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PROFESSIONAL EXPERIENCE

Distinguished Professor, University of Colorado, 11/12 – Present
Director, Materials Science and Engineering Program, 7/10 - Present
James and Catherine Patten Endowed Chair of Chemical and Biological Engineering, 7/07 – Present
Department Chair of Chemical and Biological Engineering, 7/11 – 6/12
Associate Dean for Research, College of Engineering and Applied Science, 8/07 – 7/09
Mel and Virginia Clark Professor of Chemical and Biological Engineering, University of Colorado, 7/05 – 6/07
Department Chair, Chemical and Biological Engineering, 8/03 – 6/07, 7/11 – 6/12
Courtesy Professor, Chemistry and Biochemistry, University of Colorado, 8/03 – Present
Clinical Professor of Dentistry, University of Colorado, Health Sciences Center, 1/01 – Present
Co-Director, I/UCR Center for Fundamentals and Applications of Photopolymerizations, 1/00 – Present
Gillespie Professor, Chemical and Biological Engineering, University of Colorado, 8/99 – 7/05
Associate Professor, Chemical Engineering, University of Colorado, 8/95 – 8/99
Assistant Professor, Chemical Engineering, University of Colorado, 1/92 – 8/95

EDUCATION

Ph.D. in Chemical Engineering, August 1991, Purdue University
B.S. in Chemical Engineering (with Honors), May 1988, Purdue University

HONORS AND AWARDS

Roy W. Tess Award in Coatings, American Chemical Society, Polymeric Materials Science and Engineering, 2018
Fellow, National Academy of Medicine, 2018
Mark Scholar Award, American Chemical Society, Division of Polymer Chemistry, 2017
University of Colorado Distinguished Research Lecture, 2017
Fellow, National Academy of Inventors, 2017
Outstanding Chemical Engineering Alumni Award, Department of Chemical Engineering, Purdue University, 2016
Plenary Lecture, American Chemical Society National Meeting, Divisions of Polymer Chemistry and Polymeric Materials Science and Engineering, Joint Symposium Plenary Lecture, 2016
Outstanding Teaching Award, College of Engineering and Applied Science, University of Colorado, 2016
Student Selected Outstanding Undergraduate Teaching Award, Dept of Chemical Engr, Univ of Colorado, 2016
International Association for Dental Research Peyton-Skinner Award for Innovation in Dental Materials, 2015
American Institute of Chemical Engineers Professional Progress Award in Chemical Engineering, 2011
American Institute of Chemical Engineering Materials Engineering and Science Division C.M.A. Stine Award, 2009
Academic Life Teaching Award, Committee on Learning and Academic Support Services, Univ. of Colorado, 2008
American Chemical Society, Div. of Polymeric Mtls Science and Engr Cooperative Research Award, 2007
American Institute of Chemical Engineers R.H. Wilhem Award, 2006
University of Colorado Faculty Fellowship, 2005-06
Society for Biomaterials Clemson University Award for Contributions to the Literature, 2005
College of Engineering Max S. Peters Outstanding Service Award, 2004
University of Colorado Technology Transfer Office Physical Sciences Inventor of the Year, 2003
College of Engineering John and Mercedes Peebles Teaching Innovation Award, 2002
Boulder Faculty Assembly Award for Excellence in Research, Scholarly, and Creative Work, 2002
Department of Chemical Engineering Outstanding Undergraduate Teaching Award, 2002
American Institute of Chemical Engineers Allan P. Colburn Award, 2001
American Society of Engineering Education Curtis W. McGraw Award, 2000
Fellow, American Institute of Medical and Biological Engineers, 1999
Alfred P. Sloan Research Fellow, 1998 - 2000
Materials Research Society Outstanding Young Investigator Award, 1997
Camille Dreyfus Teacher-Scholar Award, 1996
National Institutes of Health FIRST Award, 1995 - 2000
University of Colorado Outstanding Faculty Graduate Advisor, 1995
National Science Foundation Presidential Faculty Fellowship, 1994 - 1999

Department of Chemical Engineering Outstanding Graduate Teaching Award, 1994
American Society of Engineering Education Rocky Mountain Section Dow Outstanding New Faculty Award, 1994
American Chemical Society Unilever Award for the Outstanding Graduate Research in Polymer Chemistry, 1993

REFEREED PUBLICATIONS

1. D. Konetski, D.W. Zhang, D.K. Schwartz, and C.N. Bowman, "Photoinduced Pinocytosis for Artificial Cell and Protocell Systems," *Chemistry of Materials*, *30*, 8757-8763 (2018). **DOI:** 10.1021/acs.chemmater.8b02608
2. C. Wang, S. Mavila, BT. Worrell, WX. Xi, T. Goldman, C.N. Bowman, "Productive Exchange of Thiols and Thioesters to Form Dynamic Polythioester-Based Polymers" *ACS Macro Letters*, *11*, 1312-1316 (2018). **DOI:** 10.1021/acsmacrolett.8b00611
3. C. Wang, T. Goldman, BT. Worrell, MK. McBride, MD. Alim, C.N. Bowman, "Recyclable and Repolymerizable Thiol-X Photopolymers" *Materials Horizons*, *5*, 1042-1046 (2018). **DOI:** 10.1039/c8mh00724a
4. S. Mavila, B. Worrell, H. Culver, T. Goldman, C. Wang, CH. Lim, D. Domaille, S. Pattanayak, MK. McBride, CB. Musgrave, C.N. Bowman, "Dynamic and Responsive DNA-like Polymers" *Journal of the American Chemical Society*, *140*, 13594-13598 (2018). **DOI:** 10.1021/jacs.8b09105
5. D. S. Konetski, A. Baranek, S. Mavila, XP. Zhang, C.N. Bowman, "Formation of Lipid Vesicles in Situ Utilizing the Thiol-Michael Reaction" *Soft Matter*, *14*, 7645-7652 (2018). **DOI:** 10.1039/c8sm01329b
6. X. Han, DW. Domaille, B. Fairbanks, LC. He, H. Culver, XP. Zhang, J. Cha, C.N. Bowman, "New Generation of Clickable Nucleic Acids: Synthesis and Active Hybridization with DNA" *Biomacromolecules*, *19*, 4139-4146 (2018). **DOI:** 10.1021/acs.biomac.8b01164
7. BT. Worrell, S. Mavila, C. Wang, TM. Kontour, CH. Lim, MK. McBride, CB. Musgrave, R. Shoemaker, C.N. Bowman, "A User's Guide to the Thiol-Thioester Exchange in Organic Media: Scope, Limitations, and Applications in Material Science" *Polymer Chemistry*, *9*, 4523-4534 (2018). **DOI:** 10.1039/c8py01031e
8. TE. Brown, JS. Silver, BT. Worrell, IA. Marozas, FM. Yavitt, KA. Gunay, C.N. Bowman, KS. Anseth, "Secondary Photocrosslinking of Click Hydrogels to Probe Myoblast Mchanotransduction in Three Dimensions" *Journal of the American Chemical Society*, *140*, 11585-11588 (2018). **DOI:** 10.1021/jacs.8b07551
9. XP. Zhang, L. Cox, ZB. Wen, WX. Xi, YF. Ding, C.N. Bowman, "Implementation of two distinct wavelengths to induce multistage polymerization in shape memory materials and nanoimprint lithography" *Polymer*, *156*, 162-168, (2018). **DOI:** 10.1016/j.polymer.2018.09.032
10. DW. Zhang, QK. Liu, R. Visvanathan, MR. Tuchband, GH. Sheetah, B. Fairbanks, NA. Clark, II. Smalyukh, C.N. Bowman, "A Supramolecular Hydrogel Praped From a Thymine-Containing Artificial Nucleolipid: Study of Assembly and Lyotropic Mesophases" *Soft Matter*, *14*, 7045-7051 (2018). **DOI:** 10.1039/c8sm01383g
11. Z. Wen, M. McBride, X. Zhang, X. Han, A. Martinez, R. Shao, C. Zhu, R. Visvanathan, N Clark, Y. Wang, K. Yang, C.N. Bowman, "Reconfigurable LC Elastomers: Using a Termally Programmable Monodomain to Acss Two-Way Free-Standing Multiple Shape Memory Polymers" *Macromolecules*, *51*, 5812-5819 (2018). **DOI:** 10.1021/acs.macromol.8b01315
12. S. Huang, J. Sinha, M. Podgorski, X. Zhang, M. Claudino, C.N. Bowman, "Mechanistic Modeling of the Thiol-Michael Addition Polymerization Kinetics: Structural Effects of the Thiol and Vinyl Monomers" *Macromolecules*, *51*, 5979-5988 (2018). **DOI:** 10.1021/acs.macromol.8b01264
13. M. McBride, A. Martinez, L. Cox, M. Alim, K. Childress, M. Beiswinger M. Podgorski, B. Worrell, J. Killgore, C.N. Bowman, "A Readily Programmable, Fully Reversible Shap-Switching Materail" *Science Advances*, *4*, eaat4634 (2018). **DOI:** 10.1126/sciadv.aat4634

14. B. Worrell, M. McBride, G. Lyon, L. Cox, C. Wang, S. Mavila, CH. Lim, H. Coley, C. Musgrave, Y. Ding, C.N. Bowman, "Bistable and photoswitchable states of matter" *Nature Communications*, 9, 3204 (2018). DOI: 10.1038/s41467-018-05300-7
15. D.S. Bull, N. Nelson, D. Konetski, C.N. Bowman, D.K. Schwartz, A.P. Goodwin, "Contact Line Pinning Is Not Required for Nanobubble Stability on Copolymer Brushes," *The Journal of Physical Chemistry Letter*, 9, 4239-4244 (2018). DOI: 10.1021/acs.jpcclett.8b01723
16. X. Zhang, S. Huang, M. Podgórski, X. Han, M. Claudino, C.N. Bowman, "Assessment of TEMPO as a Thermally Activatable Base Generator and Its Use in Initiation of Thermally-Triggered Thio-Michael Addition Polymerizations," *Polymer Chemistry*, 9, 4294-4302 (2018). DOI: 10.1039/C8PY00662H
17. N. Sowan, L.M. Cox, P.K. Shah, H. Byul Song, J.W. Stansbury, C.N. Bowman, "Dynamic Covalent Chemistry at Interfaces: Development of Tougher, Healable Composites Through Stress Relaxation at the Resin-Silica Nanoparticles Interface," *Advanced Materials Interfaces*, 5, 1800511 (2018). DOI: 10.1002/admi.201800511
18. M.K. McBride, M. Podgórski, S. Chatani, B. Worrell, C.N. Bowman, "Thermoreversible Folding as a Route to Unique Shape Memory Character in Ductile Polymer Networks," *ACS Applied Materials & Interfaces*, 10, 22739-22745 (2018). DOI: 10.1021/acsami.8b06004
19. A.J. Anderson, E.B. Peters, A. Neumann, J. Wagner, B. Fairbanks, S.J. Bryant, C.N. Bowman, "Cytocompatibility and Cellular Internalization of PEGylated "Clickable" Nucleic Acid Oligomers," *Biomacromolecules*, 19, 2535-2541 (2018). DOI: 10.1021/acs.biomac.8b00162
20. H. Byul Song, A. Baranek, B.T. Worrell, W.D. Cook, C.N. Bowman, "Photopolymerized Triazole-Based Glassy Polymer Networks with Superior Tensile Toughness," *Advanced Functional Materials*, 28, 1801095 (2018). DOI: 10.1002/adfm.201801095
21. T.E. Brown, B.J. Carberry, B.T. Worrell, O.Y. Dudaryeva, M.K. McBride, C.N. Bowman, K.S. Anseth, "Photopolymerized dynamic hydrogels with tunable viscoelastic properties through thioester exchange," *Biomaterials*, 178, 496-503 (2018). DOI: 10.1016/j.biomaterials.2018.03.060
22. X. Zhang, W. Xi, G. Gao, X. Wang, J.W. Stansbury, C.N. Bowman, "o-Nitrobenzyl-Based Photobase Generators: Efficient Photoinitiators for Visible-Light Induced Thiol-Michael Addition Photopolymerization," *ACS Macro Letters*, 7, 852-857 (2018). DOI: 10.1021/acsmacrolett.8b00435
23. D. S. Konetski, S. Mavila, C. Wang, B.T. Worrell, C.N. Bowman, "Production of Dynamic Lipid Bilayers Using the Reversible Thiol-Thioester Exchange Reaction," *Chemical Communications*, 54, 8108-8111 (2018). DOI: 10.1039/C8CC03471K
24. T. Liu, P.K. Shah, Z. Liu, G. Gao, C.N. Bowman, J.W. Stansbury, "Effects of Photodegradable o-Nitrobenzyl Nanogels on the Photopolymerization Process," *Macromolecular Materials and Engineering*, 303, 1800206 (2018). DOI: 10.1002/mame.201800206
25. D.W. Domaille, D. Love, X. Rima, A. Harguindey-Sanchez, B. Fairbanks, D. Klug, J.N. Cha, C.N. Bowman, "Post-Synthetic Functionalization of a Polysulfone Scaffold with Hydrazone-Linked Functionality," *Polymer Chemistry*, 9, 3791-3797 (2018). DOI: 10.1039/C8PY00631H
26. D. Zhang, Z. Liu, D. Konetski, C. Wang, B.T. Worrell, C.N. Bowman, "Liposomes formed from photo-cleavable phospholipids: in situ formation and photo-induced enhancement in permeability," *RSC Advances*, 8, 14669-14675 (2018). DOI: 10.1039/C8RA00247A
27. J. Sinha, M. Podgórski, S. Huang, C.N. Bowman, "Multifunctional monomers based on vinyl sulfonates and vinyl sulfonamides for crosslinking thiol-Michael polymerizations: monomer reactivity and mechanical behavior," *Chemical Communications*, 54, 3034-3037 (2018). DOI: 10.1039/C8CC00782A
28. M. Alim, S. Mavila, D.J. Glugla, C. Wang, P.D. Nystrom, A.C. Sullivan, C.N. Bowman, R.R. McLeod, "High dynamic range two-stage photopolymer materials through enhanced solubility high refractive index writing

- monomers," *International Society for Optics and Photonics*, 10558, 105580D (2018). DOI: 10.1117/12.2290029
29. D. Love, K. Kim, JT Goodrich, B.D. Fairbanks, B.T. Worrell, M.P. Stoykovich, C.B. Musgrave, C.N. Bowman, "Amine Induced Retardation of the Radical-Mediated Thiol-Ene Reaction via the Formation of Metastable Disulfide Radical Anions, " *Journal of Organic Chemistry*, 83, 2912-2919 (2018). DOI: 10.1021/acs.joc.8b00143
 30. S. Zajdowicz, H.B. Song, A Baranek, and C.N. Bowman, "Evaluation of Biofilm Formation on Novel Cu-catalyzed Azide-Alkyne Cycloaddition (CuAAC)-Based Resins for Dental Restoratives," *Dental Materials*, 34, 657-666 (2018). DOI: 10.1016/j.dental.2018.01.011
 31. S. Huang, M. Podgórski, X. Zhang, J. Sinha, M. Claudino, J.W. Stansbury and C.N. Bowman, "Dental restorative materials based on thiol-Michael photopolymerization," *Journal of Dental Research*, 97, 530-536 (2018). DOI: 10.1177//0022034518755718
 32. A.A. Alzahrani, M. Saed, C.M. Yakacki, H.B. Song, N. Sowan, J.J. Walston, P.K. Shah, M.K. McBride, J.W. Stansbury and C.N. Bowman, "Fully recoverable rigid shape memory foam based on copper-catalyzed azide-alkyne cycloaddition (CuAAC) using a salt leaching technique," *Polymer Chemistry*, 9, 121-130 (2018). DOI: 10.1039/C7PY01121K
 33. D.W. Hanzon, N.A. Traugutt, M.K. McBride, C.N. Bowman, C.M. Yakacki, and K. Yu, "Adaptable Liquid Crystal Elastomers with Transesterification-based Bond Exchange Reactions," *Soft Matter*, 14, 951-960 (2018). DOI: 10.1039/C7SM02110K
 34. M.D. Alim, D.J. Glugla, S. Mavila, C. Wang, P.D. Nystrom, A.C. Sullivan, R.R. McLeod, and C.N. Bowman, "High Dynamic Range Two-Stage Photopolymers via Enhanced Solubility of a High Refractive Index Acrylate Writing Monomer," *ACS Applied Materials & Interfaces*, 10, 1217-1224 (2017). DOI: 10.1021/acsami.7b15063
 35. M.K. McBride, M. Hendriks, D. Liu, B.T. Worrell, D.J. Broer, and C.N. Bowman, "Photoinduced Plasticity in Cross-Linked Liquid Crystalline Networks," *Advanced Materials*, 29, ARTN: 1606509 (2017). DOI: 10.1002/adma.201606509
 36. C. Wang, M.M. Zieger, A. Schenzel, M. Wegener, J. Willenbacher, C. Barner-Kowollik, and C.N. Bowman, "Photoinduced Tetrazole-Based Functionalization of Off-Stoichiometric Clickable Microparticles," *Advanced Functional Materials*, 27, ARTN 1605317 (2017). DOI: 10.1002/adfm.201605317
 37. A. Harguindey, D.W. Domaille, B.D. Fairbanks, J. Wagner, C.N. Bowman, and J.N. Cha, "Synthesis and Assembly of Click-Nucleic-Acid-Containing PEG-PLGA Nanoparticles for DNA Delivery," *Advanced Materials*, 29, ARTN: 1700743 (2017). DOI: 10.1002/adma.201700743
 38. L.M. Cox, X. Sun, C. Wang, N. Sowan, J.P. Killgore, R. Long, H.A. Wu, C.N. Bowman, and Y. Ding, "Light-Stimulated Permanent Shape Reconfiguration in Cross-Linked Polymer Microparticles," *ACS Applied Materials & Interfaces*, 9, 14422-14428 (2017). DOI: 10.1021/acsami.7b02759
 39. P.K. Shah, J.W. Stansbury, and C.N. Bowman, "Application of an addition-fragmentation-chain transfer monomer in di(meth) acrylate network formation to reduce polymerization shrinkage stress," *Polymer Chemistry*, 8, 4339-4351 (2017). DOI: 10.1039/C7PY00702G
 40. X. Zhang, W. Xi, S. Huang, K. Long, and C.N. Bowman, "Wavelength-Selective Sequential Polymer Network Formation Controlled with a Two-Color Responsive Initiation System," *Macromolecules*, 50, 5652-5660 (2017). DOI: 10.1021/acs.macromol.7b01117
 41. Z. Liu, B. Fairbanks, L. He, T. Liu, P. Shah, J.N. Cha, J.W. Stansbury, and C.N. Bowman, "Water-soluble clickable nucleic acid (CNA) polymer synthesis by functionalizing the pendant hydroxyl," *Chemical Communications*, 53, 10156-10159 (2017). DOI: 10.1039/C7CC05542K
 42. B.D. Fairbanks, D.M. Love, and C.N. Bowman, "Efficient Polymer-Polymer Conjugation via Thiol-ene Click Reaction," *Macromolecular Chemistry and Physics*, 218, ARTN 1700073 (2017).

43. H.B. Song, X. Wang, J.R. Patton, J.W. Stansbury, and C.N. Bowman, "Kinetics and mechanics of photopolymerized triazole-containing thermosetting composites via the copper(I)-catalyzed azide-alkyne cycloaddition," *Dental Materials*, *33*, 621-629 (2017). DOI: 10.1016/j.dental.2017.03.010
44. G.B. Lyon, A. Baranek, A. and C.N. Bowman, "Scaffolded Thermally Remendable Hybrid Polymer Networks," *Advanced Functional Materials*, *26*, 1477-1485 (2016).
45. A.H. Gelebart, M. Mc Bride, A.P. Schenning, C.N. Bowman, and D.J. Broer, "Photoresponsive Fiber Array: Toward Mimicking the Collective Motion of Cilia for Transport Applications," *Advanced Functional Materials*, *26*, 5322-5327 (2016).
46. M. Claudino, X.P. Zhang, M.D. Alim, M. Podgorski, and C.N. Bowman, "Mechanistic Kinetic Modeling of Thiol-Michael Addition Photopolymerizations via Photocaged "Superbase" Generators: An Analytical Approach," *Macromolecules*, *49*, 8061-8074 (2016).
47. G.B. Lyon, L.M. Cox, J.T. Goodrich, A.D. Baranek, Y.F. Ding, and C.N. Bowman, "Remoldable Thiol-ene Vitrimers for Photopatterning and Nanoimprint Lithography," *Macromolecules*, *49*, 8905-8913 (2016).
48. H.B. Song, N. Sowan, P.K. Shah, A. Baranek, A. Flores, J.W. Stansbury and C.N. Bowman, "Reduced shrinkage stress via photo-initiated copper (I)-catalyzed cycloaddition polymerizations of azide-alkyne resins," *Dental Materials*, *32*, 1332-1342 (2016).
49. F. Alimohammadi, C. Wang, O.Z. Durham, H.R. Norton, C.N. Bowman, and D.A Shipp, "Radical Mediated Thiol-ene/yne Dispersion Polymerizations," *Polymer*, *105*, 180-186 (2016).
50. K.M. Lee, T.H. Ware, V.P. Tondiglia, M.K. McBride, X. Zhang, C.N. Bowman, and T.J. White, "Initiatorless Photopolymerization of Liquid Crystal Monomers," *ACS Applied Materials and Interfaces*, *8*, 28040-28046 (2016).
51. D.J. Glugla, M.D. Alim, K.D. Byars, D.P. Nair, C.N. Bowman, K.K. Maute, and R.R. McLeod, "Rigid Origami via Optical Programming and Deferred Self-Folding of a Two Stage Photopolymer," *ACS Applied Materials and Interfaces*, *8*, 29658-29667 (2016).
52. D. Konetski, T. Gong and C.N. Bowman, "Photo-Induced Vesicle Formation via the Copper-Catalyzed Azide-Alkyne Cycloaddition Reaction," *Langmuir*, *32*, 8195-8202 (2016).
53. M. Hardy, D. Konetski, C.N. Bowman, C. and N.P. Devaraj, "Ruthenium photoredox-triggered phospholipid membrane formation," *Organic & Biomolecular Chemistry*, *14*, 5555-5558 (2016).
54. A. Baranek, H.B. Song, M. McBride, P. Finnegan, and C.N. Bowman, "Thermomechanical Formation-Structure-Property Relationships in Photopolymerized Copper-Catalyzed Azide-Alkyne (CuAAC) Networks," *Macromolecules*, *49*, 1191-1200 (2016).
55. K. Kaastrup, A. Aguirre-Soto, C. Wang, C.N. Bowman, J.W. Stansbury, and H.D. Sikes, "UV-Vis/FT-NIR in situ monitoring of visible-light induced polymerization of PEGDA hydrogels initiated by eosin/triethanolamine/O₂," *Polymer Chemistry*, *7*, 592-602 (2016).
56. M. Podgórski, C. Wang, Y. Yuan, D. Konetski, I. Smalyukh, and C.N. Bowman, "Pristine Polysulfone Networks as a Class of Polysulfide-Derived High-Performance Functional Materials," *Chemistry of Materials*, *28*, 5102-5109 (2016).
57. H.B. Song, A. Baranek, and C.N. Bowman, "Kinetics of bulk photo-initiated copper (I)-catalyzed azide-alkyne cycloaddition (CuAAC) polymerizations," *Polymer Chemistry*, *7*, 603-612 (2016).
58. X. Zhang, W. Xi, C. Wang, M. Podgórski, and C.N. Bowman, "Visible-Light-Initiated Thiol-Michael Addition Polymerizations with Coumarin-Based Photobase Generators: Another Photoclick Reaction Strategy," *ACS Macro Letters*, *5*, 229-233 (2016).
59. W. Xi, S.K. Pattanayak, C. Wang, B.D. Fairbanks, T. Gong, J. Wagner, C.J. Kloxin, and C.N. Bowman, "Clickable Nucleic Acids: Sequence Controlled Periodic Copolymer/Oligomer Synthesis by Orthogonal thiol-X

- Reactions,” *Angewandte Chemie International Edition*, *54*, 14462-14467 (2015). (Front Cover Taken from This Article)
60. C. Wang, X.P. Zhang, M. Podgorski, W.X. Xi, J. W. Stansbury, and C.N. Bowman, “Monodispersity/Narrow Polydispersity Cross-Linked Microparticles Prepared by Step-Growth Thiol-Michael Addition Dispersion Polymerizations,” *Macromolecules*, *48*, 8461-8470 (2015).
 61. A. Aguirre-Soto, A.T. Hwang, D. Gugla, J.W. Wydra, R.R. McLeod, C.N. Bowman, and J.W. Stansbury, “Coupled UV Vis/FT-NIR Spectroscopy for Kinetic Analysis of Multiple Reaction Steps in Polymerizations,” *Macromolecules*, *48*, 6781-6790 (2015).
 62. C. Wang, S. Chatani, M. Podgorski, and C.N. Bowman, “Thiol-Michael addition miniemulsion polymerizations: functional nanoparticles and reactive latex films,” *Polymer Chemistry*, *6*, 3758-3763 (2015).
 63. M. Podgorski, E. Becka, S. Chatani, M. Claudino, "Ester-free Thiol-X Resins: New Materials with Enhanced Mechanical Behavior and Solvent Resistance," *Polymer Chemistry*, *6*, 2234-2240 (2015).
 64. M. Podgorski, C. Wang, and C.N. Bowman, “Multiple shape memory polymers based on laminates formed from thiol-click chemistry based polymerizations,” *Soft Matter*, *11*, 6852-6858 (2015).
 65. X. Mu, N. Sowan, J.A. Tumbic, C.N. Bowman, P.T. Mather, H.J. Qi, "Photo-Induced Bending in a Light-Activated Polymer Laminated Composite," *Soft Matter*, *11*, 2673-2682 (2015).
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 68. C. M. Yakacki, M. Saed, D. Nair, T. Gong, S. Reed, and C. N. Bowman, "Tailorable and Programmable Liquid-Crystalline Elastomers Using a Two-Stage Thiol-Acrylate Reaction," *RSC Advances*, *5*, 18997-19001 (2015).
 69. M. Podgorski, E. Becka, M. Claudino, A. Flores, P.K. Shah, J.W. Stansbury, and C.N. Bowman, “Ester-free thiol-ene dental restoratives-Part A: Resin development,” *Dental Materials*, *31*, 1255-1262 (2015).
 70. M. Podgorski, E. Becka, M. Claudino, A. Flores, P.K. Shah, J.W. Stansbury, and C.N. Bowman, “Ester-free thiol-ene dental restoratives-Part B: Composite development,” *Dental Materials*, *31*, 1262-1270 (2015).
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9. C.N. Bowman, B.J. Adzima, C.J. Kloxin, "Radio frequency magnetic field responsive polymer composites," US Patent No. 9,044,902, Issued 2015.
10. C.N. Bowman, B.J. Adzima, C.J. Kloxin, "Photoinduced alkyne-azide click reactions," US Patent No. 9,176,380, Issued 2015.
11. C. N. Bowman, C.J. Kloxin and B.J. Adzima, "Thermoreversible network scaffolds and methods of preparing same," U.S. Patent No. 9,012,127. Issued 2015.
12. C.N. Bowman, N.B. Cramer, "Resin Systems for Dental Restorative Materials and Methods for Using Same," U.S. Patent No. 8,962,709. Issued 2015
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14. C.N. Bowman, C.J. Kloxin, H.Y. Park, D. Leung "Stress Relief in Crosslinked Polymers," US Pat No. 8,877,730. November, 2014.
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16. R.R. McLeod, C.N. Bowman, T.F. Scott, A. Sullivan, "Diffraction Unlimited Photolithography," US Pat No. 8,697,346, April, 2014.
17. C.N. Bowman, K. Rowlen, H.D. Sikes, R. Hansen, and H. Avens, "Use of Photopolymerization for Amplification and Detection of a Molecular Recognition Event," US Pat. No.8,652,778, February 2014.
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19. C.N. Bowman, H.Y. Park, C.J. Kloxin, A.S. Abuelyaman, J.D. Oxman, and Y. Wang, "Disulfide Monomers Comprising Ehtylenically Unsaturated Norbornyl Groups for Dental Compositions," U.S. Patent No. 8,431,626, Issued April, 2013.

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FUNDING OBTAINED

High Performance Holographic Photopolymers, Oculus Corporation, 12/2018 – 11/2020, \$1,555,655 (equal co-investigators with R.R. McLeod)

Photoswitchable Biostasis, Defense Advanced Research Projects Agency: W911NF-19-2-0024, 12/2018-5/2020, \$7,000,000 (PI).

Thiol-Thioester Dynamic Covalent Chemistry in Polymer Networks, National Science Foundation: CHE 1808484, 8/2018-7/2019, \$455,576 (PI).

