

Brian P. Grady
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BIRTHDATE: August 20, 1965

RESEARCH INTERESTS: Structure-Property Relationships of Polymers, Polymer-Coated Surfaces, Surfactant Adsorption at the Liquid-Solid Interface, Biodegradable Polymeric Nanoparticles, Ion Containing Polymers, Polymer Composites, X-ray Absorption Spectroscopy

EDUCATION:

University of Illinois-Urbana/Champaign: 8/83-5/87

B.S. Chemical Engineering

GPA: 4.97/5.0-summa cum laude

University of Wisconsin-Madison: 9/89-1/94

PhD Chemical Engineering

Thesis Advisor: Stuart L. Cooper

Thesis Title: Orientation and Relaxation Mechanisms in Ionomers

GPA (technical classes): 4.0/4.0

RESEARCH AND PROFESSIONAL EXPERIENCE:

University of Oklahoma: Asst. Professor 3/94-6/99 Assoc. Professor 7/99-6/05, Professor 7/05-present

I am currently employed as a Professor in the School of Chemical Engineering and Materials Science. The department is ABET accredited, has approximately 300 undergraduate and 70 graduate students, and grants B.S., M.S. and Ph.D. degrees.

Max Planck Institute for Colloid and Interfacial Science: 8/00-8/01

I spent one year on sabbatical in this institute which is located just outside Berlin, Germany. My research was on the behavior of surfactants at the solid/liquid interface, and localized reactions at this interface.

Research Associate at Tinker AFB: Summer 1995

I was selected to participate in the Summer Faculty Research Program by the Air Force Office of Scientific Research. I worked primarily on two projects: identification of adhesive type and curing conditions for an engine stator case seal and the surface modification of glass mats to improve polymer/glass compatibility for composites.

University of Wisconsin-Madison: 9/89-2/94

My thesis research was divided into two areas: x-ray scattering of ion-containing polymers at small angles, and orientation and deformation properties of ion-containing polymers.

Procter and Gamble: 6/87-8/89

As a project engineer, I was responsible for the design, construction, startup and operation of a \$200,000 pilot plant. My many duties included managing the technicians and contractors required to operate this pilot plant.

HONORS OR AWARDS:

President's Associates Presidential Professorship: 2006

IUPAC Young Observer: 2001

Alexander von Humboldt Research Fellowship: 2000

National Science Foundation CAREER Award: 1998

College of Engineering Conoco Distinguished Lectureship Award: 1997

University of Oklahoma Junior Faculty Research Award: 6/94-8/94, 6/96-8/96

National Defense Science and Engineering Graduate Fellowship: 9/90-9/93

Wisconsin Alumni Research Foundation Fellowship: 9/89-9/90

University of Illinois Bronze Tablet: 1987

Reynold Clayton Fuson Award: 1987

Phi Beta Kappa: 1987

Tau Beta Pi: 1986

PROFESSIONAL SOCIETIES:

American Institute of Chemical Engineers

American Chemical Society

Division of Polymer Chemistry

Division of Polymer Materials Science and Engineering

Society of Plastics Engineers

OTHER PROFESSIONAL ACTIVITIES:

Co-organizer of New Technology Forum entitled "Nanocomposites" at the New Technology Conference, Society of Plastics Engineers, October 2008

Member 15-person Executive Committee of the Society of Plastics Engineers: 2008-2011

Organizer of New Technology Forum entitled "Carbon Nanotubes in Polymers" ANTEC 2007, National Meeting of Society of Plastics Engineers

Chair Engineering Properties and Structure Division, Society of Plastics Engineers 2007-2008

Chair for the ANTEC Committee, Society of Plastics Engineers, 2007-2008

Associate Director, Institute for Applied Surfactant Research, University of Oklahoma 2007-present

Co-Organizer of Symposium to recognize Stuart L. Cooper, AIChE National Meeting 2006, San Francisco, CA.

Technical Program Chair, Engineering Properties and Structure Division, ANTEC 2006,

National Meeting of Society of Plastics Engineers

Co-organizer of 2006 Texas and Southwest Thermal Analysis and Rheology Forum (NATEX), Dallas TX

Vice-Chair Engineering Properties and Structure Division, Society of Plastics Engineers 2006-2007

Vice-Chair for the ANTEC Committee, Society of Plastics Engineers, 2006-2007

Member Executive Committee, Nanonet Oklahoma 2005-present

Board of Directors, Engineering Properties and Structure Division, Society of Plastics Engineers 2004-present

Technical Program Committee, Engineering Properties and Structure Division, Society of Plastics Engineers 1998-2001, 2001-2004, 2004-present

Councilor, Society of Plastics Engineers, Oklahoma City Section, 2004-2006; Oklahoma Section 2007-present

Newsletter Chair, Oklahoma City Section of the Society of Plastics Engineers, 1998-2006

Co-organizer of 2005 Texas and Southwest Thermal Analysis and Rheology Forum (NATEX), Dallas TX.

Co-organizer and co-chair of Session at 2004 National Meeting of American Institute of Chemical Engineers "Structure and Properties of Polymers II, Polymer Blends"

Co-organized Session "Films and Fibers" for 20th annual Polymer Processing Society Meeting, Akron, Ohio 2004.

International Advisory Committee for the 8th Pacific Polymer Conference, Bangkok, Thailand, 2003

Chair of Session at the 8th Pacific Polymer Conference held in November 2003, "Polymer Blends and Composites"

Co-organizer and co-chair of Session at 2003 National Meeting of American Institute of Chemical Engineers "Polymer Thin Films and Interfaces I"

Co-organizer and co-chair of Session at 2003 National Meeting of American Institute of Chemical Engineers "Polymer Thin Films and Interfaces III"

Chair of Session at ANTEC 2003, National Meeting of Society of Plastics Engineers "Engineering Properties & Structure-Recent Advances in Polymer Structure, Properties and

Morphology"

Co-organizer and co-chair of Session at 2002 National Meeting of American Institute of Chemical Engineers "Diffusion in Polymers and Membranes I"

Chair of Session at 2002 National Meeting of Society of Plastics Engineers (ANTEC 2002) "Preparation and Characterization of Properties".

Co-organizer and co-chair of Session at 2001 National Meeting of American Institute of Chemical Engineers " Polymerization Kinetics, Catalysis and Reaction Engineering # 2"

Co-organizer of joint EPSDIV/ACS (PMSE Division) Polyolefin Symposium at 2001 Society of Plastics Engineers Annual Meeting (ANTEC 2001).

Co-organizer and co-chair of Session at 2000 National Meeting of American Institute of Chemical Engineers "Structure and Properties of Polymers-I"

Chair of Session 1999 National Meeting of American Physical Society "Crystallization I"

Co-organizer and co-chair of Session at 1998 National Meeting of American Institute of Chemical Engineers "Structure and Properties of Polymer Thin Films-II"

Co-organizer and co-chair of Session at 1997 National Meeting of American Institute of Chemical Engineers "Structure and Properties of Polymers"

Chair of Session at ANTEC 1997, National Meeting of Society of Plastics Engineers "Engineering Properties & Structure-New Technology Polymer Architecture and Blends-Structure Morphology and Property Control"

Chair of Session at 1997 National Meeting of American Physical Society "Polymer Blends", Replacement Chair for Session "Polymer Melts"

Chair of Session at 1996 Spring National Meeting of American Chemical Society "Ionomer Complexes and Blends, Complexes and Micelles"

Reviewed Manuscripts for: Journal of Polymer Science; Polymer Physics Edition., Journal of Materials Science, Journal of Applied Polymer Science, Polymer Engineering and Science, Polymer Composites, Journal of Composite Materials, Macromolecules, European Polymer Journal, Journal of the American Chemical Society, Langmuir, Chemistry of Materials, Advanced Functional Materials, Journal of Colloid and Interface Science, Colloids and Surfaces A, Industrial & Engineering Chemistry, Macromolecular Science and Engineering

Reviewer on multiple National Science Foundation Panels including CAREER Program, Nanoscale Exploratory Research program and Major Research Instrumentation Program.

