

Departments of Chemistry & Pharmacology
University of North Carolina at Chapel Hill

Department of Chem. & Biomolecular Engineering
North Carolina State University

Joseph M. DeSimone
Chancellor's Eminent Professor of Chemistry
William R. Kenan Jr. Distinguished Professor of Chemical Engineering

Current Research Interests:

New strategies for the delivery of detection, imaging and therapeutic agents for the battle against human disease; Nanomedicine; Interventional oncology; Fluoropolymers: photolithography, fuel cells, microfluidics, minimally adhesive surfaces; Medical devices; Colloid, surfactant and surface chemistry; Particle Jamming and un-jamming; Polymer synthesis and processing in carbon dioxide: new polymers, interfacial science and colloids, reaction kinetics and engineering, green chemistry.

Contact Information:

Mail: Department of Chemistry
University of North Carolina at Chapel Hill
CB #3290 Caudill Laboratories
Chapel Hill, NC 27599-3290
desimone@unc.edu
Office: (919) 962-2166; Fax: (919) 962-5467

Websites:

DeSimone Group:
<http://www.chem.unc.edu/people/faculty/desimone/>
NSF Science and Technology Center:
<http://www.nsfstc.unc.edu>
Center of Cancer Nanotechnology Excellence
<http://cancer.med.unc.edu/ccne/>
Institute for Advanced Materials, Nanoscience and Technology
<http://www.advancedmaterials.unc.edu/>

Personal Information:

Born: May 16, 1964; Norristown, Pennsylvania.
Married: Suzanne DeSimone since 1986; Children: Philip (20) and Emily (16).

Education:

BS Chemistry Ursinus College; May 1986.
Ph.D. Chemistry Virginia Polytechnic Institute and State University; March 1990.
(Advisor: Professor James E. McGrath, NAE)

Professional Positions:

2008 – Present Chancellor's Eminent Professor of Chemistry and William R. Kenan, Jr. Distinguished Professor of Chemical Engineering
2008 – Present Founding Director, Institute for Nanomedicine at UNC-CH
2005 – Present Co-PI, Carolina Center of Cancer Nanotechnology Excellence
2005 – Present Faculty Member, Lineberger Comprehensive Cancer Center and Dept. of Pharmacology, School of Medicine
2003 – Present Founding Director, Institute for Advanced Materials, Nanoscience and Technology at UNC-CH
1999 - 2009 Director, NSF Science and Technology Center for Environmentally Responsible Solvents and Processes
1999 - 2008 William R. Kenan Jr. Distinguished Professor of Chemistry at UNC-CH and Chemical Engineering at NCSU
1996 - 1999 Mary Ann Smith Professor of Chemistry at UNC-CH and Professor of Chemical Engineering at NCSU
1995 Mary Ann Smith Associate Professor of Chemistry at UNC-CH and Chemical Engineering at NCSU
1990 - 1994 Assistant Professor of Chemistry at UNC-CH

Awards and Honors:

- 2009 NIH Director's Pioneer Award
- 2009 North Carolina Award, the highest honor the State of North Carolina can bestow to recognize notable achievements of North Carolinians in the fields of Literature, Science, the Fine Arts and Public Service.
- 2009 Distinguished Graduate Alumni Achievement Award, Virginia Tech
- 2008 recipient of the \$500,000 Lemelson-MIT Prize

- *2008 Tar Heel of the Year*, Raleigh News & Observer
- Named one of the "*One Hundred Engineers of the Modern Era*" by the American Institute of Chemical Engineers (AIChE) marking the 100th Anniversary of the AIChE
- Business Leader Magazine's *2007/2008 Impact Entrepreneur of the Year* for the Triangle
- Chair, Gordon Research Conference on Drug Carriers in Medicine and Biology (2012)
- 2008 Inductee into the *Order of the Golden Fleece*, the oldest honor society of its kind in the nation (since 1904) and the most prestigious honor society at the University of North Carolina at Chapel Hill
- *2007 Collaboration Success Award* from The Council for Chemical Research
- Elected, College of Fellows, *American Institute for Medical and Biological Engineering (2006)*
- Elected Fellow, American Association for the Advancement of Science (AAAS) (2006)
- *H.F. Whalen, Jr. 2006 Award for Entrepreneurship* by ACS Div. of Business Development & Management
- Elected Member of the National Academy of Engineering (2005)
- Elected Member of the American Academy of Arts and Sciences (2005)
- *2005 Entrepreneurial Excellence Award for Life Science Spin-out of the Year* for Liquidia Technologies
- *2005 American Chemical Society Award for Creative Invention*
- *2002 John Scott Award* presented by the City Trusts, Philadelphia, given to "the most deserving" men and women whose inventions have contributed in some outstanding way to the "comfort, welfare and happiness" of mankind
- *2002 Engineering Excellence Award by DuPont* for Successful Commercialization of Supercritical CO₂ Polymerization Plant at DuPont Fayetteville Works
- *2002 Wallace H. Carothers Award* from the Delaware Section of the American Chemical Society to honor scientific innovators who have made outstanding contributions and advances in industrial applications of chemistry
- *Ernst & Young 2001 Entrepreneur of the Year in Technology* (Carolinas)
- *2001 Inventor of the Year Award* from the Triangle Intellectual Property Law Association
- *2001 Governor's Entrepreneurial Company of the Year Award* for Micell Technologies
- *2001 Esselen Award* for Chemistry in the Public Interest to recognize a chemist for outstanding achievement in scientific and technical work that contributes to the public well-being
- *2001 Outstanding Young Alumnus Award* from the Virginia Tech Alumni Association
- 2000 Oliver Max Gardner Award from the University of North Carolina, given to that person, who in the opinion of the Board of Governors' Committee, ". . . during the current scholastic year, has made the greatest contribution to the welfare of the human race."
- Phi Beta Kappa (Tau of Pennsylvania Chapter at Ursinus College)
- *1999 Fresenius Award* of the PHI LAMBDA UPSILON Honorary Chemical Society, presented annually to an outstanding young scientist who has attained national recognition in the areas of research and teaching
- *Carl S. Marvel Creative Polymer Chemistry Award* (1999), presented annually to recognize accomplishments and/or innovation of unusual merit in the field of basic or applied polymer science by younger scientists
- *Runner-up, 1999 Tar Heel of the Year Award* (with Elizabeth Dole, Mia Hamm, and Bob Young of Red Hat)
- *Honorary Doctorate of Science from Ursinus College* (1999)
- *Alfred P. Sloan Research Fellowship* (1998-2001)
- *R&D 100 Award with Micell Technologies* (1998)
- *Presidential Green Chemistry Challenge Award* (1997) in recognition of outstanding chemical technologies (Surfactants for CO₂) that incorporate the principles of green chemistry into chemical design, manufacture, and use
- *Governor's Award for Excellence* (1997)
- *Chancellor's Award for Excellence* (1997)
- *1995 Waldo Semon Award Lecturer*, The University of Akron
- *1995 Charles H. Stone Award*
- Finalist for the *1995 DISCOVER AWARD FOR TECHNOLOGICAL INNOVATION*
- *1993 Presidential Faculty Fellow Award* from the National Science Foundation

- 1993 Philip and Ruth Hettleman Prize for Artistic and Scholarly Achievement
- 1992 National Science Foundation Young Investigator - Division of Materials Research

Distinguished Lectureships:

- 2010 Danny Thomas Lecturer, St. Jude Children's Research Hospital
- 2010 Dow Lecture, Northwestern University
- 2010 NIST Colloquium Series Lecturer
- Plenary Speaker, 10th Annual Oncology Research Symposium at MIT's Koch Institute for Integrative Cancer Research (2010)
- 2009 Ulyot Lecturer sponsored by the Delaware and Philadelphia Sections of the ACS, University of Pennsylvania and the Chemical Heritage Foundation
- 2009 M. Cruickshank Lecturer at the Gordon Research Conference on Polymers
- 2009 Turner Alfrey Visiting Professor Lectures at Michigan Molecular Institute (MMI)
- 2009 Chevron Phillip Lecture at Virginia Tech
- 2008 Distinguished Lecture in Materials at Penn State University
- 2008 Distinguished Lecturer in Frontiers of Cancer Nanotechnology at Emory University
- 2008 Su Distinguished Lecture in Chemical Engineering, University of Rochester
- 2007-2008 Herman S. Bloch Memorial Lecture and the Bloch Medal, University of Chicago
- 2007 Ernest C. Mercier Lecture in Entrepreneurial Chemistry, York University
- Trent Lott Center Entrepreneurs in Polymer Science Lecture, University of Southern Mississippi (2006)
- 2006 Walter Weber Jr. Lectureship, University of Michigan (Inaugural Speaker)
- 2006 Distinguished Lecturer, The 65th Frontiers in Chemistry, Case Western Reserve University
- 2006 MacLean Lecturer, McMaster University
- 2005-2006 Nelson J. Leonard Distinguished Lectures, School of Chemical Sciences, University of Illinois
- 2005 Phi Lambda Upsilon / Glaxo Smith Kline Distinguished Lectureship at NC State University
- 2004 William H. Rauscher Lecture in Chemistry, Rensselaer Polytechnic Institute
- 2004 Milkovich Memorial Lectures, Department of Polymer Science, University of Akron
- 2004 North Carolina Distinguished Lecturer Award from the NC Section of the ACS

Government Service:

- Member, Advisory Committee for the NSF Directorate of Mathematical and Physical Sciences (MPSAC) (2009-2012)
- Co-Chair, Committee on Effectiveness of National Biosurveillance Systems: Biowatch and the Public Health System, National Academy of Sciences and the National Research Council (2008-2009)
- Co-Chair, Materials Engineering Section Peer Committee Member 2006-2009, National Academy of Engineering
- Member, Nanotechnology Technical Advisory Group (nTAG) to the President's Council of Advisors on Science and Technology (PCAST) (2007-2008)
- Member, DARPA's Defense Sciences Research Council (DSRC) (2006-2009)
- Fellow, Defense Sciences Research Council (DSRC) of DARPA (2004-2006)
- Defense Sciences Study Group, Institute for Defense Analysis funded by DARPA (2002-2003)
- Member, National Research Council Board on Chemical Sciences and Technology (2000-2004)

Boards and Councils:

- Scientific Advisory Board, David H. Koch Institute for Integrative Cancer Research at MIT (2009-)
- North Carolina School of Science and Math Education Foundation Board
- Co-Chair, National Network of Cancer Centers of Nanotechnology Excellence funded by the National Cancer Institute (w/ Sam Gambhir, Stanford) (2007/2008)

- International Advisory Board, *ChemSusChem* (2007-2009)
- Technology Council, *CCNE of Nanomaterials for Cancer Diagnostics and Therapeutics*, Northwestern University (2006-present)
- Member, Board of Directors, *Council for Entrepreneurial Development* (CED) (2005-2008)
- Scientific Advisory Committee, Center for Nanophase Material Sciences at Oak Ridge National Laboratory (2005 - present)
- Strategic Planning Group on Materials, Duke University (2005)
- Scientific Advisory Board, *Center for Environmentally Beneficial Catalysis*, NSF-ERC, University of Kansas
- Member, Advisory Board for the *Center for Entrepreneurship and Technology Venturing* at the Kenan Flagler Business School at University of North Carolina at Chapel Hill (2002 - present)
- Chair, *National Network of NSF Science and Technology Center Directors*, 2001
- Member, Board of Visitors, *Carolina Environmental Program* (2002-2005)
- Member, Board of Trustees, Ursinus College (2001-2009)
- Member, Advisory Council, Department of Chemistry, Virginia Tech (2001 - present)
- Green Chemistry Institute Founding Board Member (1999-2001)
- Founding Member, Board of Directors, Center for Environmentally Advanced Technologies (2000 – 2003)
- Editorial Board, *Journal of Supercritical Fluids* (2005-2008)
- Editorial Board, *Macromolecules* (2001-2003).
- Editorial Advisory Board, *Industrial and Engineering Chemistry Research* (2000-2003).
- Editorial Board, *Journal of Polymer Science* (1999 - present).
- Editorial Board, *Polymer Bulletin* (2002-2004)
- Editorial Board, *Journal of Applied Polymer Science* (1992-1999).
- Editorial Advisory Board, *High Performance Polymers* (1994-1999)
- *Synthesis Technical Advisory Board*, The DOW Chemical Company (1996 - 1999).

Technology Transfer and Entrepreneurial Activities

- *Liquidia Technologies, Inc.*, (<http://www.liquidia.com>) Co-Founder (w/ J. Rolland, G. Denison, B. Maynor, E. T. Samulski and Bruce Boucher); Based on PRINT™ technology and a fluoropolymer material platform licensed from labs at UNC-CH/NCSU. Liquidia develops and manufactures precisely engineered nanoparticles and films for use in a broad range of life and materials science industries. Current areas of focus include targeted delivery of nucleic acids and cytotoxic small molecules; ocular and inhaled therapeutics; vaccines; and featured films for displays.
- Partner with *Synecor* (<http://www.synecor.com/>), a medical devices company which creates new generations of diagnostic/therapeutic technologies and promotes their rapid dissemination into the marketplace. Synecor is led by R. Stack, W. Starling and M. Williams. Companies spun out by us include:
 - *Bioabsorbable Vascular Solutions*, Co-Founder (w/ R. Stack, W. Starling, M. Williams, & R. Langer) and Sci. Adv. Board Member (Founded in August, 2002; Acquired by *Guidant Corporation* [NYSE: GDT] in March, 2003); Technology is based a fully bioabsorbable polymeric drug eluting stents. Now part of Abbott Vascular.
- *Noxilizer, Inc.* (<http://www.noxilizer.com/>) Member, Scientific Advisory Board (2006 – present); Company solves problems ranging from medical instrument sterilization to chemical and biological agent destruction using proprietary gas technology.
- *MICELL Technologies, Inc.*, (<http://www.micell.com>) Co-Founder (w/ J. B. McClain and T. J. Romack) and Chairman (1996-2003); Technology is based on liquid and supercritical CO₂ for microelectronics fabrication and high performance low surface energy coatings. Micell also pioneered and launched the first liquid CO₂-based

garment dry cleaning technology through Hangers Cleaners (<http://www.hangersdrycleaners.com>) (Micell sold Hangers to Cool Clean, LLC in 2001). Micell is now actively applying the supercritical coating know-how to medical devices including stents. In 2009 Micell raised an additional \$20 million from VCs and strategic investors.

- Supercritical CO₂ Fluoroolefin Polymerization Technology; Licensed exclusively to DuPont in 1996; DuPont announced investment of \$275 million to commercialize the technology; 2 million lbs/year plant successfully brought on line in March, 2002.

Current Collaborators:

Ed Samulski, Jeff Frelinger, Shelley Earp, Leaf Huang, Balfour Sartor, Jim Bear, George Roberts, Michael Rubinstein, Rudy Juliano, Paul Resnick, Sergei Sheiko, Valerie Sheares-Ashby, Weili Lin, Etta Pisano, Heinrich Jaeger, Steve Larson (MSKCC), David Scheinberg (MSKCC), Hedi Hricak (MSKCC).