Photoresponsive Bond Exchange in Liquid Crystalline Polymer Networks, National Science Foundation: DMR 1809841, 6/2018-5/2021, \$371,666 (PI).

Dynamic Resins for High-Performance Polymeric Photonic Materials, Colorado Office of Economic Development: DO EDAA 2018-28.D, 6/2018-5/2019, \$97,500 (PI).

Soft Materials Research Center, National Science Foundation, DMR 1420736, 11/1/14 – 10/31/20, \$12,000,000 (co-PI, Leader of Click Nucleic Acids IRG based on CNB materials and funded at 1/2 of the center, Clark – PI and Center Director).

Thiol-X Click Foldamers for Polymer Affinity and Catalysis Libraries, Defense Advanced Research Projects Agency: Contract #W911-NF-14-1-0605, 9/2014 – 9/2015, \$181,295 (PI); 9/2014 – 3/2016, \$100,190 (PI).

Riblet Generation via Stimuli Responsive Polymers for Aircraft Coatings, Boeing Company: Contract #867402, 11/2013 – 12/2014, \$80,887 (PI); Contract #PO1143280, 1/2016 – 12/2016, \$70,000 (PI).

Photopolymerization Modeling for Holographic Gratings, Konica Minolta, 7/1/14-6/30/15, \$80,000 (co-PI with McLeod as PI).

Dental Composites Based on Photoinitiated Thiol-Vinyl Sulfone Reactions, NIH U01 DE023777, 9/13 – 8/18, \$2,250,000 (PI).

Cu-Catalyzed Azide-Alkyne Reactions for Novel Dental Composites, NIH U01 DE023774, 9/13 -8/18, \$2,400,000 (PI with Stansbury and Kloxin, co-PIs)

Dental Composites Based on Photoinitiated Thiol-Vinyl Sulfone Reactions, National Institute of Dental and Craniofacial Research/NIH/DHHS: U01 DE023777A, 9/2013 – 8/2016, \$438,142 (PI); U01 DE023777B, 9/2013 – 8/2018, \$941,188 (PI).

Dynamic Artificial Cells Composed of Synthetic Biorthogonal Membranes, Army Research Office, Development and Engineering Command / DOD: Grant 44000287, 9/2013 – 8/2018, \$1,380,000 (CNB's Portion, co-PI with N. Devaraj, PI).

Combining Reversible and Permanent Crosslinks in Thermosets for High Technology Applications, National Science Foundation: DMR 1310528, 7/2013 – 6/2016, \$345,000 (PI).

Photoinitiated Reactions in Covalent Adaptable Networks, National Science Foundation: CBET 1264298, 5/2013 – 4/2016, \$300,00 (PI).

Thio-Ether Nucleic Acids: Clicking Together Synthetic Poly(Nucleic Acids), National Cancer Institute/NIH/DHHS: 5 R21 CA17447902, 1/2013-12/2014 \$424,210 (PI with Kloxin, co-PI).

Photo-Click: Photocatalysis, Photopolymerization and Photomodification via the Cu(I) Catalyzed Azide-Alkyne Reaction, National Science Foundation: CHE 1214109, 7/2012 – 6/2016, \$420,000.

Thio-Ether Nucleic Acids, University of Colorado Technology Transfer Office: CU3020B, 8/2012 – 3/2014, \$66,519 (PI).

Collaboration in the Development of Novel Polymerization Enhanced Immunofluorescence, National Institute of Biomedical Imaging and Bioengineering/NIH/DHHS: 5 R21 EB012188-02, 3/2011 – 2/2014, \$412,532 (PI with Balasubramaniam and Berron, co-PIs).

Dual Cure Polymer Systems for Biomedical Applications, Bioscience Discovery Grant Program, \$200,000, 6/2011 – 12/2012.

Oxygen Mediated Initiation of Thiol-ene Adhesives and Sealants, National Institutes of Health Exploratory/Development Research Grant Award (R21), \$275,000 direct (NIH Award Number S21EB011761 (NIBIB), PI with T.F. Scott, co-PI).

Osteogenic Hydrogel Niches to Promote hMSC Migration and Differentiation, NIH R01, NIDCR, 12/10-11/15, approximately \$1,625,000 total costs (co-PI with K. Anseth, PI).

Improved Resin Bonded Dental Restoratives Based on Nanogel-modified Adhesives, NIH/NIDCR Challenge Grant, 10/09-9/11, \$1,000,000 (1RC1DE020480-01, co-PI with J.W. Stansbury, PI).

Reaction Engineering of Covalent Adaptable Networks, National Science Foundation, 9/09 – 8/12, \$275,233 (PI).

Development of Novel Thiol-Ene Methacrylate Composites for Dental Restorative Materials, National Institute of Dental and Craniofacial Research/NIH/DHHS: 5 R01 DE018233-04, 8/2008-6/2013, \$1,411,924 (PI, Jeffrey Stansbury, co-PI).

Novel Crosslinked Polymers for Dental Restorations, National Institutes of Health, 4/1/06 – 3/31/11, \$1,350,000, (PI with Prof. Jeffrey Stansbury, co-PI).

A Graduate Program in Micro- and Nanostructured Materials, U.S. Department of Education, 9/1/06 – 8/31/10, \$506,688 (PI with others as co-PI).

GOALI: Advanced Thiol-Ene Photopolymerizations, National Science Foundation, 9/06 – 9/10, \$294,375 (PI with John Woods, co-PI).

Development of Novel Dental Resins and Composites, Confi-Dental Products, 3/15/05-1/31/2012, \$384,000 (PI)

A National Science Foundation Industry / University Cooperative Research Center for Fundamentals and Applications of Photopolymerizations, In addition to NSF support numerous Companies Provide \$40,000 per year, Total annual funding of approximately \$500,000, 1/1/2000 - Present (co-Director with Prof. Alec Scranton, also co-Director).

High Amplification Detection of Genetic Cancer Markers, NIH 1R21 CA127884-01A1 Grant, 1/1/08-12/31/09, \$305,460 (PI).

Redox-Initiated Radical Chain Polymerization for the Detection and Amplification of Biological Recognition Events, University of Colorado Technology Transfer Office, \$192,000, 1/1/07 – 6/30/08 (PI).

Redox-Initiated Radical Chain Polymerization for the Detection and Amplification of Biological Recognition Events, University of Colorado Technology Transfer Office, \$25,000, 6/1/06 – 9/30/06 (PI).

Methacrylate Monomers for Use in Dental Restoratives – Fellowship, HHS NIDCR, 4/1/06 – 3/31/07, \$31,184 (Co-PI with Michael McKittrick, PI).

Thiol-Ene Polymers as Dental Restorative Materials – Fellowship, 9/1/05 – 8/31/07, \$90,824 (Co-PI with Neil Cramer, PI).

A MRSEC for Study of Ferroelectric Liquid Crystals, National Science Foundation, 9/02-8/08, \$3,100,000 (co-PI with Prof. Noel Clark, PI, and David Walba, co-PI),

ACT/SGER: Technology for Field Portable Biosensors, National Science Foundation, 8/04 – 7/05, \$131,088 (PI with Prof. Kathy Rowlen, co-PI).

Development of Advanced Detection Technologies for Biochips, National Institutes of Health through InDevR, LLC, 12/04 – 11/06, \$346,072 (CU/CNB portion, co-PI with Prof. Kathy Rowlen, PI).

Parallel Fabrication Equipment for Microfluidic Device Processing, Air Force Office of Scientific Research, 4/03-3/04, \$200,000 (PI with Prof. Anseth and Davis, co-PIs).

Structure-Reactivity-Performance Interrelationships of Novel Photopolymerizable Monomers, Surface Specialties UCB, 12/03-11/06, \$273,000 (PI).

Graduate Program in Biomolecular Engineering, U.S. Dept of Education, 8/04-8/07, \$622,665 (PI with Kristi Anseth, Rob Davis and Dhinakar Kompala as co-PIs).

Photopolymerized Gels for Cartilage Tissue Engineering, National Institutes of Health, 8/03-7/08, \$766,308, (co-PI with Kristi Anseth, PI).

A Novel Polymer-Derived-nanoCeramic for Ultrahigh Temperature MEMS Micro-igniter/Sensor, USDOE/NETL, 10/1/03-6/30/04, \$56,501 (CNB's portion, co-PI with R. Raj, PI).

Graduate Program in Functional Materials, U.S. Dept of Education, 9/03-8/06, \$516,672 (PI with Kristi Anseth, Rob Davis and Dan Schwartz as co-PIs).

Development of a Parallel Evaluation Scheme for UV Monomer Formulations, Photopolymerizations IUCRC, 7/1/2002 – 6/1/2006, \$120,000 (PI with Prof. Jeffrey Stansbury, co-PI).

Low Shrinkage Dental Resins from SOC Oligomers, National Institutes of Health, 5/1/02 – 4/30/06, \$ 900,000 (co-PI with Prof. Jeffrey Stansbury, PI).

Biofluidic Transport and Molecular Recognition in Polymeric Microdevices, DARPA, 1/02 – 2/05, \$1,100,000 (co-PI with Prof. Robert Davis, PI, and Prof. Kristi Anseth, co-PI).

Novel Crosslinked Polymers for Dental Restorations, National Institutes of Health, 4/1/01 – 3/31/06, \$1,400,000, (PI with Prof. Jeffrey Stansbury, co-PI).

A Graduate Program in Macromolecular Chemistry and Engineering, U.S. Department of Education Graduate Assistance in Areas of National Need Program, 8/15/00 - 8/14/03, \$333,096 (PI with Prof. Robert Davis and Kristi Anseth, co-PIs).

Novel Microstructures for Polymer-Liquid Crystal Composite Materials, (with M. Glaser, PI and Noel Clark and Leo Radzihovsky, co-PIs), National Aeronautics and Space Administration, 2/1/00 – 10/31/03, \$184,100 (CU's subcontract amount).

Fundamental Understanding of the Role of Oxygen in Radical Photopolymerizations, Photopolymerizations IUCRC, 1/1/2001 – 12/31/2004, \$140,000 (PI with Prof. Alec Scranton, co-PI).

Development of Thiol-Ene Photopolymerizations, Photopolymerizations IUCRC and the National Science Foundation, 7/1/2001 – 6/30/2005, \$170,000 (PI with Prof. Charles E. Hoyle, co-PI).

Development of Novel Acrylic Monomers for Ultrarapid Polymerization and Enhanced Polymer Properties, Photopolymerizations IUCRC, 1/1/2000 – 12/31/2006, \$250,000.

Comprehensive Modeling and Advanced Experimental Characterization of Photopolymerization Kinetics, Photopolymerizations IUCRC, 1/1/2000 – 12/31/2003, \$100,000.

Living Radical Photopolymerizations for Network Analysis and Unique Surface Chemistry and Properties, Photopolymerizations IUCRC, 1/1/2000 – 12/31/2001, \$50,000 (PI with Prof. Kristi Anseth, co-PI).

MALDI-TOF MS Characterization of Crosslinked Degradable Networks, Photopolymerizations IUCRC, 1/1/2000 – 12/31/2000, \$25,000 (co-PI with Prof. Kristi Anseth, PI).

A Planning Grant for Establishing an I/UCRC for Fundamentals and Applications of Photopolymerizations, National Science Foundation, 8/1/98 - 7/31/99, \$10,000, (PI with Prof. Kristi Anseth and Alec Scranton, co-PIs).

Membrane Modification by Photografting for Reduction of Adhesive Fouling, U.S. Bureau of Reclamation, 9/25/98 - 9/24/99, \$72,000 (PI with Prof. Robert Davis, co-PI).

Ferroelectric Liquid Crystals Materials Research Science and Engineering Center, National Science Foundation, 9/1/98 - 8/31/03, \$4,000,000 (co-PI with Prof. Noel Clark, PI).

Novel Tissue Engineering Matrices with Controlled Microstructure, National Institutes of Health, 9/1/98 - 6/15/01, \$500,000 (co-PI with Prof. Kristi Anseth, PI).

A Graduate Program in Chemical Engineering Separations, U.S. Department of Education Graduate Assistance in Areas of National Need Program, 8/15/98 - 8/14/01, \$375,000 (co-PI with Prof. Robert Davis, PI).

Sloan Research Fellowship, 5/1/98 - 4/30/02, \$35,000 Sloan Foundation
Development of an Interactive, Interdisciplinary Course on Polymer Engineering, Undergraduate Excellence Fund, University of Colorado, 5/1/97 - 4/30/98, \$26,000 (co-PI with Prof. Kristi Anseth).

Investigation of Composite Facilitated Transport Membranes for Separations of Hydrocarbons, National Science Foundation, 2/98 - 2/99, \$75,000 (co-PI with R.D. Noble, PI, and C.A. Koval, co-PI).

Camille Dreyfus Teacher-Scholar Award Program, Dreyfus Foundation, 9/1/96 - 8/31/01, \$60,000.

Novel Water Pretreatment Systems with Reduced Fouling, U.S. Bureau of Reclamation, 10/1/96 - 9/30/97, \$75,000 (co-PI with Robert Davis as PI).

DuPont Award, 7/1/96 - 6/30/99, \$75,000, DuPont.

Effects of Morphology and Thermodynamics on Ionic Transport in Facilitated Transport Membranes, 1/1/96 - 12/31/98, \$105,000, National Science Foundation Industrial/University Cooperative Research Center for Separations Using Thin Films (co-PI with Prof. Richard Noble).

Novel Crosslinked Polymers for Dental Restorations, 8/1/95-7/31/00, \$464,254, National Institutes of Health, FIRST Award.

3M Untenured Faculty Grant, 4/15/95 - 4/14/98, \$45,000, The 3M Company.

DuPont Award, 7/1/95 - 6/30/96, \$20,000, DuPont.

Engineering Research Equipment: A FTIR Spectrometer Coupled with an Ultraviolet Light Source for Polymerization Reaction Engineering and Catalysis, 3/1/95 - 2/28/97, \$31,000, National Science Foundation (PI with co-PI Prof. John Falconer).

Presidential Faculty Fellowship Award, 10/1/94 - 9/30/00, \$500,000, National Science Foundation.

Pseudocrown Ether Membranes for Adsorption and Separation, 1/1/95 - 12/31/97, \$105,000, National Science Foundation Industrial/University Cooperative Research Center for Separations Using Thin Films (PI with Alec Scranton, co-PI).

Prevention of Biofouling with Polyphosphazene Membranes, U.S. Army, Fort Belvoir, 6/1/94 - 5/31/97, \$120,000 (PI with Paul Todd, co-PI).

Improved Facilitated Transport Membranes for Enhanced Specificity on Hybrid Processes for Olefin Separations, 3/1/94 - 2/28/96, \$200,000, National Science Foundation (co-PI with PI Richard Noble and co-PI Carl Koval).

Improved Facilitated Transport Membranes for Enhanced Specificity on Hybrid Processes for Olefin Separations, 3/1/94 - 2/28/96, \$100,000, matching funds for NSF grant, Chevron Company (co-PI with PI Richard Noble and co-PI Carl Koval).

A Materials Research Group for Study of Ferroelectric Liquid Crystals, 10/1/93 - 9/30/97, \$176,000 (CNB's Portion), National Science Foundation (co-PI with Prof. Noel Clark, PI, and David Walba, co-PI).

A Fixed Site Carrier Membrane For Metals Extraction, 1/1/93 - 12/31/95, \$105,000, National Science Foundation Industrial/University Cooperative Research Center for Separations Using Thin Films (PI with Prof. Richard Noble, co-PI).

A Borate Exchange Membrane System, 1/1/93 - 12/31/95, \$90,000, National Science Foundation Industrial/University Cooperative Research Center for Separations Using Thin Films (co-PI with PI Paul Todd).

Modeling and Characterization of Chain Polymerization Reactions for Multifunctional Monomers, 6/15/92 - 6/14/95, \$100,000, National Science Foundation.

INVITED LECTURES PRESENTED BY CHRISTOPHER BOWMAN

1. C.N. Bowman, "Clicking Polymer Networks Together: Approaches to Form Smart, Functional Polymers from Click Chemistry" Covestro Lectureship, Akron, Ohio, September 2018.
2. C.N. Bowman, "Clicking Polymer Networks Together: Smart, Responsive Polymers Based on Covalent Adaptable Networks: Photoswitchable States of Matter" Covestro Lectureship, Akron, Ohio, September 2018.
3. C.N. Bowman, "Clicking Polymer Networks Together: Approaches to Form Smart, Functional Polymers from Click Chemistry" University of Massachusetts, Amherst, Massachusetts, September 2018.
4. C.N. Bowman, "Clicking Polymer Networks Together: Smart, Responsive Polymers Based on Covalent Adaptable Networks: Photoswitchable States of Matter" University of Massachusetts, Amherst, Massachusetts, September 2018.
5. C.N. Bowman, "Photoswitchable states of matter: thioester-based dynamic covalent chemistry in photopolymerized networks" 5th European Symposium of Photopolymer Science Mulhouse, France, September 2018.
6. C.N. Bowman, "Novel photopolymerized films and coatings: Step growth photopolymerization approaches toward the next generation of tough materials" American Chemical Society, Boston, Massachusetts, August 2018.
7. C.N. Bowman, "Photoinitiated thioester-containing polymer networks: Bistable, photoinduced (de)activation of dynamic covalent chemistry and fluid-solid transitions" American Chemical Society, Boston, Massachusetts, August 2018.
8. C.N. Bowman, "Photoinducing dynamic covalent chemistry in covalent adaptable networks: Addition fragmentation for material reconfiguration" American Chemical Society, Boston, Massachusetts, August 2018.
9. C.N. Bowman, "Nucleic acid analogs via thiol-click reactions" American Chemical Society, Boston, Massachusetts, August 2018.
10. C.N. Bowman, "Novel applications and developments utilizing photopolymerizations" Oculus Seminar Seattle, Washington, August 2018.
11. C.N. Bowman, "Click Polymerizations as a Potential Candidate for Dental Restorative Materials," International Association for Dental Research, London, England, July 2018.
12. C.N. Bowman, "Nucleic Acid Analogs via Thio-Click Reactions," World Polymer Congress MACRO, Cairns, Australia, July 2018.
13. C.N. Bowman, "Clicking Polymer Networks Together: Approaches to Form Smart, Functional Polymers Networks from Click Chemistry," Triangle Soft Matter Workshop, Raleigh, North Carolina, May 2018.
14. C.N. Bowman, "Click Chemistry in Radiation Curing," RadTech Technology Expo and Conference, Chicago, Illinois, May 2018.
15. C.N. Bowman, "Clicking Polymer Networks Together: Approaches to Form Smart, Functional Polymers Networks from Click Chemistry," Macromolecules Innovation Institute, Blacksburg, Virginia, April 2018.
16. C.N. Bowman, "Photo-Switchable Plasticity in (Photo)Polymerized Network Polymers," American Chemistry Society, New Orleans, Louisiana, March 2018.
17. C.N. Bowman, "The Power of Light in Polymer Chemistry: Making Smart, Responsive Materials with Light," University of Colorado Distinguished Research Lecture, December, 2017.

18. C.N. Bowman, "The Thiol-Thioester Exchange in Network and Linear Polymers," Emerging Polymer Technologies Summit, Melbourne, Australia, November, 2017.
19. C.N. Bowman, "Clicking Polymers Together: Approaches to Form Smart, Functional Polymers from Click Chemistry," KTH Royal Institute of Technology, Stockholm, Sweden, November, 2017.
20. C.N. Bowman, "Clicking Polymers Together: Approaches to Form Smart, Functional Polymers from Click Chemistry," Peking University Distinguished Xingda Lecture to the Department of Chemistry, Beijing, China, September, 2017.
21. C.N. Bowman, "Clicking Polymers Together: Approaches to Form Smart, Functional Polymers from Click Chemistry," Georgia Tech University Department of Chemistry, February, 2017.
22. C.N. Bowman, "Clicking Polymers Together: Approaches to Form Smart, Functional Polymers from Click Chemistry," Princeton University Department of Chemical Engineering, February, 2017.
23. C.N. Bowman, "Innovations in Dental Resins Composites Chemistry," University of Michigan Dental School, January, 2017.
24. B Worrell, M McBride, G Lyon, C Wang, L Cox, S Mavila, T Goldman, and CN Bowman, "The Thiol-Thioester Exchange in Network Polymers," The Emerging Polymers Technology Summit, Melbourne, Australia, November, 2017.
25. CN Bowman, "The Age of Plastics," The Emerging Polymers Technology Summit, Melbourne, Australia, November, 2017.
26. B Worrell, M McBride, G Lyon, C Wang, L Cox, S Mavila, T Goldman, and CN Bowman, "The Thiol-Thioester Exchange in Network Polymers," AIChE National Meeting, Minneapolis, MN, November, 2017.
27. M McBride, A Martinez, CN Bowman, M Hendriks, D Liu, DJ Broer, "Stimuli Responsive Plasticity in Crosslinked Liquid Crystalline Elastomers," International Liquid Crystal Elastomer Conference, Houston, TX, October, 2017.
28. B Worrell, M McBride, G Lyon, C Wang, M Podgorski, H Coley, L Cox, N Sowen, C.N. Bowman, "Photoinitiated Control of Dynamic Covalent Chemistry in Polymer Networks," Photopolymerization Fundamentals Meeting, Boulder, CO, September, 2017.
29. C.N. Bowman, B.T. Worrell, and M.K. McBride, "The Thiol-Thioester Exchange Reaction in Network and Linear Polymers," American Chemical Society Meeting, Washington, DC, August, 2017.
30. C.N. Bowman, M.K. McBride, M Hendriks, D. Liu, B.T. Worrell, D.J. Broer "Photoinduced plasticity in crosslinked liquid crystalline networks: A route to photopolymerizable, programmable shape shifting materials," American Chemical Society Meeting, Washington, DC, August, 2017.
31. B Worrell, M McBride, G Lyon, C Wang, M Podgorski, H Coley, L Cox, N Sowen, C.N. Bowman, "Photoinducing Dynamic Chemistry in Smart Polymers," The 12th International Conference on Advanced Polymers via Macromolecular Engineering, Ghent, Belgium, May, 2017.
32. C.N. Bowman, "The Power of light in polymer chemistry: Smart, functional polymer materials formed by and interacting with light," American Chemical Society Meeting, Washington, DC, August, 2017.
33. C.N. Bowman, "Photoinducing Dynamic Covalent Chemistry in Covalent Adaptable Networks," 36th Australian Polymer Symposium, Mantra Lorne, Australia, November, 2016.
34. C.N. Bowman, "Smart, Responsive Materials by Design," AIChE Conference, San Francisco, CA, November, 2016.
35. C.N. Bowman, "Structure-property Relationships of Photopolymerized CuAAC Networks for the Application of Tough Industrial Thermosets," RadTech Asia 2016, Tokyo, Japan, October, 2016.

36. C.N. Bowman, "Innovations in Dental Resin Composites Chemistry," Academy of Dental Materials Annual Meeting 2016, Chicago, IL, October, 2016.
37. C.N. Bowman, "Clicking Polymers Together: Assembly of Complex, Controlled Polymer Structures from Efficient Chemistries," PPG Aerospace Seminar, Burbank, CA, October, 2016.
38. C.N. Bowman, "Clicking Polymers Together: Assembly of Complex, Controlled Polymer Structures from Efficient Chemistries," Chemistry Department, Carleton College, Northfield, MN, September, 2016.
39. C.N. Bowman, "Photoinitiated Control of Covalent Adaptable Networks for Smart/Responsive Materials," ESPS 2016, Leipzig, Germany, September, 2016.
40. C.N. Bowman, "Smart Polymer Materials by Design: Creating and Implementing Smart Polymers With Latent Chemical Functionality," ACS National Meeting, POLY/PMSE Joint Plenary Session Speaker, Philadelphia, PA, August, 2016.
41. C.N. Bowman, "Thiol-click Chemistries for the Generation of Polymers With Defined Periodic Sequence," ACS National Meeting, Philadelphia, PA, August, 2016.
42. C.N. Bowman, "Photoresponsive Smart Materials," ACS National Meeting, Philadelphia, PA, August, 2016.
43. C.N. Bowman, "Clicking Polymers Together: Assembly of Complex, Controlled Polymer Structures from Efficient Chemistries," 3M Company, Woodbury, MN, July, 2016.
44. C.N. Bowman, "Rewritable Shape Memory Polymers- Materials with Latent Ability to Change Permanent Shapes by Photoirradiation," CIMTEC 2016, Perugia, Italy, June, 2016.
45. C.N. Bowman, "Clicking Polymers Together: Assembly of Complex, Biologically Useful Polymer Structures from Efficient Chemistries," Texas Biomaterials Day, University of Texas San Antonio, San Antonio, TX, June, 2016.
46. C.N. Bowman, Shortcourse on "Click Chemistry in Radiation Curing," RadTech North America 2016, Rosemont, IL, May, 2016.
47. C.N. Bowman, J. Stansbury, "Moving Dental Composites Beyond Methacrylate-based Resins," AADR/CADR Annual Meeting, Los Angeles, CA, March, 2016.
48. C.N. Bowman, "Photopolymerized Cu(I)-Catalyzed Azide-Alkyne Cycloaddition (CuAAC) Based Networks," ACS Spring 2016, San Diego, CA, March, 2016.
49. C.N. Bowman, "Clicking Polymer Networks Together: Approaches to Form Smart, Functional Polymer Networks from Click Chemistry," Chemical Engineering, University of California Santa Barbara, Santa Barbara, CA, January, 2016.
50. C.N. Bowman, "The Reciprocity Law Concerning Light Dose Relationships Applied to Dental Photopolymers: Theoretical Analysis and Experimental Characterization," International Association for Dental Research General Session, Boston, MA, March, 2015.
51. C.N. Bowman, "Clicking Polymers Together: Assembly of Complex, Controlled Polymer Structures from Efficient Chemistries," Cornell University Seminar Speaker, Ithaca, NY, March, 2015.
52. C.N. Bowman, "Click Chemistry in Polymer Films and Coatings," European Coatings Congress 2015, Nuremberg, Germany, April, 2015.
53. C.N. Bowman, "One Click at a Time: Forming Sequence Controlled Polymers by Click Reactions," High Polymer Research Group Conference, Manchester, England, April, 2015.
54. C.N. Bowman, "Adaptable and Stimuli-Responsive Polymer Networks," Hangzhou, China, June, 2015.

55. C.N. Bowman, "Photo-polymerized Networks Based on the Copper-Catalyzed Azide-Alkyne (CuAAC) Reaction," International Symposium on Photopolymerization, Beijing, China, June, 2015.
56. C.N. Bowman, "Clicking Polymers Together: Assembly of Complex, Controlled Polymer Structures from Efficient Chemistries," Rensselaer Polytechnic Institute Seminar, Troy, NY, September, 2015.
57. C.N. Bowman, "Clicking Polymers Together: Assembly of Complex, Controlled Polymer Structures from Efficient Chemistries," Columbia University Seminar Speaker, New York, NY, October, 2015.
58. C.N. Bowman, "Clicking Polymers Together: Assembly of Complex, Controlled Polymer Structures from Efficient Chemistries," Kent State University Seminar Speaker, Kent, OH, November, 2015.
59. C.N. Bowman, "Clicking Polymers Together: Assembly of Complex, Controlled Polymer Structures from Efficient Chemistries," University of Houston Seminar Speaker, Houston, TX, November, 2015.
60. C.N. Bowman, "Click Chemistry and its Unique Benefits in Composite Formulation," Composites Conference at Lake Louise, November, 2015.
61. C.N. Bowman, "Spatiotemporal Control of Covalent Adaptable Networks for Advanced Polymer Processing and Control," 14th Pacific Polymer Conference, Kauai, HI, December, 2015.
62. C.N. Bowman, "Click Chemistry Approaches in Smart Materials Design and Fabrication," 14th Pacific Polymer Conference, Kauai, HI, December, 2015.
63. C.N. Bowman, "Photo-polymerized Networks Based on the Copper-Catalyzed Azide-Alkyne (CuAAC) reaction," Pacificchem 2015, Honolulu, HI, December, 2015.
64. C.N. Bowman, "Clicking Polymer Networks Together: Approaches to Form Smart, Functional Polymers," Zing Polymer Conference, Cancun, Mexico, December, 2014.
65. C.N. Bowman, "Clicking Polymer Networks Together: Assembly of Complex, Controlled Polymer Structures from Efficient Chemistries," Japan International Polymer Conference, Tsukuba, Japan, December, 2014.
66. C.N. Bowman, "Click-Based Photopolymerizations and Holographic Materials," Konica Minolta, Japan, December, 2014.
67. C.N. Bowman, "The Thiol-Michael Click Reaction: Formation of Functional Polymers and Coatings," Mitsubishi Rayon, Tokyo, Japan, November, 2014.
68. C.N. Bowman, "Photopolymerizations and Polymer Networks Based on the CuAAC Reaction," Polymer Networks Group Meeting, Tokyo, Japan, November, 2014.
69. C.N. Bowman, "Clicking Polymer Networks Together: Approaches to Form Smart, Responsive Polymer Networks from Click Chemistries," University of North Carolina, Department of Chemistry, October, 2014.
70. C.N. Bowman, "Clicking Polymer Networks Together: Approaches to Form Smart, Responsive Polymer Networks from Click Chemistries," Stevens University, Department of Chemical Engineering, October, 2014.
71. C.N. Bowman, "Clicking Polymer Networks Together: Approaches to Form Smart, Responsive Polymer Networks from Click Chemistries," University of California - Davis, Department of Chemical Engineering, October, 2014.
72. C.N. Bowman, "Clicking Polymer Networks Together: Approaches to Form Smart, Functional Polymers from Click Chemistries," National Institutes of Health, Bethesda, MD, October, 2014.
73. C.N. Bowman, "Clicking Polymer Networks Together: Approaches to Form Smart, Responsive Polymer Networks from Click Chemistries," Polish Chemical Society National Meeting, Poland, September, 2014.

