Curriculum Vitae et Studiorum

John Anthony Pojman

Department of Chemistry
Louisiana State University
Baton Rouge, LA 70803-1804

(225) 578-7202

john@pojman.com

www.pojman.com

Born May 29, 1962, Cleveland, Ohio

Education

Doctorate in Chemical Physics from the University of Texas at Austin, September 1988 (with Ilya Prigogine and James Whitesell)

B.S. in Chemistry (Classics Minor) from Georgetown University, May 1984

Professional Experience

2021 – present	William and Patricia Senn, Jr, Distinguished Professor
2020 – present	Chair, Department of Chemistry, LSU
2012 – resent	President and CEO of Pojman Polymer Products, LLC
2008 – present	Professor of Macromolecular Science, Department of Chemistry Louisiana State University
1998 (May - June)	Visiting Professor, Laboratoire d' Analyse Numerique University Claude Bernard I, Lyon, France
1997 - 2008	Professor, Department of Chemistry and Biochemistry, University of Southern Mississippi
1996 (May - June)	Visiting Professor, Laboratoire d' Analyse Numerique University Claude Bernard I, Lyon, France
1994 - 1997	Associate Professor, Department of Chemistry and Biochemistry, University of Southern Mississippi
1990 - 1994	Assistant Professor, Department of Chemistry and Biochemistry, University of Southern Mississippi

1988 - 1990 Postdoctoral Research Associate, Brandeis University
Supervisor, Professor Irving Epstein

Research Interests

Frontal polymerization

Nonlinear phenomena in polymeric systems

Natural history of the three-toed amphiuma (*Amphiuma tridactylum*)

Cure-on demand polymerization

Additive manufacturing (3D printing)

Awards

Basic Research Award, University of Southern Mississippi, 1998

USM Innovation Award for Basic Research, 2005

Selected as a member of the National Golden Key Honor Society, 2005

Mississippi Section of the American Chemical Society "Chemist of the Year", 2006

LSU Alumni Association Faculty Excellence Award (2017)

Scientific Societies

- American Chemical Society (ACS)
- American Institute of Aeronautics and Astronautics (AIAA)
- Mississippi Academy of Sciences
- Sigma Xi Scientific Research Society
- Sigma Pi Sigma Physics Honor Society

Honor Societies

Honorary Member of Golden Key Honor Society

Committees

International Advisory Committee for SHS '99 Meeting (Moscow, August 1999)

International Organizing Committee for the International Symposium on Chaos and Order in Chemistry, March 17-20, 2000, Nara, Japan

Member, Microgravity and Space Processes Technical Committee (AIAA) January 1998- 2005

Professional Highlights

Directed research of 162 undergraduates

Over 299 presentations since 1990.

Over 260 presentations by students since 1990.

H index of 49 (Google Scholar)

Published 175 peer-reviewed articles in leading journals.

Published fifteen book chapters.

Co-author of an invited Faraday Research Article for the Royal Society *Faraday Transactions*.

Co-author of an invited review (cover story) for *Trends in Polymer Science*.

Co-author of the book from Oxford University Press *An Introduction to Nonlinear Chemical Dynamics*.

Co-editor of the book from the American Chemical Society, *Polymer Research in Microgravity: Polymerization and Processing*

Co-editor of the book from the American Chemical Society *Nonlinear Dynamics in Polymeric Systems*.

Co-editor of the book from Wiley *Nonlinear Dynamics with Polymers*

Chair of the Chemistry and Chemical Engineering Division of the Mississippi Academy of Sciences (1994).

Organized Symposium on "Nonlinear Chemical Dynamics" at ACS SE/SW Regional Meeting in Memphis, TN November 28 - December 1, 1995.

Guest Editor for *Chaos* Special Issue on "Nonlinear Dynamics Related to Polymeric Systems" (Spring 1999)

Member, Program Committee for "Oscillations and Dynamics Instabilities in Chemical Systems" Gordon Conference, Barga, Italy, June 1999

Organized Symposium at ACS National Meeting (August 1999) on "Chemical Waves, Fronts and Patterns"

Organized Symposium at ACS National Meeting (March 2000) on "Polymer Processing in Microgravity"

Organized Symposium at PacifiChem 2000 (December 2000) on "Nonlinear Dynamics in Chemistry"

Member, Program Committee for "Oscillations and Dynamics Instabilities in Chemical Systsems" Gordon Conference, Bristol, RI, August, 2000

Recipient of Best Paper Award "Effective Interfacial Tension Induced Convection (EITIC) in Miscible Fluids," John A. Pojman[1], Yuri Chekanov[1], Jonathan Masere[1], Vitaly Volpert[2], Thierry Dumont[2], and Hermann Wilke[3] (1) Department of Chemistry & Biochemistry, University of Southern Mississippi, Hattiesburg, MS 39406, (2) Laboratoire d'analyse numirique, Universite Lyon I, 69622 Villeurbanne Cedex, France, (3) Institute of Crystal Growth,Rudower Chaussee 6, D-12489 Berlin - Adlershof AIAA Aerospace Sciences Meeting, January 8-10, 2000, Reno, NV.

Mentored three groups of students who flew on NASA's KC-135 microgravity research aircraft. The students were featured in the October 1, 2001 issue of *Chemical and Engineering News* for their microgravity research on plasmas.

Organized a special session on “Diffuse Interface Problems in Fluid Mechanics and Materials Science” at the Microgravity Science and Space Processing Symposium at the 40th AIAA Aerospace Sciences Meeting and Exhibit, January 14-17, 2002.

Organized a symposium on “Nonlinear Dynamics in Polymer Systems,” for ACS National Meeting (August 2002).

Organized a symposium on “Nonlinear Dynamics in Polymer Systems,” for ACS National Meeting (March 2008).

Appeared in an Emmy-nominated episode of NASA *Connect* TV show (December 2002), which is now airing in Japan.

Vice-Chair, "Oscillations and Dynamics Instabilities in Chemical Systems" Gordon Conference, Oxford, UK, July 2002.

Chair, "Oscillations and Dynamics Instabilities in Chemical Systems" Gordon Conference, Lewiston, Maine, July 2004.

Principal Investigator for “Miscible Fluids in Microgravity (MFMG)”, the first experiment from USM performed on the International Space Station (March 2004, August 2004, September 2004, June 2005).

Career featured in the *Science 2006* elementary school textbook series be published by Pearson Education Scott Foresman in Spring 2005.

Vice-Chair (2004) and Chair (2005) of the Chemistry and Chemical Engineering Division of the Mississippi Academy of Sciences.

Recipient of USM Innovation Award for Basic Research, 2005.

Listed in “Who is Who in SHS”, 2005.

Guest on *The Space Show*, an internet broadcast radio show, March 2006 and April 2010.

Selected “Chemist of the Year” by the Mississippi Section of the American Chemical Society, 2006

Guest Editor for *Chaos* Special Issue on “Self-Organization in Nonequilibrium Chemical Systems” (Fall 2006).

Guest Editor for *Chaos* “Focus Issue: Oscillations and Dynamic Instabilities in Chemical Systems: Dedicated to Irving R. Epstein on Occasion of His 70th Birthday," (2015).

Guest Editor for *Chaos* “Focus Issue: Dissipative Structures and Irreversibility in Nature: Celebrating the 100th Anniversary of Ilya Prigogine’s Birth,” (2017).

Chair of the session on “Chemo-Hydrodynamic Instabilities”, Gordon Research Conference on *Oscillations and Dynamic Instabilities in Chemical Systems,* Colby College, Waterville, Maine, July 13 – July 18, 2008.

Co-edited Nonlinear Dynamics with Polymers: Fundamentals, Methods and Applications, WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim, 2010.

Chair of the Polymer Division for the Southeast-Southwest Regional ACS meeting (December 2010).

Chair of the session on "Nonlinear Phenomena in Material Science", Gordon Research Conference on *Oscillations and Dynamic Instabilities in Chemical Systems,* Colby College, Waterville, Maine, July 15 – July 20, 2012.

Chair of the session on "Engineering Functional Materials", Gordon Research Conference on *Oscillations and Dynamic Instabilities in Chemical Systems,* Melia Golf Vichy Catalan Business & Convention Center, Girona, Spain, July 13 – July 18, 2014.

John also appeared in 2015 with British naturalist Nigel Marven on *Nigel Marven's Cruise Ship Adventures* for his work with three-toed amphiuma of Louisiana and appeared in 2017 in the two episodes science show *Strange Evidence*.

Research on a feral hog toxicant featured RFDTVd

https://www.rfdtv.com/story/43433504/finding-the-right-bait-to-reduce-the-feral-hog-problem

He co-curated an exposition at the Louisiana Art and Science Museum on "Polymers in Art through the Centuries in 2017.

Patents

Pojman, J. A.; McCardle, T. W. "Functionally Gradient Polymeric Materials," U.S. Patent 6,057,406, **2000**

Pojman, J. A.; McCardle, T. W. "Functionally Gradient Polymeric Materials," U.S. Patent 6,313,237, **2001**.

Hayes, D.; Pojman J. A. "Thiol acrylate nanocomposite foams," patent pending, PCT/US2013/067663

External Support

Petroleum Research Fund Starter Grant "Traveling Fronts of Addition Polymerization" 1/92 - 12/94 ($21,000)

National Science Foundation's Mississippi EPSCoR Program, "Structure and Dynamics" 5/92 - 11/98 ($300,000)

"Polymerizations in Microgravity: Traveling Fronts, Dispersions and Copolymerizations, NASA, Lon J. Mathias, Robert Lochhead, John A. Pojman $300,000, 6/15/93 - 6/14/96. NAG8-973

"Study of Convection Induced by Concentration and Temperature Gradients in Propagating Fronts of Chemical Reaction," US-Hungarian Science and Technology Program, John A. Pojman, $25,000, 1/1/93-12/31/95

National Academy of Sciences Interacademy Project Development Grant August, 1992 Institute of Chemical Physics, Chernogolovka, Russia ($2,000)

"Modeling Traveling Fronts of Addition Polymerization", Office of Research and Planning Summer Research Grant. ($6,000)

"A Unified Physical Chemistry Lab Based on Oscillating Reactions and Traveling Fronts," National Science Foundation. ($28, 934)

"The Dynamics of Propagating Polymerization Fronts," National Science Foundation 5/94 - 4/97 ($180,000) CTS-9319175

"Propagating Polymerization Fronts," Air Force Office of Scientific Research, John A. Pojman, 9/30/94 - 9/29/97 ($260,276)

"Propagating Fronts of Addition Polymerization Under Normal and Microgravity," NASA EPSCoR John A. Pojman, January 1, 1995- December 31, 1995, $20,500

"Acquisition of Thermoanalytical Instrumentation for Materials Chemistry Research," NSF, Anselm C. Griffin, David Creed, Rajive Khanna, John A. Pojman, Joe, B. Whitehead, $141,139 October 1, 1995 - September 31, 1998

"Preparation of Organic Dye Gradients for Optical Limiters," AFOSR AASERT 6/1/97/ - 5/31/00 $107,675

"Analysis of Optical Polymer Samples," Boston Optical Fiber $25,000 2/1/97 - 6/30/98

"Preparation of Dye Gradients," Wright Patterson Air Force Base - Laser Hardening Branch,, $45,000 March 1, 1997, February 28, 1998.

"Frontal Polymerization in Microgravity," NASA, $565,000 February 1, 1998 - January 31, 2002

"Preparation of Functionally Graded Polymeric Materials," Navy, $330,000, March 1, 1999 – February 28, 2002

"Optical Gradient Polymeric Materials via Isothermal Frontal Polymerization," NSF, $180,000, July 1, 2002 - June 30, 2006.

"Transient Interfacial Phenomena in Miscible Polymer Systems," NASA, $724,000 02/01/02 - 9/30/04

"Transient Interfacial Phenomena in Miscible Polymer Systems," NASA, $240, 000, 10/01/04 – 9/30/06.

Industrial Contract, $126,000, 12/15/05 – 10/31/06.

Industrial Contract, $156,000 11/01/06- 10/31/07

“Evaluation of Effective Interfacial Tension by Spinning Drop Tensiometery and Microfluidics,” National Science Foundation, $380,982, 09/01/07 – 8/31/2010

“A non-pyrotechnic smoke grenade,” ARMY STTR Phase I,):$30,000 10/11/2011 – 03/31/2011

“A non-pyrotechnic smoke grenade,” ARMY STTR Phase II, $150,000 1/1/2013 – 12/31/2014.

“Time-lapse and Cure-on-Demand Polymerization using Autocatalytic Reactions,” $154,000, National Science Foundation, 8/1/2015 –7/ 31/2019.

“Reduction of Volatile Organic Compounds Through Development of Novel Next Generation Cure-On-Demand Ultra High Solid Non-Skid Coating,” $150,000, Navy, 9/1/2020 – 8/31/2021

Peer-Reviewed Journal Publications

(1) Kondepudi, D. K.; Pojman, J. A.; Malek-Mansour, M., "Nonequilibrium Processes in Polymers Undergoing Interchange Reactions 1.: Relaxation Rates," *J. Phys. Chem.,* **1989**, *93*, 5931-5937.

(2) Pojman, J. A., "Boltzmann's *H*- Theorem Applied to Simulations of Polymer Interchange Reactions," *J. Chem. Ed.* , **1990**, *67*, 200-202.

(3) Pojman, J. A., "A Simple Demonstration of Convective Effects on Reaction-Diffusion Systems: A Burning Cigarette," *J. Chem. Ed.*, **1990**, *67*, 792-794.

(4) Whitesell, J. K.; Pojman, J. A., "Kinetics of Formation of Homochiral and Heterochiral Polyesters: Polymers derived from Mandelic Acid," *Chem. Mater.* , **1990**, *2*, 248-254.

(5) Lynch,V. M.; Pojman, J. A.; Whitesell, J. K.; Davis, R. E, "The Structure of (S,S)-3,6-Diphenyl-1,4-dioxane-2,5-dione," *Acta Cryst.*, **1990**, *C46*, 1125-1127.

(6) Pojman, J. A.; Epstein, I.R. "Convective Effects on Chemical Waves. 1.: Mechanisms and Stability Criteria, " *J. Phys. Chem.* **1990**, *94*, 4966-4972.

(7) Pojman, J. A.; Epstein, I. R.; McManus, T.; Showalter, K., "Convective Effects on Chemical Waves. 2.: Simple Convection in the Iodate-Arsenous Acid System," *J. Phys. Chem.* **1991**, *95*, 1299-1306.

(8) Pojman, J. A.; Epstein, I. R.; Nagy, I. , "Convective Effects on Chemical Waves. 3.: Multicomponent Convection in the Iron(II)-Nitric Acid System," *J. Phys. Chem.* **1991**, *95*, 1306-1311.

(9) Pojman, J. A.; Epstein, I. R.; Karni, Y.; Bar-Ziv, E., "Stochastic Coalescence-Redispersion Model for Molecular Diffusion and Chemical Reactions. 2. Chemical Waves," *J. Phys. Chem.* **1991**, *95*, 3017-3021.

(10) Pojman, J. A.; Garcia, A. L.; Kondepudi, D. K.; Van den Broeck, C., "Nonequilibrium Processes in Polymers Undergoing Interchange Reactions. 2. Reaction-Diffusion Processes," *J. Phys. Chem.* **1991**, *95*, 5655-5660.

(11) Pojman, J. A., "Traveling Fronts of Methacrylic Acid Polymerization," *J. Am. Chem. Soc*., **1991**, *113*, 6284-6286.

(12) Pojman, J. A.; Dedeaux, H, Fortenberry, D. "Stirring Effects in the Mn-Catalyzed Belousov-Zhabotinskii Reaction with a Mixed Hypophosphite/Acetone Substrate in a Batch Reactor," *J. Phys. Chem.*, **1992**, *96*, 7331-7333.

(13) Pojman, J. A.; Craven, R.; Khan, A.; West, W. "Convective Instabilities Induced by Traveling Fronts of Addition Polymerization," *J. Phys. Chem.*, **1992**, *96*, 7466-7472.

(14) Pojman, J. A.; Leard, D. C.; West, W. "The Periodic Polymerization of Acrylonitrile in the Cerium-Catalyzed Belousov-Zhabotinskii Reaction," *J. Am. Chem. Soc.,* **1992**, *114*, 8298-8299.

(15) Nagy, I. P.; Pojman, J. A. "Measurement of The Temperature Profile of Chemical Waves by Thermocolor Imaging," *Chem. Phys. Lett.* **1992**, *200*, 147-152.

(16) Nagy, I. P.; Pojman, J. A. "Multicomponent Convection Induced by Fronts in the Chlorate-Sulfite Reaction," *J. Phys. Chem.*, **1993**, *97*, 3443-3449.

(17) Pojman, J. A.; Nagy, I. P.; Salter, C. "Traveling Fronts of Addition Polymerization with a Solid Monomer,"*J. Am. Chem. Soc.* **1993**, *115,* 11044-11045.

(18) Pojman, J. A.; Craven, R.; Leard, D. "Oscillations and Chemical Waves in the Physical Chemistry Lab," *J. Chem. Ed.,* **1994**, *71,* 84-90.

(19) Volpert, Vit. A.; Volpert, Vl. A.; Pojman, J. A. "Effect of Thermal Expansion on Stability of Reaction Front Propagation," *Chem. Eng. Sci.* **1994**, *14*, 2385-2388.

(20) Nagy, I. P.; Keresztessy, A.; Pojman, J. A.; Bazsa, G.; Noszticzius, Z. "Chemical Waves in the Iodide-Nitric Acid System,"*J. Phys. Chem.* **1994**, *94*, 6030-6037.

(21) Pojman, J. A.; Willis, J.; Fortenberry, D.; Ilyashenko, V.; Khan, A. "Factors Affecting Propagating Fronts of Addition Polymerization: Velocity, Front Curvature, Temperature Profile, Conversion and Molecular Weight Distribution," *J. Polym. Sci. Part A: Polym Chem.* **1995**, *33,* 643-652.

(22) Pojman, J. A.; Ilyashenko, V. M.; Khan, A. M. "Spin Mode Instabilities in Propagating Fronts of Polymerization," *Physica D* **1995**, *84*, 260-268.

(23) Nagy, I. P.; Sike, L.; Pojman, J. A. "Thermochromic Composite Prepared Via a Propagating Polymerization Front," *J. Am. Chem. Soc.* **1995**, *117*, 3611-3612.

(24) Keresztessy, A.; Nagy, I. P.; Bazsa, G.; Pojman, J. A. "Traveling Waves in the Iodate-Sulfite and Bromate-Sulfite Systems," *J. Phys. Chem.* **1995**, *99*, 5379-5384.

(25) Nagy, I. P.; Keresztessy, A.; Pojman, J. A. "Periodic Convection in the Bromate - Sulfite Reaction: a 'Jumping Wave'," *J. Phys. Chem.* **1995**, *99*, 5385-5388.

(26) Volpert, V.; Volpert, V. A.; Pojman, J. A.; Solovyov, S. E. "Hydrodynamic Stability of a Polymerization Front," *Eur. J. Appl. Math.* **1996**, *7,* 303-320.

(27) Ilyashenko, V.; Solovyov, S.; Pojman, J. A. "Theoretical Aspects of Self-Propagating Reaction Fronts in Condensed Medium," *AIChE Journal* **1995**, *41,* 2631-2636.

(28) Nagy, I. P.; Sike, L.; Pojman, J. A., "Thermochromic Composites and Propagating Polymerization Fronts," *Adv. Mat.* **1995**, *7*, 1038-1040.

(29) Pojman, J. A.; West W. W. "A Unified Physical Chemistry Lab Based on Oscillating Reactions and Traveling Fronts", *J. Chem. Ed.* **1996**, *73*, 35.

(30) Pojman, J. A.;Willis, J. R.; Khan , A. M.; West, W. W., "The True Molecular Weight Distributions of Acrylate Polymers formed in Propagating Fronts," *J. Polym. Sci. Part A: Polym Chem.* **1996**, *34*, 991-995.

(31) Nagy, I. P.; Pojman, J. A., "Suppressing Convective Instabilities in Propagating Fronts by Tube Rotation," *J. Phys. Chem.* **1996**, *100*, 3299-3304.

(32) Strizhak, P. E.; Pojman, J. A. "Application of Bifurcation Theory to Oscillations in a Semibatch Reactor: Infinite period and Hopf bifurcations for the pH-regulated oscillations in the H_2O_2 - Cu^{2+} - $S_2O_3^{2-}$-NaOH system," *Chaos* **1996**, *6*, 461-465.

(33) Pojman, J. A.; Ilyashenko, V. M.; Khan, A. M. "Free-Radical Frontal Polymerization: Self-Propagating Thermal Reaction Waves," *J. Chem. Soc. Faraday Trans.* **1996**, *92,* 2824-2836.

(34) Pojman, J. A.; Curtis, G.; Ilyashenko, V. M. "Frontal Polymerization in Solution," *J. Am. Chem. Soc.* **1996**, *118*, 3783-3784.

(35) Khan, A. M.; Pojman, J. A. "The Use of Frontal Polymerization in Polymer Synthesis," *Trends Polym. Sci. (Cambridge, U.K.)* **1996**, *4,* 253-257.

(36) Pojman, J. A.; Komlósi, A.; Nagy, I. P. "Double-Diffusive Convection in Traveling Waves in the Iodate-Sulfite System Explained," *J. Phys. Chem.* **1996**, *100*, 16209-16212.

(37) Pojman, J. A.; Elcan, W.; Khan, A. M.; Mathias, L. "Binary Polymerization Fronts: A New Method to Produce Simultaneous Interpenetrating Polymer Networks (SINs),"*J. Polym. Sci. Part A: Polym Chem.* **1997**, *35,* 227-230.

(38) Bowden, G.; Garbey, M.; Ilyashenko, V. M.; Pojman, J. A.; Solovyov, S.; Taik, A.; Volpert, V. "The Effect of Convection on a Propagating Front with a Solid Product: Comparison of Theory and Experiments," *J. Phys. Chem. B* **1997**, *101,* 678-686.

(39) Solovyov, S. E.; Ilyashenko, V. M.; Pojman, J. A. "Numerical Modeling of Self-Propagating Fronts of Addition Polymerization: The Role of Kinetics on Front Stability," *Chaos* **1997**, *7,* 331-340.

(40) Pojman, J. A.; West, W. W.; Simmons, J. "Propagating Fronts of Polymerization in the Physical Chemistry Laboratory," *J. Chem. Ed.* **1997**, *74,* 727-730.

(41) Goldfeder, P. M.; Volpert, V. A.; Ilyashenko, V. M.; Khan, A. M.; Pojman, J. A.; Solovyov, S. E. "Mathematical Modeling of Free Radical Polymerization Fronts,"*J. Phys. Chem. B* **1997**, *101,* 3474-3482.

(42) Pojman, J.; Fortenberry, D.; Ilyashenko, V. "Frontal Polymerization as an Analog of SHS," *Int. J. Self-Propag. High-Temp. Synth.* **1997**, *6*, 355-376.

(43) Chekanov, Y.; Arrington, D.; Brust, G.; Pojman, J. A. "Frontal Curing of Epoxy Resin: Comparison of Mechanical and Thermal Properties to Batch Cured Materials,"*J. Appl. Polym. Sci.* **1997**, *66,* 1209-1216.

(44) Pojman, J. A.; Khan, A. M.; Mathias, L. J. "Frontal Polymerization in Microgravity: Results from the *Conquest I* Sounding Rocket Flight,"*Microg. sci. technol.* **1997**, *X,* 36-40

(45) Volpert, Vit; Volpert, Vl.; Ilyashenko, V.; Pojman, J. A. "Frontal Polymerization in a Porous Medium," *Chem. Eng. Sci.* **1998**, *53*, 1655-1665.

(46) Ilyashenko, V. M.; Pojman, J. A. "Single Head Spin Modes in Frontal Polymerization,"*Chaos* **1998**, *8*, 285-289.

(47) Misra, G. P.; Washington, R. P.; Pojman, J. A. "New Experimental and Computational Results on the Radical-Controlled Oscillating Belousov-Zhabotinsky Reaction,"*J. Phys. Chem. Part A.* **1998**, *102,* 612-619.

(48) Masere, J.; Pojman, J. A. "Free Radical-Scavenging Dyes as Indicators of Frontal Polymerization Dynamics,"*J. Chem. Soc. Faraday Trans.* **1998**, *94,* 919-922.

(49) McCaughey, B.; Pojman, J. A.; Simmons, C.; Volpert, V. A. "The Effect of Convection on a Propagating Front with a Liquid Product: Comparison of Theory and Experiments,"*Chaos* **1998**, *8*, 520-529.

(50) Pojman, J. A.; Gunn, G.; Patterson, C.; Owens, J.; Simmons, C. "Frontal Dispersion Polymerization," *J. Phys. Chem. B*; **1998**, *102*, 3927-3929.

(51) Komlosi, A.; Nagy, I. P.; Pojman, J. A. "Convective Chemical Fronts in the 1,4-Cyclohexanedione-Bromate-Sulfuric Acid-Ferroin System," *J. Phys. Chem. A*, **1998**, 9136-9141.

(52) Masere,J.; Stewart, F.; Meehan, T.; Pojman, J. A. "Period-doubling Behavior in Frontal Polymerization of Multifunctional Acrylates," *Chaos*, **1999**, *9*, 315-322

(53) Washington, R. P; Misra, G. P.; West, W. W.; Pojman, J. A. "Polymerization Coupled to Oscillating Reactions: I. A Mechanistic Investigation and Numerical Simulation of Acrylonitrile Polymerization in the Belousov-Zhabotinsky Reaction in a Batch Reactor", *J. Am. Chem. Soc.* **1999**, *121*,7373-7380.

(54) Pojman, J. A.; Epstein, I. R. "Nonlinear Chemical Dynamics in Polymeric Systems," *Chaos*, **1999**, *9*, 255-259.

(55) Pojman, J. A. "Studying Nonlinear Dynamics with Numerical Experiments: Dynamics.mcd," *J. Chem. Educ.* **1999**, *76*, 1310.

(56) Fortenberry, D. I.; Pojman, J. A. "Solvent-Free Synthesis of Polyacrylamide by Frontal Polymerization,"*J. Polym. Sci. Part A: Polym Chem.* **2000**, *38*, 1129-1135.

(57) Texier-Picard, R.; Pojman, J. A.; Volpert, V. A. "Effect of Interfacial Tension on Propagating Polymerization Fronts,"*Chaos* **2000**, *10,* 224-230.

(58) Masere, J.; Chekanov, Y..; Warren, J. R.; Stewart, F.; Al-Kaysi, R.; Rasmussen, J. K.; Pojman, J. A. "Gas-free Initiators for High-Temperature Polymerization,"*J. Poly. Sci. Part A. Polym. Chem.* **2000**, *38,* 3984-3990.

(59) Chekanov, Y. A.; Pojman, J. A. "Preparation of Functionally Gradient Materials Via Frontal Polymerization,"*J. Appl. Polym. Sci.* **2000**, *78,* 2398-2404.

(60) Pojman, J. A. "Nonlinear chemical dynamics in synthetic polymeric systems: motivations and strategies for success," *Macromol. Symp.* **2000**, *160*, 207-214.

(61) Manz, B.; Masere, J.; Pojman, J. A.; Volke, F. "Magnetic Resonance Imaging of Spiral Patterns in Crosslinked Polymer Gels Produced via Frontal Polymerization,"*J. Poly. Sci. Part A. Polym. Chem.* **2001**, *39,* 1075-1080.

(62) Masere, J.; Lewis, L. L.; Pojman, J. A. "Optical Gradient Materials Produced Via Low-Temperature Isothermal Frontal Polymerization,"*J. Appl. Polym. Sci.* **2001**, *80,* 686-691.

(63) Allali, K.; Pojman, J.; Volpert, V. "Influence of Vibrations on Convective Instability of Polymerization Fronts," *J. Eng. Math.* **2001**, *41,* 13-31.

(64) Mariani, A.; Fiori, S.; Chekanov, Y.; Pojman, J. A. "Frontal Ring-Opening Metathesis Polymerization of Dicyclopentadiene," *Macromolecules* **2001**, *34,* 6539-6541.

(65) Pojman, J. A.; Masere, J.; Petretto, E.; Rustici, M.; Huh, D.-S.; Kim, M. S.; Volpert, V. "The Effect of Reactor Geometry on Frontal Polymerization Spin Modes," *Chaos* **2002**, *12*, 56-65.

(66) Volpert, Vit. A ; Pojman, J. A.; Texier-Picard, R."Convection Induced by Composition Gradients in Miscible Systems," *C. R. Mecanique*, **2002**, *330*, 353-358.

(67) Bazile Jr., M.; Nichols, H. A.; Pojman, J. A.; Volpert, V. "The Effect of Orientation on Thermoset Frontal Polymerization,"*J. Polym. Sci. Part A: Polym Chem.* **2002**, *40*, 3504-3508.

