

C. Allan Guymon

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Education

Ph.D. 1997- Chemical Engineering, University of Colorado, Boulder CO
M.S. 1995- Chemical Engineering, University of Colorado, Boulder CO
B.S. 1993- Chemistry, Weber State University, Ogden, UT
B.S. 1993- Applied Mathematics, Weber State University, Ogden, UT

Professional Experience

7/04- present Associate Professor, Chemical and Biochemical Engineering, University of Iowa
7/02- 6/04 Assistant Professor, Chemical and Biochemical Engineering, University of Iowa
1/98-7/02 Assistant Professor, Polymer Science, University of Southern Mississippi
10/97-12/97 Research Associate, Chemical Engineering, University of Colorado- Boulder
8/93-10/97 Research Assistant, Chemical Engineering, University of Colorado- Boulder
1/90-8/93 Chemical Research Technician, Solaray, Inc., Ogden UT
4/93-8/93 Research Chemist, Bureau of Mines, Salt Lake City UT

Awards

Presidential Early Career Award for Scientists and Engineering (PECASE) 2002
National Science Foundation CAREER Award 2001
Oak Ridge Associated Universities Ralph E. Powe Junior Faculty Enhancement Award 1999
Finalist for Council of Graduates Schools/ University Microfilms International (CGS/UMI) Distinguished Dissertation Award 1998
University of Colorado Chemical Engineering Outstanding Research Award 1997
American Chemical Society Sherwin-Williams Award Finalist for Outstanding Graduate Research in Polymer Science and Engineering 1996
Materials Research Society Graduate Student Award 1996
University of Colorado Dean's Small Grant Award (\$650) 1996
University of Colorado Dean's Small Grant Award (\$700) 1995
Sigma Xi Grant in Aid of Research (\$600) 1995
National Defense Science and Engineering Graduate Fellowship 1994-7
National Science Foundation Graduate Fellowship 1994-7 (selected)
University of Colorado Hauser Fellowship 1993-4
Weber State University Scholar of the Year 1993
Outstanding Graduate- Weber State University College of Arts and Humanities 1993
Outstanding Graduate- Weber State University College of Natural Science 1993
Outstanding Graduate- Weber State University Department of Mathematics 1993
Outstanding Graduate- Weber State University Department of Chemistry 1993

Synergetic Activities

ACS Polymer Chemistry Division Program Chair 2003-2006
Departmental Director of Graduate Studies 2003- present
ACS Polymer Preprints Associate Editor 2000-2001
ACS Polymer Preprint Assistant Editor 1998-2000

ACS Polymer Division General Papers Chair 2000-2001

Symposium Organizer for "Polymer Chemistry in Nanotechnology" at 2003 National Fall ACS Meeting

Symposium Organizer for "Polymers in Photonics and Displays" at 2002 National Fall ACS Meeting

Symposium Organizer for "Photophysics and Photochemistry of Polymeric Materials" at Pacificchem 2000.

Symposium Organizer for "Polymerization Reaction Kinetics and Catalysis" at National Fall AIChE Meeting for 1999, 2001, 2003, and 2004.

Symposium Organizer for "Nanotemplating in Polymers" at National Fall AIChE Meeting for 2004.

Symposium Organizer for "Polymer Education in Chemical Engineering" at National Fall AIChE Meeting 2001.

Symposium Organizer for "Polymers and Liquid Crystals" at 1999 National Fall ACS Meeting

Professional Organizations

American Chemical Society

Materials Research Society

American Institute of Chemical Engineers

Sigma Xi

Educational Activities

Materials Science 57:015 (Fall 2004-6)

Chemical and Biochemical Engineering 52:045 and 52:105 - Chemical Reaction Engineering (Spring 2003-6)

Chemical and Biochemical Engineering 52:044 and 52:104 - Heat and Mass Transfer (Fall 2002-3)

Polymer Science PSC 285- Problem Solving (Spring 2002- New Course)

Polymer Science 191- Polymers in Industry (Fall 1998-2000)

Polymer Science 480/740- Polymerization Kinetics (Spring 1999-2001)

Co-Developer of Design of Experiments Short Course taught annually at the International Waterborne, High-Solids, and Powder Coatings Symposium as well as 2-3 In Plant Short Courses per year.

High School in Petal, Mississippi to four Chemistry Classes in April 2002.

Undergraduate Recruiter for Polymer Science Department (1998-2002)

Polymer Science Student Association Advisor (1998-2002)

Currently Developing Polymer Science Module for High School Chemistry- Phase I Version introduced at Petal H.S. in Petal, MS.

Selected Publications

Articles:

1. J. D. Clapper, and C. A. Guymon, "Physical Behavior of Cross-Linked PEG Hydrogels Photopolymerized within Nanostructured Lyotropic Liquid Crystalline Templates," *Macromolecules* **2007**, 40(4), 1101-1107.
2. T. J. White, L. V. Natarajan, V. P. Tondiglia, T. J. Bunning, and C. A. Guymon, "Polymerization Kinetics and Monomer Functionality Effects in Thiol-ene Polymer Dispersed Liquid Crystals (PDLCs)," *Macromolecules* **2007**, 40(4), 1112-1120.
3. T. J. White, W. B. Liechty, L. V. Natarajan, V. P. Tondiglia, P. Lloyd, T. J. Bunning, and C. A. Guymon, "Monomer Functionality Effects in the Formation of Thiol-ene Holographic Polymer Dispersed Liquid Crystals (HPDLCs)," *Macromolecules* **2007**, 40(4), 1121-1127.
4. T. J. White, W. B. Liechty, and C. A. Guymon "The Influence of N-Vinyl Pyrrolidone on Polymerization Kinetics and Thermo-Mechanical Properties of Crosslinked Acrylate Polymers," *Journal of Polymer Science Part A: Polymer Chemistry* (in press).

5. M. A. DePierro, K. G. Carpenter, and C. A. Guymon, "Influence of Polymerization Conditions on Nanostructure and Properties of Polyacrylamide Hydrogels Templated from Lyotropic Liquid Crystals," *Chemistry of Materials* **2006**, 18(23), 5609-5617.
6. J. D. Clapper, and C. A. Guymon, "Compatibilization of Immiscible Polymer Networks through Photopolymerization in a Lyotropic Liquid Crystal," *Advanced Materials*, 18 (12), **2006**, 1575-1580.
7. M. A. DePierro, and C. A. Guymon, "Photoinitiation and Monomer Segregation Behavior in Polymerization of Lyotropic Liquid Crystals," *Macromolecules*, 39 (2), **2006**, 617-626.
8. H. Zhou, Q. Li, T. Y. Lee, C. A. Guymon, E. S. Jonsson, and C. E. Hoyle, "Photopolymerization of Acid Containing Monomers: Real-Time Monitoring of Polymerization Rates," *Macromolecules*, 39(24), **2006**, 8269-8273.
9. T. J. White, W. B. Liechty, L. V. Natarajan, V. P. Tondiglia, T. J. Bunning, and C. A. Guymon, "The Influence of N-Vinyl-2-Pyrrolidone in Polymerization of Holographic Polymer Dispersed Liquid Crystals (HPDLCs)," *Polymer*, 47 (7), **2006**, 2289-2298.
10. T. Y. Lee, T. M. Roper, C. A. Guymon, E. S. Jonsson, and C. E. Hoyle, "Copolymerization Mechanism of Photoinitiator Free Thiol-Vinyl Acrylate Systems" in *Film Formation: Process and Morphology*, ACS Symposium Series, **2006**, Vol. 941, pp. 17-28.
11. T. M. Roper, C. A. Guymon, and C. E. Hoyle, "Photopolymerization Kinetics of Pigmented Systems Using a Thin Film Calorimeter" in *Film Formation: Process and Morphology*, ACS Symposium Series, **2006**, Vol. 941, pp. 29-40.
12. T. M. Roper, T. Y. Lee, C. A. Guymon, and C. E. Hoyle, "In-Situ Characterization of Photopolymerizable Systems using a Thin-Film Calorimeter," *Macromolecules*, 38 (24), **2005**, 10109-10116.
13. T. Y. Lee, C. A. Guymon, E. S. Jonsson, S. Hait, and C. E. Hoyle, "Synthesis, Initiation, and Polymerization of Photoinitiating Monomers," *Macromolecules*, 38 (18), **2005**, 7529-7531.
14. M. A. DePierro, A. J. Olson, and C. A. Guymon, "Effect of Photoinitiator Segregation on Polymerization Kinetics in Lyotropic Liquid Crystals," *Polymer*, 46 (2), **2005**, 335-345.
15. T. M. Roper, C. A. Guymon, and C. E. Hoyle, "Design and performance of a thin-film calorimeter for quantitative characterization of photopolymerizable systems," *Review of Scientific Instruments*, **2005**, 76 (5), 054102.
16. E. S. Jonsson, T. Y. Lee, K. Viswanathan, C. E. Hoyle, T. M. Roper, C. A. Guymon, C. Nason, I. V. Khudyakov, "Photoinduced free radical polymerization using self-initiating monomers" *Progress in Organic Coatings* 52(1), **2005**, 63-72.
17. T. M. Roper, C. A. Guymon, E. S. Jonsson, and C. E. Hoyle, "Influence of the Alkene Structure on the Mechanism and Kinetics of Thiol-Alkene Photopolymerizations with Real-Time Infrared Spectroscopy" *Journal of Polymer Science: Polymer Chemistry*, 42 (24), **2004**, 6283-6298.
18. J. Klosterman, L.V. Natarajan, V. P. Tondiglia, R. L. Sutherland, T. J. White, C. A. Guymon, and T. J. Bunning, "The influence of surfactant in reflective HPDLC Gratings," *Polymer* 45 (21), **2004**, 7213-7218.
19. T. Y. Lee, C. A. Guymon, E. S. Jonsson, and C. E. Hoyle, "The Effect of Monomer Structure on Oxygen Inhibition of (Meth)acrylates Photopolymerization," *Polymer* 45 (18), **2004**, 6155-6162.
20. T. Y. Lee, W. Kuang, E. S. Jonsson, C. A. Guymon, and C. E. Hoyle, "Synthesis and Photopolymerization of Novel Multifunctional Vinyl Esters," *Journal of Polymer Science: Polymer Chemistry*, 42 (17), **2004**, 4424-4436.

