

# **The Fiber Society Fall Meeting and Technical Conference 2009**

Athens, Georgia, USA  
28-30 October 2009

ISBN: 978-1-5108-2133-0

**Printed from e-media with permission by:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571



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## Wednesday, October 28

- 7:30 Registration on second floor concourse. Coffee available. Breakfast on your own.
- 8:15 Welcoming Remarks, Business, and Announcements *Ian R. Hardin, Chair*  
*Gajanan Bhat, President, Fiber Society*
- 8:45 Plenary Lecture: Dr. Jason Locklin, Department of Chemistry and Faculty of Engineering,  
 University of Georgia: *Creating Smart Surfaces for Polymers and Fibers Using Polymer Brushes*

### Morning Session

	<b>Session 1A: Modification of Fiber &amp; Polymer Surfaces</b> <i>Rudolf Hufenus, Chair</i>	<b>Session 1B: Electrospinning &amp; Nanotechnology</b> <i>Glen Simmonds, Chair</i>
9:30–10:00	<i>Chemical Reinforcement of High-Performance Polymers....3</i> <u>Duane L. Simonson</u> , Bernadette A. Higgins, Michael R. Papantonakis, Rick Everett, and R. Andrew McGill, US Navy Research Laboratory	<i>Electrospun Nanoyarns for Probing Minute Amounts of Liquids....11</i> <u>Konstantin G. Kornev</u> , Taras Andrukh, Daria Monaenkova, and Chen-Chih Tsai, Clemson University
10:00–10:30	<i>Nano-Structured Functional Cellulose Fibers....5</i> <u>You-Lo Hsieh</u> , University of California Davis	<i>Biocomponent Electrospinning for Controlled Carbon Nanofiber Networks....13</i> <u>Xungai Wang</u> , H. Niu, and T. Lin, Deakin University
10:30	<b>Break</b>	<b>Break</b>
11:00–11:30	<i>Application of Low Level, Uniform Ultrasound Field for Acceleration of Enzymatic Bio-processing of Cotton....6</i> <u>Michael Easson</u> , Brian Condon, Val Yachmenev, Allan Lambert, Chris Delhom, and Jade Smith, USDA-ARS	<i>Relation Between Macromolecular Configuration and Electrospinnability....15</i> <u>Nabyl Khenoussi</u> <sup>1</sup> , Amir Houshang Hekmati <sup>1,2</sup> , and Laurence Schacher <sup>1</sup> , <sup>1</sup> UHA Mulhouse, <sup>2</sup> Islamic Azad University
11:30–12:00	<i>Fiber Surface Modification and Coloration by Electrostatic Assembly Followed by Covalent Fixation....7</i> <u>Haskell W. Beckham</u> , Marcus Foston, Christopher Hubbell, and Fred Cook, Georgia Institute of Technology	<i>Quantum Dot Nanoparticulated Electrospun Ceramic Nanofibers....17</i> <u>Yakup Aykut</u> , Carl Saquing, Behnam Pourdeyhimi, and Saad Khan, North Carolina State University
12:00	<b>Buffet Lunch Served in Georgia Center Banquet Area</b> <b>POSTER SETUP</b>	