74. C.N. Bowman, "The Thiol-Michael Addition Click Reaction: Forming Functional Polymers and Coatings," European Symposium on Photopolymer Sciences, Vienna, Austria, September, 2014.
75. C.N. Bowman, "Photopolymerizations and Polymers Based on the CuAAC Reaction," American Chemical Society National Meeting, San Francisco, CA, August, 2014.
76. C.N. Bowman, "The Thiol-Michael Addition Click Reaction: Forming Functional Polymers and Coatings," Coatings Society International Meeting, Netherlands, June, 2014.
77. C.N. Bowman, "Clicking Polymer Networks Together: Approaches to Form Smart, Responsive Polymer Networks from Click Chemistries," Hangzhou International Polymer Forum, Hangzhou, China, May, 2014.
78. C.N. Bowman, "Photoinitiated Click Reactions," Short Course at Radtech National Meeting, Chicago, IL, May, 2014.
79. C.N. Bowman, "Using Chemical Reactions to Form Smart, Foldable, Responsive Materials," MRS National Meeting, San Francisco, CA, April, 2014.
80. C.N. Bowman, "Clicking Polymer Networks Together: Approaches to Form Smart, Responsive Polymer Networks from Click Chemistries," Tufts University, Boston, MA, April, 2014.
81. C.N. Bowman, "Clicking Polymer Networks Together: Approaches to Form Smart, Responsive Polymer Networks from Click Chemistries," American Chemical Society National Meeting, Dallas, TX, March, 2014.
82. C.N. Bowman, "New Concepts in Polymer-Based Dental Restorative Materials," Dental Materials Keynote Talk, American Association for Dental Research National Meeting, Charlotte, NC, March, 2014.
83. C.N. Bowman, "Novel Dental Composites Based on Photoinitiated Click Reactions," UO1 Award Symposium, American Association for Dental Research National Meeting, Charlotte, NC, March, 2014.
84. C.N. Bowman, "Clicking Polymer Networks Together: Approaches to Form Smart, Responsive Polymer Networks from Click Chemistries," Wesleyan University, Department of Chemistry, Middletown, CT, February, 2014.
85. C.N. Bowman, "Clicking Polymer Networks Together: Approaches to Form Smart, Responsive Polymer Networks from Click Chemistries," The Scripps Research Institute, Chemistry Department, La Jolla, CA, February, 2014.
86. C.N. Bowman, "Clicking Polymer Networks Together: Approaches to Form Smart, Responsive Polymer Networks from Click Chemistries," MRS National Meeting, Boston, MA, December, 2013.
87. C.N. Bowman, "Smart, Reconfigurable Polymer Networks," AIChE National Meeting, San Francisco, CA, November 2013.
88. C.N. Bowman, "Clicking Polymers Together: Assembly of Complex, Controlled Polymer Structures from Efficient Chemistries," Professional Progress Award Lecture, AIChE National Meeting, San Francisco, CA, November, 2013.
89. C.N. Bowman, "Photopolymerizations Based on the Cu-Catalyzed Azide Alkyne Reaction," Radtech Europe, Basel, Switzerland, October, 2013.
90. C.N. Bowman, "Exploring Dual-Cure Click Reaction Strategies for Intimate Control of Network Structure and Properties," High Performance Polymers Workshop, Sonoma, CA, July 2013.
91. C.N. Bowman, "Photopolymerizations Based on the Cu-Catalyzed Azide Alkyne Reaction," Photopolymerization Fundamentals 2013, Jackson, WY, September, 2013
92. C.N. Bowman, "Using Chemical Reactions to Control Polymer Network Shape, Topography and Behavior," Australasian Polymer Society Meeting, Darwin, Northern Territories, Australia, July, 2013.

93. C.N. Bowman, "Using Chemical Reactions to Control Adhesion," Gordon Conference on Adhesion, Massachusetts, July, 2013.
94. C.N. Bowman, "Clicking Polymers Together: Assembly of Complex, Controlled Polymer Structures from Efficient Chemistries," Case Western University, 50th Anniversary Symposium, June 2013.
95. C.N. Bowman, "Covalent Adaptable Networks: A Route to Smart, Responsive Polymer Networks," Baekeland 2013: 4th International Symposium on Thermosets, Niagara Falls, June 2013.
96. B.J. Adzima, D.P. Nair, T. Gong, C.J. Kloxin, and C.N. Bowman, "Photoinitiation and Click Reactions: Synergistic Combinations and Novel Photopolymerizations," Fusion Japan UV Curing Seminar Series, Tokyo, Japan, May, 2013.
97. B.J. Adzima, D.P. Nair, T. Gong, C.J. Kloxin, and C.N. Bowman, "Photoinitiation and Click Reactions: Synergistic Combinations and Novel Photopolymerizations," Fusion Japan UV Curing Seminar Series, Osaka, Japan, May, 2013.
98. C.N. Bowman, "Clicking Polymers Together: Assembly of Complex, Controlled Polymer Structures from Efficient Chemistries," University of Rochester, Su Distinguished Lectureship, Department of Chemical Engineering, April, 2013.
99. C.N. Bowman, "Clicking Polymers Together: Assembly of Complex, Controlled Polymer Structures from Efficient Chemistries," University of Kentucky, Department of Chemical Engineering, April, 2013.
100. C.J. Kloxin, T.F. Scott, D.P. Nair, N.B. Cramer, W.D. Cook, and C.N. Bowman, "Smart Polymer Networks Based on Photoinduced Reactions," PMSE Award Symposium for Cooperative Research Award, American Chemical Society National Meeting, New Orleans, LA, April, 2013.
101. C.N. Bowman, "Clicking Polymers Together: Assembly of Complex, Controlled Polymer Structures from Efficient Chemistries," Monash University, Department of Materials Engineering, March, 2013.
102. C.N. Bowman, "Using Chemical Reactions to Control Polymer Networks Shape, Topography and Behavior," Adaptive Origami Workshop, Wright Patterson Air Force Base, Dayton, OH, January, 2013.
103. C.N. Bowman, "Photochemically and Thermally Triggered Covalent Adaptable Networks", Baylor College of Dentistry, Dallas, TX, September 2012.
104. C.N. Bowman, "Photochemically and Thermally Triggered Covalent Adaptable Networks", Air Force Research Laboratory, Dayton, OH, August 2012.
105. C.N. Bowman, "Two-Stage Reactive (Dual-Cure) Polymer Systems", European Symposium of Photopolymer Science, Torino, Italy, September 2012.
106. E.F. Gillett, C. Fenoli, D. Leung, B. Adzima, C.J. Kloxin, C.N. Bowman, "Covalent Adaptable Networks: The Benefits and Opportunities of Reversible Bonds in Thermosets", IUCRC World Polymer Congress, Blacksburg, VA, June 2012.
107. C.N. Bowman, "Photopolymerizations of Adhesive Coatings Implementing Addition-Fragmentation Chain Transfer," Pressure Sensitive Tape Council Summit 2012, May 2012, Boston, MA.
108. C.N. Bowman, "Photofixation of Diels-Alders Networks," RadTech UV & EB Technology Expo & Conference, May 2012, Chicago, IL.
109. C.N. Bowman, "Lunch and Learn: Thiol-Ene Photopolymerizations," RadTech UV & EB Technology Expo & Conference, May 2012, Chicago, IL.
110. C.N. Bowman, "University of Colorado: Photopolymerizations Technology Overview," 3M Company, April, 2012.

- 111.C.N. Bowman, "Polymer Chemistry and Medicine: How Polymerization Reactions Can Be Used to Diagnose Disease Earlier and Better" University of Colorado Director's Club, January 2012.
- 112.C.N. Bowman, "Photochemically and Thermally Triggered Covalent Adaptable Polymer Networks and Their Relevance to Coatings and Adhesives," Evonik Meets Science Conference, December 2011, Pittsburgh, PA.
- 113.C.N. Bowman, "Thermoreversible Covalent Adaptable Networks," Thermosets 2011 Conference, September 2011, Berlin.
- 114.B. Adzima, C. Kloxin, T. Scott, and C.N. Bowman, "Photoclick: 4D Control of Polymer Network Formation, Modification and Properties via Click Reactions," 242nd American Chemical Society National Meeting, Denver, CO, August 2011.
- 115.B.J. Adzima, Y. Tao, C.J. Kloxin, C.A. DeForest, K.S. Anseth, and C.N. Bowman, "Click Reactions as Photopolymerizations: The Next Generation of Photopolymerizations," RadTech Asia 2011, June 2011, Yokohama, Japan.
- 116.C.N. Bowman, "Covalent Adaptable Networks: Photochemical and Thermal Control of Network Adaptability and Reformation in Polymeric Materials," *or* "Photoclick: Photochemical Initiation of Various Click Reactions and Their Applications in Materials Science," June 2011, 3M
- 117.C.N. Bowman, "Photoclick: Spatial and Temporal Control of the Alkyne-Azide Reaction," Keynote Speaker, May 2011, Second Hangzhou International Polymer Forum, Hangzhou, China.
- 118.C.N. Bowman, "Photochemically and Thermally Activated Covalent Adaptable Networks," January 2011, Vanderbilt University.
- 119.C.N. Bowman, B.J. Adzima, C.J. Kloxin, C. DeForest, and K.S. Anseth, "Photo-click: Photoinitiated Click Polymerizations," European Symposium on Photopolymer Science, December 2010, Mulhouse, France.
- 120.C.N. Bowman, "Polymerization Reactions to Enable Biodetection," CIMBPosium, University of Colorado at Boulder, November 2010.
- 121.C.N. Bowman, "Photoreversible Covalent Adaptable Networks," Polymer Networks Group Meeting, August 2010, Goslar, Germany.
- 122.C.N. Bowman, B.D. Fairbanks, N.B. Cramer, and K.S. Anseth, "Introduction to Thiol-ene and Thiol-yne Photopolymerization," 240th American Chemical Society National Meeting, August 2010, Boston, MA.
- 123.C.N. Bowman, "Thiol-ene photopolymerizations: Fundamentals and Practical Implementation," RadTech UV&EVB Tech Expo and Conference, May 2010, Baltimore, MD
- 124.C.N. Bowman, "Thiol-Ene Click Reactions," Charles Hoyle Symposium, April 2010, Hattiesburg, MS.
- 125.C.N. Bowman, "Photochemical and thermally Triggered Covalent Adaptable Networks," Sandia National labs, March 2010.
- 126.C.N. Bowman, "Photochemically and Thermally Triggered Covalent Adaptable Networks," University of Illinois, Urbana, February 2010.
- 127.C.N. Bowman, "Polymerization Based Biodetection," University of Texas, Austin, February, 2010.
- 128.C.N. Bowman, "Photochemically and Thermally Triggered Covalent Adaptable Networks," Purdue University, January 2010.
- 129.B.D. Fairbanks, H. Park, C.J. Kloxin, T.F. Scott, K.S. Anseth, and C.N. Bowman, "Mechanism, Kinetics, and Highly Crosslinked Networks of Novel, Step-Growth Thiol-yne Photopolymerization," 11th Pacific Polymer Conference, Cairns, Australia, December 2009.

- 130.C.N. Bowman, "Stress Relief During Photopolymerizations: A Novel Approach to Photopolymerize, Radically Mediated Covalent Adaptable Networks," 16th Fusion UV Seminar, November 2009, Osaka, Japan.
- 131.C.N. Bowman (for C.E. Hoyle), "New Advances in Thiol-ene Polymerization: Advanced Physical, Optical and Oxyten Barrier Properties," 16th Fusion UV Seminar 2009, November 2009, Osaka, Japan.
- 132.C.N. Bowman, "Stress Relief During Photopolymerizations: A Novel Approach to Photopolymerize, Radically Mediated Covalent Adaptable Networks," 16th Fusion UV Seminar 2009, November 2009, Tokyo, Japan.
- 133.C.N. Bowman (for C.E. Hoyle), "New Advances in Thiol-ene Polymerization: Advanced Physical, Optical and Oxyten Barrier Properties," 16th Fusion UV Seminar 2009, November 2009, Tokyo, Japan.
- 134.C.N. Bowman, B. Adzima, H. Park, C.J. Kloxin, and T.F. Scott, "Covalent Adaptable Networks for Smart Materials Applications," Materials Research Society Fall Meeting, Boston, MA, November 2009.
- 135.C.N. Bowman, "Photopolymerizations and Their Application to Biodetection," 2009 AIChE Annual Meeting, C.M.A. Stine Award Session, Nashville, TN, November 2009.
- 136.C.N. Bowman, "Novel Developments and Applications of Photopolymerizations," The University of Utah, September 2009.
- 137.C.N. Bowman, "Photopolymerization Fundamentals: Modeling and Experimental Characterization," 238th ACS National Meeting, Washington, DC, August 2009.
- 138.C.N. Bowman, "Composite Dental Restorative Materials: Enhanced Control and Understanding of Formation-Structure-Property Relationships," IADR General Session, Miami, FL, April 2009.
- 139.C.N. Bowman, "Photoinduced Plasticity in Crosslinked Polymers," MRS Spring Meeting, April 2009.
- 140.C.N. Bowman and V.S. Khire, "Nanopatterned Thiol-ene Substrates using Step and Flash Imprint Lithography," 237th American Chemical Society National Meeting and Exposition, Salt Lake City, UT, March 2009.
- 141.C.N. Bowman, "Photochemical and Thermally Adaptable Networks" Monash University Department of Materials Science and Engineering, Melbourne, Australia, February 2009.
- 142.H. Sikes, R. Hansen, L. Johnson, R. Shenoy, B. Berron, and C.N. Bowman, "Polymerization-Based Signal Amplification for Molecular Recognition," Australian Colloid and Interface Society Meeting, Adelaide, Australia February 2009.
- 143.C.N. Bowman, "Novel Applications and Developments Utilizing Photopolymerizations," University of Texas, Austin, TX, January 2009.
- 144.C.N. Bowman, "The Future of Radiation Curing: Challenges, Opportunites, and Solutions," Radtech Annual Winter Membership Meeting, January 2009.
- 145.C.N. Bowman, "Photochemical and Thermally Adaptable Networks," 30th Australasian Polymer Symposium, Melbourne, Australia, November 2008.
- 146.C.N. Bowman, "Novel Developments and Applications of Photopolymerizations," University of Washington, Seattle, WA, October 2008.
- 147.C.N. Bowman, P. Johnson, and J.W. Stansbury, "High Throughput Evaluation and Formulation Design for Photopolymerization," American Chemical Society National Meeting, Philadelphia, PA, August 2008.
- 148.C.N. Bowman, P. Johnson, and J.W. Stansbury, "High Throughput Evaluation and Formulation Design for Photopolymerization," 2008 International Symposium on Polymer Analysis and Characterization, Newark, DE, June 2008.

- 149.C.N. Bowman, "Novel Photopolymerization Reactions, Strategies and Applications," Boise State University, Boise, ID, April 2008.
- 150.C.N. Bowman, "High Throughput Analysis, Modeling and Design of Photopolymerized Resin Systems," NCMC-13: Advances in Library Fabrication, NIST Gaithersburg Campus, Gaithersburg, MD, April 2008.
- 151.C.N. Bowman, "Reversible and Adaptable Networks," Liquid Crystal Research Center Research Review, University of Colorado, April 2008.
- 152.C.N. Bowman, N.B. Cramer, S.K. Reddy, H. Kilambi, A.K. O'Brien, A.E. Rydholm, and K.S. Anseth, "Photoinduced and Catalyzed Thiol-Vinyl Reactions in Polymers," 235th American Chemical Society National Meeting, New Orleans, LA, April 2008.
- 153.C.N. Bowman, H.D. Sikes, R.R. Hansen, and L.M. Johnson, "Synthesis of Biofunctional Photoinitiators for the Detection of Nanoscopic Materials" 235th American Chemical Society National Meeting, New Orleans, LA, April 2008.
- 154.C.N. Bowman, "Novel Developments and Applications of Photopolymerizations," Colorado School of Mines, Golden, CO, February 2008.
- 155.C.N. Bowman, K. Anseth, A. Kannurpatti, A. Guymon, M. Goodner, A.T. Metters, L. Lovell, J. Elliott, K.A. Berchtold, N. Cramer, E. Beckel, A. O'Brien, S. Reddy, and H. Kilambi, "Reaction Engineering of Photopolymerized Systems," AIChE 2007 Annual Meeting, Salt Lake City, UT, November 2007.
- 156.A. Rydholm, V. Khire, D. Benoit, K.S. Anseth, and C.N. Bowman, "Surface Modification, Network Structure, Degradation, and Cellular Interactions of Thiol-Ene Networks," 2007 MRS Fall Meeting, Boston, MA, November 2007.
- 157.C.N. Bowman, T. Haraldsson, R. Sebra, B. Hutchison, S. Reddy, N. Cramer, K.S. Anseth, and R.H. Davis, "Materials, Methods and Approaches to the Contact Liquid Photopolymerization-Based Fabrication of Polymeric Microfluidic Devices," 34th Annual Meeting of the Federation of Analytical Chemistry and Spectroscopy Societies, Memphis, TN, October 2007.
- 158.C.N. Bowman, "Novel Developments and Applications of Photopolymerizations," University of South Carolina, Columbia, September 2007.
- 159.C.N. Bowman, "Polymerization Reactions for Biological Detection," University of Colorado Cancer Center Colloquia, Aurora, CO, September 2007.
- 160.C.N. Bowman, "Novel Applications and Developments Utilizing Photopolymerizations," Henkel Corporation, Rocky Hill, CT, August 2007.
- 161.C.N. Bowman, "Mechanisms and Applications of Photoinduced Plasticization in Crosslinked Networks," 2007 Gordon Research Conference, New London, NH, July 2007.
- 162.C.N. Bowman, "Novel Applications and Developments Utilizing Photopolymerizations," CIBA Specialty Chemicals, Tarrytown, NY, July 2007.
- 163.C.N. Bowman, "Where Do Ideas Come From?" National MD/PhD Conference, Keystone, CO, July 2007.
- 164.P.M. Johnson, J.W. Stansbury, and C.N. Bowman, "High Throughput Evaluation and Formulation Design for Photopolymerization," Photopolymerization Fundamentals 2007 Meeting, Breckenridge, CO, June 2007.
- 165.C.N. Bowman, "Low Stress and Adaptable Polymer Films from Photopolymerization Reactions," PSCT May Symposium, Horsham, PA, May 2007.
- 166.C.N. Bowman, "Next Generation Lens Materials: Possibilities and Opportunities," Vistakon Vision 2007 Symposium, Jacksonville, FL, May 2007.

167. C.N. Bowman, N.B. Cramer, T.Y. Lee, and J.A. Carioscia, "Thiol-ene Photopolymerization Reactions: Fundamentals, Development, and Applications," 233rd National Meeting of the American Chemical Society, Chicago, IL, March 2007.
168. C.N. Bowman, P.M. Johnson, and J.W. Stansbury, "Investigations of Photopolymerization Kinetics Using Throughput Analysis," Fourth International Workshop on Combinatorial Science and Technology, San Juan, Puerto Rico, December 2006.
169. C.N. Bowman, "Nanotechnology," Lexmark International, Lexington, KY, December 2006.
170. C.N. Bowman, "Novel Applications and Developments Utilizing Photopolymerizations," University of California at Riverside, November 2006.
171. C.N. Bowman, "Novel Applications and Developments Utilizing Photopolymerizations," Drexel University, October 2006.
172. C.N. Bowman and S. Reddy, "Rate Mechanisms and Kinetic Modeling of Thiol-Ene Systems," 4th IUPAC Sponsored International Symposium on Radical Polymerization: Kinetics and Mechanism, Tuscany, Italy, September 2006.
173. C.N. Bowman, "Novel Applications and Developments Utilizing Photopolymerizations," Rohm and Haas, Philadelphia, PA, April 2006.
174. N.B. Cramer, C. O'Brien, and C.N. Bowman, "Novel Photopolymerizable Monomers," 2006 UV & EB Technology Expo & Conference, Chicago, IL, April 2006.
175. C.N. Bowman, "Novel Applications and Developments Utilizing Photopolymerizations," General Electric, Albany, New York, March 2006.
176. C.N. Bowman, "Novel Monomers for Dental Restorative Materials," 35th Annual Meeting and Exhibition of the AADR, Orlando, FL, March 2006.
177. C.N. Bowman, T.F. Scott, R.B. Draughon, A.D. Schneider, and W.D. Cook, "Photoinduced Plasticity in Cross-Linked Polymers," 28th Australasian Polymer Symposium, Rotorua, New Zealand, February 2006 (Keynote Lecture).
178. C.N. Bowman, "Understanding and Applications of Thiol-ene Photopolymerizations," Physical Sciences, Andover, MA, October 2005.
179. C.N. Bowman, "Modeling and Development of Thiol-Ene Photopolymerizations," RadTech Europe 2005 Conference, Barcelona, Spain, October 2005.
180. C.N. Bowman, "Novel Applications and Developments Utilizing Photopolymerizations," MIT, September 2005.
181. C.N. Bowman, "Novel Applications and Developments Utilizing Photopolymerizations," Henkel Corporation, September 2005.
182. C.N. Bowman, N. Cramer, and D. Walba, "Photopolymerization in Real Life: Research and Applications in Nanotechnology and Biomaterials," 2005 SACNAS National Conference, Denver, CO, September 2005.
183. C.N. Bowman, "Stress Relaxation in Photopolymerizable Materials," 3M, St. Paul, Minnesota, August 2005.
184. S.K. Reddy, N.B. Cramer, A.E. Rydholm, K.S. Anseth, and C.N. Bowman, "Network Structures and Polymers Formed from Thiol-Ene Polymerizations," 44th Microsymposium on Polymer Gels and Networks, Prague, Czech Republic, July 2005.
185. S.K. Reddy, A.E. Rydholm, K.S. Anseth, and C.N. Bowman, "Degradation of Thiol-acrylate and Thiol-ene Polymer Systems: Networks Control for Tissue Engineering Applications," 44th Microsymposium on Polymer Gels and Networks, Prague, Czech Republic, July 2005.

- 186.C.N. Bowman, "Exploitation of Photopolymerizations for Novel Applications," University of Colorado, Photopolymerization Fundamentals 2005, Breckenridge, CO, June 2005.
- 187.C.N. Bowman, "Novel Photopolymerization Strategies for Optimization of Biomaterial Function and Performance," Society for Biomaterials 30th Annual Meeting and Exposition," Memphis, TN, April 2005.
- 188.C.N. Bowman, "Photopolymerization Reactions: Use of Light to Create, Modify, and Manipulate Materials," Optical Science and Engineering Program (OSEP), University of Colorado, March 2005.
- 189.C.N. Bowman, "Photopolymerizations: Exploring Novel Reactions, Applications, and Materials," 3M, St. Paul, MN, March 2005.
- 190.C.N. Bowman, "Recent Developments in Photopolymerizations in Micro and Nanotechnology," UV/EB West Radtech International Meeting, Los Angeles, CA, February 2005.
- 191.C.N. Bowman, "Recent Developments in Photopolymerizations for Biosensors," ThermoBiostar, Broomfield, CO, February 2005.
- 192.C.N. Bowman, "Structures, Reactions, and Applications of Thiol-Ene Photopolymerizations," Clemson University, November 2004.
- 193.C.N. Bowman, "Photopolymerization and Their Application to Biodetection," BioStar, November 2004.
- 194.C.N. Bowman, "Structures, Reactions, and Applications of Thiol-Ene Photopolymerizations," IUPAC Macro 2004, Paris, France, July 2004.
- 195.C.N. Bowman, "Structures, Reactions, and Applications of Thiol-Ene Photopolymerizations," University of Missouri at Columbia Bent Lecture, April 2004.
- 196.C.N. Bowman, "Structures, Reactions, and Applications of Thiol-Ene Photopolymerizations," University of Texas at Austin, April 2004.
- 197.C.N. Bowman, "Novel Photopolymerization Methods and Their Exploitation for Emerging Applications," Bent Lecture Series, University of Missouri-Columbia, April 2004.
- 198.C.N. Bowman, H. Lu, and J.W. Stansbury, "Novel Investigation of Thiol-Ene System for Future Dental Restorative Resins," International Association for Dental Research Annual Meeting, Honolulu, HI, March 2004.
- 199.C.N. Bowman, "Photopolymerizations: Yesterday, Today and Tomorrow," Henkel Corporation International Radcure Workshop, Rocky Hill, CT, March 2004.
- 200.C.N. Bowman, "A New Paradigm in Composite Restoratives? Thiol-ene Polymerizations for Dental Restorative Materials," 20th Annual Scientific Meeting of the Colorado Section, American Association for Dental Research," Denver, CO, February 2004.
- 201.C.N. Bowman, "Structures, Reactions, and Applications of Thiol-Ene Photopolymerizations," California Institute of Technology, Pasadena, CA, January 2004.
- 202.C.N. Bowman, "Novel Photopolymerization Methods and Their Exploitation for Emerging Applications," National Institute of Standards and Technology, Gaithersburg, MD, January 2004.
- 203.C.N. Bowman, "Novel Photopolymerization Methods and Their Exploitation for Emerging Applications," Iowa State University, Ames, IA, October 2003.
- 204.C.N. Bowman, "Novel Photopolymerization Methods and Their Exploitation for Emerging Applications," Seventh International Symposium on Polymers for Advanced Technologies, Ft. Lauderdale, FL, September 2003.

- 205.C.N. Bowman, "C.N. Bowman, "Novel Photopolymerization Methods and Their Exploitation for Emerging Applications," Gordon Research Conference, Polymers East, June 2003.
- 206.C.N. Bowman, "Novel Photopolymerization Methods and Their Exploitation for Emerging Applications," Polymer Reaction Engineering V Conference, Quebec City, Canada, May 2003.
- 207.C.N. Bowman, "Novel Photopolymerization Methods and Their Exploitation for Emerging Applications," Columbia University, New York City, NY, April 2003.
- 208.C.N. Bowman, "C.N. Bowman, "Novel Photopolymerization Methods and Their Exploitation for Emerging Applications," Georgia Institute of Technology, Atlanta, GA, April 2003.
- 209.C.N. Bowman, "Crosslinking in Thiol-acrylate Photopolymerizations," American Chemical Society Spring Conference, Division of Polymer Chemistry, New Orleans, LA, March 2003.
- 210.C.N. Bowman, "Novel Photopolymerization Methods and Their Exploitation for Emerging Applications," Stanford University, Stanford, CA, February 2003.
- 211.C.N. Bowman, "Novel Photopolymerization Methods and Their Exploitation for Emerging Applications," 30th Annual International Waterborne, High-Solids and Powder Coatings Symposium, New Orleans, LA, February 2003.
- 212.C.N. Bowman, "Novel Photopolymerization Methods and Their Exploitation for Emerging Applications," Stanford University, Stanford, CA, February 2002.
- 213.C.N. Bowman, "Novel Photopolymerization Methods and Their Exploitation for Emerging Applications," University of Kentucky, Lexington, KY, November 2002.
- 214.C.N. Bowman, "Novel Photopolymerization Methods and Their Exploitation for Emerging Applications," 3M, St. Paul, MN, November 2002.
- 215.C.N. Bowman, "Novel Photopolymerization Methods and Their Exploitation for Emerging Applications," Wright Patterson Air Force Base, Dayton, OH, October 2002.
- 216.C.N. Bowman, "Novel Photopolymerization Methods and Their Exploitation for Emerging Applications," Massachusetts Institute of Technology, Cambridge, MA, October 2002.
- 217.C.N. Bowman, "Photopolymerization Kinetics: What We Know and What We Don't?," Photopolymerization Fundamentals 2002, June 2002.
- 218.C.N. Bowman, "Molecular Design in Photopolymerization Reactions," UCB Chemicals, April 2002.
- 219.C.N. Bowman, "Monitoring Crosslinking and Gelation in Membrane Systems," Millipore Corporation, March 2002.
- 220.C.N. Bowman, "Molecular Design in Photopolymerization Reactions," University of Southern California, February 2002.
- 221.C.N. Bowman, "Molecular Design in Photopolymerization Reactions," Purdue University, February 2002.
- 222.C.N. Bowman, K.S. Anseth, "Polymer Education at the University of Colorado," AIChE 2001 Annual Meeting, Reno, NV, November 2001.
- 223.C.N. Bowman, "Molecular Design in Photopolymerization Reactions," University of California at Santa Barbara, November 2001.
- 224.C.N. Bowman, "Using Light to Turn Liquids into Solids," Colorado Science Convention 2001—A Science Odyssey, Denver, CO, October 2001.
- 225.C.N. Bowman, "Real-time Monitoring of Photopolymerization Kinetics," EFOS, Inc., Toronto, Canada, May 2001.

