



Tutorials

Polymer Nanocomposites 2009



Monday, March 2 - Room 141 & 151 Rauch Business Center, Lehigh University	
Demonstrations – Characterization Techniques for Polymer Nanocomposites	
6:00 PM – 7:00 PM	<u>Instructors:</u> Dan Burnett (SMS) and Pete Shickel (TA Instrustruments)
7:00 PM – 8:00 PM	<u>Networking Session</u>
Tutorial- Introduction to Polymer Nanocomposites	
8:00 PM – 9:00 PM	<u>Instructor:</u> Thomas Twardowski, Ph.D. (President, Twardowski Scientific) <i>Introduction to Polymer Nanocomposites</i>

Tuesday, March 3 - Perella Auditorium (Rauch Business Center, Lehigh University)	
Nanofiber-Reinforced Polymer Nanocomposites	
Moderator: John Coulter (Professor, Lehigh University)	
8:00 AM – 8:45 AM	<u>Continental Breakfast</u> (Rauch Business Center, Lehigh University) <i>On-Site Registration and Pick-Up Proceedings</i>
8:45 AM – 9:00 AM	<u>Welcome and Introduction</u> (Organizers)
9:00 AM – 10:00 AM	<u>Keynote Speaker:</u> Brian Wardle (Professor, MIT) <i>Polymers and Advanced Polymer Matrix Composites Reinforced with Aligned Carbon Nanotubes</i>
10:00 AM - 10:30 AM	Coffee Break & Vendor Exhibit
10:30 AM - 11:15 AM	<u>Speaker:</u> Page McAndrew (Scientist, Arkema) <i>Arkema Graphistrength Multi-Walled Carbon Nanotubes</i>
11:15 AM - 12:00 PM	<u>Speaker:</u> Eric A. Mintz (Professor, Clark Atlanta University) <i>Nano-Particle Enhanced Polymer Matrix Composites: A New Paradigm in Composite-Structure Design & Engineering</i>
12:00 PM - 1:30 PM	Lunch & Vendor Exhibit
Nanoplatelet-Filled Polymer Nanocomposites	
Moderator: Thomas Twardowski (President, Twardowski Scientific)	
1:30 PM – 2:30 PM	<u>Keynote Speaker:</u> Albert Yee (Professor, UC-Irvine) <i>Interphase in Nanocomposites: Science or Fiction?</i>
2:30 PM – 3:15 PM	<u>Speaker:</u> Donald Huang (Research Scientist, DuPont) <i>'In situ' Deformation Processes in Modified Polymer Systems</i>
3:15 PM - 3:45 PM	Coffee Break & Vendor Exhibit

3:45 PM - 4:30 PM	<u>Speaker:</u> Loan Vo and Emmanuel Gianneli (Cornell University) <i>Advances in Clay Polymer Nanocomposites</i>
4:30 PM - 7:00 PM	Reception, Graduate Student Poster Session & Vendor Exhibit



Final Program Polymer Nanocomposites 2009



Wednesday, March 4 - Perella Auditorium (Rauch Business Center, Lehigh University)	
Biopolymer-Based Nanocomposites Moderator: Sabrina Jedlicka (Assistant Professor, Lehigh University)	
8:00 AM – 8:45 AM	<u>Continental Breakfast</u> (Rauch Business Center, Lehigh University) <u>On-Site Registration and Pick-Up Proceedings</u>
8:45 AM – 9:00 AM	<u>Welcome and Introduction</u> (Organizers)
9:00 AM – 10:00 AM	<u>Keynote Speaker:</u> Richard Bopp (NatureWorks, LCC) <i>PLA-based Polymer Composites and Nanocomposites</i>
10:00 AM - 10:30 AM	Coffee Break & Vendor Exhibit
10:30 AM - 11:15 AM	<u>Speaker:</u> Jeffery Gilman (NIST) <i>Sustainable Polymers, Nanoadditives and Nanocomposites</i>
11:15 AM - 12:00 PM	<u>Speaker:</u> Montgomery Shaw (Professor, University of Connecticut) <i>High-Modulus, Fully Absorbable Orthopedic Repair Composites Based on Hydroxyapatite Nanoparticles</i>
12:00 PM - 1:30 PM	Lunch & Vendor Exhibit
Nanoparticle-Filled Polymer Nanocomposites Moderator: Donald Schulz (Scientist, Exxon-Mobil)	
1:30 PM - 2:30 PM	<u>Keynote Speaker:</u> Richard Laine (Professor, University of Michigan) <i>Silsesquioxane as Polyfunctional Nanobuilding Blocks</i>
2:30 PM - 3:15 PM	<u>Speaker:</u> Joseph Mabry (Air Force) <i>Hybrid Nanocomposite Research at the Air Force Research Laboratory-Edwards AFB</i>
3:15 PM - 3:30 PM	Coffee Break
3:30 PM - 4:15 PM	<u>Speaker:</u> Ray Pearson (Professor, Lehigh University) <i>Toughening of Epoxy Resins Using Nanosilica Fillers</i>
4:15 PM - 4:30 PM	<u>Wrap-Up</u> (Organizers)