Refereed Publications and Recently Submitted Manuscripts:

(DeSimone has >7000 citations as measured by Science Citation Index in January 2009; DeSimone's Hirsch Index "*h*-Index" = 45, that is he has 45 papers with 45 or more citations, see Hirsch, J. E. *Proc. Nat. Acad. Sci.* **2005**, *46*, 16569)

1. "Continuous Precipitation Polymerization of Vinylidene Fluoride in Supercritical Carbon Dioxide: A Model for Understanding the Molecular Weight Distribution"; Ahmed, T. S.; DeSimone, J. M.; Roberts*, G. W. *Chem. Eng. Sci.* **2010**, *65*, 651.
2. Photochemically Cross-linked Perfluoropolyether-based Elastomers: Synthesis, Physical Characterization and Biofouling Evaluation"; Hu, Z.; Finlay, J.; Chen, L.; Betts, D.; Hillmyer, M.; Callow, M.; Callow, J.; DeSimone*, J. M. *Macromolecules* **2009**, *42*, 6999-7007.
3. "Top-down Particle Fabrication: Control of Size and Shape for Diagnostic Imaging and Drug Delivery"; Canelas, D. A.; Herlihy, K. P.; DeSimone*, J. M. *Advanced Reviews Wiley* **2009**, in press.
4. "Photonic Crystal Geometry for Organic Solar Cells"; Ko, D.-H.; Tumbleston, J. R.; Zhang, L.; Williams, S.; DeSimone, J. M.; Lopez, R.; Samulski*, E. T. *Nano Letters* **2009**, *9*(7), 2742-2746.
5. "Fluoropolymer Synthesis in Supercritical Carbon Dioxide"; Du, L.; Kelly, J. Y.; Roberts, G. W.; DeSimone*, J. M. *J. Supercrit. Fluids* **2009**, *47*, 447-457.
6. "Fabrication of Multiphasic and Regio-specifically Functionalized PRINT® Particles of Controlled Size and Shape"; Zhang, H.; Nunes, J. K.; Gratton, S. E. A.; Herlihy, K. P.; Pohlhaus, P. D.; DeSimone, J. M.; *New Journal of Physics* **2009**, in press.
7. "Molding Block Copolymer Micelles: A Framework for Molding of Discrete Objects on Surfaces"; Yu-Su, S. Y.; Thomas, D. R.; Alford, J. E.; LaRue, I.; Pitsikalis, M.; Hadjichristidis, N.; DeSimone, J. M.; Dobrynin, A. V.; Sheiko*, S. S. *Langmuir*, **2008**, *24*, 12671-12679. (# of citations = 0)
8. "Optically Transparent, Amphiphilic Networks Based on Blends of Perfluoropolyethers and Poly(ethylene glycol)"; Hu, Z.; Chen, L.; Betts, D.; Pandya, A.; Hillmyer, M. A.; DeSimone*, J. M. *J. Am. Chem. Soc.* **2008**, *130*, 14244-14252. (# of citations = 0)
9. "The Effect of Particle Design on Cellular Internalization Pathways"; Gratton, S. E. A.; Ropp, P. A.; Pohlhaus, P. D.; Luft, J. C.; Madden, V. J.; Napier, M. E.; DeSimone*, J. M. *Proceedings of the National Academy of Sciences* **2008**, *105*(33), 11613-11618. (# of citations = 1)

10. "Electrically-Driven Alignment and Crystallization of Unique Anisotropic Polymer Particles"; Herlihy, K. P.; Nunes, J. DeSimone*, J. M.; *Langmuir* **2008**, *24*, 8421-8426. (# of citations = 0)
11. "The Pursuit of a Scalable Nano-fabrication Platform for Use in Material and Life Science Applications"; Gratton, S. E. A.; Williams, S. S.; Napier, M. E.; Pohlhaus, P. D.; Zhou, Z.; Wiles, K. B.; Maynor, B. B.; Shen, C.; Olafsen, T.; Samulski, E. T.; DeSimone*, J. M. *Accounts of Chemical Research* **2008**, *41*, 1685-1695. (# of citations = 0)
12. "Nanostructured Titania-Polymer Photovoltaic Devices Made Using PFPE-based Nano-molding Techniques"; Williams, S.; Hampton, M.; Gowrishanker, V.; Ding, I-K.; Templeton, J.; Samulski, E.; DeSimone*, J.M.; McGehee, M.; *Chemistry of Materials*, **2008**, *20*, 5229-5234. (# of citations = 0)
13. "Shape-specific, Mono-disperse Nano-molding of Protein Particles"; Kelly, J. Y.; DeSimone*, J. M. *J. Am. Chem. Soc.* **2008**, *130*, 5438-5439. (# of citations = 2)
14. "Microfabricated Particles for Engineered Drug Therapies: Elucidation into the Mechanisms of Cellular Internalization of PRINT Particles"; Gratton, S. E. A.; Napier, M. E.; Ropp, P. A.; Tian, S. DeSimone*, J. M. *Pharm. Res.* **2008**, *25*, 2845-2852. (# of citations = 0)
15. "Continuous Co-polymerization of Vinylidene Fluoride with Hexafluoropropylene in Supercritical Carbon Dioxide: High Hexafluoropropylene-Content Amorphous Copolymers"; Ahmed, T.; DeSimone, J. M.; Roberts*, G. *Macromolecules* **2008**, *41*, 3086-3097. (# of citations = 1)
16. "Reductively Labile PRINT Nanoparticles for the Delivery of Doxorubicin to HeLa Cells"; Petros, R. A.; Ropp, P. A.; DeSimone*, J. M.; *J. Am. Chem. Soc.* **2008**, *130*, 5008-5009. (# of citations = 3)
17. L. Du, J. M. DeSimone, G. W. Roberts, in *Green Chemistry and Engineering with Gas Expanded Liquids and Near-Critical Media* (Eds.: K. W. Hutchenson, A. M. Scurto, B. Subramaniam), **2008**. (# of citations = not tracked by S.C.I.)
18. "The Patterning of Sub-500 nm, Inorganic Oxide Structures Using Cross-linked Perfluoropolyethers"; Hampton, M. J.; Williams, S. S.; Zhou, Z.; Nunes, J.; Ko, D. H.; Templeton, J. L.; Samulski, E. T.; DeSimone*, J. M. *Advanced Materials* **2008**, *20*, 2667-2668. (# of citations = 0)
19. "Continuous Co-polymerization of Vinylidene Fluoride with Hexafluoropropylene in Supercritical Carbon Dioxide: Low Hexafluoropropylene-Content Semicrystalline Copolymers"; Ahmed, T.; DeSimone, J. M.; Roberts*, G. *Macromolecules* **2007**, *40*, 9322-9331. (# of citations = 2)
20. "Nanoparticle Drug Delivery Platform"; Napier, M. E.; DeSimone*, J. M. *Polymer Reviews* **2007**, *47*, 321-327. (# of citations = 1)
21. "Etching SiO₂ with HF/pyridine Supercritical Carbon Dioxide Solutions and Resultant Interfacial Electronic Properties"; Li, Y. X.; Yang, D.; Jones III, C. A.; DeSimone, J. M.; Irene, E. A. *J. Vac. Sci. Technol.* **2007**, *25(4)*, 1139-1142. (# of citations = 0)
22. "Alternative Fluoropolymers to the Avoid Challenges Associated With Perfluorooctanoic Acid"; Guo, J.; Resnick, P.; DeSimone*, J. M.; *Ind. Chem. Eng. Res.* **2008**, *47*, 502-508. (# of citations = 0)
23. "Weak Surface Anchoring Energy of 4-Cyano-4'-pentyl-1,1'-biphenyl on Perfluoropolyether Langmuir-Blodgett Films"; Russell-Tanner, J. M.; Takayama, S.; Sugimura, A.; DeSimone, J. M.; Samulski*, E. T. *J. Chem. Phys.* **2007**, *126 (24)*: Art. No. 244706. (# of citations = 0)

24. "Dynamics of CO₂-Plasticized Electron Transport in Au Nanoparticle Films: Opposing Effects of Tunneling Distance and Local Site Mobility"; Choi, J. P.; Coble, M. M.; Branham, M. R.; DeSimone, J. M.; Murray, R. W. *J. Phys. Chem. C* **2007**, *111*, 3778-3785. (# of citations = 11)
25. "Nanofabricated Particles for Engineered Drug Therapies: A Preliminary Biodistribution Study of PRINTTM Nanoparticles"; Gratton, S. E. A.; Pohlhaus, P. D.; Lee, J.; Guo, J.; Cho, M. J.; DeSimone*, J. M. *J. Controlled Release* **2007**, *121*, 10-18. (# of citations = 15)
26. "Supramolecular Nano-mimetics: Replication of Micelles, Viruses and Other Naturally-Occurring Nanoscale Objects"; Maynor, B. W.; LaRue, I.; Hu, Z.; Rolland, J. P.; Pandya, A.; Fu, Q.; Liu, J.; Spontak, R. J.; Sheiko, S. S.; Samulski, R. J.; Samulski, E. T.; DeSimone*, J.M. *Small* **2007** *3*(5), 845-849. (# of citations = 7)
27. "Ultrathin Film Deposition by Liquid CO₂ Free Meniscus Coating-Uniformity and Morphology"; Kim, J.; Novick, B. J.; DeSimone, J. M.; Carbonell, R. G. *Langmuir* **2006**, *22*, 642-657. (# of citations = 5)
28. "Use of Substituted Bis(acetylaceton)ethylenediimine and Dialkyldithiocarbamate Ligands for Copper Chelation in Supercritical Carbon Dioxide"; Dunbar, A.; Omiatek, D. M.; Thai, S. D.; Kendrex, C. E.; Grotzinger, L. L.; Boyko, W. J.; Weinstein, R. D.; Skaf, D. W.; Bessel*, C. A.; Denison, G.; DeSimone, J. M. *Ind. Eng. Chem. Res.* **2006**, *45*, 8779-8787. (# of citations = 3)
29. "Amorphous Linear Aliphatic Polyesters for the Facile Preparation of Tunable Rapidly Degrading Elastomeric Devices and Delivery Vectors"; Olson, D. A.; Gratton, S. E. A.; DeSimone, J. M.; Sheares*, V. V. *J. Am. Chem. Soc.* **2006**, *128*, 13625-13633. (# of citations = 9)
30. "Superhydrophobic Behavior of a Perfluoropolyether Lotus-Leaf-Like Topography"; Zhang, L.; Zhou, Z.; Cheng, B.; DeSimone, J. M.; Samulski*, E. T. *Langmuir* **2006**, *22*, 8576-8580. (# of citations = 27)
31. "Molded, High Surface Area Polymer Electrolyte Membranes from Cured Liquid Precursors"; Zhou, Z.; Dominey, R. N.; Rolland, J. P.; Maynor, B. W.; Pandya, A. A.; DeSimone*, J. M. *J. Am. Chem. Soc.* **2006**, *128*, 12963-12972. (# of citations = 10)
32. "Imparting Size, Shape, and Composition Control of Materials for Nanomedicine"; Eulis, L.; DuPont, J.; DeSimone*, J. M. *Chem. Soc. Rev.* **2006**, *35*, 1095-1104. (# of citations = not tracked by S.C.I.)
33. "Particle Formation in Precipitation Polymerization: Continuous Precipitation Polymerization of Acrylic Acid in Supercritical Carbon Dioxide"; Liu, T.; Garner, P.; DeSimone, J. M.; Roberts*, G. W.; Bothun, G. D. *Macromolecules* **2006**, *39*(19), 6489-6494. (# of citations = 4)
34. "Cross-linking Polymerization of Acrylic Acid in Supercritical Carbon Dioxide"; Liu, T.; DeSimone, J. M.; Roberts*, G. W.; *Polymer* **2006**, *47*, 4276-4281. (# of citations = 5)
35. "Kinetics of the Precipitation Polymerization of Acrylic Acid in Supercritical Carbon Dioxide: The locus of Polymerization"; Liu, T.; DeSimone, J. M.; Roberts*, G. W. *Chem. Engin. Sci.* **2006**, *61*, 3129-3139. (# of citations = 7)
36. "Contact Angle Analysis, Surface Dynamics, and Biofouling Characteristics of Cross-linkable, Random Perfluoropolyether-based Graft Ter-polymers"; Yarbrough, J. C.; Rolland, J. P.; DeSimone*, J. M.; Callow, M. E.; Finlay, J. A.; Callow, J. A. *Macromolecules* **2006**, *39*, 2521-2528. (# of citations = 15)
37. "Alicyclic Photoresists for CO₂-based Next-Generation Microlithography: A Tribute to James E. McGrath"; Boggiano, M. K.; Vellenga, D.; Carbonell, R. G.; Sheares-Ashby, V.; DeSimone*, J. M.; *Polymer* **2006**, *47*, 4012-4017. (# of citations = 1)

38. "Solution Properties of a Fluorinated Alkyl Methacrylate Polymer Dissolved in Supercritical Carbon Dioxide"; Guo, Ji.; André, P.; Adam, M.; Panyukov, S.; Rubinstein*, M.; DeSimone*, J. M.. *Macromolecules* **2006**, *39*, 3427-3434. (# of citations = 1)
39. "Polymeric Nano-particles from Supercritical CO₂ via Microemulsion Polymerization"; Ye, Wei-jun; Keiper, J. S.; DeSimone, J. M.; *Chinese Journal of Polymer Science* **2006**, *24*, 95-101. (# of citations = 1)
40. "Copolymerization of Vinylidene Fluoride with Hexafluoropropylene in Supercritical Carbon Dioxide"; Ahmed, T.; Roberts*, G.; DeSimone, J. M. *Macromolecules* **2006**, *39*, 15-18. (# of citations = 7)
41. "Flexible Bi-radicals in Liquid and Supercritical Carbon Dioxide: The Exchange Interaction, Chain Dynamics, and a Comparison with Conventional Solvents"; Forbes*, M.D.E.F.; Dukes, K. E.; Avdievich, N. I.; Harbron, E. J.; DeSimone, J. M. *J. Phys. Chem.* **2006**, *110*, 1767-1774. (# of citations = 2)
42. "Production of Fluoropolymers in Supercritical Carbon Dioxide"; Wood, Colin D.; Yarbrough, J. C.; Roberts, G.; DeSimone, J. M. in *Supercritical Carbon Dioxide in Polymer Reaction Engineering*; Editors: Kemmere, M. F. and Meyer, T.; (Wiley: Weinheim, Germany); pp 189-204. (# of citations = not tracked by S.C.I.)
43. "Interfacial Properties of Fluorocarbon and Hydrocarbon Phosphate Surfactants at the Water-CO₂ Interface"; Dickson, J. L.; Smith, P. G., Jr.; Dhanuka, V. V.; Srinivasan, V.; Stone, M. T.; Rossky, P. J.; Behles, J. A.; Keiper, J. S.; Xu, B.; Johnson, C.; DeSimone, J. M.; Johnston, K. P. *Ind. Eng. Chem. Res.* **2005**, *44*, 1370-1380. (# of citations = 14)
44. "Oxidative Dissolution of Copper and Zinc Metal in Carbon Dioxide with *tert*-Butyl Peracetate and a β -Diketone Chelating Agent"; Visintin, P. M.; Bessel, C. A.; White, P. S.; Schauer, C. K.; DeSimone, J. M. *Inorg. Chem.* **2005**, *44*, 316-324. (# of citations = 8)
45. "Direct Fabrication and Harvesting of Monodisperse, Shape Specific Nano-Biomaterials"; Rolland, J. P.; Maynor, B. W.; Euliss, L. E.; Exner, A. E.; Denison, G. M.; DeSimone*, J. M. *J. Am. Chem. Soc.* **2005**, *127*, 10096-10100. (# of citations = 65)
46. "Continuous Precipitation Polymerization of Acrylic Acid in Supercritical Carbon Dioxide: The Polymerization Rate and the Polymer Molecular Weight"; Liu, T.; DeSimone, J. M.; Roberts, G. W. *J. Polym. Sci. Part A: Polym. Chem.* **2005**, *43*, 2546 – 2555. (# of citations = 8)
47. "Chemical Functionalization of Silica and Alumina Particles for Dispersion in Carbon Dioxide"; Visintin, P. M.; Carbonell, R. G.; Schauer, C. K.; DeSimone*, J. M. *Langmuir* **2005**, *21*, 4816- 4823. (# of citations = 9)
48. "Advantages of Supercritical Carbon Dioxide for Composite Particle Synthesis Using Water-Soluble or Water-Reactive Monomers"; Young, J. L.; DeSimone*, J. M. *Macromolecules* **2005**, *38*, 4542-4544. (# of citations = 2)
49. "NMR and SANS Studies of Aggregation and Microemulsion Formation by Phosphorous Fluorosurfactants in Liquid and Supercritical Carbon Dioxide"; Xu, B.; Lynn, G. W.; Guo, J.; Melinchenko, Y. B.; Wignall, G. D.; McClain, J. B.; DeSimone, J. M.; Johnson, Jr.*, C. S. *J. Phys. Chem.* **2005**, *109*, 10261-10269. (# of citations = 9)
50. "Controlled Foaming of Polymer Films Through Restricted Surface Diffusion and the Addition of Nanosilica Particles or CO₂-Philic Surfactants"; Siripurapu, S.; DeSimone, J. M.; Khan, S. A.; Spontak*, R. J. *Macromolecules* **2005**, *38*, 2271-2280. (# of citations = 9)
51. "Fabrication of Ultramicroelectrodes Using A "Teflon-like" Coating Material"; Liu, B.; Rolland, J. P.; DeSimone, J. M.; Bard*, A. J. *Anal. Chem.* **2005**, *77*, 3013-3017. (# of citations = 11)

