

Invited Seminars and Lectures (last 3 years)

1. Auburn-Opelika Rotary Club, Auburn, AL, "Nanotechnology," (February 2010).
2. NSF CMMI CAREER Workshop, Atlanta, GA. "Perspectives on a Successful CAREER Proposal," One of 2 CAREER Award Winner Speakers at the annual workshop. (March 2010).
3. Department of Chemistry, Auburn University, AL, "Macroscale Assembly of Nanocylinders: New Materials Meet a 120-Year Old Field," (February 2010).
4. Auburn University Board of Trustees Meeting, Auburn University, AL, "Nanotechnology Research, (November 2009).
5. Centre National de la Recherche Scientifique (CNRS) - Centre de Recherche Paul Pascal (CRPP), Bordeaux, France The Effects of Dispersion Methodology on the Rheology and Liquid Crystallinity Of SWNT- DNA Dispersions," (October 2009).
6. Department of Chemical Engineering, Vanderbilt University, TN, "Macroscale Assembly and Applications of Nanocylinders," (March 2009).
7. Polymer and Fiber Engineering Department, Auburn University, AL, "Macroscale Assembly and Applications of Nanocylinders," (October 2008).
8. 3M, Minneapolis, MN, "Robust Antimicrobial Films," (March 2008).
9. American Composite Manufacturers Association Conference, Birmingham, AL, "Nanocomposites: Opportunities and Challenges," (March 2008).
10. Materials Engineering Department, Auburn University, AL, "Macroscale Assembly and Applications of Nanomaterials," (January 2008).
11. Department of Materials Engineering, University of Alabama at Birmingham, Birmingham, AL, "Macroscale Systems of SWNTs and Other Anisotropic Nanomaterials: Challenge and Opportunities," (March 2007).
12. Department of Chemical Engineering, Tennessee Technological University, "Macroscale Systems of SWNTs and Other Anisotropic Nanomaterials: Challenges and Opportunities," (March 2007).

Conference Presentations (updated July 1, 2010)

Speaker in Bold

13. **C. Narváez Villarrubia**, R. Rincón, P. Atanassov, V. K. Radhakrishnan and V. A. Davis "Methylene Green Electrodeposited on SWNTs-Based "Bucky Papers" for NADH and L-Malate Oxidation." 217th ECS Meeting, Vancouver, Canada, (April 2010).
14. **S. Mantha**, V. A. Davis and A. L. Simonian, "Amperometric Biosensing Using Vertically Aligned Multiwalled Carbon Nanotubes," 217th ECS Meeting, Vancouver, Canada, (April 2010).
15. **V. A. Davis**, G. Ao, D. Nepal, M. Aono, "Cholesteric and Nematic Liquid Crystalline Phase Formation in double-stranded DNA SWNT Stabilized Dispersions," ChemonTubes 2010, Arcachon, France, (April 2010).
16. A. N. G. Parra-Vasquez, N. Behabtu, **M. J. Green**, C. C. Young, C. L. Pint, V. A. Davis, E. Kesselman, J. Schmidt, Y. Cohen, R. H. Hauge, Y. Talmon, M. Pasquali, "Dissolution of Long Carbon Nanotubes in Superacids," AIChE Annual Meeting, Nashville, TN, USA, (November 2009).
17. **A. N. Karwa**, V. A. Davis, B. J. Tatarchuk, "Synthesis of Vapor Grown Carbon Fibers (VGCF) on Sintered Metal Fibers (SMF) for Air Filtration, AIChE Annual Meeting, Nashville, TN, USA, (November 2009).
18. S. Mantha, V. Pedrosa, V. A. Davis, A. L. Simonian, "Layer by Layer Assembly of Multitwall Carbon Nanotube Ultrathin Films for Biosensing Applications," AIChE Annual Meeting, Nashville, TN, USA, (November 2009).
19. **M. J. Kayatin** and V. A. Davis, "Aligned Carbon Nanotube Films by Lyophilization," AIChE Annual Meeting, Nashville, TN, USA, (November 2009).
20. **V. K. Radhakrishnan** and V. A. Davis, "Effect of Carbon Nanotube Concentration and Functional Group Length on the Properties of Melt Extruded Polypropylene Nanocomposites," AIChE Annual Meeting, Nashville, TN, USA, (November 2009).
21. V. A. Pedrosa, T. J. Gnanaprakasa, E. V. Olsen, V. A. Davis, **A. L. Simonian**, "Electrochemical Properties of Interface Formed by Interlaced Layers of DNA and Lysozyme Coated Single-Walled Carbon Nanotubes," 216th Electrochemical Society Meeting, Vienna, Austria, (October 2009).
22. **T. J. Gnanaprakasa**, V. A. Pedrosa, E. V. Olsen, V. A. Davis, A. L. Simonian, "Probing conductivity and lateral charge transfer across LSZ-SWNT/DNA-SWNT nanocomposites using scanning electrochemical microscopy," 215th Electrochemical Society Meeting, San Francisco, CA, (May 2009).