21. M. A. DePierro, and C. A. Guymon, "Generation and Control of Polymer Nanostructure Through Photopolymerization in Lyotropic Liquid Crystalline Media," *RadTech Report*, 18 (3), **2004**, 11-21.
22. T. Y. Lee, T. M. Roper, E. S. Jonsson, C. A. Guymon, and C. E. Hoyle, "Influence of Hydrogen Bonding on Photopolymerization Rate of Hydroxyalkyl Acrylates" *Macromolecules*, 37 (10), **2004**, 3659-3665.
23. T. Y. Lee, T. M. Roper, E. S. Jonsson, C. A. Guymon, and C. E. Hoyle, "Thiol-ene Photopolymerization Kinetics of Vinyl Acrylate/Multifunctional Thiol Mixtures," *Macromolecules*, 37 (10), **2004**, 3606-3613.
24. T. M. Roper, T. Kwee, T. Y. Lee, C. A. Guymon, and C.E. Hoyle, "Photopolymerization of Pigmented Thiol-ene Systems," *Polymer* 45 (9), **2004**, 2921-2929.
25. C. L. Lester, S. W. Smith, William L. Jarrett, and C. A. Guymon, "Effects of Monomer Organization on the Photopolymerization Kinetics of Acrylamide in Lyotropic Liquid Crystal Phases" *Langmuir* **2003**, 19 (22), 9466-9472.
26. D. M. McCormick, K. Stovall and C. A. Guymon, "Photopolymerization in Pluronic Lyotropic Liquid Crystals: Induced Mesophase Thermal Stability" *Macromolecules* 36 (17), **2003**, 6549-6558.
27. C. L. Lester, and C. A. Guymon, "Physical Properties of Hydrogels Synthesized from Lyotropic Liquid Crystal Templates" *Chemistry of Materials* 15 (17), **2003**, 3376-3384.
28. D. T. McCormick, Z. Fordham, J. Smith, P. McMullan, S. F. Thames and C. A. Guymon, "Photopolymerization in a Smectic Liquid Crystal: Polymer Molecular Weight and Chain Transfer" *Polymer* 44 (9), **2003**, 2751-2759.
29. D. T. McCormick, Z. W. Fordham, and C. A. Guymon, "Polymer Nanostructure Development of Fluorinated and Aliphatic Monoacrylates in Smectic Liquid Crystals via Photopolymerization" *Liquid Crystals*, 30 (1), **2003**, 49-58.
30. T. Y. Lee, T. M. Roper, E. S. Jonsson, I. Kudyakov, K. Viswanathan, C. Nason, C. A. Guymon, and C. E. Hoyle, "Kinetics of Vinyl Acrylate Photopolymerization" *Polymer*, 44 (10), **2003**, 2859-2865.
31. C. A. Guymon, and C. L. Lester, "Photopolymerization Kinetics of Nanostructured Polymers Templated by Lyotropic Liquid Crystals" in *Advances in Photoinitiated Polymerization*, ACS Symposium Series, **2003**, Vol. 847, pp. 378-388.
32. C. L. Lester, and C. A. Guymon, "Ordering Effects on the Polymerization of a Photopolymerizable Lyotropic Liquid Crystal" *Polymer*, 43 (13), **2002**, 3707-3715.
33. C. D. Colson, C. L. Lester, and C. A. Guymon, "Photopolymerization of Lyotropic Liquid Crystalline Systems: a New Route to Nano-structured Materials" in *Advances in Liquid Crystalline Materials and Technologies*, MRS Symposium Series, **2002**, Vol. 709, pp. 285-290.
34. D. T. McCormick, and C. A. Guymon, "Polymer Nanostructure Formation in Polymer Stabilized Liquid Crystals" in *Advances in Liquid Crystalline Materials and Technologies*, MRS Symposium Series, **2002**, Vol. 709, pp. 171-176.
35. M. D. Schulte, S. J. Clarkson, L. V. Natarajan, C. Allan Guymon, and T. J. Bunning, "Holographic Polymer Dispersed Liquid Crystals: Effect of Partial Matrix Fluorination on Electro-optical and Morphological Properties" in *Advances in Liquid Crystalline Materials and Technologies*, MRS Symposium Series, **2002**, Vol. 709, pp. 211-216.
36. C. L. Lester, S. W. Smith, and C. A. Guymon, "Acceleration of Polyacrylamide Photopolymerization Using Lyotropic Liquid Crystal Templates" *Macromolecules* 34 (25), **2001**, 8587-8589.