- 226.C.N. Bowman, "Photopolymerization Kinetics," Alcatel Telecommunications Cable, Claremont, NC, March 2001.
- 227.C.N. Bowman, "Cyclization and Crosslinked Structure in Photopolymerizations," Millipore Corporation, Boston, MA, March 2001.
- 228.C.N. Bowman and N.B. Cramer, "The Effects of Nanostructure on Polymerization Kinetics," PacificChem 2000, December 2000.
- 229.C.N. Bowman, "Photopolymerization Kinetics," Arizona State University, September 2000.
- 230.C.N. Bowman, "Chain-Length Dependent Kinetics," DSM Desotech, July 2000.
- 231.C.N. Bowman, "Thiol-Ene Photopolymerization Kinetics," 3M Company, June 2000.
- 232.C.N. Bowman, "Photopolymerizations in Organized Environments," Princeton University, April 2000.
- 233.C.N. Bowman and B.J. Elliott, "Polymerization Kinetics in Self-Assembled Systems," 23rd Australian Polymer Society Meeting, Geelong, Victoria, Australia, December 1999.
- 234.C.N. Bowman, B.J. Elliott, and C.A. Guymon, "Photopolymerization Kinetics in Polymer/Liquid Crystal Composites," Radtech Europe, Berlin, Germany, November 1999.
- 235.C.N. Bowman, "Photopolymerization Kinetics," Department of Chemical Engineering, Princeton University, October 1999.
- 236.C.N. Bowman, "Structural Evolution in Crosslinked Polymers," NIST Dental and Biomedical Group, Gaithersburg, MD, July 1999.
- 237.C.N. Bowman, "Polymerization and Characterization of Polymer / Liquid Crystal Composites," Department of Chemical Engineering, University of Iowa, July 1999.
- 238.C.N. Bowman, "Pseudocrown Ethers for Adsorption and Separation," Reactive Polymers Gordon Conference, Henniker, New Hampshire, July 1999.
- 239.C.N. Bowman, "Polymerization and Characterization of Polymer / Liquid Crystal Composites," McMaster University Institute Lecture, Hamilton, Ontario, April 1999.
- 240.C.N. Bowman, "Polymerization Kinetics in Polymer / Liquid Crystal Composites," University of Illinois, Department of Chemical Engineering, April 1999.
- 241.C.N. Bowman, "Photopolymerization Kinetics," Alcon, Fort Worth, TX, March 1999.
- 242.C.N. Bowman, "Cyclization Reactions in Crosslinked Polymers," NAPP Systems, San Marcos, CA, October 1998.
- 243.C.N. Bowman, "Polymerizations and Properties of Polymer Stabilized Ferroelectric Liquid Crystals," Michigan State University, East Lansing, MI, September 1998.
- 244.C.N. Bowman, "Photopolymerization Kinetics of Polymer Stabilized Ferroelectric Liquid Crystals," DSM Desotech, Elgin, IL, August 1998.
- 245.C.N. Bowman and J.E. Gibson, "Primary Cyclization Reactions in Chain Polymerizations," Networks 98 Meeting, Trondheim, Norway, July 1998.
- 246.C.N. Bowman and J.E. Gibson, "Primary Cyclization Reactions in Crosslinked Polymers," Macro 98, Gold Coast, Australia, July 1998.
- 247.C.N. Bowman, "Polymerizations and Properties of Polymer Stabilized Ferroelectric Liquid Crystals," Department of Materials Science, Monash University, Melbourne, Australia, July 1998.

- 248.C.N. Bowman, "Photopolymerizations of Polymer Stabilized Ferroelectric Liquid Crystals," 3M Company, St. Paul, MN, March 1998.
- 249.C.N. Bowman, "Reaction Engineering of Photopolymerizations," Photopolymerizations Workshop, University of Southern Mississippi, Hattiesburg, MS, March 1998.
- 250.A.R. Kannurpatti, L.G. Lovell, S.M. Newman, and C.N. Bowman*, "Polymerization Behavior and Properties of Networks Formed by Dimethacrylate Dental Resins," American Chemical Society National Meeting, Las Vegas, NV, September 1997.
- 251.C.N. Bowman* and K.S. Anseth, "Kinetic and Structural Evolution in Crosslinking Photopolymerizations," American Chemical Society National Meeting, Las Vegas, NV, September 1997.
- 252.C.N. Bowman, "Polymerizations and Properties of Polymer Stabilized Ferroelectric Liquid Crystals," Materials Research Society Outstanding Young Investigator Award Presentation, Wright Patterson Air Force Base, Laser Hardening Group, May 8, 1997.
- 253.C.N. Bowman,"An Overview of UV Induced Photopolymerizations and Crosslinking," Federation of Coatings Society, Orlando, FL, April 24, 1997.
- 254.C.N. Bowman, "Polymerizations and Properties of Polymer Stabilized Ferroelectric Liquid Crystals," Materials Research Society Outstanding Young Investigator Award Presentation, April 2, 1997.
- 255.C.N. Bowman, "Photopolymerization Kinetics in the Production of Polymer Stabilized Ferroelectric Liquid Crystals," DuPont Company, Wilmington, DE, March 19, 1997.
- 256.C.N. Bowman, "Kinetics of Multifunctional Monomer Polymerizations," University of Southern Mississippi, Department of Polymer Science, February 13, 1997.
- 257.C.N. Bowman, "Application of Living Radical Polymerizations for the Study of Crosslinked Polymer Structural Evolution," 3M Technical Forum, Minneapolis, MN, January 27, 1997.
- 258.C.N. Bowman, "Polymerization Kinetics in Crosslinking Photopolymerizations," Bausch and Lomb Company, Rochester, NY, November 18, 1996.
- 259.C.N. Bowman, "Photopolymerization Kinetics and Monomer Heterogeneity during Formation of Polymer Gels in Ferroelectric Liquid Crystals," Organic Chemistry Group, Philips Research, Eindhoven, The Netherlands, September 1996.
- 260.A.R. Kannurpatti and C.N. Bowman, "Structural Heterogeneity of Crosslinked Polymers Formed by Photopolymerizations of Multifunctional Monomers," American Chemical Society National Meeting, Orlando, FL, August 1996.
- 261.C.N. Bowman, "Photochemistry of Polymers: Photopolymerizations - Chemistry and Applications," at the Critical Reviews of Optical Science and Technology, Polymers in Optics: Physics, Chemistry, and Applications Symposium, Denver, CO, August 1996.
- 262.C.N. Bowman, "Electro-optic Properties and Polymerization Behavior in Polymer Stabilized Ferroelectric Liquid Crystals," at the CPIMA forum on Display Materials, Stanford University, Palo Alto, CA, July 1996.
- 263.C.N. Bowman, "Photopolymerization Behavior and Photopolymer Structure," DSM Desotech, Elgin, IL, May 1996.
- 264.C.N. Bowman, "Polymerization Mechanisms and Polymer Structure in Polymerizations of Multifunctional Monomers," Plenary Speaker, University of Waterloo, Institute for Polymer Research May Symposium, Waterloo, Ontario, Canada, May 1996.
- 265.C.N. Bowman, "Mechanisms, Characterization and Applications of Iniferter Polymerizations," 3M Company, Minneapolis, MN, January 1996.

- 266.C.N. Bowman, "Polymerization Mechanisms and Polymer Structure in Polymerizations of Multifunctional Monomers," Department of Chemical Engineering, University of Minnesota, Minneapolis, MN, January 1996.
- 267.C.N. Bowman, "Polymerization Mechanisms and Polymer Structure in Polymerizations of Multifunctional Monomers," Department of Chemical Engineering, University of Michigan, Ann Arbor, MI, January 1996.
- 268.C.N. Bowman, "Heterogeneity, Structure, and Properties of Crosslinked Polymers," BASF Company, Ludwigshafen, Germany, January 1996.
- 269.C.N. Bowman, "Photopolymerizations of Multifunctional Monomers: Structure and Mechanisms," National Starch Company, Edgewater, NJ, December 1995.
- 270.C.N. Bowman, "Microstructural Evolution in Polymerizations of Multifunctional Monomers," Polaroid Company, Cambridge, MA, November 1995.
- 271.C.N. Bowman, "Publishing as a Graduate Student," Graduate Teacher Program Series, University of Colorado, Boulder, CO, October 1995.
- 272.C.N. Bowman, "Termination Mechanisms in Polymerizations of Multifunctional Monomers," Intersociety Polymer Conference, Baltimore, MD, October 1995.
- 273.C.N. Bowman, "Kinetics and Heterogeneity of Polymerizations of Highly Crosslinked Coatings," E.I. DuPont de Nemours Company, Coatings Division, Wilmington, DE, October 1995.
- 274.C.N. Bowman, "Kinetics and Heterogeneity of Polymerizations of Multifunctional Monomers," Gordon Conference on Films and Coatings, New Hampton, NH, July 1995.
- 275.C.N. Bowman, "Funding Opportunities for Young Faculty or *Assistant Professor Jones and the Search for the Holy Grant*," American Society of Engineering Education Forum, National Research Council, Washington, D.C., March 1995.
- 276.C.N. Bowman, "Polymer Science and Dentistry: Are They Compatible?," Keynote address at the University of Colorado School of Dentistry's Research Day, Denver, CO, February 1995.
- 277.C.N. Bowman, "Polymerizations of Multifunctional Monomers and Their Applications to Dentistry," Dental Products Division, 3M Company, Minneapolis, MN, February 1995.
- 278.C.N. Bowman, "Microstructural Evolution During Polymerizations of Tetrafunctional Monomers," Networks 94 Meeting, Prague, The Czech Republic, July 1994.
- 279.C.N. Bowman, "Photopolymerization Behavior of Multi(meth)acrylates," Department of Polymers and Organic Chemistry, Philips Research Laboratories, Eindhoven, The Netherlands, July 1994
- 280.C.N. Bowman, "Kinetics and Heterogeneity of Photopolymerizations of Multi(meth)acrylates," Photochemistry Division, 3M Company, Minneapolis, MN, June 1994.
- 281.C.N. Bowman, "Polymerizations of Multifunctional Monomers: An Overview," Colorado School of Mines, Department of Chemical Engineering, January 1994.
- 282.C.N. Bowman, "Polymerizations of Multifunctional Monomers: An Overview," Unilever Co., New Jersey, November 1993.
- 283.C.N. Bowman, "Modeling and Characterizations of Multifunctional Monomer Polymerizations," Colorado State University Chemical Engineering Department, Fort Collins, CO, October 1993.
- 284.C.N. Bowman, "Kinetic, Structural, and Relaxational Aspects During Photopolymerizations of Multifunctional Monomers," ACS Unilever Award Presentation, American Chemical Society National Meeting, Chicago, IL, August 1993.

- 285.C.N. Bowman, "Kinetic, Relaxational, and Structural Considerations of Multifunctional Monomer Polymerization Reactions," presented to the Nuclear Materials and Polymer Science Groups at Los Alamos National Laboratories, Los Alamos, NM, December 1992.
- 286.C.N. Bowman, "Kinetic Gelation and Physical Aging Modeling of the Polymerizations of Multifunctional Monomers," presented to the Department of Polymer Science, University of Groningen, Groningen, The Netherlands, June 1990.
- 287.C.N. Bowman, "Modeling of the Coupled Physical Aging and Reaction Kinetics in Photopolymerizations of Multifunctional Monomers," presented to the Department of Polymers and Organic Chemistry, Philips Research Laboratories, Eindhoven, The Netherlands, June 1990.

NON-INVITED PRESENTATIONS

1. Benjamin Fairbanks, Christopher Bowman, "Strategies for the assembly of sequence controlled polymers via thiol-click reactions," American Chemical Society, Boston, MA, August 2018, (Poster).
2. Danielle Konetski, Christopher Bowman, "Photo-induced Pinocytosis for Artificial Cell Feeding" American Chemical Society, New Orleans, LA, March 2018, (Oral).
3. Matthew McBride, Christopher Bowman, "Photoplasticity in Liquid Crystalline Networks" American Chemical Society, Boston, MA, August 2018, (Oral).
4. Dillion Love, Christopher Bowman, "Development of sequence ordered/functional polymers with thiol-X and aza-Michael reactions" American Chemical Society, Boston, MA, August 2018, (Poster).
5. Dillion Love, Christopher Bowman, "Combinatorial synthesis of functional polymers with complex architectures using thiol-Michael and aza-Michael chemistries" American Chemical Society, Boston, MA, August 2018, (Oral).
6. Matthew McBride, Christopher Bowman, "Photoplasticity in Liquid Crystalline Networks" International Liquid Crystal Conference, Kyoto, Japan, July 2018, (Oral).
7. Matthew McBride, Christopher Bowman, "Ambient and Switchable Plasticity in Thiol-X Photopolymers" RadTech Conference, Chicago, IL, May 2018, (Oral).
8. Dawei Zhang, Christopher Bowman, "Supramolecular hydrogel prepared from thymine-containing artificial nuclelipid--study of assembly and lyotropic mesophases," American Chemical Society, New Orleans, LA, March 2018, (Oral).
9. Dawei Zhang, Christopher Bowman, "Artificial cell-mimics with controlled morphology and behavior" Annual MURI Project Review Meeting, San Diego, CA, October 2018, (Oral).
10. Dawei Zhang, Christopher Bowman, "Light control of liposomes---morphology and permeability" Annual MURI Project Review Meeting, San Diego, CA, January 2018, (Oral).
11. Katelyn Long, Christopher Bowman, "Kinetic Differences between Primary, Secondary, and Tertiary Alkyl Thiols in Thiol-Ene Reactions" American Chemical Society, New Orleans, LA, March 2018, (Oral).
12. Katelyn Long, Christopher Bowman, "Kinetic Differences between Primary, Secondary, and Tertiary Alkyl Thiols in Thiol-Ene Reactions" The Industry-University Cooperative Research Centers, Jacksonville, FL, January 2018, (Poster).
13. Katelyn Long, Christopher Bowman, "Development of Secondary and Tertiary Thiol Monomers for Dental Applications" American Association for Dental Research, Ft. Lauderdale, FL, March 2018, (Oral).
14. Katelyn Long, Christopher Bowman, "Determining How Thiol Substitution Affect the Thiol-ene Polymerization" National Graduate Research Polymer Conference, Minneapolis, MN, June 2018, (Oral).
15. Katelyn Long, Christopher Bowman, "How the Substitution of the Thiol Affects the Thiol-Ene Reaction" 2018 StARs, Boulder, CO, December 2018, (Oral).
16. Marvin Alim, Christopher Bowman, "High dynamic range two-stage photopolymer materials through enhanced solubility high-refractive index writing monomers.," SPIE Photonics West, San Francisco, CA, January 2018, (Oral).
17. Marvin Alim, Christopher Bowman, "Design and fabrication of soft, flexible polymeric GRIN lenses," CPIA Annual Meeting, Boulder, CO, October 2018, (Oral).
18. Marvin Alim, Christopher Bowman, "Realizing high refractive index materials from thiol-X polymers: A general synthetic strategy," American Chemical Society, Boston, MA, August 2018, (Oral).
19. Brady Worrell, Christopher Bowman, "Towards the Commercialization of Thioester Containing Materials"

- RadTech Conference, Chicago, IL, July 2018, (Oral).
20. Brady Worrell, Christopher Bowman, "A User's Guide to the Thiol-Thioester Exchange in Photopolymerizable Network Polymers," European Symposium of Photopolymer Science. Mulhouse, France, (Oral).
 21. Maciej Podgorski, Christopher Bowman, "Metamorphosis within polymer networks: stress relaxation, network shape control and second-stage functionalization reactions" American Chemical Society, New Orleans, LA, March 2018, (Oral).
 22. Maciej Podgorski, Christopher Bowman, "Acyl transfer reactions within polymer networks: stress relaxation, reshaping and second stage functionalization" World Polymer Congress MACRO, Cairns, Australia, July 2018, (Oral).
 23. Jasmine Sinha, Christopher Bowman, "Development of vinyl sulfonate Michael monomers and Its influence in Polymer Network by Thiol Michael Addition Reactions" American Chemical Society, New Orleans, LA, March 2018, (Oral).
 24. Alina Martinez, Christopher Bowman, "Programmable Liquid Crystalline Elastomers Using Light Activated Covalent Adaptable Networks" American Chemical Society, Boston, MA, August 2018, (Poster).
 25. Alina Martinez, Christopher Bowman, "Programmable Liquid Crystalline Elastomers Using Light Activated Covalent Adaptable Networks" International Liquid Crystal Conference, Kyoto, Japan, July 2018, (Oral).
 26. Xun Han, Christopher Bowman, "Development of Thio-urethane Covalent Adaptable Networks" American Chemical Society, Boston, MA, August 2018, (Oral).
 27. Sijia Huang, Christopher Bowman, "Kinetics of Photoinitiated Thiol-Michael Addition Reaction" American Chemical Society, Boston, MA, August 2018, (Oral).
 28. Sijia Huang, Christopher Bowman, "Dental Restorative Materials Based on Thiol-Michael Photopolymerization" American Association for Dental Research, Ft. Lauderdale, FL, March 2018, (Oral).
 29. Heidi Culver, Christopher Bowman, "Boronate ester based dynamic nucleic acids for templated analyte detection" American Institute of Chemical Engineers, Pittsburgh, PA, October 2018, (Oral).
 30. Heidi Culver, Christopher Bowman, "Thermodynamic characterization of click nucleic acid-DNA binding for biosensing" American Institute of Chemical Engineers, Pittsburgh, PA, October 2018, (Oral).
 31. S. Mavila, "Dynamic, Responsive DNA-like Polymers", PMSE Future Faculty Symposium conducted by American Chemical Society (ACS) Division of Polymeric Materials: Science and Engineering (PMSE) at ACS National Meeting in Boston (August 2018).
 32. S. Mavila, "Dynamic, Responsive DNA-like Polymers via the Ring Opening Polymerization of Nucleobase Appended Thiolactones" ACS National Meeting, New Orleans, LA, March 18-22, 2018.
 33. Nicholas Bongiardina, "Reducing Shrinkage Stress in Composites via Addition-Fragmentation Microparticles" Oral, ACS National Meeting & Exposition, Boston, MA, August 2018.
 34. Zhang, D, "Artificial nucleolipid: formation, study of self-assembly and mesophases", MURI project annual meeting, Department of defense laboratory, Durham, North carolina, 26th~27th, June, 2017, Poster.
 35. Dillon Love, Benjamin Fairbanks, Dylan Domaille, Kangmin Kim, John Goodrich, Toni Gossett, David Klug, Christopher Bowman. "Sequence-Ordered, Biomimetic Polymer Synthesis via Thiol-X Click Chemistry," Oral, 254th ACS National Meeting & Exposition, Washington, DC, August 23, 2017.
 36. Dillon Love, Benjamin Fairbanks PhD, Brady Worrell PhD, Kang-Min Kim, John Goodrich, Prof. Dylan Domaille and Prof. Christopher Bowman. "Sequence Ordered and Functional Polymers via Thiol-X and Michael Click Reactions," Poster, AIChE Fall Meeting, Minneapolis, MN, October 30, 2017.

37. Dillon Love, Dr. Benjamin Fairbanks, Prof. Dylan Domaille, Kangmin Kim, John Goodrich, Toni Gossett, David Klug, Prof. Christopher Bowman. "Sequence-Ordered, Biomimetic Polymer Synthesis via Thiol-X Click Chemistry," Oral, AIChE Fall Meeting, Minneapolis, MN, October 29, 2017.
38. Dillon Love, Benjamin Fairbanks PhD, Brady Worrell PhD, Kang-Min Kim, John Goodrich, Dylan Domaille and Christopher Bowman. "Sequence Ordered and Functional Polymers via Thiol-X and Michael Click Reactions," Poster, Photopolymerization Fundamentals Conference 2017, Boulder, CO, September 17-20.
39. Alex J Anderson, Stephanie J Bryant, Christopher N Bowman " Cellular internalization and cytocompatibility of PEGylated clickable nucleic acid copolymers", Poster presentation, ACS National Meeting, Washington, D.C., August 21-22, 2017
40. Danielle Konetski, Tao Gong, Austin Baranek, Brady Worrell, Chen Wang, Sudhi Mavila, and Christopher Bowman, "Synthesis of Designer Lipids Using "Click" Chemistries," Presentation, AIChE National Meeting, Minneapolis, MN, October 29-November 3, 2017
41. Danielle Konetski, Dawei Zhang, Christopher Bowman, "Photo-Induced Pinocytosis in Synthetic Liposomes," Presentation, AIChE National Meeting, Minneapolis, MN, October 29-November 3, 2017
42. Danielle Konetski, Dawei Zhang, Tao Gong, Austin Baranek, Brady Worrell, Chen Wang, Sudhi Mavila, and Christopher Bowman, "Production of Artificial Cell Membranes Bearing New Characteristics or Behaviors Using "Click" Chemistries," Presentation, Artificial Cell and ISBS National Meeting, Montreal, Canada, November 15, 2017
43. X. Wang, H.B. Song, J.R. Patton, J.W. Stansbury, C.N. Bowman. "Copper(I)-catalyzed Azide-alkyne Cycloaddition (CuAAC) Composites: Balancing Mechanical Properties and Hydrophobicity" Poster, IADR Meeting, San Francisco, CA, March 22-25.
44. H.B. Song, X. Wang, J. Patton, J. Stansbury, C. Bowman, "Kinetics and mechanics of photo-initiated Copper(I)-catalyzed Azide-alkyne Cycloaddition (CuAAC) composites", International Association for Dental Research, San Francisco, CA, March, 2017 (Oral)
45. H.B. Song, A. Baranek, C. Bowman, Toughness of mechanically assisted triazole-based glassy photopolymer network", Photopolymerization Fundamentals, CO, September, 2017 (Poster)
46. H.B. Song, A. Baranek, B. Worrell, W. Cook, C. Bowman, "Mechanically ductile and stiff, triazole-based glassy photopolymer network", AIChE meeting, MN, October, 2017 (Oral)
47. X Zhang, S Huang, M Podgorski, M Claudino, K Long, J Sinha, S Zajdowicz, CN Bowman. "Photo Thiol-Michael Based Dental Restoratives Development and Evaluation" Oral. 2017 IADR/AADR/CADR General Session & Exhibition. San Francisco, CA, March 22-25
48. X Zhang, W Xi, S Huang, K Long, L Cox, CN Bowman. "Wavelength-Selective Sequential Polymer Network Formation Controlled with a Two-Color Responsive Initiation System" Poster. Photopolymerization Fundamentals 2017, Boulder, CO, September 17-20.
49. Katelyn Long. 2017 StARs Symposium, Boulder, Colorado (12/18/17). "Kinetic Differences between Primary, Secondary, and Tertiary Alkyl Thiols in Thiol-Ene Reactions" Oral.
50. Katelyn Long, Xinpeng Zhang, Sijia Huang, Jasmine Sinha, Maciej Padgorski, Christopher Bowman. 2017 IUCRC Meeting. Pittsburgh, Pennsylvania (05/16/17). "Kinetic Differences between Primary, Secondary, and Tertiary Alkyl Thiols in Thiol-Ene Reactions" Poster.
51. Xun Han, Xinpeng Zhang, Nancy Sowan, Lewis Cox, Sijia Huang, Benjamin D. Fairbanks, Christopher N. Bowman. " Photo Controlled Disulfide Based Thiol-Ene/Thiol-Michael Covalent Adaptable Network Development and Application" Poster. ACS Meeting, 2017 Spring, San Francisco, April 2-6.

52. J Sinha, M Podgorski, S Huang, and CN Bowman. "Development of vinyl sulfonate Michael monomers and its influence in Polymer Network by Thiol Michael Addition Reactions". Poster. Photopolymerization Fundamentals 2017, Boulder, CO, September 17-20.
53. Goodrich, J. T.; Bongiardina, N. J.; Coley, H. M.; Cox, L. M.; Bowman, C. N. "Dual-cure polymer networks with improved imprintability: Engineering a first-stage supramolecular network." Poster. ACS National Meeting, Washington D. C. August 20-24, 2017.
54. M Podgórski, BT Worrell, M McBride, CN Bowman, "Stress Relaxation and Network Shape Control via Acyl Transfer to Hydroxyl Groups" (poster), Photopolymerization Fundamentals 2017, Boulder, CO, September 17-20.
55. MK McBride, AM Martinez, M Hendrikx, D Liu, BT Worrell, DJ Broer, CN Bowman. "Photoinduced Stress Relaxation in Liquid Crystal Networks." Poster. Photopolymerization Fundamentals 2017, Boulder, CO, September 17-20.
56. MK McBride, AM Martinez, M Hendrikx, D Liu, BT Worrell, DJ Broer, CN Bowman. "Crosslinked, Covalent Adaptable Liquid Crystalline Networks: A Route Shape Shifting Polymers." Oral. International Liquid Crystalline Elastomer Conference. Houston, TX, October 16-17, 2017.
57. MK McBride, AM Martinez, M Hendrikx, D Liu, BT Worrell, DJ Broer, CN Bowman. "Photoplasticity in Crosslinked Liquid Crystalline Networks: A Route to Reconfigurable Shape-Changing Materials." Oral. AIChE Fall Meeting, Minneapolis MN. October 31, 2017.
58. Nancy Sowan, Han Byul Song, Lewis Cox, Christopher Bowman, "Stress relaxation in glassy polymer networks via Reversible Addition Fragmentation Chain Transfer (RAFT)" , oral presentation, ACS meeting, Washington DC, August 21, 2017.
59. Marvin D. Alim, Sudheendran Mavila, David J. Glugla, Amy C. Sullivan, Robert R. McLeod, Christopher N. Bowman, "High Δn two-stage holographic Photopolymers via high refractive index monomers exhibiting enhanced solubility", poster, Photopolymerization Fundamentals, Boulder, CO, September 18, 2017.
60. Worrell, B. T.; Bowman, C. N. "Responsive, Sequence Adaptive DNA-Like Polymers" Arnold Beckman Foundation Conference (August, 2017)
61. Marvin D. Alim, Sudheendran Mavila, David J. Glugla, Amy C. Sullivan, Robert R. McLeod, Christopher N. Bowman, "High Δn two-stage holographic Photopolymers via high refractive index monomers exhibiting enhanced solubility", poster, CPIA Annual Meeting, Boulder, CO, October 24, 2017.
62. Huang, S.; Sinha, J.; Zhang, X.; Claudino, M.; Podgoski, M.; Bowman, C.N., "Kinetics of Photoinitiated Thiol-Michael Addition Reaction", Presented as oral presentation, AADR Annual Meeting, San Francisco, CA, March 25, 2017
63. Huang, S.; Podgórski, M.; Zhang, X.; Sinha, J.; Claudino, M.; Stansbury, J.W.; Bowman, C.N., "Dental Restorative Materials Based on Thiol-Michael Photopolymerization", Presented as a poster, Photopolymerization Fundamentals 2017 (PF17), Boulder, CO, September 19, 2017
64. Alina Martinez, Matt McBride, Christopher Bowman, "Liquid Crystal Elastomer Photo-Origami Using Covalent Adaptable Chemistry", poster, International Liquid Crystal Elastomer Conference, Rice University, Houston TX, October 16-18, 2017
65. Alina Martinez, Matt McBride, Christopher Bowman, "Liquid Crystal Elastomer Photo-Origami Using Covalent Adaptable Chemistry", poster, Photopolymerization Fundamentals, Boulder CO, September 17-20, 2017
66. S. Mavila, C. Wang, B. Worrell, and C.N. Bowman, "Transthioesterification Polymerization Based on Substituted Thiophenol Esters: A Facile Route to Solution Phase Oligopeptide and Oligonucleotide Synthesis," SMRC Center-Wide Research Communication, Science Slam, and Poster Presentation Event, February 3, 2017, University of Colorado-Boulder, USA. (Best poster award).

