnology in the 21st Century," Canberra, Australia, February 13, 2002.
 268. **Integrated DNA Technologies**, "Dendrimers: An Enabling Science for Biological Applications," Coralville, IA, April 17, 2002.

269. **50th SPSJ Anniversary Memorial Meeting**, "The Role of Dendritic Polymers in the Nanotechnology Revolution," Yokohama, Japan, May 28, 2002.
270. **NANOSIG Conference**, "Dendritic Polymers an Enabling Science for Nanotechnology," San Jose, CA, October 28, 2002.
271. **Michigan State University**, "The Role of Dendritic Polymers in the Nanotechnology Revolution," E. Lansing, MI, November 15, 2002.
272. **Central Michigan University**, "Cerebral Trees," Commencement Address, Mt. Pleasant, MI, December 14, 2002.
273. **University of Washington**, "The Role of Dendritic Polymers in the Nanotechnology Revolution," January 21, 2003.
274. **Nanoventures 2003**, "Applying Dendrimer Science to Nanotechnology," Richardson, TX, February 28, 2003.
275. **University of Rochester**, "The Role of Dendritic Polymers in the Nanotechnology Revolution," Rochester, NY, April 23, 2003.
276. **Pfizer**, "Dendrimer Based Nanotechnology: Its Impact on Biology and Drug Discovery," Ann Arbor, MI, May 7, 2003.
277. **52nd Society of Polymer Science Japan (SPSJ) Annual Meeting**, The Discovery and Development of Dendrimers and Dendritic Polymers, Nagoya, Japan, May 29, 2003.
278. **European Polymer Federation (EPF03)**, Macromolecular Structure Control: Within and Beyond Dendrimers, Stockholm, Sweden, June 24, 2003.
279. **19th Royal Australian Chemical Institute Organic Conference (19RACIOC)**, Controlled Organic Nanostructures: Both Within and Beyond Dendrimers, Lorne, Victoria, Australia, July 10, 2003.
280. **Controlled Release Society's 30th Annual Meeting**, Advances in Dendrimer Based Targeting and Controlled Delivery of Therapeutics, Glasgow, Scotland, July 22, 2003.
281. **Pfizer**, "Dendrimers Based on Polyvalency," Ann Arbor, MI, August 12, 2003.
282. **3rd International Dendrimer Symposium**, Synthetic Control of Dendritic Nanostructures Both Within and Beyond Poly(amidoamine) Dendrimers, Berlin, Germany, September 20, 2003.
283. **11th Foresight Conference on Nanotechnology**, Synthetic Control of Dendritic Nanostructures Both Within and Beyond Poly(amidoamine) Dendrimers, San Francisco, CA, October 11, 2003.
284. **Procter & Gamble**, Nanotechnology: The Role of Dendrimers in the First Decade of the New Frontier, Cincinnati, OH, October 21, 2003.
285. **Columbia University**, Synthetic Control of Dendritic Nanostructures Both Within and Beyond Dendrimers, New York, NY, February 12, 2004.
286. **Columbus ACS Meeting**, Ohio State University, Synthetic Control of Dendritic Nanostructures Both Within and Beyond Dendrimers, Columbus, OH, February 25, 2004.
287. **University of Cincinnati**, Synthetic Control of Dendritic Nanostructures Both Within and Beyond Dendrimers, Cincinnati, OH, March 24, 2004.
288. **Cincinnati ACS Meeting**, Synthetic Control of Dendritic Nanostructures Both Within and Beyond Dendrimers, Miami University, Oxford, OH, March 24, 2004.
289. **227th ACS National Meeting**, Dendrimers: Birth of a Nano-Architecture Platform for a New Company, Anaheim, CA, March 29, 2004.
290. **Nanotechnology for Drug Delivery (Barnett Conference)**, Dendrimers as Nanoscale Containers/Scaffolding for Drug Delivery, Diagnostics and Nanopharmaceuticals, Philadelphia, PA April 22, 2004.
291. **Pfizer Inc.**, Dendrimer Based Nanotechnology: Its Impact on Biology, Drug Discovery and Targeted Delivery, Ann Arbor, MI, July 26, 2004.
292. **228th ACS Meeting**, Dendronization of Gold and CdSe/CdS (Core-Shell) Quantum Dots with Poly(amidoamine) PAMAM Dendrons, Philadelphia, PA, August 22, 2004.
293. **U.S. Food & Drug Administration Center for Devices and Radiological Health (FDA)**, Dendrimer Based Nanotechnology: Its Impact on Biology, Drug Discovery and

- Targeted Therapy, White Oak Laboratory, Silver Spring, MD September 15, 2004.
294. **Australian Society for Microbiology National Conference 2004 (ASM2004)**, From Atoms to Mega-Molecules to the Petri Dish: Dendrimer-Based Nanotechnology, the Next Frontier, Sydney, Australia, September 30, 2004.
 295. **Crossover 2004 Conference**, Penn State University, Dendrimer Based Nanotechnology: Its Impact on Biology, Pharma Delivery, MRI Imaging and Polyvalent/Targeted Therapies, State College, PA, October 20, 2004.
 296. **General Electric Company**, Dendrimer Based Nanotechnology: Its Impact on Biology, Pharma Delivery, MRI Imaging and Polyvalent/Targeted Therapies, Niskayuna, NY, November 3, 2004.
 297. **University of Malaga**, Dendrimer Based Nanotechnology: Its Impact on Biology, Pharma Delivery, MRI Imaging and Polyvalent/Targeted Therapies, Malaga, Spain, November 15, 2004.
 298. **University of Sevilla**, Dendrimer Based Nanotechnology: Its Impact on Biology, Pharma Delivery, MRI Imaging and Polyvalent/Targeted Therapies, Sevilla, Spain, November 17, 2004.
 299. **U.S. Food & Drug Administration Workshop** – “The Use of Nanotechnology in New Drug Development,” University of Maryland, Rockville, MD, March 24, 2004.
 300. **Case Fellowship**, Dendrimer Based Nanotechnology: Its Impact on Human Health, Environment, Energy, Communication and Advanced Materials, Mount Pleasant, MI, May 16, 2005.
 301. **Fourth International Dendrimer Symposium (IDS-4)**, Organizers: D.A. Tomalia, J.F. Frechet, F. Stoddart, Mt. Pleasant, MI, May 18-21, 2005.
 302. **Atlantic Nano Forum**, Dendrimer Based Nanotechnology: Its Impact on Human Health, Environment, Energy, Communication and Advanced Materials, Alexandria, VA, May 26, 2005.
 303. **University of Utrecht**, “Dendronized of Gold and CdSe/CdS Quantum Dots with PAMAM and Poly(ether) Dendrons,” Utrecht, The Netherlands, June 13, 2005.
 304. **University of Eindhoven**, “Emergence of a New Macromolecular Architecture: Dendrimers as Quantized Building Blocks for Nanoscale Synthetic Polymer Chemistry,” Eindhoven, The Netherlands, June 14, 2005
 305. **University Nijmegen**, “Emergence of a new Macromolecular Architecture: Dendrimers as Quantized Building Blocks for Nanoscale Synthetic Polymer Chemistry,” Nijmegen, The Netherlands, June 14, 2005.
 306. **University of Eindhoven**, “Dendronized of Gold and CdSe/CdS Quantum Dots with PAMAM and Poly(ether) Dendrons,” Eindhoven, The Netherlands, June 15, 2005.
 307. **Michigan State University – Dow/Karabatsos Lecture Series**, “Emergence of a New Macromolecular Architecture: Dendrimers as Quantized Building Blocks for Nanoscale Synthetic Chemistry,” E. Lansing, MI, September 23, 2005.
 308. **Nanomedicine: Commercializing Drug Discovery, Delivery and Diagnostics**, “Dendrimer-Based Bio-Nanotechnology: Its Impact on Biology, Pharma Delivery, MRI Imaging and Polyvalent/Targeted Therapies,” Cambridge, MA, October 4, 2005.
 309. **Ventana Medical Systems, Inc.**, “Dendrimer Based Nanotechnology: Its Impact on Biology, Pharma Delivery, MRI Imaging and Polyvalent/Targeted Therapies,” Tucson, AZ, January 10, 2006.
 310. **BIO 2006 Annual International Convention**, “A Multi-Purpose Nanoscale Dendrimer Platform for Early Detection and Treatment of Ovarian Cancer,” Chicago, IL, April 10, 2006.
 311. **Nanotechnology in Pharmaceuticals and Biotech**, “Determining the Impact of Dendrimer-Based Bio-nanotechnology,” Amsterdam, NL, April 26, 2006.
 312. **Nanotrends 2006**, “Dendrimer-Based Nanotechnology: Its Impact on Biology, Pharma Delivery, MRI Imaging and Polyvalent/Targeted Therapies,” Potsdam, Germany, May 10, 2006.