37. D. McCormick, and C. A. Guymon, "Investigation of Polymer Nanostructure Evolution During the Formation of Polymer/Smectic Liquid Crystal Composites" *Macromolecules*, 34 (20), **2001**, 6929-6935.
38. C. L. Lester, C. D. Colson, and C. A. Guymon, "Photopolymerization Kinetics and Structure Development of Templated Lyotropic Liquid Crystalline Systems" *Macromolecules* 34 (13), **2001**, 4430-4438.
39. C. L. Lester, and C. A. Guymon, "Phase Behavior and Polymerization Kinetics of a Semi-fluorinated Lyotropic Liquid Crystal" *Macromolecules*, 33 (15), **2000**, 5448-5454.
40. C. A. Guymon and C. N. Bowman, "Formation of Polymer Stabilized Ferroelectric Liquid Crystals Using a Fluorinated Diacrylate" in *Liquid Crystal Materials and Devices*, MRS Symposium Proceedings Series, 559, **1999**, 123-128.
41. C. A. Guymon, L. A. Dougan, P. J. Martens, N. A. Clark, D. M. Walba, and C. N. Bowman, "Polymerization Conditions and Electro-optic Properties of Polymer Stabilized Ferroelectric Liquid Crystals" *Chemistry of Materials* 10 (9), **1998**, 2378-88 (with cover illustrations).
42. C. A. Guymon, R. Shao, L. A. Dougan, N. A. Clark, D. Hoelter, H. Frey and C. N. Bowman, "Polymerization of Polymer/FLC Composites Formed from Branched Liquid Crystalline Dimethacrylates" *Liquid Crystals* 24 (2), **1998**, 263-70.
43. C. A. Guymon, E. N. Hoggan, N. A. Clark, T. R. Rieker, D. M. Walba and C. N. Bowman, "Molecular Organization of Photopolymerizable Monomers in a Smectic Liquid Crystal: Dependence on Monomer Structure" *Science* 275 (5296), **1997**, 57-59.
44. C. A. Guymon and C. N. Bowman, "Kinetic Analysis of Polymerization Rate Acceleration During the Formation of Polymer/ Smectic Liquid Crystal Composites" *Macromolecules* 30 (18), **1997**, 5271-8.
45. C. A. Guymon and C. N. Bowman, "Photopolymerization Behavior and Kinetics During the Formation of Polymer Stabilized Ferroelectric Liquid Crystals" *Macromolecules* 30 (6), **1997**, 1594-1600.
46. C. N. Bowman and C. A. Guymon, "Polymerization in Liquid Crystals: Polymerization and Properties of Polymer Stabilized Ferroelectric Liquid Crystals" *Materials Research Society Bulletin*. 22 (9), **1997**, 15-20 (with cover illustrations).
47. C. A. Guymon, L. A. Dougan and C. N. Bowman, "Photopolymerization and Electro-optic Properties of Polymer Network/Ferroelectric Liquid Crystal Composites" in *Advances in Photopolymerization: Fundamentals and Applications*, ACS Symp. Series Vol. 673; A. B. Scranton, C. N. Bowman, and R. W. Peiffer, Eds.; American Chemical Society; Washington D.C., 1997; pp. 16-27.
48. A. R. Kannurpatti, R. W. Pfeiffer, C. A. Guymon and C. N. Bowman, "Photochemistry of Polymers: Photopolymerization Fundamentals and Applications" in *Polymers in Optics: Physics, Chemistry, and Applications*, R. A. Lessard, W. A. Frank, Eds., Critical Reviews of Optical Science and Technology, CR63, **1996**, 136-63.
49. Guymon, E. N. Hoggan, D. M. Walba, N. A. Clark and C. N. Bowman, "Phase Behavior and Electro-optic Characteristics of a Polymer Stabilized Ferroelectric Liquid Crystal" *Liquid Crystals*, 19, **1995**, 719-727.
50. C. A. Guymon, E. N. Hoggan and C. N. Bowman "Studies of a Polymer Dispersed Ferroelectric Liquid Crystal" in *Amorphous Silicon Technology*, E. A. Schiff, A. Madan, M. Hack, A. Matsuda, M. Powell, Eds., MRS Symposium Series, 377, **1995**, 865-870.
51. C. A. Guymon, L. A. Dougan, E. N. Hoggan and C. N. Bowman, "Polymerization Effects on the Electro-optic Properties of a Polymer Stabilized Ferroelectric Liquid Crystal" in *Liquid Crystals for Advanced Technologies*,

Conference Proceedings

1. J. D. Clapper, and C. A. Guymon, "Nanostructured Biomaterials for the Treatment of Central Retinal Vein Occlusion," *Polymer Preprints*, 47 (2), **2006**, 93-4.
2. K. Owusu-Adom, and C. A. Guymon, "Surface modification of clay nanoparticles for the control of photopolymerization kinetic behavior," *Polymer Preprints*, 47 (2), **2006**, 939-940.
3. J. D. Clapper, and C. A. Guymon, "Physical Properties of a PEG Diacrylate Hydrogel Photopolymerized within Lyotropic Liquid Crystalline Template Media", *Polymer Preprints*, 47 (2), **2006**, 111-2.
4. T. J. White, L. V. Natarajan, V. P. Tondiglia, P. F. Lloyd, T. J. Bunning, and C. A. Guymon, "The Influence of Thiol-ene Polymer Evolution on the Formation and Performance of Holographic Polymer Dispersed Liquid Crystals", *Polymer Preprints*, 47 (2), **2006**, 1013-4.
5. L. Sievens-Figueroa, and C. A. Guymon, "Light intensity and crosslinking effects on the nanostructure of polymerizable lyotropic liquid crystalline systems," *Polymer Preprints*, 47 (2), **2006**, 396-397.
6. J. D. Clapper, and C. A. Guymon, "Interpenetrating Networks from Photopolymerization in Lyotropic Liquid Crystal Polymer Templates," *Radtech e/5 Proceedings*, **2006**.
7. M. D. DePierro, K. G. Carpenter, and C. A. Guymon, "Nanostructure Development of Polymers Templated from Lyotropic Liquid Crystals," *Radtech e/5 Proceedings*, **2006**.
8. White, T.J., Liechty, W.B. and Guymon, C.A., "Copolymerization of N-Vinyl Pyrrolidinone with Multifunctional Acrylates", *Radtech e/5 Proceedings*, **2006**.
9. M. D. DePierro, K. Carpenter, T. Gioielli, and C. A. Guymon, "Investigation of factors influencing the retention of nanostructure in polymers templated from lyotropic liquid crystals," *Polymer Preprints*, 46 (2), **2005**, 559-60.
10. M. D. DePierro, and C. A. Guymon, "Influence of liquid crystalline order on photoinitiation efficiency and polymerization behavior," *Polymer Preprints*, 46 (2), **2005**, 759-60.
11. M. Schulte, S. Clarson, L. Natarajan, C. A. Guymon, and T. J. Bunning, "Structure development in fluorinated holographic nanocomposite films," *Polymer Preprints*, 46 (2), **2005**, 374-5.
12. K. Owusu-Adom, and C. A. Guymon, "Photopolymerization of Clay-Polymer Nanocomposite Systems," *PMSE Preprints*, 92, **2005**, 374-5.
13. T. M. Roper, C. A. Guymon, E. S. Jonsson, and C. E. Hoyle, "Investigation of the effect of alkene structure on the reaction kinetics and mechanism of photoinduced thiol-ene polymerizations," *Polymer Preprints*, 45, **2004**, 67-68.
14. T. Y. Lee, C. A. Guymon, E. S. Jonnson, and C. E. Hoyle, "Photopolymerization and copolymerization of novel self-initiating monomers with thiol and vinyl ether," *Polymer Preprints*, 45, **2004**, 61-62.
15. T. Y. Lee, T. M. Roper, E. S. Jonnson, C. A. Guymon, and C. E. Hoyle, "Influence of hydrogen bonding on the photopolymerization rates of mono- and multifunctional (meth)acrylates," *Polymer Preprints*, 45, **2004**, 49-50.
16. T. J. White, and C. A. Guymon, "Composition dependence of the photopolymerization kinetics in holographic polymer dispersed liquid crystals (HPDLCs)," *Polymer Preprints*, 45, **2004**, 43-44.