67. C.N. Bowman, D. Konetski, and D. Zhang "Spatiotemporal Control of Membrane Synthesis and Growth," Artificial Cells MURI Annual Review, Research Triangle Park, NC, March, 2016.
68. Worrell, B. T.; Lyon, G. B.; McBride, M. M.; Wang, C.; Bowman, C. N. "Thiol/Thioester Exchange in Thiol-X Networks Towards Low Stress, High Refractive Index Materials" IUCRC (January, 2016)
69. Worrell, B. T.; Bowman, C. N. "Anionic Ring Opening of Thiolactone Appended Nucleic Acids" Arnold Beckman Foundation Conference (August, 2016)
70. Nancy Sowan, "Application of reversible addition-fragmentation chain transfer (RAFT) in covalent adaptable networks (CANs)" Industry/University Cooperative Research Centers, Estes Park, CO, October, 2016 (Poster).
71. Wang, C.; Goldman T. M.; Worrell, B. T.; McBride, M. K.; Bowman, C. N. "Recyclable and Repolymerizable Thiol-X Photopolymers", Photopolymerizations: Past, Present and Future, Estes Park, CO, October, 2016.
72. S. Mavila, C. Wang, B. Worrell, and C.N. Bowman, "Transthioesterification Polymerization Based on Substituted Thiophenol Esters: A Facile Route to Solution Phase Oligopeptide and Oligonucleotide Synthesis," Photopolymerizations: Past, Present and Future, Estes Park, CO, October, 2016.
73. Wang, C.; Bowman, C. N. "Functional Nanoparticles and Reactive Latex Film from Thiol-Michael Addition Miniemulsions", ACS Colloidal and Surface Science Symposium, Boston, MA, Jun 2016
74. Wang, C.; Bowman, C. N. "Step-growth 'Clickable' Micro/nano-Particles", RadTech Conference, Chicago, IL, May 2016
75. Wang, C.; Bowman, C. N. "Step-growth 'Clickable' micro/nano-particles", ACS 251st National Meeting, San Diego, CA, Mar 2016.
76. M. McBride, M. Hendrikx, D. Liu, D.J. Broer, C.N. Bowman. "Photo- induced Stress Relaxation in Liquid Crystalline Networks" SMART Meeting, Dallas, TX. December 4-8, 2016.
77. M. McBride, M. Hendrikx, D. Liu, D.J. Broer, C.N. Bowman. "Post- polymerization Modification of Liquid Crystalline Alignment" Materials Research Society Spring Meeting. Phoenix, AZ. March 25-28, 2016.
78. Shah, P.K., Bowman, C.N. and Stansbury, J.W., "Polymerization stress control using an addition fragmentation monomer (AFM)", American Association for Dental Research (AADR) Annual Meeting, Los Angeles, CA, 2016
79. D. Konetski, D. Zhang, T. Gong, X. Zhang, S. Chatani, A. Baranek, and C.N. Bowman, "Photo-induced Vesicle Formation Using Click Chemistries" American Chemical Society National Meeting, San Diego, CA, March, 2016.
80. D. Konetski, D. Zhang, T. Gong, A. Baranek, B. Worrell, and C.N. Bowman, "Production of Designer Lipids Using "Click" Chemistries" AIChE National Meeting, November, 2016.
81. M. Alim, D. Glugla, P. Nystrom, A. Sullivan, R. McLeod and C.N. Bowman, "Holographic performance of two-stage photopolymers incorporating addition-fragmentation chain transfer (AFCT)," Photopolymerizations: Past, Present and Future, Estes Park, CO, October, 2016.
82. H. B. Song, N. Sowan, A. Baranek, P. Shah, A. Flores, J. Stansbury, C. Bowman, "Reduced shrinkage stress via CuAAC photopolymerizations", American Association for Dental Research, Los Angeles, CA, March, 2016
83. H. B. Song, X. Wang, J. Patton, J. Stansbury, C. Bowman, "Kinetics and mechanics of photo-CuAAC composites", Photopolymerizations: Past, Present and Future, Estes Park, CO, October, 2016.

84. X. Zhang, M. Claudino, C. Wang, W. Xi, and C.N. Bowman, "Efficient Photo-base Initiator System Design and Characterization for Thiol-Michael Addition Reactions in Dental Restoratives" IADR/AADR/CADR General Session & Exhibition, March, 2016, Los Angeles, CA.
85. X. Zhang, W. Xi, S. Huang, M. Claudino, M. Podgorski, and C.N. Bowman, "Visible-light Controlled Thiol-Michael Polymerization with Novel Photobase Systems," Photopolymerizations: Past, Present and Future, Estes Park, CO, October, 2016.
86. M. McBride, M. Hendrikx, D. Liu, D.J. Broer, C.N. Bowman. "Post- polymerization Adjustment of Liquid Crystalline Alignment" ACS Spring Meeting. San Diego, CA. March 17-21, 2016.
87. Zhang, X. "Efficient Photo-base Catalysts Design for Thiol-Michael Addition Reaction" 2015 IADR/AADR/CADR General Session & Exhibition, Boston, MA, March 2015.
88. Zhang, X.; Xi, W.; Chatani, S.; Podgórski, M.; Bowman, C.N. "Light Controlled Thiol-Michael Addition Initiated by Photocaged Superbases" 2015 ACS Meeting, Denver, CO March 22-26, 2015
89. Worrell, B. T.; Bowman, C. N. "Sequence Controlled Polymerization of Nucleic Acids: An Optimistic Dispatch from the Trenches" Pacific Polymer Conference 14 (December, 2015)
90. Worrell, B. T.; Bowman, C. N. "Adaptable and Stimuli-Responsive Polymer Networks" Pacificchem (December, 2015)
91. Worrell, B. T.; Bowman, C. N. "The Sequence Controlled Polymerization of Nucleic Acids" Arnold Beckman Foundation Conference (August, 2015)
92. D.P. Nair, N.B. Cramer and C.N. Bowman, "Dual-Cure (Two Stage Reactive) Shape Memory Polymer Networks," IUPAC 10th International Conference on Advanced Polymers via Macromolecular Engineering, Durham, UK, August, 2013.
93. W. Xi, T. Gong, C.J. Kloxin, C.N. Bowman, "Clickable nucleic acids," 10th IUPAC International Conference on Advanced Polymers via Macromolecular Engineering, Durham, UK, August, 2013.
94. S. Chatani, D.P. Nair, M. Podgorski and C.N. Bowman, "The thiol-Michael addition for macromolecular design: vinyl sulfones and nucleophilic initiators," IUPAC 10th International Conference on Advanced Polymers via Macromolecular Engineering, Durham, UK, August, 2013.
95. S. Chatani, D.P. Nair and C.N. Bowman, "Reactivity and selectivity of vinyl sulfones towards the thiol-Michael addition reaction and their implementation to two-stage reactive polymer systems," ACS Spring National Meeting, April, 2013.
96. N.B. Cramer, D.P. Nair, N. Lee, J. Westcott, B. Kowalski, C. Ye, R.R. McLeod, and C.N. Bowman, "Novel Two-Stage Reactive Photopolymer Systems for Polymeric Optical Materials," ACS National Meeting, April, 2013.
97. W. Xi, T. Gong, C.J. Kloxin, C.N. Bowman, "Clickable nucleic acids," ACS Spring National Meeting, April, 2013.
98. G. Berg, T. Gong, C.R. Fenoli, C.N. Bowman, "A Novel Dual-Cure Photoresist for Self-Supporting Stereolithography," Materials Research Society Fall Meeting, Boston, MA, December 2013.
99. T. Gong, J. Wagner, B.J. Adzima, and C.N. Bowman, "A Novel Copper Containing Photoinitiator, Copper (II) Acylphosphinate, and It's Application in Both the Photomediated CuAAC Reaction and in Atom Transfer Radical Polymerization", MRS Fall Meeting, Boston, MA, December, 2013.
100. C.R. Fenoli and C.N. Bowman, "Synthesis of Novel Trithiocarbonate and Allyl Sulfides and their Application into the Advances in Covalent Adaptable Networks," Australasian Polymer Symposium, Darwin, Northern Territories, Australia, July 2013.

101. G. Berg, T. Gong, C.R. Fenoli, C.N. Bowman, "Diels Alder Networks and Acrylates: A Powerful Combination for Layer-by-Layer Stereolithography," Australasian Polymer Symposium, Darwin, Northern Territories, Australia, July 2013.
102. D.P. Nair, M. McBride, J. Gaipa, K. Lee, T. Kennedy, N. Lee, N.B. Cramer and C.N. Bowman, "Dual-Cure Shape Memory Polymer Networks for Arthroscopic Procedures," Photopolymerization Fundamentals Meeting, Jackson Hole, WY, September 2013.
103. W. Xi, S. Pattanayak, T. Gong, C.J. Kloxin, and C.N. Bowman, "Using Click Chemistry to Form Polymers of Controlled Sequence: Synthesis and Applications of Click Nucleic Acids," MRS National Meeting, Boston, MA, December, 2013.
104. H. Peng, D.P. Nair, B.A. Kowalski, W. Xi, T. Gong, N.B. Cramer, R.R. McLeod, C.N. Bowman, "Novel Free-standing Holographic Data Storage Films with Two-Stage Reactive Polymer Networks," Photopolymerization Fundamentals Meeting, Jackson Hole, WY, September 2013.
105. S. Chatani, D.P. Nair, M. Podgórski, B.A. Earle and C.N. Bowman, "Reactivity and Selectivity of Vinyl Sulfones Towards the Thiol-Michael Addition Reaction and their Implementation in Two-Stage Reactive Polymer Systems," Photopolymerization Fundamentals Meeting, Jackson Hole, WY, September 2013.
106. M. Podgorski, D.P. Nair, S. Chatani, and C.N. Bowman, "Two-Stage Reactive Polymers with Tethered and Untethered Methacrylate Networks," Photopolymerization Fundamentals Meeting, Jackson Hole, WY, September 2013.
107. W. Xi, M. Krieger, C.J. Kloxin, and C.N. Bowman, "Photo-induced Catalysis of the Thiol-Michael Addition via a Caged Primary Amine," Photopolymerization Fundamentals Meeting, Jackson Hole, WY, September 2013.
108. G. Berg, T. Gong, C.R. Fenoli, and C.N. Bowman, "Diels-Alder Networks and Acrylates: A Powerful Combination for Layer-by-Layer Stereolithography," Photopolymerization Fundamentals Meeting, Jackson Hole, WY, September 2013.
109. T. Gong, B.J. Adzima and C.N. Bowman, "A novel Copper Containing Photoinitiator, Copper (II) Acylphosphinate, and its Application in both the Photomediated CUAAC Reaction and in Atom Transfer Radical Polymerization," Photopolymerization Fundamentals Meeting, Jackson Hole, WY, September 2013.
110. M. McBride, T. Gong, C.N. Bowman, "Mechanical Properties of Photopolymerized, Copper Catalyzed Alkyne-Azide Cycloaddition," Photopolymerization Fundamentals Meeting, Jackson Hole, WY, September 2013.
111. C. Wang, T. Gong, C.N. Bowman, "Novel Polymer Network from Simultaneous Photo-Induced ATRP and Alkyne-Azide Cycloaddition," Photopolymerization Fundamentals Meeting, Jackson Hole, WY, September 2013.
112. A. Alzahrani, N. Sowan, C.H. Lim, C.B. Musgrave, and C.N. Bowman, "Relationship Between Monomer Structures and their Reactivates in the Photo-CuAAC Reaction," Photopolymerization Fundamentals Meeting, Jackson Hole, WY, September 2013.
113. B.J. Adzima, C.N. Bowman, "Cycloaddition Polymerizations", American Chemical Society National Meeting, Philadelphia, PA, August 2012.
114. T. Gong, B.J. Adzima, N.H. Baker, C.N. Bowman, "Photo-Induced (I) Catalyzed Azide Alkyne Cycloaddition (CuAAC) in Polymer Synthesis", American Chemical Society National Meeting, Philadelphia, PA, August 2012.
115. R.J. Sheridan, C.N. Bowman, "Structure, Properties and Applications of a Model Thermoreversible Covalent Adaptable Network", Polymer Networks Group Meeting, Jackson, WY, August 2012.

- 116.W.D. Cook, T. Schiller, C. Moorhoff, F. Chen, D. Nghiem, S. Thang, C.N. Bowman, T.F. Scott, "Effect of Backbone Structure on the Photo-Plasticity of Networks Containing Cleavable Allylic Thio-Ethers", Polymer Networks Group Meeting, Jackson, WY, August 2012.
- 117.G. Berg, T. Gong, B.J. Adzima, C.N. Bowman, "2D and 3D Photolithography Using Diels-Alder and Thiol-ene Click Reactions", Poster Presentation, Polymer Networks Group Meeting, Jackson, WY, August 2012.
- 118.R. Shenoy, C.N. Bowman, "3-D Conformal Coatings by Interfacial Radical Polymerization Initiated by a Glucose Oxidase-Mediated Redox System", Poster Presentation, Polymer Networks Group Meeting, Jackson, WY, August 2012.
- 119.C. Fenoli, C.N. Bowman, "Advances in Raft Monomer Development", Poster Presentation, Polymer Networks Group Meeting, Jackson, WY, August 2012.
- 120.E.F. Gillett, C. Fenoli, D. Leung, C.N. Bowman, "Allyl Sulfide Containing Covalent Adaptable Networks (CANs) Properties and Applications", Poster Presentation, Polymer Networks Group Meeting, Jackson, WY, August 2012.
- 121.T. Gong, B.J. Adzima, N.H. Baker, C.N. Bowman, "Bulk Photopolymerization Using Photo Induced Copper (I)-Catalyzed Alkyne-Azide Cycloaddition (CuAAC), Poster Presentation, Polymer Networks Group Meeting, Jackson, WY, August 2012.
- 122.K.C. Koehler, D.L. Alge, K.S. Anseth, C.N. Bowman, "Diels-Alder Mediated Controlled Release From A Peg Based Hydrogel", Poster Presentation, Polymer Networks Group Meeting, Jackson, WY, August 2012.
- 123.W. Xi, C. Wang, C.J. Kloxin, C.N. Bowman, "Nitrogen-Centered Nucleophile Catalyzed Thiol Vinylsulfone Addition, Another Thiol-ene "Click" Reaction", Poster Presentation, Polymer Networks Group Meeting, Jackson, WY, August 2012.
- 124.A. Alzahrani, C.N. Bowman, "Photo-Mediated CuAAC Reaction: Capabilities and Applications", Poster Presentation, Polymer Networks Group Meeting, Jackson, WY, August 2012.
- 125.J.W. Wydra, J. Stansbury, C.N. Bowman, "Property Development in Photopolymerizations", Poster Presentation, Polymer Networks Group Meeting, Jackson, WY, August 2012.
- 126.M.A. Cole, C.N. Bowman, "Synthesis and Characterization of Thiol-ene Functionalized Siloxanes and Evaluation of Their Crosslinked Network Properties", Poster Presentation, Polymer Networks Group Meeting, Jackson, WY, August 2012.
- 127.D.P. Nair, N.B. Cramer, J.C. Gaipa, M.K. McBride, E.M. Matherly, R.R. McLeod, R. Shandas, C.N. Bowman, "Two-Stage Reactive Polymer Materials Platform", Poster Presentation, Polymer Networks Group Meeting, Jackson, WY, August 2012.
- 128.S. Chatani, D.P. Nair, N.B. Cramer, C.N. Bowman, "Vinyl Sulfone as a Component of Two-Stage Curing Polymer Systems", Poster Presentation, Polymer Networks Group Meeting, Jackson, WY, August 2012.
- 129.C.N. Bowman, D.P. Nair, N.B. Cramer, J.C. Gaipa, R. Shandas, "Shape Memory Polymer Systems With Independent Control of Material Properties Before and After Deployment", CIMTEC 2012, Montecatini Terme, Italy, June 2012.
- 130.C.N. Bowman, "Thiol-ene Click Reactions as Photopolymerizations", Lunch & Learn Lecture at RadTech UV & EB Technology Expo and Conference, Chicago, IL, May 2012.
- 131.C.N. Bowman, "Photofixation of Diels-Alder Networks," Annual AIChE Meeting, Minneapolis, MN, October 2011.
- 132.K.C. Koehler C.N. Bowman, and C.J. Kloxin, "The Development of a Paradigm for the Facile Incorporation of Diels-Alder Moieties," Annual AIChE Meeting, Minneapolis, MN, October 2011.

133. B. Adzima, C.J. Kloxin, and C.N. Bowman, "Photoinitiators as Copper(II) Reductants: A New Approach to the Copper-Catalyzed Azide-Alkyne Cycloaddition," Annual AIChE Meeting, Minneapolis, MN, October 2011.
134. T.F. Scott, C.J. Kloxin, H.Y. Park, and C.N. Bowman, "Mechanophotopatterning of a Covalent Adaptable Network," Annual AIChE Meeting, Minneapolis, MN, October 2011.
135. B.J. Berron and C.N. Bowman, "Stimuli-responsive Microfluidic Valves for Antigen Detection," Annual AIChE Meeting, Minneapolis, MN, October 2011.
136. D. Leung and C.N. Bowman, "Photo-responsive Trithiocarbonate," Annual AIChE Meeting, Minneapolis, MN, October 2011.
137. R.J. Sheridan and C.N. Bowman, "Investigation of Time and Temperature Dependence of Properties in Diels-Alder Networks: Gelation and Crossover Frequency," 242nd American Chemical Society National Meeting, Denver, CO, August 2011.
138. S. Ye, N.B. Cramer, I.R. Smith, C.N. Bowman, and K. Voigt, "Using Thiol-yne-methacrylate Ternary System to Reduce Shrinkage Stress," 242nd American Chemical Society National Meeting, Denver, CO, August 2011.
139. M. Cole, K.M. Schreck, and C.N. Bowman, "Functionalized Siloxane Oligomers for Use as Elastomeric Dental Impression Materials," 242nd American Chemical Society National Meeting, Denver, CO, August 2011.
140. A.A. Alzahrani and C.N. Bowman, "Minimization of Copper Concentration and Optimization of the Initiation and Reaction Rates for the Photo-CuAAC Reaction," 242nd American Chemical Society National Meeting, Denver, CO, August 2011.
141. I.R. Smith, S. Ye, N.B. Cramer, and C.N. Bowman, "Kinetics and Mechanical Properties of Thiol-yne-glass Filler System," 242nd American Chemical Society National Meeting, Denver, CO, August 2011.
142. D. Leung and C.N. Bowman, "Photo-responsive Trithiocarbonate," 242nd American Chemical Society National Meeting, Denver, CO, August 2011.
143. D.P. Nair, N.B. Cramer, R. Shandas, C.N. Bowman, and T.F. Scott, "Thiol-ene Systems as Photopolymerized Shape Memory Polymers," 242nd American Chemical Society National Meeting, Denver, CO, August 2011.
144. D. Leung and C.N. Bowman, "Hybrid Molecular Fillers for Photopolymerized Networks," 242nd American Chemical Society National Meeting, Denver, CO, August 2011.
145. K.C. Koehler, C.J. Kloxin, and C.N. Bowman, "Development of a Paradigm for the Facile Incorporation of Diels-Alder Moieties," 242nd American Chemical Society National Meeting, Denver, CO, August 2011.
146. H.Y. Park, C.J. Kloxin, and C.N. Bowman, "Stress Relaxation by Addition-Fragmentation Chain Transfer in Highly Crosslinked Thiol-Ynes," IADR 89th General Session, San Diego, CA, March 2011.
147. M. Cole, K.M. Schreck, and C.N. Bowman, "Functionalized Siloxane Oligomers for Use as Elastomeric Dental Impression Materials," IADR 89th General Session, San Diego, CA, March 2011.
148. B.D. Fairbanks, S.P. Singh, C.N. Bowman, and K.S. Anseth, "Photodegradable, Photoadaptable Hydrogels via Radical-mediated Disulfide Scission and Thiol-ene Reaction," AIChE Annual Meeting, Salt Lake City, UT, November 2010.
149. H.Y. Park, C.J. Kloxin, T.F. Scott, and C.N. Bowman, "Stress Relaxation by Addition-Fragmentation Chain Transfer in Highly Cross-linked Thiol-Yne Networks," AIChE Annual Meeting, Salt Lake City, UT, November 2010.

- 150.C.J. Kloxin, B. Adzima, and C.N. Bowman, "Externally Triggered Healing of Thermoreversible Covalent Adaptable Network via Self-Limited Hysteresis Heating," AIChE Annual Meeting, Salt Lake City, UT, November 2010.
- 151.B.D. Fairbanks, M.P. Schwartz, C.N. Bowman, M. Zaman, and K.S. Anseth, "Modeling Cellular Microenvironments Using Thiol-ene Extracellular Matrix Mimics," 240th American Chemical Society National Meeting, Boston, MA, August 2010.
- 152.C. Kloxin, H. Park, T. Scott, and C.N. Bowman, "Reversible Addition – Fragmentation Chain Transfer for Low Stress Thiol-ene/yne Networks," 240th American Chemical Society National Meeting, Boston, MA, August 2010.
- 153.K.M. Schreck, N.B. Cramer, C. Couch, J.E. Boulden, J.W. Stansbury, and C.N. Bowman, "Photopolymerized Methacrylate: Thiol-ene Networks for Dental Restorative Applications," 240th American Chemical Society National Meeting, Boston, MA, August 2010.
- 154.W.D. Cook, F. chen, D. Nghiem, C. Moorhoff, J. Sun, S. Thang, C. Bowman, and T. Scott, "New Crosslinked Polymers Exhibiting photo-induced Stress Relaxation," Polymer Networks Group Meeting, Goslar Germany, August 2010.
- 155.B.J. Adzima, C.J. Kloxin, and C.N. Bowman, "Fracture Healing of a Polymer network via Hysteresis Heating," Polymer Networks Group Meeting, Goslar, Germany, August 2010.
- 156.R. Sheridan and C. Bowman, "Factors Controlling Fracture Healing Performance in Thermoreversible Polymer Networks," Polymer Networks Group Meeting, Goslar, Germany, August 2010.
- 157.W. Cook, F. Chen, Cornelis Moorhoff, D. Nghiem, J. Sun, S. Thang, C. Bowman, and T. Scott, "Photo-induced Creep and Stress Relaxation in Crosslinked Polymers Using B-scission of Allylic Thio-ether United in Network Strands," MACRO2010, 43rd IUPAC World Polymer Congress, Glasgow, UK, July 2010.
- 158.C. Bowman, "Photochemical and Thermal Covalent Adaptable Networks," MACRO2010, 43rd IUPAC World Polymer Congress, Glasgow, UK, July 2010.
- 159.C. Kloxin, T. Scott, and C. Bowman, "Addition-fragmentation Chain Transfer in Chemical Networks," MACRO2010, 43rd IUPAC World Polymer Congress, Glasgow, UK, July 2010.
- 160.A. Lowe, A. Harvison, J. Chan, and C. Bowman, "Thiol-Click Chemistries in Polymer Synthesis and Modification," MACRO2010, 43rd IUPAC World Polymer Congress, Glasgow, UK, July 2010.
- 161.H. Park and C.N. Bowman, "Stress Relaxation by AFCT in the Photopolymerization of Highly Cross-linked Thiol-yne Networks," RadTech UV&EVB Tech Expo and Conference, Baltimore, MD, May 2010.
- 162.N. Cramer and C.N. Bowman, "Unique Polymerization Properties of Thiol-ene-methacrylate Systems," RadTech UV&EVB Tech Expo and Conference, Baltimore, MD, May 2010.
- 163.B.D. Fairbanks, H. Park, C. Kloxin, T. Scott, K. Anseth, and C.N. Bowman, "Mechanism and Kinetics of Novel, Step-growth Thiol-yne Photopolymerization," IADR/AADR Annual Meeting, Washington, DC, March 2010.
- 164.N. Cramer and C.N. Bowman, "Measurement and Modeling of Oxygen Inhibition Layer in Radical Photopolymerizations," IUCRC Meeting, Iowa City, IA, January 2010.
- 165.A. Pendurti and C.N. Bowman, "Modeling Property Evolution in Photopolymer Systems," IUCRC Meeting, Iowa City, IA, January 2010.
- 166.K. Schreck and C.N. Bowman, "Molecularly Filled Composites," IUCRC Meeting, Iowa City, IA, January 2010.
- 167.N.C. Cramer, D.P. Nair, R. Shandas, and C.N. Bowman, "Thiol-ene Systems as Shape Memory Polymers," 11th Pacific Polymer Conference, Cairns, Australia, December 2009.

- 168.K. Ha, K. Hwang, and C.N. Bowman, "Surface Modification of Silica Nanoparticles and Their Effects on the Self-Life Stability of of Thiol-ene Formulations," 238th ACS National Meeting, Washington, DC, August 2009.
- 169.W.D. Cook, T.F. Scott, C.N. Bowman, F. Chen, D. Nghiem, S. Chausson, and L. LePluart, "Photo-induced Viscoelastic Creep and Stress Relaxation in Crosslinked Polymers," 238th ACS National Meeting, Washington, DC, August 2009.
- 170.C.N. Bowman, C.J. Kloxin, H. Park, and T.F. Scott, "Concurrent and Photopolymerization and Stress Relaxation Covalent Adaptable Networks," 238th ACS National Meeting, Washington, DC, August 2009.
- 171.J.S. Ashley, A. Zinchenko, R.H.Davis, and C.N. Bowman, "Modeling of Particle Transport at Low Reynold's Number in Complex Channels Using a Dynamic Boundary-Integral Method," 2009 AIChE Annual Meeting, Nashville, TN, November 2009.
- 172.C.J. Kloxin, B. Adzima, T.F. Scott, and C.N. Bowman, "Photochemical and Thermally Adaptable Networks," 2009 AIChE Annual Meeting, Nashville, TN, November 2009.
- 173.B.J. Berron and C.N. Bowman, "Basic and Applied Studies in Biologically Relevant Polymer Thin Films," 2009 AIChE Annual Meeting, Nashville, TN, November 2009.
- 174.H.J. Avens, B.J. Berron, and C.N. Bowman, "Fluorescent Polymerization-Based Signal Amplification of Antigenic Binding Events for Immunofluorescent Imaging of Cells," 2009 AIChE Annual Meeting, Nashville, TN, November 2009.
- 175.K.R. Voigt, H.J. Avens, B.J. Berron, V. Balasubramaniam, G.J. Seedorf, and C.N. Bowman, "Polymer-Based Amplification of Cellular Protein Detectin," 2009 AIChE Annual Meeting, Nashville, TN, November 2009.
- 176.B.J. Berron, L.M. Johnson, X. Ba, and C.N. Bowman, "Kinetic Investigation of Enzymatic Initiation of Biocompatible Polymer Thin Films," 2009 AIChE Annual Meeting, Nashville, TN, November 2009.
- 177.B.J. Berron, H.J. Avens, and C.N. Bowman, "Polymerization Enhanced Immunofluorescent Staining," 2009 AIChE Annual Meeting, Nashville, TN, November 2009.
- 178.J. Boulden, N. Cramer, M. Trujillo-Lemon, C. Bracho-Troconis, and C.N. Bowman, "Properties of Ternary Methacrylate-Thiol-Ene Composites," IADR General Session, Miami, FL, April, 2009
- 179.H.Y. Park, C.J. Kloxin, and C.N. Bowman, "Stress Relaxation by Additional-Fragmentation in Polymer Networks," IADR General Session, Miami, FL, April, 2009
- 180.K. Schreck, N. Cramer, C. Couch, R. Wydra, J.W. Stansbury, and C.N. Bowman, "Visible-light-cured Thiol-ene Resins for Dental Restorative Applications," IADR General Session, Miami, FL, April, 2009
- 181.J. Biggs, J.A. Morrill, C.N. Bowman and J.W. Stansbury, "Development of Quantitative Structure-Activity Relationships for Predictive Modeling of Dental Biomaterials," 237th American Chemical Society National Meeting and Exposition, Salt Lake City, UT, March 2009
- 182.H.J. Avens, and C.N. Bowman, "Polymerizaation for Signal Amplification of Antibody-based Biodetection," 237th American Chemical Society National Meeting and Exposition, Salt Lake City, UT, March 2009
- 183.H. Avens and C.N. Bowman, "Polymerization-Based Signal Amplification for Improved Biodetection in Antibody Microarrays" 30th Australasian Polymer Symposium, Melbourne, Australia, November 2008.
- 184.L. Johnson, R. Hansen, and C.N. Bowman, "Polymerization-Based Signal Amplification for the Detection of Cancer Biomarkers"30th Australasian Polymer Symposium, Melbourne, Australia, November 2008.
- 185.B. Adzima, C.J. Kloxin, T.F.Scott, and C.N. Bowman, "Characterization of the Temperature Dependent Chemical and Mechanical Properties of a Diels-Alder Based Crosslinked Polymeric Material," Annual AIChE Meeting, Philadelphia, PA, November 2008.