Reviewer for NSDEG and NSF Graduate Fellowship Applications

CONSULTING EXPERIENCE:

Hough Ear Institute 2008

Consulted on biodegradable nanoparticles.

Light Concrete 2007

Consulted on high-foam formulations for concrete

AsOne 2006-2007

Consulted on project involving recycled rubber

Gojo Inc 2007

Consulted on high-foam formulations for hand sanitizers

Star-Labs 2003-present

Consulted on Ballistic Protection systems

Premix Inc. 2001

Consulted on Vinyl Ester Resins

Carlisle Foods 1999-2000, 2001-2002

Consulted on Gel Materials

Chemical Products Inc.: 1997-2000

Consulted on preparing surfaces for coating

Dupont Inc. 1996-2000

Project involved x-ray absorption spectroscopy

PFS Thermoplastic Coatings 1997-1998

Project involved material selection for thermoplastic powder coatings

Integrated Sciences 1996

Project involved mixing of solids with uncured thermoset resins

Reid Plastics: 1995-1996

Developed and presented a polymer short course for Reid Plastic employees.

Ethicon Inc.: January 1991-July 1992

Project involved synthesis and testing of UV-curable and bioabsorbable acrylates.

Refereed Publications by Brian P. Grady

1) Journal Articles and Conference Proceedings

- 1) X. Yu, B.P. Grady, R.S. Reiner and S.L. Cooper, "Properties of Polyamic Acid Ionomers", *Journal of Applied Polymer Science*, **47**, 1673 (1993).
- 2) X. Yu, B.P. Grady, R.S. Reiner and S.L. Cooper, "Mechanical and Thermal Properties of UV-Curable Polyurethane and Polyurea Acrylates" *Journal of Applied Polymer Science*, **49**, 1943 (1993).
- 3) B.P. Grady, H. Matsuoka, N. Ise, Y. Nakatani and S.L. Cooper, "Influence of Sample Preparation Method on the Ultra Small Angle X-ray Scattering of Lightly Sulfonated Polystyrenes", *Macromolecules*, **26**, 4064 (1993).
- 4) R.J. Goddard, B.P. Grady and S.L. Cooper, "The Room Temperature Annealing Peak in Ionomers: Ionic Crystallites or Water Absorption", *Macromolecules*, **27**, 1710 (1994).
- 5) B.P. Grady, E.M. O'Connell, C.Z. Yang and S.L. Cooper, "Blends of Metal Acetates and Polyurethanes Containing Pyridine Rings II. SAXS and EXAFS Studies", *Journal of Polymer Science, Part B: Polymer Physics*, **32**, 2357 (1994).
- 6) B.P. Grady and S.L. Cooper, "EXAFS Studies of the Internal Aggregate Structure in Lightly Sulfonated Polystyrene I. Determination of the Coordination Environment about the Cation", *Macromolecules*, **27**, 6627 (1994).
- 7) B.P. Grady and S.L. Cooper, "EXAFS Studies of the Internal Aggregate Structure in Lightly Sulfonated Polystyrene II. The Effect of Uniaxial Orientation", *Macromolecules*, **27**, 6635 (1994).
- 8) B.P. Grady and R.B. Moore, "EXAFS Studies of Various Sulfonated and Carboxylated Cadmium Ionomers", *Macromolecules*, **29**, 1685 (1996).
- 9) W.B. Genetti, B.P. Grady and E.A. O'Rear, "The Effect of Orientation on Electrically Conducting Polymer Composite Properties" in Electronic Packaging Materials Science IX, Materials Research Society Symposia Series, Volume 445. S.K. Groothuis, P.S. Ho, K. Ishida and T. Wu Eds., (Pittsburgh: Materials Research Society) 1997.
- 10) K.C. Lim, J.D. Margerum, A.M. Lackner, E. Sherman, M.S. Ho, B.M. Fung, W.B. Genetti and B.P. Grady, "A Liquid Crystal Based Polymer for Applications in MMW Modulation Devices", *Molecular Crystals and Liquid Crystals*, **302**, 187 (1997).
- 11) S. Chintapalli, R.E. Frech and B.P. Grady, "An Investigation of the High Molecular Weight Poly(ethylene oxide)-Zinc Bromide Complexes" *Polymer*, **38**, 6189 (1997).
- 12) W.B. Genetti, W.L. Yuan, B.P. Grady, E.A. O'Rear, C.L. Lai and D.T. Glatzhofer, "Polymer Matrix Composites: Conductivity Enhancement through Polypyrrole Coating of Nickel

Flake", *Journal of Materials Science*, **33**, 3085 (1998).

13) B.C. McAlister and B.P. Grady, "Simulation of Small Angle X-ray Scattering from Single Particle Systems", *Journal of Applied Crystallography*, **31**, 594 (1998)

14) W.B. Genetti, R.J. Lamirand and B.P. Grady, "Wide-Angle X-ray Scattering Study of Crystalline Orientation in Reticulate-Doped Polymer Composites", *Journal of Applied Polymer Science*, **70**, 1785 (1998).

15) B.P. Grady, E.A. O'Rear, L. Penn and A. Pedicini, "Admicellar Polymerization of Styrene-Isoprene on Glass Cloth for Use in Composite Manufacture" *Polymer Composites*, **19**, 579 (1998).

16) B.P. Grady, J.A. Floyd, W.B. Genetti, P. Vanhoorne and R.A. Register, "X-ray Absorption Spectroscopy Studies of Zinc Neutralized Ethylene-Methacrylic Ionomers" *Polymer*, **40**, 283 (1999).

17) B.P. Grady, "Effect of Co-Neutralization on Internal Aggregate Structure in Ethylene-Based Ionomers" *Macromolecules*, **32**, 2983 (1999).

18) A. Welty, S. Ooi, and B.P. Grady, "Effect of Water on Internal Aggregate Structure in Zinc-Neutralized Ionomers" *Macromolecules*, **32**, 2989 (1999).

19) W.B. Genetti, P.M. Hunt, M. Shah, A.M. Lowe, E.A. O'Rear and B.P. Grady, "Conductivity Enhancement of Polymer Composites through Admicellar Polymerization of Pyrrole on Particulate Surfaces", Fundamental and Applied Aspects of Chemically Modified Surfaces, J.P. Blitz and C.B. Little eds, (Cambridge, UK: Royal Society of Chemistry) 1999.

20) B.P. Grady, "Relative Size of Ionic Aggregates Determined by X-ray Absorption Spectroscopy" *Polymer*, **41**, 2325 (2000).

21) C. Tan, B.M. Fung and B.P. Grady, "Properties of Liquid Crystal Epoxy Thermosets Cured in a Magnetic Field", *Macromolecules*, **33**, 6249 (2000).

22) K.V. Farrell and B.P. Grady, "Effect of Temperature on Aggregate Local Structure in a Zinc-Neutralized Carboxylate Ionomer", *Macromolecules*, **33**, 7122 (2000).

23) B.P. Grady, P.R. Start, K.A. Mauritz, "Effect of Sol-Gel Polymerization of Tetraethylorthosilicate on Internal Aggregate Structure in Zinc-Neutralized Ethylene-Methacrylic Acid Ionomers", *Journal of Polymer Science Part B: Polymer Physics*, **39**, 197 (2001).

24) B.P. Grady, W.B. Genetti, R. J. Lamirand and M. Shah, "An Investigation of Heat Transfer Effects in Isothermal Crystallization Studies of Low-Density Polyethylene", *Polymer Engineering and Science*, **41**, 820 (2001).