17. M. A. DePierro, A. J. Olson, and C. A. Guymon, "Influence of photoinitiator mobility and solubility on the polymerization behavior in lyotropic liquid crystalline systems," *Polymer Preprints*, 45, **2004**, 29-30.
18. T. Y. Lee, C. A. Guymon, E. S. Jonnson, and C. E. Hoyle, "Photoinitiation and photopolymerization of novel self-initiating monomers," *Polymer Preprints*, 45, **2004**, 25-26.
19. T. Y. Lee, C. A. Guymon, E. S. Jonnson, and C. E. Hoyle, "Synthesis and photopolymerization of novel multifunctional vinylester dendrimers," *Polymer Preprints*, 45, **2004**, 20-21.
20. T. M. Roper, C. A. Guymon, and C. E. Hoyle, "Measurement of photopolymerization kinetics using a thin-film calorimeter," *Polymeric Materials: Science and Engineering*, 91 **2004**, 25-26.
21. T. Y. Lee, C. E. Hoyle, T. M. Roper, C. A. Guymon, and E. S. Jonnson, "Investigation of the effect of thiols on polymerization kinetics of vinyl acrylate," *Polymeric Materials: Science and Engineering*, 91 **2004**, 21-22.
22. C. E. Hoyle, T. Y. Lee, E. S. Jonnson, and C. A. Guymon, "Photoinitiation and photopolymerization of novel self-initiating monomers," *Technical Conference Proceedings - UV & EB Technology Expo & Conference*, **2004**, 773-779.
23. T. Y. Lee, C. A. Guymon, E. S. Jonnson, and C. E. Hoyle, "Novel multifunctional vinylester monomers: a new class of monomer for reduced oxygen inhibition in UV curing" *Technical Conference Proceedings - UV & EB Technology Expo & Conference*, **2004**, 766-772.
24. M. A. DePierro, A. J. Olson, and C. A. Guymon, "Effect of photoinitiator solubility on polymerization in lyotropic liquid crystalline media," *Technical Conference Proceedings - UV & EB Technology Expo & Conference*, **2004**, 626-632.
25. C. A. Guymon, T. Y. Lee, E. S. Jonnson, and C. E. Hoyle, "Influence of structure on photocuring rate of ultrafast monofunctional diluents" *Technical Conference Proceedings - UV & EB Technology Expo & Conference*, **2004**, 268-274.
26. T. M. Roper, C. M. Chandler, C. A. Guymon, C. E. Hoyle, and S. E. Jonsson, "Structural influence of model ene reactivity in photoinduced thiol-ene polymerization of multifunctional alkenes," *Technical Conference Proceedings - UV & EB Technology Expo & Conference*, **2004**, 242-251.
27. C. L. Lester and C. A. Guymon, "Nanostructured Gels via Photopolymerization in Lyotropic Liquid Crystalline Templates" *ACS Polymer Preprints*, 44, **2003**, 216-7.
28. M. A. DePierro, A. J. Olson, and C. A. Guymon, "Photoinitiator Solubility Effects on Polymer Nanostructure Development in Lyotropic Liquid Crystals" *ACS Polymer Preprints*, 44, **2003**, 262-3.
29. C. M. Comer, P. McMullan, L. Williams, and C. A. Guymon, "Synthesis, Characterization, and Photopolymerization Kinetics of Novel Polymerizable Lyotropic Liquid Crystals: Dimethylaminoethyl Acrylates with Variable Alkyl Chain Lengths" *ACS Polymer Preprints*, 44, **2003**, 264-5.
30. D. T. McCormick and C. A. Guymon, "Polymer Nanostructure Evolution in Smectic Liquid Crystals" *ACS PMSE Proceedings*, 89, **2003**, 41-2
31. T. J. White and C. A. Guymon, "Photopolymerization Kinetics of Holographic Polymer-dispersed Liquid Crystals" *ACS PMSE Proceedings*, 89, **2003**, 452-3.
32. D. T. McCormick, K. D. Stovall, and C. A. Guymon, "Induced Mesophase Stability in Polymer/Pluronic LLC Composites Using Crosslinking Acrylate Monomers" *ACS Polymer Preprints*, 44, **2003**, 5-6.

33. T. Y. Lee, K. A. Lowery, C. A. Guymon, E. S. Jonsson, and C. E. Hoyle, "Synthesis, Photopolymerization, and Coatings Evaluation of Novel Vinyl Esters" *ACS Polymer Preprints*, **44**, **2003**, 21-2.
34. T. M. Roper, C. E. Hoyle, and C. A. Guymon, "Effect of Double Bond Position on the Reactivity of Alkenes with a Monofunctional Thiol and its Applications to Thiol-ene Crosslinking Reactions" *ACS Polymer Preprints*, **44**, **2003**, 111-2.
35. T. Y. Lee, C. A. Guymon, E. S. Jonsson, and C. E. Hoyle, "Spacer Length and Structural Effects on Oxygen Inhibition of Dimethacrylates" *ACS Polymer Preprints*, **44**, **2003**, 140-1.
36. T. M. Roper, C. E. Hoyle, and C. A. Guymon, "Construction and Application of a Thin-film Calorimeter for the In-situ Characterization of Photopolymerization Kinetics" *ACS PMSE Proceedings*, **88**, **2003**, 219-20.
37. D. T. McCormick and C. A. Guymon, "Evolution of Polymer Nanostructure in Polymer/Ferroelectric Liquid Crystal Composites" *ACS Polymer Preprints*, **43**, **2002**, 528-9.
38. C. A. Guymon, and J. H. Norton, "Nanostructured Organic-Inorganic Composites Templated by Photopolymerizable Lyotropic Liquid Crystals" *Radtech 2002*, **2002**, 338-348.
39. D. T. McCormick, and C. A. Guymon, "Photopolymerization of Fluorinated and Aliphatic Acrylates in Polymer Stabilized Liquid Crystalline Systems: Effect of Liquid Crystalline Order on Polymer Molecular Weight" *Radtech 2002*, **2002**, 349-355.
40. E. S. Jonsson, K. Vishwanathan, C. E. Hoyle, T. Y. Lee, T. M. Roper, C. A. Guymon, C. Nason, and I. Kudyakov, "Photocuring of Vinyl Acrylates and Related Monomers with Various Comonomers" *Radtech 2002*, **2002**, 284-291.
41. T. M. Roper, K. L. Rhudy, C. M. Chandler, C. E. Hoyle, and C. A. Guymon, "Photoinitiated Polymerization of Pigmented Thiol-Ene Systems" *Radtech 2002*, **2002**, 697-704.
42. T. Y. Lee, C. E. Hoyle, T. M. Roper, C. A. Guymon, E. S. Jonsson, and I. Kudyakov, "Investigation of the Effect of Thiols on Polymerization Kinetics of Vinyl Acrylate" *Radtech 2002*, **2002**, 705-711.
43. C. L. Lester and C. A. Guymon, "Nanostructured Gels Via Photopolymerization of Lyotropic Liquid Crystalline Templates" *ACS PMSE Proceedings*, **85**, **2001**, 200-1.
44. D. T. McCormick, R. Chavers, and C. A. Guymon, "Polymer Nanostructure Formation in a Smectic Liquid Crystal" *ACS Polymer Preprints*, **42**, **2001**, 168-9.
45. C. L. Lester and C. A. Guymon, "Photopolymerization Kinetics of Nanostructured Polymers Templated by Lyotropic Liquid Crystals" *ACS Polymer Preprints*, **42**, **2001**, 724-5.
46. J. H. Norton, and C. A. Guymon, "Nanostructured Organic-Inorganic Composites Templated by Photopolymerizable Lyotropic Liquid Crystals" *ACS Polymer Preprints*, **42**, **2001**, 753-4.
47. A. G. DeTrana, C. M. Comer, and C. A. Guymon, "UV-Cured Metal Coatings for Surface Energy Reduction" *ACS PMSE Proceedings*, **85**, **2001**, 317-8.
48. C. L. Lester and C. A. Guymon, "Formulation and Polymerization of Lyotropic Liquid Crystalline Assemblies with Controlled Nanostructure" *Formulations Forum 2000*.
49. C. L. Lester and C. A. Guymon, "Characterization of Polymerization Kinetics and Phase Behavior of a UV Curable Semifluorinated Lyotropic Liquid Crystal" *Radtech 2000*, **2000**, 773-84.
50. C. L. Lester, C. Colson, and C. A. Guymon, "Polymerization Kinetics of Difunctional Monomers in Lyotropic Liquid Crystalline Phases" *ACS PMSE Proceedings*, **82**, **2000**, 352-3.