- 186.R.R. Hansen, H.J. Avens, R. Shenoy, and C.N. Bowman, "Quantitative Evaluation of Oligonucleotide Surface Concentrations Using Polymerization-Based Amplification," Annual AIChE Meeting, Philadelphia, PA, November 2008.
- 187.L. Johnson and C.N. Bowman, "Signal Amplification Method for the Detection of Biomarkers Using Radical Chain Polymerization," American Chemical Society National Meeting, Philadelphia, PA, August 2008.
- 188.R. Hansen, H.D. Sikes, L.M. Johnson, and C.N. Bowman, "Development of Polymerization Based Amplification for the Detection of Nucleic Acid Hybridization," 8th World Biomaterials Congress, Amsterdam, May 2008.
- 189.B. Fairbanks, P. Polizzotti, C. Nuttelman, C. Bowman, and K. Anseth, "Thiol-ene Photopolymerization for the Synthesis of Poly(ethylene glycol)-peptide Hydrogels," 8th World Biomaterials Congress, Amsterdam, May 2008.
- 190.C.N. Bowman, P.M. Johnson, and J.W. Stansbury, "Optimization of Photopolymer Formulations from High-Throughput Analysis and Modeling," RadTech – The Association for UV & EB Technology, Chicago, IL, May 2008.
- 191.N. Cramer, J. Boulden, L. Scheidewind, and C.N. Bowman, "Multicomponent Thiol-Ene Systems for Tailored Polymer Properties," RadTech – The Association for UV & EB Technology, Chicago, IL, May 2008.
- 192.J.E. Boulden, N.B. Cramer, and C.N. Bowman, "Thiol-ene Based Reconstructive Dental Materials," 235th American Chemical Society National Meeting, New Orleans, LA, April 2008.
- 193.C.J. Kloxin, T.F. Scott, R.B. Draughon, and C.N. Bowman, "Photoinduced Stress Relaxation in Thiol-ene Polymer Networks," 235th American Chemical Society National Meeting, New Orleans, LA, April 2008.
- 194.C.N. Bowman, C.J. Kloxin, T.F. Scott, and R.B. Draughon, "New Mechanism for Concurrent Photopolymerization and Stress Relaxation," 37th Annual Meeting and Exhibition of AADR, Dallas, TX, April 2008.
- 195.N. Cramer, H. Kilambi, L. Schneidewind, J.W. Stansbury, and C. Bowman, "Highly Reactive Monomethacrylates as Reactive Diluents for Dimethacrylate-based Dental Composites," 37th Annual Meeting and Exhibition of AADR, Dallas, TX, April 2008.
- 196.J.W. Garcia, P.K. Shah, C.N. Bowman, and J.W. Stansbury, "Effects of Reaction Kinetics and Conversion on Photopolymerization Stress Development," 37 Annual Meeting and Exhibition of AADR, Dallas, TX, April 2008.
- 197.C.N. Bowman, "The Origins and Mitigation of Stress Development During Photopolymerizations," 3M IUCRC Day, Minneapolis, MN, April 2008.
- 198.N. Cramer and C.N. Bowman, "Mechanistic Studies, Advanced Characterization, and Novel Development of Thiol-Ene Reactions," 3M IUCRC Day, Minneapolis, MN, April 2008.
- 199.K. Schreck, T-Y Lee, and C.N. Bowman, "Molecular Fillers for Thiol-Ene Composites, 3M IUCRC Day, Minneapolis, MN, April 2008.
- 200.C.J. Kloxin, T.F. Scott, R.B. Draughon, and C.N. Bowman, "New Mechanism for Stress Relaxation During Polymerization," 3M IUCRC Day, Minneapolis, MN, April 2008.
- 201.M.P. Schwartz, R.K. Sivamani, C.R. Nuttelman, B.D. Fairbanks, R.R. Isseroff, and K.S. Anseth, "Delivery of Human Mesenchymal Stem Cells in a Synthetic Biodegradable Scaffold for Treating Skin Wounds," 3M IUCRC Day, Minneapolis, MN, April 2008.
- 202.V. Khire and C.N. Bowman, "Surface Modification Using Thiol-ene and Thiol-acrylate Polymerizations," 3M IUCRC Day, Minneapolis, MN, April 2008.

- 203.J. Garcia, C.N. Bowman, and J.S. Stansbury, "Controlled Formation and Practical Use of Polymer/Polymer Interfaces," 3M IUCRC Day, Minneapolis, MN, April 2008.
- 204.S. Ye and C.N. Bowman, "Thermal Initiation of Thiol-ene Polymerizations," 3M IUCRC Day, Minneapolis, MN, April 2008.
- 205.R.R. Hansen, H.D. Sikes, and C.N. Bowman, "Photopolymerization for Signal Amplification in the Detection of Biomolecular Recognition," Annual 2007 AIChE Meeting, Salt Lake City, UT, November 2007.
- 206.K. Anseth, R.P. Sebra, K.S. Master, and C.N. Bowman, "Photografting Antibodies for Rapid Antigen Detection in Biologically Complex Fluids," Annual 2007 AIChE Meeting, Salt Lake City, UT, November 2007.
- 207.A. Aguirre, B. Adzima, T.F. Scott, C.J. Kloxin, and C.N. Bowman, "Thermo-Reversibility and Crack-Healing of a Cross-Linked Maleimide/furan Polymer," Annual 2007 AIChE Meeting, Salt Lake City, UT, November 2007.
- 208.C.N. Bowman, K. Anseth, A. Kannurpatti, A. Guymon, M. Goodner, A.T. Metters, L. Lovell, J. Elliott, K.A. Berchtold, N. Cramer, E. Beckel, A. O'Brien, S. Reddy, and H. Kilambi, "Reaction Engineering of Photopolymerized Systems," Annual 2007 AIChE Meeting, Salt Lake City, UT, November 2007.
- 209.R.R. Hansen, H.D. Sikes, L.M. Johnson, and C.N. Bowman, "Detection of Codon 12 K-Ras Mutations Using a Photopolymerization-Based Signal Amplification Method," Molecular Diagnostics in Cancer Therapeutic Development Conference, Denver, CO, September 2007.
- 210.L. Johnson, J. Yang, R. Hansen, and C.N. Bowman, "A High Throughput Assay for the Detection of Cancer Biomarkers via the Novel Redox-Initiated Radical Chain Polymerization Signal Amplification Method," Poster Presentation at Molecular Diagnostics in Cancer Therapeutic Development Conference, Denver, CO, September 2007.
- 211.N. Cramer, T-Y Lee, J. Carioscia, and C.N. Bowman, "Multicomponent Thiol-Ene Systems for Advanced Applications," Photopolymerization Fundamentals 2007 Meeting, Breckenridge, CO, June 2007.
- 212.R.R. Hansen, H.D. Sikes, and C.N. Bowman, "Visible Light Photopolymerization for Detection of Nucleic Acid Hybridization," Photopolymerization Fundamentals 2007 Meeting, Breckenridge, CO, June 2007.
- 213.H. Avens and C.N. Bowman, "Characterization and Kinetic Studies of a Visible Light Initiator Functionalized for Biodetection," Poster Presentation, Photopolymerization Fundamentals 2007 Meeting, Breckenridge, CO, June 2007.
- 214.L. Johnson, J. Yang, R. Hansen, and C.N. Bowman, "Detection of Single Base Pair Mutations via the Radical Chain Polymerization Signal Amplification Method," Poster Presentation, Photopolymerization Fundamentals 2007 Meeting, Breckenridge, CO, June 2007.
- 215.P. Johnson and C.N. Bowman, "Light Intensity Gradients for (Meth)acrylate Photopolymerization Analysis," Poster Presentation, Photopolymerization Fundamentals 2007 Meeting, Breckenridge, CO, June 2007.
- 216.J. Ashley, C.N. Bowman, and R.H. Davis, "Hydrodynamic Selection of Particulate Matter Using Pinched Flow Fractionation," Poster Presentation, Photopolymerization Fundamentals 2007 Meeting, Breckenridge, CO, June 2007.
- 217.V. Khire and C.N. Bowman, "Surface Modification Using Thiol-Ene and Thiol-Acrylate Polymerizations," Poster Presentation, Photopolymerization Fundamentals 2007 Meeting, Breckenridge, CO, June 2007.
- 218.C. Kloxin and C.N. Bowman, "Stress Relief in Photopolymer Systems," Poster Presentation, Photopolymerization Fundamentals 2007 Meeting, Breckenridge, CO, June 2007.
- 219.T. Scott and C.N. Bowman, "Diffraction Unlimited Photolithography," Poster Presentation, Photopolymerization Fundamentals 2007 Meeting, Breckenridge, CO, June 2007.

- 220.V. Khire and C.N. Bowman, "Gradient Polymer Films on Surfaces Using Thiol-ene and Thiol-acrylate Polymerizations," 233rd National Meeting of the American Chemical Society, Chicago, IL, March 2007.
- 221.V. Khire, D.S.W. Benoit, K.S. Anseth, and C.N. Bowman, "Surface Modification Using Thiol-ene and Thiol-acrylate Polymerizations," 233rd National Meeting of the American Chemical Society, Chicago, IL, March 2007.
- 222.C.N. Bowman, T.F. Scott, and R.B. Draughon, "Photoinduced Stress Relaxation and Actuation in Crosslinked Polymers," Annual AIChE Meeting, San Francisco, CA, November 2006.
- 223.S.R. Reddy, K.S. Anseth, and C.N. Bowman, "Design and Development of Novel Thiol-Vinyl Photopolymerization Chemistries for Advanced Applications," Poster Presentation, Annual AIChE Meeting, San Francisco, CA, November 2006.
- 224.S.R. Reddy, C.N. Bowman, and K.S. Anseth, "Photopolymerizable Tough Elastomeric Biomaterials," Annual AIChE Meeting, San Francisco, CA, November 2006.
- 225.M.C. Lawson, K.S. Anseth, and C.N. Bowman, "A Novel Antibacterial Polymer: Orthopaedic and Other Applications," Annual AIChE Meeting, San Francisco, CA, November 2006.
- 226.V. Khire, A.W. Harant, and C. N. Bowman, "Organic Films on Surfaces Using Thiol-ene Polymerizations," 232nd National ACS Meeting, San Francisco, CA, September 2006.
- 227.R.R. Hansen, H.D. Sykes, L.M. Johnson, and C.N. Bowman, "Visible Light Photopolymerization for the Detection of Biomolecular Recognition," 232nd National ACS Meeting, San Francisco, CA, September 2006.
- 228.C. Bowman, H. Lu, B.E. Lehigh, and J.W. Stansbury, "Hybrid Methacrylate/Thiol-ene System for Novel Dental Resins," 84th General Session & Exhibition of the IADR, Brisbane, Australia, June 2006.
- 229.N. Cramer, J. Carioscia, H. Lu, J.W. Stansbury, and C. Bowman, "Thiol-Enes as Low-Shrinkage, Low-Stress, High-Tg Dental Restorative Materials," 35th Annual Meeting & Exhibition of the AADR, Orlando, FL, March 2006.
- 230.C. Bowman, T. Scott, A. Schneider, R. Draughon, and W.D. Cook, "Photoinduced Stress Relaxation in Crosslinked Polymers," 35th Annual Meeting & Exhibition of the AADR, Orlando, FL, March 2006.
- 231.H. Lu, S.M. Newman, C.N. Bowman, and J.W. Stansbury, "Dimer Acid Derived Dimethacrylate for Ternary Dental Restorative Resins," 35th Annual Meeting & Exhibition of the AADR, Orlando, FL, March 2006.
- 232.H. Lu, B.E. Lehigh, J.W. Stansbury, and C.N. Bowman, "Hybrid Methacrylate/Thiol-ene System for Novel Dental Resins," 35th Annual Meeting & Exhibition of the AADR, Orlando, FL, March 2006.
- 233.T.M. Lovestead, K.A. Berchtold, and C.N. Bowman, "An Investigation of Chain Length Dependent Termination and Reaction Diffusion Controlled Termination during the Free Radical Photopolymerization of Multivinyl Monomers," 28th Australasian Polymer Symposium, Rotorua, New Zealand, February 2006.
- 234.N. Cramer, J. Carioscia, S. Reddy, H. Lu, J. Stansbury, and C. Bowman, "Advanced Polymer Properties from Thiol-Ene Photopolymerizations," 28th Australasian Polymer Symposium, Rotorua, New Zealand, February 2006.
- 235.C.N. Bowman, T.F. Scott, A.D. Schneider, and W.D. Cook, "Photo-induced Alteration of Polymer Network Topology," Pacifichem 2005 Congress, Honolulu, Hawaii, December 2005.
- 236.C.N. Bowman, H. Sikes, R. Hansen, R. Jenison, and K. Rowlen, "Photopolymerization as a Method of Robust, Inexpensive Signal Amplification in the Sensitive Detection of Molecular Recognition Events," Pacifichem 2005 Congress, Honolulu, Hawaii, December 2005.

- 237.H. Sikes and C.N. Bowman, "Synthesis and Characterization of Water-Soluble Macroinitiators Containing Bio-Recognition Elements for Use in Biosensing Applications," Pacificchem 2005 Congress, Honolulu, Hawaii, December 2005.
- 238.H. Sikes, R. Hansen, R. Jenison, K. Rowlen, and C.N. Bowman, "Photopolymerization for Signal Amplification in the Detection of Biomolecular Recognition Events," Annual AIChE Meeting, Cincinnati, OH, November 2005.
- 239.J.A. Cariosia and C.N. Bowman, "Photopolymerizable Thiol/Vinyl Ether Hybrid Materials," Annual AIChE Meeting, Cincinnati, OH, November 2005.
- 240.A. Harant, C.N. Bowman, and V.S. Khire, "Patterned Ultrathin Polymer Films Using Thiol-Ene Polymerizations," Annual AIChE Meeting, Cincinnati, OH, November 2005.
- 241.H.D. Sikes, R. Hansen, R. Jenison, K. Rowlen, and C.N. Bowman, "Photopolymerization for Signal Amplification in the Detection of Biomolecular Recognition Events," Annual AIChE Meeting, Cincinnati, OH, November 2005.
- 242.S.K. Reddy, A.E. Rydholm, K.S. Anseth, and C.N. Bowman, "Degradation of Thiol-Acrylate and Thiolene Polymer Systems: Networks Control for Tissue Engineering Applications," 44th Microsymposium on Polymer Gels and Networks, Prague, Czech Republic, July 2005.
- 243.C. N. Bowman, S. K. Reddy, A. E. Rydholm, and K. S. Anseth, "Degradable Thiol-Acrylate and Thiolene Systems: Network Control for Tissue Engineering," 2nd International Conference on Tissue Engineering, Crete, Greece, May 2005.
- 244.C.N. Bowman, K.T. Haraldsson, R.P. Sebra, B.T. Good, J.B. Hutchison, and K.S. Anseth, "Novel Materials and Methods for Microfluidic Device Manufacture," Society for Biomaterials Annual Meeting, Memphis, TN, April 2005.
- 245.N. B. Cramer, S. Reddy, and C.N. Bowman, "Kinetics and Mechanism of Thiol-Ene Photopolymerizations with and without Photoinitiators," Annual AIChE Meeting, Austin, TX, November, 2004.
- 246.A.K. O'Brien and C.N. Bowman, "The Impact of Oxygen on Photopolymerization Kinetics," Annual AIChE Meeting, Austin, TX, November, 2004.
- 247.P.M. Johnson, J.W. Stansbury, and C.N. Bowman, "Rapid analysis of conversion and material properties using photopolymer property gradients," Annual AIChE Meeting, Austin, TX, November, 2004.
- 248.R.P. Sebra, K.S. Masters, K.S. Anseth, and C.N. Bowman, "A Rapid Antigen Detection Assay Using Photografted Whole Antibodies," Annual AIChE Meeting, Austin, TX, November, 2004.
- 249.A.E. Rydholm, S. Reddy, K.S. Anseth, and C.N. Bowman, "Fundamental Studies of Degradable Thiol-Acrylate Photopolymeric Biomaterials as Tissue Engineering and Drug Delivery Scaffolds," Annual AIChE Meeting, Austin, TX, November, 2004.
- 250.C.N. Bowman, "Biofluidic Transport and Molecular Recognition In Polymeric Microdevices," Symbiosis PI Meeting, Vail, Colorado, October, 2004.
- 251.S.K. Reddy, N.B. Cramer, K.S. Anseth, and C.N. Bowman, "Thiol-acrylate Photopolymerizations: Controlled Network Evolution," Polymer Networks 2004 Conference, Bethesda, MD, August, 2004.
- 252.C.N. Bowman, H. Lu, and J.W. Stansbury, "Thiol-ene Dental Materials," 228th ACS National Meeting, Philadelphia, PA, August, 2004.
- 253.J.A. Carioscia, H. Lu, J. W. Stansbury, and C. N. Bowman, "Thiol-ene Oligomers as Dental Restorative Material," 228th ACS National Meeting, Philadelphia, PA, August, 2004.
- 254.H. Kilambi, E.R. Beckel, J.W. Stansbury, and C.N. Bowman, "Kinetic Studies of Novel (Meth)acrylic Monomers," 228th ACS National Meeting, Philadelphia, PA, August, 2004.

- 255.C.N. Bowman, N.B. Cramer, and S.K. Reddy, "Kinetics and Mechanism of Thiol-ene Photopolymerizations with and without Photoinitiators," 228th ACS National Meeting, Philadelphia, PA, August, 2004.
- 256.S.K. Reddy, N.B. Cramer, A. Rydholm, K.S. Anseth, and C.N. Bowman, "Controlled Network Architectures through Thiol-ene and Thiol-acrylate Photopolymerizations," 228th ACS National Meeting, Philadelphia, PA, August, 2004.
- 257.A.K. O'Brien and C.N. Bowman, "The Impact of Oxygen on Photopolymerization Kinetics and Polymer Structure," 228th ACS National Meeting, Philadelphia, PA, August, 2004.
- 258.M.A. Rice, P. Martens, S.J. Bryant, M.J. Mahoney, C.N. Bowman, and K.S. Anseth, "Photopolymerization of Synthetic Hydrogel Niches for 3D Cell Culture and Tissue Regeneration," 228th ACS National Meeting, Philadelphia, PA, August, 2004.
- 259.N.B. Cramer, S.K. Reddy, and C.N. Bowman, "Structures, Reactions, and Applications of Thiol-Ene Photopolymerizations," World Polymer Congress MACRO 2004, Paris, France, July 4-9, 2004.
- 260.C.N. Bowman, H. Lu, J.W. Stansbury "Probing the Fundamental Relationship Between Polymerization Shrinkage Stress and Degree of Conversion," 7th World Biomaterials Congress, Sydney, Australia, May, 2004.
- 261.C.N. Bowman, H. Lu, J.W. Stansbury, and N.B. Cramer, "Investigation of Thiol-Ene System for Novel Dental Restorative Resins," 7th World Biomaterials Congress, Sydney, Australia, May, 2004.
- 262.H. Sikes and C.N. Bowman, "Photopolymerization for Amplification and Detection of Biomolecular Recognition Events," 7th World Biomaterials Congress, Sydney, Australia, May, 2004.
- 263.P.M. Johnson, T.B. Reynolds, C.N. Bowman, and J.W. Stansbury, "Rapid Analysis of Photopolymer Conversion as a Function of Composition and Exposure Time," American Chemical Society Spring Conference, Division of Polymer Chemistry, Anaheim, CA, March, 2004.
- 264.S.M. Newman, J.W. Stansbury, and C.N. Bowman, "Synthesis and Photopolymerization Kinetics of Hydroxymethacrylates," International Association for Dental Research Annual Meeting, Honolulu, HI, March, 2004.
- 265.J.A. Carioscia and C.N. Bowman, "Reactive Oligomeric Thiol and Ene Materials as Dental Restorative Resins," International Association for Dental Research Annual Meeting, Honolulu, HI, March, 2004.
- 266.A.K. O'Brien and C.N. Bowman, "The Impact of Oxygen on Photopolymerized Materials," International Association for Dental Research Annual Meeting, Honolulu, HI, March, 2004.
- 267.H. Lu, J.W. Stansbury, and C.N. Bowman, "Filler Effect on Shrinkage Stress and In Situ Polymerization Kinetics," International Association for Dental Research Annual Meeting, Honolulu, HI, March, 2004.
- 268.C.N. Bowman, "Novel (Meth)Acrylate Monomers for Ultrarapid Polymerization and Enhanced Polymer Properties," 20th Annual Scientific Meeting of the Colorado Section, American Association for Dental Research," Denver, CO, February, 2004.
- 269.S.M. Newman, J.W. Stansbury, and C.N. Bowman, "Synthesis and Photopolymerization Kinetics of Hydroxymethacrylates," 20th Annual Scientific Meeting of the Colorado Section, American Association for Dental Research," Denver, CO, February, 2004.
- 270.J.A. Carioscia and C.N. Bowman, "Reactive Oligomeric Thiol and Ene Materials as Dental Restorative Resins," 20th Annual Scientific Meeting of the Colorado Section, American Association for Dental Research," Denver, CO, February, 2004.
- 271.H. Lu and C.N. Bowman, "Towards the Elucidation of Polymerization Shrinkage Stress Development & Relaxation in Dental Composites," 20th Annual Scientific Meeting of the Colorado Section, American Association for Dental Research," Denver, CO, February, 2004.

272. C.N. Bowman, H. Lu, and J.W. Stansbury, "Novel Investigation of Thiol-ene System for Future Dental Restorative Resins," 20th Annual Scientific Meeting of the Colorado Section, American Association for Dental Research," Denver, CO, February, 2004.
273. R.P. Sebra III, H.M. Simms, K.S. Anseth, and C.N. Bowman, "Living Radical Photopolymerization for Constructing Polymeric 3D Microfluidic Devices with Spatially Controlled Grafted Functionalities," AIChE National Meeting, San Francisco, CA, November, 2003.
274. A.W. Harant and C.N. Bowman, "In Situ Scanning Probe Microscopy of Solvent Vapor Annealed Block Copolymer Films on Organosilane Self-Assembled Monolayers," AIChE National Meeting, San Francisco, CA, November, 2003.
275. J.B. Hutchison, K.T. Haraldsson, C.J. Hawker, and C.N. Bowman, "Novel Technologies for Three-Dimensional Polymeric Microsensors," AIChE National Meeting, San Francisco, CA, November, 2003.
276. E.R. Beckel, J. Nie, J.W. Stansbury, and C.N. Bowman, "Effect of Aryl Substitution on the Polymerization Rate of Novel Monovinyl Acrylate Monomers," AIChE National Meeting, San Francisco, CA, November, 2003.
277. T.M. Lovestead and C.N. Bowman, "Non-Classical Termination Kinetics in Multivinyl Free Radical Photopolymerizations," AIChE National Meeting, San Francisco, CA, November, 2003.
278. T.M. Lovestead and C.N. Bowman, "Comprehensive Modeling and Advanced Experimental Characterization of Photopolymerization Kinetics," 2003 Fall Meeting of the Industry/University Cooperative Research Center for Fundamentals and Applications of Photopolymerizations, Boulder, CO, September, 2003.
279. A.K. O'Brien and C.N. Bowman, "The Impact of Oxygen on Photopolymerization Kinetics and Polymer Structure," 2003 Fall Meeting of the Industry/University Cooperative Research Center for Fundamentals and Applications of Photopolymerizations," Boulder, CO, September, 2003.
280. S.K. Reddy, N.B. Cramer, T. Cross, R. Raj, and C.N. Bowman, "Polymer Derived Ceramic Materials from Thiol-ene Photopolymerizations," American Chemical Society Fall Conference, Division of Polymer Chemistry, New York, NY, September, 2003.
281. A.W. Harant and C.N. Bowman, "Nanopatterning Self-assembled Monolayers Using Block Copolymer Lithography," American Chemical Society Fall Conference, Division of Polymer Chemistry, New York, NY, September, 2003.
282. A.K. O'Brien and C.N. Bowman, "Comprehensive Modeling of Photopolymerization Kinetics," 26th Australasian Polymer Symposium, Noosa, Queensland, Australia, July, 2003.
283. N.B. Cramer, S.K. Reddy, and C.N. Bowman, "Structures, Reactions, and Applications of Thiol-ene Photopolymerizations," 26th Australasian Polymer Symposium, Noosa, Australia, July, 2003.
284. T.M. Lovestead and C.N. Bowman, "Multivinyl Free Radical Photopolymerization Kinetics," 26th Australasian Polymer Symposium, Noosa, Australia, July, 2003.
285. K.T. Haraldsson, J.B. Hutchison, R.P. Sebra III, H. Simms, R. Davis, C.N. Bowman and B. Good, "Fabrication of Photopolymeric Microfluidic Devices and Components," 26th Australasian Polymer Symposium, Noosa, Australia, July, 2003.
286. E.R. Beckel, H. Lu, J. Nie, J.W. Stansbury, and C.N. Bowman, "Fundamental Studies of Novel (Meth)Acrylate Monomers for Dental Restorative Applications," 81st General Session of the International Association for Dental Research, Goteborg, Sweden, July, 2003.
287. H. Lu, J.W. Stansbury, S.H. Dickens, F.C. Eichmiller, and C.N. Bowman, "Effect of Curing Protocol on Polymerization Shrinkage Stress Development," 81st General Session of the International Association for Dental Research, Goteborg, Sweden, July, 2003.

- 288.A. Harant and C.N. Bowman, "Nanopatterning Surface Chemistry with Block Copolymer Lithography of Organosilane Self-Assembled Monolayers," Gordon Research Conference, Polymers East, South Hadley, MA, June, 2003.
- 289.H. Sikes and C.N. Bowman, "Use of a Photopolymerization Reaction to Detect Hybridization to a DNA Microarray," Gordon Research Conference, Polymers East, South Hadley, MA, June, 2003.
- 290.N.B. Cramer and C.N. Bowman, "Crosslinking in Thiol-acrylate Photopolymerizations," American Chemical Society Spring Conference, Division of Polymer Chemistry, New Orleans, LA, March, 2003.
- 291.K.A. Berchtold, T.W. Randolph, C.N. Bowman, "Using EPR Spectroscopy in Conjunction with FT-NIR Spectroscopy Study Cross-linking Photopolymerization Kinetics," American Chemical Society Spring Conference, Division of Polymeric Materials: Science and Engineering, New Orleans, LA, March, 2003
- 292.R.P. Sebra III, J.B. Hutchison, K.T. Haraldsson, K.S. Anseth, C.N. Bowman, "Living Radical Photopolymerizations to Modify Surfaces in Microfluidic Devices for Biological Applications," American Chemical Society Spring Conference, Division of Polymer Chemistry, New Orleans, LA, March, 2003
- 293.E.R. Beckel, K.A. Berchtold, J. Nie, H. Lu, J.W. Stansbury, C.N. Bowman, "Novel (Meth)Acrylate Monomers for Ultrarapid Polymerization and Enhanced Polymer Properties," American Chemical Society Spring Conference, Division of Polymer Chemistry, New Orleans, LA, March, 2003
- 294.N.B. Cramer, T. Davies, A.K. O'Brien, C.N. Bowman, "Kinetics and Modeling of Thiol-ene Photopolymerizations," American Chemical Society Spring Conference, Division of Polymer Chemistry, New Orleans, LA, March, 2003.
- 295.H. Lu, S.H. Dickens, F.C. Eichmiller, J.W. Stansbury, C.N. Bowman, "Novel Method of Simultaneous Measurement of Polymerization Shrinkage Stress and Conversion," International Association of Dental Research, San Antonio, TX, March, 2003.
- 296.S.M. Newman, J.W. Stansbury, C.N. Bowman, D.M. Knauss, "Fast-reacting Novel Monomethacrylates," International Association of Dental Research Annual Meeting, San Antonio, TX, March, 2003.
- 297.C.N. Bowman, H. Lu, J. Nie, J.W. Stansbury, "Development of Rapidly Polymerizing Monomethacrylates as Reactive Diluents," International Association of Dental Research Annual Meeting, San Antonio, TX, March, 2003.
- 298.B.T. Good, R.H. Davis, and C.N. Bowman, "Fabrication of Polymeric Microfluidic Devices," University of Colorado Chemical Engineering Student Annual Research Symposium," Boulder, CO, February, 2003.
- 299.J.W. Stansbury, M. Trujillo, C.N. Bowman, "Development of pH-responsive Hydrogels as Biomaterials," International Association of Dental Research Annual Meeting, San Antonio, TX, March, 2003.
- 300.A.K. O'Brien and C.N. Bowman, "The Impact of Oxygen on Photopolymerization Kinetics and Polymer Structure," 2003 Fall Meeting of the Industry/University Cooperative Research Center for Fundamentals and Applications of Photopolymerizations," Iowa City, IA, January, 2003.
- 301.C.N. Bowman, K.S. Anseth, J.A. Burdick, T.M. Lovestead, "Understanding Chain Length Effects in Multivinyl Photopolymerizations Through Modeling and GPC Investigation of Degradable Networks," AIChE 2002 Annual Meeting, Indianapolis, IN, November, 2002.
- 302.J.A. Burdick, T.M. Lovestead, K.S. Anseth, C.N. Bowman, "Experimental Investigation of Heterogeneity in Thick Networks Formed by the Photoinitiated Polymerization of Divinyl Monomer," AIChE 2002 Annual Meeting, Indianapolis, IN, November, 2002.
- 303.C.N. Bowman, K.A. Berchtold, E.R. Beckel, J. Nie, B. Hacıoglu, "Development of Ultrarapid Polymerization Systems," AIChE 2002 Annual Meeting, Indianapolis, IN, November, 2002.
- 304.A.W. Harant, T.A. Winningham, S.G. Whipple, N.A. Clark, K. Douglas, C.N. Bowman, "Nanopatterning Silicon with Solvent Vapor-Annealed Block Copolymer Films," AIChE 2002 Annual Meeting, Indianapolis, IN, November, 2002.