52. "Heterogeneous Polymerization of Fluoroolefins in Supercritical Carbon Dioxide"; by Kennedy, K. A.; Roberts, G. W.; DeSimone*, J. M. in *Advances in Polymer Science*; Okubo, M. Editor; Springer, **2005**, *175*, 329-346. (# of citations = 10)
53. "Emulsion Polymerization of N-Ethylacrylamide in Supercritical Carbon Dioxide"; Ye, W.; DeSimone*, J. M. *Macromolecules* **2005**, *38*, 2180-2190. (# of citations = 14)
54. "Solid-State Polymerization of Poly(bisphenol A carbonate) Facilitated by Supercritical Carbon Dioxide"; Kiserow, D. J.; Shi, C.; Roberts*, G. W.; Gross, S. M.; DeSimone, J.M. in *Advances in Polycarbonates*; Editors: Brunelle, D. J.; Korn, M. R.; ACS Symposium Series 898: 86-94, **2005**. (# of citations = 0)
55. "Low-temperature, surface-mediated foaming of polymer films"; Siripurapu, S.; DeSimone, J. M.; Khan, S. A.; Spontak, R. J. *Adv. Mat.* **2004**, *16* (12), 989. (# of citations = 25)
56. "Spin coating of photoresists using liquid carbon dioxide"; Hoggan, E. N.; Flowers, D.; Wang, K.; DeSimone, J. M.; Carbonell, R. G. *Ind. Eng. Chem. Res.* **2004**, *43* (9), 2113-2122. (# of citations = 14)
57. "Deposition of thin polymeric films from liquid carbon dioxide using a high-pressure free-meniscus coating process"; Novick, B. J.; DeSimone, J. M.; Carbonell, R. G. *Ind. Eng. Chem. Res.* **2004**, *43* (2), 515-524. (# of citations = 15)
58. "New Fluoropolymer Materials"; Wood, C. D.; Michel, U.; Rolland, J. P.; DeSimone*, J. M. *J. Fluor. Chem.* **2004**, *125*, 1671-1676. (# of citations = 7)
59. "Light Scattering Study of Poly (dimethyl siloxane) in Liquid and Supercritical CO₂"; André, P.; Folk, S. L.; Adam, * M.; Rubinstein, * M.; DeSimone, * J. M. *J. Phys. Chem.* **2004** *108*, 9901-9907. (# of citations = 5)
60. "Applications of "Dry" Processing in the Microelectronics Industry Using Carbon Dioxide"; Jones, C. A.; Geissler, A.; DeYoung, J. P.; McClain, J. B.; Carbonell, R.; *DeSimone, J. M. *Critical Reviews in Solid State and Materials Sciences* **2004**, *29*, 97-109. (# of citations = 15)
61. "Continuous precipitation polymerization of vinylidene fluoride in supercritical carbon dioxide: modeling the molecular weight distribution"; Ahmed, T.S.; DeSimone, J. M.; Roberts, G. W. *Chem. Eng. Sci.* **2004**, *59* (22-23), 5139-5144. (# of citations = 10)
62. "High Resolution Soft Lithography: Enabling Materials for Nano-Technologies"; Rolland, J. P.; Hagberg, E. C.; Carter, * K. R.; DeSimone*, J. M. *Angew. Chem. Int. Ed.* **2004**, *43*, 5796-5799. (# of citations = 60)
63. "Self-Assembly of Phosphate Fluorosurfactants in Carbon Dioxide"; Keiper, J. S.; Behles, J. A.; Bucholz, T. L.; Simhan, R.; DeSimone*, J. M.; Lynn, G. W.; Wignall*, G. D.; Melnichenko, Y. B.; Frielinghaus, H. *Langmuir* **2004**, *20*, 1065-1072. (# of citations = 12)
64. "Solvent Resistant "Liquid Teflon" for Microfluidic Device Fabrication"; Rolland, J. P.; Van Dam, R. M.; Schorzman, D. A.; Quake*, S. R.; DeSimone*, J. M.; *J. Am. Chem. Soc.* **2004**, *126*(8), 2322-2323. (# of citations = 94)
65. "Micro- and Nanoporous Materials Developed Using Supercritical Carbon Dioxide"; Paisner, S. N.; DeSimone*, J.M. in *Polymers for Microelectronics and Nanoelectronics*; Editors: Lin, Q.; Pearson, R. A.; Hedrick, J. C.; ACS Symposium Series 874: 223-235, **2004**. (# of citations = 5)
66. "Macromolecular Surfactants for Supercritical Carbon Dioxide Applications: Synthesis and Characterization of Fluorinated Block Copolymers Prepared by Nitroxide-Mediated Radical Polymerization"; Lacroix-Desmazes* P; André P; DeSimone J. M.; Ruzette A.; Boutevin B. *J. Polym. Sci. Part A: Polymer Chemistry* **2004**, *42*(14), 3537-3552. (# of citations = 35)

67. "Dry Lithography Using Liquid and Supercritical Carbon Dioxide-based Chemistries and Processes"; Hoggan, E. N.; Flowers, D.; Wang, Ke.; DeSimone*, J. M.; Carbonell*, R. G. *IEEE Transactions* **2004**, 17(4), 510-516. (# of citations = 9)
68. "Green synthesis of polymers using supercritical carbon dioxide"; Wood, C. D.; Cooper, A. I.; DeSimone, J. M. *Current Opinion in Solid State and Materials Science* **2004**, 8(5), 325-331. (# of citations = 9)
69. "Green Chemistry Using Liquid and Supercritical Carbon Dioxide"; Joseph M. DeSimone and William Tumas, Editors; Oxford University Press: New York, 2003 (259 pages). (# of citations = not tracked by S.C.I.)
70. "Improvement of Silicone Endotheliazation by Treatment with Allylamine and/or Acrylic Acid Low-pressure Plasma"; Monge, S.; Mas, A.; Hamzaoui, A.; Kassis, C. M.; DeSimone, J. M.; Schue, F. *J. Appl. Polym. Sci.* **2003**, 87(11), 1794-1802. (# of citations = 12)
71. "Copolymerization of Tetrafluoroethylene and 2,2-Bis(trifluoromethyl)-4,5-difluoro-1,3-dioxole in Supercritical Carbon Dioxide" Michel, U.; Resnick, P.; Kipp, B.; DeSimone*, J. M. *Macromolecules* **2003**, 36, 7107-7113. (# of citations = 18)
72. "HF Etchant Solutions in Supercritical Carbon Dioxide for 'Dry' Etch Processing of Microelectronic Devices"; Jones, C. A.; Yang, D.; Irene, E. B.; Gross, S. M.; Wagner, M.; DeYoung*, J.; DeSimone*, J. M. *Chemistry of Materials* **2003**, 15, 2867-2869. (# of citations = 10)
73. "Etchant Solutions for the Removal of Cu(0) in a Supercritical CO₂-based "Dry" Chemical Mechanical Planarization Process for Device Fabrication"; Bessel, C. A.; Denison, G. M.; DeSimone*, J. M.; DeYoung, J.; Gross, S.; Schauer, C. K.; Visintin, P. M. *J. Am. Chem. Soc.* **2003**, 125, 4980-4981. (# of citations = 32)
74. "NMR Studies of Water Transport and Proton Exchange in Water-in-Carbon Dioxide Microemulsions"; Nagashima, K.; Lee, Jr., C. T.; Xu, B.; Johnston, K. P.; DeSimone, J. M.; Johnson, Jr., C. S. *J. Phys. Chem.* **2003**, 107, 1962-1968. (# of citations = 17)
75. "Voltammetry and Electron-Transfer Dynamics in a Molecular Melt of a 1.2 nm Metal Quantum Dot"; Lee, D.; Donkers, R. L.; DeSimone, J. M.; Murray*, R. W. *J. Am. Chem. Soc.* **2003**, 125, 1182-1183. (# of citations = 42)
76. "Ion Atmosphere Relaxation Control of Electron Transfer Dynamics in a Plasticized Carbon Dioxide Redox Polyether Melt"; Lee, D.; Harper, A. S.; DeSimone*, J. M.; Murray*, R. W. *J. Am. Chem. Soc.* **2003**, 125, 1096-1103. (# of citations = 12)
77. "Diffusion of Water in Liquid and Supercritical Carbon Dioxide: An NMR Study"; Xu, B.; Nagashima, K.; DeSimone, J. M.; Johnson, Jr., C. S. *J. Phys. Chem.* **2003**, 107, 1-3. (# of citations = 9)
78. "A Combined Small-Angle Neutron and X-ray Scattering Study of Block Copolymer Micellization in Supercritical Carbon Dioxide"; Lo Celso, F.; Triolo, A.; Triolo, F.; Thiyagarajan, P.; Amenitsch, H.; Steinhart, M.; Kriechbaum, M.; DeSimone, J. M.; Triolo*, R.; *J. Appl. Crystall.* **2003**, 36, 660-663. (# of citations = 2)
79. "Industrial applications of the aggregation of block copolymers in supercritical CO₂: a SANS study"; Lo Celso, F.; Triolo, A.; Triolo, F.; McClain, J.; DeSimone, J. M.; Heenan, R. K.; Amenitsch, H.; Triolo, R. *Appl. Phys. A-Mat. Sci. Proc.* **2002**, 74, S1427-S1429. (# of citations = 3)
80. "Polymeric Nanogels Produced via Inverse Microemulsion Polymerization as Potential Gene and Antisense Delivery Agents"; McAllister, K.; Sazani, P.; Adam, M.; Cho, M.; Rubinstein, M.; Samulski, R. J.; DeSimone*, J. M. *J. Am. Chem. Soc.* **2002**, 124, 15198-15207. (# of citations = 53)

81. "Electron and Mass Transport in Hybrid Redox Polyether Melts Contacted with Carbon Dioxide"; Lee, D.; Hutchison, J. C.; Leone, A. M.; DeSimone*, J. M.; Murray*, R. W. *J. Am. Chem. Soc.* **2002**, *124*, 9310-9317. (# of citations = 19)
82. "Practical Approaches to Green Solvents"; DeSimone*, J. M. *Science* **2002**, *297*, 799-803. (# of citations = 236)
83. "Novel Electronic Coatings Using Liquid CO₂"; Hoggan, E. N.; Novick, B. J.; DeSimone, J. M.; Carbonell, R. G. *Semicond. Fabtech* **2002**, *16*, 169-173. (# of citations = not tracked by S.C.I.)
84. "Continuous Precipitation Polymerization of Vinylidene Fluoride in Supercritical CO₂: Formation of Polymers with Bimodal Molecular Weight Distributions"; Saraf, M.; Gerard, S.; Wojcinski, L. M.; Charpentier, P. A.; DeSimone*, J. M.; Roberts*, G. W. *Macromolecules* **2002**, *35*, 7976-7985. (# of citations = 31)
85. "Structure of Phosphate Fluorosurfactant-based Reverse Micelles in Supercritical Carbon Dioxide"; Senapati, S.; Keiper, J. S.; DeSimone, J. M.; Wignall, G. D.; Melinchenko, Y. B.; Frielinghaus, H.; Berkowitz, M. L. *Langmuir* **2002**, *18*, 7371 - 7376. (# of citations = 41)
86. "Kinetics of Block Copolymer Aggregation in Supercritical CO₂"; Triolo, A.; Lo Celso, F.; Triolo, F.; Amenitsch, H.; Steinhart, M.; Thiyagarajan, P.; Wells-Kennedy, S.; DeSimone, J. M.; Triolo, R. *J. Noncrystal Solids* **2002**, *307*, 725-730. (# of citations = 4)
87. "Designing Photoresist Systems for Microlithography in Carbon Dioxide"; Flowers, D.; Hoggan, E.; DeSimone*, J. M.; Carbonell, R. *Mat. Res. Soc. Symp. Proc.* **2002**, *705*, 81-87. (# of citations = not tracked by S.C.I.)
88. "Continuous Precipitation Polymerization of Vinylidene Fluoride in Supercritical CO₂: Molecular Weight Distribution"; Saraf, M.; Wojcinski, L. M.; Kennedy, K.; Gerard, S.; Charpentier, P. A.; DeSimone, J. M.; Roberts*, G. W. *Macromol. Symp.* **2002**, *182*, 119-129. (# of citations = not tracked by S.C.I.)
89. "Continuous Polymerizations in Supercritical Carbon Dioxide"; Charpentier, P.A.; DeSimone*, J.M.; Roberts*, G.W. in Clean Solvents: ACS Symposium Series 819: 113-135, **2002**. (# of citations = 6)
90. "Formation of Self-assembled Monolayers of Semifluorinated and Hydrocarbon Chlorosilane Precursors on Silica Surfaces from Liquid Carbon Dioxide"; Efimenko, K.; Novick, B.; Carbonell, R. G.; DeSimone, J. M.; Genzer*, J. *Langmuir* **2002**, *18*, 6170-6179. (# of citations = 12)
91. "Generation of Microcellular Foams of PVDF and Its Blends Using Supercritical Carbon Dioxide in a Continuous Process"; Siripurapu, S.; Gay, Y. J.; Royer, J. R.; DeSimone, J. M.; Spontak, R. J.; Khan*, S. A. *Polymer* **2002**, *43*, 5511-5520. (# of citations = 35)
92. "Polymer Self-Assembly in Carbon Dioxide"; Taylor, D. K.; Keiper, J. S.; DeSimone*, J. M. *Ind. Eng. Chem. Res.* **2002**, *41*, 4451-4459. (# of citations = 8)
93. "Microphase-Separated Block Copolymers Comprised of Low Surface Energy Fluorinated Blocks and Hydrophilic Blocks: Synthesis and Characterization"; Arnold, M.; Leroux, D.; Betts, D.; Nagai, K.; Spontak, R.; Linton, R.; DiGiano, F.; DeSimone*, J. M.; Freeman*, B. *Macromolecules* **2002**, *35*, 3697-3707. (# of citations = 24)
94. "Determination of the Equilibrium Constant for the Reaction between Bisphenol A and Diphenyl Carbonate"; Gross, S. M.; Bunyard, W. C.; Erford, K.; Roberts, G.; Kiserow, D. J.; DeSimone*, J. M. *J. Polym. Sci. Part A*: **2002**, *40*, 171-178. (# of citations = 8)

95. "Effect of Polymer Coatings from CO₂ on Water Transport in Porous Media"; Henon, F. E.; Carbonell*, R. G.; DeSimone, J. M.; *AIChE Journal* **2002**, *48*(5), 941-952. (# of citations = 7)
96. "A Commentary on 'Carbon Dioxide-Poly(Vinylidene Fluoride) Interactions at High Pressure"; Kennedy, K. A. DeSimone, J. M.; Roberts*, G. W. *J. Polym. Sci. Part B: Polymer Physics*, **2002**, *40*(6), 602-604. (# of citations = 2)
97. "New Phosphate Fluorosurfactants for Carbon Dioxide"; Keiper, J. S.; Simhan, R. DeSimone*, J. M.; Wignall, G. D.; Melinchenko, Y. B. *J. Am. Chem. Soc.* **2002**, *124*, 1834-1835. (# of citations = 56)
98. "Polymer Melt Rheology with High-pressure CO₂ Using a Novel Magnetically Levitated Sphere Rheometer" Royer, J.R.; Gay, Y. J.; Adam, M.; DeSimone, J. M.; Khan, S.A. *Polymer* **2002**, *43*(8), 2375-2383. (# of citations = 22)
99. "Light scattering study of poly(tert-butyl methacrylate)-block-poly(1,1-dihydroperfluorooctyl methacrylate) in liquid and supercritical carbon dioxide-Towards the reversible control of self-assembly"; Yoshida, E.; Wells, S. L.; DeSimone, J. M. *Konbunshi Ronbunshi* **2001**, *58*(10), 507-513. (# of citations = 5)
100. "Polymers with Multiple Ligand Sites for Metal Extractions in Dense Phase Carbon Dioxide"; Powell, K. R.; McCleskey, T. M.; Tumas*, W.; DeSimone*, J. M. *Ind. Eng. Chem. Res.* **2001**, *40*(5), 1301-1305. (# of citations = 11)
101. "Separation of Positional Isomers of Oxidation Catalysts Precursors" Hartshorn, C. M.; Maxwell, K.A.; White, P.S.; DeSimone, J. M.; Meyer*, T. J. *Inorg. Chem.* **2001**, *40*, 601-606. (# of citations = 19)
102. "Four- and Five-Coordinate CO Insertion Mechanism in d(8)-Nickel(III) Complexes"; Shultz, C. S.; DeSimone, J. M.; Brookhart*, M. *J. Am. Chem. Soc.* **2001**, *123*(37), 9172-9173. (# of citations = 26)
103. "Formation of Perfluoropolyether Coatings by the Rapid Expansion of Supercritical Solutions (RESS) Process. Part 1: Experimental Results"; Chernyak, Y.; Henon, F.; Harris, R. B.; Gould, R. D.; Franklin, R. K.; Edwards, J. R.; DeSimone, J. M.; Carbonell, R. G. *Ind. Eng. Chem. Res.* **2001**, *40*, 6118-6126. (# of citations = 25)
104. "Bond Angle Effects on the Migratory Insertion of Ethylene and Carbon Monoxide into Palladium(II)-Methyl Bonds in Complexes Bearing Bidentate Phosphine Ligands"; Ledford, J.; Shultz, C. S.; Gates, D. P.; White, P. S.; DeSimone, J. M.; Brookhart*, M. *Organometallics*, **2001**, *20*(25); 5266-5276. (# of citations = 37)
105. "Developments in Carbon Dioxide Research"; Behles, J. A.; DeSimone*, J. M. *Pure Appl. Chem.* **2001**, *73* (8), 1281-1285. (# of citations = 21)
106. "Ultrafast Excited-state Energy Migration Dynamics in an Efficient Light Harvesting Antenna Polymer based on Ru(II) and Os(II) Polypyridyl Complexes"; Fleming, C. N.; Maxwell, K. A.; DeSimone, J. M.; Meyer, T. J.; Papanikolas*, J. M. *J. Am. Chem. Soc.* **2001**, *123*, 10336-10347. (# of citations = 55)
107. "Reaction Kinetics of the Solid State Polymerization of Poly(bisphenol A carbonate) Facilitated by Supercritical CO₂"; Shi, C.; DeSimone, J. M.; Roberts*, G.; Kiserow*, D. J. *Macromolecules* **2001**, *34*, 7744-7750. (# of citations = 19)
108. "Well-defined Glycopolymer Amphiphiles for Liquid and Supercritical Carbon Dioxide Applications"; Ye, W.; Wells, S.; DeSimone*, J. M. *J. Polym. Sci. Part A: Polym. Chem.* **2001**, *39*, 3841-3849. (# of citations = 18)
109. "Electrospinning of Polymer Nanofibers with Specific Surface Chemistry"; Deitzel, J. M.; Kosik, W.; McKnight, S. H.; Beck Tan*, N. C.; DeSimone, J. M.; Crette, S. *Polymer* **2002**, *43*(3), 1025-1029. (# of citations = 68)