51. C. L. Lester and C. A. Guymon, "Kinetic Investigations of Photo-Initiated Free-Radical Polymerization of Diallyldimethylammonium Chloride" *ACS Polymer Preprints*, 40, **1999**, 277-8.
52. C. L. Lester and C. A. Guymon, "Phase Behavior and Polymerization Kinetics of a Semi-fluorinated Lyotropic Liquid Crystal" *ACS Polymer Preprints*, 40, **1999**, 506-7.
53. C. A. Guymon and C. N. Bowman, "Formulation of Polymer Stabilized Ferroelectric Liquid Crystals for Optimization of Electro-optic Performance" *Formulations Forum '99*, **1999**.
54. C. A. Guymon and C. N. Bowman, "Formation of Polymer Stabilized Ferroelectric Liquid Crystal Thin Films Using a Fluorinated Diacrylate" *ACS Polymer Preprints*, 39, **1998**, 972-3.
55. C. A. Guymon and C. N. Bowman, "Influence of Polymerization Conditions on Performance in Polymer/Ferroelectric Liquid Crystal Composite Thin Films" *ACS Polymer Preprints*, 39, **1998**, 1051-2.
56. C. A. Guymon and C. N. Bowman, "Characterization and Polymerization Behavior of Polymer/Smectic Liquid Crystal Composites" *Fifth International Conference on Composites Engineering*, **1998**, 349-50.
57. C. A. Guymon and C. N. Bowman, "Photopolymerization Behavior During the Formation of Polymer/Smectic Liquid Crystal Composites" *Radtech '98 Proceedings*, **1998**, 597-600.
58. C. A. Guymon and C. N. Bowman, "Mechanisms for Accelerated Polymerization Rate Behavior in Polymer/Smectic Liquid Crystal Composites" *ACS Polymer Preprints*, 38, **1997**, 292-3.
59. C. A. Guymon, R. Shao, D. Hoelter, H. Frey and C. N. Bowman, "Polymerization of Polymer Stabilized Ferroelectric Liquid Crystals Formed from Branched Liquid Crystalline Dimethacrylates" *ACS Polymer Preprints*, 38, **1997**, 366-7.
60. C. A. Guymon and C. N. Bowman "Monomer Heterogeneity Before Polymerization in Polymer Stabilized Ferroelectric Liquid Crystals" *ACS PMSE Proceedings*, 75, **1996**, 119-20.
61. C. A. Guymon, E. N. Hoggan and C. N. Bowman, "Photopolymerization Kinetics During the Formation of Polymer Stabilized Ferroelectric Liquid Crystals" *ACS PMSE Proceedings*, 74, **1996**, 192-3.

Presentations

Invited

1. C. A. Guymon, "Polymer Nanostructure Formation in Liquid Crystals," Eindhoven University of Technology Chemical Engineering Departmental Seminar, Eindhoven, Netherlands, January, 2007.
2. C. A. Guymon, "Polymer Nanostructure Formation Through Photopolymerization in Lyotropic Liquid Crystals," Royal Institute of Technology Fiber and Polymer Technology Departmental Seminar, Stockholm, Sweden, January 2007.
3. C. A. Guymon, "Polymer Nanostructure Formation through Photopolymerization in Lyotropic Liquid Crystals," Philips Electronics, Eindhoven, Netherlands, January 2007.

4. C. A. Guymon, "Photopolymerization in Nanostructured Systems," DSM, Urmond, Netherlands, January 2007.
5. C. A. Guymon, "Graduate School and Research in Chemical Engineering at the University of Iowa," University of Wisconsin- Eau Claire Departmental Seminar, Eau Claire, WI, November 2006.
6. C. A. Guymon, "Polymeric Design for Vascular Stents and Graft Devices," Medical Device and Manufacturing Conference, Minneapolis, MN, October 2006.
7. C. A. Guymon, "Polymer Nanostructures Formation in Liquid Crystals," University of Wisconsin-Madison Chemical and Biological Engineering Departmental Seminar," Madison, WI, September 2006.
8. J. D. Clapper and C. A. Guymon, "Polymeric Design for a Ocular Nanostructured Vascular Device, American Chemical Society Fall Meeting, San Francisco, CA, September 2006.
9. C. A. Guymon, "Polymeric Design for Vascular Stents and Graft Devices," Medical Device and Manufacturing Conference, New York, NY, June 2006.
10. C. A. Guymon, "Polymer Nanostructures through Photopolymerization in Lyotropic Liquid Crystals," Kodak, Rochester, NY, March 2006.
11. C. A. Guymon, "Polymer Nanostructures through Photopolymerization in Lyotropic Liquid Crystals," Cytec, Atlanta, GA, March 2006.
12. C. A. Guymon, "Polymer Nanostructure Development in Liquid Crystals," American Chemical Society Spring Meeting, Atlanta, GA, March 2006.
13. C. A. Guymon, "Polymer Nanostructure Formation in Liquid Crystals," Australasian Polymer Society, Rotorua, New Zealand, February 2006.
14. C. A. Guymon, "Polymer Nanostructures through Photopolymerization in Lyotropic Liquid Crystals," Bausch and Lomb, Rochester, NY, January 2006.
15. C. A. Guymon, "Polymer Nanostructure Formation in Liquid Crystals," Clemson University Chemical Engineering Departmental Seminar, Clemson, SC, October 2005.
16. C. A. Guymon, "Polymer Nanostructure Formation Using Photopolymerization," Wright Patterson Air Force Base Laser Hardening Symposium Series, Wright Patterson Air Force Base, OH, September 2005.
17. C. A. Guymon, "Polymer Nanostructure Formation in Liquid Crystals," Photopolymerization Fundamentals Symposium, Breckenridge, CO, June 2005.
18. C. A. Guymon, "Nanotechnology and Photopolymerization," Photopolymerization Fundamentals Short Course, Breckenridge, CO, June 2005.
19. C. A. Guymon, "Polymer Nanostructure Formation in Liquid Crystals," Iowa State University Chemical Engineering Departmental Seminar, Ames, IA, April 2005.
20. C. A. Guymon, "Polymer Nanostructure Formation in Liquid Crystals," University of Missouri- Kansas City Chemistry Departmental Seminar, Kansas City, MO, February 2005.
21. C. A. Guymon and M. A. DePierro, "Control of Polymer Nanostructure in Photopolymerization of Lyotropic Liquid Crystalline Systems" 2004 MRS Fall Meeting, Boston, MA, December 2004.
22. C. A. Guymon, "Polymer Nanostructure Formation in Liquid Crystals," University of Iowa Physical Chemistry Seminar, Iowa City, IA, December 2004.

23. C. A. Guymon, "Polymer Nanostructure Formation in Liquid Crystals," Illinois Institute of Technology, Chicago, IL, September 2004.
24. T. Y. Lee, C. A. Guymon, T. M. Roper, S E. Jönsson, and C. E. Hoyle, "Influence of hydrogen bonding on the photopolymerization rates of mono- and multifunctional (meth)acrylates," 2004 ACS Fall National Meeting, Philadelphia, PA, August 2004.
25. C. A. Guymon, "Polymer Nanostructure Evolution in Polymer Stabilized Liquid Crystals" Great Lakes Photonics Symposium, Cleveland, OH, June 2004.
26. C. A. Guymon, "Polymer Nanostructure Formation in Liquid Crystals," University of Massachusetts, Amherst, MA, February 2004.
27. C. L. Lester and C. A. Guymon, "Nanostructured Gels via Photopolymerization in Lyotropic Liquid Crystalline Templates" ACS Fall ACS Meeting, New York, NY, September 2003.
28. D. T. McCormick and C. A. Guymon, "Polymer Nanostructure Evolution in Smectic Liquid Crystals" ACS Fall ACS Meeting, New York, NY, September 2003.
29. C. A. Guymon, "Polymer Nanostructure Formation in Liquid Crystals," Gordon Conference on Liquid Crystals, New London, NH, June 2003.
30. C. A. Guymon, "Polymer Nanostructure Formation in Liquid Crystals," Queen's University, Kingston, ON, Canada, April 2003.
31. D. T. McCormick, K. D. Stovall, and C. A. Guymon, "Induced Mesophase Stability in Polymer/Pluronic LLC Composites Using Cross-linking Acrylate Monomers," 2003 Spring ACS Meeting, New Orleans, LA, March 2003.
32. C. A. Guymon, "Photopolymerization of Lyotropic Liquid Crystalline Systems: A New Route to Nanostructured Materials," Iowa State University, Ames, IA, September 2002.
33. C. A. Guymon, "Nanotechnology and Photopolymerization," Photopolymerization Fundamentals Short Course, Breckenridge, CO, June 2002.
34. C. A. Guymon, "Photopolymerization of Lyotropic Liquid Crystalline Systems: A New Route to Nanostructured Materials," Photopolymerization Fundamentals Symposium, Breckenridge, CO, June 2002.
35. C. A. Guymon, "Polymer Structure Evolution in Liquid Crystalline Systems," 2002 Canadian Society of Chemists National Meeting, Vancouver, Canada, June 2002.
36. C. A. Guymon, "Photopolymerization Kinetics of Nanostructured Polymers Templated by Lyotropic Liquid Crystals," 2001 Fall ACS Meeting, Chicago, IL, August 2001.
37. C. A. Guymon, "Photopolymerization of Lyotropic Liquid Crystalline Systems: A New Route to Nanostructured Materials," Flint Ink Corporation, Ann Arbor, MI, February 2001.
38. C. A. Guymon, "Pigment Dispersion for UV Inks Using Polymerizable Surfactants," NSF IU/CRC in Coatings Semi-annual Meeting, New Orleans, LA, February 2001.
39. C. A. Guymon, "UV Curing of Amphiphilic Monomers for Corrosion Resistant Coatings and Nanostructured Materials," Betz Dearborn, Trevose, PA, January 2001.
40. C. A. Guymon, "Photopolymerization of Lyotropic Liquid Crystalline Systems: A New Route to Nanostructured Materials," University of Missouri- Rolla, Rolla, MO, November 2000.