(68) Gill, N.; Pojman, J. A.; Willis, J.; Whitehead, J. B. "Polymer Dispersed Liquid Crystal (PDLC) Materials Fabricated Using Frontal Polymerization," *J. Poly. Sci. Part A. Polym. Chem.* **2003**, *41*, 204-212.

(69) Perry, M.F.; Volpert, Vl, A; Lewis, L. L.; Nichols, H. A.; Pojman, J. A. "Free-radical Frontal Copolymerization: The Dependence of the Front Velocity on the Monomer Feed Composition and Reactivity Ratios," *Macromolecular Theory and Simulations* **2003**, *12*, 276-286.

(70) Pojman, J. A.; Varisli, B.; Perryman, A.; Edwards, C.; Hoyle, C. "Frontal Polymerization with Thiol-Ene Systems,"*Macromolecules* **2004**, *37,* 691-693.

(71) Pojman, J. A.; Griffith, J.; Nichols, H. A. "Binary Frontal Polymerization: Velocity Dependence on Initial Composition" *e-Polymers* **2004**, *13,* 1-7.

(72) Bessonov, N.; Pojman, J. A.; Volpert, V. "Modelling of Diffuse Interfaces with Temperature Gradients," *J. Engineering Math.* **2004**, *49,* 321-338.

(73) McFarland, B.; Popwell, S.; Pojman, J. A. "Free-Radical Frontal Polymerization with a Microencapsulated Initiator," *Macromolecules* **2004**, *37,* 6670 - 6672.

(74) Bessonov, N.; Pojman, J. A.; Volpert, V. "Modelling of miscible liquids and microgravity experiments," *Matapli*,(Journal of Société de Mathématiques Appliquées & Industrielles) **2004**, *75*, 51-66.

(75) Lewis, L. L.; DeBisschop, C. S.; Pojman, J. A.; Volpert, V. A. "Isothermal Frontal Polymerization: Confirmation of the Mechanism and Determination of Factors Affecting Front Velocity, Front Shape, and Propagation Distance with Comparison to Mathematical Modeling,"*J. Polym. Sci. Part A Polym. Chem.* **2005**, *43*, 5774-5786.

(76) Chen, S.; Sui, J.; Chen, L.; Pojman, J. A. "Polyurethane-Nanosilica Hybrid Nanocomposites Synthesized by Frontal Polymerization," *J. Polym. Sci. Part A Polym. Chem.* **2005**, *43*, 1670-1680.

(77) Bessonov, N.; Volpert, V. A.; Pojman, J. A.; Zoltowski, B. D. "Numerical Simulations of Convection Induced by Korteweg Stresses in Miscible Polymer-Monomer Systems," *Microgravity Sci. Tech.* **2005**, *XVII,* 2-6.

(78) Nason, C.; Roper, T.; Hoyle, C.; Pojman, J. A. "UV-Induced Frontal Polymerization of Multifunctional (Meth)Acrylates," *Macromolecules* **2005**, *38,* 5506-5512.

(79) Antrim, D.; Bunton, P.; Lewis, L. L.; Zoltowski, B. D.; Pojman, J. A. "Measuring the Mutual Diffusion Coefficient for Dodecyl Acrylate in Low Molecular Weight Poly(Dodecyl Acrylate) Using Laser Line Deflection (Wiener's Method) and the Fluorescence of Pyrene," *J. Phys. Chem. Part B* **2005**, *109,* 11842-11849.

(80) Devadoss, D. E.; Pojman, J. A.; Volpert, V. A. "Mathematical Modeling of Thiol-Ene Frontal Polymerization," *Chem. Eng. Sci.* **2006**, *61,* 1257-1271.

(81) Binici, B.; Fortenberry, D. I.; Leard, K. C.; Molden, M.; Olten, N.; Popwell, S.; Pojman, J. A. " Spherically Propagating Thermal Polymerization Fronts," *J. Polym. Sci. Part A: Polym. Chem.* **2006**, *44*, 1387-1395.

(82) McFarland, B.; Popwell, S.; Pojman, J. A. "Free-Radical Frontal Polymerization with a Microencapsulated Initiator: Characterization of Microcapsules and Their Effect on Pot Life, Front Velocity and Mechanical Properties," *Macromolecules* **2006**, *39*, 53-63.

(83) Pojman, J. A.; Whitmore, C.; Turco Liveri, M. L.; Lombardo, R.; Marszalek, J.; Parker, R.; Zoltowski, B. "Evidence for the Existence of an Effective Interfacial Tension between Miscible Fluids: Isobutyric Acid-Water and 1-Butanol-Water in a Spinning-Drop Tensiometer," *Langmuir* **2006**, *22,* 2569-2577.

(84) Gaponenko, Y.; Volpert, V.; Zen'kovskaya, S.; Pojman, J. "Effect of High-Frequency Vibration on Convection in Miscible Fluids," *J. Appl. Mech.& Tech. Phys.* **2006**, *47,* 190-198.

(85) Evstratova, S. I.; Antrim, D.; Fillingane, C.; Pojman, J. A. "Isothermal Frontal Polymerization: Confirmation of the Isothermal Nature of the Process and the Effect of Oxygen and Polymer Seed Molecular Weight on Front Propagation," *J. Polym. Sci. Part A: Polym. Chem.* **2006**, *44,* 3601-3608.

(86) Hu, T.; Chen, S.; Tian, Y.; Pojman, J. A.; Chen, L. "Frontal Free-Radical Copolymerization of Urethane-Acrylates," *J. Poly. Sci. Part A. Polym. Chem.* **2006**, *44,* 3018-3024.

(87) Zoltowski, B.; Leard, K.; Carter, N.; Budzinski, K.; Ainsworth, W.; Pojman, J. A. "The Role of Gravity in the Motion of Plasma Arcs inside 'Plasma Balls': An Investigation in the NASA Reduced Gravity Student Flight Opportunities Program," *Microgravity Sci. Tech.* **2006**, *XVIII,* 39-42.

(88) Epstein, I. R.; Pojman, J. A.; Steinbock, O. "Introduction: Self-Organization in Nonequilibrium Chemical Systems," *Chaos* **2006**, *16,* 037101.

(89) Pojman, J. A.; Bessonov, N.; Volpert, V. "Miscible Fluids in Microgravity (MFMG): A Zero-Upmass Investigation on the International Space Station," *Microgravity Sci. Tech.* **2007**, *XIX*, 33-41.

(90) Hu, T.; Chen, S.; Tian, Y.; Chen, L.; Pojman, J. A. "Facile Synthesis of Poly (Hydroxyethyl Acrylate) by Frontal Free-Radical Polymerization," *J. Polym. Sci. Part A Polym. Chem.* **2007**, *45,* 873-881.

(91) Jiménez, Z.; Pojman, J. A. "Frontal Polymerization with Monofunctional and Difunctional Ionic Liquid Monomers," *J. Polym. Sci. Part A: Polym. Chem.* **2007**, *45,* 2745 - 2754.

(92) Jiménez, Z.; Bounds, C.; Hoyle, C.; Lowe, A.; Pojman, J. A. "Photopolymerization Kinetics of Ionic Liquid Monomers Derived from Neutralization Reaction between Trialkylamines and Acid-Containing (Meth)Acrylates," *J. Polym. Sci. Part A: Polym. Chem.* **2007**, *45*, 3009-3021.

(93) Zoltowski, B.; Chekanov, Y.; Masere, J.; Pojman, J. A.; Volpert, V. "Evidence for the Existence of an Effective Interfacial Tension between Miscible Fluids. 2. Dodecyl

Acrylate-Poly(Dodecyl Acrylate) in a Spinning Drop Tensiometer," *Langmuir* **2007**, *23,* 5522-5531.

(94) Mariani, A.; Alzari, V.; Monticelli, O.; Pojman, J. A.; Caria, G. "Polymeric Nanocomposites Containing Polyhedral Oligomeric Silsesquioxanes (POSS) Prepared Via Frontal Polymerization," *J. Polym. Sci. Part A Polym. Chem.* **2007**, *45,* 4514-4521.

(95) Marszalek, J.; Pojman, J. A.; Aultman, K. L.; Hoyle, C.; Whitehead, J. B. "Humidity-Responsive Polymeric Films Based on AOT-Water Reverse Microemulsions," *J. Appl. Polym. Sci.* **2007**, *106,* 1957-1963.

(96) Ray, E.; Bunton, P.; Pojman, J. A. "Determination of the Diffusion Coefficient between Corn Syrup and Distilled Water Using a Digital Camera," *Amer. J. Phys.* **2007**, *75,* 903-906.

(97) Chen, S.; Hu, T.; Yu, H.; Chen, L.; Pojman, J. A. "First Solvent-Free Synthesis of Poly (N-Methylolacrylamide) Via Frontal Free Radical Polymerization," *J. Polym. Sci. Part A: Polym. Chem.* **2007**, *45*, 4322 - 4330.

(98) Ward, M.; Wyatt, V.; Griffith, J.; Craft, T.; Neurath, A. R.; Strick, N.; Li, Y.-Y.; Wertz, D. L.; Pojman, J. A.; Lowe, A. B. "Anti-HIV-1 Activity of Poly(Mandelic Acid) Derivatives," *Biomacromolecules* **2007**, *8,* 3308 -3316.

(99) Pojman, J. A.; Viner, V.; Binici, B.; Lavergne, S.; Winsper, M.; Golovaty, D.; Gross, L. "Snell's Law of Refraction Observed in Thermal Frontal Polymerization," *Chaos* **2007**, *17,* 033125.

(100) Zhou, H.; Jiménez, Z.; Pojman, J. A.; Paley, M. S.; Hoyle, C. E. "Photopolymerization Kinetics of Tributylmethylammonium-Based (Meth)Acrylate ionic Liquids and the Effect of Water," *J. Polym. Sci. Part A Polym. Chem.* **2008**, *46,* 3766-3773.

(101) Bessonov, N.; Pojman, J.; Viner, G.; Volpert, V.; Zoltwoski, B. "Instabilities of Diffuse Interfaces," *Math. Model. Nat. Phenom.* **2008**, *3,* 108-125

(102) Viner, G.; Pojman, J. A. "Studying Diffusion of Partially Miscible and Systems near Their Consolute Point by Laser Line Deflection," *Optics and Laser in Engineering* **2008**, *46,* 893–899.

(103) Marszalek, J.; Pojman, J. A.; Page, K. A. "Neutron Scattering Study of the Structural Change Induced by Photopolymerization of AOT/D_2O/Dodecyl Acrylate Inverse Microemulsions," *Langmuir* **2008**, *24,* 13694-13700.

(104) Nason, C.; Pojman, J. A.; Hoyle, C. "The Effect of a Trithiol and Inorganic Fillers on the Photo- Induced Thermal Frontal Polymerization of a Triacrylate" *J. Polym. Sci. Part A Polym. Chem.* **2008**, *46*, 8091-8096.

(105) Pojman, J. A.; Chekanov, Y.; Wyatt, V.; Bessonov, N.; Volpert, V. "Numerical Simulations of Convection Induced by Korteweg Stresses in a Miscible Polymer-Monomer System: Effects of Variable Transport Coefficients, Polymerization Rate and Volume Changes," *Microgravity Sci. Tech.* **2009**, *21*, 225-237.

(106) Scognamillo, S.; Bounds, C.; Luger, M.; Mariani, A.; Pojman, J. A. "Frontal Cationic Curing of Epoxy Resins," *J. Polym. Sci. Part A: Polym. Chem.* **2010**, *48,* 2000-2005.

(107) Viner, V. G.; Pojman, J. A.; Golovaty, D. "The Effect of Phase Change Materials on the Frontal Polymerization of a Triacrylate," *Physica D: Nonlinear Phenomena* **2010**, *239,* 838-847.

(108) Hu, G.; Pojman, J. A.; Bounds, C.; Taylor, A. F. "Time-Lapse Thiol-Acrylate Polymerization Using a pH Clock Reaction," *J. Polym. Sci. Part A: Polym. Chem.* **2010**, *48,* 2955-2959.

(109) Hu, G.; Pojman, J. A.; Scott, S. K.; Wrobel, M. M.; Taylor, A. F. "Base-Catalyzed Feedback in the Urea–Urease Reaction," *J. Phys. Chem. B* **2010**, *114,* 14059-14063.

(110) Major, S. R.; Fontenot Jr., C. L.; Pojman Sr., J. A.; Pojman Jr., J. A.; Merchant, M. E. "Serum Complement Activity in the Three-Toed Amphiuma (*Amphiuma Tridactylum*)," *Comparative Microbiology, Immunology and Infectious Diseases* **2011**, *34*, 115-121.

(111) Thoma, A.; Dahal, A.; Regmi, A.; Valencia, A.; Viner, V.; Cueto, R.; Baker, B.; Bunton, P.; Pojman, J. A. "EPR Measurement of Trapped Radical Concentrations in Frontally-Polymerized and Bulk-Polymerized Multifunctional (Meth)Acrylates," *J. Polym. Sci. Part A: Polym. Chem.* **2011**, *49,* 4261–4266.

(112) Pojman Sr., J. A.; Pojman Jr., J. A.; Fontenot Jr., C. L. "Comparison of Immobilization Methods for PIT Tagging Three-Toed Amphiuma (*Amphiuma Tridactylum*)," *Herp. Rev.* **2011**, *42*, 362-363.

(113) Viner, V.; Pojman, J. A. "Effects of Thiols, Lithium Chloride, and Ethoxylated Monomers on the Frontal Polymerization of a Triacrylate," *J. Polym. Sci. Part A: Polym. Chem.* **2011**, *49,* 4556–4561.

(114) Liu, H.; Pojman, J. A.; Zhao, Y.; Pan, C.; Zheng, J.; Yuan, L.; Horváth, A. K.; Gao, Q. "Pattern Formation in the Iodate-Sulfite-Thiosulfate Reaction-Diffusion System," *Phys. Chem. Chem. Phys.* **2012**, *14,* 131-137.

(115) Bounds, C. O.; Goetter, R.; Pojman, J. A.; Vandersall, M. "Preparation and Application of Microparticles Prepared Via the Primary Amine-Catalyzed Michael Addition of a Trithiol to a Triacrylate," *J. Polym. Sci. Part A: Polym. Chem.* **2012**, *50*, 409-422.

(116) Riolfo, L. A.; Carballido-Landeira, J.; Bounds, C. O.; Pojman, J. A.; Kalliadasis, S.; De Wit, A. "Experimental Reaction-Driven Liquid Film Fingering Instability," *Chem. Phys. Ltts* **2012**, *534*, 13-18.

(117) Parrinello, C. A.; Bounds, C. O.; Liveri, M. L. T.; Pojman, J. A. "Thermal Frontal Polymerization with a Thermally Released Redox Catalyst," *J. Polym. Sci. Part A: Polym. Chem.* **2012**, *50,* 2337-2343.

(118) Wrobel, M. M.; Bánsági Jr., T.; Scott, S. K.; Taylor, A. F.; Bounds, C. O.; Carranza, A.; Pojman, J. A. "pH Wave-Front Propagation in the Urea-Urease Reaction," *Biophysical J.* **2012**, *103,* 610–615.

(119) Mota-Morales, J. D.; Gutiérrez, M. C.; Ferrer, M. L.; Sanchez, I. C.; Elizalde-Peña, E. A.; Pojman, J. A.; Monte, F. D.; Luna-Bárcenas, G. "Deep Eutectic Solvents as Both Active Fillers and Monomers for Frontal Polymerization," *J. Polym. Sci. Part A: Polym. Chem.*

2013, *51,* 1767–1773.

(120) Bounds, C. O.; Upadhyay, J.; Totaro, N.; Thakuri, S.; Garber, L.; Vincent, M.; Huang, Z.; Pojman, J. A. "Fabrication and Characterization of Stable Hydrophilic Microfluidic Devices Prepared Via the in Situ Tertiary-Amine Catalyzed Michael Addition of Multifunctional Thiols to Multifunctional Acrylates," *ACS Appl. Mater. Interfaces,* **2013**, *5*, 1643–1655.

(121) Morales, A.; Pojman, J. A. "A Study of the Effects of Thiols on the Frontal Polymerization and Pot Life of Multifunctional Acrylate Systems Initiated by Cumene Hydroperoxide," *J. Polym. Sci. Part A: Polym. Chem.* **2013**, *51,* 3850-3855.

(122) Garber, L.; Chen, C.; Kilchrist, K. V.; Bounds, C.; Pojman, J.; Hayes, D. "Thiol-Acrylate Nanocomposite Foams for Critical Size Bone Defect Repair: A Novel Biomaterial," *J. Biomed. Mater. Res. Part A* **2013**, *101A,* 3531-3541.

(123) Higham, A.; Garber, L.; Latshaw, D.; Hall, C.; Pojman, J.; Khan, S. "Gelation and Crosslinking in Multi-Functional Thiol and Multi-Functional Acrylate Systems Involving an in Situ Comonomer Catalyst," *Macromolecules* **2014**, *47,* 821-829.

(124) Scognamillo, S.; Bounds, C.; Thakuri, S.; Mariani, A.; Wu, Q.; Pojman, J. A. "Frontal Cationic Curing of Epoxy Resins in the Presence of Defoaming or Expanding Compounds," *J. Appl. Polym. Sci.* **2014**, *131,* 40339-40349.

(125) Pojman Sr., J. A.; Pojman Jr., J. A.; Fontenot Jr., C. L. "Use of Clove Oil as an Anesthetic for PIT Tagging and Surgery with the Three-toed Amphiuma (*Amphiuma tridactylum*) and Determination of Recovery Time as a Function of Body Mass," *Herp. Rev.* **2014**, *45,* 25-27.

(126) Carranza, A.; Gewin, M.; Pojman, J. A. "Europium-doped aluminum oxide phosphors as indicators for frontal polymerization dynamics," *Chaos*, **2014**, *24*, 023118.

(127) Smoak; Garber, L.; Chen, C.; Hayes, D.; Pojman, J. A. "Antimicrobial Cytocompatible Pentaerythritol Triacrylate-Co-Trimethylolpropane Composite Scaffolds for Orthopaedic Implants," *J. Appl. Poly. Sci.* **2014**, *131,* 41099.

(128) Carranza, A.; Pojman, J. A.; Mota-Morales, J. D. "Deep-Eutectic Solvents as a Support in the Nonaqueous Synthesis of Macroporous Poly(HIPEs)," *RSC Advances* **2014**, *4,* 41584-41587.

(129) Sanchez-Leija, R. J.; Pojman, J. A.; Luna-Barcenas, G.; Mota-Morales, J. D. "Controlled Release of Lidocaine Hydrochloride from Polymerized Drug-Based Deep-Eutectic Solvents," *J. Mater. Chem. B* **2014**, *2,* 7495-7501.

(130) Bunton, P.; Dice, B.; Pojman, J. A.; De Wit, A.; Brau, F. "Reconstruction by Fluorescence Imaging of the Spatio-Temporal Evolution of the Viscosity Field in Hele-Shaw Flows," *Physics of Fluids (1994-present)* **2014**, *26,* 114106.

(131) Chen, C.; Garber, L.; Smoak, M.; Fargason, C.; Scherr, T.; Blackburn, C.; Bacchus, S.; Lopez, M. J.; Pojman, J. A.; Del Piero, F.; Hayes, D. J. "In Vitro and in Vivo Characterization of Pentaerythritol Triacrylate-Co-Trimethylolpropane Nanocomposite

Scaffolds as Potential Bone Augments and Grafts," *Tissue Engineering Part A* **2015***, 21,* 320-331.

(132) Nuvoli, D.; Alzari, V.; Pojman, J.; Sanna, V.; Ruiu, A.; Sanna, D.; Malucelli, G.; Mariani, A. "Synthesis and Characterization of Functionally Gradient Materials Obtained by Frontal Polymerization," *ACS Appl. Mater. Interfaces* **2015**, *7,* 3600−3606.

(133) Perez-Garcia, M. G.; Carranza, A.; Puig, J. E.; Pojman, J. A.; del Monte, F.; Luna-Barcenas, G.; Mota-Morales, J. D. "Porous Monoliths Synthesized Via Polymerization of Styrene and Divinyl Benzene in Nonaqueous Deep-Eutectic Solvent-Based HIPES," *RSC Adv.* **2015**, *5,* 23255-23260.

(134) Lian, H.; Hong, S.; Carranza, A.; Mota-Morales, J. D.; Pojman, J. A. "Processing of Lignin in Urea-Zinc Chloride Deep-Eutectic Solvent and Its Use as a Filler in a Phenol-Formaldehyde Resin," *RSC Adv.* **2015**, *5,* 28778-28785.

(135) McFarland, B.; Pojman, J. A. "Effects of Shell Crosslinking on Polyurea Microcapsules Containing a Free-Radical Initiator," *J. Appl. Polym Sci* **2015**, 132, 42408.

(136) Kiss, I. Z.; Pojman, J. A. "Introduction to Focus Issue: Oscillations and Dynamic Instabilities in Chemical Systems: Dedicated to Irving R. Epstein on Occasion of His 70th Birthday," *Chaos* **2015**, *25,* 064201.

(137) Zhang, W.; Tullier, M. P.; Patel, K.; Carranza, A.; Pojman, J. A.; Radadia, A. D. "Microfluidics Using a Thiol-Acrylate Resin for Fluorescence-Based Pathogen Detection Assays," *Lab Chip* **2015**, *15,* 4227-4231.

(138) Jee, E.; Bánsági, T.; Taylor, A. F.; Pojman, J. A. "Temporal Control of Gelation and Polymerization Fronts Driven by an Autocatalytic Enzyme Reaction," *Angew. Chem.* **2016**, *128,* 2167-2171.

(139) Abedin, R.; Pojman, J. A.; Knopf, F. C.; Rice, R. G. "Suspended Droplet Polymerization in an Unstable, Vibrating Shallow-Bed Reactor," *Ind. Eng. Chem. Res.* **2016**, *55,* 2493-2503.

(140) Holt, T.; Fazende, K.; Jee, E.; Wu, Q.; Pojman, J. A. "Cure-on-Demand Wood Adhesive Based on the Frontal Polymerization of Acrylates," *J. Appl. Polym. Sci.* **2016**, *133,* 44064.

(141) Ramirez-Wong, D. G.; Ramirez-Cardona, M.; Sanchez-Leija, R. J.; Rugerio, A.; Mauricio-Sanchez, R. A.; Hernandez-Landaverde, M. A.; Carranza, A.; Pojman, J. A.; Garay-Tapia, A. M.; Prokhorov, E.; Mota-Morales, J. D.; Luna-Barcenas, G. "Sustainable-Solvent-Induced Polymorphism in Chitin Films," *Green Chemistry* **2016**, *18,* 4303-4311.

(142) Totaro, N. P.; Murphy, Z. D.; Burcham, A. E.; King, C. T.; Scherr, T. F.; Bounds, C. O.; Dasa, V.; Pojman, J. A.; Hayes, D. J. "In Vitro Evaluation of Thermal Frontally Polymerized Thiol-Ene Composites as Bone Augments," *J. Biomed. Mater. Res. Part A: Appl. Biomater.* **2016,** *104,* 1152–1160.

(143) Lombardo, R.; Calabrese, I.; Gelardi, G.; Turco Liveri, M. L.; Pojman, J. A. "The Apparently

Anomalous Effects of Surfactants on Interfacial Tension in the IBA/Water System near Its Upper Critical Solution Temperature," *Colloid and Polymer Science* **2016**, *294,* 1425-1430.

(144) Fontenot Jr., C. L.; Pojman, J. A. "Self and Conspecific Dermatophagy in the Aquatic Salamander *Amphiuma Tridactylum*," *Southeastern Naturalist* **2016**, *15,* N40-N43.

(145) Carranza, A.; Song, K.; Soltero-Martinez, J. F. A.; Wu, Q.; Pojman, J. A.; Mota-Morales, J. D. "On the Stability and Chemorheology of a Urea Choline Chloride Deep-Eutectic Solvent as an Internal Phase in Acrylic High Internal Phase Emulsions," *RSC Adv.* **2016**, *6,* 81694-81702.

(146) Hong, S.; Lian, H.; Sun, X.; Pan, D.; Carranza, A.; Pojman, J. A.; Mota-Morales, J. D. "Zinc-Based Deep Eutectic Solvent-Mediated Hydroxylation and Demethoxylation of Lignin for the Production of Wood Adhesive," *RSC Advances* **2016**, *6,* 89599-89608.

(147) Carranza, A.; Pérez-García, M. G.; Song, K.; Jeha, G. M.; Diao, Z.; Jin, R.; Bogdanchikova, N.; Soltero, A. F.; Terrones, M.; Wu, Q.; Pojman, J. A.; Mota-Morales, J. D. "Deep-Eutectic Solvents as MWCNT Delivery Vehicles in the Synthesis of Functional Poly(HIPE) Nanocomposites for Applications as Selective Sorbents," *ACS Appl. Mater. Interfaces* **2016**, *8,* 31295-31303.

(148) Carranza, A.; Romero-Perez, D.; Almanza-Reyes, H.; Bogdanchikova, N.; Juarez-Moreno, K.; Pojman, J. A.; Velasquillo, C.; Mota-Morales, J. D. "Nonaqueous Synthesis of Macroporous Nanocomposites Using High Internal Phase Emulsion Stabilized by Nanohydroxyapatite," *Adv. Mater. Interfaces* **2017**, 1700094-n/a.

(149) Tullier, M. P.; Pojman, J. A. "Cure-on-Demand Acrylamide Grout Using Frontal Polymerization," *J. Mater. Civ. Eng.* **2017**, *29,* 06017014.

(150) Kondepudi, D.; Petrosky, T.; Pojman, J. A. "Dissipative Structures and Irreversibility in Nature: Celebrating 100th Birth Anniversary of Ilya Prigogine (1917–2003)," *Chaos* **2017**, *27,* 104501.

(151) Viner, G.; Monica, T. L.; Lombardo, R.; Pojman, J. A. "Effect of Pseudo-Gravitational Acceleration on the Dissolution Rate of Miscible Drops " *Chaos* **2017**, *27*, 104603.

(152) Bunton, P. H.; Tullier, M. P.; Meiburg, E.; Pojman, J. A. "The Effect of a Crosslinking Chemical Reaction on Pattern Formation in Viscous Fingering of Miscible Fluids in a Hele-Shaw Cell," *Chaos* **2017**, *27,* 104614.

(153) Cui, Y.; Li, M.-C.; Wu, Q.; Pojman, J. A.; Kuroda, D. G. "Synthesis-Free Phase-Selective Gelator for Oil-Spill Remediation," *ACS Appl. Mater. Interfaces* **2017**, *9,* 33549-33553.

(154) Fazende, K. F.; Phachansitthi, M.; Mota-Morales, J. D.; Pojman, J. A. "Frontal Polymerization of Deep Eutectic Solvents Composed of Acrylic and Methacrylic Acids," *J. Polym. Sci. A Polym. Chem.* **2017**, *55,* 4046-4050.

(155) Mota-Morales, J. D.; Sánchez-Leija, R. J.; Carranza, A.; Pojman, J. A.; del Monte, F.; Luna-Bárcenas, G. "Free-Radical Polymerizations of and in Deep Eutectic Solvents: Green Synthesis of Functional Materials," *Progress in Polymer Science* **2018**, *78,* 139-153.

(156) Stewart, S.; Marin, D.; Tullier, M.; Pojman, J.; Meiburg, E.; Bunton, P. "Stabilization of Miscible Viscous Fingering by a Step Growth Polymerization Reaction," *Experiments in Fluids* **2018**, *59,* 114.

(157) Pereira, K. E.; Crother, B. I.; Sever, D. M.; Fontenot, C. L.; Pojman, J. A.; Wilburn, D. B.; Woodley, S. K. "Skin Glands of an Aquatic Salamander Vary in Size and Distribution and Release Antimicrobial Secretions Effective against Chytrid Fungal Pathogens," *The Journal of Experimental Biology* **2018**, *221,* jeb183707.

(158) Anoosha, F.; Leah, G.; Cong, C.; Fariborz, T.; Timothy, B. T.; Ram, D.; John, A. P.; Daniel, H. "Fabrication and Characterization of Thiol-Triacrylate Polymer Via Michael Addition Reaction for Biomedical Applications," *Biomedical Materials* **2019**, *14,* 015001.

(159) Yang, D.; Fan, J.; Cao, F.; Deng, Z.; Pojman, J. A.; Ji, L. "Immobilization adjusted clock reaction in the urea–urease–H^+ reaction system," *RSC Adv.*, **2019**, *9*, 3514.

(160) Markovic, V. M.; Bánsági Jr., T.; McKenzie, D.; Mai, A.; Pojman, J. A.; Taylor, A. F. "Influence of Reaction-Induced Convection on Quorum Sensing in Enzyme-Loaded Agarose Beads," *Chaos: An Interdisciplinary Journal of Nonlinear Science* **2019**, *29,* 033130.