23. **M. J. Kayatin** and V. A. Davis, "Viscoelasticity and Stability of Single Walled Carbon Nanotube – Unsaturated Polyester Resin Dispersions," American Chemical Society Colloids Meeting, New York, NY, USA, (June 2009).
24. **V. A. Davis**, Ao Geyou, Dhriti Nepal, "Rheology and Liquid Crystallinity of Dispersions of Carbon Nanotubes in DNA and Enzymes," American Chemical Society Colloids Meeting, New York, NY, USA, (June 2009).
25. S. Murali, K. Pizarro, T. Xu, J. Boice, **V. A. Davis**, "Phase Behavior and Processing of Inorganic Nanocylinder Dispersions," NSTI Nanotech, Houston, TX, (May 2009).
26. **V. K. Radhakrishnan**, E.W. Davis, V.A. Davis, "The Effects of Functionalization, Preblending, and Melt Processing on SWNT-PP Nanocomposite Properties," (poster) NSTI Nanotech, Houston, TX, USA, (May 2009).
27. **M. J. Kayatin** and V. A. Davis "Aligned Carbon Nanotube Films by Lyophilization," (poster) NSTI Nanotech, Houston, TX, USA, (May 2009).
28. S. Mantha, A. Geyou, V. Pedrosa, D. Nepal, S. Balasubramanian, S. Paliwal, J. Wild, A. Simonian, V. A. Davis, "Multifunctional Carbon Nanotube-Enzyme Composites," (poster) NSTI Nanotech, Houston, TX, USA, (May 2009).
29. **V. K. Radhakrishnan**, M. J. Kayatin, R. L. Yuan, and V. A. Davis, "Effect of Pore Size and Rope Size on the Mechanical Properties of Vapor Grown Carbon Nanofiber – Unsaturated Polyester Resin Nanocomposites," AIChE Annual Meeting, Philadelphia, PA, USA, (November 2008).
30. **A. N. Karwa**, B. J. Tatarchuk, and V. A. Davis, "Vapor Grown Carbon Fiber - Microfibrillar Matrix Composites," AIChE Annual Meeting, Philadelphia, PA, USA, (November 2008).
31. S. Murali, K. Pizarro, K. Taylor, and **V. A. Davis**, "Liquid Crystalline Assemblies of Inorganic Nanorods Enzyme Modified Carbon Nanotube Biosensors for Pesticide Detection," AIChE Annual Meeting, Philadelphia, PA, USA, (November 2008).
32. S. Balasubramanian, V. Pedrosa, S. Paliwal, **V. A. Davis**, J. Wild, and A. Simonian, "Enzyme Modified Carbon Nanotube Biosensors for Pesticide Detection," AIChE Annual Meeting, Philadelphia, PA, USA, (November 2008).
33. **M. J. Kayatin** and V. A. Davis, "Viscoelasticity and Stability of Single Walled Carbon Nanotube – Unsaturated Polyester Resin Dispersions," AIChE Annual Meeting, Philadelphia, PA, USA, (November 2008).