41. C. A. Guymon, "Photopolymerization of Lyotropic Liquid Crystalline Systems: A New Route to Nanostructured Materials," Louisiana State University, Baton Rouge, LA, September 2000.
42. C. A. Guymon and C. N. Bowman, "Formulation of Polymer Stabilized Ferroelectric Liquid Crystals for Optimization of Electro-optic Performance" Formulations Forum '99, Orlando, FL, March 1999.
43. C. A. Guymon, "Plastic Film Surface Modification Using Photopolymerization and Photografting," Tredegar Inc., Terre Haute, IN, August 1998.
44. C. A. Guymon, "Characterization and Polymerization Behavior of Polymer Stabilized Ferroelectric Liquid Crystals," DSM Desotech Inc., Chicago, IL, August 1998.
45. C. A. Guymon, "Characterization and Polymerization Behavior of Polymer/Smectic Liquid Crystal Composites" Fifth International Conference on Composites Engineering, Las Vegas, NV, July 1998.
46. C. A. Guymon, "Characterization and Polymerization Behavior of Polymer Stabilized Ferroelectric Liquid Crystals" 1998 SPIE Annual Meeting, San Diego, CA, July 1998.
47. C. A. Guymon, "Monomer Segregation in Polymerization of Polymer Stabilized Ferroelectric Liquid Crystals" Brigham Young University Chemical Engineering Seminar Series, March 1997.
48. C. A. Guymon and C. N. Bowman, "Electro-optic Properties and Polymerization in Polymer Stabilized Ferroelectric Liquid Crystals" Wright-Patterson AFB- Laser Hardened Materials Symposium Series, August 1996.

Contributed

1. L. Sievens-Figueroa, and C. A. Guymon, "Photopolymerization Kinetics and Structural Development of Polymerizable Lyotropic Liquid Crystalline Systems," SHPE National Technical and Career Conference Meeting, Denver, CO, January, 2007.
2. L. Sievens-Figueroa, and C. A. Guymon, "Photopolymerization Kinetics, Crosslinking, and the Resulting Properties of Polymerizable Lyotropic Liquid Crystals," AIChE National Meeting, San Francisco, CA, November, 2006.
3. J. D. Clapper, and C. A. Guymon "Nanostructured Biomaterials for the Treatment of Central Retinal Vein Occlusion," Fall ACS Meeting, San Francisco, CA, September 2006.
4. K. Owusu-Adom, Kwame; and C. A. Guymon, "Surface modification of clay nanoparticles for the control of photopolymerization kinetic behavior," Fall ACS Meeting, San Francisco, CA, September 2006
5. T. J. White, L. V. Natarajan, V. P. Tondiglia, P. F. Lloyd, T. J. Bunning, and C. A. Guymon, "The Influence of Thiol-ene Polymer Evolution on the Formation and Performance of Holographic Polymer Dispersed Liquid Crystals", Fall ACS Meeting, San Francisco, CA, September 2006.
6. J. D. Clapper, and C. A. Guymon, "Physical Properties of a PEGDA Hydrogel Photopolymerized within Lyotropic Liquid Crystalline Template Media," Fall ACS Meeting, San Francisco, CA, September 2006.
7. L. Sievens-Figueroa, and C. A. Guymon, "Light intensity and crosslinking effects on the nanostructure of polymerizable lyotropic liquid crystalline systems," Fall ACS Meeting, San Francisco, CA, September 2006 (poster).

8. C. A. Guymon, M. A. DePierro, and J. D. Clapper "Polymer nanostructures through photopolymerization in lyotropic liquid crystals," International Liquid Crystals Conference, Keystone, CO, July 2006.
9. M. D. DePierro, K. G. Carpenter, and C. A. Guymon, "Nanostructure Development of Polymers Templated from Lyotropic Liquid Crystals," Radtech UV & EB Technology Expo and Conference, Chicago, IL, April, 2006.
10. J. D. Clapper, and C. A. Guymon "Interpenetrating Networks from Photopolymerization in Lyotropic Liquid Crystal Polymer Templates," Radtech UV & EB Technology Expo and Conference, Chicago, IL, April 2006.
11. T. J. White, W. B. Liechty, and C. A. Guymon, "Copolymerization of N-Vinyl Pyrrolidone with Multifunctional Acrylates", Radtech UV & EB Technology Expo and Conference, Chicago, IL, April 2006.
12. J. D. Clapper, and C. A. Guymon, "Structure Property Relationships for Nanostructured Biopolymeric Networks," Fall National AIChE Meeting, Cincinnati, OH, November 2005.
13. T. J. White, W. B. Liechty, and C. A. Guymon, "Kinetics and Mechanical Properties in Copolymerization with Acrylates with Increasing Functionality," Fall National AIChE Meeting, Cincinnati, OH, November 2005 (poster).
14. M. A. DePierro, T. J. Gioielli, and C. A. Guymon, "Photoinitiation and Monomer Ordering Phenomena in Polymerizations Conducted in Lyotropic Liquid Crystalline Phases," Fall National AIChE Meeting, Cincinnati, OH, November 2005.
15. M. A. DePierro, K. G. Carpenter, and C. A. Guymon, "Investigation of Factors Influencing Phase Retention in Lyotropic Liquid Crystal Template Polymerization," Fall National AIChE Meeting, Cincinnati, OH, November 2005.
16. K. Owusu-Adom, and C. A. Guymon, "Quaternary Ammonium Surfactant Effects on Polymerization Rates in Clay-Polymer Nanocomposite Systems," Fall National AIChE Meeting, Cincinnati, OH, November 2005.
17. M. D. DePierro, and C. A. Guymon, "Influence of liquid crystalline order on photoinitiation efficiency and polymerization behavior," Fall ACS Meeting, Washington DC, August 2005.
18. M. D. DePierro, K. Carpenter, T. Gioielli, and C. A. Guymon, "Investigation of factors influencing the retention of nanostructure in polymers templated from lyotropic liquid crystals," Fall ACS Meeting, Washington DC, August 2005.
19. M. Schulte, S. Clarson, L. Natarajan, C. A. Guymon, and T. J. Bunning, "Structure development in fluorinated holographic nanocomposite films," Fall ACS Meeting, Washington DC, August 2005.
20. M. D. DePierro, and C. A. Guymon, "Investigation of factors influencing the retention of nanostructure in polymers templated from lyotropic liquid crystals," Photopolymerization Fundamentals Meeting, Breckenridge, CO, June 2005.
21. T. J. White, and C. A. Guymon, "Photopolymerization Kinetics in Holographic Dispersed Liquid Crystals," Gordon Conference on Liquid Crystals, Tilton, NH, June 2005 (poster).
22. K. Owusu-Adom, and C. A. Guymon, "Photopolymerization of Clay-Polymer Nanocomposite Systems," Spring ACS Meeting, San Diego, CA, March 2005 (poster).
23. T. J. White, and C. A. Guymon, "Photopolymerization Kinetic Contribution of Additives in the Formation of Holographic Polymer Dispersed Liquid Crystals (HPDLCs), 2004 MRS Fall Meeting, Boston, MA, December 2004