## Afternoon Session

	<b>Session 2A: Properties of Fibrous Assemblies</b> <i>Dominique Adolphe, Chair</i>	<b>Session 2B: Antimicrobial Functions on Fibers &amp; Polymers</b> <i>You-Lo Hsieh, Chair</i>
1:30–2:00	<i>Short Fiber Preforms with Pre-determined Fiber Orientation Distribution Using an Electrostatic Field....23</i> <u>Kenneth D. Langley</u> <sup>2</sup> , Sandip V. Pawar <sup>1</sup> , and Yong Kim <sup>2</sup> , <sup>1</sup> Velcro USA, <sup>2</sup> University of Massachusetts Dartmouth	<i>Production of Halamine Biocidal Polyolefin Polymer and Fibers by Reactive Extrusion....33</i> <u>Gang Sun</u> , Bei Xiang, Dong Wang, and Mohammad Reza Badrossamay, University of California Davis
2:00–2:30	<i>Experimental Studies on Liquid Water Transport of Plant Structured Knitted Fabric....25</i> <u>Qing Chen</u> , Jintu Fan, and Manas Sarkar, Hong Kong Polytechnic University	<i>Synthesis of Silver Nanoparticles in Textile Finish Aqueous System and Their Antimicrobial Properties on Cotton Fibers....35</i> <u>Sunghyun Nam</u> , Dharnidhar V. Parikh, and Brian Condon, USDA-ARS
2:30–3:00	<i>New Understanding of Moisture Vapor Transport in Fibrous Assemblies....27</i> <u>Seshadri Ramkumar</u> <sup>1</sup> , Arvind Purushothaman <sup>1</sup> , Kater D. Hake <sup>2</sup> , Siva Parameswaran <sup>1</sup> , and Gopal Coimbatore <sup>1</sup> , <sup>1</sup> Texas Tech University, <sup>2</sup> Cotton Incorporated	<i>The Application of “Brush Polymers” to Achieve Anti-Microbial Properties on Polymer and Fiber Surfaces....37</i> <u>Ian R. Hardin</u> , Vikram Dhende, Jason Locklin, and Satyabatra Samanta, University of Georgia

3:00	<b>Break</b>	<b>Break</b>
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3:30–4:00	<i>Study of Cationic Softener Deposition on Knitted Fabrics....29</i> <u>Gaurav Agarwal</u> <sup>1,2</sup> , Ludovic Koehl <sup>1,2</sup> , and Anne Perwulez <sup>1,2</sup> , <sup>1</sup> University Lille Nord de France, <sup>2</sup> ENSAIT	<i>Market Lesson for Fiber Science Researchers—A Case Study....39</i> <u>Glen E. Simmonds</u> , DuPont, USA
4:00–5:15	<b>Student Paper Competition    Chair: Xungai Wang</b>	
	Tracie Owens, Georgia Tech: <i>Validation of a New Wicking Technique Through the Evaluation of Wicking with Organic Liquids in Polyester Fibers....N/A</i>	
	Vijoya Sa, Clemson: <i>Wet Spinning of Fibers Containing High Concentration of Single Walled Carbon Nanotubes....N/A</i>	
	Daria Monaenkova, Clemson: <i>Stress Transfer Through Fibrous Materials in Wicking Experiments....N/A</i>	

## Evening Session

6:00–7:30	<b>Reception: Refreshments and Open Bar</b>
	<b>Poster Presentations</b>
	<b>Dinner on your own in the Savannah Room of the Georgia Center or in downtown Athens</b>

## Thursday, October 29

7:45 Registration on second floor concourse. Coffee available. Breakfast on your own.