313. **89th Canadian Chemistry Conference**, "Dendrons/Dendrimers as Reactive Quantized Building Blocks for Nanoscale Organic Synthesis," B. Huang, V.R. Pulgam, D.R. Swanson, D.A. Tomalia, Halifax, NS, Canada, May 31, 2006.
314. **Nanotechnology Characterization Laboratory**, "Determining the Impact of Dendrimer-Based Bio-Nanotechnology," Frederick, MD, June 6, 2006.
315. **Abbott Laboratories**, Dendrimers: Precision Nanostructure Engineering for Pharmaceutical Applications: Drug Delivery, Deerfield, IL, August 2, 2006.
316. **Cellular Delivery of Therapeutic Macromolecules**, "Dendrimer Based Nanocontainers/Scaffolding for Targeted Diagnostics/Therapies," L.A. Reyna, S. Svenson, D.A. Tomalia, Cardiff University, UK, August 30, 2006.
317. **The Second Annual Meeting of the American Academy of Nanomedicine (AANM)**, "Dendrimers: Key Properties of Importance to Nanomedicine," Washington, DC, September 9-10, 2006.
318. **Wayne State University**, "Dendrimer-Based Nanomedicine: Its impact on Biology, Pharma Delivery, MRI Imaging and Polyvalent/Targeted Therapies," Detroit, MI, September 19, 2006.
319. **NanoTX06**, Priostar™ Dendrimers- A New Nanoscale Building Block Platform for High Volume Commercial Applications, Dallas, TX, September 27, 2006.
320. **Modern Drug Discovery & Development Summit**, "Dendrimer-Based Bio-Nanotechnology: Its Impact on Biology, Pharma Delivery, MRI Imaging and Polyvalent/Targeted Therapies," L.A. Reyna, S. Svenson, D.A. Tomalia, Philadelphia, PA, December 5, 2006.
321. **International Nanomaterial Environmental Health and Safety Research Needs Assessment Workshop 1**, International Council on Nanotechnology (ICON), "Dendrimers: Assessing Risk/Benefit Boundaries Based on Nano-Properties and Applications," D.A. Tomalia, Bethesda, MD, January 10, 2007.
322. **The Dow Chemical Company**, "The Dendritic State: The Importance of Macromolecular Architecture and Nanoscale Control on Physico/Chemical Properties," Midland, MI, February 13, 2007.
323. **The University of Copenhagen**, "Emergence of a New Macromolecular Architecture: Dendrimers as Quantized Building Blocks for Nanoscale Synthesis," Copenhagen, Denmark, February 22, 2007.
324. **Materials Research Society Meeting**, "Dendrimer-Based Nano-Containers/Scaffolding for Targeted Diagnostics and Therapies, L.A. Reyna, S. Svenson and D.A. Tomalia, San Francisco, CA, April 11, 2007.
325. **1st International Symposium of Nanomedicine-from Basic to Applications**, "Dendrimer-Based Nanomedicine: Its Impact on Biology, Pharma Delivery, MRI Imaging and Polyvalent/Targeted Therapies," Okazaki, Japan, April 22, 2007.
326. **Procter & Gamble Company**, "The Dendritic State: The Influence of Macromolecular Architecture and Nanoscale Control on Physico/Chemical Properties and Applications," Cincinnati, OH, May 1, 2007.
327. **University of Wisconsin "Nanoparticles" A Short Course**, "Dendrimers: The Importance of Macromolecular Architecture/Nanoscale Control on Physico/Chemical Properties and Applications" and "Dendrimer-Based Nanomedicine: Its Impact on Pharma Delivery, MRI Imaging and Polyvalent Therapies, Madison, WI, May 21, 2007.
328. **SERDP Scientific Advisory Board Meeting**, "Dendrimer Enhanced Water Remediation," Latham, NY, June 14, 2007.
329. **International Dendrimer Symposium (IDS-5)**, "Priostar Dendrimers Derived from Acrylate Click Chemistry," D.R. Swanson, B. Huang, H. Abdelhady, V.R. Pulgam, A. Chauhan, D.A. Tomalia, Toulouse, France, August 29, 2007.
330. **Third Annual Meeting, American Academy of Nanomedicine**, "Key Properties of Importance to Nanomedicine," University of California, San Diego, La Jolla, CA, September 7, 2007.