110. "Dispersion Polymerization of Glycidal Methacrylate in Supercritical Carbon Dioxide"; Shiho, H.; DeSimone*, J. M. *Macromolecules* **2001**, *34*(5), 1198-1203. (# of citations = 61)
111. "Surfactants and Self-assembly in Carbon Dioxide"; DeSimone*, J. M.; Keiper, J. S. *Current Opinion in Solid State and Materials Science* **2001**, *5*, 333-341. (# of citations = 14)
112. "Diffusive Transport of Micelles and Monomeric Solutes in Supercritical CO₂"; Lee, D.; Hutchison, J. C.; DeSimone*, J. M.; Murray*, R. W. *J. Am. Chem. Soc.* **2001**, *123*, 8406-8407. (# of citations = 14)
113. "Viscosity Effects on the Thermal Decomposition of Bis(perfluoro-2-N-propoxypropionyl) Peroxide in Dense Carbon Dioxide and Fluorinated Solvents"; Bunyard, W. C.; Kadla, J. F.; DeYoung, J.; DeSimone*, J. M. *J. Am. Chem. Soc.* **2001**, *123*, 7199-7206. (# of citations = 19)
114. "Study of the Association of a Diblock Copolymer and Absorption of an Insoluble Homopolymer in CO₂"; Wells, S. L.; Taylor, D.; Adam, M.; DeSimone*, J. M.; Farago, B. *Macromolecules* **2001**, *34*, 6161-6163. (# of citations = 4)
115. "Critical Phase Polymerizations"; Jones, III, C. A.; DeSimone*, J. M. in *Encyclopedia of Polymer Science and Engineering*, 3rd Edition, Ed. Mark, H.; Wiley-Interscience: Hoboken; 111-127; **2001**. (# of citations = not tracked by S.C.I.)
116. "Surfactants for Supercritical and Near-Critical Fluids"; Carson, T.; Wells, S. L.; DeSimone*, J. M. in *Reactions and Synthesis in Surfactant Systems*; Ed. John Texter; Marcel Dekker: New York; pp. 129-143, 2001. (# of citations = not tracked by C.S.I.)
117. "Synthesis of High Molecular Weight Polycarbonate by Solid State Polymerization"; Gross, S. M.; Roberts*, G.; Kiserow*, D. J.; DeSimone*, J. M. *Macromolecules* **2001**, *34*, 3916-3920. (# of citations = 17)
118. "Gas Permeation Properties of Poly(1,1'-dihydroperfluorooctyl acrylate), Poly(1,1'-dihydroperfluorooctyl methacrylate) and Poly(styrene)-*b*-Poly(1,1'-dihydroperfluorooctyl acrylate) Block Copolymers"; Arnold, M.; DeSimone, J. M.; Freeman*, B. *Macromolecules* **2001**, *34*, 5611-5619. (# of citations = 17)
119. "Solubility and Diffusivity of Sodium Chloride in Phase-separated Block Copolymers of Poly(2-dimethylaminoethyl methacrylate), Poly(1,1'-dihydroperfluorooctyl methacrylate) and Poly(1,1,2,2-tetrahydroperfluorooctyl acrylate)"; Nagai, K.; Tanaka, S.; Hirata, Y.; Nakagawa, T.; Arnold, M. E.; Freeman, B. D.; Leroux, D.; Betts, D. E.; DeSimone, J. M.; and DiGiano*, F. *Polymer* **2001**, *42*(25), 9941-9948. (# of citations = 5)
120. "Nucleophilic Displacements in Supercritical CO₂ Using Silica-Supported Phase Transfer Agents"; DeSimone, J. M.; Selva*, M.; Tundo*, P. *J. Org. Chem.* **2001**, *66*(11), 4047-4049. (# of citations = 14)
121. "Latest Applications of Compressed Carbon Dioxide"; Crette, S. A.; DeSimone, J. M. *Nachrichten Aus der Chemie* **2001**, *49*(4), 462-466. (# of citations = 1)
122. "Reaction Kinetics of the Solid State Polymerization of Poly(bisphenol A carbonate)"; Shi, C.; Gross, S. M.; DeSimone, J. M.; Kiserow, D. J.; Roberts, G. *Macromolecules* **2001**, *34*, 2060-2064. (# of citations = 11)
123. "Cationic Four- and Five-coordinate nickel(II) Complexes: Insights into the Nickel(II)-catalyzed Copolymerization of Ethylene and Carbon Monoxide"; Brookhart*, M.; DeSimone, J. M.; Shultz, S. C. *Organometallics* **2001**, *20*(1), 16-18. (# of citations = 26)
124. "The Carbon Dioxide Technology Platform: An Important Tool for Environmental Problem Solving"; Wells, S. L.; DeSimone*, J. M. *Angew. Chem.* **2001**, *113*, 518-527. (# of citations = 12)

125. "High-pressure Rheology and Viscoelastic Scaling Predictions of Polymer Melts Containing Liquid and Supercritical Carbon Dioxide"; Royer, J. R.; DeSimone, J. M.; Khan, S. A. *J. Polym. Sci.: Part B-Polymer Physics* **2001**, *39* (23), 3055-3066. (# of citations = 26)
126. "Broadening of Molecular-weight Distribution in Solid-state Polymerization Resulting from Condensate Diffusion"; Goodner, M. D.; Gross, S. M.; DeSimone, J. M.; Roberts*, G. W.; Kiserow, D. J. *J. Appl. Polym. Sci.* **2001**, *79*(5), 928-943. (# of citations = 5)
127. "Kinetic Studies of Migratory Insertion Reactions at the (1,3-bis(diphenylphosphino)propane)Pd(II) Center and Their Relationship to the Alternating Copolymerization of Ethylene and Carbon Monoxide"; Shultz, C. S.; Ledford, J.; DeSimone, J. M.; Brookhart, M. *J. Am. Chem. Soc.* **2000**, *122*(27), 6351-6356. (# of citations = 60)
128. "Synthesis of Sugar-Containing Amphiphiles for Liquid and Supercritical Carbon Dioxide"; Ye, W.; DeSimone*, J. M. *Ind. Eng. Chem. Res.* **2000**, *39*, 4564-4566. (# of citations = 13)
129. "Crystallization and Solid-state Polymerization of Poly(bisphenol A carbonate) Facilitated by Supercritical CO₂"; Gross, S. M.; Roberts, G. W.; Kiserow, D. J.; DeSimone*, J. M. *Macromolecules* **2000**, *33*(1), 40-45. (# of citations = 49)
130. "Frontiers in Green Chemistry Utilizing Carbon Dioxide for Polymer Synthesis"; Young, J. L.; DeSimone*, J. M. *Pure Appl. Chem.* **2000**, *72*(7), 1357-1363. (# of citations = 10)
131. "High Pressure Rheology of Polystyrene Melts Plasticized with CO₂: Experimental Measurement and Predictive Scaling Relationships"; Royer, J. R.; Gay, Y. J.; DeSimone, J. M.; Khan, S. A. *J. Polym. Sci. Part B Polym. Phys.* **2000**, *38*, 3168-3180. (# of citations = 55)
132. "Critical Micellization Density: A Small Angle Scattering Structural Study of Monomer-Aggregate Transition of Block Copolymers in Supercritical Carbon Dioxide"; Triolo, A.; Triolo, F.; Lo Celso, F.; Betts, D. E.; McClain, J. B.; DeSimone, J. M.; Wignall, G. D.; Triolo*, R.; *Physical Review E.* **2000**, *62*, 5839-5842. (# of citations = 17)
133. "Critical Micelle Density: A Small Angle Scattering Structural Study of the Unimer to Aggregate Transition of Block Copolymers in Supercritical Carbon Dioxide"; Triolo, A.; Triolo, F.; Triolo*, R.; Betts, D. E.; McClain, J. B.; DeSimone, J. M.; Steytler, D. C.; Wignall, G. D.; Deme, B.; Heenan, R. K.; *J. Appl. Crystal.* **2000**, *33*, 641-644. (# of citations = 11)
134. "Decomposition of Polymerization Initiators in Supercritical CO₂: A Novel Approach to reaction Kinetics Using a CSTR"; Charpentier, P. A.; DeSimone, J. M.; Roberts*, G. W. *Chem. Eng. Sci.* **2000**, *55*, 5341-5349. (# of citations = 14)
135. "Radical Polymerizations of a Silicone-Containing Acrylic Monomer in Supercritical Carbon Dioxide"; Shiho, H. and DeSimone*, J.M. *Journal of Polymer Science Part A: Polymer Chemistry* **2000**, *38*, 3100-3105. (# of citations = 4)
136. "An Equilibrium Model for Diffusion-limited Solid State Polymerization"; Goodner, M. D.; DeSimone, J. M.; Kiserow*, D. J.; Roberts*, G. W. *Ind. Eng. Chem. Res.* **2000**, *39*, 2797-2806. (# of citations = 9)
137. "Mimicking the Antenna-Electron Transfer Properties of Photosynthesis"; Sykora, M.; Maxwell, K. A.; DeSimone, J. M.; Meyer*, T. J. *Proceedings of the National Academy of Sciences USA* **2000**, *97*, 7687-7691. (# of citations = 24)
138. "One-pot Synthesis and Characterization of a Chromophore-Donor-Acceptor Assembly"; Maxwell, K. A.; Sykora, M.; DeSimone, J. M.; Meyer*, T. J. *Inorg. Chem.* **2000**, *39*, 71-75. (# of citations = 25)
139. "Structure of Diblock Copolymers in Supercritical Carbon Dioxide and Critical Micellization Pressure"; Triolo*, R.; Triolo, A.; Triolo, F.; Steytler, D. C.; Lewis, C. A.; Heenan, R. K.; Wignall, G. D.; DeSimone, J. M. *Physical Review* **2000**, *61*, 4640-4643. (#

of citations = 23)

140. "Quasi-elastic Neutron Scattering from Polymer Aggregates in Supercritical Carbon Dioxide"; Triolo, R.; Arrighi, V.; Triolo*, A.; Migliardo, P.; Magazu, S.; McClain, J. B.; Betts, D.; DeSimone, J. M.; Middendorf, H. D. *Physica B* **2000**, 276/278, 386-387. (# of citations = 3)

141. "Dispersion Polymerization of 1-Vinyl-2-pyrrolidone in Supercritical Carbon Dioxide" Carson, T.; Lizotte, J. and DeSimone*, J.M. *Macromolecules* **2000**, 33, 1917-1920. (# of citations = 37)

142. "Preparation of Silicone-Graft Copolymers by Homogeneous Radical Copolymerization in Supercritical Carbon Dioxide"; Shiho, H. and DeSimone*, J.M. *Journal of Polymer Science Part A: Polymer Chemistry* **2000**, 38, 1139-1145. (# of citations = 10)

143. "Opportunities for Pollution Prevention and Energy Efficiency Enabled by the Carbon Dioxide Technology Platform"; Taylor, D. K.; Carbonell, R. G.; DeSimone*, J. M. *Ann. Rev. Ener. Environ.* **2000**, 25, 115-146. (# of citations = 16)

144. "Continuous Precipitation Polymerizations of Vinylidene Fluoride in Supercritical CO₂: Modelling of the Rate of Polymerization"; Charpentier, P. A.; DeSimone, J. M.; Roberts*, G. W. *Ind. Eng. Chem. Res.* **2000**, 39(12), 4588-4596. (# of citations = 38)

145. "Dispersion Polymerization of Styrene in Supercritical Carbon Dioxide Utilizing Random Copolymers Including Fluorinated Acrylate for Preparing Micron-size Polystyrene Particles"; Shiho, H. and DeSimone*, J.M. *Journal of Polymer Science Part A: Polymer Chemistry* **2000**, 38, 1146-1153. (# of citations = 41)

146. "Dispersion Polymerization of Acrylonitrile in Supercritical Carbon Dioxide" Shiho, M and DeSimone*, J.M. *Macromolecules* **2000**, 33, 1565-1569. (# of citations = 43)

147. "Critical Micelle Density for the Self-Assembly of Block Copolymer Surfactants in Supercritical Carbon Dioxide" Triolo, F.; Triolo, A.; Triolo*, R.; Londono, J. D.; Wignall, G. D.; McClain, J. B.; Betts, D. E.; Wells, S.; Samulski, E. T.; DeSimone, J. M. *Langmuir* **2000**, 16, 416-421. (# of citations = 48)

148. "Dispersion Polymerization of 2-Hydroxyethyl Methacrylate in Supercritical Carbon Dioxide"; Shiho, H.; DeSimone*, J. M. *J. Polym. Sci.: Part A- Polym. Chem.* **2000**, 38(20), 3783-3790. (# of citations = 33)

149. "Step-scan FTIR Time-Resolved Spectroscopy Study of Excited State Dipole Orientation in Soluble Metallopolymers" Smith, G. D.; Maxwell, K. A.; DeSimone, J. M.; Meyer, T. J.; Palmer*, R. A. *Inorg. Chem.* **2000**, 39(5), 893-898. (# of citations = 17)

150. "Perfluoropolyether Synthesis in Liquid Carbon Dioxide by Hexafluoropropylene Photooxidation"; Bunyard, W. C.; Romack, T. J.; DeSimone*, J. M. *Macromolecules* **1999**, 32, 8224-8226. (# of citations = 14)

151. "Atom Transfer Radical Polymerization in Supercritical Carbon Dioxide" Xia, J.; Johnson, T.; Gaynor, S.; Matyjaszewski*, K.; DeSimone*, J. M. *Macromolecules* **1999**, 32, 4802-4805. (# of citations = 86)

152. "Supercritical CO₂ as a Solvent for Polymeric Stone Protective Materials"; Henon, F. E.; Camaiti, M.; Burke, A. L. C.; Carbonell*, R. G.; DeSimone, J. M.; Piacenti, F. *J. Supercrit. Fluids* **1999**, 15(2), 173-179. (# of citations = 31)

153. "Solid State Polymerization of Polycarbonates Using Supercritical CO₂"; Gross, S. M.; Flowers, D.; Roberts, G.; Kiserow, D. J.; DeSimone*, J. M. *Macromolecules* **1999**, 32, 3167-3169. (# of citations = 27)