(161) Hong, S.; Sun, X.; Lian, H.; Pojman, J. A.; Mota-Morales, J. D. "Zinc Chloride/Acetamide Deep Eutectic Solvent-Mediated Fractionation of Lignin Produces High- and Low-Molecular-Weight Fillers for Phenol-Formaldehyde Resins," *Journal of Applied Polymer Science* **2019**, *doi.org/10.1002/app.48385,* 48385.

(162) Bynum, S.; Tullier, M.; Morejon-Garcia, C.; Guidry, J.; Runnoe, E.; Pojman, J. A. "The Effect of Acrylate Functionality on Frontal Polymerization Velocity and Temperature," *Journal of Polymer Science Part A: Polymer Chemistry* **2019**, *57,* 982-988.

(163) Pojman, J. A. "Mathematical Modeling of Frontal Polymerization," *Math. Model. Nat. Phenom.* **2019**, *14,* 604.

(164) Khan, A. H.; Cook, J. K.; Wortmann III, W. J.; Kersker, N. D.; Rao, A.; Pojman, J. A.; Melvin, A. T. "Synthesis and Characterization of Thiol-Acrylate Hydrogels Using a Base-Catalyzed Michael Addition for 3D Cell Culture Applications," *Journal of Biomedical Materials Research Part B: Applied Biomaterials* **2020***, 108B,* 2294–2307.

(165) Bansal, K.; Pojman, J. A.; Webster, D.; Quadir, M. "Frontal Polymerization of a Thin Film on a Wood Substrate," *ACS Macro Letters* **2020**, *9,* 169-173.

(166) Upadhyay, J.; Bounds, C. O.; Totaro, N.; Thakuri, S.; Garber, L.; Vincent, M.; Huang, Z.; Pojman, J. A. "Production and Analysis of Stable Microfluidic Devices with Tunable Surface Hydrophilicity Via the in-Situ Tertiary-Amine Catalyzed Michael Addition of a Multifunctional Thiol to a Multifunctional Acrylate," *European Polymer Journal* **2020**, *126,* 109482.

(167) Fazende, K. F.; Gary, D. P.; Mota-Morales, J. D.; Pojman, J. A. "Kinetic Studies of Photopolymerization of Monomer-Containing Deep Eutectic Solvents," *Macromol. Chem. Phys.* **2020**, 1900511.

(168) Gary, D. P.; Bynum, S.; Thompson, B. D.; Groce, B. R.; Sagona, A.; Hoffman, I. M.; Morejon-Garcia, C.; Weber, C.; Pojman, J. A. "Thermal Transport and Chemical Effects of Fillers on Free-Radical Frontal Polymerization," *Journal of Polymer Science* **2020**, *58,* 2267-2277.

(169) Mai, A. Q.; Davies, J.; Nguyen, D.; Carranza, A.; Vincent, M.; Pojman, J. A. "Microparticles and Latexes Prepared Via Suspension Polymerization of a Biobased Vegetable Oil and Renewable Carboxylic Acid," J. *Appl. Polym. Sci.* **2020**, *138,* e50180.

(170) Pojman, J. A. "A New Approach to Manufacturing with Frontal Polymerization to Generate Patterned Materials," *ACS Cent. Sci.* **2021**, *7,* 534–535.

(171) Khan, A. H.; Smith, N. M.; Tullier, M. P.; Roberts, B. S.; Englert, D.; Pojman, J. A.; Melvin, A. T. "Development of a Flow-Free Gradient Generator Using a Self-Adhesive Thiol-Acrylate Microfluidic Resin/Hydrogel (TAMR/H) Hybrid System," *ACS Applied Materials & Interfaces* **2021**, *13,* 26735-26747.

(172) Mai, A. Q.; Bánsági, T.; Taylor, A. F.; Pojman, J. A. "Reaction-Diffusion Hydrogels from Urease Enzyme Particles for Patterned Coatings," *Communications Chemistry* **2021**, *4,* 101.

(173) Groce, B. R.; Gary, D. P.; Cantrell, J. K.; Pojman, J. A. "Front Velocity Dependence on Vinyl Ether and Initiator Concentration in Radical-Induced Cationic Frontal Polymerization of Epoxies," *J .Polym. Sci. **2021**, 1.* https://doi.org/10.1002/pol.20210183.

(174) Gao, Y.; Shaon, F.; Kumar, A.; Bynum, S.; Gary, D.; Sharp, D.; Pojman, J. A.; Geubelle, P. H. "Rapid Frontal Polymerization Achieved with Thermally Conductive Metal Strips," *Chaos: An Interdisciplinary Journal of Nonlinear Science* **2021**, *31,* 073113.

Books

Epstein, I. R.; Pojman, J. A. *An Introduction to Nonlinear Chemical Dynamics: Oscillations, Waves, Patterns and Chaos*; Oxford University Press: New York, 1998.

Downey, J. P.; Pojman, J. A. (editors) *Polymer Research in Microgravity: Polymerization and Polymer Processing*, ACS Symposium Series No. 793, American Chemical Society: Washington, D.C, 2002.

Pojman, J. A.; Tran-Cong-Miyata, Q. (editors) *Nonlinear Dynamics in Polymeric Systems*, *ACS Symposium Series No.* 869, American Chemical Society: Washington, DC, 2003.

Pojman, J. A.; Tran-Cong-Miyata. Q. (editors) Nonlinear Dynamics with Polymers: Fundamentals, Methods and Applications, WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim, 2010.

Book Chapters

1) Volpert, V. A.; Volpert, V. A.; Garbey, M.; Pojman, J. A. Stability of Reaction Fronts: in *Gas-Phase Chemical Reaction Systems: Experiments and Models 100 Years after Max Bodenstein*; Wolfrum, J.; Volpp, H.-R.; Rannacher, R. Warnatz, J., Ed.; Springer Berlin: Heidelberg, **1996**; pp 309-317.
2) Fortenberry, D. I.; Khan, A.; Ilyashenko, V. M.; Pojman, J. A. Frontal Polymerization: Self-Propagating High Temperature Synthesis of Polymeric Materials: in *Synthesis and Characterization of Advanced Materials, ACS Symposium Series No. 681*; Serio, M. A.; Gruen, D. M. Malhotra, R., Ed.; American Chemical Society: Washington, DC, 1998; pp 220-235.
3) Pojman, J. A.; Fortenberry, D.; Lewis, L. L.; Simmons, C.; Ilyashenko, V. Solvent-Free Synthesis by Free-Radical Frontal Polymerization: in *Solvent-Free Polymerizations and Processes, ACS Symposium Series No. 713*; Long, T. E. Hunt, M. O., Ed.; American Chemical Society: Washington, D.C., 1998; pp 140-153
4) Ainsworth, W.; Pojman, J. A.; Chekanov, Y.; Masere, J. Bubble Behavior in Frontal Polymerization: Results from KC-135 Parabolic Flights: in *Polymer Research in Microgravity: Polymerization and Processing, ACS Symposium Series No. 793*; Downey, J. P. Pojman, J. A., Ed.; American Chemical Society: Washington, DC, 2001; pp 112-125.
5) Downey, J. P.; Pojman, J. A. Polymer Processing in Microgravity: An Overview: in *Polymer Research in Microgravity: Polymerization and Processing, ACS Symposium Series No. 793*; Downey, J. P. Pojman, J. A., Ed.; American Chemical Society: Washington, DC, 2001; pp 2-15.
6) Pojman, J. A.; Volpert, V. A.; Volpert, V. A. "Nonlinear Dynamics of SHS-Like Processes in Polymer Chemistry" in *Self-Propagating High-Temperature Synthesis of Materials*; A. A. Borisov, L. T. De Luca., A. G. Merzhanov, Ed.; Taylor and Francis: New York, 2002; pp 99-118.
7) Epstein, I. R.; Pojman, J. A., Tran-Cong-Miyata, Q. Nonlinear Dynamics and Polymeric Systems - An Overview: in *Nonlinear Dynamics in Polymeric Systems, ACS Symposium Series No.* 869; Pojman, J. A.; Tran-Cong-Miyata, Q. Eds.; American Chemical Society: Washington, DC, 2003; pp 2-15.
8) Pojman, J. A.; Popwell, S.; Fortenberry, D. I.; Volpert, Vit. A.; Volpert, Vl. A. Nonlinear Dynamics in Frontal Polymerization: in *Nonlinear Dynamics in Polymeric Systems, ACS Symposium Series No. 869*; Pojman, J. A. Tran-Cong-Miyata, Q., Ed.; American Chemical Society: Washington, DC, 2003; pp 106-120.
9) Lewis, L. L.; DeBisschop, C. A.; Pojman, J. A.; Volpert, Vl. A. Evolution of Isothermal Polymerization Fronts via Laser Line Deflection and Predictive Modeling: in *Nonlinear Dynamics in Polymeric Systems, ACS Symposium Series No. 869*; Pojman, J. A. Tran-Cong-Miyata, Q., Ed.; American Chemical Society: Washington, DC, 2003; pp 169-185.
10) Pojman, J. A. Polymers: in *Encyclopedia of Nonlinear Science*; Scott, A., Ed.; Routledge: New York and London, 2004

11) Epstein, I. R.; Pojman, J. A. Ilya Prigogine: in *The New Dictionary of Scientific Biography*; Koertge, N. Ed. Charles Scribner's Sons, 2007.

12) Pojman, J. A. Nonlinear Chemical Dynamics in Synthetic Polymer Systems: in *Chemomechanical Instabilities in Responsive Materials (NATO Science for Peace and Security Series A: Chemistry and Biology)*; Borckmans, P.; De Kepper, P.; Khokhlov, A. R. Métens, S., Ed.; Springer: Dordrecht, 2009; pp 221-240.

13) Pojman, J. A.; Tran-Cong-Miyata, Q. Introduction: in *Nonlinear Dynamics with Polymers: Fundamentals, Methods and Applications*; Pojman, J. A. Tran-Cong-Miyata, Q., Ed.; WILEY-VCH Verlag GmbH & Co. KGaA: Weinheim, 2010; pp 1-4.

14) Epstein, I. R.; Pojman, J. A.; Tran-Cong-Miyata, Q. What Is Nonlinear Dynamics and How Does It Relate to Polymers?: in *Nonlinear Dynamics with Polymers: Fundamentals, Methods and Applications*; Pojman, J. A. Tran-Cong-Miyata, Q., Ed.; WILEY-VCH Verlag GmbH & Co. KGaA: Weinheim, 2010; pp 5-20.

15) Pojman, J. A. Frontal Polymerization: in *Nonlinear Dynamics with Polymers: Fundamentals, Methods and Applications*; Pojman, J. A. Tran-Cong-Miyata, Q., Ed.; WILEY-VCH Verlag GmbH & Co. KGaA: 2010; pp 45-68.

16) Pojman, J. A. Frontal Polymerization: in *Polymer Science: A Comprehensive Reference*; Matyjaszewski, K. Möller, M., Ed.; Elsevier BV: Amsterdam, 2012; pp 957–980.

Preprints and Unrefereed Conference Proceedings

1) Pojman, J. A.; Khan, A., M.; West, W. "Traveling Fronts Of Addition Polymerization: A Possible New Method Of Materials Synthesis.,"*Polym. Prepr. (Am Chem. Soc. Div. Polym. Chem.)* **1992**, *33,* 1188-1189.

2) Pojman, J. A.; Fortenberry, D.; Jones, C. E.; Khan, A. K.; Walker, J. S.; Willis, J. "Traveling Fronts of Addition Polymerization," report #153 of Equipe D' Analyse Numerique Lyon Saint-Etienne, CNRS, France.

3) Pojman, J.; Gill, N.; Willis, J.; Whitehead, J. B. "Polymer Dispersed Liquid Crystal (PDLC) Materials Produced via Frontal Epoxy Curing,"*Polym. Mater. Sci. Eng. Prep.* **1996**, *75,* 20-21.

4) Pojman, J. A.; Gunn, G.; Simmons, C. "Frontal Dispersion Polymerization,"*Polym. Prepr. (Am Chem. Soc. Div. Polym. Chem.)* **1997**, *38(2),* 351-352.

5) Fortenberry, D.; Pojman, J. A. "Solvent-Free Processing of Solid Monomers Utilizing Frontal Polymerization,"*Polym. Prepr. (Am Chem. Soc. Div. Polym. Chem.)* **1997**, *38(2),* 472-473.

6) Pojman, J. A.; Simmons, C.; Ilyashenko, V. "Solvent-Free Synthesis by Free-Radical Frontal Polymerization,"*Polym. Prepr. (Am Chem. Soc. Div. Polym. Chem.)* **1997**, *38(2),* 420-421.

7) Pojman, J. A.; Khan, A. M.; Mathias, L. "Frontal Polymerization in Microgravity,"*Polym. Prepr. (Am Chem. Soc. Div. Polym. Chem.)* **1997**, *38(1),* 717-718.

8) Lewis, L. L.; Pojman, J. A. "Experimental Investigation of the Mechanism of Isothermal Frontal Polymerization,"*Polym. Mater. Sci. Eng. Prep. Div. Polym. Mater. Sci. Eng.* **1998**, *79,* 44-45.

9) Pojman, J. A.; Warren, J. "Frontal Polymerization in Porous Media,"*Polym. Prepr. (Am Chem. Soc. Div. Polym. Chem.)* **1998**, *39,* 356-357.

10) Pojman, J. A.; Nichols, H. A.; Volpert, V. "The Effects of Reactor Orientation on Frontal Polymerization,"*Polym. Prepr. (Am Chem. Soc. Div. Polym. Chem.)* **1998**, *39,* 463-464.

11) Chekanov, Y.; Pojman, J. A.; Rasmussen, J. K. "Bubble-Free Initiators for High Temperature Free-Radical Polymerization,"*Polym. Prepr. (Am Chem. Soc. Div. Polym. Chem.)* **1998**, *39,* 465-467.

12) Pojman, J. A.; Chekanov, Y. A.; Case, C.; McCardle, T. "Functionally-Graded Polymeric Materials Prepared Via Frontal Polymerization,"*Polym. Mater. Sci. Eng. Prep. Div. Polym. Mater. Sci. Eng.* **1998**, *79,* 82-83.

13) Masere, J.; Pojman, J. A. "Period-Doubling Behavior in Propagating Polymerization

Fronts of Multifunctional Acrylates,"*Polym. Mater. Sci. Eng. Prep. Div. Polym. Mater. Sci. Eng.* **1998**, *79,* 80-81.

14) Pojman, J. A.; Griffith, J.; Simmons, C. "Binary Frontal Polymerization and Frontal Copolymerization,"*Polym. Prepr. (Am Chem. Soc. Div. Polym. Chem.)* **1998**, *39,* 231-232.

15) Washington, R. P.; Misra, G. P.; Pojman, J. A. "The Redox Polymerization of Acrylonitrile in an Oscillating Reaction,"*Polym. Prepr. (Am Chem. Soc. Div. Polym. Chem.)* **1998**, *39,* 237-238.

16) Pojman, J. A. "Self Organization in Synthetic Polymeric Systems," *Annals New York Acad. Sci.* **1999**, *879,* 194-214.

17) Pojman, J.; Volpert, V.; Dumont, T.; Ainsworth, W.; Chekanov, Y.; Masere, J.; Wilke, H., Bubble Behavior and Convection in Frontal Polymerization on the KC-135 Aircraft, AIAA 2000-0856,*38th Aerospace Sciences Meeting,* **2000,** Reno, NV.

18) Pojman, J.; Volpert, V.; Dumont, T.; Ainsworth, W.; Chekanov, Y.; Masere, J.; Wilke, H., "Frontal Polymerization in Microgravity: Bubble Behavior and Convection on the KC-135 Aircraft," NASA's Microgravity Materials Science Meeting, Huntsville, AL, June 6-8, 2000.

19) "Effective Interfacial Tension Induced Convection (EITIC) in Miscible Fluids", John A. Pojman, Yuri Chekanov, Jonathan Masere, Vitaly Volpert, Thierry Dumont, and Hermann Wilke, AIAA Aerospace Sciences Meeting, AIAA-2001-0764, January 8-10, 2001, Reno, NV. **Recipient of Best Paper Award**

20) Budzinski, K., Carter, N., Leard, K., Watters, C., Zoltowski, B. and Pojman, J. A. "Down to Earth" Microgravity Experiments: Classroom Demonstrations of Microgravity Research," AIAA-2002-1114 presented at the 40th AIAA Aerospace Sciences Meeting and Exhibit, 14-17, Reno, Nevada, January 2002.

21) Bessonov, N., Texier-Picard, R., Volpert, V., Wilke, H., and Pojman, J. A. "Numerical simulations of transient interfacial phenomena in miscible fluids," AIAA-2002-0892 presented at the 40th AIAA Aerospace Sciences Meeting and Exhibit, 14-17, Reno, Nevada, January 2002.

22) Wilke, H. and Pojman, J. A "Coupling Between Buoyancy and Marangoni Convection in a Two-Fluid System Under Reduced Gravity: A Numerical Study," AIAA-2002-0756 presented at the 40th AIAA Aerospace Sciences Meeting and Exhibit, 14-17, Reno, Nevada, January 2002.

23) Lewis, L. L. and Pojman, J. A. "Use of Laser Line Deflection and Shadowgraphy as Non-Invasive Monitoring Techniques for Isothermal Frontal Polymerization of Methyl Methacrylate Systems," Proc. ACS Poly. Mat. Sci and Eng. 86(1), 161 (2002).

24) Fortenberry, D. I; Pojman, J. A Spherically-Propagating Frontal Polymerization, Polym. Prep. 43(2), 825-826 (2002)

25) Volpert, Vit. and Pojman, J. A. "Convective Instabilities In Frontal Polymerization," Polym. Prep. 43(2), 816-817 (2002)

26) Lewis, L. L., DeBisschop, C., Pojman, J. A., Volpert, Vl. "Evolution of isothermal polymerization fronts via laser line deflection and predictive modeling," Polym. Prep. 43(2), 821-822 (2002)

27) Pojman, J. A., Bessonov, N., Texier-Picard, R., Volpert, V., and Wilke, H. "Effective interfacial tension in miscible polymers systems: A possible new source of instabilities," Polym. Prep. 43(2), 854-855 (**2002**)

28) McFarland, B. H., Pojman, J. A. "Controlled Initiation of Polymerization Reactions using Microencapsulation Techniques," Polym. Prep. 43(2), 854-855 (**2002**)

29) "Investigation of the Intensity and Pattern of Plasma Movement in an Inert Gas Dischage Tube," Kayce Leard, Brian Zoltowski, Nicholas Carter, Kristi Budzinski, Christina Watters, Shelly Gallendar, Janette Dill, William J. Ainsworth, John A. Pojman, AIAA-2003-0821, 41st AIAA Aerospace Sciences Meeting and Exhibit, 6-9 January **2003**, Reno, NV.

30) "Numerical Simulations of Transient Interfacial Phenomena in Miscible Polymer Systems," Nick Bessonov, John A. Pojman*, and Vitaly Volpert, Brian Zoltowski, AIAA-2003-1157, Microgravity Science and Space Processing, 41st AIAA Aerospace Sciences Meeting and Exhibit, 6-9 January **2003**, Reno, NV.

31) "Using Spinning Drop Tensiometry to Determine the Square Gradient Parameter for Dodecyl Acrylate/Poly (Dodecyl Acrylate) for Use in the TIPMPS Flight Investigation" Brian Zoltowski, John A. Pojman* Microgravity Science and Space Processing, AIAA 2003-0996, 41st AIAA Aerospace Sciences Meeting and Exhibit, 6-9 January **2003**, Reno, NV.

32) "Modeling of the Photopolymerization Kinetics of Docecyl Acrylate for the TIPMIPS Flight Investigation" William J. Ainsworth, John A. Pojman, Yuri Chekanov, and Victor T. Wyatt, Microgravity Science and Space Processing, AIAA-2003-0820, 41st AIAA Aerospace Sciences Exhibit and Meeting 6-9 January **2003**, Reno, NV.

33) "Behavior and limitations of isothermal frontal polymerization of methyl methacrylate systems, Lydia L. Lewis , Alford Perryman, John Pojman , Proc. ACS Poly. Mat. Sci and Eng. 88(1), 1-2 (2003).

34) "Estimation of the square gradient parameter for dodecyl acrylate/poly(dodecyl acrylate) using spinning drop tensiometry," Brian D. Zoltowski*, John A. Pojman, and Vitaly Volpert, Proc. ACS Poly. Mat. Sci and Eng. 88(1), 461-462 (2003).

35) "Measuring the diffusion coefficient for dodecyl acrylate/poly(dodecyl acrylate) using laser line deflection," Charles P. Edwards, Lydia L. Lewis, Alford Perryman*, David Rankin, and John Pojman, Proc. ACS Poly. Mat. Sci and Eng. 88(1), 350-350 (2003).

36) "Measuring viscosity via fluorescence during the adiabatic, neat photopolymerization of dodecyl acrylate." Victor T. Wyatt*, Kayce C. Leard, David Creed, Brian D. Zoltowski, Patrick H. Bunton, Blair Unger, Joseph Huff, Victoria Owensby, and John Pojman, Proc. ACS Poly. Mat. Sci and Eng. 88(1), 469-470 (2003).

37) "Transient interfacial phenomena in miscible polymer systems, ," Nick Bessonov, John A. Pojman, and Vitaly Volpert, Brian Zoltowski, Proc. ACS Poly. Mat. Sci and Eng. 88(1), 570-571 (2003).

38) "Controlled initiation of polymerization reactions using microencapsulation techniques," Brian H. McFarland and J. A. Pojman, Polym. Prep. 44(1), 909-910 (2003)

39) "Characterization of the kinetics of the adiabatic photopolymerization of dodecyl acrylate," William J. Ainsworth*, Yuri A. Chekanov, John A. Pojman, and Victor T. Wyatt, Polym. Prep. 44(1), 1075-1076 (2003)

40) "Numerical Simulations of Transient Interfacial Phenomena in Miscible Fluids, AIAA-2004-631," N. Bessonov, J. A. Pojman, Vitaly A. Volpert, 42nd AIAA Aerospace Sciences Meeting, (2004).

41) "Miscible Fluids in Microgravity (MFMG), AIAA-2004-962," N. Bessonov, J. A. Pojman, Vitaly A. Volpert, 42nd AIAA Aerospace Sciences Meeting, (2004).

42) "Preparation and analysis of peroxide core microcapsules" Brian McFarland and John A. Pojman, Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (2004), 45(1), 1-2

43) "Photoinitiated Frontal Polymerization Kinetics of Meth(Acrylates)," Nason, C; Hoyle, CE; Pojman, J, Polymer Preprints (Division of Polymer Chemistry, American Chemical Society), (2004), 45(2), 53-54.

44) "Photoinitiated Frontal Polymerization Kinetics of Meth(Acrylates)," Nason, C; Hoyle, CE; Pojman, J, RadTech UV&EB Conference, 2004.

45) Bessonov, N.; Pojman, J.; Volpert, V. "Modelling of Miscible Lquids and Microgravity Experiments,"*Matapli (Journal of Le Société de Mathématiques Appliquées & Industrielle)* **2004**, *75,* 51-66.

46) Pojman, J. A.; Bessonov, N.; Volpert, V.; Paley, M. S. "Miscible Fluids in Microgravity (MFMG): A Zero-Upmass Experiment on the International Space Station, AIAA-2005-718", 43rd AIAA Aerospace Sciences Meeting (2005).

47) Pojman, J. A.; Nason, C.; Hoyle, C. "In-Space Fabrication and Repair via Frontal Polymerization. AIAA-2005-535," 43rd AIAA Aerospace Sciences Meeting (200).

48) Pojman, J. A.; Parker, R.; Whitmore, C.; Zoltowski, B." Definitive Evidence for the Existence of an Effective Interfacial Tension between Miscible Fluids: Isobutyric Acid and Water in a Spinning Drop Tensiometer, AIAA-2005-719." 43rd AIAA Aerospace Sciences Meeting (2005).

49) Popwell, S.; McFarland, B; Pojman, J. A."Preparation and Analysis of Initiator-core Polyurea Microcapsules Using Pentamines and Diamines as Shell Components," Polymer Preprints 2005, 46(1), 735-736.

50) Leard, K.; Pojman, J. A.; "Polymer-dispersed aqueous materials," Polymer Preprints 2005, 46(1), 545-546.

51) McFarland, B.; Popwell, S.; Pojman, J. A."Preparation of initiator-core microcapsules and their use in frontal polymerization," Polymer Preprints 2005, 46(1), 748

52) Jiménez, Z.; Pojman, J. A..; Lowe, A.; Zhou, H.; Hoyle, C. E.; Paley, M. S. "Properties of Difunctional Ionic Liquid Monomers and their Polymers," RadTech UV&EB Conference, 2006.

53) Pojman, J.A. "Photoinitiated Frontal Polymerization for Rapid Repair and for Studying Spherically Propagating Thermal Fronts," RadTech UV&EB Conference, 2006.

54) Jiménez, Z. A.; Bounds, C; Pojman, J. A. "Frontal Polymerization with Ionic Liquid Monomers," Proc. ACS Poly. Mat. Sci and Eng. 91(2), 2006.

55) Marszalek,J.; Pojman, J.; Hoyle, C. "Polymer-dispersed aqueous materials," Proc. ACS Poly. Mat. Sci and Eng. 91(2), 2006.

56) McFarland, B.; Pojman, J. A. "Microencapsulation of Free-radical Initiators and their Use in Frontal Polymerization," *Polymer Preprints (Division of Polymer Chemistry, American Chemical Society),* **2008**, 49(1), 794-795.

57) Pojman, J. A. "Frontal polymerization for rapid repair and studying nonlinear dynamics," *Polymer Preprints* (American Chemical Society, Division of Polymer Chemistry) (2008), 49(1), 775-77.

58) Veronika, V. G.; Pojman, J. A. "Front Temperature and Front Velocity as a function of benzoyl peroxide concentration, Trithiol concentration and filler loading in the frontal polymerization of a triacrylate," *Polymer Preprints (Division of Polymer Chemistry, American Chemical Society),* **2008**, 49(1), 773-774.

59) Bounds, C.; Pojman, J. A. "Frontal Polymerization with Encapsulated Initiators Prepared by Several Methods," *Polymer Preprints (Division of Polymer Chemistry, American Chemical Society),* **2008**, 49(1), 777-778.

60) Bounds, C.; Goetter, R.; Pojman, J. A.; Vandersall, M. "Microencapsulation for Cure-on-Demand and Controlled Release Applications Using Novel Thiol-Acrylate Chemistry," *Polym. Mater: Sci. & Engin.* **2009**, *100,* 391-392.

61) Bounds, C.; Goetter, R.; Pojman, J. A.; Vandersall, M. "Microencapsulation of a Peroxide to Increase the Shelf Life of an Unsaturated Polyester for Electrical Insulating Applications," *Polym. Mater. Sci. & Engin.* **2009**, *100,* 384-385.

62) Scognamillo, S.; Mariani, A.; Bounds, C.; Luger, M.; Pojman, J. A. "Frontal Cationic Curing of Epoxy Resins: The Effect of Fillers and Catalyst Concentration on the Front Velocity, Front Temperature and Mechanical Properties.," *Polym. Mater. Sci. & Engin.* **2009**, *100,* 389-390.

63) Viner, V. G.; Pojman, J. A. "Effect of Reactive and Non-Reactive Additives on the Frontal Polymerization of Multifunctional Acrylates," *Polym. Mater. Sci. & Engin.* **2009**, *100,* 651-652.

64) . Microencapsulation for cure-on-demand composite materials and improvements to rheological properties of epoxy systems , Bounds, Chris; Pojman, John A. PMSE Preprints (2010), No pp. given. Language: English, Database: CAPLUS

65) Time-lapse thiol-acrylate polymerization using a pH clock reaction , Pojman, John A.; Hu, Gang; Boundsp, Christoher; Taylor, Annette F. PMSE Preprints (2010), No pp. given.

66) Cure-on-demand polymerizations based on frontal polymerization , Pojman, John A.; Bessette, Lauren; Von Holt, Trey; Luger, Michael; Smith, Frederick; Viner, Veronika PMSE Preprints (2010).

67) Cure-on-demand wood adhesives using frontal polymerization , Von Holt, Trey; Pojman, John A.; Bessette, Lauren; Luger, Michael; Smith, Frederick, PMSE Preprints (2010).

The following presentations were made by Dr. Pojman and do not include those made by his students.

1990

(1) "Convective Effects on Chemical Waves," September, USM Physics Department.

1991

(2)"Convective Effects on Chemical Waves and Traveling Fronts of Polymerization," August 12, Kossuth Lajos Science University, Institute of Physical Chemistry, Debrecen, Hungary.