24. T. Y. Lee, and C. A. Guymon, "Influence of hydrogen bonding on the photopolymerization rates of mono- and multifunctional (meth)acrylates" AICHE Annual Meeting, Austin, TX, November 2004.
25. M. A. DePierro, "Influence of photoinitiator mobility and solubility on the polymerization behavior in lyotropic liquid crystalline systems" AICHE Annual Meeting, Austin, TX, November 2004.
26. C. A. Guymon, C. L. Lester, and D. T. McCormick, "Formation of Templated Polymers Using Lyotropic Liquid Crystalline Systems" AICHE Annual Meeting, Austin, TX, November 2004.
27. T. M. Roper, C. A. Guymon, E. S. Jonsson, and C. E. Hoyle, "Investigation of the effect of alkene structure on the reaction kinetics and mechanism of photoinduced thiol-ene polymerizations," Fall ACS Meeting, Philadelphia, PA, August 2004.
28. T. Y. Lee, C. A. Guymon, E. S. Jonsson, and C. E. Hoyle, "Photopolymerization and copolymerization of novel self-initiating monomers with thiol and vinyl ether," Fall ACS Meeting, Philadelphia, PA, August 2004.
29. T. Y. Lee, T. M. Roper, E. S. Jonsson, C. A. Guymon, and C. E. Hoyle, "Influence of hydrogen bonding on the photopolymerization rates of mono- and multifunctional (meth)acrylates," Fall ACS Meeting, Philadelphia, PA, August 2004.
30. T. J. White, and C. A. Guymon, "Composition dependence of the photopolymerization kinetics in holographic polymer dispersed liquid crystals (HPDLCS)," Fall ACS Meeting, Philadelphia, PA, August 2004.
31. M. A. DePierro, A. J. Olson, and C. A. Guymon, "Influence of photoinitiator mobility and solubility on the polymerization behavior in lyotropic liquid crystalline systems," Fall ACS Meeting, Philadelphia, PA, August 2004.
32. T. Y. Lee, C. A. Guymon, E. S. Jonsson, and C. E. Hoyle, "Photoinitiation and photopolymerization of novel self-initiating monomers," Fall ACS Meeting, Philadelphia, PA, August 2004.
33. T. Y. Lee, C. A. Guymon, E. S. Jonsson, and C. E. Hoyle, "Synthesis and photopolymerization of novel multifunctional vinylester dendrimers," Fall ACS Meeting, Philadelphia, PA, August 2004.
34. T. M. Roper, C. A. Guymon, and C. E. Hoyle, "Measurement of photopolymerization kinetics using a thin-film calorimeter," Fall ACS Meeting, Philadelphia, PA, August 2004.
35. T. Y. Lee, C. E. Hoyle, T. M. Roper, C. A. Guymon, and E. S. Jonsson, "Investigation of the effect of thiols on polymerization kinetics of vinyl acrylate," Fall ACS Meeting, Philadelphia, PA, August 2004.
36. C. E. Hoyle, T. Y. Lee, E. S. Jonsson, and C. A. Guymon, "Photoinitiation and photopolymerization of novel self-initiating monomers," UV & EB Technology Expo & Conference, Charlotte, NC, April 2004.
37. T. J. White, and C. A. Guymon, "Photopolymerization Kinetics of Holographic Polymer Dispersed Liquid Crystals: Role of Octanoic Acid and N-vinyl Pyrrolidinone" Great Lakes Photonics Symposium, Cleveland, OH, June 2004.
38. T. Y. Lee, C. A. Guymon, E. S. Jonsson, and C. E. Hoyle, "Novel multifunctional vinylester monomers: a new class of monomer for reduced oxygen inhibition in UV curing" UV & EB Technology Expo & Conference, Charlotte, NC, April 2004.
39. M. A. DePierro, A. J. Olson, and C. A. Guymon, "Effect of photoinitiator solubility on polymerization in lyotropic liquid crystalline media," UV & EB Technology Expo & Conference, Charlotte, NC, April 2004.
40. C. A. Guymon, T. Y. Lee, E. S. Jonsson, and C. E. Hoyle, "Influence of structure on photocuring rate of ultrafast monofunctional diluents" UV & EB Technology Expo & Conference, Charlotte, NC, April 2004.

41. T. M. Roper, C. M. Chandler, C. A. Guymon, C. E. Hoyle, and S. E. Jonsson, "Structural influence of model ene reactivity in photoinduced thiol-ene polymerization of multifunctional alkenes," UV & EB Technology Expo & Conference, Charlotte, NC, April 2004.
42. C. L. Lester, and C. A. Guymon, "Photopolymerization Kinetics in Lyotropic Liquid Crystalline Systems" AIChE Annual Meeting, San Francisco, CA, November 2003.
43. D. M. McCormick, and C. A. Guymon, "Induced Mesophase Stability in Polymer/Lyotropic Liquid Crystals Systems via Nanostructured Polymer Gels" AIChE Annual Meeting, San Francisco, CA, November 2003.
44. M. A. DePierro, A. J. Olson, and C. A. Guymon, "Photoinitiator Solubility Effects on Polymer Nanostructure Development in Lyotropic Liquid Crystals" ACS Fall ACS Meeting, New York, NY, September 2003 (poster).
45. C. M. Comer, P. McMullan, L. Williams, and C. A. Guymon, "Synthesis, Characterization, and Photopolymerization Kinetics of Novel Polymerizable Lyotropic Liquid Crystals: Dimethylaminoethyl Acrylates with Variable Alkyl Chain Lengths" ACS Fall ACS Meeting, New York, NY, September 2003 (poster).
46. T. J. White and C. A. Guymon, "Photopolymerization Kinetics of Holographic Polymer-dispersed Liquid Crystals" ACS Fall ACS Meeting, New York, NY, September 2003 (poster).
47. T. Y. Lee, K. A. Lowery, C. A. Guymon, E. S. Jonsson, and C. E. Hoyle, "Synthesis, Photopolymerization, and Coatings Evaluation of Novel Vinyl Esters" 2003 Spring ACS Meeting, New Orleans, LA, March 2003.
48. T. M. Roper, C. E. Hoyle, and C. A. Guymon, "Effect of Double Bond Position on the Reactivity of Alkenes with a Monofunctional Thiol and its Applications to Thiol-ene Crosslinking Reactions" 2003 Spring ACS Meeting, New Orleans, LA, March 2003.
49. T. Y. Lee, C. A. Guymon, E. S. Jonsson, and C. E. Hoyle, "Spacer Length and Structural Effects on Oxygen Inhibition of Dimethacrylates" 2003 Spring ACS Meeting, New Orleans, LA, March 2003.
50. T. M. Roper, C. E. Hoyle, and C. A. Guymon, "Construction and Application of a Thin-film Calorimeter for the In-situ Characterization of Photopolymerization Kinetics" 2003 Spring ACS Meeting, New Orleans, LA, March 2003.
51. D. McCormick and C. A. Guymon, "Evolution of Polymer Nanostructure in Polymer/Ferroelectric Liquid Crystal Composites" 2002 Fall ACS Meeting, Boston, MA, August 2002.
52. D. T. McCormick, K. D. Stovall, and C. A. Guymon, "Nanostructured Polymer Development in Fluoronic Lyotropic Liquid Crystalline Hydrogels via Photopolymerization" 2002 Fall ACS Meeting, Boston, MA, August 2002.
53. C. A. Guymon, and J. H. Norton, "Nanostructured Organic-Inorganic Composites Templated by Photopolymerizable Lyotropic Liquid Crystals" *Radtech 2002*, Indianapolis, IN, April 2002.
54. D. T. McCormick, and C. A. Guymon, "Photopolymerization of Fluorinated and Aliphatic Acrylates in Polymer Stabilized Liquid Crystalline Systems: Effect of Liquid Crystalline Order on Polymer Molecular Weight" *Radtech 2002*, Indianapolis, IN, April 2002.
55. E. S. Jonsson, K. Vishwanathan, C. E. Hoyle, T. Y. Lee, T. M. Roper, C. A. Guymon, C. Nason, and I. Kudyakov, "Photocuring of Vinyl Acrylates and Related Monomers with Various Comonomers" *Radtech 2002*, Indianapolis, IN, April 2002.
56. T. M. Roper, K. L. Rhudy, C. M. Chandler, C. E. Hoyle, and C. A. Guymon, "Photoinitiated Polymerization of Pigmented Thiol-Ene Systems" *Radtech 2002*, Indianapolis, IN, April 2002.