25) H. Gecol, J.F. Scamehorn, S.D. Christian, B.P. Grady, and F.E. Riddell, "Use of

Surfactants to Remove Water Based Inks from Plastic Films”, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **189**, 55 (2001).

26) H.J. Barraza, M.J. Hwa, K. Blakely, E.A. O’Rear, and B.P. Grady, “Wetting Behavior of Elastomer-Modified Glass Fibers”, *Langmuir*, **17**, 5288 (2001).

27) K.V. Farrell and B.P. Grady, "Studies of Cation Local Environment in Sodium-Neutralized Ethylene Copolymer Ionomers", *Macromolecules*, **34**, 7108 (2001).

28) W. Pattanakul, R. Magaraphan, and B.P. Grady, “Compounding of Poly(dimethyl siloxane) to Reduce Tack in Natural Rubber”, *Journal of Applied Polymer Science*, **82**, 519 (2001).

29) B.P. Grady, C.P. Rhodes, S. York and R.E. Frech, “Effect of Temperature on Local Structure in Poly(ethylene oxide)-Zinc Bromide Salt Complexes”, *Macromolecules*, **34**, 8523 (2001).

30) A. de Rovere, B.P. Grady and R.L. Shambaugh, “The Influence of Processing Parameters on the Properties of Melt-Spun Polypropylene Hollow Fibers”, *Journal of Applied Polymer Science*, **83**, 1759 (2002).

31) B.P. Grady, “The Use of X-ray Absorption Spectroscopy in the Study of Synthetic Polymers”, *Microchemical Journal*, **71**, 267 (2002).

32) B.P. Grady, F. Pompeo, R.L. Shambaugh and D.E. Resasco, “Nucleation of Polypropylene Crystallization by Single-Walled Carbon Nanotubes”, *Journal of Physical Chemistry B*, **106**, 5852 (2002).

33) W. Yuan, E.A. O’Rear, B.P. Grady and D.T. Glatzhofer, “Nanometer-Thick Polypyrrole Films Formed by Admicellar Polymerization under Conditions of Depleting Adsolubilization”, *Langmuir*, **18**, 3343 (2002).

34) K. Bunsomit, R. Magaraphan, E.A. O’Rear and B. P. Grady, “Polypyrrole-Coated Natural Rubber Latex by Admicellar Polymerization”, *Colloid and Polymer Science*, **280**, 509 (2002).

35) N. Goel, S. N. Shah and B.P. Grady, “Correlating Viscoelastic Measurements of Fracturing Fluid to Particles Suspension and Solids Transport”, *Journal of Petroleum Science and Engineering*, **35**, 59 (2002).

36) H. Gecol, J.F. Scamehorn, S.D. Christian, B.P. Grady, and F.E. Riddell, "Deinking of Water Based Ink Printing from Plastic Film using Nonionic Surfactants", *Journal of Surfactants and Detergents*, **5**, 363 (2002).

37) A.D.W. Carswell, A.M. Lowe, X. Wei, B.P. Grady, “CMC Determination in the Presence of Surfactant-Adsorbing Inorganic Particulates”, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **212**, 147 (2003).

- 38) B.C. McAlister, B.P. Grady, "The Use of Monte-Carlo Simulations to Calculate Small-Angle Scattering Patterns", *Macromolecular Symposia*, **190**, 117 (2003).
- 39) U. Somnuk, N. Yanumet, J. Ellis, B.P. Grady and E.A. O'Rear, "Adhesion Improvement in Glass Fiber Reinforced Polyethylene Composites via Admicellar Polymerization", *Polymer Composites*, **24**, 171 (2003)
- 40) P. Leewajanakul, R. Pattanaolarn, J. W. Ellis, M. Nithitanakul and B.P. Grady, "The Use of Zinc-Neutralized Ethylene-Methacrylic Acid Copolymer Ionomers as Blend Compatibilizers for Nylon 6 and Low Density Polyethylene", *Journal of Applied Polymer Science*, **89**, 620 (2003).
- 41) X. Wei, A.D.W. Carswell, W. Alvarez and B.P. Grady, "X-ray Photoelectron Spectroscopic Studies of Hydrophilic Surfaces Modified via Admicellar Polymerization", *Journal of Colloid and Interface Science*, **264**, 296 (2003).
- 42) A.D.W. Carswell, E.A. O'Rear, B.P. Grady, "Adsorbed Surfactants as Templates for the Synthesis of Morphologically Controlled Polyaniline and Polypyrrole Nanostructures on Flat Surfaces: From Spheres to Wires to Flat Films", *Journal of the American Chemical Society*, **125**, 14793 (2003).
- 43) K. Blakely, B.P. Grady, H.J. Barraza and E.A. O'Rear, "Effects of Styrene-Isoprene Copolymer Glass Fiber Coatings on Woven Glass Cloth Epoxy Composite Performance", *Polymer Composites*, **25**, 82 (2004).
- 44) N. Pongrakananon, N. Somrang, W. Visitsart, P. Supaphol, M. Nithitanakul and B. P. Grady, "Blends of Ethylene-Methyl Acrylate-Acrylic Acid Terpolymers with Ethylene-Acrylic Acid Copolymers: Mechanical and Thermomechanical Properties", *Journal of Applied Polymer Science*, **91**, 2216 (2004).
- 45) O. Probst, E.M. Moore, B.P. Grady and D.E. Resasco, "Nucleation of Polyvinyl Alcohol Crystallization by Single-walled Carbon Nanotubes", *Polymer*, **45**, 4437 (2004).
- 46) P. Lekpittaya, N. Yanumet, B.P. Grady, and E.A. O'Rear, "Resistivity of Conductive Polymer-Coated Fabric", *Journal of Applied Polymer Science*, **92**, 2629 (2004).
- 47) N. Somrang, M. Nithitanakul, P. Supaphol and B.P. Grady, "Non-Isothermal Melt Crystallization Kinetics for Ethylene-Acrylic Acid Copolymers and Ethylene-Methyl Acrylate-Acrylic Acid Terpolymers", *European Polymer Journal*, **40**, 829 (2004)
- 48) E.M. Moore, D.L. Ortiz, V.T. Marla, R.L. Shambaugh and B.P. Grady, "Enhancing the Strength of Polypropylene Fibers with Carbon Nanotubes" *Journal of Applied Polymer Science*, **93**, 2926 (2004).
- 49) B.P. Grady, J.G.P. Goossens and M.E. Wouters "The Morphology of Zinc-Neutralized Maleated Ethylene-Propylene Copolymer Ionomers: The Structure of Ionic Aggregates as Studied by X-ray Absorption Spectroscopy" *Macromolecules*, **37**, 8585 (2004).