154. "Polymerizations in Supercritical Carbon Dioxide" Kendall, J.L.; Canelas, D.A.; Young, J.L.; DeSimone, J.M. *Chem. Rev.* **1999**, *99*, 543-563 (# of citations = 390)
155. "Small Angle Neutron Scattering from Polymers in Supercritical Carbon Dioxide" Londono, J.D.; Wignall, G.D.; McClain, J.B.; Betts, D.E.; Canelas, D.A.; DeSimone, J.M.; Samulski, E.T.; Triolo, R. *Neutron News* **1999**, *10/2*, 10-11. (# of citations = not tracked by S.C.I.)
156. "Preparation of Micron-size Polystyrene Particles in Supercritical Carbon Dioxide"; Shiho, H.; DeSimone*, J. M. *J. Polym. Sci. Part A* **1999**, *37*, 2429-2437. (# of citations = 45)
157. "Continuous Polymerizations in Supercritical Carbon Dioxide: Chain-Growth Precipitation Polymerizations" Charpentier, P.A.; Kennedy, K.A.; DeSimone, J.M.; Roberts, G.W. *Macromolecules* **1999**, *32*, 5973-5975. (# of citations = 41)
158. "Synthesis of Fluoropolymers in Liquid and Supercritical Carbon Dioxide Solvent Systems" DeYoung, J. P.; Romack, T.J.; DeSimone, J.M. In *Fluoropolymers*, Chapter. 13. Plenum Publishing, **1999**, 191-205. (# of citations = not tracked by S.C.I.)
159. "Carbon Dioxide-Induced Swelling of Poly (dimethylsiloxane)"; Royer, J. R.; DeSimone, J. M.; Khan, S. A. *Macromolecules* **1999**, *32*, 8965-8973. (# of citations = 55)
160. "Interfacial Activity of Polymeric Surfactants at the Polystyrene-Carbon Dioxide Interface"; Harrison, K. L.; da Rocha, S. R. P.; Yates, M. Z.; Johnston*, K. P.; Canelas, D.; DeSimone, J. M. *Langmuir* **1998**, *14*, 6855-6863. (# of citations = 25)
161. "Polymerizations in Dense Carbon Dioxide"; Davidson, T.; DeSimone*, J. M. in "Chemical Synthesis in Supercritical Fluids"; Jessop, P.; Leitner, J. Wiley-VCH: Weinheim, Germany **1998**. (# of citations = not tracked by S.C.I.)
162. "Synthesis and Swelling of Poly(bisphenol A carbonate) Using Supercritical Carbon Dioxide"; Gross, S. M.; Givens, R. D.; Jikei, M.; Royer, J. R.; Khan, S.; DeSimone*, J. M.; O'Dell*, P. G.; Hamer, G. K. *Macromolecules* **1998**, *31*, 9090-9092. (# of citations = 21)
163. "Structure and Morphology of Poly([R,S]-beta-butyrolactone) Synthesized from Aluminoxane Catalysts"; Jaimes, C.; Arcana, M.; Brethon, A.; Mathieu, A.; Schue*, F.; DeSimone, J. M. *Eur. Polym. J.* **1998**, *34(2)*, 175-185. (# of citations = 2)
164. "Poly(vinyl acetate) and Poly(vinyl acetate-co-ethylene) Latexes via Dispersion Polymerization in Carbon Dioxide"; Canelas, D. A.; Betts, D. E.; DeSimone*, J. M.; Yates, M. Z.; Johnston, K. P. *Macromolecules* **1998**, *31*, 6794-6805. (# of citations = 71)
165. "Light-Scattering Study of Diblock Copolymers in Supercritical Carbon Dioxide: CO₂ Density-Induced Micellization Transition"; Buhler, E.; Dobrynin, A.; DeSimone*, J. M.; Rubinstein*, M. *Macromolecules* **1998**, *31*, 7347-7355. (# of citations = 51)
166. "Phase Behavior of Poly(1,1-dihydroperfluorooctyl acrylate) in Supercritical Carbon Dioxide"; Luna-Barcenas, G.; Mawson, S.; Takishima, S.; DeSimone, J. M.; Sanchez, I. C.; Johnston*, K. P. *Fluid Phase Equil.* **1998**, *146*, 325-337. (# of citations = 35)
167. "Stereochemistry of Ring-Opened Metathesis Polymers Prepared in Liquid CO₂ at High Pressure Using Ru(H₂O)₆(Tos)₂ as Catalyst"; Hamilton, J. G.; Rooney, J. J.; DeSimone, J. M.; Mistele, C.; *Macromolecules* **1998**, *31*, 4387-4389. (# of citations = 12)
168. "Pulsed-Laser Polymerization of Methyl Methacrylate in Liquid and Supercritical Carbon Dioxide"; Quadir, M. A.; DeSimone*, J. M.; van Herk*, A. M.; German, A. L. *Macromolecules* **1998**, *31*, 6481-6485. (# of citations = 20)

169. Betts, D. E.; Johnson, T.; LeRoux, D.; DeSimone, J. M. In *Controlled Radical Polymerization*; Matyjaszewski, K., Ed.; ACS Symposium Series 685; American Chemical Society: Washington, DC, 1998; pp. 418 - 432. (# of citations = not tracked by S.C.I.)
170. "Diffusion of Block Copolymers in Liquid CO₂: Evidence of Self-Assembly from Pulsed Field Gradient NMR"; Cain, J. B.; Zhang, K.; Betts, D. E.; DeSimone*, J. M.; Johnson, Jr.*, C. S. *J. Am. Chem. Soc.* 1998, 120, 9390-9391. (# of citations = 14)
171. "Fluorocarbons Dissolved in Supercritical Carbon Dioxide: NMR Evidence for Specific Solute-Solvent Interactions"; Dardin, A.; DeSimone, J. M.; Samulski*, E. T. *J. Phys. Chem.* 1998, 102, 1775-1780. (# of citations = 83)
172. "Carbon Dioxide as a Continuous Phase for Polymer Synthesis"; Canelas, D. A.; Burke, A.; DeSimone*, J. M. *Plastics Engineering* 1997, 53 (12), 37-40.. (# of citations = 9)
173. "On the Role of Carbon Dioxide in Transition Metal Catalysis, Extractions, and Deposition"; Mistele, C.; DeSimone*, J. M. *Green Chemistry: Frontiers in Benign Chemical Synthesis and Processing* 1998, Oxford University Press, p. 286-312. (# of citations = not tracked by S.C.I.)
174. "Detergent-Aided Cleaning of Metal Surfaces in Liquid Carbon Dioxide"; Hoggan, E. N.; Carbonell, R. G.; DeSimone, J. M.; Cramer, G. L.; Stewart, G. M. *CleanTech98 Proceedings* 1998, 137-146; Witter Publishing, Flemington, NJ. (# of citations = not tracked by S.C.I.)
175. "Time-resolved EPR study of a 1.9-Flexible Biradical Dissolved in Liquid Carbon Dioxide. Observation of a New Spin-Relaxation Phenomenon: Alternating Intensities in Spin-correlated Radical Pair Spectra"; Avdievich, N. I.; Dukes, K. E.; Forbes*, M. D. E.; DeSimone, J. M. *J. Phys. Chem.* 1997, 101(4), 617-621. (# of citations = 10)
176. "XPS Analysis of Poly[(3-hydroxybutyric acid)-co-(3-hydroxyvaleric acid)] Film Surfaces Exposed to an Allylamine low-pressure Plasma"; Mas*, A.; Jaaba, H.; Shue, F.; Belu, A. M. Kassis, C.K.; Linton, R. W.; DeSimone, J. M. *Macromol. Chem. Phys.* 1997, 198, 3737-3752. (# of citations = 5)
177. "Stabilized Polymer Microparticles by Precipitation with a Compressed Fluid Antisolvent: 1. Poly(fluoro acrylates)"; Mawson, S.; Johnston*, K. P.; Betts, D. E.; McClain, J. B.; DeSimone*, J. M. *Macromolecules* 1997, 30(1), 71-77. (# of citations = 55)
178. "Extraction of a Hydrophilic Compound from Water Into Liquid CO₂ Using Dendritic Surfactants "; Cooper, A. I.; Londono, D.; Wignall, G.; McClain, J. B.; Samulski, E. T.; Lin, J. S.; Dobrynin, A.; Rubinstein, M.; Burke, A. L. C. Frechet, J. M. J.; DeSimone*, J. M. *Nature* 1997, 389, 368-371. (# of citations = 196)
179. "Polymerizations in Liquid and Supercritical Carbon Dioxide"; Canelas, D. A.; DeSimone*, J. M. *Adv. Polym. Sci.* 1997, 133, 103-140. (# of citations = 112)
180. "Emulsion Stabilization and Flocculation in CO₂. 1. Turbidimetry and Tensiometry"; O'Neill, M. L.; Yates, M. Z.; Harrison, K. L.; Johnston*, K. P.; Canelas, D. A.; Betts, D. E.; DeSimone*, J. M.; Wilkinson, S. P. *Macromolecules* 1997, 30, 5050-5059. (# of citations = 54)
181. "Emulsion Stabilization and Flocculation in CO₂. 2. Dynamic Light Scattering"; Yates, M. Z.; O'Neill, M. L.; Johnston*, K. P.; Weber, S.; Canelas, D. A.; Betts, D. E.; DeSimone, J. M.; *Macromolecules* 1997, 30, 5060-5067. (# of citations = 42)
182. "Propagation Rate Coefficients of Styrene and Methyl Methacrylate in Supercritical Carbon Dioxide"; Van Herk*, A. M.; Canelas, D.; DeSimone*, J. M. *Macromolecules* 1997, 30, 4780-4782. (# of citations = 21)

183. "Dispersion Polymerizations of Styrene in Carbon Dioxide Stabilized with Poly(styrene-b-dimethylsiloxane)"; Canelas, D. A.; DeSimone*, J. M. *Macromolecules* **1997**, *30*, 5673-5682. (# of citations = 121)
184. "The Morphology of Block Copolymer Micelles in Supercritical Carbon Dioxide by Small Angle Neutron and X-ray Scattering"; Londono, J. D.; Dharmapurikar, R.; Cochran, H. D.; Wignall, G. D.; McClain, J. B.; Bets, D. E.; Canelas, D. A.; DeSimone, J. M.; Samulski, E. T.; Chillura-Martino, D.; Triolo, R. *J. Appl. Cryst.* **1997**, *30*, 690-695. (# of citations = 28)
185. "Flow System and 9.5 GHz Microwave Resonators for Time-Resolved and Steady-State Electron Paramagnetic Resonance Spectroscopy in Compressed and Supercritical Fluids"; Dukes, K. E.; Harbron, E. J.; Forbes*, M. D. E.; DeSimone, J. M. *Rev. Sci. Instrum.* **1997**, *68*, 2505-2510. (# of citations = 7)
186. "Observation of an Inverse Kinetic Isotope Effect in a Co(III)-Catalyzed Polymerization of Ethylene"; Tanner, M. J.; Brookhart*, M.; DeSimone, J. M. *J. Am. Chem. Soc.* **1997**, *119*, 7617-7618. (# of citations = 31)
187. "An Investigation Into Importance of Polymer Matrix Miscibility Using MALDI-MS"; Kassis, C.; DeSimone*, J. M.; Linton*, R. W.; Lange, G. W.; Friedman, R. M. *Rapid Comm. Mass Spectrom.* **1997**, *11*, 1462-1466. (# of citations = 17)
188. "A Direct Deposition Method for Coupling Matrix-assisted Laser Desorption/Ionization Mass Spectrometry with Gel Permeation Chromatography for Polymer Characterization"; Kassis, C. E.; DeSimone*, J. M.; Linton*, R. W.; Remsen, E. E.; Lange, G. W.; Friedman, R. M. *Rapid Comm. Mass Spectrom.* **1997**, *11*, 1134-1138. (# of citations = 42)
189. "Poly(hydroxybutyrate-co-9% hydroxyvalerate) Film Surface Modification by Ar, O₂, H₂O/O₂, H₂O and H₂O₂ Plasma Treatment"; Mas*, A.; Jaaba, H.; Schue, F.; Belu, A. M.; Kassis, C.; Linton, R. W.; DeSimone, J. M. *J. Macromol. Sci.* **1997**, *A34*, 67-79. (# of citations = 6)
190. "Surface Modification of Poly(hydroxybutyrate-co-9% hydroxyvalerate) by Allyl Alcohol Plasma Polymerization"; Mas, A.; Jaaba, H.; Schue*, F.; Belu, A. M.; Kassis, C. M.; Linton, R. W.; DeSimone, J. M. *Eur. Polym. J.* **1997**, *33*, 331-317. (# of citations = 6)
191. "High-Pressure NMR of Polymers Dissolved in Supercritical Carbon Dioxide"; Dardin, A.; Cain, J. B.; DeSimone*, J. M.; Johnson, Jr., C. S.; Samulski*, E. T. *Macromolecules* **1997**, *30*, 3593-3599. (# of citations = 32)
192. "Photo-Induced Graft Polymerization of Styrene onto Polypropylene Substrates"; Li, Y.; DeSimone*, J. M.; Poon, C.-D.; Samulski*, E. T. *J. Appl. Polym. Sci.* **1997**, *64*, 883-889. (# of citations = 14)
193. "Cationic Dispersion Polymerizations in Liquid Carbon Dioxide"; Clark, M. R.; DeSimone*, J. M. *Macromolecules* **1997**, *30*, 6011-6014. (# of citations = 15)
194. "Dispersion Polymerizations of Methyl Methacrylate in Supercritical Carbon Dioxide: The Influence of Helium Concentration on Particle Size and Particle Size Distribution"; Hsiao, Y.-L.; DeSimone*, J. M. *J. Polym. Sci.* **1997**, 2009-2013. (# of citations = 33)
195. "Emulsion Polymerization in a Hybrid Carbon Dioxide/Aqueous Medium: The Formation of Latex Particles Having a Narrower Molecular Weight Distribution"; Quadir, M. A.; Gilbert*, R. G.; DeSimone*, J. M. *Macromolecules* **1997**, *30*, 6015-6023. (# of citations = 16)
196. "Polymer Synthesis and Characterization in Liquid/Supercritical Carbon Dioxide"; Cooper, A. I.; DeSimone*, J. M. *Current Opinion in Solid State & Materials Science* **1996**, *1*, 761-768. (# of citations = 27)

197. "The Importance of Surfactants for Polymerizations in Carbon Dioxide"; Betts, D. E.; McClain, J. B.; DeSimone*, J. M. *Process Technol. Proc.* **1996**, *12* (High Pressure Chem. Eng.), 23-30. (# of citations = not tracked by S.C.I.)
198. "Modification of Poly[(3-Hydroxybutyric acid)-co-(3-hydroxyvaleric acid)] Film Surfaces in an Oxygen Low Pressure Plasma"; Mas, A.; Jaaba, H.; Schue*, F.; Belu, A. M.; Kassis, C.; Linton, R. W.; DeSimone, J. M. *Macromol. Chem. Phys.* **1996**, *197*, 2331-2341. (# of citations = 12)
199. "XPS Studies of Fluorinated Acrylate Polymers and Block Copolymers with Polystyrene" Kassis, C.; Steehler, J. K.; Betts, D. E.; Guan, Z.; Romack, T. J.; DeSimone*, J. M.; Linton*, R. W. *Macromolecules* **1996**, *29*, 3247-3254. (# of citations = 77)
200. "Structural Characterization of a Polymer-Substituted Fullerene (Flagellene) by Small Angle Neutron Scattering" Affholter, K. A.; Bunick, G. J.; DeSimone, J. M.; Hunt, M. O.; Menciloglu, Y. Z.; Samulski*, E. T.; Wignall*, G. D. *Proc. Mater. Res. Soc.* **1996**. (# of citations = not tracked by S.C.I.)
201. "Design of Non-ionic Surfactants for Carbon Dioxide"; McClain, J. B.; Londono, D.; Combes, J. R.; Romack, T. J.; Canelas, D. A.; Betts, D. E.; Samulski, E. T.; Wignall*, G.; DeSimone*, J. M. *Science* **1996**, *274*, 2049-2052. (# of citations = 185)
202. "Synthesis of Poly(2,6-dimethylphenylene oxide) in Carbon Dioxide"; Kapellen, K. K.; Mistele, C. D.; DeSimone*, J. M. *Macromolecules* **1996**, *29*, 495-496. (# of citations = 22)
203. "Dispersion Polymerization of Styrene in Supercritical Carbon Dioxide: The Importance of Effective Surfactants"; Canelas, D. A.; Betts, D. E.; DeSimone*, J. M. *Macromolecules* **1996**, *29*, 2818-2821. (# of citations = 148)
204. "Solution Properties of a CO₂-Soluble Fluoropolymer via Small Angle Neutron Scattering"; McClain, J. B.; Londono, D.; Combes, J. R.; Romack, T. J.; Canelas, D. A.; Betts, D. E.; Wignall, G.; Samulski, E. T.; DeSimone*, J. M. *J. Am. Chem. Soc.* **1996**, *118*, 917-918. (# of citations = 75)
205. "Dispersion Polymerizations in Carbon Dioxide Using Siloxane-based Stabilizers"; Shaffer, K. A.; Jones, T.A.; Canelas, D. A.; DeSimone*, J. M. *Macromolecules* **1996**, *29*, 2704-2706. (# of citations = 133)
206. "Ring-opening Metathesis Polymerizations in Supercritical Carbon Dioxide"; Mistelle, C.; Thorp, H.; DeSimone*, J. M. *J. Macromol. Sci.* **1996**, *A33(7)*, 953-960. (# of citations = 30)
207. "Useful Model Systems for the Study of S_{RN}1 Chemistry in the Synthesis of Poly(arylene ether ketone)s"; Dukes, K. E.; Forbes*, M. D. E.; Jeevarajan, A. S.; Belu, A. M.; DeSimone*, J. M.; Linton, R. W.; Sheares, V. V. *Macromolecules* **1996**, *29*, 3081-3089. (# of citations = 6)
208. "Evaluation of Matrix-Assisted Laser Desorption Ionization Mass Spectrometry for Polymer Characterization"; Belu, A.; DeSimone, J. M.; Linton*, R. W. *J. Am. Soc. Mass Spectr.* **1996**, *7*, 11-24. (# of citations = 147)
209. "Neutron Scattering Characterization of Homopolymers and Graft-Copolymer Micelles in Supercritical Carbon Dioxide"; Chillura-Martino, D.; Triolo*, R.; McClain, J. B.; Combes, J. R.; Betts, D. E.; Canelas, D. A.; DeSimone, J. M.; Samulski, E. T.; Cochran, H. D.; Londono, J. D.; Wignall, J. D. *J. of Molecular Structure* **1996**, *383*, 3-10. (# of citations = 48)
210. "Synthesis and SANS Structural Characterization of a Polymer-Substituted Fullerene (Flagellene) by Small Angle Neutron Scattering"; Affholter, K. A.; Bunick, G. J.; DeSimone, J. M.; Hunt, M. O.; Menciloglu, Y. Z.; Samulski*, E. T.; Wignall*, G. D. *Macromolecules* **1995**, *28*, 6000-6006. (# of citations = 44)
211. "Aggregation of Amphiphilic Molecules in Supercritical Carbon Dioxide: A Small Angle X-Ray Scattering Study"; Fulton*, J. L.; Pfund, D. M.; McClain, J. B.; Romack, T. J.; Maury, E. E.; Combes, J. R.; Batten, H.; Samulski, E. T.; DeSimone*, J. M.