331. **National Science Foundation Workshop**, "The Big Picture: From Synthetic Small Molecule Chemistry (1808) to Synthetic Nano-Chemistry (2008)," Central Michigan University, Mt. Pleasant, MI, September 24, 2007.
332. **Scientific Workshop: FDA-ANH Nanotechnology Initiative**, "Nano-Periodic Patterns for Predicting Risk/Benefit Boundaries," Houston, Texas, March 12, 2008.
333. **Polish Academy of Sciences**, "Emergence of a New Macromolecular Architecture: Dendrimers as Quantized Building Blocks for Nanoscale Synthesis," Warsaw, Poland, July 1, 2008.
334. **Bio-Dendrimer 2008, University of Lodz**, "Dendrimer Based Nanomedicine," Lodz, Poland, July 4, 2008.
335. **Fourth Annual Symposium, American Academy of Nanomedicine**, "Dendrimers in Nanomedicine: Simple Poly(amidoamine) (PAMAM) Dendrimers Exhibit *In Vivo* Activity as Nanoscale Anti-inflammatory Agents," A.S. Chauhan, P.V. Diwan, N.K. Jain, D.A. Tomalia, Potomac, MD, September 6, 2008.
336. **Yonsei University**, "Dendrimer-Based Nanomedicine: Its Impact on Biology," Pharma Delivery, MRI Imaging and Polyvalent Targeted Therapies, Seoul, Korea, October 16, 2008.
337. **Seoul National University**, Dendrimer-Based Nanomedicine: Its Impact on Biology, Pharma Delivery, MRI Imaging and Polyvalent Targeted Therapies, Seoul, Korea, October 17, 2008.
338. **Seoul National University**, Emergence of a New Macromolecular Architecture: Dendrimers as Quantized Building Blocks for Nanoscale Synthesis, Seoul, Korea, October 17, 2008.
339. **KCIST08**, "Dendrons/Dendrimers as Quantized Building Blocks for Nano-Compound Synthesis," Phoenix Park, Korea, October 19, 2008.
340. **NSF Grantees Conference**, "In Quest of a Central Dogma for Synthetic Nano-Chemistry: Nano-Elements, Nano-Compounds and Nano-Periodic Property Patterns," Arlington, VA, December 4, 2000.
341. **Greener Nano 2009**, "Evolving Greener Dendrimer Manufacturing Processes and a Systematic Framework for Unifying Nanoscience," Eugene, OR, March 3, 2009.
342. **Texas A&M University – Chevron Lecture Series**, "Traveling the Nano Road of Science, Art & Discovery," D.A. Tomalia, College Station, TX, March 10, 2009.
343. **Central Michigan University**, "Evolving a Greener Dendrimer Process and a Systematic Framework for Unifying Nanoscience," March 16, 2009.
344. **Experimental Biology 2009 – AAA Symposium**, "Dendrimer-Based Nanomedicine: Its Impact on Biology, Pharma Delivery, MRI Imaging and Polyvalent Targeted Therapies," New Orleans, LA, April 21, 2009.
345. **2nd European Conference for Clinical Nanomedicine**, "Demonstration of In Vivo Anti-inflammatory Activity for Simple Functionalized Poly(amidoamine) (PAMAM) Dendrimers Exhibit Unexpected In Vivo Activity as Nanoscale Anti-inflammatory Agents," A.S. Chauhan, P.V. Diwan, N.K. Jain, D.A. Tomalia, Basel, Switzerland, April 27, 2009.
346. **2nd Scientific Workshop: FDA/ANH Nanotechnology Initiative**, "A Dendrimer Inspired Systematic Framework for Unifying Nanoscience," Houston, TX, May 6, 2009.
347. **International Dendrimer Symposium (IDS-6)**, "A Dendrimer Inspired Systematic Framework for Unifying Nanoscience: A Nanoperiodic System," Stockholm, Sweden, June 18, 2009.
348. **Second Workshop on Nanomedicine Research**, "Dendrimer-Based Nanomedicine: Its Impact on Biology, Pharma Delivery, MRI Imaging and Polyvalent Targeted Therapies," University of Santiago de Compostela, Spain, July 9-10, 2009.
349. **Micro Nano Breakthrough Conference 2009**, "In Quest of a Systematic Framework for Unifying Nanoscience," Portland, OR, September 22, 2009.
350. **First Annual Conference of the American Society of Nanomedicine**, "Dendrimer-Based Nano-containers/Scaffolding for Targeted Imaging and Therapies," Potomac, MD,

October 25, 2009.

351. **University of Detroit Mercy**, "In Quest of a Systematic Framework for Unifying and Defining Nanoscience," Detroit, MI, November 19, 2009.
352. **2009 NSF Nanoscale Science & Engineering Grantees Conference**, "In Quest of a Systematic Framework for Unifying and Defining Nanoscience, D.A. Tomalia, Arlington, VA, December 7, 2009.
353. **National Institutes of Health**, "Unexpected *In Vivo* Anti-inflammatory Activity Observed for Simple Surface Functionalized PAMAM Dendrimers," Bethesda, MD, January 22, 2010.
354. **University of Pennsylvania**, "In Quest of a Systematic Framework for Unifying and Defining Nanoscience," Philadelphia, PA, February 8, 2010.
355. **Columbia University**, "In Quest of a Systematic Framework for Unifying and Defining Nanoscience," Skype VideoCam Lecture, February 22, 2010.
356. **Linus Pauling Memorial Lecture**, "The New Nano-World: Beneath the World," Portland, OR, March 11, 2010.
357. **California NanoSystems Institute, UCLA**, "In Quest of a Systematic Framework for Unifying and Defining Nanoscience," Los Angeles, CA, May 4, 2010.
358. **3rd European Conference for Clinical Nanomedicine**, "Progress Toward Phase I Clinical Trials Using PAMAM Dendrimer Based MRI Contrast Agents for Lymphatic Imaging," D.A. Tomalia, P. Choyke, H. Kobayashi, Basel, Switzerland, May 10, 2010.
359. **Frontiers in Macromolecular and Supramolecular Science**, Third Cristofor I. Simionescu Symposium, Romanian Academy, "In Quest of a Systematic Framework for Unifying and Defining Nanoscience," Bucharest, Romania, June 7, 2010.
360. **Frontiers in Macromolecular and Supramolecular Science**, Third Cristofor I. Simionescu Symposium, Petru Poni Institute of Macromolecular Chemistry, "In Quest of a Systematic Framework for Unifying and Defining Nanoscience," Iasi, Romania, June 8, 2010.
361. **Centre Interdisciplinaire de Nanoscience de Marseille**, "A Dendrimer Inspired Systematic Framework for Unifying Nanoscience: A Nanoperiodic System," Marseille, France, June 22, 2010.
362. **2nd International Symposium on Biological Applications of Dendrimers (Bio-dendrimer 2010)**, Progress Toward Phase I Clinical Trials Using PAMAM Dendrimer Based MRI Contrast Agents for Lymphatic Imaging," Porquerolles, France, June 23, 2010.
363. **5th IUPAC-Sponsored Symposium on Macro-and Supramolecular Architectures and Materials**, "In Quest of a Systematic Framework for Unifying and Defining Nanoscience," D.A. Tomalia, Montego Bay, Jamaica, 8-17-10.
364. **240th ACS National Meeting**, "Dendrimer-Based Nanomedicine: Its Impact on Biology, Pharma Delivery, MRI Imaging and Polyvalent Targeted Therapies," Boston, MA, August 23, 2010.
365. **DuPont Central Research**, "In Quest of a Systematic Framework for Unifying and Defining Nanoscience," Wilmington, DE, September 8, 2010.
366. **Nano and Emerging Technologies for HIV Workshop**, "Nanomedicine: Well Defined, Nano-Building Blocks and their Impact on Biology, Diagnostics and MRI Imaging," Potomoc, MD, October 14, 2010.
367. **University of Maryland School of Pharmacy**, "Dendrons and Dendrimers: A Window to a New Nano-periodic System," College Park, MD, November 3, 2010.
368. **Novartis Institutes for BioMedical Research**, "Nanomedicine: Well Defined Nano-Building Blocks and their Impact on Biology, Pharma Delivery, Imaging and Polyvalent Therapies," Cambridge, MA, November 10, 2010.
369. **3rd RISE-MARC Symposium: Advances in Nanomedicine: Current Status and Clinical Applications**, "Dendrimer Based Nanomedicine – The Present and Future," San Juan, Puerto Rico, April 30, 2011.

