



**2009 GPEC® CONFERENCE - February 25-27, 2009**

**“Plastics: The Wonderful World of Sustainability & Recycling”**

**Disney’s Coronado Springs Resort | Walt Disney World®, Florida**  
**Sponsored by the Society of Plastics Engineers, Plastics Environmental Division**

<b>Thursday AM</b>	<b>Recycling FIESTA 1-3</b>	<b>Reclamation &amp; Supply FIESTA 7-10</b>	<b>Bio-based &amp; Biodegradable Materials FIESTA 6</b>
<b>Thursday PM</b>	<b>Clean Technology Business Plan Competition FIESTA 1-3</b>	<b>Reclamation &amp; Supply FIESTA 7-10</b>	<b>Bio-based &amp; Biodegradable Materials (Battelle) FIESTA 6</b>
<b>Friday AM</b>	<b>Recycling FIESTA 1-3</b>	<b>Reclamation &amp; Supply FIESTA 7-10</b>	<b>Bio-based &amp; Biodegradable Materials FIESTA 6</b>
<b>Friday PM</b>	<b>Recycling FIESTA 1-3</b>	<b>Reclamation &amp; Supply FIESTA 7-10</b>	<b>Bio-based &amp; Biodegradable Materials FIESTA 6</b>

**Wednesday, February 25, 2009**

<b>1.00-6.00 pm</b>	<b>Registration</b>
<b>3.30-5.30 pm</b>	<b>PED Board Meeting</b>
<b>6.00-7.00 pm</b>	<b>Connections Reception</b>
<b>7.30-8.00 pm</b>	<b>Moderators Pre-Conference Meeting</b>



Thursday, February 26, 2009

7.30-8.25 am			
Breakfast			
Track	Recycling FIESTA 1-3	Reclamation & Supply FIESTA 7-10	Bio-based & Biodegradable Materials FIESTA 6
Section Moderator	Michael Montpetit	Ray Dawson	Brenda Platt
8.30	<b>Paper R1</b> Recycling of Agricultural Film  <u>Speaker</u> Werner Herbold <u>Affiliation</u> Resource Recycling Systems	<b>Paper RS1</b> Engineered Recycling Systems for Post-Consumer & Post-Industrial Scrap  <u>Speaker</u> Brian Woodcock <u>Affiliation</u> PSI-Polymer Systems	<b>Paper BB1</b> Quantifying the Biobased Carbon Content within Plastics using ASTM-D6866: A Technical Overview.  <u>Speaker</u> Darden Hood <u>Affiliation</u> Beta Analytic
8.55 am	Set-up & Transfer Break		
8.55 - 9.00 am	Set-up & Transfer Break		
9.00	<b>Paper R2</b> The Development of HDPE Corrugated Drainage Pipe Containing Recycled HDPE for Highway Applications  <u>Speaker</u> Richard Thomas <u>Affiliation</u> TRI/Environmental,	<b>Paper RS2</b> Size Reduction Equipment for Reclaim Extrusion  <u>Speaker</u> John Farney <u>Affiliation</u> Cumberland Engineering Corporation	<b>Paper BB2</b> Curaua Fiber Plastic Composites  <u>Speaker</u> Jay Amarasekera <u>Affiliation</u> SABIC Innovative Plastics
9.25 am	Set-up & Transfer Break		
9.25 - 9.30 am	Set-up & Transfer Break		
9.30	<b>Paper R3</b> Analytical Approaches to Characterize Products & Issues Associated With Recycled Materials  <u>Speaker</u> Jennifer Brooks <u>Affiliation</u> Polymer Solutions	<b>Paper RS3</b> Automated Optical Sorting of Electronic Scrap – Case Studies from the USA & Europe  <u>Speaker</u> Felix Hottenstein <u>Affiliation</u> MSS	<b>Paper BB3</b> Synthesis of Bio Based Epoxy & Curing Agent using Rosin & Study of Cure Reactions  <u>Speaker</u> Jinwen Zhang <u>Affiliation</u> Washington State University
9.55 am	Set-up & Transfer Break		
9.55 - 10.00 am	Set-up & Transfer Break		
10.00	Break	Break	<b>Paper BB4</b> High Performance Bioplastics – Utilizing Castor Oil as a Renewable Feedstock for Polyamide 11  <u>Speaker</u> Todd Rogers <u>Affiliation</u> Arkema
10.25 am	Set-up & Transfer Break		
10.25 - 10.30 am	Set-up & Transfer Break		
10.30	<b>Paper R4</b> New Coupling Technology Helps Olefin-Based Thermoplastic Composites Make Products Greener  <u>Speaker</u> Louis Martin <u>Affiliation</u> Addcomp America	<b>Paper RS4</b> Titanates & Zirconates for Recycled, Compostable & Biobased Polymer Composites  <u>Speaker</u> Sal Monte <u>Affiliation</u> Kenrich	Break
10.55 am	Set-up & Transfer Break		
10.55 – 11.00 am	Set-up & Transfer Break		
11.00	<b>Paper R5</b> Commercial Application of Post Consumer Recycled Resins in Flexible Packaging  <u>Speaker</u> Peter Clark <u>Affiliation</u> Kimberly-Clark Corporation	<b>Paper RS5</b> Screw Optimization for Bio-Based Resins  <u>Speaker</u> Christine Ronaghan <u>Affiliation</u> Davis -Standard Converting Systems	<b>Paper BB5</b> Conversion of Beer Bottoms Waste & Rice Waste to Biodegradable Plastics via Bacterial Transformation  <u>Speaker</u> Joseph Greene <u>Affiliation</u> California State University
11.25 am	Set-up & Transfer Break		
11.25 – 11.30 am	Set-up & Transfer Break		
11.30	<b>Paper R6</b> Carpet America Recovery Effort  <u>Speaker</u> Frank Hurd <u>Affiliation</u> Carpet America Recovery Effort	<b>Paper RS6</b> How to Reclaim Your Bio Resin Scrap  <u>Speaker</u> Bob Harrison <u>Affiliation</u> Wittmann, Inc	<b>Paper BB6</b> Samsung's Environment-Friendly Materials: Sustainable & Durable  <u>Speaker</u> Youngmi Chung <u>Affiliation</u> Samsung Cheil Industries
11.55 am	Transfer		
11.55 am-noon	Transfer		