(3) "Convective Effects on Chemical Waves and Traveling Fronts of Polymerization," August 22, Attila Joszef Science University, Institute of Physical Chemistry, Szeged, Hungary.

(4) "Traveling Fronts of Addition Polymerization", September, 20, Department of Polymer Science, University of Southern Mississippi.

(5) "Convective Effects on Chemical Waves and Traveling Fronts of Polymerization," October 3Department of Chemistry, Xavier University, New Orleans.

(6) "Convective Effects on Chemical Waves and Traveling Fronts of Polymerization," September 24, Department of Chemistry, Wake Forest University, Winston-Salem, NC.

(7) "Multicomponent Convection Induced by Traveling Fronts," October 14, Center for Nonlinear Dynamics, University of Texas, Austin, TX.

(8) "Self-Organization In Chemistry and Biology: How does order arise from disorder?" Sigma XI Research Society, November 21, University of Southern Mississippi.

Lay Audience:

Presentation to Miss Dixie's Kindergarten, February in Hattiesburg, MS.

Presentation to Kindergarten class in August, USM

1992

(9) "Chemically Induced Convection", January 31, Department of Chemistry, Mississippi State University, Starkville, MS

(10) "Convection Induced by Traveling Fronts", February 7, Department of Chemistry, Jackson State University, Jackson, MS

(11) "Chemical Self-Organization", February 20, Department of Chemistry, Birmingham Southern College, Birmingham, AL.

(12) "A Nonlinear Dynamics Approach to Polymeric Materials Synthesis", April 25, Department of Chemistry, Memphis State University, Memphis, TN.

(13) "A Nonlinear Dynamics Approach to Polymeric Materials Synthesis", August 11, Department of Chemistry and the Technology of Catalytic Processes, Institute of Chemical Physics, Chernogolovka, Russia

(14) "Fronts in the Chlorate Oxidation of Sulfite and Fronts of Methacrylic Acid Polymerization", August 13, Department of Chemical Kinetics, Institute of Chemical Physics, Chernogolovka, Russia.

(15) "A Nonlinear Dynamics Approach to Polymeric Materials Synthesis" August 17, Research and Development Center of the Polymer Optical Fibers Company, Tver, Russia.

(16) "Convective Instabilities in Propagating Fronts", August 19, Department of Mathematics, Institute of Chemical Physics, Chernogolovka, Russia.

(17) "A Nonlinear Dynamics Approach to Polymeric Materials Synthesis: Traveling Fronts and Oscillating Reactions", November 13, Department of Chemistry, University of New Orleans.

(18) "A Nonlinear Dynamics Approach to Polymeric Materials Synthesis: Traveling Fronts and Oscillating Reactions", December 9, Department of Chemistry, Georgetown University, Washington, DC.

(19) "Vinyl Polymerizations Coupled to the Belousov-Zhabotinskii Oscillating Reaction," John A. Pojman, Randy Washington and William W. West, ACS Mid Atlantic Regional Meeting, Washington, DC December 8.

(20) "Measurement of The Temperature Profile of Chemical Waves by Thermocolor Imaging,". John A. Pojman, and Istvan P. Nagy, Department of Physical Chemistry, Kossuth Lajos University, Debrecen, Hungary H-4010 ACS Mid Atlantic Regional Meeting, Washington, DC December 8.

Presentations to lay audience:

July 6, Presentation to C_4ET program at USM.
July 20, Presentation to High School Physics program at USM.
July 27, Presentation to C_4ET program at USM.
October 24, Presentation at Minority Day at USM.
"Order Out of Chaos", Blue Cross & Blue Shield Lecture Series in the Sciences, December 2.

1993

(21) "A Nonlinear Dynamics Approach to Polymeric Materials Synthesis: Oscillating Reactions and Traveling Fronts", February 26, Department of Chemistry, University of Mississippi, Oxford, MS.

(22) "A Nonlinear Dynamics Approach to Polymeric Materials Synthesis: Oscillating Reactions and Traveling Fronts", April 5, Department of Chemistry, West Virginia University, Morgantown, West Virginia.

(23) "A Nonlinear Dynamics Approach to Polymeric Materials Synthesis: Oscillating Reactions and Traveling Fronts", May 21, Department of Chemistry, Auburn University, Auburn, Alabama.

(24) "Increasing the Number of African-American Ph.D.'s: A Call To Action," July 16, Committee on Diversity, 3M, St. Paul, Minnesota.

(25) "A Nonlinear Dynamics Approach to Polymeric Materials Synthesis: Oscillating Reactions and Traveling Fronts", July 16, Technical Forum, 3M, St. Paul, Minnesota.

(26) "Propagating Fronts of Addition Polymerization," July 19, Microgravity Research Group, 3M, St. Paul, Minnesota.

(27) "Propagating Fronts of Addition Polymerization," August 3, Hercules Inc., Wilmington, DE.

(28) "Increasing the Number of African-American Ph.D.'s: A Call To Action," August 3, Hercules Inc., Wilmington, DE.

(29) "Propagating Fronts of Addition Polymerization," September 24, Department of Chemistry, University of Alabama, Huntsville.

(30) "Propagating Fronts of Addition Polymerization," November 15, Department of Applied Mathematics, Northwestern University, Evanston, IL.

(31) "Propagating Fronts of Addition Polymerization," December 7, Department of Polymer Science and Engineering, Kyoto Institute of Technology, Kyoto, Japan.

(32) "Propagating Fronts of Addition Polymerization," December 8, Department of Materials Chemistry, Nagoya University, Nagoya, Japan.

(33) "Traveling Fronts of Addition Polymerization" **Invited Lecture** at the Symposium on Pattern Formation in Polymers: From Equilibrium to Nonequilibrium, December 6-7, Tokyo, Japan.

(34) "Instabilities in Traveling Fronts of Addition Polymerization," John A. Pojman and Akhtar M. Khan, Canadian Society for Chemists, 76th meeting, Symposium on Nonlinear Dynamics and Chemical Self-Organization, Sherbrooke, Quebec, May 31, 1993.

(35) "Polymers Undergoing Interchange Reactions and Diffusion," John A. Pojman, Dept. Chem., Univ. Southern Miss., Hattiesburg, MS 39406; A. L. Garcia, Department of Physics, San Jose State University, San Jose, CA; D. K. Kondepudi, Department of Chemistry, Wake Forest University, Winston-Salem, NC 27109; C. Van den Broeck, Limburgs Universitair Centrum, B-3610 Dipenbeek, Belgium. Mississippi State Annual Conference on Differential Equations & Computational Simulations, March 20, 1993, Starkeville, MS.

(36) "Convective Instabilities in Traveling Fronts of Addition Polymerization,", John A. Pojman, William Elcan, Chris E. Jones and Akhtar Khan, **ASME Annual meeting**, December 1, 1993, New Orleans.

1994

(37) "Propagating Fronts of Polymerization," International Workshop on Dynamism and Regulation in Non-linear Chemical Systems, March 23, Tsukuba, Japan **(Invited Lecture)**

(38) "Factors Affecting Propagating Fronts of Polymerization," MacroAkron IUPAC International Symposium on Macromolecules, July 11, 1994 Akron, Ohio.

(39) "Instabilities in Propagating Fronts of Polymerization", J. Pojman, Gordon Research Conference on Oscillations and Dynamic Instabilities, Newport, RI, August 11, 1994.

(40) "Two-Dimensional Pattern Formation in the Iodide-Nitric Acid System"

Istvan P. Nagy, Tamas Karoly, Gyorgy Bazsa and John A. Pojman, Gordon Research Conference on Oscillations and Dynamic Instabilities, Newport, RI, August 11.

(41) "Numerical Modeling of Self-propagating Fronts of Addition Polymerization"

Stanislav E. Solovyov and John A. Pojman, Gordon Research Conference on Oscillations and Dynamic Instabilities, Newport, RI, August 11.

(42) “Spin Mode Instability in Propagating Polymerization Fronts,”Victor M. Ilyashenko and John A. Pojman, Gordon Research Conference on Oscillations and Dynamic Instabilities, Newport, RI, August 11.

(43) “Propagating Fronts of Polymerization with Solid Monomers”

Dionne Fortenberry and John A. Pojman, Gordon Research Conference on Oscillations and Dynamic Instabilities, Newport, RI, August 11.

(44) “Hydrodynamic Instabilities in Propagating Fronts of Polymerization”

Akhtar Khan and John A. Pojman, Gordon Research Conference on Oscillations and Dynamic Instabilities, Newport, RI, August 11.

(45) “Order Out of Chaos”, Department of Chemistry, University of South Alabama, February 4.

(46) “Order Out of Chaos”, Department of Chemistry, Nicholls State University, Thibadeux, LA, March 16.

(47) “Novel Approaches to Polymer Synthesis,” Mitsubishi Rayon Techno, LTD, March 25, 1994, Tokyo, Japan

(48) “Propagating Fronts of Addition Polymerization”, Kossuth Lajos University, May 19, Debrecen, Hungary.

(49) “Propagating Fronts of Polymerization”, Laboratoire d’analyse numirique, Université Lyon I, May 26, Lyon, France.

(50) “Instabilities in Propagating Fronts of Polymerization”, Department of Physics, University of New Orleans, New Orleans, LA, September 7.

(51) “Instabilities in Propagating Fronts of Polymerization”, Department of Physics, University of Southern Mississippi, Hattiesburg, MS, September 30.

(52) “Factors Affecting Propagating Fronts of Polymerization,” **Invited Lecture** at Federation of Analytical Chemistry and Spectroscopy Societies, St. Louis, October 6, 1994.

(53) “Propagating Fronts of Polymerization”, Composites Research Group, Department of Aerospace Engineering, University of Illinois, Urbana, IL, October 7, 1994.

1995

(54) “Spin Modes and Pulsations in Propagating Fronts of Addition Polymerization”

John A. Pojman*, Victor Ilyashenko and Akhtar Khan, Dynamics Days, Houston, TX January 5, 1995

(55) “Instabilities in Propagating Fronts of Polymerization”, **Invited Lecture** at the Workshop on Instabilities and Propagating Fronts, University Lyon I, Lyon France, April 27

(56) “Polymerizations in Microgravity”, (with Lon Mathias and Robert Lochhead), Ninth European Symposium on Gravity-Dependent Phenomena, Berlin, Germany May 2- 5, 1995

(57) “Instabilities in Propagating Fronts of Polymerization”, Institut für Theoretische Physik, Technical University, Berlin, Germany, May 5

(58) “Recent Advances in Frontal Polymerization”, Institute of Physical Chemistry, Kossuth Lajos University, Debrecen Hungary, April 20

(59) “Recent Advances in Convection Induced by Chemical Waves,” Institute of Physical Chemistry, Polish Academy of Sciences, Warszawa, Poland, May 8

(60) “Instabilities in Frontal Polymerization”, Center for Complex Systems, Brandeis University, Waltham, MA June 26, 1995.

(61) “Binary Polymerization Fronts: A New Method to Produce Simultaneous Interpenetrating Polymer Networks (SINs)”, William Elcan, Akhtar M. Khan, Lon Mathias and John A. Pojman, InterSociety Polymer Meeting, October 7 -10, 1995 Baltimore, MD.

(62) Suppression of Double-Diffusive and Taylor Instabilities in Propagating Fronts by Tube Rotation. John A. Pojman, and Istvan Nagy, Department of Physical Chemistry, Kossuth Lajos University, H-4010 Debrecen, pf. 7 Hungary ACS SE/SW Regional Meeting in Memphis November 28 - December 1, 1995

(63) “Traveling Waves in the Iodate-Sulfite and Bromate-Sulfite Systems,” Andrea Keresztessy, Istvan P. Nagy, György Bazsa and John A. Pojman

Department of Chemistry and Biochemistry, University of Southern Mississippi, Hattiesburg, MS 39406- 5043 and Department of Physical Chemistry, Kossuth Lajos University, Debrecen, Hungary H-4010, Mississippi Academy of Sciences, Biloxi, MS February 17- 18, 1995.

1996

(64) “Convective Instabilities in Frontal Polymerization- NASA EPSCoR”, John A. Pojman, Mississippi Annual EPSCoR Meeting, Jackson, January 30-31

(65) “Frontal Polymerization—DEPSCoR”
Mississippi Annual EPSCoR Meeting, Jackson, January 30-31
(66) “Frontal Polymerization: *Quo Vadis?*”, John A. Pojman, American Chemistry Society National Meeting, New Orleans, March 25

(67) “Frontal Polymerization: From Nonlinear Dynamics to Materials,” Department of Chemistry, Brandeis University, March 31.

(68) “Order Out of Chaos: An Introduction to Nonlinear Chemical Dynamics”, Department of Chemistry, Mississippi College, April 9.

(69) “Frontal Polymerization: From Nonlinear Dynamics to Materials,” Max-Planck-Institut für Molekulare Physiologie, Dortmund, Germany, June 11

(70) “Frontal Polymerization: From Nonlinear Dynamics to Materials,” Technical University, Berlin, Germany, June 14.

(71) “Frontal Polymerization: From Dynamics to Materials,” **invited presentation** at 28th Congress National D’Analyse Numerique, La Londe-Les Maures, France, May 29.

(72) “Frontal Polymerization: From Nonlinear Dynamics to Materials,” Wright Patterson Air Force Base, Dayton, Ohio, July 9

(73) “Binary Frontal Polymerization: A New Method to Produce Simultaneous Interpenetrating Polymer Networks (SINs)” John A. Pojman, William Elcan, Akhtar M. Khan, Chris Simmons and Lon Mathias , American Chemical Society National Meeting, Orlando, August 26

(74) "Frontal Polymerization: Self-Propagating High Temperature Synthesis (SHS) of Polymeric Materials,"John A. Pojman, Dionne Fortenberry, Akhtar Khan and Victor Ilyashenko, American Chemical Society National Meeting, Orlando, August 26

(75) "Reactor Design and Performance for the Study of Frontal Polymerization," John A. Pojman and Akhtar M. Khan, American Chemical Society National Meeting, Orlando, August 26

(76) "Polymer Dispersed Liquid Crystal (PDLC) Materials Produced via Frontal Epoxy Curing**,** " John Pojman, Nicole Gill[a], and Jason Willis[a], Joe B. Whitehead American Chemical Society National Meeting, Orlando, August 26, 1996.

(77) "Applications of Frontal Polymerization to Materials Synthesis," NSF Workshop on Materials Chemistry, October 17, Philadelphia, PA

1997

(78) "Frontal Polymerization in Microgravity," John A. Pojman, Mississippi Academy of Sciences Annual Meeting, February 20, Biloxi, MS.

(79) "Frontal Polymerization: From Nonlinear Dynamics to Materials," Department of Chemistry, Middle Tennessee State University, Murfreesboro, TN January 30.

(80) "Frontal Curing of Epoxies," Yuri Chekanov and John A. Pojman, ACS National Meeting, April 14, San Francisco, 1997.

(81) "Frontal Polymerization in Microgravity," John A. Pojman, A. Khan and Lon Mathias, ACS National Meeting, April 14, San Francisco, 1997.

(82) "Effect of Green Density on Frontal Polymerization with a Solid Monomer," Dionne Fortenberry and John A. Pojman, ACS National Meeting, April 14, San Francisco.

(83) "The Effect of Convection on Propagation Polymerization Fronts," John A. Pojman, Oscillations and Dynamic Instabilities in Chemistry (Gordon Conference) July 14, New Port, RI.1997

(84) "Solvent-less Processing by Frontal Polymerization," John A. Pojman, Chris Simmons, L. Lee Lewis, Victor Ilyashenko, ACS National Meeting, September 8 - 11, Las Vegas

(85) "Frontal Dispersion Polymerization," John A. Pojman, Grady Gunn, Chilibra Patterson, Chris Simmons, ACS National Meeting, September 8 - 11, Las Vegas

(86) "Solvent-less Processing of Acrylamide by Frontal Polymerization," Dionne I. Fortenberry and John A. Pojman, ACS National Meeting, September 8 - 11, Las Vegas

(87) "Frontal Polymerization: From Nonlinear Dynamics to Materials," Department of Chemistry, City University of New York—College of Staten Island, Staten Island, NY September 29.

(88) "Frontal Polymerization as an Analog of SHS," Pojman, J.; Fortenberry, D.; Ilyashenko, V. **invited presentation**, 4th International Symposium on SHS, October 6 -10, Toledo, Spain., 1997

(89) "The Effect of Green Density on Front Velocity and Product Morphology in the Frontal Polymerization of Acrylamide," D. Fortenberry and J. Pojman, 4th International Symposium on SHS, October 6 -10, Toledo, Spain.

(90) “Frontal Polymerization: From Microgravity to New Materials,” J. Pojman, Workshop on Chemical Waves, Fronts, and Patterns , October 14-15, Lyon, France

(91) “The Effect of Green Density on Front Velocity and Product Morphology in the Frontal Polymerization of Acrylamide,” D. Fortenberry and J. Pojman, Workshop on Chemical Waves, Fronts, and Patterns , October 14-15, Lyon, France, 1998

(92) “Frontal Polymerization in Microgravity,” John A. Pojman, AIAA Aerospace Sciences Meeting, January 15, 1998, Reno, NV.

(93) “Frontal Polymerization: From Microgravity to New Materials,” Department of Chemistry, LSU, February 6, 1998

(94) “Why Do We Study Chemical Reactions in Microgravity?,” John A. Pojman, Mississippi Academy of Sciences, February 26-27, 1998, Biloxi, MS.

(95) “The Effect of Initial Composition on Front Velocity in Binary Frontal Polymerization and Frontal Copolymerization: Comparison of Theory to Experiment,” Jerry Griffith and John A. Pojman, Mississippi Academy of Sciences, February 26-27, 1998, Biloxi, MS.

(96) “Binary Frontal and Frontal Copolymerization,” John A. Pojman, Jerry Griffith, Chris Simmons, National American Chemical Society meeting, March 29, 1998, Dallas, TX

(97) “Frontal Polymerizaton: From Microgravity to New Materials,” C.N.R.S.-Paul Pascal (Bourdeax France) May 26, 1998

(98) “Frontal Polymerizaton: From Microgravity to New Materials,” Departament de Quimica FisicaUniversitat de Barcelona, Barcelona, Spain May 28, 1998

(99) “What is Nonlinear Chemical Dynamics?” Université Lyon I, Lyon, France, June 2, 1998.

(100) “Why Do We Do Science in Microgravity?” Université Lyon I, Lyon, France, June 3, 1998.

(101) “Frontal Polymerizaton: From Microgravity to New Materials,” Université Lyon I, Lyon, France, June 4, 1998.

(102) “Frontal Polymerizaton: From Microgravity to New Materials,” Departament de Quimica Fisica Universitat de Barcelona, Barcelona, Spain May 28, 1998

(103) “Frontal Polymerization in Microgravity,” John A. Pojman, NASA’s Microgravity Materials Science Meeting, July 14 - 16, Huntsville, AL.

(104) “Frontal Polymerizaton: From Microgravity to New Materials,” Society of Plastics Engineers (Gulf Coast Section) meeting, Baton Rouge, LA July 28, 1998.

(105) “Frontal Polymerization in Porous Media,” John A. Pojman and James Warren, National American Chemical Society Meeting, August 23 – 27.

(106) “Nonlinear Chemical Dynamics in the Physical Chemistry Lab and Lecture,” John A. Pojman, National American Chemical Society Meeting, August 23 – 27.

(107) “Self Organization in Synthetic Polymeric Systems,” Tempos in Science and Nature Conference, September 23-26, Sienna, Italy. **Invited talk**

(108) “Frontal Polymerization: From Microgravity to New Materials,” Department of Mechanical Engineering, University of Southern California, October 7, Los Angeles, CA.

(109) “Self Organization in Synthetic Polymeric Systems,” Southeast Louisiana State University, November 13, Hammond, LA.

(110) “Self Organization in Synthetic Polymeric Systems,” University of Missouri-St. Louis, November 23, St. Louis, MO.

(111) “Nonlinear Chemical Dynamics: What is it and What is It Good For?”, Nonlinear Reactions and Synergetic Phenomena,” **Invited Talk,** Nara University of Education. December 6.

(112) “The Mississippi River: An Ecological Overview,” Nara University of Education, December 7.

(113) “Self Organization in Synthetic Polymeric Systems,” Kyoto Institute of Technology, Lecture, December 9. Kyoto, Japan.

(114) “Self Organization in Synthetic Polymeric Systems,” **Invited Lecture,** Nonlinear Dynamics and Polymeric Materials, December 10, Nagoya, Japan.

(115) “Why We Do Science in Microgravity,” Ochanomizu University, December 11, Tokyo, Japan.

(116) “Frontal Polymerization: From Microgravity to New Materials,” December 14, 1998, National Institute of Materials and Chemical Research, Tsukuba,Japan.

1999

(117) “Surface Tension-Induced Convection in Chemical Reaction,” Mississippi Academy of Sciences, February 25, Tupelo, MS.

(118) “What is the Difference between Science and Pseudoscience,” Mississippi Academy of Sciences, February 25, Tupelo, MS.

(119) “An Investigation of Bubble Behavior in Viscous Frontal Polymerization System,” Mississippi Academy of Sciences, February 25, Tupelo, MS.

(120) “Nonlinear Chemical Dynamics: What is it and What is It Good For?”, **Invited Talk**, Alcorn State University, Lorman, MS, March 29.

(121) “Frontal Polymerization: From Microgravity to New Materials,” **Invited Talk**, Workshop on Modeling Fronts, Universite Lyon I, Lyon, France, April 18.

(122) “Frontal Polymerization: From Microgravity to New Materials,” **Invited Talk**, Fifth SIAM Conference on Applications of Dynamical Systems, May 27, Snowbird, Utah.

(123) “Self Organization in Synthetic Polymeric Systems,” Oscillations and Dynamic Instabilities Gordon Conference, June 6 - 11, Barca, Italy. **Invited talk**

(124) “Self Organization in Synthetic Polymeric Systems,”Dipartimento di Chimica, UNIVERSITÀ DEGLI STUDI DI SASSARI, June 15, 1999, Sassari, Italy.

(125) “The Effective Interfacial Tension in Miscible Fluids,” Vitaly Volpert[1], Thierry Dumont[2], Yuri Chekanov[3], Jonathan Masere[3], and John A. Pojman[3]. (1) Laboratoire d’analyse numirique, Universite Lyon I, 69622, Villeurbanne Cedex, France, (2) Laboratoire d’analyse numirique, Université Lyon I, 69622 Villeurbanne Cedex, France, (3) Department of Chemistry & Biochemistry, University of Southern Mississippi, Hattiesburg, MS 39406, August 22-26, 1999, American Chemical Society, National Meeting, New Orleans, LA.

(126) “Frontal Polymerization in Microgravity,”**John A. Pojman**1, Vitaly I. Volpert2, Hermann M. Wilke3, Yuri Chekanov1, Jonathan Masere1, William Ainsworth1, Vinh Nguyen1, and James Warren1. (1) Department of Chemistry & Biochemistry, University of Southern Mississippi, Hattiesburg, MS 39406, (2) Laboratoire dÕanalyse numirique, Universit* Lyon I, 43, bd du 2 Villeurbanne Cedex, France, (3) Institute of Crystal Growth, Rudower Chaussee 6, D-12489 Berlin - Adlershof, Germany, August 22-26, 1999, American Chemical Society, National Meeting, New Orleans, LA.

(127) “Self Organization in Synthetic Polymeric Systems,” Nonlinear Dynamics in Polymer Science and Related Fields, NIMC-EAPS International Conference, October 10-15, 1999, Moscow, Russia. **Invited talk**

(128) “Self Organization in Synthetic Polymeric Systems,” University of Alabama, Tuscaloosa, Alabama, December 2, 1999.**Invited talk**

2000

(129) “Bubble Behavior and Convection in Frontal Polymerization on the KC-135 Aircraft,”John A. Pojman[1], Vitaly Volpert[2], Thierry Dumont[2], William Ainsworth[1], Yuri Chekanov[1], Jonathan Masere[1] (1) Department of Chemistry & Biochemistry, University of Southern Mississippi, Hattiesburg, MS 39406, (2) Laboratoire d’analyse numirique, Universite Lyon I, 69622,Villeurbanne Cedex, France, AIAA Aerospace Sciences Meeting, January 12, 2000, Reno, NV.

(130) "The Effective Interfacial Tension in Miscible Fluids", Vitaly Volpert**[1]**, Thierry Dumont[2], Yuri Chekanov[3], Jonathan Masere[3], and John A. Pojman[3]. (1) Laboratoire d’analyse numirique, Universite Lyon I, 69622, Villeurbanne Cedex, France, (2) Laboratoire d’analyse numirique, Université Lyon I, 69622 Villeurbanne Cedex, France, (3) Department of Chemistry & Biochemistry, University of Southern Mississippi, Hattiesburg, MS 39406, Mississippi Academy of Sciences, February 24, 2000, Biloxi, MS.

(131) "Measuring the Effective Interfacial Tension in Miscible Fluids by Spinning Drop Tensiometry", Vitaly Volpert**[1]**, Thierry Dumont[2], Yuri Chekanov[3], Jonathan Masere[3], and John A. Pojman[3]. (1) Laboratoire d’analyse numirique, Universite Lyon I, 69622, Villeurbanne Cedex, France, (2) Laboratoire d’analyse numirique, Université Lyon I, 69622 Villeurbanne Cedex, France, (3) Department of Chemistry & Biochemistry, University of Southern Mississippi, Hattiesburg, MS 39406, Journées du PSMN, “Mouillage et Tension Superficielle (Wetting and Surface Tension), Ecole Normale Superieure de Lyon, March 15, 2000. **Invited talk**

(132) “Self Organization in Synthetic Polymeric Systems,” Dipartimento di Chmica Fisica, Universita degli studi di Palermo, Palmero Italy, March 20, 2000. **Invited Talk**

(133) “Frontal Polymerization in Microgravity,” Vitaly Volpert**[1]**, Thierry Dumont[2], Yuri Chekanov[3], Jonathan Masere[3], and John A. Pojman[3]. (1) Laboratoire d’analyse numirique, Universite Lyon I, 69622, Villeurbanne Cedex, France, (2) Laboratoire d’analyse numirique, Université Lyon I, 69622 Villeurbanne Cedex, France, (3) Department of Chemistry & Biochemistry, University of Southern Mississippi, Hattiesburg, MS 39406, American Chemical Society National Meeting, San Francisco, March 30, 2000.

(134) "Frontal Polymerization in Microgravity: Bubble Behavior and Convection on the KC-135 Aircraft," John A. Pojman, William Ainsworth, Yuri Chekanov, Jonathan Masere, Vitaly

Volpert, Thierry Dumont, and Hermann Wilke, NASA's Microgravity Materials Science Meeting, Huntsville, AL, June 6-8, 2000.