Langmuir **1995**, 11, 4241-4249. (# of citations = 124)

212. "Branching Out into New Polymer Markets"; DeSimone*, J. M. *Science* **1995**, 269(5227), 1060-1061. (# of citations = 17)

213. "Termination of Living Anionic Polymerizations Using Chlorosilane Derivatives: General Synthetic Methodology for the Synthesis of End-functionalized Polymers"; Peters, M.A.; Belu, A. M.; Linton, R. W.; DeSimone*, J. M. *J. Am. Chem. Soc.* **1995**, 117, 3380-3388. (# of citations = 62)

214. "Free Radical Telomerization of Tetrafluoroethylene in Supercritical Carbon Dioxide"; Romack, T. J.; Combes, J. R.; DeSimone*, J. M. *Macromolecules* **1995**, 28, 1724-1726. (# of citations = 25)

215. "Cationic Polymerizations of Vinyl and Cyclic Ethers in Supercritical and Liquid Carbon Dioxide"; DeSimone*, J. M.; Clark, M.R. *Macromolecules* **1995**, 28, 3002-3004. (# of citations = 50)

216. "Formation of Fluoropolymer Submicron Fibers and Particles From Supercritical Carbon Dioxide Solutions"; Mawson, S.; Johnston*, K. P.; Combes, J. R.; DeSimone, J. M. *Macromolecules* **1995**, 28, 3182-3191. (# of citations = 113)

217. "Chain Polymerizations in Inert Near- and Supercritical Fluids"; Shaffer, K. A.; DeSimone*, J. M. *Trends in Polymer Science* **1995**, 3, 146-153. (# of citations = 85)

218. "Precipitation Polymerizations of Acrylic Acid in Supercritical Carbon Dioxide" Romack, T. J.; Maury, E. E.; DeSimone*, J. M. *Macromolecules* **1995**, 28, 912-915. (# of citations = 85)

219. "Polymerization of Tetrafluoroethylene in a Hybrid Carbon Dioxide/Aqueous Medium"; Romack, T. J.; Kipp, B. E.; DeSimone*, J. M. *Macromolecules* **1995**, 28, 8432-8434. (# of citations = 21)

220. "Synthesis of Tetrafluoroethylene-based, Non-aqueous Fluoropolymers in Supercritical Carbon Dioxide"; Romack, T. J.; DeSimone*, J. M. *Macromolecules* **1995**, 28, 8429-8431. (# of citations = 47)

221. "Dispersion Polymerization of Methyl Methacrylate Stabilized with Poly(1,1-dihydroperfluorooctyl acrylate) in Supercritical Carbon Dioxide"; Hsiao, Y. L.; Maury, E. E.; DeSimone*, J. M. *Macromolecules* **1995**, 28, 8159-8166. (# of citations = 146)

222. "Cobalt(III)-Catalyzed Living Polymerization of Ethylene: Routes to End-Capped Polyethylene with a Narrow Molar Mass Distribution"; Brookhart*, M.; DeSimone, J. M.; Grant, B. E.; Tanner, M. J. *Macromolecules* **1995**, 28, 5378-5380. (# of citations = 83)

223. "Transition Metal Catalyzed Alternating Copolymerizations of Olefins and CO"; Rix, F.; Barborak, J.; Wagner, M.; Tahliani, S.; DeSimone, J. M.; Brookhart, M.; Elder, D. *Macromol. Symp* **1995**, 98, 219. (# of citations = 2)

224. "Homogeneous Free Radical Polymerizations in Supercritical Carbon Dioxide: 2. Telomerization of Vinylidene Fluoride"; Combes, J. R.; Guan, Z.; DeSimone*, J. M. *Macromolecules* **1994**, 27, 865-867. (# of citations = 39)

225. "Homogeneous Free Radical Polymerizations in Supercritical Carbon Dioxide: 1. Thermal Decomposition of 2,2'-Azobis(isobutyronitrile)"; Guan, Z.; Combes, J. R.; Menciloglu, Y. Z.; DeSimone*, J. M. *Macromolecules* **1993**, 26, 2663-2669. (# of citations = 131)

226. "Dispersion Polymerizations in Supercritical Carbon Dioxide"; DeSimone*, J. M.; Maury, E. E.; Menciloglu, Y. Z.; Combes, J. R.; McClain, J. B.; Romack, T. *Science* **1994**, 265, 356-359. (# of citations = 461)

227. "Fluorocarbon-based Heterophase Polymeric Materials: Block Copolymer Surfactants for Carbon Dioxide Applications" Guan, Z.; DeSimone*, J. M. *Macromolecules* **1994**, *27*, 5527-5532. (# of citations = 72)
228. "Isomeric Poly(benzophenone)s: Synthesis of Highly Crystalline Poly(4,4'-benzophenone) and Amorphous Poly(2,5-benzophenone), a Soluble Poly(*p*-phenylene) Derivative"; Phillips, R. W.; Sheares, V. V.; Samulski, E. T.; DeSimone*, J. M. *Macromolecules* **1994**, *27*, 2354-2356. (# of citations = 37)
229. "Near- and Supercritical Fluid Solvents for Living Anionic Polymerizations"; DeSimone*, J. M.; Maury, E. E.; Lemert, R. M.; Combes, J. R. *Makromol. Chem., Macromol.Symp.* **1993**, *67*, 251-260. (# of citations = 6)
230. "Clarification of the Introduction to the Communication 'New Polymerization Methodology – Synthesis of Thiophene-based Poly(arylene ether ketone)s"; DeSimone*, J. M.; Sheares, V. V. *Macromolecules* **1993**, *26(10)*, 2642-2642. (# of citations = 2)
231. "Time-of-Flight Secondary Ion Mass Spectrometry of Polymeric Materials"; Linton*, R.W.; Mawn, M. P.; Belu, A.M.; DeSimone, J. M.; Hunt, Jr., M. O.; Menciloglu, Y. Z.; Cramer, H. G.; Benninghoven, A. *Surface and Interface Analysis* **1993**, *20*, 991-999. (# of citations = 45)
232. "End-functionalized Polymers: 2. Quantification of Functionalization Using Time-of-Flight Static Secondary Ion Mass Spectrometry" Belu, A.; Hunt, Jr., M. O.; DeSimone*, J. M.; Linton*, R. W.; *Macromolecules* **1994**, *27*, 1905-1910. (# of citations = 31)
233. "End-functionalized Polymers: 1. Synthesis and Characterization of Perfluoroalkyl-terminated Polymers"; Hunt, Jr., M. O.; Belu, A.; Linton, R. W.; DeSimone*, J. M. *Macromolecules* **1993**, *26*, 4854 - 4859. (# of citations = 81)
234. "Thiophene-based Poly(arylene ether)s: 5. Imide-Arylene Ether Ketone Statistical Copolymers"; Sheares, V. V.; DeSimone*, J. M.; Hedrick*, J. L.; Labadie, J.W. *Polymer* **1994**, *35*, 3782-3785. (# of citations = 0)
235. "Thiophene-based Poly(arylene ether)s: 4. Synthesis and Characterization of Poly(arylene ether sulfone)s"; Archibald, R. S.; Sheares, V. V.; Samulski, E. T.; DeSimone*, J. M. *Macromolecules* **1993**, *26*, 7083-7085. (# of citations = 10)
236. "Thiophene-based Poly(arylene ether ketone)s: 2. Thermal and Mechanical Properties of Amorphous Systems Using Bis(*p*-fluorobenzoyl)aryl Monomers"; Brennan*, A. S.; Wang, Y. Q.; DeSimone, J. M.; Stempel, S.; Samulski, E. T. *Polymer* **1993**, *34*, 807-812. (# of citations = 4)
237. "Thiophene-containing Poly(arylene ether ketone)s: 1. Polymerization of Bis(*p*-fluoro-benzoyl)aryl Systems with 4,4'-Isopropylidenediphenol"; DeSimone*, J. M.; Stempel, S.; Samulski, E. T. *Macromolecules* **1992**, *25*, 2546-2550. (# of citations = 20)
238. "New Polymerization Methodology: Synthesis of Thiophene-based Poly(arylene ether ketone)s"; DeSimone*, J. M.; Sheares, V. V. *Macromolecules* **1992**, *25*, 4235-4236; **1993**, *26*, 2642. (# of citations = 12)
239. "Palladium (II) Catalysts for Living Alternating Copolymerization of Olefins and Carbon Monoxide"; Brookhart*, M. S.; Rix, F. C.; DeSimone, J. M.; Barborak, J. *J. Am. Chem. Soc.* **1992**, *114*, 5894-5895. (# of citations = 253)
240. "Flagellenes: Nanophase-separated, Polymer-substituted Fullerenes"; Samulski*, E. T.; DeSimone, J. M.; Hunt, Jr., M. O.; Menciloglu, Y. Z.; Jarnagin, R.C.; York, G. A.; Lablat, K. B.; Wang, H. *Chemistry of Materials* **1992**, *4*, 1153-1157. (# of citations = 130)

241. "Synthesis and Characterization of Poly(methyl methacrylate)-g-Poly(dimethylsiloxane) Copolymers: Bulk and Surface Properties"; Smith, S. D.; DeSimone, J. M.; Huang, H. H.; York, G. A.; Dwight, D. W.; Wilkes, G. L.; McGrath, J. E. *Macromolecules* **1992**, *25*, 2575-2581. (# of citations = 62)
242. "Reactive-ion Etch-resistant Polysulfones for Microlithography"; Bowden*, M. J.; Gozdz, A. S.; DeSimone, J. M., McGrath*, J. E.; Ito, S.; Matsuda, M.; *Makromol. Chem., Macromol. Symp.* **1992**, *53*, 125-137. (# of citations = 1)
243. "Synthesis of Fluoropolymers in Supercritical Carbon Dioxide"; DeSimone*, J. M.; Guan, Z.; Elsbernd, C. S. *Science* **1992**, *257*, 945-947. ((# of citations = 573)
244. "Solvatochromic Characterization of Near- and Supercritical Ethane, Propane, and Dimethylether Using 9-(-perfluoroheptyl-, -dicyanovinyl)julolidine"; Lemert, R. M.; DeSimone*, J. M. *J. Supercrit. Fluids* **1991**, *4*, 186-193. (# of citations = not tracked)
245. "Aluminum-27 NMR Characterization of Aluminum Porphyrin Living Polymerization Initiators"; DeSimone, J. M.; Stengle, M.; Riffle, J. S.; McGrath*, J. E. *Makromol. Chem., Macromol. Symp.* **1991**, *42/43*, 373-385. (# of citations = 4)
246. "Synthesis, Bulk, Surface, and Microlithographic Characterization of Poly(1-butene sulfone)-g-poly(dimethylsiloxane)"; DeSimone, J. M.; York, G. A.; McGrath*, J. E.; Gozdz, A. S.; Bowden, M. J. *Macromolecules* **1991**, *24*, 5330-5339. (# of citations = 21)
247. "Homogeneous and Multiphase Poly(methyl methacrylate) Graft Copolymers Via the Macro-monomer Method"; DeSimone, J. M.; Hellstern, A. M.; Siochi, E. J.; Smith, S. D.; Ward, T. C.; Gallagher, P. M.; Krukoni, V. J.; McGrath*, J. E.; *Makromol. Chem., Macromol. Symp.* **1990**, *32*, 21-45. (# of citations = 16)
248. "Dilute Solution Properties of PMMA-g-PMMA's"; Siochi, E. J.; DeSimone, J. M.; Hellstern, A. M.; McGrath, J. E.; Ward*, T. C.; *Macromolecules* **1990**, *23*, 4696-4706. (# of citations = 10)
249. "Synthesis and Characterization of Poly(1-butene sulfone)-g-Polydimethylsiloxane): A New Electron-Beam Resist for Two-Layer Lithography"; DeSimone, J. M.; York, G. A.; Smith, S. D.; Gozdz, A. S.; Bowden, M. J.; McGrath*, J. E. *Proceedings of the 3rd International SAMPE Electronics Conference* **1989**, *3*, 872-881. (# of citations = not tracked by S.C.I.)
250. "Advances in Heterophase Copolymer Synthesis"; McGrath*, J. E.; DeSimone, J. M.; Hellstern, A. M.; Long, T. E.; Hoover, J. M.; Smith, S. D.; Broske, A. D.; Cho, C.; Yoo, Y.; Wood, P.; DePorter, C. D.; Riffle, J. S. In *Multiphase Macromolecular Systems*; Culbertson, W., Ed.; American Chemical Society: Washington, D. C.; **1989**, p. 213-226. . (# of citations = not tracked)
251. "Synthesis, Characterization, and Chemical Composition Distribution Investigations of Graft Copolymers Prepared by the Macromonomer Technique"; DeSimone, J. M.; Hellstern, A. M.; Ward, T. C.; McGrath*, J. E.; Smith, S. D.; Gallagher, P. M.; Krukoni, V. J.; Stejskal, J.; Strakova, D.; Kratochvil, P. In *Multiphase Macromolecular Systems*; Culbertson, W., Ed.; American Chemical Society: Washington, D. C.; **1989**, p. 227-241. . (# of citations = not tracked)

Issued Patents: (* indicates that a corporation has licensed the patent; ** indicates that a corporation has an option to license the patent; *** indicates that the patent is assigned to Micell Technologies)

1. * US Patent 5,496,901 March 5, 1996; "Method of Making Fluoropolymers in Carbon Dioxide"; Inventor - J. M. DeSimone; Filed: March 27, 1992.
2. * US Patent 5,312,882; May 17, 1994; "Heterogeneous Polymerizations in Carbon Dioxide"; Inventors - J. M. DeSimone, E. E. Maury, Y. Z. Menciloglu, J. R. Combes.
3. US Patent 5,266,677; November 30, 1993; "Thiophene-based Materials"; Inventors - E. T. Samulski and J. M. DeSimone.
4. US Patent 5,354,836; November 11, 1994; ; "Thiophene-based Materials"; Inventors - E. T. Samulski and J. M. DeSimone.
5. US Patent 5,358,836; October 21, 1994; "Thiophene-based Materials"; Inventors - E. T. Samulski and J. M. DeSimone.
6. ** US Patent 5,360,869; November 1, 1994; "Method of Making Fluorinated Copolymers"; Inventors - J. M. DeSimone and M. O. Hunt, Jr.
7. US Patent 5,410,013; April 25, 1995; "Thiophene-containing Poly(arylene ether) Sulfones"; Inventors - E. T. Samulski and J. M. DeSimone.
8. US Patent 5,420,224; May 30, 1995; "Thiophene-based Polymers: Polybenzoxazoles"; Inventors - E. T. Samulski and J. M. DeSimone.
9. * US Patent 5,382,623; January 17, 1995; "Heterogeneous Polymerizations in Carbon Dioxide"; Inventors - J. M. DeSimone, E. E. Maury, Y. Z. Menciloglu, J. R. Combes.
10. * US Patent 5,514,759; May 7, 1996; "Multi-phase Polymerization Process"; Inventors - J. M. DeSimone, T. J. Romack.
11. * US Patent 5,451,633; September 19, 1995; "Heterogeneous Polymerizations in Carbon Dioxide"; Inventors - J. M. DeSimone, E. E. Maury, Menciloglu, J. R. Combes.
12. * US Patent 5,506,317; April 9, 1996; "Heterogeneous Polymerizations in Carbon Dioxide"; Inventors - J. M. DeSimone, E. E. Maury, Y. Z. Menciloglu, J. R. Combes.
13. * US Patent 5,527,865; June 18, 1996; "Multi-phase Polymerization Process"; Inventors - J. M. DeSimone, T. J. Romack.
14. * US Patent 5,530,077; June 25, 1996; "Multi-phase Polymerization Process"; Inventors - J. M. DeSimone, T. J. Romack.
15. US Patent 5,561,216; October 1, 1996; "Late Transition Metal Catalysts for the Co- and Terpolymerization of Olefins and Alkyne Monomers with Carbon Monoxide"; Inventors - J. C. Barborak, M. S. Brookhart, and J. M. DeSimone.
16. * US Patent 5,589,105; December 31, 1996; "Heterogeneous Polymerizations in Carbon Dioxide"; Inventors - J. M. DeSimone, E. E. Maury, Y. Z. Menciloglu, J. R. Combes.
17. * US Patent 5,618,894; April 8, 1997; "Non-aqueous Polymerization of Fluoromonomers"; Inventors - J. M. DeSimone, T. J. Romack.
18. * US Patent 5,639,836; June 17, 1997; "Heterogeneous Polymerizations in Carbon Dioxide"; Inventors - J. M. DeSimone, E. E. Maury, Y. Z. Menciloglu, J. R. Combes.
19. ** South African Patent 96/4546; February 26, 1997; "Process for the Preparation of Polyester in Carbon Dioxide"; Inventors: J. M. DeSimone and Gerhard Maier.