noon-1.25 pm	<b>Lunch – Plenary</b>		
	<b>Paper</b> Automotive Applications & Expectations of Bio-Based Materials <b>Speaker</b> Eric J. Connell <b>Affiliation</b> Toyota		
1.25-1.30 pm	Set-up & Transfer Break		
<b>Track</b>	<b>Clean Technology Business Plan Competition FIESTA 1-3</b>	<b>Reclamation &amp; Supply FIESTA 7-10</b>	<b>Bio-based &amp; Biodegradable Materials (Battelle) FIESTA 6</b>
<b>Section Moderator</b>	<b>Eric Koester</b>	<b>Scott Melton</b>	<b>Cindy Conner</b>
1.30	<u>Company</u> Cool Energy, <u>Speaker</u> Sam Weaver	<b>Paper RS7</b> An Eco-efficiency Life Cycle Analysis of Food Waste Collection & Disposal <u>Speaker</u> Keith Edwards <u>Affiliation</u> BASF Corporation & JF Connolly & Associates	<b>Battelle B1</b> Accelerating Development & Commercialization of BioProducts in Ohio <u>Speaker</u> Dennis Hall <u>Affiliation</u> OBIC/OSU
1.55 pm		Set-up & Transfer Break	
1.55-2.00 pm	<u>Company</u> Polyflow LLC <u>Speaker</u> Joseph Hensel	<b>Paper RS8</b> Life-Cycle -Analysis of Hot Beverage Cup Technologies: Coated Paper, PS Foam & Expanded R-PET <u>Speaker</u> Tom Malone <u>Affiliation</u> MicroGREEN Polymers	<b>Battelle B2</b> Production of Algae in a Hybrid Pond PBR, Primarily for Bio-Plastics & Fuel  <u>Speaker</u> Ross Youngs <u>Affiliation</u> Univenture
2.00		Set-up & Transfer Break	
2.25 pm	<u>Company</u> SunBrite Packaging Company, <u>Speaker</u> Lawrence W. Masten	<b>Paper RS9</b> An Innovative Equipment Solution To Reclaim Post Industrial & Post Consumer Film That Contains High Levels Of Moisture & Printing <u>Speaker</u> Kevin Slusarz <u>Affiliation</u> Davis -Standard, LLC	<b>Battelle B3</b> A New Class of Biobased Polyols Utilizing Cost-Effective Feedstocks & their Applications  <u>Speaker</u> Jeff Cafmeyer <u>Affiliation</u> Battelle
2.25-2.30 pm		Set-up & Transfer Break	
2.30	<u>Company</u> PolyNew, <u>Speaker</u> John Dorgan	<b>Paper RS10</b> Uses of Recycled Rubber Powder in Thermoplastic Resins as a Feedstock Extender, Impact Modifier & Functional Filler <u>Speaker</u> Carl MacAfee & William Schreiber <u>Affiliation</u> Lehigh Technologies	<b>Battelle B4</b> Carbon Footprints -- What Are They & What Good Are They?  <u>Speaker</u> Shawn Blenis <u>Affiliation</u> Ciba
2.55 pm		Set-up & Transfer Break	
2.55-3.00 pm	<u>Company</u> FRX Polymers, <u>Speaker</u> Marc A. Lebel	<b>Paper RS11</b> New Aliphatic TPU Material Make PV Solar Panels More Environmentally Friendly <u>Speaker</u> Chris Cooper <u>Affiliation</u> Bayer Material Science LLC	<b>Battelle B5</b> Improving PLA Performance for Injection-Molding Applications  <u>Speaker</u> Corey Linden <u>Affiliation</u> Battelle
3.00		Set-up & Transfer Break	
3.25 pm	<u>Company</u> Exotech Bio Solution <u>Speaker</u> Zvika Meiri		
3.25-3.30 pm		Set-up & Transfer Break	
3.30			
3.55 pm			
3.55-4.00 pm	<b>Close of Paper Section</b>		
4.00-6.00 pm	<b>Student Poster Session</b>		
6.00-7.00 pm	<b>Reception</b>		
7.00-9.00 pm	<b>Awards Dinner</b>		