- 50) A. Lahor, M. Nithitanakul, B.P. Grady, "Blends of Low-Density Polyethylene with Nylon Compatibilized with a Sodium Neutralized Carboxylate Ionomer" *European Polymer Journal*, **40**, 2409 (2004).
- 51) M. Marquez and B.P. Grady, "The Use of Surface Tension to Predict the Formation of 2D Arrays of Latex Spheres formed via the Langmuir-Blodgett Technique", *Langmuir*, **20**, 10998 (2004).
- 52) M. Marquez, B.P. Grady and I.D. Robb, "Different Methods for Surface Modification of Hydrophilic Particulates with Polymers" *Colloids and Surfaces A: Physicochem. Eng. Aspects*, **266**, 18 (2005).
- 53) R.D. Kopke, R.A. Wassel, F. Mondalek, B.P. Grady, K. Chen, J. Liu, D. Gibson, K.J. Dormer "Magnetic Nanoparticles: Inner Ear Targeted Molecule Delivery and Middle Ear Implant", *Audiology and Neurotology* **11**, 123 (2006).
- 54) M.J. Hargis and B.P. Grady, "Effect of Sample Size on Isothermal Crystallization Measurements Performed in a Differential Scanning Calorimeter: A Method to Determine Avrami Parameters Without Sample Thickness Effects" *Thermochimica Acta*, **443**, 152 (2006).
- 55) M. Marquez, A. Robben, B.P. Grady and I.D. Robb, "Viscosity and Yield Stress Reduction in Non-colloidal Concentrated Suspensions by Surface Modification with Polymers and Surfactants and/or Nanoparticle Addition" *Journal of Colloid and Interface Science*, **295**, 374 (2006).
- 56) P. Rungruang, B.P. Grady and P. Supaphol, "Surface-Modified Calcium Carbonate Particles by Admicellar Polymerization to be used as Filler for Isotactic Polypropylene, *Colloids and Surfaces A: Physicochem. Eng. Aspects*, **275**, 114 (2006).
- 57) M. Hargis, B.P. Grady, L. Aktas, K.R. Bomireddy, S. Howsman, M.C. Altan, T. Rose and H. Rose, "Calorimetric and Rheological Measurements of Three Commercial Thermosetting Prepreg Epoxies", *Journal of Composite Materials*, **40**, 873 (2006).
- 58) M. Marquez, K. Patel, A.D.W. Carswell, D.W. Schmidtke and B.P. Grady, "Fabrication of Nanometer-Scale Polymeric Structures on Surfaces: Pillars and Honeycombs", *Langmuir*, **22**, 8011 (2006).
- 59) B.P. Grady. "The Use of Solution Viscosity to Characterize Single-Walled Carbon Nanotube Dispersions", *Macromolecular Chemistry and Physics*, **207**, 2167 (2006).
- 59) R.A. Wassel, B.P. Grady, R.D. Kopke, K.J. Dormer, "Dispersion of super paramagnetic iron oxide nanoparticles in poly(D,L-lactide-co-glycolide) microparticles" *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **292**, 125 (2007).
- 60) D.A. Acosta, G.P. Funkhouser and B.P. Grady, "Mechanical Properties and Rheology of

Polyalkenoate Cements Based on Manganese Tetraoxide” *Journal of Materials Science*, **42**, 3632 (2007)

61) B. Chatreenuwat, M. Nithitanakul, B.P. Grady, “The Effect of Zinc Oxide Addition on the Compatibilization Efficiency of Maleic Anhydride Grafted High-Density Polyethylene Compatibilizer for High-Density Polyethylene/Polyamide 6 Blends”, *Journal of Applied Polymer Science*, **103**, 3871 (2007).

63) F. Buffa, G.A. Abraham, B.P. Grady and D.E. Resasco, “Effect of Nanotube Functionalization on the Properties of Single-Walled Carbon Nanotube-Polyurethane Composites” *Journal of Polymer Science: Part B Polymer Physics*, **45**, 490 (2007).

64) M.L.P. Ha, B.P. Grady, D.E. Resasco, L. Balzano, W.T. Ford, “Composites of Single-wall Carbon Nanotubes and Copolymer Latices of Styrene and Isoprene” *Macromolecular Chemistry and Physics*, **208**, 446 (2007).

65) M. Marquez, S. Kim, J. Jung, N. Truong, D. Teeters, B.P. Grady, “Factors Affecting the Synthesis of Polymeric Nanostructures from Template Assisted Admicellar Polymerization” *Langmuir*, **23**, 10008 (2007).

66) C.M. Burba, R. Frech, B.P. Grady, “Stretched PEO-LiCF₃SO₃ films: Polarized IR spectroscopy and X-ray diffraction” *Electrochimica Acta*, **53**, 1548 (2007).

66) F.G. Mondalek, B.J. Lawrence, B.P. Kropp, B.P. Grady, K.M. Fung, S.V. Madihally, H.K. Lin, The Incorporation of Poly(lactic-co-glycolic) Acid Nanoparticles into Porcine Small Intestinal Submucosa Biomaterials, *Biomaterials*, **29**, 1159 (2008)

68) W. Sinthavathavorn, M. Nithitanakul, R. Magaraphan, B.P. Grady, “Blends of Polyamide 6 with Low-Density Polyethylene Compatibilized with Ethylene-Methacrylic Acid Based Copolymer Ionomers: Effect of Neutralizing Cation”, *Journal of Applied Polymer Science*, **107**, 3090 (2008).

69) C. Gutig, B.P. Grady, A. Striolo, “Experimental Studies on the Adsorption of Two Surfactants on Solid-Aqueous Interfaces: Adsorption Isotherms and Kinetics” *Langmuir*, **24**, 4806 (2008); Correction: *Langmuir*, **24**, 13814 (2008).

67) B.P. Grady, “Review and Critical Analysis of the Morphology of Random Ionomers Across Many Length Scales” *Polymer Engineering and Science*, **48**, 1029 (2008)

69) N. Muksing, M. Nithitanakul, B.P. Grady, R. Magaraphan, “Melt Rheology and Extrudate Swell of Organobentonite-filled Polypropylene Nanocomposites”, *Polymer Testing*, **27**, 470 (2008).

70) M.N. Tchoul, W.T. Ford, M.L.P. Ha, I. Chavez-Sumarriva, B.P. Grady, G.L. Lolli, D.E. Resasco, S. Arepalli, “Composites of single-walled carbon nanotubes and polystyrene: preparation and electrical conductivity”, *Chemistry of Materials*, **20**, 3120 (2008).

- 70) W. Sinthavathavorn, M. Nithitanakul, B.P. Grady, R. Magaraphan, "elt Rheology of Low-density polyethylene/polyamide 6 using Ionomer as a Compatibilizer", *Polymer Bulletin*, **61**, 331 (2008)
- 71) H. Luo, G. Churu, E.F. Fabrizio, J. Schnobrich, A. Hobbs, A. Dass, S. Mutik, Y. Zhang, B.P. Grady, A. Capecelatro, C. Sotiriou-Leventis, H. Lu, N. Leventis, "Synthesis and Characterization of the Physical, Chemical and Mechanical properties of Isocyanate-crosslinked Vanadia Aerogels" *J. Sol-Gel Science and Technology*, **48**, 113 (2008).
- 72) J. Peters, D.V. Papavassiliou, B.P. Grady "Unique Thermal Conductivity Behavior of Single-Walled Carbon Nanotube-Polystyrene Composites", *Macromolecules*, **41**, 7274 (2008).
- 73) K. Hatami, B.P. Grady, M.C. Ulmer, "Sensor-enabled Geosynthetics", accepted *Journal of Geotechnical and Geoenvironmental Engineering*

2) Book Chapters

- 1) B.P. Grady and S.L. Cooper, "Thermoplastic Elastomers", in Science and Technology of Rubber (2nd Edition), J.E. Mark, B. Erman and F.R. Eirich, Eds., (San Diego: Academic Press) 1994.
- 2) E.J. Bickrest, J.L. Cook, B.P. Grady, K. Jamshidi, L. Livinghouse, R.A. Ryntz, "Material Selection", in Tool and Manufacturing Engineers Handbook, Volume 8, Plastic Part Manufacturing, Philip Mitchell, Ed., (Dearborn, MI: Society of Manufacturing Engineers) 1996.
- 3) B.P. Grady and S.L. Cooper, "Morphological Structure-Characterization", Ionomers: Synthesis, Structure, Properties and Applications, M.R. Tant, K.A. Mauritz and G.L. Wilkes Eds., (New York: Chapman and Hall) 1996.
- 4) J.H. O'Haver, B.P. Grady, E.A. O'Rear and J.H. Harwell, "Admicellar Polymerization", Reactions and Synthesis in Surfactant Systems (Surfactant Science, Vol. 100), J. Texter ed. (New York, Marcel Dekker) 2001.
- 5) B.P. Grady, A. R. Slagle, Linda Zhu, E.E. Tucker, Sherril D. Christian, John F. Scamehorn, "Surface Tension Measurements with Top-Loading Balances", in "Adsorption and Aggregation of Surfactants in Solution", K.L. Mittal, and D.O. Shah eds, (New York: Marcel Dekker) 2003.
- 6) A.D.W. Carswell and B.P. Grady, "Electrically Conducting Polymeric Nanostructures: Techniques for One-Dimensional Synthesis" in Dekker Encyclopedia of Nanoscience and Nanotechnology, James A. Schwarz, Cristian Contescu, and Karol Putyera eds. (New York: Marcel Dekker) 2004.
- 7) B.P. Grady and S.L. Cooper, "Thermoplastic Elastomers", in Science and Technology of Rubber (3rd Edition), J.E. Mark, B. Erman and F.R. Eirich, Eds., (San Diego: Academic Press) 2005.