370. **University of Copenhagen Chemistry Department**, "In Quest of a Systematic Framework for Unifying and Defining Nanoscience," Copenhagen, Denmark, May 9, 2011.
371. **4th European Conference for Clinical Nanomedicine**, "Dendrons and Dendrimers: Window to a New Periodic System for Unifying Nanoscience, Basel, Switzerland, May 24, 2011.
372. **International Dendrimer Symposium (IDS-7)**, "Dendrons and Dendrimers:" Window to a New Systematic Framework for Unifying and Defining Nanoscience," Gaithersburg, MD, July 1, 2011.
373. **Virginia Commonwealth University**, "In Quest for a Systematic Framework for Unifying & Defining Nanoscience," Richmond, VA, October 13, 2011.
374. **2011 Louis W. Busse Lecture Series, University of Wisconsin, School of Pharmacy**, "Dendrimer-Based Drug Delivery, Imaging and Nanopharmaceuticals," Madison, WI, December 1, 2011.
375. **2011 Louis W. Busse Lecture Series, University of Wisconsin, School of Pharmacy**, "Dendron/Dendrimers: Window to a New Systematic Framework for Unifying Nanoscience," Madison, WI, December 2, 2011.
376. **American Physical Society Meeting 2012**, "In Quest of a Systematic Framework for Unifying and Defining Nanoscience," Boston, MA, March 1, 2012.
377. **47th AAPS Arden House Conference "Nanoscience in Pharmaceuticals: Translating Fundamental Understanding to Practical Application in Drug and Device Development,"** "Dendrimer-Based Drug Delivery, Imaging and Nano-Pharmaceuticals," West Point, NY, March 11-14, 2012.
378. **243rd ACS National Meeting**, "Our Compelling and Intriguing Journey with Poly(2-Oxazolines)s: Past, Present and Future," San Diego, CA, March 27, 2012.
379. **35th Annual Carothers Award Presentation**, "Dendrimer/Dendrons & Dendritic Polymers: A Versatile Platform for Nanomedicine and Window to a New Nano-periodic System for Unifying Nanoscience," Wilmington, DE, April 3, 2012.
380. **University of Maryland-Baltimore**, "Dendrimer-Based Drug Delivery, Imaging and Nano-Pharmaceuticals," Baltimore, MD, April 17, 2012.
381. **European Summit for Clinical Nanomedicine**, "Predictive Nano-periodic Property Patterns for Designing Optimum Nano-therapies," Basel, Switzerland, May 9, 2012.
382. **39th Annual Controlled Release Society Meeting**, "Dendrimer-Based Nanomedicine – The Present and Future," Quebec City, Quebec, Canada, July 16, 2012.
383. **Bio-dendrimer 2012 – 3rd International Symposium on Biological Applications of Dendrimers**, "Nano-periodic Property Patterns for Designing Dendrimers Based on Nano-therapies/Devices," Toledo, Spain, September 7, 2012.
384. **Dendrimer Symposium: Significance in the Context of Nanotechnology**, "Dendrimer Derived Nano-therapeutics Based on New Nano-periodic Concepts," University of Sao Paulo, Brazil, October 1, 2012.
385. **W.H. Rauscher Lectureship**, Rensselaer Polytechnic Institute, "Window to a Nano-Periodic System for Unifying and Defining Nanoscience, Troy, NY, November 6, 2012.
386. **44th Central Regional Meeting of The American Chemical Society**, "Dendrimer Inspired Systematic Framework for Unifying Nanoscience: A Predictive Nanoperiodic System," Mt. Pleasant, MI, May 16, 2013.
387. **8th International Dendrimer Symposium**, "Dendritic Effects: The Role of Dendrimers As Soft Superatoms in Nanoperiodic Property Patterns," Madrid, Spain, June 24, 2013.
388. **The 4th Asian Symposium on Advanced Materials: Chemistry, Physics & Biomedicine of Functional and Novel Materials (ASAM-4)**, "Systematic Framework for Unifying and Defining Nanoscience: A Predictable Nano-periodic System," Taipei, Taiwan, October 24, 2013.
389. **National Cheng Kung University**, "Systematic Framework for Unifying and Defining Nanoscience: A Predictable Nano-periodic System," Tainan, Taiwan, October 28, 2013.
390. **Kaohsiung Medical University**, "Nano-periodic Property Patterns for Designing