- 305.T.K. Haraldsson, R.P. Sebra III, J.B. Hutchison, N. Luo, K.S. Anseth, C.N. Bowman, "3D-Microfluidic Devices Using LRPP," AIChE 2002 Annual Meeting, Indianapolis, IN, November, 2002.
- 306.M.E. Staben, C.N. Bowman, "Modeling of Particle Transport in Narrow Microfluidic Channels," Low Reynolds Number Hydrodynamics Session of the AIChE 2002 Annual Meeting, Indianapolis, IN, November, 2002.
- 307.T.M. Lovestead, J.A. Burdick, C.N. Bowman, K.S. Anseth, "Coupling GPC and Modeling to Investigate Kinetic Chain Length in Multivinyl Photopolymerized Degradable Networks," American Chemical Society Conference, Boston, MA, August, 2002.
- 308.C.N. Bowman, "Living Radical Photopolymerizations for Micropatterning," American Chemical Society Conference, Boston, MA, August, 2002.
- 309.R.P. Sebra III, K.T. Haraldsson, N. Luo, J.B. Hutchison, K.S. Anseth, and C.N. Bowman, "3D-Microfluidic Devices Using Liquid Polymer Precursors," American Chemical Society Conference, Boston, MA, August, 2002.
- 310.T.M. Lovestead and C.N. Bowman, "Modeling the Effects of Chain Length on the Termination Kinetics of Multivinyl Photopolymerizations," Polymerization Fundamentals 2002 Conference, Breckenridge, CO, June, 2002.
- 311.A.K. O'Brien and C.N. Bowman, "The Impact of Oxygen on Photopolymerization Kinetics and Polymer Structure," Polymerization Fundamentals 2002 Conference, Breckenridge, CO, June, 2002.
- 312.C.N. Bowman, "Using EPR Spectroscopy in Conjunction with Near-IR Spectroscopy to Study the Kinetics of Crosslinking Photopolymerization," RadTech 2002 Conference, Indianapolis, IN, April, 2002.
- 313.C.N. Bowman, "Effect Of Cure Rate On The Network Evolution And Mechanical Properties Of Highly Crosslinked Photopolymers," RadTech 2002 Conference, Indianapolis, IN, April, 2002.
- 314.C.N. Bowman, A.K. O'Brien, "Modeling Spatial Effects in Photopolymerizations," American Physical Society 2002 Annual Conference, San Antonio, TX, March, 2002.
- 315.C.N. Bowman, "Kinetic Evaluation of Monovinyl Polymerization Systems that Exhibit Rapid Polymerization Behavior and Enhanced Polymer Properties," RadTech 2002 Conference, Indianapolis, IN, April, 2002.
- 316.C.N. Bowman, "Molecular Design as a Tool for Understanding Free Radical Photopolymerization Reactions," 25th Australasian Polymer Symposium, Armidale, Australia, February, 2002.
- 317.N.B. Cramer, J. Fort, and C.N. Bowman, "Properties and Mechanisms of Thiol-ene and Thiol-acrylate Photopolymerizations," 25th Australasian Polymer Symposium, Armidale, Australia, February, 2002.
- 318.T.A. Lovestead, K.A. Berchtold, C.N. Bowman, "Modeling Chain Length Effects on the Termination Kinetics in Multivinyl Free Radical Photopolymerizations," AIChE 2001 Annual Meeting, Reno, NV, November, 2001.
- 319.K.A. Berchtold, T.M. Lovestead, and C.N. Bowman, "A Study of Chain Length Dependent Termination in Photopolymerizations of (Meth)acrylic Monomers," RadTech Europe 2001 Conference, Basel, Switzerland, October, 2001.
- 320.N.B. Cramer, and C.N. Bowman, "Investigation into Thiol-ene and Thiol-acrylate Photopolymerizations," RadTech Europe 2001 Conference, Basel, Switzerland, October, 2001.
- 321.C.N. Bowman, "Formation-Structure-Property Relationships in Polymeric Hydrogels," American Chemical Society Conference, Chicago, IL, August, 2001.
- 322.C.N. Bowman, K.S. Anseth, N. Luo, L.G. Lovell, H. Lu, "Photopolymerized Coatings and Surface Modifications," American Chemical Society Conference, Chicago, IL, August, 2001.

- 323.P. Martens, T.V. Holland, C.N. Bowman, K.S. Anseth, "Synthesis and Characterization of Degradable Poly (vinyl alcohol) Hydrogels," American Chemical Society Conference, Chicago, IL, August, 2001.
- 324.C.N. Bowman, H. Lu, L.G. Lovell, "Structural Evolution in Highly Crosslinked Polymers," European Polymer Federation Congress, Eindhoven, The Netherlands, July, 2001.
- 325.A. Harant and C.N. Bowman, "Atomic Force Microscopy of Solvent Vapor Annealed Block Copolymer Films on Bare Glass and Organosilane Self-Assembled Monolayers," Gordon Research Conference, Liquid Crystals, July, 2001.
- 326.T.M. Lovestead, K.A. Berchtold, and C.N. Bowman, "Modeling the Effects of Chain Length on the Termination Kinetics in Crosslinking Photopolymerizations," Gordon Research Conference, Polymers East, New London, NH, July, 2001.
- 327.N. Cramer and C.N. Bowman, "Kinetics of Thiol-ene and Thiol-acrylate Photopolymerizations," Gordon Research Conference Polymers East, New London, NH, July, 2001.
- 328.B.T. Good, D.A. Rager, and C.N. Bowman, "Hydrogel Micropump for Microfluidic Devices," Gordon Research Conference, Coatings and Films, July, 2001.
- 329.L.G. Lovell, H. Lu, C.N. Bowman, "The Effect of Cure Rate on the Mechanical Properties of Highly Crosslinked Biomaterials," Society for Biomaterials 27th Annual Meeting, St. Paul, MN, April, 2001.
- 330.K.A. Berchtold, J. Nie, J.W. Stansbury, C.N. Bowman, "Structural Effects on the Cure Characteristics of Functionalized Methacrylate Monomers," Society for Biomaterials 27th Annual Meeting, St. Paul, MN, April, 2001.
- 331.J.E. Elliott, T.M. Lovestead, K.A. Berchtold, C.N. Bowman, "Polymerization Kinetics and Network Formation of Ophthalmological Materials," Society for Biomaterials 27th Annual Meeting, St. Paul, MN, April, 2001.
- 332.P.J. Martens, A.T. Metters, C.N. Bowman, K.S. Anseth, "Modeling the Degradation of Hydrogels Formed from Multi-Functional Macromers," Society for Biomaterials 27th Annual Meeting, St. Paul, MN, April, 2001.
- 333.H. Lu, L.G. Lovell, and C.N. Bowman, "The Effects of Heterogeneity and Curing Temperature on the Mechanical Properties of Light-Cured Resins," American Association for Dental Research, Chicago, IL, March, 2001.
- 334.S.M. Newman, L.G. Lovell, M.M. Donaldson, and C.N. Bowman, "Flexural Strength vs. Conversion vs. Initiation Rate for BisGMA/TEGDMA," American Association for Dental Research, Chicago, IL, March, 2001.
- 335.B. Hacıoglu, A.K. Poshusta, K. S. Anseth, and C.N. Bowman, "MALDI-TOF MS Characterization of Crosslinked Degradable Polymers," Industry/University Cooperative Research Center Winter Meeting, Iowa City, IA, January, 2001.
- 336.C.N. Bowman, K.S. Anseth, and A.T. Metters, "Predicting the Release of High Molecular Weight Solutes from Degradable Poly(ethylene glycol)-Based Networks," North American Membrane Society Meeting, Boulder, CO, 2000.
- 337.C.N. Bowman, K.S. Anseth, A.T. Metters, "Predicting Degradation Behavior of PEG-b-PLI Hydrogels," World Polymer Congress, IUPAC Macro, Warsaw, Poland, 2000.
- 338.C.N. Bowman, K.A. Berchtold, L.G. Lovell, J. Nie, and B. Hacıoglu, "The Significance of Chain-Length Dependent Termination in the Photopolymerization of Multifunctional(Meth)acrylates," IUPAC Polymer Meeting, Warsaw, Poland, 2000.

- 339.C.N. Bowman and K.A. Berchtold, "Using EPR Spectroscopy in Conjunction with Near-IR Spectroscopy to Study the Kinetics of Crosslinking Photopolymerizations," 2000 AIChE National Meeting, Los Angeles, CA, November 2000.
- 340.C.N. Bowman, J.E. Elliott, and M. MacDonald, "Network Formation in Crosslinked Hydrogels," 2000 AIChE National Meeting, Los Angeles, CA, November 2000.
- 341.C.N. Bowman, K.A. Berchtold, J.R. Brown, "A Study of the Effects of Composition on the Photopolymerization Kinetics of a Typical Dental Resin using EPR Spectroscopy," 2000 AIChE National Meeting, Los Angeles, CA, November 2000.
- 342.K.A. Berchtold, J.R. Brown, and C.N. Bowman, "A Study of the Effects of Composition on the Photopolymerization Kinetics of a Typical Dental Resin using Electron Paramagnetic Resonance Spectroscopy," AIChE National Meeting, Los Angeles, CA, November 2000.
- 343.C.N. Bowman, H. Lu, L.G. Lovell, and J.W. Stansbury, "The Effect of Cure Rate on the Network Structure of Crosslinked Dimethacrylate Systems," AIChE National Meeting, Los Angeles, CA, November 2000.
- 344.C.N. Bowman, H. Lu, L.G. Lovell, J.W. Stansbury, "The Effect of Cure Environment and Cure Rate on the Mechanical Properties of Crosslinked Photopolymers," Gordon Research Conference on Polymers (East), New London, CT, June 2000.
- 345.C.N. Bowman and K.A. Berchtold, "A Study of Termination Kinetics of Crosslinking Photopolymerizations using FTIR and EPR Spectroscopy," Gordon Research Conference on Polymers (East), New London, CT, June 2000.
- 346.C.N. Bowman and T.E. Elliott, "Primary Cyclization During the Network Formation of Crosslinked Polymers," Gordon Research Conference on Polymers (East), New London, CT, June 2000.
- 347.C.N. Bowman, L.G. Lovell, and S.M. Newman, "Degree of Cure with a Quick Curing Light," IADR International Meeting, Washington, DC, April 2000.
- 348.C.N. Bowman, L.G. Lovell, H. Lu, J.W. Stansbury, "The Effect of Cure Rate on the Mechanical Properties of Dental Resins," IADR International Meeting, Washington, DC, April 2000.
- 349.B. Hacıoglu and C.N. Bowman, "A Novel Way of Characterizing Photocrosslinked Systems," RadTech Europe 99, Berlin, Germany, November 1999.
- 350.B.E. Elliott and C.N. Bowman, "Photopolymerization of Poly(ethylene glycol) Diacrylate / Cation Complexes: Synthesis of Pseudocrown Ethers," RadTech Europe 99, Berlin, Germany, November 1999.
- 351.J.E. Elliott and C.N. Bowman, " Primary cyclization in Photopolymerization of Crosslinked Polymers," RadTech Europe 99, Berlin, Germany, November 1999.
- 352.J.E. Gibson, L.G. Lovell, and C.N. Bowman, "Primary Cyclization Reactions in Crosslinked Dental Materials," IADR International Meeting, Vancouver BC, March 1999.
- 353.J.E. Elliott and C.N. Bowman, "Crosslinking and Primary cyclization Reactions in Photopolymers," Gordon Research Conference on Coatings & Films, New London, NH, July 1999.
- 354.J.E. Gibson, J.W. Anseth and C.N. Bowman, " Network Formation in Crosslinked Polymer Hydrogels " AIChE National Meeting, Dallas TX, November, 1999.
- 355.L.G. Lovell, Y.A. Oguntemein, and C.N. Bowman, "Mechanical Properties and Structural Heterogeneity of Dental Resins," IADR International Meeting, Vancouver BC, March 1999.
- 356.L. G. Lovell and C. N. Bowman, "Polymerization Behavior of Photocured Dimethacrylate Systems," Gordon Research Conference on Coatings and Films, New London NH, July 1999.

- 357.L. G. Lovell, J. W. Stansbury, D. C. Syrpes, and C. N. Bowman, " Kinetic Studies of Photoinitiated Dimethacrylate Copolymers," RadTech Europe 99 Conference for Radiation Curing, Berlin, Germany, November 1999.
- 358.A.T. Metters, K.S. Anseth, and C.N. Bowman, "Impact of Polymerization Kinetics on Degradation Behavior of Hydrogels," AIChE Annual Fall Meeting, Dallas, TX; November 1999.
- 359.A.T. Metters, K.S. Anseth, and C.N. Bowman, "Optimization of Synthetic Hydrogel Biomaterials Through Control of Microstructure," Biomedical Engineering Society-Engineering in Medicine and Biology Society (BMES-EMBS) 1st Annual Joint Meeting, Atlanta, GA; October 1999.
- 360.A.T. Metters, K.S. Anseth, and C.N. Bowman, "Fundamental Studies of Biodegradable Hydrogels as Cartilage Replacement Materials," 36th Annual Rocky Mountain Bioengineering Symposium: Copper Mountain, CO; April 1999.
- 361.A.T. Metters, K.S. Anseth, and C.N. Bowman, "Fundamental Studies of Biodegradable Hydrogels as Cartilage Replacement Materials," Materials Research Society Spring Meeting: San Francisco, CA; April 1999.
- 362.K.A. Berchtold, C.N. Bowman, "Termination Kinetics of Crosslinking Photopolymerizations of (Meth)Acrylic Monomers using FTIR and EPR Spectroscopy," RadTech Europe 99, Berlin, Germany, November 1999.
- 363.K.A. Berchtold, C.N. Bowman, "Kinetics of Crosslinking Photopolymerizations of (Meth)Acrylic Monomers," AIChE National Meeting, Dallas, TX November 1999 (Materials Science and Engineering Division Poster Contest, First Place).
- 364.K.A. Berchtold, C.N. Bowman, "Termination Kinetics of Crosslinking Photopolymerizations of (Meth)Acrylic Monomers," NIST Polymers Division Seminar, Gaithersburg, MD, June 1999.
- 365.K.A. Berchtold., C.N. Bowman, "Termination & Radical Populations in Photopolymerizations of Multifunctional Monomers," Gordon Research Conference on Coatings & Films, New London, NH, July 1999.
- 366.H. Ma, C.N. Bowman, R.H. Davis, "A Novel Photoinduced Graft Living Polymerization for Membrane Surface Modification" International Congress on Membranes and Membrane Processes, Toronto, Canada, June, 1999.
- 367.H. Ma, C.N. Bowman, R.H. Davis, "Membrane Fouling Reduction for Bacterial Suspensions by Backpulsing and Membrane Surface Modification" Colorado Biotechnology Symposium, Boulder, CO, September, 1999.
- 368.J. Nie, L.G. Lovell, and C.N. Bowman, "The Significance of Chain Length Dependent Termination on the Photopolymerization of Multifunctional (Meth)Acrylates," ACS National Meeting, New Orleans, LA, August, 1999.
- 369.L.G. Lovell, J. Nie and C.N. Bowman, "Chain Length Dependent Termination in the Polymerization of Highly Cross-linked Multifunctional Methacrylates" AIChE National Meeting, Dallas TX, November 1999.
- 370.C.N. Bowman and J.E. Gibson, "Primary Cyclization Reactions in Crosslinked Polymers," AIChE National Meeting, Miami, FL, November 1998.
- 371.C.N. Bowman, M. Pasmore, and P.W. Todd, "Effects of Ultrafiltration Membrane Surface Characteristics on Biofilm Fouling," AIChE National Meeting, Miami, FL, November 1998.
- 372.C.N. Bowman and J.E. Gibson, "Effects of Solvent on Crosslinked Polymer Systems," AIChE National Meeting, Miami, FL, November 1998.
- 373.A.B. Scranton, C.N. Bowman, and B.J. Elliott, "Polymeric Pseudocrown Ether Membranes for Adsorption and Separation of Metal Ions," AIChE National Meeting, Miami, FL, November 1998.

- 374.C.A. Guymon and C.N. Bowman, "Influence of Polymerization Conditions on Performance in Polymer/Ferroelectric Liquid Crystal Composite Thin Films," American Chemical Society National Meeting, August 1998.
- 375.R.T. Pogue, C.N. Bowman, L.V. Natarajan, V.P. Tondiglia, R.L. Sutherland, and T.J. Bunning, "Examining the Role of Cure Temperature on PDLF Films Prepared from High Functionality Films," American Chemical Society National Meeting, August 1998.
- 376.C.A. Guymon and C.N. Bowman, "Formation of PSFLC Thin Films Using a Fluorinated Acrylate," American Chemical Society National Meeting, August 1998.
- 377.J.E. Gibson and C.N. Bowman, "Primary Cyclization Reactions in Crosslinked Polymers," American Chemical Society National Meeting, August 1998.
- 378.L.G. Lovell, A.R. Kannurpatti and C.N. Bowman, "Heterogeneity and Properties of Highly Crosslinked Photopolymers," American Chemical Society National Meeting, August 1998.
- 379.L.G. Lovell, D.C. Syrpes, J.W. Stansbury and C.N. Bowman, "Dimethacrylate Dental Resins: The Effect of Comonomer on the Polymerization Kinetics," American Chemical Society National Meeting, August 1998.
- 380.R. H. Davis, A.R. Kannurpatti, W.D. Mores, M.B. Linck, C.N. Bowman, and H. Ma, "Combined Chemical and Hydrodynamic Approach to Fouling Reduction in Membrane Based Water Treatment," AIChE National Meeting, Los Angeles, CA, November 1997.
- 381.C.A. Guymon and C.N. Bowman, "Polymerization Behavior and Reaction Kinetics During the Polymerization of Polymer/Smectic Liquid Crystal Composites," AIChE National Meeting, Los Angeles, CA, November 1997.
- 382.C.A. Guymon and C.N. Bowman, "Electro-Optic Properties and Polymeric Structure of Thin Film Polymer Stabilized Ferroelectric Liquid Crystals," AIChE National Meeting, Los Angeles, CA, November 1997.
- 383.M.D. Goodner and C.N. Bowman, "Kinetic Modeling of Primary Radical Termination and Optical Thickness in Radical Photopolymerizations," AIChE National Meeting, Los Angeles, CA, November 1997.
- 384.B.J. Elliott, A.B. Scranton, and C.N. Bowman, "Synthesis of Pseudocrown Ether Membranes for Adsorption and Separation of Metal Ions," AIChE National Meeting, Los Angeles, CA, November 1997.
- 385.M.D. Goodner and C.N. Bowman, "Modeling and Experimental Studies of Light Intensity and Initiator Effects on Photopolymerization Rate," Fall ACS National Meeting, Las Vegas, NE, September 1997.
- 386.C.A. Guymon and C.N. Bowman, "Polymerization Kinetics in the Formation of Polymer Stabilized FLCs," FLC 97, France, July 1997.
- 387.M.D. Goodner and C.N. Bowman, "Simulation of Diffusion Controlled Radical Photopolymerizations," Gordon Conference on Elastomers, Networks and Gels, New London, New Hampshire, July 1997.
- 388.M.D. Goodner and C.N. Bowman, "Experiments and Modeling of the Photopolymerization Kinetics of 2-Hydroxyethyl Methacrylate," Spring ACS National Meeting, San Francisco, CA, April 1997.
- 389.C.A. Guymon and C.N. Bowman, "Monomer Segregation in Polymerization of Polymer Stabilized Ferroelectric Liquid Crystals," AIChE National Meeting, Chicago, IL, November 1996.
- 390.C.A. Guymon and C.N. Bowman, "Photopolymerization Kinetics and Monomer Heterogeneity during Formation of Polymer Gels in Ferroelectric Liquid Crystals," Networks 96 Meeting, Doorn, The Netherlands, September 1996.
- 391.C.A. Guymon and C.N. Bowman, "Monomer Heterogeneity Before Polymerization in Polymer Stabilized Ferroelectric Liquid Crystals," American Chemical Society National Meeting, Orlando, FL, August 1996.

392. B.M. Smith, P. Todd, and C.N. Bowman, "An Empirical and Modeling Study of Speciation for Reactive Dendrimeric Polymers in Solution," American Chemical Society National Meeting, Orlando, FL, August 1996.
393. K.L. Thunhorst, R.D. Noble, and C.N. Bowman, "Preparation of Functionalized Polymers by Reactions of Poly (Vinyl Benzyl Chloride)," American Chemical Society National Meeting, Orlando, FL, August 1996.
394. R. Kannurpatti, S. Lu and C. N. Bowman, "Reaction Behavior and Kinetic Modeling Studies of Iniferter Polymerizations," American Chemical Society National Meeting, New Orleans, LA, March 1996.
395. R. Kannurpatti, K. J. Anderson, J. W. Anseth and C. N. Bowman, "Use of Iniferters to Study the Structural Evolution and Properties of Highly Crosslinked Polymer Networks," American Chemical Society National Meeting, New Orleans, LA, March 1996.
396. A. Guymon, E. N. Hoggan, and C. N. Bowman, "Kinetics of Polymerization During the Formation of Polymer Stabilized Ferroelectric Liquid Crystals," American Chemical Society National Meeting, New Orleans, LA, March 1996.
397. A.R. Kannurpatti, K.J. Anderson, J.W. Anseth, and C.N. Bowman, "Characterization of Structure and Properties of Crosslinked Polymer Networks," AIChE National Meeting, Miami Beach, FL, November 1995.
398. K. S. Anseth, C. Noffsinger and C. N. Bowman, "Termination Kinetics During Crosslinking Photopolymerizations of Multifunctional Monomers," AIChE National Meeting, Miami Beach, FL, November 1995.
399. K. S. Anseth, A. R. Kannurpatti and C. N. Bowman, "Structural Evolution of Crosslinked Polymer Films," AIChE National Meeting, Miami Beach, FL, November 1995.
400. K. L. Thunhorst, C. N. Bowman and R. D. Noble, "Heavy Metal Ion Transport Using Fixed Site Carrier Membranes," American Institute of Chemical Engineers Annual Meeting, Miami Beach, FL, November 1995.
401. A. Guymon, E. N. Hoggan, and C. N. Bowman, "Studies of a Polymer Dispersed Ferroelectric Liquid Crystal," Materials Research Society Spring Meeting, San Francisco, CA, April 1995.
402. K.S. Anseth and C.N. Bowman, "Photopolymerizations of Dimethacrylate Coatings: Kinetics and Volume Relaxation Effects," ACS National Meeting, Anaheim, CA, March 1995.
403. K.S. Anseth, M. Goodner, and C.N. Bowman, "Optimization of Comonomer Composition for Maximization of Monomer Conversion and Material Properties in Dental Restorative Materials," ACS National Meeting, Anaheim, CA, March 1995.
404. M.D. Goodner, S.M. Newman, and C.N. Bowman, "Effects of Comonomer Composition on Photopolymerizations of Multiethylene Glycol Dimethacrylates," American Association of Dental Research, San Antonio, March 1995.
405. A. Guymon, E. N. Hoggan, and C. N. Bowman, "Polymerization Behavior During the Formation of a Polymer Dispersed Ferroelectric Liquid Crystal," Joint Meeting of the Northwest and Rocky Mountain Regions of the American Chemical Society, Park City, UT, June 1995.
406. A. Guymon, E. N. Hoggan, and C. N. Bowman, "Polymer Network Influence in a Polymer Dispersed Ferroelectric Liquid Crystal," Gordon Conference on Liquid Crystals, Wolfeboro, NH, June 1995.
407. K.S. Anseth and C.N. Bowman, "Structural Evolution of Highly Crosslinked Polymer Networks," Materials Research Society 1994 Fall Meeting, Boston, MA, November 1994 (Won outstanding graduate student award).
408. A.R. Kannurpatti and C.N. Bowman, "Photopolymerized Crosslinked Polymers as Stable Second Order Nonlinear Optical Materials," AIChE National Meeting, San Francisco, CA, November 1994.

- 409.C.A. Guymon, E. Hoggan, and C.N.Bowman, "Studies of a Polymer Dispersed Ferroelectric Liquid Crystal," AIChE National Meeting, San Francisco, CA, November 1994. (Awarded Second Place in the Polymeric Materials Posters)
- 410.K.L. Thunhorst, R.D. Noble, and C.N. Bowman, "Facilitated Transport Membranes for Removal of Heavy Metals," AIChE National Meeting, San Francisco, CA, November 1994.
- 411.K.S. Anseth, M.D. Rothenberg, C.M. Wang, L.M. Kline, and C.N. Bowman, "Effects of Heterogeneity on the Polymerization of Multifunctional Monomers," AIChE National Meeting, San Francisco, CA, November 1994.
- 412.L.M. Kline, K.S. Anseth, and C.N. Bowman, "Kinetics and Reaction Diffusion in Photopolymerizations of Multiethylene Glycol Dimethacrylates," AIChE National Meeting, San Francisco, CA, November 1994. (Recipient of second place student poster award)
- 413.R. Kannurpatti and C. N. Bowman, "Crosslinked Polymeric Materials for Guided Wave Nonlinear Optics," Optical Society of America National Meeting, Dallas, TX, October 1994.
- 414.K.S. Anseth, M.D. Rothenberg, and C.N. Bowman, "Applications of UV-Vis Spectroscopy to Determine Free Volume Distributions During Polymerizations of Multifunctional Monomers," ACS National Meeting, Washington, D.C., August 23, 1994.
- 415.A.R. Kannurpatti and C.N. Bowman, "In Situ Poling and Polymerization of Doped Multifunctional Monomers for Second Harmonic Generation," ACS National Meeting, Washington, D.C., August 24, 1994.
- 416.K.S. Anseth and C.N. Bowman, "Reaction Mechanisms and Network Structure in Multifunctional Monomer Polymerizations," IUPAC Polymer Networks 94, Prague, Czech Republic, July, 1994.
- 417.P. Smith, P. Todd, and C.N. Bowman, "Continuous Ion Exchange Membranes for Boron Removal and Concentration," AIChE Summer Meeting, Denver, CO, August 15, 1994.
- 418.K.S. Anseth and C.N. Bowman, "Monitoring the Microstructure of Crosslinked Networks with Photochromic Probes," American Physical Society National Meeting, Pittsburgh, PA, March 23, 1994.
- 419.K.S. Anseth and C.N. Bowman, "Reaction Behavior and Kinetics of Multifunctional Methacrylate Photopolymerizations," ACS National Meeting, San Diego, CA, March 17, 1994.
- 420.K.S. Anseth and C.N. Bowman, "Diffusion Effects on the Composition of Copolymers Produced from Vinyl-Vinyl and Vinyl-Divinyl Copolymerizations," AIChE National Meeting, St. Louis, MO, November 8, 1993 (Awarded Best Poster in Polymeric Materials).
- 421.C.M. Wang, K.S. Anseth, and C.N. Bowman, "Kinetics of Multifunctional Monomer Polymerizations," AIChE National Meeting, St. Louis, MO, November 8, 1993 (Awarded Third Best Poster in Engineering Fundamentals).
- 422.M.D. Rothenberg, K.S. Anseth, and C.N. Bowman, "Free Volume Distributions During Photopolymerizations of Multifunctional Monomers," AIChE National Meeting, St. Louis, MO, November 8, 1993 (Awarded Third Best Poster in Materials) .
- 423.A.R. Kannurpatti, J.F. Kasic, and C.N. Bowman, "In Situ Second Harmonic Generation Studies During Multifunctional Monomer Polymerizations," AIChE National Meeting, St. Louis, MO, November 8, 1993.
- 424.B.M. Smith, C.N. Bowman, and P. Todd "Boron Removal from Waste Water Streams Using Fixed-Site Carrier Membranes," AIChE National Meeting, St. Louis, MO, November 8, 1993 (Awarded Second Best Poster in Environmental Engineering).
- 425.M.S. Solis, R.D. Noble, and C.N. Bowman, "Heavy Metal Ion Exchange Using Fixed Site Carrier Membranes," Gordon Research Conference on Reactive Polymers, Ion Exchangers, and Adsorbents, Newport, RI, August 25, 1993, poster.