8) Y. Hamidi, M.C. Altan and B.P. Grady “Polymer Composites” Encyclopedia of Chemical Processing, (New York: Taylor and Francis) 2006.

9) M. Marquez and B.P. Grady, “Patterned Nanostructures from Particle Lithography”, accepted by Encyclopedia of Nanoscience and Nanotechnology, (Stevenson Ranch, CA: American Scientific Publishers)

Invited Presentations by Brian P. Grady

“Carbon Nanotubes: An Overview”, EAFIT University, August 2008, Medellin, Colombia.

“Admicellar Polymerization: The Use of Adsorbed Surfactant Layers as Polymerization Templates at the Solid-Water Interface”, International Conference on Soft Systems, February 2008, Kolkata, India

“Carbon Nanotubes in Polymers: An Overview”, National Chemical Laboratory, February 2008, Pune, India

“Diverse Applications of Nanoscale Colloids: From Drug Delivery to Composites to Lithography”, November 2007, University of Kansas, Lawrence Kansas.

“Nanotechnology: Where are the applications?” Oklahoma Section of the Society of Mechanical Engineers, September 2007, Norman, Oklahoma

"An Introduction to Carbon Nanotubes in Polymers" May 2007, Society of Plastics Engineers National Meeting (ANTEC), Cincinnati, OH.

“Single-Walled Carbon Nanotube-Polymer Composites: Thermal and Rheological Properties”, Texas and Southwest Thermal Analysis and Rheology Forum, April 2007, Dallas, Texas.

“Admicellar Polymerization: The Use of Adsorbed Surfactant Layers as Polymerization Templates at the Solid-Water Interface”, October 2006, Clemson University, Clemson, South Carolina

“Admicellar Polymerization: The Use of Adsorbed Surfactant Layers as Polymerization Templates at the Solid-Water Interface”, September 2006, Oklahoma State University, Stillwater, Oklahoma

“Carbon Nanotubes in Thermoplastic Polymers: Focus on Crystallization”, June 2004, Rolduc Polymer Meeting, Kerkrade, Holland.

“Surfactants at the Solid-Liquid Interface as Templates for the Synthesis of Polymer Nanostructures”, Max Planck Institute for Colloid and Interface Science, June 2004, Golm, Germany.

“Artifacts in Isothermal Crystallization Experiments of Polymers”, April 2004, Texas and Southwest Thermal Analysis and Rheology Forum (NATEX), Dallas TX.

“Surfactants at the Solid-Liquid Interface as Templates for the Synthesis of Polymer Nanostructures”, Max Planck for Colloid and Interface Science, June 2003, Golm, Germany.

“Artifacts in Isothermal Crystallization Experiments of Polymers”, Texas and Southwest Thermal Analysis and Rheology Forum, April 2003, Dallas, Texas.

“Zinc-Neutralized Carboxylate Ionomers as Blend Compatibilizers for Nylon 6 and Low-Density Polyethylene”, November 2003, 8th Pacific Polymer Conference, Bangkok, Thailand.

“Crystallization of Polypropylene Nucleated by Single-Walled Carbon Nanotubes”, November 2003, 8th Pacific Polymer Conference, Bangkok, Thailand.

“The Relationship Between the Nanometer-Scale Structure of Ethylene-Carboxylate Ionomers and Their Bulk Properties”, 59th Southwest Regional American Chemical Society Meeting, October 2003, Oklahoma City OK.

“Carbon Nanotubes in Thermoplastic Polymers: A Critical Overview”, September 2003, On-Line Presentation sponsored by the Society of Plastics Engineers.

“The Use of Monte-Carlo Simulations to Calculate Small-Angle Scattering (SAS) Patterns”, July 2001, Scattering in Polymers, Prague, Czech Republic.

“The Use of Monte-Carlo Simulations to Calculate Small-Angle Scattering (SAS) Patterns, June 2001, Max Planck for Colloid and Interface Science, June 2001, Golm, Germany.

“Admicellar Polymerization, Fundamentals and Applications”, February 2001, Particles 2001, Orlando, FL.

“Admicellar Polymerization, Fundamentals and Applications”, December 2000, 2000 International Chemical Congress of Pacific Basin Societies, Honolulu, HI.

Structure, Properties and Consequences of Ionic Aggregates in Surlyn[®] Ionomers, December 2000, DuPont Research Center, Geneva, Switzerland.

“My Research Interests: A Short Introduction”, November 2000, Halliburton Research Center, Duncan, OK.

“Sabbatical Leave: A Short Introduction” November 2000, American Institute of Chemical Engineers National Meeting, Dallas, TX.

“Fundamentals of Admicellar Polymerization” October 2000, Introductory Meeting for Humboldt Fellows

“Novel Methods for Measuring Surface Tension and Surface Geometry”, June 2000, 13th International Symposium on Surfactants in Solution, Gainesville, FL.

"Selected Properties and Applications of Surfactants at the Solid/Water Interface", October 1999, Max Planck for Colloid and Interface Science, Potsdam, Germany

"Selected Properties and Applications of Surfactants at the Solid/Water Interface", October 1999, Chulalongkorn University, Bangkok, Thailand.

"Influence of Ionic Aggregate Structure on Properties of Zinc-Neutralized Carboxylate Ionomers", June 1999, Ion-Containing Polymers Gordon Conference, Newport, RI.

"Influence of Ionic Aggregate Structure on Properties of Zinc-Neutralized Carboxylate Ionomers", April 1999, University of Southern Mississippi, Hattiesburg, MS.

"Influence of Ionic Aggregate Structure on Properties of Zinc-Neutralized Carboxylate Ionomers", March 1999, University of Wisconsin-Madison, Madison, WI.

"The Use of X-ray Absorption Spectroscopy and Small-Angle X-Ray Scattering in Polymer Science", July 1997, National Cheng Kung University, Kaohsiung, Taiwan.

"Admicellar Polymerization-A Novel Way to Improve Polymer-Filler Adhesion in Polymer Matrix Composites", November 1996, Institute for Applied Surfactant Research Annual Meeting, Norman, OK.

"A Short Talk About Compact Discs", April 1996, North Oklahoma Section of American Chemical Society, Ponca City, OK.

"What the University Can Do For You!", January 1996, Oklahoma City Section of the Society of Plastics Engineers, Oklahoma City, OK.

"Uncommon Applications of X-rays in Polymer Science", November 1995, Oklahoma State University, Stillwater, OK.

Other Presentations by Brian P. Grady

"Compatibilization Efficiency of Maleic Anhydride Grafted High-Density Polyethylene with and without Zinc Neutralization for High-Density Polyethylene/Polyamide 6 Blends", May 2007, Society of Plastics Engineers National Meeting (ANTEC), Cincinnati, OH

"Dispersion of super paramagnetic iron oxide nanoparticles in poly(D,L-lactide-co-glycolide) microparticles", March 2007, American Chemical Society Spring National Meeting, Chicago, IL.

"Templated Admicellar Polymerization as a Method to Produce Nanostructured Polymers on Solid Surfaces", March 2007, American Chemical Society Spring National Meeting, Chicago, IL.