- Dendrimer Based Nano-Therapeutics/Devices," Kaohsiung, Taiwan, October 29, 2013.
391. **Biodendrimer 2014**, "Emerging Concepts in Dendrimer-Based Nanomedicine: From Design Principles to Clinical Applications," Lugano, Switzerland, June 20, 2014.
392. **7th European Summit for Clinical Nanomedicine and Targeted Medicine**, "Emerging Concepts in Dendrimer-Based Nanomedicine: Predictive, CNDP-Directed Optimization of Nanoparticle Prototypes from Discovery to Clinical Translation," Basel, Switzerland, June 24, 2014.
393. **XXIII International Materials Research Congress 2014**, "A Systematic Framework for Unifying and Defining Nanoscience Based on Hard/Soft Quantized Building Blocks—Superatoms," Cancun, Mexico, August 21, 2014.
394. **2014 International Symposium on Nano Science and Technology (ISNST)**, "A Systematic Framework for Unifying and Defining Nanoscience Based on Hard/Soft Quantized Building Blocks—Superatoms," Tainin, Taiwan, October 17, 2014.
395. **National Cheng Kung University**, "A Systematic Framework for Unifying and Defining Nanoscience Based on Hard/Soft Quantized Building Blocks—Superatoms," Tainin, Taiwan, October 20, 2014.
396. **National Taiwan University**, "A Systematic Framework for Unifying and Defining Nanoscience Based on Hard/Soft Quantized Building Blocks—Superatoms," Taipei, Taiwan, October 21, 2014.
397. **Ventana Medical Systems**, "Emerging Concepts in Dendrimer-Based Nanomedicine: From Design Principles to Diagnostic/Clinical Translations," Tucson, AZ, February 6, 2015.
398. **8th European Summit for Clinical Nanomedicine and Targeted Medicine (CLINAM)**, "Dendrimer-Based Nanomedicine: Systematic CNDP Engineering of Dendrimers Compared with other Nanoparticle," Basel, Switzerland, June 30, 2015.
399. **9th International Dendrimer Symposium (IDS-9)**, "Commercial Applications of Dendrimer-Based on their Controlled Structures and Disruptive Properties: Past Present and Future," Montreal, Canada, July 17, 2015.
400. **ESF-EMBO**, "Designing and Engineering Dendrimer CNDPs for Diverse Roles in Immunology," D.A. Tomalia, Pultusk, Poland, October 6, 2015.
401. **University of Lodz**, "Designing and Engineering Dendrimer CNDPs for Diverse Roles in Immunology, Lodz, Poland, October 9, 2015.
402. **Texas Christian University**, "A Systematic Framework for Unifying Nanoscience Based on Hard/Soft Quantized Building Blocks—Superatoms," Fort Worth, TX, October, 29, 2015.
403. **Michigan State University**, "A Systematic Framework for Unifying Nanoscience Based on Hard/Soft Quantized Building Blocks—Superatoms," E. Lansing, MI, March 23, 2016.
404. **9th European Summit for Clinical Nanomedicine and Targeted Medicine (CLINAM 2016)**, "Systematic Engineering of Dendrimer CNDPs and Quality Suitable for in vivo Clinical Trials," Basel, Switzerland, June 28, 2016.
405. **Biodendrimer 2016**, "Systematic CNDP Engineering of Dendrimers for New Properties, Predictable Nanoperiodic Property Patterns and Nanomedicine Applications," Copenhagen, Denmark, August 2, 2016.
406. **252nd American Chemical Society National Meeting**, "Mendeleev-like Nanoperiodic Tables for Predicting Supramolecular Structures of Amphiphilic Dendrons, Dendrimers and Proteins," Philadelphia, PA, August 21, 2016.
407. **Global Education Symposium**, "The Serendipitous Journey Leading to my Love of Chemistry," New York, NY, September 16, 2016.
408. **FIP/USP/AAPS Nanomedicines-Technical and Regulatory Perspectives Workshop**, "Systematic Engineering of Critical Nanoparticle Design Parameters as a Strategy for Developing Predictive Nanoscale-QSAR for Nanomedicines," Rockville, MD, March 21, 2017.
409. **1st Pan-American Polymer Science Conference (PanPoly)**, American Chemical Society, Mendeleev-like Nanoperiodic Tables for Predicting Supramolecular Structures of

410. *Amphiphilic Dendrons, Dendrimers and Proteins*," Sao Paulo, Brazil, March 22-24, 2017. **17th IUPAC International Symposium on Macromolecular Complexes (MMC-17)**, "Mendeleev-like Nanoperiodic Tables for Predicting Supramolecular Assembly of Amphiphilic Dendrons, Dendrimers and Proteins," Waseda University, Tokyo, Japan, August 28, 2017.
411. **Tokyo Institute of Technology**, "Systematic Engineering of Critical Nanoparticle Design Parameters (CNDPs) as a Strategy for Developing Predictive Nanoscale-QSAR for Nanomedicine," Tokyo, Japan, August 30, 2017.

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2. "1-(Aziridine)thiocarbonyl Chlorides. Isomerization to 2-(Chloroalkyl) Isothiocyanates," D.A. Tomalia, *J. Heterocyclic Chem.*, 3, 384-6 (1966).
3. "Alkoxy Carbonium Ions, NMR Examination of 2-Alkyl-1,3-Dioxolenium Cations," H. Hart, D.A. Tomalia, *Tetrahedron Lett.*, 29, 3383-8 (1966).
4. "Alkoxy Carbonium Ions. II. NMR Examination of 2-Aryl-1,3-Dioxolenium Cations," D.A. Tomalia, H. Hart, *Tetrahedron Lett.*, 29, 3389-94 (1966).
5. "Homopolymerization of 2-Alkyl and 2-Aryl-2-Oxazolines," D. A. Tomalia, D.P. Sheetz, *J. Polymer Sci. Pt A-1*, 2253-65 (1966).
6. "Alkoxy carbonium Ions. III. NMR Examination of 2,2'-Alkylenedi-1,3-Dioxolenium Dications," H. Hart, D.A. Tomalia, *Tetrahedron Lett.*, 15, 1347-51 (1967).
7. "1-Aziridinecarbonyl Chlorides and 1-Aziridinecarbonyl Quaternary Ammonium Chlorides. Rearrangement of 2-Chloroalkyl Isocyanates," D.A. Tomalia, J.N. Paige, *J. Heterocycl. Chem.*, 4, 178-82 (1967).
8. "Isomerization of 1-(Aziridine) Sulfinyl Chloride to 2-Chloro-N-Sulfinylalkyl-amines," D.A. Tomalia, *Tetrahedron Lett.*, 27, 2559-62 (1967).
9. "1,1'-(Thiocarbonyl)bisaziridines," D.A. Tomalia, *J. Heterocycl. Chem.*, 4, 419-21 (1967).
10. "[The Structure and Reactivity of Cyclic Esters. Ethylene Sulfate and Vinylene Sulfate](#)," F.P. Boer, J.J. Flynn, E.T. Kaiser, O.R. Zaborsky, D.A. Tomalia, A.E. Young, Y.C. Tong, *J. Am. Chem. Soc.*, 90, 2970-1 (1968).
11. "N.M.R. Examination of Cyclic Dialkoxy Carbonium Ions (1,3-Dioxolenium Cations)," D.A. Tomalia, Michigan State University, *Diss. Abstr. B*, 29(6), 68-17, 146 (1968).
12. "[Synthesis and Chemistry of 2-Aziridinyl-2-Oxazolines](#)," D.A. Tomalia, N.D. Ojha, B.P. Thill, *J. Org. Chem.*, 34, 1400-5 (1969).
13. "[Heteronuclear Stabilized Carbonium Ions. I . Nuclear Magnetic Resonance Examination of Aryl Oxocarbenium Ions](#)," D.A. Tomalia, *J. Org. Chem.*, 34, 2583-88 (1969).
14. "[Mechanism of the Isomerizations of 1-\(Arylthiocarbonyl\)aziridines to 2-\(Arylthioalkyl\)](#)