(135) "Bubble interactions with frontal polymerization in reduced gravity", William Ainsworth, Yuri Chekanov, Jonathan Masere and John A. Pojman, Department of Chemistry and Biochemistry, University of Southern Mississippi, Hattiesburg, MS, "Oscillations and Dynamic Instabilities in Chemical Systems" Gordon Research Conference, Bristol, RI, August 20-25, 2000

(136) "Frontal Approaches to Gradient Polymeric Materials Synthesis"
Yuri Chekanov, Lydia Lee Lewis, Jonathan Masere and John A. Pojman
Department of Chemistry and Biochemistry, University of Southern Mississippi, Hattiesburg, MS, "Oscillations and Dynamic Instabilities in Chemical Systems" Gordon Research Conference, Bristol, RI, August 20-25, 2000

(137) "Effective Interfacial Tension Induced Convection (EITIC) in Miscible Fluids"
John A. Pojman, Yuri Chekanov[1], Jonathan Masere[1], Department of Chemistry & Biochemistry, University of Southern Mississippi, Hattiesburg, MS 39406, Vitaly Volpert, Thierry Dumont, Laboratoire d'analyse numirique, Universite Lyon I, 69622 Villeurbanne Cedex, France and Hermann Wilke, Institute of Crystal Growth, Rudower Chaussee 6, D-12489 Berlin - Adlershof , GERMANY,,"Oscillations and Dynamic Instabilities in Chemical Systems" Gordon Research Conference, Bristol, RI, August 20-25, 2000

(138) "Frontal Polymerization in Two and Three Dimensions," John A. Pojman*, Yuri Chekanov, Monique Kendrick, Jonathan Masere, Marcus Molden and James Warren Department of Chemistry and Biochemistry, University of Southern Mississippi, Hattiesburg, MS, 39406, "Oscillations and Dynamic Instabilities in Chemical Systems" Gordon Research Conference, Bristol, RI, August 20-25, 2000

(139) "Why We Do Research in Microgravity," John A. Pojman, Hattiesburg Kiwanis Club, Hattiesburg, MS, September 11, 2000.**Invited**

(140) "Frontal Polymerization: From Microgravity to New Materials," John A. Pojman, Department of Chemical Engineering, University of Houston, Houston, TX, September 14, 2000. **Invited**

(141) "Nonlinear Dynamics in Polymer Systems," John A. Pojman, Department of Chemistry, Florida State University, Tallahasse, FL, October 30, 2000. **Invited**

(142) "Effect of Geometry and Viscosity on Spin Modes in Frontal Polymerization"
John A. Pojman*, Yuri Chekanov, Jonathan Masere, Marcus Molden, Enrico Pettreto, Department of Chemistry and Biochemistry, University of Southern Mississippi, Hattiesburg, MS and Vitaly Volpert, Laboratoire d'analyse numirique, Universite Lyon I, 69622 Villeurbanne Cedex, France, Pacifichem, Honolulu, HI, December 15, 2000.
2001

(143) "Effective Intefacial Tension Induced Convection (EITIC) in Miscible Fluids," John A. Pojman[1], Yuri Chekanov[1], Jonathan Masere[1], Vitaly Volpert[2], Thierry Dumont[2], and Hermann Wilke[3] (1) Department of Chemistry & Biochemistry, University of Southern Mississippi, Hattiesburg, MS 39406, (2) Laboratoire d'analyse numirique, Universite Lyon I, 69622

Villeurbanne Cedex, France, (3) Institute of Crystal Growth,Rudower Chaussee 6, D-12489 Berlin - Adlershof AIAA Aerospace Sciences Meeting, January 8-10, 2000, Reno, NV. **Recipient of Best Paper Award**

(144) Effective Intefacial Tension Induced Convection (EITIC) in Miscible Fluids, John A. Pojman[1], Yuri Chekanov[1], Jonathan Masere[1], Vitaly Volpert[2], Thierry Dumont[2], and Hermann Wilke[3] (1) Department of Chemistry & Biochemistry, University of Southern Mississippi, Hattiesburg, MS 39406, (2) Laboratoire d'analyse numirique, Universite Lyon I, 69622 Villeurbanne Cedex, France, (3) Institute of Crystal Growth,Rudower Chaussee 6, D-12489 Berlin - Adlershof Mississippi Academy of Sciences, February 8-9, Tupelo, MS.

(145) "Why We Do Research in Microgravity", John A. Pojman, Mississippi University for Women, Columbus, MS, March 27, 2001. **invited**

(146) "Self Organization in Synthetic Polymer Systems," John A. Pojman, Department of Chemistry, University of Illinois, Champaigne-Urbana, Illinois, April 20, 2001. **Invited**

(147) "Effective Intefacial Tension Induced Convection (EITIC) in Miscible Fluids," John A. Pojman[1], Yuri Chekanov[1], Jonathan Masere[1], Vitaly Volpert[2], Thierry Dumont[2], and Hermann Wilke[3] (1) Department of Chemistry & Biochemistry, University of Southern Mississippi, Hattiesburg, MS 39406, (2) Laboratoire d'analyse numirique, Universite Lyon I, 69622 Villeurbanne Cedex, France, (3) Institute of Crystal Growth,Rudower Chaussee 6, D-12489 Berlin - Adlershof International Workshop on Miscible Interfaces, July 2, 2001, Paris, France.

2002

(148) "Numerical Simulations of Transient Interfacial Phenomena in Miscible Fluids," John A. Pojman[1], Nicholas Bessonov, Rozenn Texier-Picard[2], Vitaly Volpert[2], and Hermann Wilke[3] (1) Department of Chemistry & Biochemistry, University of Southern Mississippi, Hattiesburg, MS 39406, (2) Laboratoire d'analyse numirique, Universite Lyon I, 69622, Villeurbanne Cedex, France, (3) Institute of Crystal Growth,Rudower Chaussee,. D-12489 Berlin - 6, Adlershof Microgravity Science and Space Processing Symposium of the 40th AIAA Aerospace Sciences Meeting and Exhibit, 14-17 January 2002, Reno, NV.

(149) "Coupling Between Buoyancy and Marangoni Convection in a Two-Fluid System Under Reduced Gravity: A Numerical Study," John Pojman [1], Hermann Wilke[2]b (1) University of Southern Mississippi, Hattiesburg, MS (2) Institute of Crystal Growth, Berlin, Germany, 40th AIAA Aerospace Sciences Meeting and Exhibit, 14-17 January 2002, Reno, NV.

(150) "Numerical Simulations of Transient Interfacial Phenomena in Miscible Fluids," John A. Pojman[1], Nicholas Bessonov, Rozenn Texier-Picard[2], Vitaly Volpert[2], and Hermann Wilke[3] Department of Chemistry & Biochemistry, University of Southern Mississippi, Hattiesburg, MS 39406, (2) Laboratoire d'analyse numirique, Universite Lyon I, 69622, Villeurbanne Cedex, France, (3) Institute of Crystal Growth,Rudower Chaussee,. D-12489 Berlin - 6, Adlershof, Mississippi Academy of Science, February 21 -22, 2002, Biloxi, MS.

(151) "Self Organization in Synthetic Polymer Systems," John A. Pojman, Lord Corporation, Cary, NC, March 14, 2002. **Invited**

(152) “Polymer Research in Microgravity: Polymerization and Polymer Processing,” John A. Pojman, North Carolina Section of the American Chemical Society, ACS Polymer Discussion Group, Raleigh, NC, March 14, 2002, **Invited.**

(153) "Transient Interfacial Phenomena in Miscible Polymer Systems," John A. Pojman, Vitaly Volpert, and Hermann Wilke, NASA 2002 Materials Science Conference, Huntsville, Alabama, June 25, 2002.

(154) "Korteweg stress in miscible systems: a new source of dynamics in reaction-diffusion systems," J. A. Pojman, N. Bessonov, V. Volpert and B. Zoltowski
Gordon Research Conference on "Oscillations & Dynamic Instabilities in Chemical Systems," July 28 - August 2, 2002, Queens College, Oxford, UK.

(155) "Isothermal frontal polymerization: comparison between modeling and experiment," L. L. Lewis, C. A. DeBisschop, J. A. Pojman and V. Volpert , Gordon Research Conference on "Oscillations & Dynamic Instabilities in Chemical Systems," July 28 - August 2, 2002, Queens College, Oxford, UK.

(156) " Spherically-propagating polymerization fronts," Dionne Fortenberry, K. Leard, and J. A. Pojman and Vitaly Volpert, Gordon Research Conference on "Oscillations & Dynamic Instabilities in Chemical Systems," July 28 - August 2, 2002, Queens College, Oxford, UK.

(157) " Effective interfacial tension in miscible polymers systems: A possible new source of instabilities.," **J. A. Pojman Sr.**, N. Bessonov, R. Texier-Picard, V. Volpert, H. Wilke, 224th ACS National Meeting, Boston, MA, August 18-22, 2002.

(158) "Why Do We Do Science in Microgravity?" Department of Chemistry, Loyola University, New Orleans, LA, October 21, 2002.

(159) "Self Organization in Synthetic Polymer Systems," Department of Chemical Engineering, Illinois Institute of Technology, Chicago, Illinois, October 23, 2002. **Invited**

(160) "Why Do We Do Science in Microgravity?" AIChE Student Chapter, Department of Chemical Engineering, Illinois Institute of Technology, Chicago, Illinois, October 23, 2002. **Invited**

2003

(161) “Numerical Simulations of Transient Interfacial Phenomena in Miscible Polymer Systems,” Nick Bessonov, John A. Pojman, and Vitaly Volpert, Mississippi Academy of Sciences, Hattiesburg, MS, February 13, 2003.

(162) "Self Organization in Synthetic Polymer Systems," Department of Applied Chemistry, Keio University, Yokohama, Japan, March 6, 2003. **Invited**

(163) “Microemulsions, Nanotechnology and Polymers,” AIST Nanotech Round-table: Self-Organization in Nanotechnology, Tokyo, Japan, March 8, 2003, **Invited**

(164) “Transient interfacial phenomena in miscible polymer systems, ,” Nick Bessonov, John A. Pojman, and Vitaly Volpert, Brian Zoltowski, 225th ACS National Meeting, New Orleans, LA, March 23-27, 2003
(165) “Why We Do Science in Microgravity?”, John A. Pojman, Millasps College, Jackson, MS April 8, 2003.

(166) Why We Do Science in Microgravity?”, John A. Pojman, Delta State University, Cleveland, MS October 16, 2003.

(167) Why We Do Science in Microgravity?”, John A .Pojman, Delta Community College, MS October 16, 2003.

2004

(168) “Numerical Simulations of Transient Interfacial Phenomena in Miscible Fluids, AIAA-2004-631,” N. Bessonov, J. A. Pojman, Vitaly A. Volpert, 42nd AIAA Aerospace Sciences Meeting, Reno, NV January 5-8, 2004.

(169) “Miscible Fluids in Microgravity (MFMG), AIAA-2004-962,” N. Bessonov, J. A. Pojman, Vitaly A. Volpert, 42nd AIAA Aerospace Sciences Meeting, Reno, NV January 5-8, 2004.

(170) “Effective Interfacial Tension in Miscible Fluids,” N Bessonov, John A. Pojman, Vitaly Volpert, Colin Whitmore and Brian Zoltowksi, Workshop on Diffuse Interfaces, Ecole Normale Superior, Lyon, France, January 14-16, 2004 **Invited**

(171) “Miscible Fluids in Microgravity (MFMG), AIAA-2004-962,” N. Bessonov, J. A. Pojman, Vitaly A. Volpert, Mississippi Academy of Sciences Meeting, Biloxi, MS, February 19-20, 2004.

(172) Polymer-Dispersed Aqueous Materials, Kayce Leard-Aultman, John A. Pojman and Dana Ho, Mississippi Academy of Sciences Meeting, Biloxi, MS, February 19-20, 2004.

(173) “Novels Methods of Fabrication and Repair in Space via Frontal Polymerization,” Transformation Space Launch and Operating Conference, Washington, DC May 24-26, 2004.

(174) “Creating Functionally Gradient Materials with Frontal polymerization”, John A. Pojman, NIST, Gaithersburg, MD, September 29, 2004.

(175) “Novels Methods of Fabrication and Repair in Space via Frontal Polymerization,” NASA Capability Roadmap Public Outreach Workshop, Washington, DC November 30, 2004.

2005

(176) Pojman, J. A.; Bessonov, N.; Volpert, V.; Paley, M. S. "Miscible Fluids in Microgravity (MFMG): A Zero-Upmass Experiment on the International Space Station, AIAA-2005-718", 43rd AIAA Aerospace Sciences Meeting, Reno, NV, January 11, 2005.

(177) Pojman, J. A.; Nason, C.; Hoyle, C. "In-Space Fabrication and Repair via Frontal Polymerization. AIAA-2005-535," 43rd AIAA Aerospace Sciences Meeting, Reno, NV, January 11, 2005.

(178) Pojman, J. A.; Parker,R.; Whitmore, C.; Zoltowski, B." Definitive Evidence for the Existence of an Effective Interfacial Tension between Miscible Fluids: Isobutyric Acid and Water in a Spinning Drop Tensiometer, AIAA-2005-719," 43rd AIAA Aerospace Sciences Meeting, Reno, NV, January 11, 2005.

(179) Pojman, J. A.; Bessonov, N.; Volpert, V.; Paley, M. S. "Miscible Fluids in Microgravity (MFMG): A Zero-Upmass Experiment on the International Space Station" Mississippi Academy of Sciences, Oxford, MS, February 16-17, 2005.

(180) "Nonlinear Dynamics in Polymer Systems," John A. Pojman, Department of Mathematics, University of Akron, Akron, OH, March 8, 2005. **Invited**

(181) "Nonlinear Dynamics in Synthetic Polymer Systems," John A. Pojman, Telluride Conference on Polymer Physics, Telluride, CO, July 28, 2005.

2006

(182) "Opportunities for Graduate Study in Science," Jones Country Junior College, Ellisville, MS, February 1, 2006.

(183) "Effective Interfacial Tension between Miscible Fluids," Southeastern Louisiana University, Hammond, LA, February 3, 2006.

(184) "Photoinitiated Frontal Polymerization for Rapid Repair," John A. Pojman, UV&EB 2006, April 25, 2006.

(185) "Using Frontal Polymerization to Make Materials and Study Dynamics," Gordon Research Conference on *Oscillations and Dynamics Instabilities in Chemical Systems*, Oxford, UK, August 1, 2006. **Invited**

(186) "Order Out of Chaos," Mississippi ACS Section Chemist of the Year Award Lecture, Hattiesburg, MS October 10, 2006

(187) "Order Out of Chaos," Kenyon College, Gambier, Ohio, November 9, 2006.

(188) "Using Frontal Polymerization to Make Materials and Study Dynamics," Rohm & Haas, December 7, Spring House, PA. 2006

2007

(189) “Self Organization via Frontal Polymerization, ” American Institute of Physics, Denver, CO, March 9, 2007. **invited**

(190) “Toward Chemical Anchors Using Frontal Polymerization,” Hilti GMBH, Kafering, Germany, March 29, 2007.

(191) “Using Frontal Polymerization to Make Materials and Study Dynamics,” Institute of Chemical Technology, Prague, Czech Republic, March 30, 2007.

(192) “Frontal Polymerization,” Brazil-US Workshop: Challenges in the Frontier of Material Science, Gramado, Brazil, April 27, 2007.**invited**

(193) “Self Organization in Synthetic Polymer Systems,” NATO Advanced Studies Institute on “Morphogenesis through the interplay of nonlinear chemical instabilities and elastic active media”, Cargese, Corsica, July 9, 2007.

(194) “Thermal Frontal Polymerization,” NATO Advanced Studies Institute on “Morphogenesis through the interplay of nonlinear chemical instabilities and elastic active media”, Cargese, Corsica, July 13, 2007.

(195) “Using Frontal Polymerization to Make Materials and Study Dynamics,” Department of Chemical Engineering, Princeton University, Princeton, NJ, September 26, 2007.

(196) “Using Frontal Polymerization to Make Materials and Study Dynamics,” School of Polymer, Textile and Fiber Engineering, Georgia Institute of Technology, Atlanta, GA, November 27, 2007.

(197) “Order Out of Chaos,” Christmas Lecture at William Jewell College, Liberty, MO, December 4, 2007.

(198) “Using Frontal Polymerization to Make Materials and Study Dynamics,” Second National Institute of Standards and Technology, Gaithersburg, MD, December 10, 2007.

2008

(199) “Dynamics of Thermal Frontal Polymerization,” Dynamics Days 2008, Knoxville, TV, January 4, 2008.

(200) “Using Frontal Polymerization to Make Materials and Study Dynamics,” National Center for Nanomaterials, Oak Ridge National Lab, Knoxville, TN January 7, 2008

(201) “How Molecules Organize Themselves,” Mississippi University for Women, March 5, 2008

(202) “Effective Interfacial Tension in Miscible Fluids,” American Physics Society National Meeting, New Orleans, LA, March 13, 2008.

(203) “Frontal Polymerization with Encapsulated Initiators prepared by Several Methods,” Gordon Research Conference on “Oscillations and Dynamic Instabilities in Chemical Systems,” Colby College, Waterville, Maine, July 13 – 18, 2008.

(204) “Using Frontal Polymerization to Make Materials and Study Dynamics,” Department of Physics, Hofstra University, October 22, 2008

(205) “Order Out of Chaos,” Public Lecture, Hofstra University, October 23, 2008.

2009

(206) “Microencapsulation of a peroxide to increase the shelf life of an unsaturated polyester for electrical insulating application“, ACS National Meeting, Salt Lake City, Utah, March 25, 2009.

(207) “Frontal cationic curing of epoxy resins: The effect of fillers and catalyst concentration on the front velocity, front temperature and mechanical properties,” ACS National Meeting, Salt Lake City, Utah, March 26, 2009.

(208) “Order Out of Chaos”, St. Louis University, September 11, 2009.

(209) “Photopolymerization kinetics of ionic liquid acrylate monomers,” Workshop on Ionic Liquids and Polymers, Washington, DC, October 6-7, 2009.
(210) “Cure-On-Demand Polymerizations,” Department of Mechanical Engineering, LSU, October 9, 2009.

(211) “Order Out of Chaos”, Faculty Science Club, LSU, October 13, 2009.

(212) “Frontal Polymerization: Basics and Applications,“ Ivoclar, Inc., October 24, 2009, Liechtenstein.

(213) “Buoyancy-driven and Interfacial-Tension-Driven Convection Caused by Polymerization,” Solvay Workshop on Chemo-hydrodynamic patterns and instabilities, Brussels, Belgium, October 28-30, 2009

(214) “Order Out of Chaos”, McNeese State University, Lake Charles, LA, Nov 4, 2009.

2010

(215) “Why We Do Science in Microgravity,” Louisiana Junior Math and Humanities Symposium, Baton Rouge, LA January 15, 2010.

(216) “Effective-Interfacial-Tension Induced Convection: A Suborbital Investigation with Blue Origin,” Next Generation Suborbital Researchers Conference, Boulder, CO, February 20, 2010.

(217) “Cure-on Demand Polymerization,” University of the Ozarks, Clarksville, AR, March 15, 2010.

(218) “Cure-on Demand Polymerizations based on Frontal Polymerization,” Spring National Meeting of the American Chemical Society, San Francisco, CA March 21, 2010.

(219) “Cure-on Demand Polymerization based on Frontal Polymerization,” Air Force Research Lab, Edwards Air Force Base, CA April 26, 2010.

(220) “Cure-on Demand Polymerization based on Frontal Polymerization,” Naval Air Weapons Service, China Lake, CA April 27, 2010.

(221) “Cure-on Demand Polymerization Using Clock Reactions and Fronts,” Gordon Research Conference on Oscillations and Dynamic Instabilities in Chemical Systems, Invited Presentation, Barga, Italy, July 6, 2010.

(222) “Order Out of Chaos,” September 21, 2010, Department of Chemistry, The University of Southern Mississippi

(223) “Cure-on Demand Polymerization Using Clock Reactions and Fronts,” Nonlinear Dynamic Systems Days: Non-Linear Dynamics and Self-Organisation in Chemical Systems, invited presentation, Centre de Recherche Paul Pascal - Bordeaux (France), October 18-20, 2010.

(224) “Cure-on Demand Polymerization Using Frontal Polymerization,” Workshop on Reaction-diffusion systems : Experiments, Modeling, and Analysis, invited presentation, Universite Paris-Sud 11, October 21-22, 2010.

(225) “Nonlinear dynamic approaches to polymeric materials – an introduction”, 66th Southwest and 62nd Southeastern Regional Meeting of the American Chemical Society, New Orleans, December 1, 2010.

(226) “Cure-on Demand Polymerizations using clock reactions and frontal polymerization, ” 66th Southwest and 62nd Southeastern Regional Meeting of the American Chemical Society, New Orleans, December 1, 2010.

(227) “Emulsion polymerization coupled to the Belousov-Zhabotinsky oscillating reaction,” **J. A. Pojman**, L. Sciascia, M. L. Turco Liveri, 66th Southwest and 62nd Southeastern Regional Meeting of the American Chemical Society, New Orleans, December 1, 2010.

(228) “Frontal polymerization,” J. A. Pojman, invited presentation, Pacifichem, Honolulu, HI, December 17, 2010.

2011

(229) “”Cure-on-Demand Polymerizations Using Clock Reactions and Fronts,” Materials Research Institute-UNAM, Mexico City, Mexico, January 12, 2011.

(230) “”Cure-on-Demand Polymerizations Using Clock Reactions and Fronts,” Department of Chemistry, Xavier University, January 20, 2011.

(231) ”Cure-on-Demand Polymerizations Using Clock Reactions and Fronts,” Department of Polymer Engineering, University of Akron, February 4, 2011.

(232) ”Cure-on-Demand & Time-Lapse Polymerizations,” Department of Chemistry, Portland State University, April 4, 2011.

(233) ”Cure-on-Demand & Time-Lapse Polymerizations,” Department of Chemistry, Nanjing University of Technology, Nanjing, China, May 14, 2011.

(234) “Nonlinear Dynamics with Polymers,” Anhui University, Hefei, China, May 17, 2011.

(235) “Nonlinear Dynamics with Polymers,” College of Chemical Technology, China University of Mining and Technology, Xuzhou, China, May 18, 2011.

(236) “Nonlinear Dynamics with Polymers,” Chemistry Department, Loyola University, New Orleans, LA, October 3, 2011

(237) “Nonlinear Dynamics with Polymers,” Department of Chemistry & Biochemistry, The University of Southern Mississippi, Hattiesburg, MS, October 6, 2011.

(238) “Nonlinear Dynamics in Polymeric Systems,” Plenary Lecture, PolyMat (International Conference on Polymers and Advanced Materials, Huatalco, MX, October 18, 2011.

(239) “Polimeri Gratia Artis – Polymers for Art,” LSU Science Saturday, November 19, 2011

2012

(240) ”Cure-on-Demand & Time-Lapse Polymerizations,” Department of Chemical Engineering, University of Alabama at Huntsville, Huntsville, AL, February 3, 2012.

(241) ”Cure-on-Demand & Time-Lapse Polymerizations,” Department of Chemical Engineering, North Carolina State University, Raleigh, NC, February 13, 2012.

(242) **“**A Study of The Effects of Thiols On the Frontal Polymerization and Pot Life of Multifunctional Acrylate Systems Initiated by Cumene Hydroperoxide,” with Alejandra Morales, Louisiana Academy of Sciences Annual Meeting, Alexandria, LA March 3, 2012.

(243) “Cure-on-Demand Polymerization based on Frontal Polymerization,” National Center for Preservation Technology and Training, Natchitoches, LA March 19, 2012.

(244) “Cure-on Demand Art and DIY Repair based on Frontal Polymerization,” Gordon Research Conference on “Oscillations and Dynamic Instabilities in Chemical Systems, Waterville, ME, July 14-20, 2012.

(245) “Polimeri Gratia Artis – Polymers for Art,” Department of Chemistry, Louisiana Tech, September 18, 2012.

(246) “New Thiol-acrylate based resins for microfluidic applications”, Institute for Micromanufacturing, Louisana Tech, Ruston, LA, September 18, 2012.

(247) “Cure-on-Demand Polymerization based on Frontal Polymerization,” Department of Chemistry, University of Louisiana at Lafayette, September, 21, 2012.

(248) “Frontal Polymerization and Its use for Cure-on Demand Art and Rapid Repair,” 6th International Workshop on Material Science and Nanotechnology, Da Long, Vietnam, October 31, 2012.

(249) “Frontal Polymerization and Its use for Cure-on Demand Art and Rapid Repair,” 6th International Workshop on Material Science and Nanotechnology, Vietnam National University of HCM City, Ho Chi Minh City, Vietnam, November 4, 2012.

2013

(250) “Cure-on demand polymer-clay composites using frontal polymerization,” 245th ACS National Meeting, New Orleans, April 11, 2013.

(251) “Fabrication and characterization of stable hydrophilic microfluidic devices prepared via the in situ tertiary-amine catalyzed Michael addition of multifunctional thiols to multifunctional acrylates” 245th ACS National Meeting, New Orleans, April 11, 2013.

(252) “Frontal Polymerization and Its use for Cure-on Demand Art and Rapid Repair,” Emergence in Chemistry 3.0, University of Alaska Anchorage, June 18, 2013.

(253) “Time-lapse and Cure-on Demand Polymerizations,” University of Leeds, Leeds, UK, September 30, 2013.

(254) “Time-lapse and Cure-on Demand Polymerizations,” University of St. Andrews, St. Andrews, UK, October 3, 2013.

(255) “Applications and Analysis of Novel Thiol-Acrylate Materials,” Department of Physics, Brandeis University, Waltham, MA, October 17, 2013.

(256) “Time-lapse and Cure-on Demand Polymerizations,” Department of Chemistry, Brandeis University, Waltham, MA, October 21, 2013.

2014

(257) “Polimeri gratia Artis: Polymers for Art,” Science Café of LSU, Baton Rouge, LA, February 25, 2014.

(258) “Powder coatings as additives for frontal polymerization,” 247th ACS National Meeting that will be held in Dallas, TX, March 16-20, 2014

(259) “Europium-doped Aluminum Oxide Phosphors as Indicators for Frontal Polymerization Dynamics,” Arturo Carranza, Mariah Gewin and John A. Pojman*, "Oscillations and Dynamics Instabilities in Chemical Systems" Gordon Conference Girona, Spain, July 14, 2014

(260) “Polimera gratia Artis: Polymers for Art,” Department of Chemistry, The University of Southern Mississippi, Hattiesburg, MS, October 24, 2014.

(261) “Polimera gratia Artis: Polymers for Art,” Department of Chemistry, Southern Methodist University, Dallas, TX, November 19, 2014.

(262) “Cure-on-demand polymerizations using the urease-catalyzed hydrolysis of urea to trigger thiol-acrylate polymerization,” ACS Southwest Regional Meeting, Fort Worth, Texas, November 20, 2014.**invited**

(263) “Cure-on-demand polymerizations using the urease-catalyzed hydrolysis of urea to trigger thiol-acrylate polymerization,” MacroMex2014, Nuovo Vallerta, Mexico, December 4, 2014.

2015

(264) “Polimera gratia Artis: Polymers for Art,” Art Department, University of St. Mary, Leavenworth, KS, February 3, 2015.

(265) “Polimera gratia Artis: Polymers for Art,” Goppert Gallery, University of St. Mary, Leavenworth, KS, February 6, 2015.

(266) “Polimera gratia Artis: Polymers for Art,” Chemistry Department, Oklahoma State University, Stillwater, OK, February 10, 2015.

(267) “Cure-on-demand polymerizations using the urease-catalyzed hydrolysis of urea to trigger thiol-acrylate polymerization,” The 3rd International Symposium on Advanced Polymer Materials and Fiber Science, Kyoto Institute of Technology, Kyoto, Japan, February 23, 2015.

(268) “Cure-on-demand polymerizations using the urease-catalyzed hydrolysis of urea to trigger thiol-acrylate polymerization,” Eastman Chemical, Kingsport, TN, March 4, 2015.

(269) “Cure-on-demand polymerizations using Clock Reactions and Propagating Fronts,” School of Materials Science and Engineering, Georgia Tech, Atlanta, GA, April 6, 2015.

(270) “Cure-on-demand polymerizations using Clock Reactions and Propagating Fronts,” Department of Chemistry, Pennsylvania State University, State College, PA, April 27, 2015.

(271) “Temporal Oscillations,” **invited lecture,** Conference on Complex Systems, Tempe, AZ, September 30, 2015.

2016

(272) “Cure-on-demand polymerizations using the urease-catalyzed hydrolysis of urea to trigger thiol-acrylate polymerization,” American Chemical Society National Meeting San Diego, CA March 16, 2016.

(273) “Time-Lapse and Cure-On-Demand Polymerizations for Adhesives and Fillers,” **invited lecture,** Adhesives and Sealant Council Meeting, New Orleans, LA, April 20, 2016.

(274) “Cure-on-demand polymerizations using Clock Reactions and Propagating Fronts,” Department of Biomedical and Chemical Engineering, Syracuse University, Syracuse, NY, April 22, 2016. **invited lecture**

(275) "Time-Lapse and Cure-On Demand Polymerizations", Gordon Research Conference on “Oscillations and Dynamic Instabilities in Chemical Systems, Burlington, VT, July 20, 2016. **invited lecture**

(276) “Non-chemical research of a Chemistry Professor: The three-toed amphiuma and microgravity research,” Tribeta Honor Society, Baton Rouge, LA, September 19, 2016

(277) “Order Out of Chaos,” Dominican University, 6th Lillian L.Y. Wang Yin, PhD Endowed Lecturer, San Rafael California, September 22, 2016.

(278) “Polimera gratia Artis: Polymers for Art,” Natural Science Department, Nicholls State University, Thibadeaux, LA, October 3, 2016.

(279) “Polimera gratia Artis: Polymers for Art,” School of Polymers & High Performance Materials, The University of Southern Mississippi, Hattiesburg, MS, October 31, 2016.

2017

(280) “Order out of Chaos,” Department of Chemistry, University of West Florida, Pensacola, FL, January 17, 2017.

(281) "Time-Lapse and Cure-On Demand Polymerizations", School of Polymers & High Performance Materials, The University of Southern Mississippi, Hattiesburg, MS, April 12, 2017.

(282) "Time-Lapse and Cure-On Demand Polymerizations", Danube Vltava Sava Polymer Meeting, Vienna, Austria, September 5, 2017 **invited.**

(283) “Time-Lapse and Cure-On Demand Polymerizations for Adhesives, Wood Repair, and Art,” Symposium on Structure and Behavior of Polymers from Equilibrium to Far-From-Equilibrium, Kyoto Institute of Technology, Kyoto, Japan, November 18, 2017.**invited**

2018

(284) “Time-Lapse and Cure-On Demand Polymerizations for Adhesives, Wood Repair, and Art,” Department of Materials Science, Clemson University, February 8, 2018.