"Nanometer-Scale Polymeric Structures on Surfaces: Pillars and Honeycombs", November 2006, American Institute of Chemical Engineers National Meeting, San Francisco, CA.

"Polymer Latex/Single-Walled Carbon Nanotube Composites" November 2006, American Institute of Chemical Engineers National Meeting, San Francisco, CA.

"Dispersion of super paramagnetic iron oxide nanoparticles in poly(D,L-lactide-co-glycolide) microparticles", November 2006, American Institute of Chemical Engineers National Meeting, San Francisco, CA.

"Measurement of Thickness Independent Isothermal Crystallization Kinetics", April 2006, Texas and Southwest Thermal Analysis and Rheology Forum, Dallas, Texas. (poster)

"Reduction in Viscosity and Yield-Stress in Non-colloidal Concentrated Suspensions by Surface Modification and/or Nanoparticle Addition" March 2006, American Chemical Society Spring National Meeting, Atlanta, Georgia

"Nanometer-scale pillars and honeycombs of polymers on a solid surface using nanosphere lithography: a comparison of synthesis and adsorption" March 2006, American Chemical Society Spring National Meeting, Atlanta, Georgia

"Styrene/Isoprene-Carbon Nanotube Composites Via Emulsion and Miniemulsion Polymerization" November 2005, American Institute of Chemical Engineers National Meeting, Cincinnati, OH.

"Nanometer-Size Honeycomb and Pillars of Electrically Conducting Polymers on Solid Surfaces" November 2005, American Institute of Chemical Engineers National Meeting, Cincinnati, OH.

"Mechanical and Rheological Properties of Polyalkenoate Cements Designed as Portland Cement Substitutes" November 2005, American Institute of Chemical Engineers National Meeting, Cincinnati, OH. (poster)

“The Role of Positive Counterion in Ethylene-Methacrylic Acid Copolymer Blends with Nylon”
November 2005, American Institute of Chemical Engineers National Meeting, Cincinnati, OH.

“Blend Compatibilization via the Use of Sodium-Neutralized Ionomers”, May 2005, Society of Plastics Engineers Annual Meeting (ANTEC 2005), Boston, MA.

“A Comparison of Rheological and Thermal Measurements of Cure in Three Epoxy Resins”,
May 2005, Society of Plastics Engineers Annual Meeting (ANTEC 2005), Boston, MA.

“Viscosity and Yield Stress Reduction in Highly Concentrated Sand Suspensions via the Use of Adsorbing Molecules and/or the Addition of Nanoparticles”, April 2005, Texas and Southwest Thermal Analysis and Rheology Forum, Dallas, Texas. (poster)

“Nucleation of Polyvinyl Alcohol Crystallization by Single-Walled Carbon Nanotubes”,
November 2004, American Institute of Chemical Engineers National Meeting, Austin, TX.

“Surfactants at the Solid-Liquid Interface as Templates for the Synthesis of Polymer Nanostructures”, CESIO 2004, Berlin Germany.

“Synthesis of Oriented Polyaniline Nanowires at the Solid-Liquid Interface”, November 2003, 8th Pacific Polymer Conference, Bangkok, Thailand.

“The Production of Electrically Conducting Composites From Inorganic Fillers Coated with Various Thicknesses of Conducting Polymers”, November 2003, American Institute of Chemical Engineers National Meeting, San Francisco, CA.

“Using Surfactant Templates to Synthesize Morphologically Controlled Electrically Conducting Polymers of Nanoscale Dimensions”, November 2003, American Institute of Chemical Engineers National Meeting, San Francisco, CA.

“CMC Determination in the Presence of Surfactant Adsorbing Inorganic Particulates”,
November 2003, American Institute of Chemical Engineers National Meeting, San Francisco, CA.

"CMC Determination in the Presence of Surfactant Adsorbing Inorganic Particulates",
September 2003, American Chemical Society Fall National Meeting, New York City, NY (poster).

"Using Surfactant Templates to Synthesize Morphologically Controlled Electrically Conducting Polymers of Nanoscale Dimensions", September 2003, American Chemical Society Fall National Meeting, New York City, NY.

“Blends of Ethylene-Methyl Acrylate-Acrylic Acid Terpolymers with Ethylene-Acrylic Acid Copolymers”, May 2003, Society of Plastics Engineers Annual Meeting (ANTEC 2003), Nashville, TN.

“Carbon Nanotube Nucleation of Polypropylene Crystals”, May 2003, Society of Plastics Engineers Annual Meeting (ANTEC 2003), Nashville, TN.

“Effect of Styrene-Isoprene Admicellar Coatings on the Performance of Epoxy-Glass Fiber Composites”, November 2002, American Institute of Chemical Engineers National Meeting, Indianapolis, IN.

“Nucleation of Polypropylene Crystallization by Single-Walled Carbon Nanotubes”, November 2002, American Institute of Chemical Engineers National Meeting, Indianapolis, IN.

“Zinc-Neutralized Ethylene-Methacrylic Acid Copolymer Ionomers as Blend Compatibilizers for Nylon 6 and Low-Density Polyethylene”, November 2002, American Institute of Chemical Engineers National Meeting, Indianapolis, IN.

“Synthesis of Highly-Oriented Uniform Polyaniline Nanowires at the Graphite-Water Interface”, November 2002, American Institute of Chemical Engineers National Meeting, Indianapolis, IN.

“The Use of Extended X-ray Absorption Fine Structure in the Study of Carboxylate Ionomers”, September 2002, Synchrotron Radiation in Polymer Science, Sheffield, England.

“Self-Assembly of Oriented Polyaniline Nanowires at the Solid-Liquid Interface”, June 2002, 76th Colloid and Surface Science Symposium, Ann Arbor, MI.

“The Use of Zinc-Neutralized Ethylene-Methacrylic Acid Copolymer Ionomers as Blend Compatibilizers for Nylon 6 and Low-Density Polyethylene”, May 2002, Society of Plastics Engineers Annual Meeting (ANTEC 2002), San Francisco, CA.

“Ionic Aggregate Structure in Ethylene-Carboxylate Ionomers Neutralized with Zinc and Sodium”, July 2001, IUPAC World Chemistry Congress, Brisbane, Australia.

“Admicellar Polymerization: The Use of Adsorbed Surfactant Layers as Polymerization Templates”, July 2001, IUPAC World Chemistry Congress, Brisbane, Australia. (poster)

“Heat Transfer Effects in Isothermal Crystallization Experiments”, July 2001, IUPAC World Chemistry Congress, Brisbane, Australia. (poster)

“Structure of Ionic Aggregates in Zinc-Neutralized Carboxylate Ionomers”, December 2000, 2000 International Chemical Congress of Pacific Basin Societies, Honolulu, HI

“A Method to Measure the Critical Micelle Concentration in the Presence of Adsorbing Solid Particulates” November 2000, American Institute of Chemical Engineers National Meeting, Los Angeles, CA.

“Compounding of Low Molecular Weight Poly(dimethylsiloxane) to Reduce Tack in Natural Rubber”, November 2000, American Institute of Chemical Engineers National Meeting, Los Angeles, CA (poster)

"Electrical Static Dissipative Composites Made From Coated Fillers", May 2000, Society of Plastics Engineers Annual Meeting (ANTEC 2000), Orlando, FL.

"Multiple Bilayer Formation of Surfactants on Porous and Non-Porous Solids", November 1999, American Institute of Chemical Engineers National Meeting, Dallas, TX.

"Structure in Mixed Sodium/Zinc Carboxylate Ionomers and its Effect on Viscosity ", November 1999, American Institute of Chemical Engineers National Meeting, Dallas, TX.

"Crystallization Kinetics in Low Density Polyethylene Composites" May 1999, Society of Plastics Engineers Annual Meeting (ANTEC 99), New York City, NY.

"Differences in Internal Aggregate Structure for Co-Neutralized Carboxylate Ionomers" May 1999, Society of Plastics Engineers Annual Meeting (ANTEC 99), New York City, NY.