### Morning Session

	<b>Session 3A: Medical Applications of Fibers &amp; Textiles</b> <i>Stephen Michielsen, Chair</i>	<b>Session 3B: Polymer &amp; Fiber Science</b> <i>Michael Ellison, Chair</i>
8:30–9:00	<i>Nanofibers for Self-Diagnosis of Bacterial Vaginosis....43</i> <u>Victor Maximov</u> <sup>1</sup> , Vladimir Reukov <sup>1</sup> , Alexey Vertegel <sup>1</sup> , Oleksandr Burtovyy <sup>1</sup> , Konstantin Kornev <sup>1</sup> , Igor Luzinov <sup>1</sup> , and Paul Miller <sup>2</sup> , <sup>1</sup> Clemson University, <sup>2</sup> Greenville Hospital System	<i>Thermal Engineering of Lignin for Low-cost Production of Carbon Fiber....55</i> <u>D.A. Baker</u> , F.S. Baker, and N.C. Gallego, Oak Ridge National Laboratory
9:00–9:30	<i>The Effect of Capillary Channel Polymer Fiber Denier on Cellular Alignment and Matrix Production....45</i> <u>Kristofer Sinclair</u> , Phillip Brown, and Ken Webb, Clemson University	<i>Oxidative Pyrolysis Gas Chromatographic Analysis of Poly(acrylonitrile) from a Point of View of Prevention of Hazard Disaster....57</i> <u>Masatomo Minagawa</u> , Choju Aoki, and Hirotaka Sakai, Yamagata University
9:30–10:00	<i>Advancing New Prospects for Trehalose Siloxanes....47</i> <u>Navzer Sachinvala</u> <sup>5</sup> , Burgese K. Turel <sup>1</sup> , Naozumi Teramoto <sup>2</sup> , Qui Zhong <sup>3</sup> , Ronald B. Luftig <sup>3</sup> , and Morton H. Litt <sup>4</sup> , <sup>1</sup> South Central Regional Medical Center, <sup>2</sup> Chiba Institute of Technology, <sup>3</sup> LSU-HSC, <sup>4</sup> Case Western Reserve University, <sup>5</sup> USDA-ARS Retired	<i>Flame Retardant Finishing of Cotton Fleece Fabric: The Combination of a Hydroxyl-Functional Organophosphorus Oligomer and 1,2,3,4-Butanetetracarboxylic Acid....59</i> <u>Charles Q. Yang</u> and Xinying Cheng, University of Georgia
10:00	<b>Break</b>	<b>Break</b>
10:30–11:00	<i>Effect of Chemical Compaction on Dilation of Vascular Grafts....49</i> <u>Yusuf Ulcay</u> , Ahmet Fatih Isik, and Sule Altun, University of Uludag	<i>Processing and Property Relationship of Nanoclay Reinforced Polypropylene Monofilaments....61</i> <u>Erdem Selver</u> and Sabit Adanur, Auburn University
11:00–11:30	<i>The Preparation and Characterization of Composite Small Diameter Vascular Graft....51</i> <u>Weilin Xu</u> <sup>1</sup> , Hongjun Yang <sup>2</sup> , Weici Wang <sup>3</sup> , Chenxi Ouyang <sup>3</sup> , <sup>1</sup> Wuhan University of Science & Engineering, <sup>2</sup> Donghua University, <sup>3</sup> Tongji Medical College of Huazhong University of Science and Technology	<i>The Measurement of Displacement and Strain on a Single Yarn in a Kevlar Fabric Using Photogrammetry....63</i> <u>Jian H. Yu</u> , Peter G. Dehmer, Chian-Fong Yen, Brian R. Scott, and Bryan A. Cheeseman, US Army Research Laboratory
11:45	<b>Buffet Lunch Served in Georgia Center Banquet Area</b>	

## Afternoon Session

	<b>Session 4A: Melt Spun Fibers &amp; Polymers</b> <i>Gang Sun, Chair</i>	<b>Session 4B: Biopolymers for Textile Products</b> <i>Gajanan Bhat, Chair</i>
1:00–1:30	<i>Structure and Properties of Poly(phenylene sulfide) Melt Spun Fibers....67</i> <u>Prabhakar V. Gulgunje</u> and Gajanan S. Bhat, University of Tennessee Knoxville	<i>Short Biofibers Inclusion Effects on Green Composites Performance....77</i> <u>Hechmi Hamouda</u> , North Carolina State University
1:30–2:00	<i>Effect of Processing Parameters on Polypropylene Film Properties....69</i> <u>Ikilem Gocek</u> and Sabit Adanur, Auburn University	<i>Polymer Blends and Composites Derived From Biopolymers....78</i> <u>Suraj Sharma</u> , University of Georgia
2:00–2:30	<i>Structure and Properties of Meltblown Nanofiber Webs....71</i> <u>Gajanan Bhat</u> , Rohit Uppal, and Chris Eash, University of Tennessee Knoxville	<i>Determination of Pulp and Paper Production Conditions from Textile Wastes and Cotton Linters....79</i> <u>Yusuf Ulcay</u> <sup>2</sup> , Remzi Gemci <sup>1</sup> , Ahmet Tutus <sup>1</sup> , Volkan Kalin <sup>1</sup> , <sup>1</sup> KSU, <sup>2</sup> University of Uludag
2:30–3:00	<i>Improving Toughness of Polypropylene Injection Molded Parts with Thermoplastic Elastomer Materials....73</i> <u>Reyhan Keskin</u> and Sabit Adanur, Auburn University	<i>Fibrous Materials Science—Coming of Age?....81</i> <u>Ning Pan</u> , University of California Davis

3:15–5:00	<b>Campus, Community, and Textile Science Bus Tour—Meet at Front of Georgia Center</b>
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**5:30–6:30**      **General Body Meeting: Open to Fiber Society Members Only**

**6:30–7:30**      **Reception**

**7:30**            **Awards Banquet**

**Speaker:** Professor James McGregor, University of Georgia,  
*Losing the Symbol: The Architectural Language of Washington, DC*

## Friday, October 30

Breakfast on your own.