34. **V. K. Radhakrishnan** and V. A. Davis “Effect of Functionalization and Processing Parameters on SWNT Polypropylene Nanocomposites,” AIChE Annual Meeting, Philadelphia, PA, USA, (November 2008).
35. **M. J. Green**, A. N. G. Parra-Vasquez, N. Behabtu, V. A. Davis, and M. Pasquali, “Modeling the Phase Behavior of Polydisperse Rodlike Molecules with Attractive Interactions,” AIChE Annual Meeting, Philadelphia, PA, USA, (November 2008).
36. D. Nepal and **V. A. Davis**, “Phase Behavior and Rheology of Biopolymers Stabilized Carbon Nanotubes,” AIChE Annual Meeting, Philadelphia, PA, USA, (November 2008).
37. **K. Taylor**, D. Nepal, K. Pizarro, and S. Murali, and V. A. Davis, “Dispersion and Shear Alignment of Nanostructured Materials,” (poster) AIChE Annual Undergraduate Meeting, Philadelphia, PA, USA, (November 2008).
38. **V. A. Davis**, S. Murali, K. Pizarro, D. Nepal, and K. Taylor, “Nanorod Dispersions, Phase Behavior and Shear Alignment,” ACS Colloids, Raleigh NC, USA, (June 2008).
39. **S. Balasubramanian**, D. Nepal, T. Gnanaprakasa, V. A. Davis, and A. Simonian, “Electrochemical Characteristics of SWNT-biopolymer Nanocomposites,” 213th ECS Meeting, Phoenix, AZ, USA, (May 2008).
40. **N. Behabtu**, A. N. G. Parra-Vasquez, M. J. Green, V. A. Davis, M. Pasquali, “Morphology and Properties of Neat SWNT Fibers from Chlorosulfonic Dope,” AIChE/ACS Joint Spring Meeting, New Orleans, LA, USA (April 2008).
41. **D. Nepal**, S. Balasubramanian, A. Simonian, V. A. Davis, “Strong Antimicrobial Coatings: Single-Walled Carbon Nanotubes Armored with Biopolymers,” AIChE/ACS Joint Spring Meeting, New Orleans, LA, USA (April 2008).
42. V. K. Radhakrishnan, S. Zagarola, and **V. A. Davis**, “Effect of Structure and Processing on the Properties of Vapor Grown Carbon Fibers (VGCF), Single Walled Carbon Nanotubes (SWNT) and C12 Functionalized Single-Walled Carbon Nanotubes (C12-SWNT) – Polypropylene Nanocomposites,” (poster) Nanomaterials for Defense Conference, Arlington, VA, USA (April 2008).
43. D. Nepal, S. Balasubramanian, A. Simonian, and **V. A. Davis**, “Strong Antimicrobial Coatings: Single-Walled Carbon Nanotubes Armored with Biopolymers,” (poster) Nanomaterials for Defense Conference, Arlington, VA, USA (April 2008).
44. M. J. Kayatin, V. K. Radhakrishnan, R. L. Yuan, and **V. A. Davis**, “Unsaturated Polyester Resin Glass Fiber Composites with Single-Walled Carbon Nanotubes