- [Isocyanates](#)," D.A. Tomalia, D.P. Sheetz, G.E. Ham, *J. Org. Chem.*, 35, 47-52 (1970).
15. "Formation of Imidazolidines by Reaction of Aziridines and Oxalyl Chloride," D.A. Tomalia, T.J. Giacobbe, W. Sprenger, *J. Heterocyclic Chem.*, 8, 669-70 (1971).
 16. "[Isomerization of N-Aryl-1-Aziridinecarboximidoyl Chlorides to N\(2-Chloroalkyl\)-N-Aryl Carbodiimides](#)," T.J. Giacobbe, D.A. Tomalia, W. Sprenger, *J. Org. Chem.*, 36, 2142-6 (1971).
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 19. "[Heteronuclear Stabilized Carbonium Ions. II. N-Aroyl- and Aryl-2-Oxazolinium Cations. Intermediates in a New Class of Neighboring Group Reactions](#)," D.A. Tomalia, J.N. Paige, *J. Org. Chem.*, 38, 422-30 (1973).
 20. "[Facile Synthesis of 2,2'-Bi-2-Thiazolines and -Thiazines](#)," D.A. Tomalia, J.N. Paige, *J. Org. Chem.*, 38, 3949-51 (1973).
 21. "Vinylbenzyl Aziridine. Synthesis, Polymerization and Crosslinking," B.P. Thill, D.A. Tomalia, J.D. DeVrieze, R.J. Dolinski, *Am. Chem. Soc., Div. Org. Coat. Plast. Chem.*, 34 (1), 695-8, (1974).
 22. Chapter entitled "Reactive Heterocyclic Monomers," D.A. Tomalia in *Functional Monomers*, Volume 2, edited by R. H. Yocum and E. B. Nyquist, Marcel Dekker Inc., New York, 1-355 (1974).
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 26. "[A New Class of Polymers: STARBURST®-Dendritic Macromolecules](#)," D.A. Tomalia, H. Baker, J. Dewald, M. Hall, G. Kallos, S. Martin, J. Roeck, J. Ryder, P. Smith, *Polym. J. (Tokyo)*, 17, 117-32 (1985) (Google scholar: [>3831 citations](#)).
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30. "[STARBURST® Dendrimers IV. Covalently Fixed Unimolecular Assemblages Reminiscent of Spheroidal Micelles](#)," D.A. Tomalia, V. Berry, M. Hall, D.M. Hedstrand, *Macromolecules*, 20, 1164-7 (1987).
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 37. Chapter entitled "STARBURST® Dendrimers: Size, Shape and Surface Control of Macromolecules," D.A. Tomalia, D.M. Hedstrand, L.R. Wilson, D.M. Downing in *Frontiers of Macromolecular Science*, 32nd IUPAC Proceedings, edited by T. Saegusa, T. Higashimura, A. Abe, Blackwell Publications, 207-12 (1989).
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PATENTS ISSUED (U.S.)

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Inventors: D. Tomalia
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- U.S. 3,501,458 Preparation of N,N-Dialkyl-1-Aziridinecarboxamides
Inventors: D. Tomalia, J. Paige
Issued: 3/17/70
- U.S. 3,511,876 N,N'-Diacyl-N,N'-bis(Haloethyl)Oxamides
Inventors: D. Tomalia
Issued: 5/12/70
- U.S. 3,563,920 Bi-2-Oxazoline and Oxazine Ethers and Thioethers
Inventors: D. Tomalia, J. Paige
Issued: 2/16/71
- U.S. 3,630,996 Package Latent Cure Polyepoxide Systems Employing 2,2'-Bi-2-Oxazoline or Oxazine Copolymeric Curing Agents
Inventors: D. Tomalia
Issued: 12/28/71
- U.S. 3,639,395 2,2'-Alkylenebis-2-Oxazolines and Oxazines
Inventors: D. Tomalia
Issued: 2/1/72
- U.S. 3,640,957 Monooxazoline and Oxazine Cured Epoxy Resins
Inventors: D. Tomalia, R. Thomas
Issued: 2/8/72
- U.S. 3,670,046 Copolymers of Bis-Oxazolines and Dithiol Compounds as Curing Agents for Polyepoxides
Inventors: D. Tomalia, B. Thill
Issued: 6/13/72
- U.S. 3,673,274 Polymeric Adhesive Containing a Polyepoxide, a Carboxy Terminated Polybutadiene and a Bis-2-Oxazoline
Inventors: D. Tomalia, W. Glesner
Issued: 6/27/72

- U.S. 3,682,948 Sulfur-Containing 2-Oxazoline and Oxazine Monomers and their Polymers
Inventors: D. Tomalia, Y. Dickert
Issued: 8/8/72
- U.S. 3,697,524 Preparing 1,4-Disubstituted Piperazines
Inventors: D. Tomalia, N. Ojha
Issued: 10/10/72
- U.S. 3,697,537 2-(Aryloxy)-2-Thiazolinium Compounds
Inventors: D. Tomalia
Issued: 10/10/72
- U.S. 3,709,904 Aminethylation Reaction and Products Thereof
Inventors: D. Tomalia, N. Ojha
Issued: 1/9/73
- U.S. 3,716,520 Composition of an Epoxy Resin and 2,2'-Alkylene Bis-2-Oxazoline as Curing Agent
Inventors: D. Tomalia
Issued: 2/13/73
- U.S. 3,723,451 Bi-2-Oxazoline and Oxaline Ethers and Thioethers
Inventors: D. Tomalia
Issued: 3/27/73
- U.S. 3,730,915 Bi-2-Oxazoline and Oxazine Compounds Derived from Cyanoethylated Poly(Ethylene and Propylene) Glycols
Inventors: D. Tomalia, D. Sheetz
Issued: 5/1/73
- U.S. 3,738,961 Copolymers of Bis-Oxazolines and Dithiol Compounds and Process for their Preparation
Inventors: D. Tomalia, B. Thill
Issued: 6/12/73
- U.S. 3,741,944 Polymeric Reaction Product of a Dithiol with 2,2'-Alkylene-bis-2-Oxazoline or Oxazine
Inventors: D. Tomalia
Issued: 6/26/73
- U.S. 3,746,691 Sulfur-Containing Polymers from 2-Oxazoline and Oxazine Monomers
Inventors: D. Tomalia, Y. Dickert
Issued: 7/17/73
- U.S. 3,749,683 Bi-2-Oxazoline and Oxazine Ethers and Thioethers
Inventors: D. Tomalia, J. Paige
Issued: 7/31/73
- U.S. 3,752,854 Homopolymers-N(2-Hydroxyethyl)-Aziridines and N-(2-Thioethyl)Aziridines and a Method of Preparation
Inventors: D. Tomalia, N. Ojha
Issued: 8/14/73