(285) “Time-Lapse and Cure-On Demand Polymerizations for Adhesives, Wood Repair, and Art,” Macromolecular Colloquium Freiburg 21-23 February 2018, **invited**

(286) "Time-Lapse and Cure-On Demand Polymerizations for Adhesives, Wood Repair, and Art," Department of Materials Science and Engineering, Georgia Tech, March 6, 2018.

(287) "Frontal Polymerization for Adhesives, Fillers and Art," 255th ACS National Meeting, New Orleans, LA, March 18-22, 2018.

(288) "Polimera gratia Artis: Polymers for Art," LSU Center for Collaborative Knowledge, March 22, 2018.

(289) "Time-Lapse and Cure-On Demand Polymerizations for Adhesives, Wood Repair, and Art," Department of Coatings and Polymeric Materials, North Dakota State University, Fargo, ND, April 6, 2018.

(290) "Polimera gratia Artis: Polymers for Art," Science Café, The University of Southern Mississippi, April 13, 2018. **Invited**

(291) "Polimera gratia Artis: Polymers for Art," Louisiana School for Math, Science and the Arts, Natchitoches, LA, May 4, 2018.

(292) "Time-Lapse and Cure-On Demand Polymerizations for Adhesives, Wood Repair, and Art," Oscillations and Dynamic Instabilities in Chemical Systems (GRS), Les Diablerets, Switzerland, July 7, 2018, **Invited.**

(293) "Frontal Polymerization with Highly Conductive Additives," John A. Pojman, Samuel Bynum, Anthony Sagona, Catherine Morejon-Garcia Veronika Viner, and Corey Weber, Oscillations and Dynamic Instabilities in Chemical Systems (GRS), Les Diablerets, Switzerland, July 7, 2018,

(294) "Frontal Polymerization for Cure-on Demand Repair and Art," Scott White Memorial Symposium, Beckman Institute, University of Illinois, Urbana, IL, August 14, 2018.

2019

(295) "Time-Lapse and Cure-On Demand Polymerizations for Adhesives, Wood Repair, and Art," Grambling State University, Grambling, LA, March 20, 2019.

(296) "Time-Lapse and Cure-On Demand Polymerizations for Adhesives, Wood Repair, and Art," Louisiana Tech University, Ruston, LA, March 21, 2019.

(297) "Order Out of Chaos – How molecules Organize themselves," Ohio-Region Section of the American Physical Society, College of Wooster Wooster Ohio, March 29, 2019.

(298) "Time-Lapse and Cure-On Demand Polymerizations for Adhesives, Wood Repair, and Art," Symposium in Honor of Professor Ken Showalter's 70th Birthday, West Virginia University, Morgantown, WVA, May 17, 2019.

(299) “Time-Lapse and Cure-On Demand Polymerizations for Adhesives, Wood Repair, and Art,” SMART Polymers REU, LSU, Baton Rouge, LA, June 13, 2019.

(300) “Time-Lapse and Cure-On Demand Polymerizations for Adhesives, Wood Repair, and Art,” POLYMAT 2019, Huatulco, MX, **Invited**, October 23, 2019.

2020

(301 “Time-Lapse and Cure-On Demand Polymerizations for Adhesives, Wood Repair, and Art,” CONIN IV-irtual, Centro de Fisica Aplicada y Tecnologia Avanzada, CFATA UNAM, Mexico (by Zoom), November 10, 2020

2021

(302) “Polimeri Gratia Artis – Polymers for Art,” Speaking of Science Series, Evans High School (Zoom), February 12, 2021.

(303) "Epistemological Implications of Chaos Theory", Uncertainty Across the Arts and Sciences: A Conversation, LSU (Zoom)**,** February 23, 2021

(304) “Time-Lapse and Cure-On Demand Polymerizations for Adhesives, Wood Repair, and Art”, Baton Route Section of AIChE, (Zoom) March 25, 2021

Presentations by students and collaborators.

1992

(1) “A Study of Convection-Free Traveling Fronts in the Chlorate-Oxidation of Bisulfite,” Rhoma Johnson and John A. Pojman, Dept. Chem., February, Mississippi Academy of Sciences, Biloxi, MS.

(2) “Free-Radical Polymerization Initiated by the Belousov-Zhabotinsky Oscillating Reaction,” Danna C. Leard and John A. Pojman, February, Mississippi Academy of Sciences, Biloxi, MS.

(3) “Stirring Effects in the manganese Catalyzed Belousov-Zhabotinsky Oscillating Reaction,” Herbert Dedeaux, Jr. and John A. Pojman, February, Mississippi Academy of Sciences, Biloxi, MS.

(4) “Measurement of the Volume Changes in the Mn(II)-Catalyzed Belousov-Zhabotinskii Oscillating Reaction,” Dionne Fortenberry, Department of Chemistry, Dillard University, New Orleans, LA 70122 and John A. Pojman, February, Mississippi Academy of Sciences, Biloxi, MS.

(5) “Convective Instabilities in Traveling Fronts of Addition Polymerization,” Akhtar Khan, William West and John A. Pojman, February, Mississippi Academy of Sciences, Biloxi, MS.

(6) “Initiation of Addition Polymerization in the Belousov-Zhabotinsky Oscillating Reaction—A Study of Three Subsystems,” William W. West and John A. Pojman, February, Mississippi Academy of Sciences, Biloxi, MS.

1993

(7) TRAVELING FRONTS OF ADDITION POLYMERIZATION REACTION Akhtar M. Khan and John A. Pojman, Dynamics Days Conference, January, 1993, Tempe, AZ.

(8) “The Effect of Changing Acid Concentration in the Belousov-Zhabotinsky Oscillating Reaction on the Initiation of Polymerization Using Various Monomers,” William W. West and John Pojman, Mississippi Academy of Sciences, February, 1993, Jackson, MS.

(9) SURVEY OF THE CONCENTRATION EFFECTS OF DIFFERENT INITIATORS ON MULTICOMPONENT CONVECTIVE “FINGERING” OF METHACRYLIC ACID POLYMER FRONTS. Chris E. Jones and John A. Pojman, Mississippi Academy of Sciences, February, 1993, Jackson, MS.

(10) COUPLING OF POLYMERIZATION TO TRAVELING WAVES OF THE BELOUSOV-ZHABOTINSKII OSCILLATING REACTION. William H. Elcan* and John A. Pojman, Mississippi Academy of Sciences, February, 1993, Jackson, MS.

(11) POLYMERIZATION COUPLED TO THE RÁCZ OSCILLATING SYSTEM. Randy P. Washington and John A. Pojman, Mississippi Academy of Sciences, February, 1993, Jackson, MS.

(12) THE DYNAMIC BEHAVIOR OF CONVECTION-FREE FRONTAL ADDITION POLYMERIZATION, Akhtar M. Khan, John A. Pojman, Mississippi Academy of Sciences, February, 1993, Jackson, MS.

1994

(13) COMPOSITION OF METHACRYLIC ACID AND ACRYLAMIDE COPOLYMER FRONTS.
Karen Terrell and John A. Pojman, Mississippi Academy of Sciences, Biloxi, MS, February 17 - 18, 1994

(14) ANALYSIS OF TRAVELING FRONTS OF FREE-RADICAL POLYMERIZATION IN VARIOUS SOLID MONOMERS.
Dionne Fortenberry and John A. Pojman, Mississippi Academy of Sciences, Biloxi, MS, February 17 - 18, 1994

(15) INVESTIGATIONS INTO THE MECHANISM OF POLYMERIZATION COUPLED TO OSCILLATIONS IN THE BELOUSOV-ZHABOTINSKY OSCILLATING REACTION II. THE SAGA CONTINUES.
William W. West and John Pojman, Mississippi Academy of Sciences, Biloxi, MS, February 17 - 18, 1994

(16) INVESTIGATIONS INTO THE MECHANISM OF POLYMERIZATION COUPLED TO THE OSCILLATIONS IN THE BELOUSOV ZHABOTINSKY OSCILLATING REACTION.

Maria F. Garcia, William W. West, and John Pojman, Mississippi Academy of Sciences, Biloxi, MS, February 17 - 18, 1994

(17) PROPAGATING WAVES OF ADDITION COPOLYMERIZATION USING VARIOUS COMONOMER SYSTEMS.
William H. Elcan and John A. Pojman, Department of Chemistry, Mississippi Academy of Sciences, Biloxi, MS, February 17 - 18, 1994

(18) MACROKINETIC ASPECTS OF FRONTAL POLYMERIZATION.
V. M. Ilyashenko and J. A. Pojman, Mississippi Academy of Sciences, Biloxi, MS, February 17 - 18, 1994

(19) METHODS OF DETERMINING THE AMOUNT OF UNREACTED MONOMER IN A POLYMETHACRYLIC ACID SAMPLE.
Jason R. Willis and John A. Pojman, Mississippi Academy of Sciences, Biloxi, MS, February 17 - 18, 1994

(20) INVESTIGATING WAYS TO CONTROL THE MOLECULAR WEIGHT DISTRIBUTION OF POLYMERS INITIATED BY AN OSCILLATING REACTION.
Randy P. Washington and John A. Pojman, Mississippi Academy of Sciences, Biloxi, MS, February 17 - 18, 1994

(21) ANALYSIS OF PERCENTAGE CONVERSION OF POLYMERIC SAMPLE FROM FRONT PROPAGATING OF METHACRYLIC ACID POLYMERIZATION.
Chieko Takasaka, John A. Pojman, Mississippi Academy of Sciences, Biloxi, MS, February 17 - 18, 1994

(22) ANALYSIS OF POLYMER SAMPLES FROM TRAVELING FRONTS OF COPOLYMERIZATION USING VARIOUS METHODS.
Christy A. Cox, William H. Elcan and John A. Pojman, Mississippi Academy of Sciences, Biloxi, MS, February 17 - 18, 1994

(23) ANALYSIS OF INITIATOR EFFECT ON TRAVELING FRONTS OF FREE-RADICAL POLYMERIZATION IN VARIOUS SOLID MONOMERS.
Stephanie Brown and John A. Pojman, Mississippi Academy of Sciences, Biloxi, MS, February 17 - 18, 1994

(24) KINETIC EFFECTS IN MODELING OF SELF-PROPAGATING FRONTS OF ADDITION POLYMERIZATION.
Stanislav E. Solovyov and John A. Pojman, Mississippi Academy of Sciences, Biloxi, MS, February 17 - 18, 1994

(25) CONVECTIVE INSTABILITIES IN THE FRONTAL PROPAGATION OF ADDITION POLYMERIZATIONS.
Akhtar M. Khan, John A. Pojman, Mississippi Academy of Sciences, Biloxi, MS, February 17 - 18, 1994

(26) “Radial Mass Transport occurring during solid phase frontal polymerization”

I. P. Nagy, L. Sike, J. A. Pojman, G. Bazsa, July 12, Akron, Ohio.

(27) "Nonlinear Dynamics in the Physical Chemistry Lab", William West and John A. Pojman, Gordon Research Conference on Oscillations and Dynamic Instabilities, Newport, RI, August 11, 1994.

(28) "Polymerizations Coupled to the BZ reaction," Randy Washington, William West and John A. Pojman, Gordon Research Conference on Oscillations and Dynamic Instabilities, Newport, RI, August 11, 1994.

1995

(29) "Binary Polymerization Fronts Employing Two Different Mechanisms,"William Elcan and John A. Pojman, Dynamics Days, Houston, TX, January 5-7, 1995

(30) PROPAGATING FRONTS OF FREE-RADICAL POLYMERIZATION WITH SOLID MONOMERS
Dionne Fortenberry and John A. Pojman, University of Southern Mississippi
Hattiesburg, MS , Dynamics Days, Houston, TX, January 5-7, 1995

(31) STUDYING THE EFFECT OF OSCILLATING REACTION'S DYNAMICS ON THE MOLECULAR WEIGHT DISTRIBUTION OF ADDITION POLYMERIZATION. Randy P. Washington and John Pojman, Dynamics Days, Houston, TX, January 5-7, 1995

(32) NUMERICAL SIMULATION OF SELF-PROPAGATING FRONTS OF ADDITION POLYMERIZATION: KINETIC AND MECHANISM EFFECTS
Stanislav E. Solovyov and John A. Pojman, Dynamics Days, Houston, TX, January 5-7, 1995

(33) SPIN MODE INSTABILITY IN PROPAGATING POLYMERIZATION FRONTS
Victor M. Ilyashenko and John A. Pojman, Dynamics Days, Houston, TX, January 5-7, 1995

1995

(34) "Stability of Reaction Fronts," Gas Phase Chemical Reaction Systems: Experiments and Models 100 Years after Max Bodenstein , Marc Garbey, Vitaly Volpert and John A. Pojman 25 - 28 of August, 1995, Heidelberg, Germany.

(35) "Convection in Ascending Fronts of Epoxy Curing: Comparison of Experiment to Linear Stability Analysis." Gina Bowden, M. Garbey, J. Pojman, A. Taik, V. Volpert, ACS SE/SW Regional Meeting in Memphis November 28 - December 1, 1995.

(36) PERIODIC MODES OF FREE-RADICAL FRONTAL POLYMERIZATION. Victor M. Ilyashenko and John A. Pojman, ACS SE/SW Regional Meeting in Memphis November 28 - December 1

(37) AN INVESTIGATION OF BINARY POLYMERIZATION FRONTS EMPLOYING TWO DIFFERENT AND NON-INTERFERING POLYMERIZATION MECHANISMS.

William H. Elcan and John A. Pojman, ACS SE/SW Regional Meeting in Memphis November 28 - December 1

(38) TWO DIMENSIONAL MODES OF PROPAGATING POLYMERIZATION FRONTS
S.E. Solovyov and J.A. Pojman, ACS SE/SW Regional Meeting in Memphis November 28 - December 1

(39) PROPAGATING FRONTS OF ACRYLAMIDE DILUTED WITH BARIUM CARBONATE Ginger C. Curtis, Victor M. Ilyashenko and John A. Pojman, ACS SE/SW Regional Meeting in Memphis November 28 - December 1.

(40) ANALYSIS OF FRONTAL FREE-RADICAL POLYMERIZATION IN VARIOUS SOLID MONOMERS Dionne I. Fortenberry and John A. Pojman, ACS SE/SW Regional Meeting in Memphis November 28 - December 1

(41) "Characterization of Liquid Crystal Polymer Dispersions (LCPD) Produced in Propagating Fronts of Epoxy Curing," Nicole Gill, Joe Whitehead, John A. Pojman, ACS SE/SW Regional Meeting in Memphis November 28 - December 1.

(42) POLYMERIZATION OF ACRYLONITRILE IN THE BELOUSOV-ZHABOTINSKY REACTION IN A CSTR
Randy Washington and John Pojman, ACS SE/SW Regional Meeting in Memphis November 28 - December 1.

(43) "Investigations Into the Rate of Reaction Between Ce(IV) and Growing Polymer Chains," William W. West and John Pojman, Mississippi Academy of Sciences, Biloxi, MS February 17- 18.

(44) "Functionally Gradient and Phase-Separated Polymers Produced From Propagating Polymerization Fronts," William H. Elcan and John A. Pojman, Mississippi Academy of Sciences, Biloxi, MS February 17- 18.

(45) "Investigations into the Mechanism of Polymerization Coupled to Oscillations in the Belousov-Zhabotinsky Oscillating Reaction: Emulsion polymerization with Styrene," Garrett Evans, William W. West, John Pojman, Oak Grove High School and Department of Chemistry and Biochemistry, University of Southern Mississippi, Mississippi Academy of Sciences, Biloxi, MS February 17- 18.

(46) "Numerical Simulation of Self-propagating Fronts of Addition Polymerization: Mechanism and Kinetic Effects," Stanislav E. Solovyov and John A. Pojman, Mississippi Academy of Sciences, Biloxi, MS February 17- 18.

(47) "A Study of Self-Propagating Polymerization Fronts in Commercial Epoxy Systems," Reade A. Quinton and John Pojman, Mississippi Academy of Sciences, Biloxi, MS February 17-18.

(48) "Self-Propagating Frontal Polymerization: Experimental Technique and Reactor Design and Performance," Akhtar M. Khan and John A. Pojman, Mississippi Academy of Sciences, Biloxi, MS February 17- 18.

(49) "Analysis of the Traveling Fronts of Methacrylic Acid Initiated by Lupersol 231," Patrick Lewis and John A. Pojman , Mississippi Academy of Sciences, Biloxi, MS February 17-18.

(50) "Studying the effect of oscillating reaction's dynamics on the molecular weight distribution of addition polymerization," Randy P. Washington and John A. Pojman, Mississippi Academy of Sciences, Biloxi, MS February 17- 18.

(51) "Factors Affecting Propagating Fronts of Addition Polymerization: Conversion and Molecular Weight Distribution," Jason Willis and John A. Pojman, Mississippi Academy of Sciences, Biloxi, MS February 17- 18.

(52) "Macrokinetic Aspects of Frontal Polymerization," V. M. Ilyashenko and J. A. Pojman, Mississippi Academy of Sciences, Biloxi, MS February 17- 18.

1996

(53) "Analysis of Frontal Polymerization using Various Solid Monomers," Dionne I. Fortenberry and John A. Pojman, American Chemical Society National Meeting, New Orleans, March 25, 1996

(54) "Periodic Modes of Frontal Polymerization," Victor M. Ilyashenko and John A. Pojman, American Chemical Society National Meeting, New Orleans, March 25

(55) "Frontal Polymerization of n-Butyl Acrylate," Akhtar M. Khan and John A. Pojman, American Chemical Society National Meeting, New Orleans, March 26

(56) "Frontal Polymerization of in Solution," Gina Bowden, Ginger Curtis, Victor Ilyashenko and John A. Pojman, American Chemical Society National Meeting, New Orleans, March 26

(57) "Frontal Curing of Epoxies," Gina Bowden and John A. Pojman, American Chemical Society National Meeting, New Orleans, March 26

(58) "2-D Modes of Propagating Reaction-Diffusion Fronts in Condensed Media," Stanislav E. Solovyov and John A. Pojman, American Chemical Society National Meeting, New Orleans, March 24

(59) "Polymerization of Acrylonitrile in the Belousov-Zhabotinsky Reaction in a CSTR," Randy Washington and John A. Pojman, American Chemical Society National Meeting, New Orleans, March 24

(60) "Isothermal Frontal Polymerization," Victor Ilyashenko and John A. Pojman, American Chemical Society National Meeting, Orlando, August 26

(61) "Frontal Free-Radical Polymerization in Solid Monomers," Dionne I. Fortenberry and John A. Pojman, American Chemical Society National Meeting, Orlando, August 26

(62) "Polymerization of Acrylonitrile in the Belousov-Zhabotinsky reaction in a Continuous-flow Stirred Tank Reactor," Randy P. Washington and John A. Pojman, American Chemical Society National Meeting, Orlando, August 26

(63) "Frontal Curing of Epoxies," Gina Bowden and John A. Pojman, Mississippi Academy of Sciences, February 1996

1997

(64) "Effect of Green Density on Frontal Polymerization with a Solid Monomer," Dionne Fortenberry and John A. Pojman, Mississippi Academy of Sciences Annual Meeting, February 20, Biloxi, MS.

(65) "Polymerization Coupled to the Belousov-Zhabotinsky Oscillating Reaction," Randy Washington and John Pojman, Mississippi Academy of Sciences Annual Meeting, February 20, Biloxi, MS.

(66) "Spin Mode Instabilities in Frontal Polymerization," David Arrington and John A. Pojman, Mississippi Academy of Sciences Annual Meeting, February 21, Biloxi, MS.

(67) "Convective Instabilities in Frontal Polymerization," Chris Simmons and John A. Pojman, Mississippi Academy of Sciences Annual Meeting, February 21, Biloxi, MS 1997.

1998

(68) "Period Doubling in Propagating Fronts of 1,6-Hexanediol Diacrylate Polymerization"Jonathan Masere and John A. Pojman, Mississippi Academy of Sciences, February 26-27, 1998, Biloxi, MS.

(69) "An Investigation of Organic Dye Gradient Materials," Jim Owens and John A. Pojman, Mississippi Academy of Sciences, February 26-27, 1998, Biloxi, MS.

(70) "Polymerization of Acrylonitrile Coupled to an Oscillating Reaction," Randy Washington, Gauri P. Misra, and John A. Pojman, Mississippi Academy of Sciences, February 26-27, 1998, Biloxi, MS.

(71) "An Experimental Investigation of the Mechanism Behind Isothermal Frontal Polymerization," L. Lee Lewis and John A. Pojman, Mississippi Academy of Sciences, February 26-27, 1998, Biloxi, MS.

(72) "Orientation Dependence of the Front Velocity of Descending Thermal Fronts," Archie Nichols and John A. Pojman, and Alexander Segal, Institute of Fine Mechanics and Optics, St. Petersburg, Russia
and Vital Volpert, Université Lyon I, Lyon, France, Mississippi Academy of Sciences, February 26-27, 1998, Biloxi, MS.

(73) "Redox Polymerization of Acrylonitrile in an Oscillating Reaction," Randy Washington and John A. Pojman,, National ACS meeting, March 29, 1998, Dallas, TX

(74) "Experimental Investigation of the Mechanism of Isothermal Frontal Polymerization," L. Lee Lewis and John A. Pojman, National ACS meeting, March 29, 1998, Dallas, TX

(75) "Experimental Investigation of the Mechanism behind Isothermal Frontal Polymerization," Lydia Lee Lewis, Jennifer Coleman and John A. Pojman, National American Chemical Society Meeting, August 23 – 27, 1998, Boston, MA.

(76) "Effect of Reactor Orientation on Frontal Polymerization," John A. Pojman, H. Archie Nichols, and Vitaly Volpert , National American Chemical Society Meeting, August 23 – 27, 1998, Boston, MA.

(77) "Bubble-Free Initiators for High Temperature Free-Radical Polymerization," Yuri Chekanov, Jerry Rasmussen and John A. Pojman, National American Chemical Society Meeting, August 23 – 27, 1998, Boston, MA.

(78) "Effects of Frontal Polymerizations' Reaction Wave on the Morphology of a Semi-Interpenetrating Polymer Network," James M. Helt, James D. Batteas and John A. Pojman, National American Chemical Society Meeting, August 23 – 27, 1998, Boston, MA.

(79) "Period-Doubling Behavior in Propagating Polymerization Fronts of Multifunctional Acrylates," Jonathan Masere and John A. Pojman, National American Chemical Society Meeting, August 23 – 27, 1998, Boston, MA.

(80) "Functionally Graded Polymeric Materials Prepared via Frontal Polymerization," John A. Pojman, Yuri A. Chekanov, Chad Case and Timothy Mcardle, National American Chemical Society Meeting, August 23 – 27, 1998, Boston, MA.

1999

(81) "Polymeric Foam Production in Frontal Polymerization," William J. Ainsworth and John A. Pojman, Mississippi Academy of Sciences, February 26, 1999, Tupelo, MS.

(82) "In Situ Synthesis of Ionic Liquid-Polymer Electrolyte Composites by Frontal Polymerization," Jonathan Masere, Yuri Chekanov, and John A. Pojman, Mississippi Academy of Sciences, February 25, 1999, Tupelo, MS.

(83) "Orientation Dependence of the Front Velocity of Descending Thermal Fronts," Mervin Bazile Jr., Archie Nichols and John A. Pojman, Mississippi Academy of Sciences, February 26, 1999, Tupelo, MS.

(84) "An Experimental Investigation of the Mechanism Behind Isothermal Frontal Polymerization: Nonlinear Velocities and Diffusion Limits," L. Lee Lewis, Jennifer Coleman and John A. Pojman, Mississippi Academy of Sciences, February 25, Tupelo, MS.

(85) “Functionally Graded Polymeric Materials Prepared via Frontal Polymerization,” John A. Pojman, Yuri A. Chekanov, Mississippi Academy of Sciences, February 26, Tupelo, MS.

(86) “The Effect of orientation on Descending fronts with a solid product,” J.A. Pojman, M. Bazile, T. Dumont, H. A. Nichols, V. Volpert, , Workshop on Modeling Reaction Fronts, Universite Lyon I, Lyon, France, April 18.

(87) “Effect of Interfacial tension on Propagating Polymerization Fronts,” R. Texier-Picard, J. A. Pojman, V. Volpert, Workshop on Modeling Fronts, Universite Lyon I, Lyon, France, April 18.

(88) “Periodic polymerization of acrylonitrile with the BZ Reaction,” Randy P. Washington, William W. West, Gauri Misra and John A. Pojman, Oscillations and Dynamic Instabilities Gordon Conference, June 6 - 11, 1999, Barca, Italy

(89) “Investigation into the Mechanism of Isothermal Frontal Polymerization,” L. Lee Lewis, John A. Pojman, Oscillations and Dynamic Instabilities Gordon Conference, June 6 - 11, 1999, Barca, Italy.

(90) “Spin Head-Doubling Behavior in Frontal Polymerization of Multifunctional Acrylates” **Jonathan Masere**, Felicia D. Stewart, Timothy Meehan, and John A. Pojman, August 22-26, 1999, American Chemical Society, National Meeting, New Orleans, LA.

(91) “Preparation of Gradient Materials via Frontal Polymerization”, John A. Pojman and **Yuri A. Chekanov,** August 22-26, 1999, American Chemical Society, National Meeting, New Orleans, LA.

(92) “Isothermal Frontal Polymerization: Front Propagation in Experiments and in Theory” **Cynthia A. Spade1**, **Lydia L. Lewis2,** John A. Pojman2, and Vladimir A. Volpert1. (1) Engineering Sciences and Applied Mathematics, Northwestern University, Technological Institute, 2145 Sheridan Road, Evanston, IL 60201, (2) Department of Chemistry and Biochemistry, The University of Southern Mississippi, Box 5043, Hattiesburg, MS 39406, August 22-26, 1999, American Chemical Society, National Meeting, New Orleans, LA.

(93) “Determination of a Diffusion Coefficient Using Liesegang Rings: A Physical Chemistry Laboratory Experiment” John A. Pojman and Rabih Al-Kaisi. Department of Chemistry & Biochemistry, University of Southern Mississippi, Hattiesburg, MS 39406, August 22-26, 1999, American Chemical Society, National Meeting, New Orleans, LA.

(94) “Polymeric Foam Experiments in Microgravity: Results From the NASA KC-135A Parabolic Flight Experiments” John A. Pojman, William J. Ainsworth, James R. Warren, Vinh V. Nguyen, Paulin N. Wahjudi, Monique Kendrick, and Felicia Stewart. Department of Chemistry and Biochemistry, The University of Southern Mississippi, USM Box 5046, Hattiesburg, MS 39406, August 22-26, 1999, American Chemical Society, National Meeting, New Orleans, LA.

(95) “Two-Dimensional Frontal Polymerization”, John A. Pojman and **James Warren**. Department of Chemistry & Biochemistry, University of Southern Mississippi, Hattiesburg, MS 39406, August 22-26, 1999, American Chemical Society, National Meeting, New Orleans, LA.

(96) "Polymerization Coupled to Oscillating Reactions: A Mechanistic Investigation of acrylonitrile Polymerization in the Belousov-Zhabotisnky Reaction in a Batch Reactor" **Randy P. Washington**, Willliam W. West, Gauri Misra, and John A. Pojman. Department of Chemistry & Biochemistry, University of Southern Mississippi, Hattiesburg, MS 39406, August 22-26, 1999, American Chemical Society, National Meeting, New Orleans, LA.

(97) "Polymeric Foam Production in a Reduced Gravity Environment: Results from the NASA Reduced Gravity Student Flight Opportunities Program", William J. Ainsworth, Vinh V. Nguyen, James R. Warren, Paulin N. Wahjudi, Felicia D. Stewart, Monique Kendrick, John A. Pojman, SERMACS 1999 Undergraduate Meeting in Miniature, October, 1999, Oakridge, TN.

2000

(98)"Two-Dimensional Frontal Polymerization", Monique Kendrick and John A. Pojman, Mississippi Academy of Sciences, February 24-25, 2000 Biloxi, MS.

(99) "Investigations of Expanding Spherical Fronts," Marcus Molden and John A. Pojman, Mississippi Academy of Sciences, February 24-25, 2000 Biloxi, MS.

(100) "Preparation of Polymeric Materials via Frontal Polymerization," Yuri A. Chekanov, and John A. Pojman, University of Southern Mississippi,
MS 39406, Mississippi Academy of Sciences, February 24-25, Biloxi, MS.

(101) "Isothermal Frontal Polymerization with Water Soluble Monomer," Paulin Wahjudi and John A. Pojman, Mississippi Academy of Sciences, February 24-25, 2000 Biloxi, MS.