- 426.K.S. Anseth and C.N. Bowman, "Kinetic Gelation Model Predictions of Gel Point Conversions, Cyclization Rates, and Heterogeneity During Polymerization of Tetrafunctional Monomers," ACS National Meeting, Chicago, IL, August 23, 1993.
- 427.J.F. Kasic and C.N. Bowman, "Photopolymerized Nonlinear Optical Polymers," Materials Research Society Spring Meeting, San Francisco, CA, April 15, 1993.
- 428.K.S. Anseth, C.N. Bowman, and N.A. Peppas, "Photopolymerizations of Multifunctional Methacrylates and Acrylates," AIChE National Meeting, Miami, FL, November 2, 1992.
- 429.C.N. Bowman and N.A. Peppas, "A Kinetic Gelation Simulation for the Analysis of Free Radical Polymerizations," AIChE National Meeting, Los Angeles, CA, November 21, 1991.
- 430.C.N. Bowman and N.A. Peppas, "Kinetics and Modeling of UV Induced Multiethylene Glycol Dimethacrylate Polymerizations," AIChE National Meeting, Los Angeles, CA, November 21, 1991.
- 431.C.N. Bowman and N.A. Peppas, "A Novel Kinetic Gelation Approach to the Simulation of Free Radical Polymerizations of Tetrafunctional Monomers," American Physical Society Spring Meeting, Cincinnati, OH, March 18, 1991.
- 432.C.N. Bowman and N.A. Peppas, "Effects of Physical Aging on Polymerization Kinetics," Materials Research Society Meeting, Boston, MA, November 28, 1990.
- 433.C.N. Bowman and N.A. Peppas, "A Novel Kinetic Gelation Simulation for Analysis of Free Radical Polymerizations of Multifunctional Monomers," AIChE National Meeting, Chicago, IL, November 14, 1990.
- 434.C.N. Bowman and N.A. Peppas, "Kinetics and Volume Relaxation for Polymerizations of Multiethylene Glycol Dimethacrylates," AIChE National Meeting, Chicago, IL, November 14, 1990.
- 435.C.N. Bowman and N.A. Peppas, "Fractal Analysis in Polymer Structures for Information Technology," AIChE National Meeting, San Francisco, CA, November 8, 1989.
- 436.C.N. Bowman and N.A. Peppas, "Kinetics of UV Induced Multiethylene Glycol Dimethacrylate Polymerizations," AIChE National Meeting, San Francisco, CA, November 8, 1989.
- 437.C.N. Bowman and N.A. Peppas, "Preparation and Properties of Novel Methacrylate Based Laser Video Disc Polymers," AIChE National Meeting, Washington, D.C., November 28, 1988.

TEACHING QUALIFICATIONS

Course and Curriculum Information:

Courses Taught with Instructor (I) and Course (C) Evaluations:

Undergraduate Fluid Mechanics (Spring 1992: I 3.37/4.0, C 2.80/4.0; Spring 1993: I 3.62/4.0, C 3.26/4.0; Spring 2015: I 5.6/6.0, C 5.3/6.0; Spring 2016: I 5.7/6.0, C 5.2/6.0; Spring 2017: I 5.8/6.0, C 5.6/6.0)

Biokinetics (Spring 2015: I 5.5/6.0, C 5.4/6.0; Spring 2016: I 5.9/6.0, C 5.7/6.0; Spring 2017: I 5.7/6.0, C 5.3/6.0)

Graduate Reaction Engineering (Fall 1992: I 2.71/4.0, C 2.73/4.0; Fall 1993: I 3.48/4.0, C 3.29/4.0; Spring 1995: I 3.23/4.0, C 3.08/4.0; Fall 2007)

Polymer Chemistry (Fall 1993: I 3.88/4.0, C 3.80/4.0; Spring 1996: I 3.57/4.00, C 3.00/4.00; Spring 2002: I 3.55/4.0, C 3.05/4.0; Fall 2013: I 5.5/6.0, C 5.2/6.0)

Polymer Engineering (I 3.60/4.0, C 3.40/4.0)

Photopolymerization Reactions (Fall 1996: I 3.54/4.0, C 3.08/4.0, Fall 1999: I 3.11/4.0, C 3.06/4.0, Fall 2009: I 4.5/6.0, C 4.2/6.0)

Polymerization Reaction Engineering (UROP Seminar Course, Spring 1994: I 4.0/4.0, C 3.83/4.0)

Undergraduate Reaction Engineering (Fall 1994: I 3.43/4.0, C 3.07/4.0, Fall 1997: I 3.63/4.0, C 3.29/4.0, Fall 1999: I 3.50/4.0, C 3.36/4.0)

Freshman Chemistry for Engineers taught to more than 300 students (Fall 1995: I 2.65/4.0, C 2.77/4.0, Fall 1996: I 3.11/4.0, C 2.82/4.0, Fall 1997: I 3.09/4.0, C 2.74/4.0; Fall 2007: I 4.9/6.0; C 4.2/6.0; Fall 2010: I 4.8/6.0, C 4.2/6.0)

Biology for Engineers (Spring 2003: I 3.83/4.0, C 3.75/4.0)

Curriculum Development:

Significantly revamped Chemistry for Engineers as a part of the College Diversity Plan and Improved FCQ evaluations, Fall 2006 and Fall 2007

Developed a new course – Biology for Engineers, Spring 2003

Assisted Prof. Kristi Anseth in the Development of a new Course on Polymer Engineering (First Taught Fall 1998)

Developed a new Course on Photopolymerization Reactions (First taught Fall 1996)

Developed a Materials Option for Undergraduate Chemical Engineering Students who wish to develop a specialization in the Materials Science Area; option advisor since Fall 1993

Developed a new course on Polymer Chemistry (First taught Fall 1993)

Was Selected to Teach Research Seminar Class Entitled, "Reaction Engineering for Free Radical Polymerizations," Spring 1994

Research and Independent Study Advisees

Post-Doctoral Associates and Visiting Scholars

Xun Han, November 2015- present
Mingtao Chen, September 2018- present
Heidi Culver, May 2017- present
Sudheedran Mavila, 2015- present
Matthew McBride, Spring 2018- present
Jasmine Sinha, 2015- present
Benjamin Fairbanks, 2015- present
Brady Worrell, June 2014- present
Maciej Podgorski, November 2012 – Present
Austin Baranek, 2013-2015
Sankha Pattanayak, 2013-2015
Tao Gong, June 2011 – 2013
Devatha Nair, July 2011 - 2012
Diana Leung, July 2010 – 2012
Brad Berron, Spring 2008 – August 2011
Kathleen Schreck, June 2007 – August 2010
Christopher Kloxin, June 2006 – June 2011
Jing Yang, October 2005 – December 2007
Michael McKittrick, April 2005 – August 2006
Sirish Reddy, January 2005 – August 2006
TaeYeon Lee, December 2004 – February 2007
Lixin Chen, April 2004 – December 2004
Oguz Okay, July 2004 – December 2004
Hui Lu, January 2004- March 2006
Timothy Scott, November 2003 – Fall 2008
Neil Cramer, August 2003 – present
Hadley Sikes, February 2003 – July 2007
Tommy Haraldsson, September 2002 – February 2005
Bilge Hacıoglu, Visiting Professor, September 1998 – 2002
Jun Nie, January 1999 – February 2003
Ning Luo, Visiting Professor, January 1999 – 2002
Brian Elliott, December 1998 – 1999
Kristi Anseth, January 1995 - May 1995
Takeo Yamaguchi (Co-advised with Prof. Richard Noble), April 1993 - May 1995
David Jackson, January 1993 - August 1993

Graduate Students Supervised:

Kristi S. Anseth, August 1992 - November 1994, **Graduated with PhD**, "Photopolymerizations of Multifunctional Monomers: Reaction Mechanisms and Polymer Structural Evolution" (Currently Tisone Chair at the University of Colorado, Department of Chemical and Biological Engineering)

Minerva S. Solis (Co-Advised by Prof. Richard Noble), January 1993 - May 1994, **Graduated with MS**, "Transport of Heavy Metal Ions Using Fixed Site Carrier Membranes" (Working in Environmental Consulting)

Janet de Grazia, January 1992 - May 1994, **Graduated with MS**, "Settling Characteristics of Microparticles Modified by Hydrophilic Semi-Interpenetrating Networks" (Currently Teaching at the University of Colorado)

James F. Kasic, January 1992 - May 1993, **Graduated with MS**, "Second Harmonic Generation from Doped, Poled Polymers" (Working for Battelle Medical Products in Boulder, CO)

Anandkumar R. Kannurpatti, January 1993 - May 1997, **Graduated with PhD**, "Characterization of Properties and Structural Heterogeneity of Crosslinked Polymers Formed by Living Radical Photopolymerizations" (Currently working as a Research Associate for Cyrel, a division of DuPont, Parlin, NJ)

Bryan Smith (Co-Advised by Prof. Paul Todd), January 1993 - May 1997, **Graduated with PhD**, "Reversible Polymer Complexation for Boron Removal and Concentration with Polymer-Assisted Ultrafiltration" (Currently working as a Research Associate at TDA Research, Golden, CO)

C. Allan Guymon, January 1994 - December 1997, **Graduated with PhD**, "Characterization and Polymerization Behavior of Polymer Stabilized Ferroelectric Liquid Crystals," (Currently working as a Professor at the University of Iowa, Department of Chemical Engineering)

Kristin L. Thunhorst (Co-Advised by Prof. Richard Noble) January 1994 - February 1998, **Graduated with PhD**, "Investigation of Ion Transport and Selectivity Achieved with Crown Ether Fixed Site Polymeric Membranes: Grafting and Photopolymerization Membrane Production Methods," (Currently working as a Research Associate at 3M Corporate Research, St. Paul, MN)

Russell Goering (Co-Advised by Prof. Richard Noble) January 1994 - January 1998, **Graduated with PhD**, "A Mechanistic Study of the Facilitated Transport of Olefins through Silver (I) Based Membranes," (Currently working as a research associate at Santa Fe Science and Technology, Santa Fe, NM).

Michael Goodner, January 1995 - August 1998, **Graduated with PhD**, "Kinetics of Diffusion Controlled Radical Photopolymerizations" (Currently a research associate at Intel, Portland, OR)

Jennifer Young, January 1996 - September 1998, **Graduated with PhD**, (Co-Advised by Prof. Kristi Anseth), "Modeling and Characterization of Reaction Diffusion Enhanced Termination in Crosslinked Polymers" (Currently Staff Scientist with Los Alamos National Laboratories, Los Alamos, NM)

Brian Elliott, January 1995 – December 1998, **Graduated with PhD**, "Pseudocrown Ether Membranes for Ion Separations," (Currently working as a Research Associate at TDA Research, Golden, CO)

Mark Pasmore (Co-Advised by Prof. Paul Todd), January 1995 – May 1999, **Graduated with PhD**, "Membrane Materials for Prevention of Biofouling," Defended M.S. Thesis and Continuing as PhD Candidate (Employed as a Research at Baxter Healthcare, Round Lake, IL)

Lale Lovell, January 1997 – December 2000, **Graduated with PhD**, "Highly Crosslinked Methacrylates as Advanced Dental Materials" (Employed as a Research Associate by Lexmark, Niwot, CO)

Wendy Mores (Co-Advised by Prof. Robert Davis), January 1997 – August 1998, "Development of Photografted Materials for Fouling Resistant Membranes" **Graduated with MS**

Huimin Ma (Co-Advised by Prof. Robert Davis), May 1997 – December 2000, **Graduated with PhD**, "Development of a Novel Photografting Technique for Membrane Surface Modification" (Employed as a Research Associate with Headway Technologies, Milpitas, CA).

Andrew Metters (Co-Advised by Prof. Kristi Anseth), August 1997 – December 2000, **Graduated with PhD**, "Polymerization and Network Structural Evolution of Degradable Networks," (Currently Chief Technology Officer, Selah Technologies, Clemson, SC)

Kathryn Berchtold, January 1997 – December 2001, **Graduated with PhD**, "Impact of Monomer Structure and Termination Kinetics on Free Radical Photopolymerizations" (Currently Staff Scientist at Los Alamos National Laboratory)

Jeannine Gibson Elliott, January 1998 – August 2001, **Graduated with PhD**, "Modeling and Characterization of Cyclization Reactions in Photopolymerization of Multifunctional Monomers" (Currently Research Associate at TDA Research)

Neil Cramer, January 1999 – May 2003, **Graduated with PhD**, "Investigation of Thiol-Ene Photopolymerizations and Their Unique Applications" (Currently a Senior Research Associate, University of Colorado)

Hui Lu, January 2000 – December 2003, **Graduated with PhD**, "Investigation into Polymerization Shrinkage Stress and Development of Novel Dental Resin" (Currently a Research Associate with Caulk Dentsply, Wilmington, DE)

Adam Harant, January 2000 – December 2004, **Graduated with PhD**, "Patterning Organosilane Self-Assembled Monolayers, Block Copolymer Lithography and Thin Film Behavior, and the Photoinduced Formation of Polymer Brushes and Monolayers" (Currently at DisplayTek, Longmont, CO)

Tara Lovestead, January 2000 – December 2004, **Graduated with PhD**, “The Role of Chain Length Dependent Kinetics on Observed Non-Classical Multivinyl Photopolymerization Behavior” (Currently Research Associate, National Institutes of Standards and Technology, Boulder, CO)

Eric Beckel, January 2000 – December 2004, **Graduated with PhD**, “Mechanistic Studies of Enhanced Polymerization Characteristics of Novel Mono (Meth) Acrylate Monomers” (Currently Research Manager, DOD Contracting Firm)

Brian Good, (Co-Advised by Prof. Robert Davis), May 2005, **Graduated with PhD**, “Development of Flow Control Elements for Portable Polymeric Microfluidic Devices” (Currently a Research Associate with Azdel Inc., Cincinnati, OH)

Amber Hofstad Rydholm, (Co-Advised by Prof. Kristi Anseth), January 2001 – May 2006, **Graduated with PhD**, “Photopolymeric Thiol-ene Biomaterials: Controlling Network Structure to Tune Degradation Behavior and Material Properties” (Currently a Research Associate with Hospira, Boulder, CO)

Allison O’Brien, January 2001 – April 2005, **Graduated with PhD**, “The Impact of Oxygen on Photopolymerization Kinetics and Polymer Structure” (Currently a Research Associate with Thermo Fischer Scientific, Colorado)

Robert Sebra, (Co-Advised by Prof. Kristi Anseth), August 2001 – Fall 2005, **Graduated with PhD**, “Design and Application of Chemically and Biologically Active Surface Graft Architectures Using Living Radical Photopolymerization Chemistry” (Currently a Research Associate with Pacific Biosciences, San Francisco, CA)

Helen Simms, (Co-Advised by Prof. Kristi Anseth), December 2002 – February 2009, **Graduated with PhD** “Polymer Microfluidic Devices for Bioanalysis”

Tommy Haraldsson, 2002 – 2005, **Graduated with PhD**, “Photopolymerization Reactions for Microfluidics and Other Applications.” (Currently faculty member at KTH Royal Institute of Technology)

Sirish Reddy, December 2001 – December 2004, **Graduated with PhD**, “Mechanistic Modeling, Network Evolution, and Advanced Applications of Novel Thiol-Vinyl Systems” (Currently a Research Associate at Novellus)

Jacquelyn Carioscia, December 2002 – December 2006, **Graduated with PhD**, “An Investigation into the Impact of Thiol-ene Chemistries on the Material Properties of Controlled Thiol-ene Polymerizations” (Currently an Associate with URS Washington Division, Denver, CO)

Peter Johnson, December 2002 – January 2007, **Graduated with PhD**, “Parallel Evaluation of Photopolymerizations” (Currently at NIST Gaithersburg, MD, Polymer Division)

Harini Kilambi, December 2002 – May 2006, **Graduated with PhD**, “Novel Monomer Reactivity and Mechanisms” (Currently at Intel, Portland, Oregon)

Vaibhav Khire, December 2003 – April, 2008, **Graduated with PhD**, “Surface Modification Using Thiol-Ene and Thiol-Acrylate Polymerizations” (Currently at Intel, Portland, Oregon)

Ryan Hansen, December 2003 – December 2008, **Graduated with PhD**, “Development of Polymerization-Based Signal Amplification for Detection of Biomolecular Recognition” (Currently on Short-Term Mission Trip in Georgia)

Leah Johnson, May 2004 – November 2009, **Graduated with PhD**, “Polymerization Based Amplification of Dilute Biochemical Reactions”

MacKinley Lawson (Co-Advised by Prof. Kristi Anseth), August 2004 – June 2008, **Graduated with PhD**, “Structure-Function Relationships of Polymerizable Vancomycin Derivatives for the Antimicrobial Surface Modification of Orthopedic Biomaterials” (Currently completing Residency for MD/PhD program)

Heather Avens, December 2004 – November 2009, **Graduated with PhD**, “Photopolymerized-Based Detection of Cancer” (Presently Post-doctoral Associate at the University of Colorado)

Ben Fairbanks (Co-Advised by Prof. Kristi Anseth), August 2004 – December 2009, **Graduated with PhD**, “Photochemical Reactions for Biomaterials Development: Thiol-ene and Thiol-yne Polymerizations” (Currently Post-doctoral Associate at the University of Colorado)

Devatha Nair (co-advised with Prof. Robin Shandas), June 2008 – December 2011, **Graduated with PhD**, “Thiol-Vinyl Systems as Shape Memory Polymers and Novel Two-Stage Reactive Polymer Systems”, Post-doctoral position at the University of Colorado

Brian Adzima, December 2006 – December 2011, **Graduated with PhD**, “Cyclopolymerizations and Click Reactions”, Post-Doc at Carnegie Mellon University

Sheng Ye, August 2007 – September 2011, **Graduated with PhD**, “Advanced Modeling and Characterization of Thiol-ene Photopolymerizations”, Research Associate at 3M

Heeyoung Park, December 2007 – May 2011, **Graduated with PhD**, “Stress Relaxation Mechanisms in Crosslinked Polymers”, Research Associate at Samsung

John Ashley (Co-Advised by Prof. Robert Davis), September 2004 – December 2012, **Graduated with PhD**, “Nano-chip Design Using Microfluidic and Photopolymerization Techniques”, Self-Employed

Raveesh Shenoy, December 2007 – December 2012, **Graduated with PhD**, “Glucose Oxidase Mediated Polymerizations for Interfacial Coatings and Polymerization” Research Associate at 3M

Megan Cole, December 2008 – May 2012, **Graduated with PhD** “Synthesis and Characterization of Thiol-Ene Functionalized Siloxanes and Evaluation of their Reaction Kinetics, Network Properties, and Dental Applications”, Post-doctoral associate

K. Christopher Koehler, December 2008 – December 2012, **Graduated with PhD** “Development and Implementation of Clickable Amino Acids”, Research Associate at Merck

Richard Sheridan, December 2007 – December 2012, **Graduated with PhD**, “Rheology and Application of Thermoreversible Networks Based on the Diels-Alder Cycloaddition,” Post-doctoral Associate at NIST

Weixian Xi, April 2011 – 2015, **Graduated with PhD**, “Thiol-X Chemistries in Polymerization: Photopolymerization and Sequence Controlled Polymers.” Currently a post-doctoral associate.

Shunsuke Chatani, September 2011 – 2014, **Graduated with PhD**, “Thiol-Michael Addition Polymerization Reactions” Currently a research associate at Mitsubishi.

Abeer Alzahrani, January 2010 – 2014, **Graduated with PhD**, ” Copper Catalyzed Azide Alkyne Cycloaddition Polymer Networks”

Christopher Fenoli, January 2012 – 2015, **Graduated with PhD**, ”Design and Implementation of the Addition-Fragmentation Chain Transfer Reaction in Polymer Networks”

Haiyan Peng, Visiting Student, October 2012 – September 2014, **Graduated with PhD**, “Holographic Materials Based on Photopolymerization Reactions”

Gayla Berg Lyon, December 2011 – May 2016, **Graduated with PhD**, “Development and Characterization of Covalent Adaptable Networks for Functional Polymeric Material”

Matthew McBride, December 2012 – May 2018, **Graduated with PhD**, “Nanostructured Shape Morphing Polymers and their Implementations”

Chen Wang, December 2012 - December 2016, **Graduated with PhD**, “Step-growth Nano/Micro Polymer Networks”

Xinpeng Zhang, December 2013 – May 2018, “Photoinitiated Thiol-Michael Addition” Currently a post-doctoral associate at Northwestern University

Nancy Sowan, December 2013 - present, “Covalent Adaptable Networks”

Danielle Konetski, December 2013 – May 2018, **Graduated with PhD**, “In Situ Designer Lipid Productions: Intergration of Novel Characteristics and Behaviors into Synthetic Cell Membranes” Currently a post-doctoral associate at OHSU

Han Byul Song, December 2013 – May 2018, **Graduated with PhD**, “CuAAC Reactions for Polymeric Dental Materials”

Dawei Zhang, September 2014 - present

Marvin Alim, September 2014 - present

Dillon Love, December 2014 - present

Kathryn Morrissey, 2018 – present

JJ Hernandez, November 2018 – present

Adam Dobson, December 2017 – present

Alex Anderson, December 2015 – present

Sijia Huang, January 2016 – present

Xiance Wang, December 2016 – present

Katelyn Long, Decmeber 2016 – present

Shafer Soars, Septermber 2018 – present

Joshua Kamps, Septermber 2018 – present

Nicholas Bongiardina, Novmeber 2016 – present

Alina Martinez, November 2016 - present

More than 300 Undergraduate Students have Worked in the Bowman Laboratories - Undergraduates Working in the Bowman Laboratory have gone to numerous companies including Dow, Amoco, TDA Research, Atmel, Amgen, Syntex, Los Alamos National Laboratories and to graduate schools across the country.

UNIVERSITY, PROFESSIONAL, AND PUBLIC SERVICE ACTIVITIES

University Service:

Director, Materials Science and Engineering Program, July 2010 – Present
Department Chair (Fall 2003 – Summer 2007, Fall 2011 – Spring 2012)
Energy Initiative Steering Committee (Fall 2008 – Spring 2010)
Associate Dean for Research (August 2007 – June 2009)
Chair, Faculty Search Committee (Numerous Occasions)
Graduate Admissions Committee (Fall 2003)
Member, Administrative Council (Fall 2003 – Spring 2009, Fall 2011 – Spring 2012)
Graduate School Executive Advisory Committee (Fall 2000 – Spring 2003)
Graduate Program Director (Fall 1993 – Fall 1996, Fall 1999 – Fall 2001, Fall 2002 – Spring 2003)
Graduate Student Advisor (Fall 1993 – Fall 1996, Fall 1999 – Spring 2003)
Strategic Futures Council, College of Engineering (Fall 1999 – Fall 2000)
Dean's Search Committee (Fall 2000 – Spring 2001)
Graduate Fellowship Subcommittee (Fall 2000 – Spring 2003)
Program Review Committee (Fall 1996)
AIChE Faculty Sponsor (Spring 1992 - Spring 1996)
Assistant Safety Director (Spring 1992)
Undergraduate Lab Renovation Committee (Spring 1992)
Centennial Celebration Committee (Fall 1992 - September 1993)
Faculty Search Committees (Numerous Occasions)
Integrated Teaching Laboratory Committee for Mechanics and Materials (Spring 1993 - Fall 1994)
Developed Materials Option for Chemical Engineering (Spring 1993)
Developed New Course: CHEN 4838/5838 Polymer Chemistry
Developed New Course: Graduate Level Photopolymerization Reactions
Revised Existing Course Outline for CHEN Materials
Dean's Small Grant Award Committee (Numerous Occasions)
Patten Chair Search Committee (Fall 1994)

Professional and Public Service:

Organizer and Chair, Photopolymerization Fundamentals Meeting, Summer 2013, Jackson Hole, WY
Organizer and Chair, Polymer Networks 2012 Meeting, Summer 2012, Jackson Hole, WY
Organizer and Chair, Photopolymerization Fundamentals Meeting, Summer 2011, Breckenridge, CO
Chair, Engineering Research Council Awards Committee, 2009 - 2012
Editorial Board, Chemistry of Materials, 2011-2014
Board of Directors, ASEE Engineering Research Council, 2009-2011
Organizer, ACS Tess Award Symposia to Honor Christian Decker, Fall 2009, Washington D.C.
Organizer and Chair, Photopolymerization Fundamentals Meeting, Summer 2009, Breckenridge, CO
Organizer, American Chemical Society Symposia on Polymerizations in Nanostructured Environments, Spring 2009, Salt Lake City, UT
Board of Consulting Editors, AIChE Journal, 2009 - 2014
Editorial Board, Cambridge Series in Chemical Engineering, 2008 - 2011
Session Co-Chair, MRS 2007 Fall Meeting, "Biological and Biomimetic Networks," November 2007, Boston, MA
Organizer and Chair, Photopolymerization Fundamentals Meeting, Summer 2007, Breckenridge, CO
Session Chair, IUCRC Update at 2006 UV & EB Technology Expo & Conference, April 2006.
Session Chair, "Hydrogels I," 28th Australasian Polymer Symposium, Rotorua, New Zealand, February 2006.
Organizer and Chair, Photopolymerization Fundamentals Meeting, Summer 2005, Breckenridge, CO
Editorial Board, *Journal of Macromolecular Science, Pure and Applied Chemistry*, Fall 2004– Summer 2008
Chair ACS Symposium "Advances in Photopolymerizations" ACS National Meeting, Fall 2004, Philadelphia, PA
Taught one day short course on "Photopolymerization Reactions" at Radtech National Meeting, May, 2004
Director, Materials Division of the American Institute of Chemical Engineers, November 2003 – October 2005
Session Chair, "Dental Materials: Polymer Materials-Chemistry," International Association for Dental Research 82nd General Session, Honolulu, HI, March, 2004
Session Chair, "Polymer Networks," 26th Australasian Polymer Symposium, Noosa, Australia, July, 2003.
Session Chair, "Dental Materials: V – Polymer Materials--Chemistry Program," International Association of Dental Research Annual Meeting, San Antonio, TX, March, 2003.
Organizer and Chair, Photopolymerization Fundamentals Meeting, Summer 2002, Breckenridge, CO

Participant, workshop and summer school on Free Radical Polymerization Methods, 25th Australasian Polymer Symposium, Armidale, Australia, February, 2002.

Committee Chair, "Biomedical and Chemical Engineering Panel," 2001 NSF Graduate Research Fellowship Panel, February, 2001

Program Co-Chair, Division of Polymer Chemistry, Fall 2000 – Fall 2003

Co-chair, AIChE Annual Meeting, 1999

Editorial Board, *Polymer Reaction Engineering*, January 1997 – 2004

Assistant Editor, *Polymer Preprints*, Summer 1996 – Fall 1999

Chair Symposium "Polymers and Liquid Crystals" at the ACS National Meeting

Chair Session "Polymerization Reaction Engineering: Applications," at the AIChE National Meeting, November 1997

Co-Chair Symposium "Chemical Reactions on Polymers" at the ACS Fall National Meeting, August 1996

Chair Symposium "Unilever Award Symposium to Honor Kristi Anseth" at the ACS Fall National Meeting, August 1996

Co-chair Symposium "Recent Advances in Photopolymerizations: Applications and Fundamentals" at the ACS Spring National Meeting, 1996

Chair of Rocky Mountain Section of AIChE, 1995-1996

Chair Session "Polymerization Reaction Engineering: Applications" AIChE National Meeting, November 1995

Co-Chair Session "Polymerization Reaction Engineering: Fundamentals" AIChE National Meeting, November 1995

Chair Session "Young Faculty Forum" at the AIChE National Meeting, November 1995

Chair Session "Proposal Writing Workshop" at the ASEE National Meeting, June 1995

Vice-Chair of Rocky Mountain Section of AIChE, 1994-1995

Co-chaired Session "Young Faculty Forum" at the AIChE National Meeting, November 1994

Co-chaired Sessions on "Preparation and Physicochemical Characterization of Hydrogels" Spring American Chemical Society National Meeting, Denver, CO, March 1993.

Co-Taught one-day short course on "Photopolymerizations" at Radtech National Meeting, April 2000, 2002, 2004

Taught three day short course "Photopolymerization Reactions" at 3M Company, January 1998

Taught short course "Frontiers in Polymer Science: Polymer Preparation, Properties, and Structure," June 22 - June 26, 1992, Indianapolis, IN, Course taught with three other instructors.

Taught short course "Macromolecules and Polymers of Pharmaceutical Interest," Part of the First International Advanced Course on Technology and Control of Drugs in Perugia, Italy, August 2 - August 7, 1992.

Fellowship Panel and Reviewer for National Science Foundation

Reviewed Papers for *Journal of Polymer Science*, *Biomaterials*, *Journal of Applied Polymer Science*, *Macromolecules*, *AIChE Journal*, *Liquid Crystals*, *Polymer*, *Science*, *Nature Materials*, Among Others