Friday, February 27, 2009

7.30-8.25	Breakfast		
Track	Recycling FIESTA 1-3	Reclamation & Supply FIESTA 7-10	Bio-based & Biodegradable Materials FIESTA 6
Section Moderator	Leonardo Simon	Dennis Denton	Richard Bopp
8.30	<b>Paper R7</b> PET Bottle Recycling  <u>Speaker</u> Mike Hendley <u>Affiliation</u> Buhler	<b>Paper RS12</b> Auxiliary Equipment for Reclaim Extrusion  <u>Speaker</u> Keith Larson <u>Affiliation</u> Colortronic North America	<b>Paper BB7</b> Impact-Modified PC Blends with Sustainable, Environment-Friendly Polylactide  <u>Speaker</u> James Chung <u>Affiliation</u> Bayer Material Science LLC
8.55 am	Set-up & Transfer Break		
8.55 - 9.00 am	Set-up & Transfer Break		
9.00	<b>Paper R8</b> New Thermoplastic Polyurethane (TPU) From Renewable Sources  <u>Speaker</u> Dennis Lauzon <u>Affiliation</u> Merquinsa North America	<b>Paper RS13</b> What Is the Current Regulatory Status & Future Landscape For Flame Retardants?  <u>Speaker</u> Raymond Dawson <u>Affiliation</u> Albemarle Corp.	<b>Paper BB8</b> Mirel Biobased, Biodegradable Polyhydroxyalkanoates (PHAs): Renewable Materials for the Growing Bioplastics Marketplace  <u>Speaker</u> Kristin Taylor <u>Affiliation</u> Telles, Metabolix & ADM JV
9.25 am	Set-up & Transfer Break		
9.25 - 9.30 am	Set-up & Transfer Break		
9.30	<b>Paper R9</b> Sorting Out the Economics & Science of Green Polymers  <u>Speaker</u> Roger Jones <u>Affiliation</u> Franklin International LLC & G.H. Associates	<b>Paper RS14</b> Zero Waste Energy Systems Compactors Developed to Remove Liquids from Plastic Containers  <u>Speaker</u> Bruce Coxhead <u>Affiliation</u> Zero Waste Energy Systems	<b>Paper BB9</b> Advances in the Manufacture, Development & Commercialization of Poly Hydroxy Butyrate Valerate (PHBV) Biopolymers  <u>Speaker</u> Jim Lunt <u>Affiliation</u> Tianan Biologic
9.55 am	Set-up & Transfer Break		
9.55 - 10.00 am	Set-up & Transfer Break		
10.00	Break	Break	<b>Paper BB10</b> Oxo-Biodegradable Plastics  <u>Speaker</u> Michael Stephen <u>Affiliation</u> Symphony Environmental Technologies
10.25 am	Set-up & Transfer Break		
10.25 - 10.30 am	Set-up & Transfer Break		
10.30	<b>Paper R10</b> Recycling... It's Not Optional Anymore!  <u>Speaker</u> Wolfgang Unger <u>Affiliation</u> FRP Green / Seawolf Design	<b>Paper RS15</b> From Trash to Cash: A Case Study of GLOBAL P.E.T.  <u>Speaker</u> Anthony Georges <u>Affiliation</u> AMUT N.A.	Break
10.55 am	Set-up & Transfer Break		
10.55 - 11.00 am	Set-up & Transfer Break		
11.00	<b>Paper R11</b> New FR Bayblend GR Resins Based on Post-Consumer Plastic Waste  <u>Speaker</u> Marina Rogunova <u>Affiliation</u> Bayer MaterialScience	<b>Paper RS16</b> Recycling Machinery for Plastics  <u>Speaker</u> Rob Northrup <u>Affiliation</u> Advanced Extrusion Solutions	<b>Paper BB11</b> Sustainable Communities Need Sustainable Biomaterials  <u>Speaker</u> Brenda Platt <u>Affiliation</u> Institute for Local Self-Reliance
11.25 am	Set-up & Transfer Break		
11.25 - 11.30 am	Set-up & Transfer Break		
11.30	<b>Paper R12</b> Recycling of PVC  <u>Speaker</u> David Yopak <u>Affiliation</u> Teknor Apex Corporation	<b>Paper RS17</b> Composites from Recycled Plastics Co-Blends with Micro-Fibrillar Structures  <u>Speaker</u> Qinglin Wu <u>Affiliation</u> Louisiana State University	<b>Paper BB12</b> Advanced Hybrid Composite Materials Biodegradable Super Absorbent Polymer  <u>Speaker</u> Zvika Meiri <u>Affiliation</u> Exotech BioSolutions
11.55 am	Transfer		
11.55 am-noon	Transfer		

