

SPE BIOPLASTICS & RENEWABLE TECHNOLOGIES

March Newsletter, 2018



CHAIR'S COMMENTS

Happy Spring everyone! Antec is approaching very fast and we have been busy getting ready for it since our last newsletter. We will have 3 sessions this year filled with very good papers. We invite all who can to join us in Orlando, FL, on May 7-10 for this important annual event.

As you all know we are now a Division in Formation (DIF). This move from SIG to DIF has given us an opportunity to expand the group's vision and serve better its members. In this process we have to build our member base again, as not all SIG members automatically move to DIF. Please encourage your colleagues who work in this field or have interest in this field to join this newly formed Division. I assure all members that we will continue to build and expand this division.

We will have a closed door board meeting this year, but I would like encourage you to volunteer to work on the board. Please reach out to any board member if you are interested.

Hope to see you all in Orlando!

Abhishek Ambekar



MEET OUR 2018 ANTEC® KEYNOTE SPEAKER

We are pleased to welcome Dr. William Orts as keynote speaker for the Bioplastics Keynote Address at ANTEC this year.

Dr. Orts has over 30 years of experience in research related to bioproducts and biofuels with >175 publications, >150 invited presentations and 10 patents. His MSc work at the University of Toronto focused on fermentation scale-up of gums derived from fermenting wood-derived sugars as part of a wood-to biofuels biorefinery. His PhD work was carried out at the Xerox Research Centre of Canada in developing poly(hydroxyalkanoates), PHA, as a commercial biopolymer.

Dr. Orts currently leads a team of researchers at the USDA Western Regional Research Center, Albany, CA that optimizes strategies for biorefinery operation, especially focused on biomass sources found in the Western U.S. This includes research on biopolymer development, biorefinery design, nanotechnology & nanocomposites, x-ray/neutron scattering characterization, industrial microbiology, and enzyme engineering.

ANTEC® Orlando 2018 - Bioplastics Agenda

The Bioplastics Division welcomes an exciting group of speakers and papers for ANTEC® 2018 in Orlando, Florida. The current schedule of speakers is below.

Time	Presenter	Title
MONDAY MAY 7		
8:30	Manjusri Misra	Transamidation of corn oil side-steam product from bioethanol industry as strategy to develop sustainable polyesteramides
9:00	Joyanta Goswami	Nanocellulose as a Sizing Agent for Glass Fiber Towards an Enhanced Glass Fiber Epoxy Interphase
9:30	Sergio Torres-Giner	On the Use of High-throughput Electrospinning to Produce Optimized Packaging Films from Polyhydroxyalkanoates
10:00	Yong-Chao Jiang	Polycaprolactone Nanofibers Containing Vascular Endothelial Growth Factor-Encapsulated Gelatin Particles Enhance Mesenchymal Stem Cell Differentiation to Endothelial Cells and Angiogenesis of Endothelial Cells
10:30	Xiaofeng Guo	Effect of shish material on the formation of self induced shish-kabab structure
11:00	Cindu Annand	Fully Biobased Degradable Plastic with Insecticide Functionality
TUESDAY MAY 8		
8:00	William Orts (KEYNOTE)	Bringing Agriculturally Derived Bioproducts to Market: Challenges and Opportunities.
9:00	Manjusri Misra	Study of Biodegradable Polybutylene succinate/Poly(butylene adipate-co-terephthalate) Blends
9:30	Joseph Greene	Biodegradation of Biodegradable and Compostable Plastics under Industrial Compost, Marine, and Anaerobic Digestion
10:00	Siwen Bi	Tunable Degradation of Poly(butylene succinate) by Copolymerization and Catalysts
10:30	Christopher Lewis	Mechanical Behavior and Anaerobic Biodegradation of a Poly(lactic acid) blend containing a Poly(lactic acid)-co-Poly(glycolic acid) Copolymer
11:00	John Campanelli	Low Temperature Solution Depolymerization of PLA

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WEDNESDAY MAY 9		
8:00	Juan Fernando Campuzano Vallejo	Physical Foaming Using High Pressure Gas Saturation for Biopolymer Application
8:30	Barbara Calderon	Study of Biocompatibilizer for New Renewable Blends of Polypropylene Carbonate and Polybutylene Succinate
9:00	Hiroyuki Nishimura	Mechanical Properties and Effects of Microfibrillation of 100% Biomass Sisal-PLA Composite
9:30	Junseop Im	Synthesis of High Hardness Polyester Resin for Powder Coatings
10:00	Ganjian Guo	Effects of Molding Conditions on Mechanical Behavior of Direct Injection Molded PLA/Wood-Fiber Composites
10:30	Shujie Yan	Hierarchical Micro/Nanostructures of Poly (lactic acid) Scaffolds for Medical Applications
11:00	Barbara DeButts	Wheat Protein as a Participant in the Sulfur-Curing of Isoprene Rubber

Be sure to register early for ANTEC® Orlando. Information on the conference and registration, go to: <https://www.eiseverywhere.com/ehome/252707>.



BREAKING NEWS

Bioplastics & Renewable Technologies Division: NEWS

Registration for the Bioplastics and Renewable Technologies Division

Did you know that when a SIG changes to a division, your SIG membership does not carry over to the new division? Members of the former Bioplastics SIG must register for the new Bioplastics and Renewable Technologies Division under SPE. You can do this at any time, including during your membership renewal. We look forward to everyone's official membership in the new Bioplastics and Renewable Technologies Division!

Call for Newsletter Articles

Our newsletter is an opportunity to showcase the efforts and achievements of your group or organization among your Bioplastics and Renewable Technologies Division peers, and foster future collaborations!

Send a summary (1 page or less) on your group or organization's efforts to kalstovall@gmail.com for inclusion in a future newsletter.



OUR MISSION

The mission of the Bioplastics and Renewable Technologies Division is “To provide a unified forum for promoting open exchange of scientific and engineering knowledge related to bioplastics materials that are either biobased, biodegradable, or both with a sustainability emphasis.”

Areas of interest include synthesis, characterization, processing, structure-property relationships, degradation, product design and development, application development, modeling, regulations and compliance, and life-cycle analyses. To achieve its objectives, the division collaborates closely with other interested technical divisions of SPE and organizations to coordinate the dissemination of knowledge and understanding of bioplastics through appropriate channels.



MEET YOUR BOARD

These are the working members of your Board of Directors and bring a strong commitment and knowledge in guiding our Division into the future.

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Keep up with the latest happenings with the Bioplastics &
Renewable Technologies Division:

<https://www.4spe.org/bioplastics>