(102) "Optical Gradient Materials Produced Via Low-Temperature Isothermal Frontal Polymerization," Jonathan Masere and John A. Pojman, Mississippi Academy of Sciences, February 24-25, 2000 Biloxi, MS.

(103) "Polymeric Foam Production in a Reduced Gravity Environment: Results from the NASA Reduced Gravity Student Flight Opportunities Program", William J. Ainsworth, Vinh V. Nguyen, James R. Warren, Paulin N. Wahjudi, Felicia D. Stewart, Monique Kendrick, John A. Pojman, and John A. Pojman, Mississippi Academy of Sciences, February 24-25, 2000 Biloxi, MS.

(104) "Isothermal Frontal Polymerization: Experiments and Theory of Methyl Methacrylate Systems," Lydia L. Lewis and John A. Pojman, Mississippi Academy of Sciences, February 24-25, 2000 Biloxi, MS.

(105) "Some Problems in Modelization of Miscible Liquids," Vitaly Volpert[1], Thierry Dumont[2], Yuri Chekanov[3], Jonathan Masere[3], and John A. Pojman[3]. (1) Laboratoire d'analyse numirique, Universite Lyon I, 69622, Villeurbanne Cedex, France, (2) Laboratoire d'analyse numirique, Université Lyon I, 69622 Villeurbanne Cedex, France, (3) Department of Chemistry & Biochemistry, University of Southern Mississippi, Hattiesburg, MS 39406, Journées du PSMN, "Mouillage et Tension Superficielle (Wetting and Surface Tension), Ecole Normale Superieure de Lyon, March 15, 2000.

(106) "Influence of Interfacial Tension on Propagating Polymerization Fronts," **Rozenn Texier**, Vitaly Volpert[1], Thierry Dumont[2], Yuri Chekanov[3], Jonathan Masere[3], and John A. Pojman[3]. (1) Laboratoire d'analyse numirique, Universite Lyon I, 69622, Villeurbanne Cedex, France, (2) Laboratoire d'analyse numirique, Université Lyon I, 69622 Villeurbanne Cedex, France, (3) Department of Chemistry & Biochemistry, University of Southern Mississippi, Hattiesburg, MS 39406, Journées du PSMN, "Mouillage et Tension Superficielle (Wetting and Surface Tension), Ecole Normale Superieure de Lyon, March 15, 2000.

(107) "Polymeric Foam Production in a Reduced Gravity Environment: Results from the NASA Reduced Gravity Student Flight Opportunities Program", **William J. Ainsworth**, Vinh V. Nguyen, James R. Warren, Paulin N. Wahjudi, Felicia D. Stewart, Monique Kendrick, John A. Pojman, American Chemical Society National Meeting, San Francisco, March 27, 2000.

(108) "Polymeric Foam Production in a Reduced Gravity Environment", **William J. Ainsworth**, Vinh V. Nguyen, James R. Warren, Paulin N. Wahjudi, Felicia D. Stewart, Monique Kendrick, John A. Pojman, American Chemical Society National Meeting, San Francisco, March 28, 2000.

(109) "Effect of Geometry and Viscosity on Spin Modes in Frontal Polymerization" John A. Pojman*, Yuri Chekanov, **Jonathan Masere**, Marcus Molden, Enrico Pettreto, Department of Chemistry and Biochemistry, University of Southern Mississippi, Hattiesburg, MS and Vitaly Volpert, Laboratoire d'analyse numirique, Universite Lyon I, 69622 Villeurbanne Cedex, France, "Oscillations and Dynamic Instabilities in Chemical Systems" Gordon Research Conference, Bristol, RI, August 20-25, 2000

(110) Particle Image Velocimetry Applied to Miscible Polymer Systems, **William J. Ainsworth** and John A. Pojman, Mississippi Academy of Sciences, February 8-9, Tupelo, MS.

(111) Monitoring Isothermal Frontal Polymerization by Shadowagraphy, **Lydia Lee Lewis** and John A. Pojman, Mississippi Academy of Sciences, February 8-9, Tupelo, MS.

(112) "The Use of Particle Imaging Velocimetry to Study Convection in Miscible Polymer Systems," William Ainsworth and John A. Pojman, International Workshop on Miscible Interfaces, July 2, 2001.

(113) "Polimerizzazione Frontale del Diciclopentadiene," Alberto Mariani, Stefano Fiori, Yuri Chekanov, John A. Pojman, Proceedings of XV Convegno Italiano di Scienza e Tecnologia delle Macromolecole, Trieste (Italy), September 2001.

(114) "Synthesis of polydicyclopentadiene by frontal ring-opening metathesis polymerization," Alberto Mariani, Stefano Fiori, Yuri Chekanov and John A. Pojman, Proceedings of "XIV Congresso Nazionale della Divisione di Chimica Industriale", pp. 187-188, Milano (Italy), October 3-4, 2001.

2002

(115) "Down to Earth" Microgravity Experiments: Classroom Demonstrations of Microgravity Research," Kristi Budzinski, Nicholas Carter, Kayce Leard, Christina Watters, Brian Zoltowski and John A. Pojman, Department of Chemistry & Biochemistry, University of Southern

Mississippi, Hattiesburg, Mississippi, Microgravity Science and Space Processing, 40th AIAA Aerospace Sciences Meeting and Exhibit, 14-17 January 2002, Reno, NV.

(116) “Particle Image Velocimetry as a Method for Measuring Convection in Miscible Polymer Systems,” William Ainsworth and John A. Pojman, Microgravity Science and Space Processing, 40th AIAA Aerospace Sciences Meeting and Exhibit, 14-17 January 2002, Reno, NV.

(117) “Measuring Convection in Miscible Polymer Using Particle Image Velocimetry,” William Ainsworth and John A. Pojman,
Mississippi Academy of Science, February 21 -22, 2002, Biloxi, MS.

(118) “Using Laser Line Deflection and Shadowgraphy to Determine the Existenec of Isothermal Frontal Polymerization of Methyl Methacrylate, Its Front Position and Its Front Width,” Lydia L. Lewis and John A. Pojman, Mississippi Academy of Science, February 21 -22, 2002, Biloxi, MS.

(119) “Down to Earth” Microgravity Experiments, Part I: The Benefits of Classroom-Based Drop Experiments,” Nicholas Carter* , Kristi Budzinski, Kayce Leard, Christina Watters, Brian Zoltowski, William Ainsworth and John A. Pojman, Mississippi Academy of Science, February 21 -22, 2002, Biloxi, MS.

(120) “Down to Earth” Microgravity Experiments, Part II: Verification of Plasma Behavior in Microgravity,,” Brian Zoltowski* , Nicholas Carter, Kristi Budzinski, Kayce Leard, Christina Watters, William Ainsworth and John A. Pojman, Mississippi Academy of Science, February 21 -22, 2002, Biloxi, MS.

(121) “Viscosity Dependence of Spin Modes in Frontal Polymerization of Multifunctional Acrylates,” Kayce Leard*, Sarah Tompkins, John A. Pojman, Mississippi Academy of Science, February 21 -22, 2002, Biloxi, MS.

(122) “Controlled Initiation of Polymerization using Microencapsulation Techniques,” Brian H. McFarland and John A. Pojman, Mississippi Academy of Science, February 21 -22, 2002, Biloxi, MS.

(123) “Method for determining viscosity of unknown samples,” Roger Holloway and John A. Pojman, Mississippi Academy of Science, February 21 -22, 2002, Biloxi, MS.

(124) " Use of Laser Line Deflection and Shadowgraphy as Non-Invasive Monitoring Techniques for Isothermal Frontal Polymerization of Methyl Methacrylate Systems, " Lydia Lee Lewis and John A. Pojman, American Chemical Society National Meeting, April 7-11, 2002, Orlando, FL.

(125) " Measuring Convection in Miscible Polymer Using Particle Image Velocimetry," William Ainsworth and John A. Pojman,, NASA 2002 Materials Science Conference, Huntsville, Alabama, June 25, 2002.

(126) "Spinning Drop Tensiometry of Miscible Polymer/Monomer Systems," Brian Zoltwoski and John A. Pojman,, NASA 2002 Materials Science Conference, Huntsville, Alabama, June 25, 2002.

(127) "Convective instabilities in frontal polymerization," J. A. Pojman Sr., **V. Volpert,** 224th ACS National Meeting, Boston, MA, August 18-22, 2002.

(128) "Evolution of isothermal polymerization fronts via laser line deflection and predictive modeling," **L. L. Lewis**, C. A. DeBisschop, J. A. Pojman, V. A. Volpert, 224th ACS National Meeting, Boston, MA, August 18-22, 2002.

(129) "Spherically-propagating frontal polymerization," **D. I. Fortenberry**, J. A. Pojman Sr., 224th ACS National Meeting, Boston, MA, August 18-22, 2002.

(130) "Controlled-initiation of polymerization reactions using microencapsulation techniques," , 224th ACS National Meeting, Boston, MA, August 18-22, 2002.

2003

(131) "Numerical Simulations of Transient Interfacial Phenomena in Miscible Polymer Systems," Nick Bessonov, John A. Pojman*, and Vitaly Volpert, **Brian Zoltowski**, Microgravity Science and Space Processing, 41th AIAA Aerospace Sciences Meeting and Exhibit, 6-9 January 2003, Reno, NV. 2003-1157

(132) "Modeling of the Photopolymerization Kinetics of Docecyl Acrylate for the TIPMIPS Flight Investigation" William J. Ainsworth, John A. Pojman, Yuri Chekanov, and Victor T. Wyatt, Microgravity Science and Space Processing, 41th AIAA Aerospace Sciences Exhibit and Meeting 6-9 January 2003, Reno, NV.

(133) "Investigation of the Intensity and Pattern of Plasma Movement in an Inert Gas Dischage Tube," Kayce Leard, Brian Zoltowski, Nicholas Carter, Kristi Budzinski, Christina Watters, Shelly Gallendar, Janette Dill, William J. Ainsworth, John A. Pojman, Materials I, 41st AIAA Aerospace Sciences Meeting and Exhibit, 6-9 January 2003, Reno, NV.

The paper number was: AIAA-2003-0821

(134) "Using Spinning Drop Tensiometry to Determine the Square Gradient Parameter for Dodecyl Acrylate/Poly (Dodecyl Acrylate) for Use in the TIPMPS Flight Investigation" Brian Zoltowski, John A. Pojman* Microgravity Science and Space Processing, 41th AIAA Aerospace Sciences Meeting and Exhibit, 6-9 January 2003, Reno, NV.

(135) "Controlled Initiation of Frontal Polymerization Using Microencapsulation Techniques", **Brian McFarland*** and John A. Pojman, Mississippi Academy of Sciences, Hattiesburg, MS, February 14, 2003.

(136) "Measuring Viscosity via Fluorescence during the Adiabatic, Neat Photopolymerization of Dodecyl Acrylate," Victor T. Wyatt*, Patrick H. Bunton, Kayce Leard, and John A. Pojman, Mississippi Academy of Sciences, Hattiesburg, MS, February 13, 2003.

(137) "Measuring the Diffusion Coefficient for Dodocyl ACrylate/Poly (Dodecyl Acrylate) Using Laser Line Deflection," Charles Edwards,* Lydia Lee Lewis, John A. Pojman, Mississippi Academy of Sciences, Hattiesburg, MS, February 14, 2003.

(138)"Isothermal Frontal Polymerization: Limitations and Comparison of Front Characteristics," **Lydia Lee Lewis*** and John Pojman, Mississippi Academy of Sciences, Hattiesburg, MS, February 14, 2003.

(139) "The Development of Laser Line Deflection to Monitor Polymer Fronts," Alford Perryman,* Lydia Lee Lewis, and John A. Pojman, Mississippi Academy of Sciences, Hattiesburg, MS, February 14, 2003.

(140) "pH Fronts in Microemulsions," **Kayce Leard**, Brian Zoltowski, William J. Ainsworth, John A. Pojman, Mississippi Academy of Sciences, Hattiesburg, MS, February 13, 2003.

(141) "Modeling of the Free-Radical Photopolymerization Kinetics of Dodecyl Acrylate," **William J. Ainsworth*,** John A. Pojman, Yuri A. Chekanov, and Victor T. Wyatt, Mississippi Academy of Sciences, Hattiesburg, MS, February 13, 2003.

(142) “Using Spinning Drop Tensiometry to Determine the Square Gradient Parameter for Dodecyl Acrylate/Poly (Dodecyl Acrylate) for Use in the TIPMPS Flight Investigation" **Brian Zoltowski**, John A. Pojman* Mississippi Academy of Sciences, Hattiesburg, MS, February 13, 2003.

(143) “Behavior and Limitations of Isothermal Frontal Polymerization of Methyl Methacrylate Systems,” Lydia L. Lewis, Alford M. Perryman, and John A. Pojman, 225th ACS National Meeting, New Orleans, LA, March 23-27, 2003.

(144) “Development of novel reactions and products through polymerization and microemulsions,” Stacey Kirkland* and John A. Pojman, 225th ACS National Meeting, New Orleans, LA, March 23-27, 2003.

(145) "pH fronts in microemulsions,” Kayce C. Leard* , William Ainsworth, Brian D. Zoltowski, and John A. Pojman. 225th ACS National Meeting, New Orleans, LA, March 23-27, 2003.

(146) “Controlled initiation of polymerization reactions using microencapsulation techniques,” Brian H. McFarland* and J. A. Pojman, 225th ACS National Meeting, New Orleans, LA, March 23-27, 2003.

(147) “Estimation of the square gradient parameter for dodecyl acrylate/poly(dodecyl acrylate) using spinning drop tensiometry,” Brian D. Zoltowski*, John A. Pojman, and Vitaly Volpert,

225th ACS National Meeting, New Orleans, LA, March 23-27, 2003.

(148) "Measuring the diffusion coefficient for dodecyl acrylate/poly(dodecyl acrylate) using laser line deflection," Charles P. Edwards, Lydia L. Lewis, Alford Perryman*, David Rankin, and John Pojman, 225th ACS National Meeting, New Orleans, LA, March 23-27, 2003.

(149) "Characterization of the kinetics of the adiabatic photopolymerization of dodecyl acrylate," William J. Ainsworth*, Yuri A. Chekanov 1, John A. Pojman 2, and Victor T. Wyatt, 225th ACS National Meeting, New Orleans, LA, March 23-27, 2003.

(150) "Measuring viscosity via fluorescence during the adiabatic, neat photopolymerization of dodecyl acrylate." Victor T. Wyatt*, Kayce C. Leard, David Creed, Brian D. Zoltowski, Patrick H. Bunton, Blair Unger, Joseph Huff, Victoria Owensby, and John Pojman, 225th ACS National Meeting, New Orleans, LA, March 23-27, 2003.

2004

(151) "Optical Gradient Polymer Materials via Isothermal Frontal Polymerization," Lydia Lee Lewis, John A. Pojman, Vladimir Volpert, NSF Design, Service and Manufacturing Grantees and Research Conference, January 5-8, 2004, 2004.

(152) "Isothermal Frontal Polymerization," Svetlana I. Evstratova*, Daniel Antrim, John A. Pojman, Workshop on Diffuse Interfaces, Ecole Normale Superior, Lyon, France, January 14-16, 2004.

(153) "Theory and Use of Laser Line Deflection to Monitor Isothermal Frontal Polymerization," Lydia Lee Lewis and John A. Pojman, Mississippi Academy of Sciences Meeting, Biloxi, MS, February 19-20, 2004.

(154) "Limitations of Isothermal Frontal Polymerization," Christopher Harris*, Lydia Lee Lewis and John A. Pojman, Mississippi Academy of Sciences Meeting, Biloxi, MS, February 19-20, 2004.

(155) "Determination of the Effect of Oxygen and Inhibitor on an Isothermal Frontal Polymerization System via Laser Line Deflection," Daniel Antrim*, Svetlana I. Evstratova and John A. Pojman, Mississippi Academy of Sciences Meeting, Biloxi, MS, February 19-20, 2004.

(156) "Demonstration and Quantification of the Effective Interfacial Tension in an Isobutyric Acid/Water System via Spinning Drop Tensiometry," Colin Whitmore*, Rosie Parker, Brian Zoltowski and John A. Pojman, Mississippi Academy of Sciences Meeting, Biloxi, MS, February 19-20, 2004.

(157) "Production of Initiator-Core Microcapsules and Analysis of their Release Properties," Brian McFarland and John A. Pojman, Mississippi Academy of Sciences Meeting, Biloxi, MS, February 19-20, 2004.

(158) "Determining Viscosity Noninvasively Using Fluorimetric Techniques," Sammy

Popwell*, Kayce Leard and John A. Pojman, Mississippi Academy of Sciences Meeting, Biloxi, MS, February 19-20, 2004.

(159) "Investigating Spin Mode Patterns in Spherically-Propagating Polymerization Fronts," Hitish Nathani*, Sammy Popwell, and John A. Pojman, Mississippi Academy of Sciences Meeting, Biloxi, MS, February 19-20, 2004.

(160) "Investigation of Frontal Polymerization in a Thiol-Ene System," Alford Perryman* and John A. Pojman, Mississippi Academy of Sciences Meeting, Biloxi, MS, February 19-20, 2004.

(161) "Frontal Polymerization in Thiol-Ene and Thiol-Acrylate Systems," Birsen Varisli* and John A. Pojman, Mississippi Academy of Sciences Meeting, Biloxi, MS, February 19-20, 2004.

(162) "Preparing Oligomers of Mandelic Acid to be tested for Anti-HIV Activity," Jelani Griffin*, Victor Wyatt and John A. Pojman, Mississippi Academy of Sciences Meeting, Biloxi, MS, February 19-20, 2004.

(163) "Limitations of Isothermal Frontal Polymerization," Chris Harris, Lydia L. Lewis, and John A. Pojman, Sr. Anaheim, CA, 227th National Meeting of the American Chemical Society, March 21 – April 1, 2004,

(164) "Preparation and analysis of peroxide core microcapsules" Brian McFarland and John A. Pojman, Anaheim, CA, 227th National Meeting of the American Chemical Society, March 21 – April 1, 2004

(165) "Convection in Miscible Fluids under High-Frequency Vibrations"
YURI A. GAPONENKO, JOHN A. POJMAN, VITALY A. VOLPERT
21st International Congress of Theoretical and Applied Mechanics (ICTAM04) 15 - 21 August 2004, Warsaw, Poland.

2005

(166) "The Investigation of Frontal Polymerization in Thiol-Ene Systems," Alford Perryman, Jr*, Birsen Varisli, John A. Pojman, Mississippi Academy of Sciences, Oxford, MS, February 16-17, 2005.

(167) "Preparation of Initiator-Core Microcapsules and Their Use in Frontal Polymerization," Brian McFarland*, Sammy Popwell and John A. Pojman, Mississippi Academy of Sciences, Oxford, MS, February 16-17, 2005.

(168) "Analyzing Isothermal Frontal Polymerization in Thin Layers by Laser Line Deflection," Chip Fillingane* and John A. Pojman, Mississippi Academy of Sciences, Oxford, MS, February 16-17, 2005.

(169) "Michael Addition Thiol-Ene System Polymerization," Birsen Varisli* and John A. Pojman, Mississippi Academy of Sciences, Oxford, MS, February 16-17, 2005.

(170) “Polymer-Dispersed Aqueous Materials,” Kayce Leard* and John A. Pojman, Mississippi Academy of Sciences, Oxford, MS, February 16-17, 2005.

(171) “An Investigation on Microencapsulation of Carbon Tetrabromide,” Max Bonner* and John A. Pojman, Mississippi Academy of Sciences, Oxford, MS, February 16-17, 2005.

(172) “Determination of Critical Conditions for the Existence of Frontal Polymerization with Multifunctional Acrylates,” Burcu Binici*, Nesrin Olten, and John A. Pojman, Mississippi Academy of Sciences, Oxford, MS, February 16-17, 2005.

(173) “Synthesis of A New Ionic Liquid Monomer,” Zulma Jimenez* and John A. Pojman, Mississippi Academy of Sciences, Oxford, MS, February 16-17, 2005.

(174) “Measurement of the Effective Interfacial Tension in a Miscible System (1-Butanol-Water) by Spinning Drop Tensiometry, Jola Marszalek*, Renato Lombardo, Mississippi Academy of Sciences, Oxford, MS, February 16-17, 2005.

(175) “Frontal Polymerization of a Thiol-Acrylate System with a Peroxide Initiator Combined with Ammonium Carbamate and a Microencapsulated Crown Ether,” Dawn Anderson, Birsen Varisli* Mississippi Academy of Sciences, Oxford, MS, February 16-17, 2005.

(176) “Preparation and Analysis of Initiator-core Polyurea Microcapsules Using Pentamines and Diamines as Shell Components,” Sammy Popwell*, Brian McFarland, and John A. Pojman, Mississippi Academy of Sciences, Oxford, MS, February 16-17, 2005.

(176) “Preparation and Analysis of Initiator-core Polyurea Microcapsules Using Pentamines and Diamines as Shell Components,” Sammy Popwell*, Brian McFarland, and John A. Pojman, 229th ACS National Meeting, San Diego, CA, March 13-17, 2005.

(177) “Polymer-dispersed aqueous materials,” Kayce Leard* and John A. Pojman, 229th ACS National Meeting, San Diego, CA, March 13-17, 2005

(178) “Preparation of initiator-core microcapsules and their use in frontal polymerization,” Brian McFarland*, Sammy Popwell and John A. Pojman, 229th ACS National Meeting, San Diego, CA, March 13-17, 2005.

2006

(179) "The polymer-dispersed aqueous materials" Jolanta Marszalek*, John A. Pojman, C. Hoyle, Mississippi Academy of Sciences, Vicksburg, MS, February 22-24, 2006.

(180) "Evolution of Transient Interfacial Phenomena in Miscible and Partially Miscible Systems," Gloria Viner* and John A. Pojman, Mississippi Academy of Sciences, Vixburg, MS, February 2-24, 2006.

(181) "Applying Snell's Law to Frontal Polymerization," Shanna Lavergne*, Burcu Binici, Nesrin Olsten, and John. A. Pojman, Mississippi Academy of Sciences, Vicksburg, MS, February 23-24, 2006.

(182) “Polymerization Systems Using Microencapsulated Reaction Components,” Sam Popwell*, Brian McFarland, John A. Pojman, Mississippi Academy of Sciences, Vicksburg, MS, February 22-24, 2006.

(183) "Monitoring isothermal frontal polymerization in thin-layered cells via laser line deflection," Chip Fillingane* and John A. Pojman, Mississippi Academy of Sciences, Vicksburg, MS, February 23, 2006.

(184) "Photo-Induced Polymerization of Ionic Liquid Monomers", Zulma Jimenez, John A. Pojman, Hui Zhou, Charles Hoyle, Andrew B. Lowe and Mark Paley, Mississippi Academy of Sciences, Vicksburg, MS, February 22-24, 2006.

(185) “Properties of Difunctional Ionic Liquid Monomers and their Polymers,” Zulma Jimenez, John A. Pojman, Charles Hoyle, UV&EB 2006, April 25, 2006.

(186) Jiménez, Z. A.; Bounds, C; Pojman, J. A. “Frontal Polymerization with Ionic Liquid Monomers,” ACS National Meeting, San Francisco, September 10-14, 2006.

(187) Marszalek,J.; Pojman, J.; Hoyle, C. “Polymer-dispersed aqueous materials,” ACS National Meeting, San Francisco, September 10-14, 2006.

2007

(188) Pojman, J. A. Viner, G.*, Lombardo, R.; Zoltowski, B. “The Effect of Rotational Acceleration on Diffusion between Miscible Fluids,” Mississippi Academy of Sciences Meeting, Starkeville, MS, February 22, 2007.

(189) Viner, V.*,; Pojman, J. A.; Lavergne, S.; Winsper, M.; Binici, B. “Snell’s Law of Refraction Observed in Thermal Frontal Polymerization,” Mississippi Academy of Sciences Meeting, Starkeville, MS, February 22, 2007.

(190) Viner, G.*; Pojman, J. A. “A Microfluidic Study of Transient Interfacial Phenomena in Miscible and Partially Miscible Systems,” Mississippi Academy of Sciences Meeting, Starkeville, MS, February 22, 2007.

(191) Marszalek, J.*; Page, K.; Pojman, J. A. “Small-Angle Neutron Scattering study on a structural change in the polymerization of the dodecyl acrylate microemulsion,” Mississippi Academy of Sciences Meeting, Starkeville, MS, February 22, 2007.

(192) Marszalek, J.*; Page, K.; Pojman, J. A. “Small-Angle Neutron Scattering investigation of a structural change in the light induced polymerization of the dodecyl acrylate microemulsion” 233rd National ACS Meeting, Chicago, IL, March 25-29, 2007.

(193) Viner, V.*,; Pojman, J. A.; Lavergne, S.; Winsper, M.; Binici, B. “Snell’s Law of Refraction Observed in Thermal Frontal Polymerization,” Brazil-US Workshop: Challenges in the Frontier of Material Science, Gramado, Brazil, April 27, 2007.

(194) Marszalek, J.*; Pojman, J. A.; Hoyle, C.; Page, K.; "Photopolymerization of the dodecyl acrylate based microemulsion: scattering investigation" 2007 National Graduate Polymer Research Conference, Knoxville, TN, June 3-7, 2007.

(195) Hoyle, C. E.*; Pojman, J.A. "Frontal Polymerization," Photopolymerization Fundamentals, Breckenridge, CO, June 24-27, 2007.

(196) Bessonov, N.; Pojman, J.; Volpert, V.* "Transient Interfacial Phonemena in Miscible Fluids," Congress Francais de Mecanique, Grenoble, France, August 31, 2007.

2008

(197) Viner, V.; Pojman, J. "Front Temperature and Front Velocity as a function of Benzoyl Peroxide Concentration, Trithiol Concentration and Filler Loading in the Frontal Polymerization of a Triacrylate," Mississippi Academy of Science, February 21, 2008.

(198) Viner, G.; Pojman, J. "A Microfluidic Study of Transient Interfacial Phenomena in Miscible and Partially Miscible Systems," Mississippi Academy of Science, February 21, 2008.

(199) Emfinger, J.; Pojman, J.A. "Convection Induced by Gradients in Effective Interfacial Tension," Mississippi Academy of Science, February 21, 2008.

(200) Maszalek, J.; Pojman, J. A.; Hoyle, C. "Thiol-ene Microemulsions - Novel Polymers," Mississippi Academy of Science, February 21, 2008.

(201) Bounds, C.; Pojman, J. A. "Frontal Polymerization with Encapsulated Initiators Prepared by Several Methods," Mississippi Academy of Science, February 21, 2008.

2009

(202) **Bounds, C.;** Pojman, J. A., Goetter, R.; Vandersall, M. "Microencapsulation for Cure-on-Demand and Controlled Release Applications using Novel Thiol-Acrylate Chemistry," 237 ACS National Meeting, Salt Lake City.

2010

(203) Bounds, C.; Pojman, J. A. "Microencapsulation for cure-on-demand composite materials and improvements to rheological properties of epoxy systems," Spring National Meeting of the American Chemical Society, San Francisco, CA March 21, 2010.

(204) Holt, TreyVon; Bessette, L.; Luger, M.; Smith, F. "Cure-on Demand Wood Adhesives using Frontal Polymerization," Spring National Meeting of the American Chemical Society, San Francisco, CA March 21, 2010.

(205) Hu, G.; Bounds, C.; Taylor, A.; Pojman, J. A. "Time-lapse thiol-acrylate polymerization using a pH clock reaction," Spring National Meeting of the American Chemical Society, San Francisco, CA March 21, 2010.

(206**)** "Preparation and application of microparticles prepared via the primary amine-catalyzed

Michael addition of a trithiol to a triacrylate," **C. O. Bounds,** 66th Southwest and 62nd Southeastern Regional Meeting of the American Chemical Society, New Orleans, December 1-3, 2010.

(207) "Microcapsule synthesis using a piston mixer," **M. A. Molinar**, P. A. Burns, C. Bounds, J. A. Pojman, 66th Southwest and 62nd Southeastern Regional Meeting of the American Chemical Society, New Orleans, December 1-3, 2010.

(208) "Cure on Demand Using Frontal Polymerization with Acrylate Based Wood Adhesives. **T. Holt,** J. Pojman, 66th Southwest and 62nd Southeastern Regional Meeting of the American Chemical Society, New Orleans, December 1-3, 2010.

(209) "Cure-on demand acrylamide grout," **M. P. Tullier**, J. A. Pojman, 66th Southwest and 62nd Southeastern Regional Meeting of the American Chemical Society, New Orleans, December 1-3, 2010.

(210) "Cure-on demand coatings via frontal polymerization," L. A. Bessette, **S. A. Thakuri, J. A. Upadhyay,** T. A. Ashby, C. Bounds, J. A. Pojman, 66th Southwest and 62nd Southeastern Regional Meeting of the American Chemical Society, New Orleans, December 1-3, 2010.