20. * **US Patent 5,674,957**; October 7, 1997; "Non-aqueous Polymerization of Fluoromonomers"; Inventors - J. M. DeSimone, T. J. Romack.
21. * **US Patent 5,679,737**; October 21, 1997; "Heterogeneous Polymerizations in Carbon Dioxide"; Inventors - J. M. DeSimone, E. E. Maury, Y. Z. Menciloglu, J. R. Combes.
22. * **US Patent 5,672,667**; September 30, 1997; "Multi-phase Polymerization Process"; Inventors - J. M. DeSimone, T. J. Romack.
23. * **US Patent 5,688,879**; November 18, 1997; "Method of Making Fluoropolymers in Carbon Dioxide"; Inventor - J. M. DeSimone.
24. * **US Patent 5,739,223**; April 14, 1998; "Method of Making Fluoropolymers in Carbon Dioxide"; Inventor - J. M. DeSimone.
25. * **US Patent 5,780,553**; July 14, 1998; "Heterogeneous Polymerizations in Carbon Dioxide"; Inventors - J. M. DeSimone, E. E. Maury, Y. Z. Menciloglu, J. R. Combes.
26. * **US Patent 5,783,082**; July 21, 1998; "Novel Cleaning Process Using Carbon Dioxide as a Solvent and Employing Molecularly Engineered Surfactants"; Inventors – J. M. DeSimone, T. J. Romack, J. B. McClain, D. E. Betts.
27. * **US Patent 5,824,726**; October 20, 1998; "Multi-phase Polymerization Process"; Inventors - J. M. DeSimone, T. J. Romack.
28. ** **US Patent 5,840,820**; November 24, 1998; "Olefin Metathesis Reactions in Carbon Dioxide"; Inventors - J. M. DeSimone, C. Mistele.
29. ** **US Patent 5,855,819**; January 5, 1999; "Synthesis of Conductive Polymers in Liquid and Supercritical Carbon Dioxide"; Inventors - J. M. DeSimone, Yizeng Ni.
30. * **US Patent 5,860,467** January 19, 1999; "Use of CO₂-Soluble Materials in Making Molds"; Inventors - J. M. DeSimone, Esin Gulari, Charles Menke; Filed: December 3, 1996.
31. * **US Patent 5,863,612** January 26, 1999; "Method of Making Fluoropolymers in Carbon Dioxide"; Inventor - J. M. DeSimone; Filed: February 7, 1997.
32. * **US Patent 5,866,005**; February 2, 1999; "Novel Cleaning Process Using Carbon Dioxide as a Solvent and Employing Molecularly Engineered Surfactants"; Inventors – J. M. DeSimone, T. J. Romack, J. B. McClain, D. E. Betts.
33. ** **US Patent 5,872,157**; February 12, 1999; "Method for Olefin Oxidation"; Inventors – J. M. DeSimone, T. J. Romack.
34. * **US Patent 5,922,833** July 13, 1999; "Method of Making Fluoropolymers in Carbon Dioxide"; Inventor - J. M. DeSimone.
35. * **US Patent 5,939,501**; August 17, 1999; "Non-aqueous Polymerization of Fluoromonomers"; Inventors - J. M. DeSimone, T. J. Romack.
36. * **US Patent 5,939,502**; August 17, 1999; "Non-aqueous Polymerization of Fluoromonomers"; Inventors - J. M. DeSimone, T. J. Romack.
37. ** **US Patent 5,945,477**; August 31, 1999; "Process for the Preparation of Polyester in Carbon Dioxide"; Inventors: J. M. DeSimone and Gerhard Maier.
38. * **US Patent 5,944,996**; August 31, 1999; "Novel Cleaning Process Using Carbon Dioxide as a Solvent and Employing Molecularly Engineered Surfactants"; Inventors – J. M. DeSimone, T. J. Romack, J. B. McClain, D. E. Betts.
39. ** **US Patent 5,977,292**; November 2, 1999; "Process for the Preparation of Polyester in Carbon Dioxide"; Inventors: J. M. DeSimone and Gerhard Maier.

40. * **US Patent 5,981,673**; November 9, 1999; "Non-aqueous Polymerization of Fluoromonomers"; Inventors - J. M. DeSimone, T. J. Romack.
41. ** **United Kingdom Patent 2,315,755**; December 8, 1999; "Process for the Preparation of Polyester in Carbon Dioxide"; Inventors: J. M. DeSimone and Gerhard Maier.
42. ** **US Patent 6,001,418**; December 14, 1999; "Spin Coating Method and Apparatus for Liquid Carbon Dioxide Systems"; Inventors: J. M. DeSimone and Ruben Carbonell.
43. *** **US Patent 6,010,542**; January 4, 2000; "Method of Dyeing Substrates in Carbon Dioxide"; Inventors – J. DeYoung, James McClain, J. M. DeSimone, T. J. Romack.
44. ** **US Patent 6,025,459**; February 15, 2000; "Synthesis of Polyamides in Liquid and Supercritical Carbon Dioxide"; Inventors: J. M. DeSimone, Givens, R., Ni, L.
45. * **Mexican Patent 196010**; April 14, 2000; "Heterogeneous Polymerizations in Carbon Dioxide"; Inventors - J. M. DeSimone, E. E. Maury, Y. Z. Menciloglu, J. R. Combes.
46. ** **US Patent 6,083,565**; July 4, 2000; "Method for Meniscus Coating with Liquid Carbon Dioxide"; Inventors: J. M. DeSimone, Ruben Carbonell, Brian Novick.
47. * **European Patent 96909747.6**; August 3, 1996; "Non-aqueous Polymerization of Fluoromonomers"; Inventors - J. M. DeSimone, T. J. Romack.
48. ** **US Patent 6,107,443**; August 22, 2000; "Methods for Solid State Polymerizing Polyesters Utilizing Carbon Dioxide"; Inventors: J. M. DeSimone and Gerhard Maier.
49. ** **US Patent 6,127,000**; October 3, 2000; " Method and Compositions for Protecting Civil Infrastructure"; Inventors: R. G. Carbonell; J. M. DeSimone; F. E. Henon.
50. * **German Patent DE 696 09 168.2-08**; July 5, 2000; "Non-aqueous Polymerization of Fluoromonomers"; Inventors - J. M. DeSimone, T. J. Romack.
51. * **German Patent DE 69625092.6**; "Non-aqueous Polymerization of Fluoromonomers"; Inventors - J. M. DeSimone, T. J. Romack.
52. * **Italian Patent IT 69846BE/2000**; July 5, 2000; "Non-aqueous Polymerization of Fluoromonomers"; Inventors - J. M. DeSimone, T. J. Romack.
53. **Italian Patent 813548**; "Non-aqueous Polymerization of Fluoromonomers"; Inventors - J. M. DeSimone, T. J. Romack.
54. **Italian Patent 957113**; "Non-aqueous Polymerization of Fluoromonomers"; Inventors - J. M. DeSimone, T. J. Romack.
55. * **United Kingdom Patent GB 0 813 548**; July 5, 2000; "Non-aqueous Polymerization of Fluoromonomers"; Inventors - J. M. DeSimone, T. J. Romack.
56. * **British Patent 957113**; "Non-aqueous Polymerization of Fluoromonomers"; Inventors - J. M. DeSimone, T. J. Romack.
57. * **French Patent FR 0 813 548**; July 5, 2000; "Non-aqueous Polymerization of Fluoromonomers"; Inventors - J. M. DeSimone, T. J. Romack.
58. * **French Patent 957113**; "Non-aqueous Polymerization of Fluoromonomers"; Inventors - J. M. DeSimone, T. J. Romack.
59. **Dutch Patent 957113**; "Non-aqueous Polymerization of Fluoromonomers"; Inventors - J. M. DeSimone, T. J. Romack.

60. **US Patent 6,176,895**; January 23, 2001; "Polymers for Metal Extractions in Carbon Dioxide"; Inventors-J. M. DeSimone and S. Crette.
61. **US Patent 6,211,422**; April 3, 2001; "Enzyme Catalysis in Carbon Dioxide Fluids"; Inventors: J. M. DeSimone, R. Carbonell
62. **US Patent 6,224,774**; May 1, 2001; "Method of Entraining Solid Particulates in Carbon Dioxide Fluid"; Inventors: J. M. DeSimone, T. Romack, J. B. McClain, D. E. Betts
63. **** US Patent 6,240,936**; June 5, 2001; "Methods of Spin Cleaning Substrates Using Carbon Dioxide Liquids"; Inventors: J. M. DeSimone and Ruben Carbonell.
64. *****US Patent 6,248,136**; June 19, 2001; "Method for Carbon Dioxide Dry Cleaning with Integrated Distribution"; Inventors: J. M. DeSimone, T. Romack, J. B. McClain, J. DeYoung, R. B. Lienhart, K. Huggins.
65. **** US Patent 6,288,202**; September 11, 2001; "Synthesis of Polycarbonates Using Carbon Dioxide"; Inventors: J. M. DeSimone, R. Givens, M. Jikei, J. D. Cohen.
66. **** US Patent 6,298,902**; October 9, 2001; "Use of CO₂-Soluble Materials in Making Molds"; Inventors: J. M. DeSimone, Esin Gulari, Charles Menke.
67. *****US Patent 6,332,342**; December 25, 2001; "Method for Carbon Dioxide Dry Cleaning with Integrated Distribution"; Inventors: J. M. DeSimone, T. Romack, J. B. McClain, J. DeYoung, R. B. Lienhart, K. Huggins.
68. *****US Patent 6,383,289**; May 7, 2002; "Apparatus for Liquid Carbon Dioxide Systems"; Inventors: J. M. DeSimone and R Carbonell.
69. *****US Patent 6,403,663**; June 11, 2002; "Method of Making Foamed Materials Using Surfactants and Carbon Dioxide"; Inventors: J. M. DeSimone and R Carbonell.
70. *** US Patent 6,426,391**; July 30, 2002; "Fluorination in Liquid and Supercritical Carbon Dioxide"; Inventors - J. M. DeSimone, T. J. Romack.
71. **** US Patent 6,451,287**; September 17, 2002; "Fluorinated Copolymer Surfactants and Use Thereof in Aerosol Compositions"; Inventors: J. M. DeSimone, Terri Johnson Carson, John Miller, Sharon Wells.
72. *** Canadian Patent 2,168,423**; July 9, 2002; "Heterogeneous Polymerizations in Carbon Dioxide"; Inventors - J. M. DeSimone, E. E. Maury, Y. Z. Menciloglu, J. R. Combes.
73. *** European Patent 0638095** July 8, 2002; "Method of Making Fluoropolymers in Carbon Dioxide"; Inventor - J. M. DeSimone.
74. *** Mexican Patent 206607**; February 8, 2002; "Multi-phase Polymerization Process"; Inventors - J. M. DeSimone, T. J. Romack.
75. **** US Patent 6,497,921**; December 24, 2002; "Method for Meniscus Coating with Liquid Carbon Dioxide"; Inventors: J. M. DeSimone, Ruben Carbonell, Brian Novick.
76. **** US Patent 6,500,273**; December 31, 2002; "Spin Cleaning Methods"; Inventors: J. M. DeSimone and Ruben Carbonell.
77. **US Patent 6,512,062**; January 28, 2003; "Polymerization of Non-Fluorinated Monomers in Carbon Dioxide"; Inventors: J. M. DeSimone, T. J. Carson, H. Shiho, J. Lizotte.
78. **** US Patent 6,517,633**; February 11, 2003; "Apparatus for Meniscus Coating with Liquid Carbon Dioxide"; Inventors: J. M. DeSimone, Ruben Carbonell, Brian Novick.
79. ****US Patent 6,623,355**; September 23, 2003; "Methods, apparatus and slurries for Chemical Mechanic Planarization; Inventors: J.B. McClain, J. DeYoung, J. M. DeSimone

80. ****US Patent 6,641,678**; November 4, 2003; "Methods for Cleaning Microelectronic Device Structures with Aqueous Carbon Dioxide Systems; Inventors: J.B. McClain, J. DeYoung, S. Gross, J. M. DeSimone
81. * **Japanese Patent 3,476,016**; September 26, 2003; "Heterogeneous Polymerizations in Carbon Dioxide"; Inventors - J. M. DeSimone, E. E. Maury, Y. Z. Menciloglu, J. R. Combes
82. **** US Patent 6,652,920**; November 25, 2003; "Method for Meniscus Coating a Substrate with a Polymeric Precursor"; Inventors: J. M. DeSimone, Ruben Carbonell, Brian Novick
83. * **Chinese Patent 96193189.2**; "Non-aqueous Polymerization of Fluoromonomers"; Inventors - J. M. DeSimone, T. J. Romack.
84. * **US Patent 6,684,525**; February 3, 2004; "Phosphate Fluorosurfactants in Carbon Dioxide"; Inventors - J. M. DeSimone; J. Keiper.
85. * **Japanese Patent 3512796**, January 16, 2004; "Method of Making Fluoropolymers in Carbon Dioxide"; Inventor - J. M. DeSimone.
86. * **US Patent 6,716,945**; April 6, 2004; "Multimodal Fluoropolymers and Methods of Making the Same"; Inventors - J. M. DeSimone; George Roberts, Paul Charpentier.
87. * **European Patent 0711311**; October 15, 2003; "Heterogeneous Polymerizations in Carbon Dioxide"; Inventors - J. M. DeSimone, E. E. Maury, Y. Z. Menciloglu, J. R. Combes.
88. **** US Patent 6,736,996**; May 18, 2004; "Compositions for Protecting Civil Infrastructure"; Inventors: R. G. Carbonell; J. M. DeSimone; F. E. Henon.
89. ****US Patent 6,743,078**; June 1, 2004; "Methods, apparatus and slurries for Chemical Mechanic Planarization; Inventors: J.B. McClain, J. DeYoung, J. M. DeSimone
90. **US Patent 6,747,179**; June 8, 2004; Carbon Dioxide Soluble Polymers and Swellable Polymers for Carbon Dioxide based Application; Inventors: J. M. DeSimone, Eva Birnbaum, Ruben Carbonell, Stephanie Crette, James B. McClain, T. Mark McClesky, Kimberly Powell, Timothy Romack, Willaim Tumas.
91. ****US Patent 6,763,840**; July 20, 2004; "Methods and apparatus for Cleaning Substrates using Liquid Carbon Dioxide; Inventors: J.B. McClain, J. DeYoung, J. M. DeSimone
92. ****US Patent 6,764,809**; July 20, 2004; "CO₂-Processes, photoresists, polymers and photoactive compounds for Microlithography"; Inventors: J. M. DeSimone, Ruben Carbonell, Jonathan Kendall, Chris McAdams.
93. ****US Patent 6,765,030**; July 20, 2004; "Methods of Forming Polymeric Structures Using Carbon Dioxide and Polymeric Structures Formed Thereby"; Inventors: J. M. DeSimone, Sarah Paisner.
94. **US Patent 6,790,870**; September 14, 2004; "Methods of Making Foamed Materials of Blended Thermoplastic Polymers Using Carbon Dioxide"; Inventors: J. M. DeSimone, S. A. Khan, J. R. Royer, R. J. Spontak, T. A. Walker, Y. Gay, S. Siripurapu.
95. * **US Patent 6,806,332**; October 19, 2004; "Continuous Process for Making Polymers in Carbon Dioxide"; Inventors - J. M. DeSimone; George Roberts, Paul Charpentier.
96. **US Patent 6,900,267**; May 31, 2005; "Methods of CO₂-Assisted Reactive Extrusion": Inventors: Royer, J.; DeSimone, J. M.; Roberts, G.; Kahn, S.
97. **US Patent 6,887,266**; May 3, 2005; "Endoprostheses and Methods of Manufacture": Inventors: Williams, M. S.; Glenn, Richard A.; Smith, Jeffrey A.; Holbrook, Kevin, D.; DeSimone, J. M.
98. * **US Patent 6,914,105**; July 5, 2005; "Continuous Process for Making Polymers in Carbon Dioxide"; Inventors - J. M. DeSimone; George Roberts, Paul Charpentier.