57. T. Y. Lee, C. E. Hoyle, T. M. Roper, C. A. Guymon, E. S. Jonsson, and I. Kudyakov, "Investigation of the Effect of Thiols on Polymerization Kinetics of Vinyl Acrylate" *Radtech 2002*, Indianapolis, IN, April 2002.
58. D. T. McCormick and C. A. Guymon, "Polymer Nanostructure Formation in Polymer Stabilized Liquid Crystals" 2001 Fall MRS Meeting, Boston, MA, November 2001.
59. C. L. Lester and C. A. Guymon, "Nanostructured Gels Via Photopolymerization of Lyotropic Liquid Crystalline Templates" 2001 Fall ACS Meeting ICI Award Symposium, Chicago, IL, August 2001.
60. C. D. Colson, C. L. Lester and C. A. Guymon, "Photopolymerization of LLC Mixtures for the Controlled Synthesis of Nanomaterials" 2001 Fall ACS Meeting, Chicago, IL, August 2001 (poster- winner of Colloid and Surface Chemistry Division Student Poster Award).
61. D. T. McCormick, R. Chavers, and C. A. Guymon, "Polymer Nanostructure Formation in a Smectic Liquid Crystal" 2001 Fall ACS Meeting, Chicago, IL, August 2001.
62. J. H. Norton, and C. A. Guymon, "Nanostructured Organic-Inorganic Composites Templated by Phopolymerizable Lyotropic Liquid Crystals" 2001 Fall ACS Meeting, Chicago, IL, August 2001 (poster).
- A. G. DeTrana, C. M. Comer, and C. A. Guymon, "UV-Cured Metal Coatings for Surface Energy Reduction" 2001 Fall ACS Meeting, Chicago, IL, August 2001 (poster).
63. D. T. McCormick, R. Chavers, C. A. Guymon, "Controlled Polymer Nanostructure Formation for Stabilization of Smectic Liquid Crystals" *Pacificchem 2000*, Honolulu HI, December 2000.
- B. L. Lester, C. D. Colson, S. Smith, C. A. Guymon, "Polymerization Kinetics of Lyotropic Liquid Crystalline Systems" *Pacificchem 2000*, Honolulu HI, December 2000.
- C. A. Guymon, "Photopolymerization Behavior of Lyotropic Liquid Crystalline Systems" *Formulations Forum 2000*, Orlando, FL, September 2000.
- D. L. Lester and C. A. Guymon, "Characterization of Polymerization Kinetics and Phase Behavior of a UV Curable Semifluorinated Lyotropic Liquid Crystal" *Radtech 2000*, Baltimore, MD, April 2000.
64. C. L. Lester, C. Colson, and C. A. Guymon, "Polymerization Kinetics of Difunctional Monomers in Lyotropic Liquid Crystalline Phases" 2000 Spring ACS Meeting, San Francisco, CA, March 2000.
65. C. L. Lester and C. A. Guymon, "Polymerization Kinetics of a Semi-fluorinated Lyotropic Liquid Crystal" 1999 Annual AIChE Meeting, Dallas, TX, November 1999.
66. C. L. Lester and C. A. Guymon, "Kinetic Investigations of Photo-Initiated Free-Radical Polymerization of Diallyldimethylammonium Chloride" 1999 Summer ACS Meeting, New Orleans, LA, August 1999 (poster).
67. C. L. Lester and C. A. Guymon, "Phase Behavior and Polymerization Kinetics of a Semi-fluorinated Lyotropic Liquid Crystal" 1999 Summer ACS Meeting, New Orleans, LA, August 1999.
68. C. L. Lester and C. A. Guymon, "Characterization and Polymerization Kinetics of Lyotropic Liquid Crystalline Systems" 1999 AAU/ORAU Partners in Collaboration Conference, Oak Ridge, TN, August 1999 (poster).
69. C. L. Lester and C. A. Guymon, "Characterization and Polymerization Kinetics of Lyotropic Liquid Crystalline Systems" 1999 Gordon Research Liquid Crystals Conference, Tilton, NH, June 1999 (poster).

70. C. A. Guymon and C. N. Bowman, "Formation of Polymer Stabilized Ferroelectric Liquid Crystals Using a Fluorinated Diacrylate" 1999 Spring Materials Research Society Meeting, San Francisco, CA, April 1999.
71. C. A. Guymon and C. N. Bowman, "Formation of Polymer Stabilized Ferroelectric Liquid Crystal Thin Films Using a Fluorinated Diacrylate" 1998 Summer ACS Meeting, Boston, MA, August 1998.
72. C. A. Guymon and C. N. Bowman, "Influence of Polymerization Conditions on Performance in Polymer/Ferroelectric Liquid Crystal Composite Thin Films" 1998 Summer ACS Meeting, Boston, MA, August 1998.
73. C. A. Guymon, "Photopolymerization Behavior during the Formation of Polymer/Smectic Liquid Crystal Composites," 1998 Radtech North America Meeting, Chicago, IL, April 1998.
74. C. A. Guymon and C. N. Bowman, "Electro-optic Properties and Polymerization Conditions of Thin Film Polymer Stabilized Ferroelectric Liquid Crystals," 1997 Annual AIChE Meeting, Los Angeles, CA, November 1997.
75. C. A. Guymon and C. N. Bowman, "Polymerization Behavior and Reaction Kinetics during the Polymerization of Polymer/Smectic Liquid Crystal Composites, 1997 Annual AIChE Meeting, Los Angeles, CA, November 1997.
76. C. A. Guymon and C. N. Bowman, "Polymerization and Properties of Polymer Stabilized Ferroelectric Liquid Crystals," 6th International Conference on Ferroelectric Liquid Crystals, Brest, France, July 1997.
77. C. A. Guymon and C. N. Bowman, "Characterization and Polymerization Behavior of Polymer Stabilized Ferroelectric Liquid Crystals," Gordon Conference on Liquid Crystals (poster), Tilton, NH, June 1997.
78. C. A. Guymon and C. N. Bowman, "Mechanisms for Accelerated Polymerization Rate Behavior in Polymer/Smectic Liquid Crystal Composites" 1997 Spring ACS Meeting, San Francisco, CA, April 1997
79. C. A. Guymon and C. N. Bowman, R. Shao, D. Hoelter and H. Frey, "Polymerization of Polymer Stabilized Ferroelectric Liquid Crystals Formed from Branched Liquid Crystalline Dimethacrylates" 1997 Spring ACS Meeting, San Francisco, CA, April 1997.
80. C. A. Guymon and C. N. Bowman, "Monomer Segregation in Polymerization of Polymer Stabilized Ferroelectric Liquid Crystal Thin Films" 1996 Annual AIChE Meeting (poster), Chicago, IL, November 1996.
81. C. A. Guymon and C. N. Bowman, "Monomer Heterogeneity before Polymerization in Polymer Stabilized Ferroelectric Liquid Crystals" 1996 Fall ACS Meeting Sherwin-Williams Award Symposium, Orlando, FL, August 1996.
82. C. A. Guymon and C. N. Bowman: "Monomer Heterogeneity and Subsequent Polymerization of Polymer Stabilized Ferroelectric Liquid Crystals" International Liquid Crystal Conference, Kent, OH, June 1996.
83. C. A. Guymon, L. A. Dougan, E. N. Hoggan and C. N. Bowman, "Polymerization Effects on the Electro-optic Properties of a Polymer Stabilized Ferroelectric Liquid Crystal" 1996 Spring MRS Meeting, San Francisco, CA, April 1996.
84. C. A. Guymon, E. N. Hoggan and C. N. Bowman, "Photopolymerization Kinetics During the Formation of Polymer Stabilized Ferroelectric Liquid Crystals" 1996 Spring ACS Meeting, New Orleans, LA, March 1996.
85. C. A. Guymon, E. N. Hoggan, and C. N. Bowman, "Polymer Network Influence in a Polymer Dispersed Ferroelectric Liquid Crystal," Gordon Conference on Liquid Crystals (poster), Wolfeboro, NH, June 1995.

86. C. 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.
87. C. 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.
88. C. A. Guymon, E. N. Hoggan, and C. N. Bowman, "Studies of a Polymer Dispersed Ferroelectric Liquid Crystal," AIChE Annual Meeting (awarded second place in competition), San Francisco, CA, November 1994.