"Real-time Measurements of Crystallinity in Polyethylene Composites", March 1999, American Physical Society National Meeting, Atlanta, GA.

"The Structure of Ionomer Aggregates at Elevated Temperatures", March 1999, American Physical Society National Meeting, Atlanta, GA.

"Isothermal Crystallization in Nickel-Filled Low-Density Polyethylene Composites", November 1998, American Institute of Chemical Engineers National Meeting, Miami, FL. (poster).

"Surface Modification of Particles for Use in Electrically Conducting Polymer Composites", June 1998, 7th International Symposium on Chemically Modified Surfaces, Evanston, IL.

"Experimentally Determined Errors in EXAFS Measurements", March 1998, American Physical Society National Meeting, Los Angeles, CA.

"Local Environment in Amorphous Zinc Sulfonated Polystyrene Ionomers", March 1997, American Physical Society National Meeting, Los Angeles, CA.

"The Use of X-ray Absorption Spectroscopy in Solid State Ionic Materials", October 1997, 53rd Southwest Regional ACS Meeting, Tulsa, OK.

"EXAFS Studies of Zinc Neutralized Ethylene-Methacrylic Ionomers", June 1997, Ion-Containing Polymers Gordon Conference, New London, NH.

"Admicellar Polymerization as a Surface Modification Procedure to Improve Polymer-Filler Adhesion in Composites" Society of Plastics Engineers Annual Meeting (ANTEC 97), Toronto, Canada

"Aggregate Local Environment in Zinc-Neutralized Ethylene Methacrylic Acid Ionomers", April 1997, Society of Plastics Engineers Annual Meeting (ANTEC 97), Toronto, Canada.

"Local Structure in Poly(ethylene oxide)/Zinc Bromide Structures", March 1997, American Physical Society Annual Meeting, Kansas City, MO.

"EXAFS of Zinc Neutralized Surlyn Ionomers", December 1996, DuPont Sabine Research Laboratory, Orange, TX.

"Local Environment in Polyethylene Oxide-Zinc Bromide Complexes", November 1996, American Institute of Chemical Engineers National Meeting, Chicago, IL. (Poster)

"Admicellar Polymerization-A Novel Way to Improve Polymer-Filler Adhesion in Polymer Matrix Composites", November 1996, American Institute of Chemical Engineers National Meeting, Chicago, IL.

"Aggregate Local Structure in Transition Metal Ionomers", October 1996, 41st Pentasectional Meeting of the American Chemical Society, Bartlesville, OK.

"Improvements in Adhesion via Admicellar Polymerization", August 1996, Science of Adhesion Gordon Conference, Tilton, NH. (Poster)

"EXAFS Investigations of Transition Metal Ionomers", March 1996, American Chemical Society Spring National Meeting, New Orleans, LA.

"Modification of Inorganic Fillers for Polymer Composites via Admicellar Polymerization", March 1996, American Physical Society Annual Meeting, St. Louis, MO. (Poster)

"Determination of Ionic Phase Structure in Ionomers Using X-ray Absorption Spectroscopy", April 1995, 40th Pentasectional Meeting of the American Chemical Society, Norman, OK.

"Small Angle X-ray Scattering from Oriented Multiphase Systems", March 1995, American Physical Society Annual Meeting, San Jose, CA.

"A Short Talk About Compact Discs", February 1995, Central Oklahoma Section of American Institute of Chemical Engineers, Norman, OK.

"Computer Simulation of Small-Angle Scattering from Multiphase Systems", July 1994, 43rd Annual Denver X-ray Conference, Steamboat Springs, CO. (Poster)

"Small Angle X-ray Scattering of Uniaxially Oriented Lightly Sulfonated Polystyrenes", March 1994, American Physical Society Annual Meeting, Pittsburgh, PA.

"Extended X-ray Absorption Fine Structure Investigations of Uniaxially Oriented Lightly Sulfonated Polystyrene", November 1993, American Institute of Chemical Engineers National Meeting, St. Louis, MO.

"Ultra Small-Angle X-ray Scattering of Lightly Sulfonated Polystyrene", March 1993, American

Physical Society Meeting, Seattle, WA.

"Investigation of the Room Temperature Annealing Peak in Ionomers", March 1993, American Chemical Society Spring National Meeting, Denver, CO.

"Small Angle X-ray Scattering from Lightly Sulfonated Polystyrene Acids", (Poster), April 1992, American Chemical Society Spring National Meeting, San Francisco, CA.

"Mechanical Properties of a Novel Model Ionomer System: Amic Acid Ionomers", August 1991, American Chemical Society Fall National Meeting, New York, NY.

"Infrared Dichroism of Lightly Sulfonated Polystyrene", March 1991, American Physical Society Annual Meeting, Cincinnati, OH.

Presentations by Members of Brian P. Grady's Research Group

M. Marquez, "New routes to increase surface coverage in particle lithography" American Chemical Society 232th National Meeting, San Francisco, CA.

M. Marquez, "Synthesis of nanometer-scale polymeric structures on surfaces using particle lithography: Pillars and honeycombs" American Chemical Society 232th National Meeting, San Francisco, CA.

M. Marquez, "Viscosity and yield stress reduction in highly concentrated sand suspensions via the use of adsorbing molecules and/or the addition of nanoparticles", June 2006, 80th ACS Colloid and Surface Science Symposium, Boulder, CO

M. Marquez, "Polymeric nanostructures via the use of sphere lithography and admicellar polymerization", June 2006, 80th ACS Colloid and Surface Science Symposium, Boulder, CO

M. Ha, "Single-wall carbon nanotubes/Polymer lattices: synthesis and properties" June 2006, 80th ACS Colloid and Surface Science Symposium, Boulder, CO

J. Peters, "The Use of Modulated Differential Scanning Calorimetry to determine how well Carbon Nanotubes increase the Thermal Conductivity for Materials with Widely Different Matrix Stiffnesses", May 2006, OK NSF EPSCoR Annual Conference Functional Genomics Resources Consortium Network for Nanostructured Materials, Norman, OK.

M. Ha, "Single-wall carbon nanotubes/Polymer lattices: synthesis and properties" May 2006, OK NSF EPSCoR Annual Conference Functional Genomics Resources Consortium Network for Nanostructured Materials, Norman, OK.

M. Marquez "Synthesis of Nanometer-Scale Polymeric Structures on Surfaces using Particle Lithography: Pillars and Honeycombs" May 2006, OK NSF EPSCoR Annual Conference Functional Genomics Resources Consortium Network for Nanostructured Materials, Norman, OK.

M. Marquez, "New Routes to Increase Surface Coverage in Particle Lithography", May 2006, OK NSF EPSCoR Annual Conference Functional Genomics Resources Consortium Network for Nanostructured Materials, Norman, OK.

M. Ha, "Single-wall carbon nanotubes/Polymer lattices: synthesis and properties" April 2006, 51st Annual Oklahoma Pentasectional Meeting, Bartlesville, OK

M. Ha, "Single-wall carbon nanotubes/Polymer lattices: synthesis and properties" April 2006, Texas and Southwest Thermal Analysis and Rheology Forum, Dallas, TX..

M. Marquez, "Polymeric Nano and Microstructures via the use of Sphere Lithography: A Comparison of Admicellar Polymerization and Polymer Adsorption" September 2005, 18th Annual NSF EPSCoR Conference, Río Grande, Puerto Rico.

M. Marquez, "Viscosity and Yield Stress Reduction in Highly Concentrated Sand Suspensions via the Use of Adsorbing Molecules and/or the Addition of Nanoparticles" August 2005, Particles 2005, San Francisco, CA.

M. Marquez, "Nano and Micro-patterned Structures of Poly(aniline) from Admicellar Polymerization" August 2005, Particles 2005, San Francisco, CA.