- and Vapor Grown Carbon Fibers,” (poster) Nanomaterials for Defense Conference, Arlington, VA, USA (April 2008).
45. S. Murali, Bennett Marshall, K. Pizarro, K. Taylor, and **V. A. Davis**, “Self-Assembly and Shear Alignment of Inorganic Nanorods: Highly Aligned Films,” (poster) Nanomaterials for Defense Conference, Arlington, VA, USA (April 2008)
 46. A. Karwa, B. J. Tatarchuk, and **V. A. Davis**, “Vapor Grown Carbon Fiber - Microfibrous Matrix Composites,” (poster) Nanomaterials for Defense Conference, Arlington, VA, USA (April 2008).
 47. **S. Murali** and V. A. Davis, “Aligned Nanorod Coatings,” (poster) American Composites Manufacturers Association (ACMA), Birmingham, AL, USA, (March 2008).
 48. **V. K. Radhakrishnan** and V. A. Davis, “Polypropylene Carbon Nanotube Composites,” (poster) American Composites Manufacturers Association (ACMA), Birmingham, AL, USA, (March 2008).
 49. V. K. Radhakrishnan, **M. J. Kayatin**, and V. A. Davis, “Unsaturated Polyester Resin VGCF-Fiber Reinforced Composites,” (poster) American Composites Manufacturers Association (ACMA), Birmingham, AL, USA, (March 2008).
 50. B. D. Marshall, S. Murali, D. Nepal, K. Pizarro, D.C. Lee, B. A. Korgel, and **V. A. Davis**, “Dispersion Behavior and Assembly of Inorganic Nanorods, Nanowires, and Nanowhiskers.” Materials Research Society Annual Meeting, Boston, MA, USA (November 2007).
 51. **A. N. G. Parra-Vasquez**, V.A. Davis, P.K. Rai, H. Fan, R. Booker, N. Behabtu, V. Prieto, R. A. Pinnick, J. Allison, C. K. Kittrell, W. F. Hwang, H. K. Schmidt, R. H. Hauge, R. E. Smalley, and M. Pasquali, “Controlling the Phase Behavior of Single-Walled Carbon Nanotube-Superacid Dispersions,” (poster) Materials Research Society Annual Meeting, Boston, MA, USA (November 2007).
 52. **D. Nepal**, Shankar Balasubramanian, A. Simonian, and V. A. Davis, “Thin Film SWNT-Biopolymer Nanocomposites: Production and Characterization of Protein and DNA Based Single-Walled Carbon Nanocomposite by Layer by Layer Assembly,” (poster), Materials Research Society Annual Meeting, Boston, MA, USA (November 2007).
 53. M. J. Kayatin, D. E. Jones, and R. L. Yuan, **V. A. Davis**, “Carbon Nanotube - Unsaturated Polyester Resin Composites,” Materials Research Society Annual Meeting, Boston, MA, USA (November 2007).

54. S. Murali, **B. D. Marshall**, D. Nepal, and V. A. Davis, "Self-Assembly and Flow Alignment of Inorganic Nanorods," (poster) AIChE Annual Meeting, Salt Lake City, UT, USA (November 2007).
55. **M.J. Kayatin**, N. K. Wagner, R. L. Yuan, D. M. Jones, and V. A. Davis, "Carbon Nanotube – Unsaturated Polyester Resin Composites," AIChE Annual Meeting, Salt Lake City, UT, USA (November 2007).
56. **V. K. Radhakrishnan**, B. J. Downs, D. Nepal, V. A. Davis, and S. W. Zagarola, "Structure-Processing-Property Interrelationships in SWNT, C12-SWNT and VGCF Polypropylene Nanocomposites" AIChE Annual Meeting, Salt Lake City, UT, USA (November 2007).
57. **D. Nepal**, V. A. Davis, and K. E. Geckeler, "Dispersion of Single-Walled Carbon Nanotubes In Proteins: Characterization and Potential Applications," AIChE Annual Meeting, Salt Lake City, UT, USA (November 2007).
58. **B. D. Marshall**, M. Rasche, D. C. Lee, B. A. Korgel, and V. A. Davis, "Dispersion, Brownian Motion, and Self-Assembly of Germanium Nanowires," AIChE Annual Meeting, Salt Lake City, UT, USA (November 2007).
59. V. K. Radhakrishnan, B. J. Downs, D. Nepal, and **V. A. Davis**, "Viscoelasticity of Polypropylene -Carbon Nanotube Composites: Effect of Functionalization and Processing Conditions," Society of Rheology Annual Meeting, Salt Lake City, UT, USA (October 2007).
60. B. D. Marshall, D. C. Lee, B. A. Korgel, and **V. A. Davis**, "Brownian Motion of Germanium Nanowires," Society of Rheology Annual Meeting, Salt Lake City, UT, USA (October 2007).
61. V. Radhakrishnan, **S. W. Zagarola**, and **V. A. Davis**, "Structure-Processing-Property Interrelationships in Carbon Nanotube Polypropylene Composites – A Statistically Sound Approach to Maximum Learning in Minimum Time," Nanocomposites 2007, Las Vegas, NV, USA (September 2007).