(211) "Toward a time-lapse polymerization based on the urea-urease clock reaction," **T. A. La Monica,** C. Bounds, J. A. Pojman 66th Southwest and 62nd Southeastern Regional Meeting of the American Chemical Society, New Orleans, December 1-3, 2010.

2011

(212) **"**Effective-Interfacial-Tension-Induced Convection:A Planned Suborbital Flight Experiment**," Patrick Bunton,** John A. Pojman, 2011 Next-Generation Suborbital Researchers Conference, Orlando, FL, March 1, 2011.

(213) "Effective Interfacial-Tension-Induced Convection," Patrick Bunton, John A. Pojman, **Brett Whisler and Carl Merrigan**, 2011 Next-Generation Suborbital Researchers Conference, Orlando, FL, March 1, 2011.

2012

(214) "Frontal Curing of Copolymer Cyanate Ester Systems," **Elizabeth Jee,** and Veronika Viner Louisiana Academy of Sciences Annual Meeting, Alexandria, LA March 3, 2012.

(215) "Mechanical, Orthogonal Delamination, and Surface Energy Analysis of Novel Thiol-Acrylate Microfluidic Materials," **Jagannath Upadhyay**, Christopher O. Bounds, John A. Pojman, Louisiana Academy of Sciences Annual Meeting, Alexandria, LA March 3, 2012.

(216) "Investigation into the Adhesive Strength of Cure On-Demand Polymers on Thermoplastics," **Sasha Bacchus,** Chris Bounds and John A. Pojman, Louisiana Academy of Sciences Annual Meeting, Alexandria, LA March 3, 2012.

(217) “Production of stable “Boundless” microfluidic devices with tunable surface energies via the in situ tertiary amine-catalyzed Michael Addition of a multifunctional thiol to a multifunctional acrylate,” **Chris Bounds** and John A. Pojman, Louisiana Academy of Sciences Annual Meeting, Alexandria, LA March 3, 2012.

(218) “Cure On-Demand Acrylamide Grout,” **Michael Tullier** and John A. Pojman, ,Louisiana Academy of Sciences Annual Meeting, Alexandria, LA March 3, 2012.

(218) “Cure-on Demand Art,” **Douglass Maddox** and John A. Pojman, Louisiana Academy of Sciences Annual Meeting, Alexandria, LA March 3, 2012.

(219) “Mechanical, orthogonal delamination force, and surface energy analysis of thiol-acrylate thick films,” **Jagannath Upadhyay**, Christopher O. Bounds, John A. Pojman, Regional Science and Engineering Conference, Southern University, Baton Rouge, LA April 5, 2012.

(220) “Frontal Curing of Cyanate Ester Copolymers,” **Elizabeth Jee**, Veronika Viner and John A. Pojman, Regional Science and Engineering Conference, Southern University, Baton Rouge, LA April 5, 2012.

(221) “Cure On-Demand Acrylamide Grout,” **Michael Tullier** and John A. Pojman, Regional Science and Engineering Conference, Southern University, Baton Rouge, LA April 5, 2012.

(222) “Cure on Demand Coating via Frontal Polymerization,” Regional Science and Engineering Conference, Southern University, Baton Rouge, LA April 5, 2012.

(223) “pH fronts in the urea-urease reaction,” **Stephen Scott,** Annette Taylor and John A. Pojman Gordon Research Conference on “Oscillations and Dynamic Instabilities in Chemical Systems, Waterville, ME, July 14-20, 2012.

(224) “Extremely high biomass density in the aquatic salamander, *Amphiuma tridactylum*”John A. Pojman Sr., John A. Pojman Jr. and **Clifford Fontenot**, World Congress of Herpetology, Vancouver, CA, August 8 - 14, 2012

(225) “Study of partially miscible systems with different pressure gradients”. Viner, G.*; Choi, W.; Ho, C.; Pojman, J. ACS National Meeting, Philadelpha, PA August 2012.

(226) "Thiol-Acrylate Polymers for Use as *in situ* Polymerizing Osteogenic Foams" Catherine Collins, Caleb Blackburn, Leah Garber, Cong Chen, Kameron Kilchrist, John Pojman, Daniel Hayes, ACS Southwest Regional Meeting, Baton Rouge, LA, November 6, 2012.

(227) “Thiol Acrylate Nano-composite Foams for Critical Size Bone Defect Repair: A Novel Biomaterial,” Cong Walker, Leah Garber, Kameron Kilchrist, Daniel Hayes, John Pojman, ACS Southwest Regional Meeting, Baton Rouge, LA, November 6, 2012.

(228) "Using the urea-urease reaction to frontally polymerize multi-acrylates", E. Jee, J. A. Pojman, & A. F. Taylor, ACS Southwest Regional Meeting, Baton Rouge, LA, November 6, 2012.

(229) "Investigation into the adhesive strength of cure on-demand polymers to thermoplastic materials," Sasha Bacchus, Christopher Bounds and John Pojman, ACS Southwest Regional Meeting, Baton Rouge, LA, November 6, 2012.

2013

(230) "Impact of low melt monomers and nanoparticles on binary cyanate ester composites,"Veronika Viner, Gloria Viner, Elizabeth Jee and John A. Pojman, 245th ACS National Meeting, New Orleans, April 11, 2013.

(231) "Characterization of novel PETA: Hydroxyapatite scaffolds for human adipose-derived stem cells bone tissue," **Cong Chen, Leah A Garber**, John Pojman, Daniel Hayes, 245th ACS National Meeting, New Orleans, April 11, 2013.

(232) "New method for crosslinking acrylate-modified soybean oil via the base-catalyzed feedback of the urea-urease reaction," **Elizabeth Jee**, John A. Pojman, Annette F. Taylor, 245th ACS National Meeting, New Orleans, April 11, 2013.

(233) "Microfluidics: Effect of channel width and design on miscible and partially miscible systems," **Gloria Viner**, Carlos Ho, John A. Pojman, Wonjae Choi, 245th ACS National Meeting, New Orleans, April 11, 2013.

(234) John A. Pojman Sr, John A. Pojman Jr., and **Clifford L. Fontenot Jr.** Use of Clove Oil as an Anesthetic for Amphiuma tridactylum, and Recovery Time as a Function of Body Mass. Ernest A. Liner Louisiana Herpetology Conference at LUMCON, Cocodrie, LA, 2013.

2014

(234) "Free-radical polymerization of deep-eutectic solvents," **Josué Mota-Morales** and John A. Pojman, 247th ACS National Meeting, Dallas, TX, March 16-20, 2014.

(235) "Development of time-lapse crosslinking triggered by the change in pH of a probammable pH clock reaction," **Elizabeth Jee** and John A. Pojman, 247th ACS National Meeting, Dallas, TX, March 16-20, 2014.

(236) "Porous bone scaffolds fabricated by gas foaming polymeric gels," **Leah Garber,** Caleb Blackburn, Daniel Hayes, Mollie Smoak, 247th ACS National Meeting, Dallas, TX, March 16-20, 2014.

(237) "Effects of Chemical Reactions on Viscous Fingering during Step-Growth Polymerization of Thiol-Acrylate Systems," **Patrick Bunton*,** Simone Stewart, Gabrielle Brooks, Anne De Wit and John A. Pojman, "Oscillations and Dynamics Instabilities in Chemical Systems" Gordon Conference Girona, Spain, July 14, 2014

(238) "Porous polymer synthesized via polymerization of nonaqueous deep-eutectic solvent-based HIPEs," M. Guadalupe Perez-García, Josue Mota-Morales, Arturo Carranza, Jorge E.

Puig, John A. Pojman, Gabriel Luna- Barcenas, MacroMex2014, Nuovo Vallerta, Mexico, December 4, 2014.

2015

(239) "Exploring Alternative Materials to Fabricate Microfluidic Gradient Generators to Study Algal Growth and Migration," Benjamin Roberts, Kelly O'Quinn, Devin Manning, Michael Tullier, John Pojman, and Adam T. Melvin, AICHe meeting, Salt Lake City, November 8-13. 2015.

2016

(240) "Effects of inert fillers on frontal polymerization temperature and velocity in acrylate composites," **Samuel Bynum**, Veronika Viner and John A. Pojman, American Chemical Society National Meeting, San Diego, March 15, 2016.

(241) "Free-radical frontal polymerization properties of vinylic monomers in deep eutectic monomer mixtures," **Kylee Fazende** and John A. Pojman, American Chemical Society National Meeting, San Diego, March 15, 2016.

(242) "Thiol-acrylate hydrogels prepared via a new time-lapse polymerization method," **Elizabeth Jee**, Annette Taylor, Tamas Bansagi and John A. Pojman, American Chemical Society National Meeting, San Diego, March 15, 2016.

(243) "Thiol-acrylate materials for microfluidic applications," **Michael Tullier**, Benjamin Roberts, Adam Melvin, John A. Pojman, American Chemical Society National Meeting, San Diego, March 15, 2016.

(244) "Analysis and characterization of thiol-acrylate polymers for use as biomaterials," **Leah Garber**, Daniel Hayes and John A. Pojman, American Chemical Society National Meeting, San Diego, March 15, 2016.

(245) "Deep-eutectic solvents as delivery vehicles in the non-aqueous synthesis of functional macroporous poly(HIPEs) CNT nancomposites," **Arturo Carranza**, Maria Guadalupe Perez-Garzia, Kunlin Song, George Jeha, Zhenyu Diao, Rongying Jin, Armando Soltero-Matinez, Mauricio Terrones, John A. Pojman, Josué Mota, American Chemical Society National Meeting, San Diego, March 15, 2016.

(246) "Stabilization of Viscous Fingering using Chemical Reactions," **Patrick Bunton**, S. Stewart, D. Marin, J. Pojman, Gordon Research Conference on "Oscillations and Dynamic Instabilities," Burlington, VT, July 20, 2016.

(247) "Temporal Control of Polymerization using an Enzyme Reaction," **Tamas Bánsági,** Annette Taylor, and John A. Pojman, Gordon Research Conference on "Oscillations and Dynamic Instabilities," Burlington, VT, July 20, 2016.

2017

(248) “The effect of conductive material to modulate front velocities in self-propagating thermal frontal polymerization systems,” **Corey Weber** and John Pojman, 5th Annual Polymer Research Symposium, Applied Polymer Extension Consortium, Hattiesburg, MS, November 13, 2017.

(249) “Low Temperature frontal polymerization of acrylate-based composites for use in bone repair,” **Sam Bynum**, Catherine Morejon-Garcia, John A. Pojman, 5th Annual Polymer Research Symposium, Applied Polymer Extension Consortium, Hattiesburg, MS, November 13, 2017.

(250) “High-Throughput Assessment of a Novel Thiol-Acrylate Hydrogel for Tumor Spheroid Synthesis in a Microfluidic Device,” **Nathan Kersker**, Adam Melvin, John A. Pojman, 5th Annual Polymer Research Symposium, Applied Polymer Extension Consortium, Hattiesburg, MS, November 13, 2017.

(251) “Macromolecular Applications for Urease Autocatalysis using Watermelon Seeds,” **Dennel McKenzie**, Angelina Dang and John A. Pojman, Applied Polymer Technology Extension Consortium, Hattiesburg, November 13, 2017.

(252) "Radical-induced Cationic Frontal Polymerization Using Divinyl Ethers" **Baylen Thompson**, Daniel Christiansen, and John A. Pojman, Applied Polymer Technology Extension Consortium, Hattiesburg, November 13, 2017.

(253) “Frontal Polymerization and Polymerization Kinetics of Deep Eutectic Solvents,” **Kylee F. Fazende** and John A. Pojman, APTEC Annual Meeting, Hattiesburg, MS, November 13, 2017.

2018

(254) “The effect of conductive material to modulate front velocities in self-propagating thermal frontal polymerization systems,” **Corey Weber** and John Pojman, 255th ACS National Meeting, New Orleans, LA, March 18-22, 2018.

(255) “High-Throughput Assessment of a Novel Thiol-Acrylate Hydrogel for Tumor Spheroid Synthesis in a Microfluidic Device,” **Nathan Kersker**, Adam Melvin, John A. Pojman, 255th ACS National Meeting, New Orleans, LA, March 18-22, 2018.

(256) “Low Temperature frontal polymerization of acrylate-based composites for use in bone repair,” **Sam Bynum**, Catherine Morejon-Garcia, Hailey Buller, John A. Pojman, 255th ACS National Meeting, New Orleans, LA, March 18-22, 2018.

(257) “Macromolecular Applications for Urease Autocatalysis using Watermelon Seeds,” **Dennel McKenzie**, Annette Taylor, and John A. Pojman, American Chemical Society National Meeting, New Orleans, March 18, 2018.

(258) "Radical-induced Cationic Frontal Polymerization Using Divinyl Ethers" **Baylen Thompson**, Daniel Christiansen, and John A. Pojman, American Chemical Society National Meeting, New Orleans, March 20, 2018.

(259) "Nonlinear Dynamics and Polymers," **Annette F. Taylor**, John A. Pojman and Irving Epstein, American Chemical Society National Meeting, New Orleans, March 18, 2018.

(260) "Immobilization adjusted Autocatalysis and Clock Behavior in the Urea-Urease Reaction Sytem," Dan Yang, Junhe Fan, Fengyi Cao, John A. Pojman, **Lin Ji**, Oscillations and Dynamic Instabilities in Chemical Systems (GRS), Les Diablerets, Switzerland, July 7, 2018,

Visiting Scientists Hosted

Dr. Yuri Chekanov of the Institute of Chemical Physics, Chernogolovka Russia June - September, 1996

Dr. István Nagy of the Institute for Physical Chemistry, Kössüth Lajos University, Debrecen, Hungary, April - July, 1992; May - August, 1993; June - August, 1994.

Ms. Andrea Keresztessy of the Institute for Physical Chemistry, Kössüth Lajos University, Debrecen, Hungary, June - August, 1994, June - August, 1995.

Dr. George Bazsa of the Institute for Physical Chemistry, Kössüth Lajos University, Debrecen, Hungary, July 1995.

Dr. Victor Ilyashenko, Tver, Russia, September 1993 to October 1996

Dr. Evgeni Klimchuck, Chernogolovka, Russia, April 200 – June 2000

Dr. Marc Garbey, Lyon France August 1995

Dr. Renato Lombardo, Palermo, Sicily, July, 2004

Dr. Alberto Mariani, Sassari, Italy, October - November 1999

Dr. Gauri Misra (India) September 1996 - November 1997

Dr. Nicola Muratore, Palermo, Sicily, October, 2004 – March, 2005

Dr. Ahmed Taik, Marrakech Morocco June - August 1995

Dr. Maria Lira Turco Liveri, Palermo, Sicily February 2005

Dr. Peter Strizhak, Kiev, Ukraine February - May 1995.

Dr. Annette Taylor

Dr. Vitaly Volpert, Lyon, France March 1996, March 1997.

Dr. Alexander Merzhanov and Dr. Alexander Mukasyan, Chernogolovka Russia August 1995

Dr. Hermann Wilke, Institute of Crystal Growth, Berlin, Germany

Graduate Students Supervised at USM

1. William Elcan (Traveling Fronts of Methacrylic Acid/Acrylamide Copolymerization)
    a. Received Master's Degree December 1995
2. Dionne Fortenberry (Propagating Fronts with Solid Monomers)
    a. Received Doctorate May 1998
3. Akhtar Khan (Traveling Fronts of Methacrylic Acid Polymerization)
    a. Received Doctorate May 1997
4. William West (Polymerizations Coupled to the Belousov-Zhabotinskii Oscillating Reaction)
    a. Received Doctorate December 1997
5. Stanislav Solovyov (Numerical Simulation of Traveling Fronts of Polymerization)
    a. Received Doctorate December 1997
6. Randy Washington (Polymerizations Coupled to the Belousov-Zhabotinskii Oscillating Reaction)
    a. Received Doctorate December 1998
7. Lydia Lee Lewis (Isothermal Frontal Polymerization)
    a. Received Doctorate December 2003
8. Brian Zoltowski (Spinning Drop Tensiometry)
    a. Received Master's degree August 2003
9. Colin Whitmore (Spinning Drop Tensiometry with Miscible Fluids)
    a. Received Master's degree December 2004)
10. Kayce Leard (Aqueous-Dispersed Polymeric Materials)
11. Brian McFarland (Micrencapsulation and Frontal Polymerization)
12. Birsen Varisli (Aqueous-Dispersed Polymeric Materials)
13. Jola Marszalek

Graduate Students Supervised at LSU

Chris Bounds
Michael Luger
TreyVon Holt (MS)
Elizabeth Jee
Leah Garber
Michael Tullier
Arturo Carranza

1. Viner, Veronika, December 2009; "Study of Thermal Frontal Polymerization Utilizing Reactive and Non-Reactive Additives." United State Navy—Naval Air Systems Command (NAVAIR), Naval Air Warfare Center, Weapons Division, (NAWCWD),

2. Viner, Gloria, May 2010; "A Study of the Effective Interfacial Tension Between Miscible Fluids by Spinning Drop Tensiometer and Microfluidics." (Advisor: John Pojman)

Postdoc: Dept of Mechanical Engineering, UT Dallas

3. Holt, TreyVon, July 2011 "Cure-on Demand Wood Adhesives Using Frontal Polymerization of Acrylates" Instructor, Univ. Louisiana at Shreveport

4. Bounds, Chris, August 2012 "Fabrication, analysis, application, and characterization of core-containing microparticles and hydrophilic microfluidic devices produced via the primary- and in situ tertiary-amine catalyzed Michael addition of multifunctional thiols to multifunctional acrylates"
   Albemarle Corp.

5. Garber, Leah, May 2016 "BIOMEDICAL APPLICATIONS OF THIOL-ACRYLATE POLYMERS", Medcomp Sciences

6. Jee, Elizabeth, May 2016

7. Carranza, Arturo, December 2016," DEEP-EUTECTIC SOLVENTS AS DELIVERY VEHICLES IN THE SYNTHESIS OF NON-AQUEOUS HIGH INTERNAL PHASE EMULSION TEMPLATED FUNCTIONAL MACROPOROUS NANOCOMPOSITES AND THEIR APPLICATION AS SELECTIVE FUEL SORBENTS AND TISSUE SCAFFOLDS"

8. Tullier, Michael, May 2017 "THIOL-ACRYLATE POLYMERIZATION KINETICS AND APPLICATIONS IN MICROFLUIDICS"

9. Fazende, Kylee, August 2019 Free-Radical Polymerization of Acid-Containing Deep Eutectic Solvents

10. Samuel Bynum

11. Baylen Thompson (MS)

12. Anthony Mai, May, 2021, Characterization, Immobilization, and Polymeric Applications of Watermelon Seed Powder, a Novel Source of Urease Enzyme

Undergraduate Students Supervised Since 1990

1) Virginia Aborom (Numerical Simulation of Traveling Fronts of Polymerization)
2) William Ainsworth (Bubble Interactions with Frontal Polymerization)
3) Tsega Alemu (Microencapsulation of peroxides)
4) Dawn Anderson (Amine-Catalyzed Michael Addition in Thiol-Ene Polymerization)
5) Contessa Avery (2004) (Amine-catalyzed thiol-ene reactions)
6) Daniel Antrim (2003; Measurement of Diffusion Coefficients in dodecyl acrylate/poly(dodecyl acrylate)
7) David Arrington (Spin Mode Instabilities in the frontal polymerization of acrylamide in solution)
8) Lauren Bessette (Frontal Polymerization in Thin Layers) LSU
9) Max Bonner (2004; Microencapsulation of CBr_4)
10) Chris Bounds (2006: FP of Ionic Liquid Monomers)
11) Gina Bowden (Frontal Curing of Epoxy Resins)
12) Linda Bourn (Polymerization Liesegang Rings)
13) Timothy Bourne (In Situ Synthesis of Ionic Liquid-Polymer Electrolyte Composites using Frontal Polymerization)
14) Greg Brust (Epoxy Systems and the SCRIMP process)
15) Michael Brown (Temperature Dependence of the Belousov-Zhabotinskii Oscillating Reaction)
16) Stephanie Brown (Propagating Fronts with Solid Monomers)
17) Jeannie Buckner Collins (Polymerizations Coupled to the BZ Oscillating Reaction)
18) Nicolas Carter (Lab-Based Microgravity Investigations)
19) Chad Case (Preparation of Functionally Gradient Polymeric Materials)
20) Jennifer Coleman (Isothermal Frontal Polymerization)
21) June Crosby (Polymerizations Coupled to the Belousov-Zhabotinskii Oscillating Reaction)
22) Christy Cox (Determination of the Methacrylic Acid/Acrylonitrile Copolymer Composition)
23) Pam Corder (Chemiluminscent Oscillating Reaction)
24) Ginger Curtis (Propagating Fronts with Acrylamide and Barium Carbonate)
25) Michael Davis (Measurement of Viscosity in low molecular Poly(Dodecyl Acrylate))

26) Herbert Dedeaux (Stirring effects in the Mn(II) catalyzed BZ reaction)
27) Chiemeka Duru (pH Fronts in the urea-urease system) LSU
28) Charles Edwards (Frontal Polymerization of Thiol-Ene Polymerization)
29) Lee Eleuterius (Attempts to Encapsulate Acrylamide)
30) Joey Emfinger (Frontal Polymerization for rapid repair)
31) Brian Guy (Determination of Polymer Composition of Methacrylic Acid/Acrylamide Copolymerization Traveling Fronts)
32) Emma James (Microencapsulation of Grubbs Catalyst), 2004
33) Rhoma Johnson (Traveling Fronts in the Chlorate-bisulfite reaction)
34) Andrea Jordan (Viscosity Effects on Double-Diffusive Convection Induced by Propagating Fronts of Methacrylic Acid Polymerization)
35) Chris Jones (Traveling Fronts of Addition Polymerization)
36) Dionne Fortenberry (Volume measurements of Mn(II) Catalyzed BZ reaction)
37) Maria Garcia (Polymerizations Coupled to the Belousov-Zhabotinskii Oscillating Reaction)
38) Willie Gilford (Volume Measurements on the Mn-catalyzed BZ reaction)
39) Nikki Gill (PDLCs Produced in Propagating Fronts)
40) Mariah Gewin (Phosphorescene for monitoring frontal polymerization) Summer 2012
41) Jelani Griffin (Synthesis of Esters of Mandelic Acid)
42) Jerry Griffith (Binary Frontal Polymerization)
43) Grady Gunn (pH Fronts in Enzyme reactions)
44) Harriet Hanson (Microencapsulation of Grubbs Catalyst), 2005
45) James Helt (Preparation of IPNs via Frontal Polymerization)
46) Laura Herndon (2003, Microencapsulation for Frontal Polymerization)
47) Scott Hillanbrand (Polymer-dispersed aqueous materials)
48) Dana Ho (Preparation of Aqueous-Dispersed Polymeric Materials)
49) Roger Holloway (Using Fluorescence as a Non-Invasive Method to Measure Viscosity)
50) Emma James (Microencapsulation of Grubbs Catalysis)
51) Monique Kendrick (Substrate Dependence of Polymerization Coupled to the BZ Reaction)
52) Justin Lang (Development of a Method to Measure Conversion in Acrylate Polymerization)
53) Shanna Lavergne (Snell's Law in Frontal Polymerization)
54) Danna Leard (Polymerizations Coupled to the BZ Oscillating Reaction)
55) Kayce Leard (pH Fronts in Microemulsions Systems)

56) Patrick Lewis (Chain Branching in Propagating Polymerization Fronts)

57) Brian Lindley (Microencapsulation for Frontal Polymerization)

58) Byron McCaughey (The Effect of Convection in Ascending Fronts with a Liquid Product)

59) Tim McCardle (Frontal Polymerization in thin layers)

60) Chaz McIntyre (The effect of randomly distributed particles on Frontal Polymerization)

61) Tim Meehan (Spin Modes in Frontal Polymerization of Multifunctional Acrylates)

62) Jennifer Morgan (Membranes for BZ Waves)

63) Hitish Nathani (Spherical-Propagating Frontal Polymerization)

64) Sam Popwell (Microencapsulation of peroxides)

65) Sarah Nelson (Determination of Viscosity in Polymer Liquids using the Fluorescence of bis-pyrene)

66) Vinh Nguyen (Hydrodynamic Instability in Frontal Polymerization)

67) H. Archie Nichols (Orientation Dependence of Frontal Polymerization)

68) James Owens (Dye Gradient Preparation via Isothermal Frontal Polymerization)

69) Rosie Parker (Effective Interfacial Tensioin in Miscible Fluids)

70) Chilibra Patterson (Frontal Dispersion Polymerization)

71) Alford Perryman (Frontal Thiol-ene Polymerization)

72) Jace Ponder (pH Fronts in Microemulsions)

73) Sammy Popwell (2003-2005, Spin Modes in Frontal Polymerization)

74) Reade Quinton (Traveling Fronts of Epoxy Curing)

75) Rashad Simms (PDLCs Produced in Propagating Fronts)

76) Chris Simmons (IPNs and Semi-IPNs via Frontal Polymerization)

77) Melissa Smith (Polymerizations in the Uncatalyzed BZ Oscillating Reaction)

78) Felicia Stewart (Spin Modes in Frontal Polymerization of Multifunctional Acrylates)

79) Louis Somlai (Factors Affecting Free-Radical Frontal Polymerization)

80) Chieko Takasaka (Determination of Extent of Reaction in Traveling Fronts of Addition Polymerization)

81) Boon Teo (from Singapore, 2003; Photopolymerization of dodecyl acrylate)

82) Karen Terrell (Determination of the Methacrylic Acid/Acrylonitrile Copolymer Composition)

83) James Scott Walker (Study of Dual Initiator Systems in Traveling Fronts of Addition Polymerization)

84) Paulin Wahjudi (Isothermal Frontal Polymerization with Hydrogels)

85) LaShonda Ward (Study of Acrylonitrile in BZ Oscillating Reaction)

86) James Warren (Frontal Polymerization in Absorbent Materials)

87) Marty Ward (Preparation of mandelic acid esters)

88) Matthew Wasbrough

89) Randy Washington (Polymerizations Coupled to the BZ Oscillating Reaction)

90) Jason Willis (Determination of Extent of Reaction in Traveling Fronts of Addition Polymerization)

91) Melanie Winsper (Development of Free-Radical Interfacial polymerization for microencapsulation), 2005

92) Brian Zoltowski (Spinning Drop Tensiometery in Miscible Polymer-Monomer systems)

LSU 2008 -

1) Lindsay Albrittain
2) Suman Thakuri
3) Jagannath Upadhyay
4) Alejandra Morales
5) Tyler Ashby
6) Lap Huynh
7) Nick Totaro
8) Michael Tullier
9) Clayton Avery
10) Sasha Bacchus
11) Douglas Maddox
12) Catherine Collins
13) Stephen Muller
14) Chiemeka Duru
15) Lauren Bessette
16) Aaron McKinney (Observations of Frontal Polymerization with TMPTA)
17) Arturo Caranza
18) Jessica Nelson
19) Adelina Kaliba
20) Tyler Fontenot
21) Alex Dulhonde
22) Caleb Blackburn
23) Robert Anderson
24) Wade Muller
25) Kyle Blackburn
26) Payton Mitchell
27) Samuel Wright
28) Logan Landry (urea-urease reaction)
29) Hailey Buller
30) Nick Viverito
31) Robert Hayes
32) Adam Bourque
33) Catherine Morejon-Garcia
34) Joseph Gombeda

35) Brandi Sun
36) Angelina Dang
37) Hailey Buller
38) Manysa Elle Phachansitthi
39) Kyle Blackburn
40) Erin Lombard
41) George Jeha
42) Jesse Guidry
43) Angelie Matar
44) Daniel Nguyen
45) Dylan Vaughn
46) Angelina Dang
47) Caleb Blackburn
48) Erica Charlton
49) Maddie Mertz
50) Hawber Abdulqader
51) Catherine Stewart
52) Jackie Davies
53) Rowan Knight
54) Anthony Sagona
55) Daniel Christiansen
56) Corey Weber
57) Tynia Madison
58) Ambernecia Cooksey
59) Alie Shiell
60) Emma Runnoe (University of Minnesota)
Effect of acrylate functionality on frontal polymerization velocity.
61) Kirsten Adams Proteins in the secretions of the three-toed amphiumas
62) Amber Bui
63) Julian Cecil
64) Tuyen Bui (effect of viscosity on frontal polymerization in thin layers)
65) Miranda Albarez
66) Joseph Kantrell
67) Jordan Waldmann
68) Alaina B Perry
69) Claire Turner
70) Douglas Ngo
71) Terry Rodney
72) Noah Fisher
73) Imogen Hoffman
74) Axel Rice

75) Ethan Burnett
76) Dylan Ngo
77) Sarah Li (High School)
78) Ava Nesbit (High school)
79) Emma Lane