M. Marquez "Nano and Micro-patterned Structures of Poly(aniline) from Admicellar Polymerization" May 2005, OK NSF EPSCoR Annual Conference Functional Genomics Resources Consortium Network for Nanostructured Materials, Stillwater, OK.

M. Ha "Composite materials of SWNTs prepared by mini- and macro- emulsion polymerization" May 2005, OK NSF EPSCoR Annual Conference Functional Genomics Resources Consortium Network for Nanostructured Materials, Stillwater, OK.

M. Ha, "Composite materials of SWNTs prepared by miniemulsion polymerization" March 2005, American Chemical Society 229th National Meeting, San Diego, CA.

M. Marquez, "Micropatterned Conductive Thin Films of Poly(aniline) from Langmuir-Blodgett Technique and Admicellar Polymerization" March 2005, American Chemical Society 229th National Meeting, San Diego, CA.

M. Hargis, "Effect of Sample Size on DSC Measurements", April 2005, Texas and Southwest Thermal Analysis and Rheology Forum, Dallas, Texas.

M. Marquez "2D Arrays of Latex Spheres on HOPG. From LB Technique Using SDS as Spreading Agent: The Role of the Surfactant in Forming a Well-ordered, Stable Monolayer" November 2004, American Institute of Chemical Engineers National Meeting, Austin, TX.

A. Robben "The Effect of Molecular Weight on the Rheological Properties of Polyvinylpyrrolidone-modified Sand Slurries" November 2004, American Institute of Chemical Engineers National Meeting, Austin, TX.

M. Hargis, "A Comparison of Different Methods to Measure Cure in Epoxy Resins", November 2004, American Institute of Chemical Engineers National Meeting, Austin, TX.

M. Marquez "2D Arrays of Latex Spheres on HOPG From LB Technique Using SDS as Spreading Agent: The Role of the Surfactant in Forming a Well-ordered, Stable Monolayer" ACS PRF Summer School. Ypsilanti, MI. (poster).

M. Hargis, "Comparison of Thermal and Mechanical Cure Rates of Various Epoxy Resins", April 2004, Texas and Southwest Thermal Analysis and Rheology Forum, Dallas, Texas.

M. Marquez, "2D arrays of latex spheres on HOPG from Langmuir-Blodgett nanolithography with SDS as spreading agent: The role of the surfactant in forming a well-ordered, stable monolayer" March 2004, American Chemical Society Fall National Meeting, Anaheim, CA

(poster).

M. Marquez, "Different methods for surface modification of hydrophilic particulates with polymers." March 2004, American Chemical Society Fall National Meeting, Anaheim, CA (poster).

M. Hargis, "Comparison of Thermal and Mechanical Cure Rates of Various Epoxy Resins", March 2004, AIChE Midwest Regional Student Paper Contest, St. Louis, MO.

M. Marquez "Different Methods for Surface Modification of Hydrophilic Particulates With Polymers", October 2003, 59th Southwest Regional American Chemical Society Meeting, Oklahoma City OK (poster).

M. Marquez, "Using Surfactant Templates To Synthesize Polyaniline Nanowires on Flat Surfaces", September 2003, American Chemical Society Fall National Meeting, New York City, NY (poster).

A.D.W. Carswell, "Self-Assembly of Oriented Polyaniline Nanowires at the Solid/Liquid Interface", August 2002, American Chemical Society Fall National Meeting, Boston, MA.

A.D.W. Carswell, "Self-Assembly of Oriented Polyaniline Nanowires at the Graphite/Water Interface", May 2002, OK NSF EPSCoR Annual Conference Functional Genomics Resources Consortium Network for Nanostructured Materials, Stillwater, OK.

A.D.W. Carswell, "Self-Assembly of Oriented Polyaniline Nanowires at the Solid/Liquid Interface", March 2002, Southwest Regional ACS Meeting, Duncan, OK.

Xin Wei, "Multiple-Layered Self-Assembled Surfactant Structures at the Solid/Liquid Interface", June 2000, 13th International Symposium on Surfactants in Solution, Gainesville, FL.

Xin Wei, "A Method to Measure the CMC in the Presence of Solid Particulates", June 2000, 13th International Symposium on Surfactants in Solution, Gainesville, FL.

A.M. Lowe, "CMC Determination in the Presence of Surfactant Adsorbing Particulates", March 1999, American Chemical Society Spring National Meeting, San Francisco, CA.

A.D.W. Carswell, " Multiple-Layered Surfactant Adsorption on Hydrophilic Surfaces", March 1999, American Chemical Society Spring National Meeting, San Francisco, CA.

X. Wei, "Study of the Adsorption Isotherms in an Ultrasonic Field", August 1999, American Chemical Society Fall National Meeting, New Orleans, LA.

A.D.W. Carswell, "Study of Electrically Conductive Polymer Composites Prepared by Admicellar Polymerization" August 1999, American Chemical Society Fall National Meeting, New Orleans, LA.

B.C. McAlister, "Small-Angle X-ray Scattering from Oriented Single Particle Systems", July 1998, American Crystallographic Association Annual Meeting, Washington, D.C.

W.B. Genetti, "Crystallization Kinetics of Nickel Filled Low Density Polyethylene", April 1998, American Chemical Society Spring National Meeting, Dallas, TX.

P.M. Hunt, "Kinetics of Admicellar Polymerization: Adsolubilized styrene initiated by AIBN", April 1998, American Chemical Society Spring National Meeting, Dallas, TX.

W.B. Genetti "Morphological Considerations in Electrically Conducting TTF-TCNQ Filled Polyethylene Composites", March 1998, American Physical Society National Meeting, Los Angeles, CA.

W.B. Genetti "Wide Angle X-Ray Scattering Study of Crystalline Orientation in Reticulate Doped Polymer Composites", November 1997, American Institute of Chemical Engineers National Meeting, Los Angeles, CA.

W.B. Genetti, "Effects of Morphology on Reticulate Doped Polymer Composites", March 1997, American Physical Society Annual Meeting, Kansas City, MO.

Bryan McAlister, "Small Angle X-ray Scattering From Oriented Single Particle Systems", March 1997, American Physical Society Annual Meeting, Kansas City, MO.

W.B. Genetti, "The Effect of Orientation on Electrically Conducting Composite Properties", December 1996, Fall Meeting of the Material Research Society, Boston, MA.

Bryan McAlister, "Small Angle X-ray Scattering From Oriented Single Particle Systems", October 1996, 41st Pentasectional Meeting of the American Chemical Society, Bartlesville, OK.

W.B. Genetti, "Electrically Conducting Thermoplastic Composites", October 1996, 41st Pentasectional Meeting of the American Chemical Society, Bartlesville, OK.

R. Lamirand, "Tensile Testing of Fishing Line", March 1996, AIChE Midwest Regional Student Paper Contest, Lincoln, NE.

W.B. Genetti, "Effect of Orientation on Electrically Conducting Thermoplastic Composites", March 1996, American Chemical Society Spring National Meeting, New Orleans, LA.

B.C. McAlister, "Small-Angle X-ray Scattering from Oriented Single Particle Systems", March 1996, American Chemical Society Spring National Meeting, New Orleans, LA.

J.L. Reynolds, "Admicellar Polymerization on Precipitated Silica", March 1996, American Chemical Society Spring National Meeting, New Orleans, LA.

S. Chintapalli, "Spectroscopic Characterization of Poly(ethylene oxide)-zinc bromide complexes", March 1996, American Chemical Society Spring National Meeting, New Orleans,

LA.

B.C. McAlister, "Computer Simulation of Small-Angle Scattering", April 1995, 40th Pentasectional Meeting of the American Chemical Society, Norman, OK.

S. Stewart, "Synthesis of Lightly Sulfonated Polystyrene", March 1995, AIChE Midwest Regional Student Paper Contest, Rolla, MO.