99. ****US Patent 6,929,904**; August 16, 2005; "Positive Tone Lithography with Carbon Dioxide Development Systems"; Inventors: J.B. McClain, J. DeYoung, J. M. DeSimone
100. **US Patent 6,932,930**; August 23, 2005; "Intraluminal Prostheses having Polymeric Material With Selectively Modified Crystallinity and Methods of Making the Same"; Inventors: Williams, M. S.; DeSimone, J. M.
101. **Canadien Patent 2,236,529**; December 28, 2005; "Novel Cleaning Process Using Carbon Dioxide as a Solvent and Employing Molecularly Engineered Surfactants"; Inventors – J. M. DeSimone, T. J. Romack, J. B. McClain, D. E. Betts.
102. **European Patent 1177159**; December 28, 2005; "Fluorination in Liquid and Supercritical Carbon Dioxide"; Inventors - J. M. DeSimone, T. J. Romack.
103. **German Patent No. 60203269.5**; "Nano- and Micro-Cellular Foamed Thin Walled Materials and Processes and Apparatuses for Making the Same"; Royer, J.; Siripurapu, S; DeSimone, J. M. 2006
104. **Chinese Patent ZL01816240.1**; Issued: March 22, 2006; "Phosphate Fluorosurfactants for Use in Carbon Dioxide"; DeSimone, et. al.
105. **US Patent 7,029,832**; Issued: April 18, 2006; "Immersion Lithography Methods Using Carbon Dioxide"; Inventors: Jason Rolland, and J. M. DeSimone.
106. **US Patent 7,063,839**; Issued June 20, 2006; "Continuous Method and Apparatus for Separating Polymer from a High Pressure Carbon Dioxide Fluid Stream"; Inventors: Joseph Royer, Paul Charpentier, George Roberts and Joseph M. DeSimone.
107. **Chinese Patent 00807262.0**; July 12 28, 2006; "Fluorination in Liquid and Supercritical Carbon Dioxide"; Inventors - J. M. DeSimone, T. J. Romack.
108. * **US Patent 7,122,060**; October 17, 2006; "Phosphate Fluorosurfactants in Carbon Dioxide"; Inventors - J. M. DeSimone; J. Keiper.
109. **US Patent 7,141,061**; November 28, 2006; "Photocurable Endoprostheses System"; Inventors: Williams, M. S.; Glenn, Richard A.; Smith, Jeffrey A.; Holbrook, Kevin, D.; DeSimone, J. M.
110. * **Japanese Patent 3936720**; March 30, 2007; "Multi-phase Polymerization Process"; Inventors - J. M. DeSimone, T. J. Romack.
111. * **Chinese Patent ZL01813069.0**; April 18, 2007; "Multimodal Fluoropolymers and Methods of Making the Same"; Inventors - J. M. DeSimone; George Roberts, Paul Charpentier.
112. * **Chinese Patent ZL98803810.2**; July 24, 2007; "Method of Making Fluoropolymers"; Inventors - J. M. DeSimone; Tim Romack.
113. * **Japanese Patent 3996637**; August 10, 2007; "Non-aqueous Polymerization of Fluoromonomers"; Inventors - J. M. DeSimone, T. J. Romack.
114. * **Japanese Patent 4036893**; November 9, 2007; "Multi-phase Polymerization Process"; Inventors - J. M. DeSimone, T. J. Romack.
115. * **Chinese Patent ZL02159391.4**; October 17, 2007; "Non-aqueous Polymerization of Fluoromonomers"; Inventors - J. M. DeSimone, T. J. Romack.
116. * **European Patent 1172383**; April 16, 2008; "Method of Making Fluoropolymers"; Inventors - J. M. DeSimone.
117. * **European Patent 1328610**; July 2, 2008; "Phosphate Fluorosurfactants in Carbon Dioxide"; Inventors - J. M. DeSimone; J. Keiper
118. **US Patent 7,410,620**; August 12, 2008; "Apparatus for the Continuous Production of Polymers in Carbon Dioxide"; Inventors - J. M. DeSimone; George Roberts, Paul Charpentier.

119. **US Patent 7,435,495**; October 14, 2008; "Liquid Materials for Use in Electrochemical Cells"; Inventors - J. M. DeSimone; Zhilian Zhou.

Current Research Group

<u>Name</u>	<u>Position</u>	<u>Previous Institution</u>
James Byrne	Ph.D. Candidate	University of Texas – Austin BME
Blake, Steven	Postdoctoral Scholar	UC-San Diego
Chang, Kelly	Ph.D. Candidate	Rutgers University
Conwell, Christine	Postdoctoral Scholar	Georgia Tech
Dunn, Stuart	Ph.D. Candidate	Virginia Tech
Earl- Hampton, Meredith	Ph.D. Candidate (w/ Templeton)	Case Western Reserve
Enlow, Liz	Ph.D. Candidate	Univ. South Carolina
Forman, Nicole	Ph.D. Candidate	St. John's University
Herlihy, Kevin	Ph.D. Candidate	UC-Santa Barbara
Hinson, William	Ph.D. Candidate	University of Florida
Hu, Zhaokang	Ph.D. Candidate	Univ. of Science & Technology, China
Jeong, Wonhee	Postdoctoral Scholar	Stanford University
Jones, Stephen	Ph.D. Candidate Cell Biology	Earlham College
Merkel, Timothy	Ph.D. Chemistry	Swarthmore
Misra, Sanjit	Undergraduate	UNC-CH
Napier, Mary	Senior Research Associate	RTI/Xanthon
Nunes, Janine	Ph.D. Candidate	Morgan State University
Orgel, Ryan	Undergraduate	UNC-CH
Nunes, Janine	Ph.D. Candidate	Morgan State University
Parrott, Matthew	Postdoctoral Scholar	McMaster University
Perry, Antonio	Ph.D. Candidate	Cal State-Fresno
Pilai, Jonathan	Postdoctoral Scholar	Ohio State BME
Ropp, Patty	Senior Research Associate	UNC Chemistry
Tian, Shaomin	Research Associate	UNC Microbiology
Wang, Jin	Postdoc at UNC	Ohio State University
Williams, Stuart	Ph.D. Candidate	James Madison University
Yadav, Rameshwar	Ph.D. Candidate at NCSU	India Institute of Technology
Xu, Jing	Ph.D. Candidate	Nankai University, China
Zhang, Hanjun (Henry)	Postdoctoral Scholar	Temple University

Past Group Members and Visitors (* denotes people currently in academic positions)

- 47 Postdocs;
- 35 Ph.D. Degrees in Chemistry
- 5 Ph.D. in Chemical Engineering;
- 6 M.S. Degrees in Chemistry;
- 23 B.S. Chemistry

<u>Name</u>	<u>Degree w/ DeSimone</u>	<u>Next Location</u>
Ahmed, Tamer	Ph.D. Candidate at NCSU	NCSU
Anderson, Chris	B.S. Chemistry	Caltech
Andre, Pascal	Postdoc	Industry in France
Archibald, Scott	Postdoc	UniRoyal
Astrum-Acevedo, Jim	Ph.D. Chemistry	US Patent & Trademark Office
Askew, Kim	B.S. Chemistry	Medical School
Batten, Heather	B.S. Chemistry	University of Massachusetts - Amherst
Behles, Jackie	Ph.D. Chemistry	Novartis

Berndt, Steve	B.S. Chemistry	NC Molding Company
Bertrand, Elizabeth	B.S. Chemistry	University of Montpellier
Bessel, Carol	Sabbatical Leave	Villanova
Betts, Douglas	Ph.D. Chemistry	Nalco, Micell Technologies
Boggiano, Mary Kate	Ph.D. Chemistry	Start-up in College Park, MD
Buhler, Eric	Postdoc	CNRS – Grenoble, France
Bulgin, Andrew	B.S. Chemistry	Medical School
Bunyard, Clay	Ph.D. Chemistry	Kimberly Clark
Burke, Amy	M.S. Chemistry	Lord Corporation
Burns, Sonja	MS Graduate Student	High School Teacher
Butcher, Eric	Undergraduate Researcher	Pharmacy School
Brannen, Candice	Postdoc at UNC-CH	Lord Corporation
*Canelas, Dorian	Ph.D. Chemistry	NCSU
Cangelosi, Michael	B.S. in Applied Sciences	Unknown
Carson, Terri	Ph.D. Chemistry	Dow Chemical, Freeport, TX
Cha, Junhoe	Postdoc at UNC-CH	University of Singapore
Chernyak, Yuri	Postdoc NCSU	Huntsman Chemical Company, RTI
* Charpentier, Paul	Postdoc NCSU	Univ. of Western Ontario
*Choi, Jai-Pil	Postdoc at UNC-CH	Professor, California State University, Fresno
Clark, Michael	Ph.D. Chemistry	DSM
Combes, Jimmy	Postdoc	Xerox Research Centre of Canada
* Cooper, Andy	Postdoc	Cambridge University, Liverpool
Crette, Stephanie	Ph.D. Chemistry	Westvaco
Dardin, Alex	Postdoc	RohMax
* Davidson, Tammy	Postdoc	Middle Tennessee State
Denison, Ginger	Ph.D. Chemistry	Co-Founder, Liquidia Technologies
Dessipri, Geni	Postdoc	ARI - Greece
DeYoung, James	Postdoc	Micell Technologies
Dominey, Raymond	Sabatical Leave	University of Richmond
Du, Libin	Postdoc at UNC-CH	Lubrizol
Dukes, Katerina	Ph.D. Chemistry	Rohm & Haas
Dunn, Erin	Undergraduate Researcher	Graduate School
DuPont, Julie	Postdoc at UNC-CH	Organic Synthesis Company
Erford, Karen	Ph.D. Chemistry	Rohm & Haas, Postdoc Univ. Pennsylvania
Ermoshkin, Alexander	Postdoc at UNC-CH	Liquidia Technologies
Eulis, Larken	Postdoc at UNC-CH	Postdoc, Department of Radiology, UNC-CH
Exener, Ansley	MS. Chemistry	University of Georgia
Fakhouri, Sami	Undergraduate Researcher	UMass – Polymer Science
Flowers, Devin	Ph.D. Chemistry	DuPont
Folk, Sarah	Ph.D. Chemistry	Secondary School Teacher
Galloway, Ashley	Postdoc at UNC-CH	Liquidia Technologies
Gao, Xin	MS Chemistry	University of North Carolina
Genova, Jennifer	B.S. Chemistry	Medical School
Givens, Ramone	M.S. Chemistry	Micell Technologies, MBA KFBS, Glaxo
Glover, Rebecca	Undergraduate Researcher	Dental School
Goodner, Mike	Postdoc	Intel
Gratton, Stephanie	Ph.D. Chemistry	Merck
* Gross, Stephen	Ph.D. Chemistry	Micell Integrated Systems,
* Guan, Zhibin	Ph.D. Chemistry	University of California at Irvine
Guo, Ji	Postdoc at UNC-CH	FDA

Harbinson, Chris	B.S. Chemistry	Micell Technologies
Haynie, Mindy	B.S. Chemistry	Micell Technologies
Herman, Delores	Postdoc	Duke Law School
Hicks, Evan	M.S. Chemistry	Duke Fuqua School of Business
Hoggan, Eric	Ph.D. Chemical Engineering	Intel
Hsiao, Yu-Ling	Postdoc	Bayer
Hunt, Michael	Ph.D. Chemistry	DuPont, Milliken
Jikei, Mishi	Postdoc	Tokyo Institute of Technology
Jones, Charles	Ph.D. Chemistry	Postdoc, UNC-CH w/ Ashby
Jones, Tamara	M.S. Chemistry	VCU Medical School
* Kadla, John	Visiting Scientist	NC State University
Kapellen, Kerstin	Postdoc	4P – Germany
Karkanawi, Sarah	Undergraduate Researcher	Pharmacy School
Keiper, Jason	Postdoc	Stepan
Kelly, Jennifer	Ph.D. at UNC-CH	Consulting
Kendall, Jonathan	Postdoc	Lord Corporation
Kennedy, Karen	Ph.D. Chemical Engineering	Air Products and Chemicals
Killian, Susan	B.S. Chemistry	Northwestern University
Kipp, Brian	Ph.D. Chemistry	DuPont
*Lee, Dongil	Postdoc (Joint with Murray)	Asst. Professor, Western Michigan University
Lemert, Rich	Postdoc	Consultant
Lin, Jun	Postdoc	Consultant
Liu, Tao	Ph.D. at NCSU (w/ Roberts)	Independent in China
Lizotte, Jeremy	B.S. Chemistry	Virginia Tech
Luft, Chris	Senior Research Associate	Liquidia
Maier, Gerhard	Postdoc	Technische Universitat Muenchen
Marshall, Kelly	B.S. Chemistry	University of California - Berkeley
Maynor, Ben	Postdoc at UNC-CH	Liquidia Technologies
Maurry, Elise	Ph.D. Chemistry	Nalco – Leiden, Lorielle
Maxwell, Kim	Ph.D. Chemistry	Albarlmarle Corporation
McClain, Jim	Ph.D. Material Sciences	Micell Technologies
* Menciloglu, Yusuf	Postdoc	Gemsan - Turkey
Mistele, Chad	Ph.D. Chemistry	GE Plastics
Mofrad, Peter	B.S. Chemistry	Medical School
Murphy, Andrew	Postdoc at UNC-CH	Liquidia Technologies
Ni, Yizeng	Postdoc	Supelco
Novick, Brian	Ph.D. Chemical Engineering	Intel
Paisner, Sara	Postdoc	GE Plastics
Pandya, Ashish	Lab Mgr. and Sr. Res. Ass.	Science House
Peters, Mark	Ph.D. Chemistry	Bayer, Eastman
Petros, Rob	Postdoc at UNC-CH	University of North Texas
Phillips, Rich	Ph.D. Chemistry	Merck
Pohlhaus, Patrick	Postdoc at UNC-CH	Liquidia
Polley, Jennifer	M.S. Chemistry	Teaching
Pollitis, Jeffery	B.S. Chemistry	University of Michigan
Poppe, Dirk	Postdoc	Industry in Germany
Portnow, Lauren	B.S. Chemistry	UNC-CH School of Medicine
Powell, Kim	Postdoc	Savannah River
Quadir, Murat	Postdoc/Lab Manager	Nalco
Rolland, Jason	Ph.D. Chemistry	Liquidia Technologies

* Romack, Tim	Ph.D. Chemistry	East Carolina University
Royer, Joseph	Ph.D. Chemical Engineering	Milliken
Schorzman, Derek	Postdoc	Bausch and Lomb
Seus, Allison	Undergraduate Researcher	Graduate School
* Shaffer, Katherine	Postdoc	Wayne State College
* Sheares-Ashby, Valerie	Ph.D. Chemistry	NATO Postdoc Mainz, Iowa State, UNC-CH
Shi, Chunmei	NCSU Postdoc	NCSU Postdoc w/ Roberts
Shiho, Hiroshi	Visiting Scientist	JSR Corporation
Snead, David	B.S. Chemistry	Graduate School
Shultz, Scott	Ph.D. Chemistry	Merck & Co.
Smith, Renee	B.S. Chemistry	MIT Graduate School
Stewart, Gina	Postdoc	Micell Technologies, Consultant
Stranko, Matt	B.S. Chemistry	Medical School
Tahiliani, Shonali	Ph.D. Chemistry	Bayer
*Taylor, Darlene	STC Tech. Coordinator	Assist. Prof. NC Central University
Thompson, Drew	B.S. Chemistry	University of California – Berkeley
Traud, Ron	MS Chemistry	UNC Law School
Trecek, John	B.S. Chemistry	Medical School
Wang, Danni	Postdoc	Supelco
Wei, Han-Chao	Postdoc	Exfluor Incorporated
Wells-Kennedy, Sharon	Ph.D. Chemistry	NIST Postdoc (faculty bound...)
Michel, Udo	Postdoc	Degussa Stockhausen
Visintin, Pamela	Ph.D. Chemistry	CMP Company
Wang, Ke	Postdoc (w/ Carbonell)	Guidant Corporation
Weston, Ken	B.S. Chemistry	University of California – Santa Barbara
White, Jesse	Undergraduate Researcher	Architecture School
Wojckinski, Lou	Postdoc	Postdoc, Univ. of Kentucky
Wood, Colin	Postdoc at UNC-CH	Researcher at University of Liverpool
Xu, Bin	Ph.D. Chemistry	Postdoc at UCLA
Yarbrough, Jason	Postdoc at UNC-CH	Sealed Air Corporation
Ye, Weijun	Ph.D. Chemistry	Hong Kong Univ of Science & Technology
* Yoshida, Eri	Postdoc	Assistant Professor – Kyoto University
Young, Jennifer	Ph.D. Chemistry	DuPont
Zannoni, Luke	Ph.D. Chemistry	Unilever
Zhou, Zhilian	Ph.D. Chemistry at UNC-CH	Liquidia Technologies