- U.S. 3,754,032 2-Chloroalkyl Carbodiimides and a Method of Preparation
Inventors: D. Tomalia, T. Giacobbe
Issued: 8/21/73
- U.S. 3,763,177 Bi-2-Oxazoline and Oxazine Compounds Derived from Cyanoethylated Poly(ethylene and Propylene) Glycols
Inventors: D. Tomalia, D. Sheetz
Issued: 10/2/73
- U.S. 3,773,550 Inhibiting Degradation and Corrosion of Substrates by Application thereto of a Curable Coating of a Polyepoxide and an Oxaine or Oxazoline
Inventors: D. Tomalia, D. Schmidt
Issued: 11/20/73
- U.S. 3,784,508 Rapid Cure Polyepoxide Oxazine or Oxazoline Systems
Inventors: D. Tomalia, R. Thomas
Issued: 1/8/74
- U.S. 3,822,237 Reaction Products of Polyepoxides and Excess Di-2-Oxazoline
Inventors: J. Alford, B. Tefertiller, D. Tomalia
Issued: 7/2/74
- U.S. 3,824,269 Aminoalkylation of Alcohols Using Aziridine-Sulfur Dioxide Complex
Inventors: D. Tomalia, J. Bewbaker, N. Ojha
Issued: 7/16/74
- U.S. 3,833,557 N-(Ar-Vinylbenzyl) Aziridines
Inventors: D. Tomalia, J. DeVrieze
Issued: 9/3/74
- U.S. 3,888,847 Aziridiny Haloformimides
Inventors: D. Tomalia, T. Giacobbe
Issued: 6/10/75
- U.S. 3,928,499 Unsaturated Poly(Amide-Esters) and Cross-linked Derivatives Thereof
Inventors: D. Tomalia, B. Thill
Issued: 12/23/75
- U.S. 3,996,204 Novel N-(Ar-Vinylbenzyl) Aziridines
Inventors: D. Tomalia, J. DeVrieze
Issued: 12/7/76
- U.S. 3,996,237 Oxazoline-or-Oxazine-Substituted Acrylic Esters
Inventors: D. Tomalia
Issued: 12/7/76
- U.S. 4,011,376 Novel Reaction Products of Allyl Halides or Vinylbenzyl Halides with Oxazolines (or Oxaines)
Inventors: D. Tomalia, E. Zubritzky
Issued: 3/8/77
- U.S. 4,013,480 Cellulosic Sizing Agents
Inventors: L. Chumbley, L. Sams, R. McFadden, J. Longoria, D. Tomalia, R.

Thomas, J. Lalk
Issued: 3/22/77

- U.S. 4,016,192 Unsaturated Acrylic Acid-Oxazoline Reaction Products
Inventors: D. Tomalia, B. Thill, T. Regulski
Issued: 4/5/77
- U.S. 4,112,067 Method for Treating Poison Ivy Dermatitis Using Certain Polyamines and Polytertiaryamides
Inventors: D. Tomalia, Y. Dickert, L. McCarty
Issued: 9/5/78
- U.S. 4,139,539 Vinyl Substituted Cyclic Polyethers
Inventors: T. Chamberlin, D. Tomalia
Issued: 2/13/79
- U.S. 4,245,063 Thermosetting Powder Coating Composition Comprising Vinyl Interpolymer and Polycarboxylic Acid
Inventors: B. Thill, D. Tomalia
Issued: 1-13-81
- U.S. 4,256,855 Metal Salt Complexes of Vinyl-Substituted Cyclic Polyether Addition Polymers
Inventors: T. Chamberlin, D. Tomalia
Issued: 3/17/81
- U.S. 4,257,970 Novel Sulfonyl Imide Intermediates
Inventors: D. Tomalia
Issued: 3/24/81
- U.S. 4,261,925 Surfactants
Inventors: D. Tomalia, J. Huffines
Issued: 4/14/81
- U.S. 4,265,825 Process for the Preparation of N-(Haloalkyl)Sulfonamide
Inventors: P. Owen, Z. Harmon, D. Tomalia
Issued: 5/5/81
- U.S. 4,267,350 Imidazolinium Compounds
Inventors: D. Tomalia, F. Buchholz
Issued: 5/12/81
- U.S. 4,287,052 Alkyl-Substituted Phenyl Ether Amine Collectors in Flotation
Inventors: D. Tomalia, R. Hefner Jr.
Issued: 9/1/81
- U.S. 4,331,785 Vinyl Substituted Cyclic Polyethers and Addition Polymers Thereof
Inventors: T. Chamberlin, D. Tomalia
Issued: 5/25/82
- U.S. 4,351,933 Vinyl Substituted Cyclic Polyethers and Addition Polymers Thereof
Inventors: T. Chamberlin, D. Tomalia
Issued: 9/28/82

- U.S. 4,357,464 Removal of 2-Isopropenyl-2-Oxazoline Monomer
Inventors: D. Tomalia, T. Adaway
Issued: 11/2/82
- U.S. 4,376,861 Method for Preparing 2-Alkenyl-2-Oxazolines
Inventors: J. Lalk, G. Kolb, D. Tomalia, P. Owen
Issued: 3/15/83
- U.S. 4,435,548 Branched Polyamidoamines
Inventors: D. Tomalia, L. Wilson, J. Conklin
Issued: 3/6/84
- U.S. 4,474,923 Self-Curable Latex Compositions
Inventors: W. Keskey, J. Schuetz, D. Lee, J. Schwartz, D. Tomalia
Issued: 10/2/84
- U.S. 4,507,466 Dense Star Polymers Having Core, Core Branches, Terminal Groups
Inventors: D. Tomalia, J. Dewald
Issued: 3/26/85
- U.S. 4,517,122 Cyclic Peptides
Inventors: D. Tomalia, L. Wilson
Issued: 5/14/85
- U.S. 4,529,803 Process for Preparing Imidazolium Compounds
Inventors: D. Tomalia, F. Buchholz
Issued: 7/16/85
- U.S. 4,558,120 Dense Star Polymer
Inventors: D. Tomalia, J. Dewald
Issued: 12/10/85
- U.S. 4,568,737 Dense Star Polymers and Dendrimers
Inventors: D. Tomalia, J. Dewald
Issued: 2/4/86
- U.S. 4,587,329 Dense Star Polymers Having Two-Dimensional Molecular Diameter Per
Inventors: D. Tomalia, J. Dewald
Issued: 5/6/86
- U.S. 4,599,400 Star/Comb-Branched Polyamide
Inventors: D. Tomalia, M. Hall
Issued: 7/8/86
- U.S. 4,600,535 Cyclic Peptides
Inventors: D.A. Tomalia, L.R. Wilson
Issued: 7/15/86
- U.S. 4,631,337 Hydrolytically-Stable Dense Star Polyamine
Inventors: D. Tomalia, J. Dewald
Issued: 12/23/86
- U.S. 4,690,985 Star/Comb-Branched Polyamine