noon-1.25 pm	<b>Lunch – Plenary</b>		
	<b>Paper</b> Climate Change by the Numbers <b>Speaker</b> John Christy <b>Affiliation</b> University of Alabama		
1.25-1.30 pm	Set-up & Transfer Break		
<b>Track</b>	<b>Recycling FIESTA 1-3</b>	<b>Recycling FIESTA 7-10</b>	<b>Bio-based &amp; Biodegradable Materials FIESTA 6</b>
<b>Section Moderator</b>	<b>Susan Landry</b>	<b>Larry Koester</b>	<b>Subu Subramanian</b>
1.30	<b>Paper R13</b> Germany's New Recycling Ways In Packaging Waste  <u>Speaker</u> Sascha Schuh <u>Affiliation</u> ASCON GmbH	<b>Paper R15</b> Physical Properties of Recycled Polypropylene with Agricultural Fillers  <u>Speaker</u> Leonardo Simon <u>Affiliation</u> University of Waterloo	<b>Paper BB13</b> Improvement of Mechanical Properties of Southern Yellow Pine through Impregnation with BORR Resin <u>Speaker</u> Katerina Sanchez <u>Affiliation</u> University of Wisconsin – Madison
1.55 pm			
1.55-2.00 pm	Set-up & Transfer Break		
2.00	<b>Paper R14</b> X-ray Fluorescence Spectroscopy (XRF) as a Public Health Screening Tool for the Presence of Hazardous Chemicals in Plastics <u>Speaker</u> Jeff Gearhart <u>Affiliation</u> Ecology Center	<b>Paper R16</b> American Commodities: A Case Study  <u>Speaker</u> Scott Melton <u>Affiliation</u> American Commodities	<b>Paper BB14</b> Novel Bioplastic Blends and Nanocomposite  <u>Speaker</u> John Dorgan <u>Affiliation</u> Colorado School of Mines
2.25 pm			
2.25-2.30 pm	Set-up & Transfer Break		
2.30		<b>State of the Union Panel Discussion</b>  Lead By Susan Kozora GPEC 2009 Conference Chair  (Panel ends at 4.00 pm)	<b>Paper BB15</b> Novel Method to Control the Rheological Properties & Processability for Microbial Poly(3-hydroxybutyrate) <u>Speaker</u> Masayuki Yamaguchi <u>Affiliation</u> J.A.I.S.T.
2.55 pm			
3.00 pm			
3.00			<b>Paper BB16</b> Characterization of Polystyrene-g-Polylactide Synthesized by Grafting-From Method <u>Speaker</u> Rathanawan Magaraphan <u>Affiliation</u> Chulalongkorn Universtiy
3.25 pm			
4.00 pm	<b>End of Conference</b>		

## Judges for the Clean Technology Business Plan Competition

Jamie Boyd, Senior Vice President, Cascadia Capital

Rick Heggs, Director of Biobased Materials Strategy, Battelle

P.M. (Subu) Subramanian, SPM Technologies

Neil Cameron, Advanced Materials Specialist, Emerald Technology Ventures

Cathleen Hess, Head of Sustainability, SABIC Innovative Plastics

Tony Deligio, Senior Editor, Modern Plastics Worldwide