	<b>Session 5: General Topics</b> <i>Yusuf Ulcay, Chair</i>
8:30–9:00	<i>Rapid Continuous Dyeing Process for Heavy Face Weight Nylon 6,6 Carpet....85</i> <u>Hongming Dong</u> , Wallace W. Carr, Fred L. Cook, and Sunghyum Nam, Georgia Institute of Technology
9:00–9:30	<i>Fiber Fly Generation of Yarns During Warp Preparation....87</i> <u>Mehmet Emin Yuksekkaya</u> , Usak University
9:30–10:00	<i>Technical Innovation in Haute Couture....89</i> <u>Hoon Joo Lee</u> , North Carolina State University
	<b>Close of Conference</b>

## Poster Presentations

**Session Chair: Ian R. Hardin**

- Dominique Adolphe *Sustainable Development for Polynesian Islands: Valorization of the Coir Issued of the Polynesian Coprah Industry....93*
- Taras Andrukha *Interactions of Droplets with Nanoporous Substrates: Competition Between Spreading and Absorption....95*
- Venugopal Boppa *Characterization of Structure and Tensile Properties of Electrospun Web....97*
- Wei Cao *Consumers' Acceptance of Sustainable Apparel Products: A Case Study from U.S. College Students....99*
- Weigang Cui *Effect of Pre-heating on Wool Fabric Treated via Corona Discharge....101*
- Phillip Gibson *Review and Challenges for Coupling of Human Thermal Physiology Models with Advanced Clothing Models....103*
- Dominique Adolphe *Morphological and Mechanical Characterization of PA-6 Nano-webs....105*
- Bernadette Higgins *Polyethylene Fiber Modification for Soft Armor Applications....107*
- Rudolf Hufenus *Fiber with Rheological Core for Flexure-rate Responsive Damping....109*
- Jie Zhou *Vertical Velocity Analysis of the Whole Breast During Activities with Braless and Sports Bras....111*
- Hoon Joo Lee *Metastable Superoleophobic NyCo Using Fluorosilane....113*
- Xin Liu *Dyeing Properties of Polypropylene/Superfine Down Powder Composite Fibers....114*
- Alexander Lobovsky *Shaped Fibers as a Gateway into Micro and Nano Worlds....116*
- Daria Monaenkova *Stress Transfer through Fibrous Materials in Wicking Experiments....117*
- Shirin Nourbakhsh *Surface Modification of Textile Fabrics by Laser Irradiation....119*
- Tracie Owens *Validation of a New Wicking Technique Using Organic Liquids in Polyester Fabric....121*
- Vijoya Sa *Wet Spinning of Polymeric Fibers Containing High Loading of Single Walled Carbon Nanotubes....123*

Laurence Schacher	<i>Sensory Properties Prediction from Process and Structure Parameters of Knitted Fabrics Using Fuzzy Logic and Neural Networks Techniques....125</i>
Quan Shi	<i>Nylon 6/Silica Composite and Porous Nylon 6 Nanofibers Prepared by Electrospinning....127</i>
Chen-Chih Tsai	<i>Wettability of Nanoporous PVDF/PEO Yarns and Films....129</i>
Fehime Vatansever	<i>Towards Pointed Surface Modification of Fibrous Structures....131</i>
Yakup Aykut	<i>Portable and Digitally Controllable System Design for Testing Fiber-based Materials' Mechanical Behaviors....132</i>
Navzer Sachinvala	<i>Could Cellulose Oligomers Be Useful Tools for Studying Ion Channels in Cell Membranes?...134</i>
Ming Zhang	<i>Synthesis and Characterization of Flame Retardant Polymer/Layered Double Hydroxide Nanocomposites via Melt Intercalation....136</i>
Qingliang He	<i>Textile Flammability Measured and Evaluated by Microscale Combustion Calorimetry....138</i>
Genyang Cao	<i>Analysis Interface of Composites of Cellulose and Starch Treated with 3-glycidoxypropyltrimethoxysilane....140</i>