- Inventors: D. Tomalia, M. J. Hall
Issued: 9/1/87
- U.S. 4,694,064 Rod-Shaped Dendrimers
Inventors: D. Tomalia, P. Kirchhoff
Issued: 9/15/87
- U.S. 4,713,975 Dense Star Polymers for Calibrating/Characterizing Sub-micron Apertures
Inventors: D. Tomalia, L. Wilson
Issued: 12/22/87
- U.S. 4,737,550 Bridged Dense Star Polymers
Inventors: D. Tomalia
Issued: 4/12/88
- U.S. 4,857,599 Modified Dense Star Polymers
Inventors: D. Tomalia, J. Stahlbush
Issued: 8/15/89
- U.S. 4,871,779 Ion Exchange/Chelation Resins Containing Dense Star Polymers Having Ion Exchange or Chelate Capabilities
Inventors: D. Tomalia, G. Killat
Issued: 10/3/89
- U.S. 5,331,100 Self-Building Detergents
Inventors: H. Smith, D. Tomalia
Issued: 7/19/94
- U.S. 5,338,532 Starburst Conjugates
Inventors: D. Tomalia, D. Kaplan, W. Kruper, Jr., R. Cheng, I. Tomlinson, M. Fazio, D. Hedstrand, L. Wilson
Issued: 8/16/94
- U.S. 5,387,617 Small Cell Foams and Blends and a Process for their Preparation
Inventors: D. Hedstrand, D. Tomalia
Issued: 2/7/95
- U.S. 5,393,795 Polymer Blend Containing a Modified Dense Star Polymer or Dendrimer and a Matrix Polymer
Inventors: D. Hedstrand, D. Tomalia
Issued: 2/28/95
- U.S. 5,393,797 Small Cell Foams Containing a Modified Dense Star Polymer or Dendrimer as a Nucleating Agent
Inventors: D. Hedstrand, D. Tomalia
Issued: 2/28/95
- U.S. 5,527,524 Dense Star Polymer Conjugates
Inventors: D.A. Tomalia, L.R. Wilson, D.M. Hedstrand, I.A. Tomlinson, M.J. Fazio, W.J. Kruper, Jr., D.A. Kaplan, R.C. Cheng, D.S. Edwards, C.W. Jung
Issued: 6/18/96
- U.S. 5,560,929 Structured Copolymers and their Use as Absorbents, Gels, and Carriers of

- Metal Ions
Inventors: D.M. Hedstrand, B.J. Helmer, D.A. Tomalia
Issued: 10/1/96
- U.S. 5,631,329 Process for Producing Hyper-Comb-branched Polymers
Inventors: R. Yin, D.A. Tomalia, D.M. Hedstrand, D.R. Swanson
Issued: 5/20/97
- U.S. 5,705,573 Process for Preparation of Water Borne Curing Agents
Inventors: D.R. Swanson, D.A. Tomalia
Issued: 1/6/98
- U.S. 5,714,166 Bioactive and/or Targeted Dendrimer Conjugates
Inventors: D.A. Tomalia, J.R. Baker, R.C. Cheng, A.U. Bielinska, M.J. Fazio,
D.M. Hedstrand, J.A. Johnson, D.A. Kaplan, S.L. Klakamp, W.J. Kruper, Jr.,
J. Kukowska-Latallo, B.D. Maxon, L.T. Piehler, I.A. Tomlinson, L.R. Wilson,
R. Yin, H.M. Brothers II
Issued: 2/3/98
- U.S. 5,731,095 Dendritic Polymer Coatings
Inventors: L.A. Milco, D.A. Tomalia
Issued: 3/24/98
- U.S. 5,773,527 Non-Crosslinked, Polybranched Polymers
Inventors: D.A. Tomalia, D.M. Hedstrand, R. Yin
Issued: 6/30/98
- U.S. 5,919,442 Hyper Comb-branched Polymer Conjugates
Inventors: R. Yin, D.A. Tomalia, D.M. Hedstrand, D.R. Swanson,
J.R. Baker Jr., J.F. Kukowska-Latallo
Issued: 7/6/99
- U.S. 6,020,457 Disulfide-Containing Dendritic Polymers
Inventors: J.W. Klimash, H.M. Brothers II, D.R. Swanson, R. Yin, R. Spindler,
D.A. Tomalia, Y. Hsu, R.C. Cheng
Issued: 2/1/00
- U.S. 6,043,336 Electrically Conducting Dendrimers
Inventors: L.L. Miller, D.A. Tomalia, R.G. Duan
Issued: 3/28/00
- U.S. 6,177,414B1 Starburst Conjugates
Inventors: D.A. Tomalia, W.J. Kruper, R.C. Cheng, I.A. Tomlinson, M.J. Fazio,
D.M. Hedstrand, L.R. Wilson, D.A. Kaplan
Issued: 1/23/01
- U.S. 6,224,898 B1 Antimicrobial Dendrimer Nanocomposites and a Method of Treating Wounds
Inventors: L. Balogh, G.L. Hagnauer, D.A. Tomalia, McManus, A.T.
Issued: 5/1/01
- U.S. 6,312,679 Dense Star Polymer Conjugates as Dyes
Inventors: Tomalia, D.A., Kaplan, D.A., Kruper Jr., W.J., Cheng, R.,
Tomlinson, I.A., Fazio, M.J., Hedstrand, D.M., Wilson, L.R.

Issued: 11/6/01

- U.S. 6,471,968B1 Multifunctional Nanodevice Platform
Inventors: J.R. Baker, Jr., D.A. Tomalia
Issued: 10/29/02
- U.S. 6,475,994B2 Method and Articles for Transfection of Genetic Material
Inventors: D.A. Tomalia, L. Balogh
Issued: 11/5/02
- U.S. 6,632,889B1 Convergent Self-Branching Polymerization
Inventors: R. Yin, D.A. Tomalia, D. Qin, J. Dunham
Issued: 10/14/03
- U.S. 6,635,720B1 Core-Shell TectoDendrimers
Inventors: D.A. Tomalia, S. Uppuluri, D.R. Swanson, H.M. Brothers II
Issued: 10/21/03
- U.S. 6,664,315B2 Nanocomposites of Dendritic Polymers
Inventors: D.A. Tomalia, L. Balogh
Issued: 12/16/03
- U.S. 6,995,234B2 Nanocomposites of Dendritic Polymers
Inventors: D.A. Tomalia, L. Balogh
Issued: 2/7/06
- U.S. 7,005,124B2 Dendritic-Antineoplastic Drug Delivery System
Inventors: N. Malik, R. Duncan, D.A. Tomalia, R. Esfand
Issued: 2/28/06
- U.S. 7,078,461B2 Biocompatible Dendrimers
Inventors: D.A. Tomalia, I.J. Majoros
Issued: 7/18/06
- U.S. 7,389,029B2 Photonic Waveguide Structures for Chip-Scale Photonic Integrated Circuits
Inventors: A. Rahman, D. Tomalia
Issued: 7/17/2008
- U.S. 7,977,452B2 Janus Dendrimers and Dendrons
Inventors: D.A. Tomalia, V.R. Pulgam, D.R. Swanson, B. Huang
Issued: 7/12/11
- U.S. 7,981,444B2 Dendritic Polymers with Enhanced Amplification and Interior Functionality
Inventors: D.A. Tomalia, D.R. Swanson, B. Huang, V.R. Pulgam
Issued: 7/19/11
- U.S. 7,985,424B2 Dendritic Polymers with Enhanced Amplification and Interior Functionality
Inventors: D.A. Tomalia, D.R. Swanson, B. Huang, V.R. Pulgam, J.R. Heinzlmann, S. Svenson, L.A. Reyna, M.A. Zhuravel, A.S. Chauhan, C.R. DeMattei
Issued: 7/26/11