

SPE BIOPLASTICS SIG

TOPCON Newsletter, 2014



Message from Edwin Tam, SPE Bioplastic Materials Tutorial & Topical Conference Co -Chair

Society of Plastics Engineers (SPE) Bioplastics SIG and Chicago Section held their second Bioplastic Materials Tutorial Conference from September 30 to October 2 in Chicago. The pre-conference tutorial session gives an overview on sustainability and bioplastics, instructors are Dr. Kelvin Okamoto from Green Bottom Line and Edwin Tam from Teknor Apex. Two keynote speakers at this conference, first speaker is Willem De Vos, CEO of SPE, the title of his talk is "Innovation in the Age of Interaction." Second day speaker is Ken Miller from KFM Associates, his talk is the "Role of Bioplastics in a Circular Economy."

Unlike other Bioplastics Conference, this conference is primarily focused on the technical aspect of the Bioplastics Industry. There are over 20 technical presentations in two days with experts from academics, industry and organizations. In addition, there are four posters from graduate students that want to showcase their research works. This conference is an excellent opportunity to find out the latest development in Bioplastics industry, also a great opportunity to network with peers, professionals and industry leaders in the Bioplastics Industry."



2nd Bioplastic Materials Tutorial & Topical Conference*

September 30 - October 2

*The World of Biopolymers
Expanding Markets, Materials & Applications*



Pre-Conference Tutorial – 1 Day (Sept 30)



Dr. Kelvin T. Okamoto

Sustainability: Overview

Terminology and Definitions
Life Cycle Analysis
Regulations
Testing



Edwin Tam

Bioplastic Materials: Overview

Classes of Biopolymers/Bioplastics
Chemistry
Typical Properties
Typical Markets & Applications

Conference Date - October 1-2, 2014

Invite Speakers:



Willem De Vos, CEO, SPE, “Innovation in the Age of Interaction.”



Kenneth Miller, President, KFM Associates, “Role of Bioplastics in a Circular Economy.”

Conference Program Speakers and Companies October 1 (Day 1)

Time	Speaker	Company	Title of Presentation
8:00 - 8:30 am			Registration
8:30 - 8:40 am	Edwin Tam	Teknor Apex	Welcome & House Keeping
8:40 - 9:10 am	Kevin Cai	Teknor Apex	High Bio Content Styrenic Block Copolymer Based Thermoplastic Elastomers
9:10 - 9:40 am	Sam McCord	MCG Biocomposites	"Sustainability-Renewability-Recyclability": Why Should We Be Concerned?
9:40 - 10:10 am	Samaneh Rahim	Michigan State University	Assessment of the Environmental Profile of Michigan Soybean Agriculture
10:10 - 10:30 am			Break, Tabletop Display & Networking
10:30 - 11:00 am	Lora Liang	Mondelez	Food Packaging Innovation Across The Supply Chain - a Brand Owner's Perspective"
11:00 - Noon	Willem Devos	SPE	Innovating in the Age of Interaction
Noon - 1:30 pm			Lunch, Tabletop Display & Networking
1:30 - 2:00 pm	Doug Hirt	Clemson University	Effects of Temperature and Humidity on PLA Degradation
2:00 - 2:30 pm	Edwin Tam	Teknor Apex	Plasticized PLA Using Segetis Levulinic Acid
2:30 - 3:00 pm	Jeff Schneider	Michigan State University	Designing Poly(lactide) for Blown Film Applications
3:00 - 3:30 pm			Break, Tabletop Display & Networking
3:30 - 4:00 pm	Richard Freundlich	Metabolix	New Developments in Multifunctional PHA Copolymer Technology and Applications
4:00 - 4:30 pm	Ala Qattawi	Clemson University	A Comparative LCA of PP and PHBV Processed via Conventional and Microcellular Technologies for Automotive Interior Applications
4:30 - 5:00 pm	Alan Boardman	Brigham Young University	Process Evaluation and Characterization of Extrusion Blow Molded Potato Starch/High Density Polyethylene Compounds

Conference Program Speakers and Companies October 2 (Day 2)

Time	Speaker	Company	Title of Presentation
8:00 - 8:10 am	Edwin Tam	Teknor Apex	Welcome & House Keeping
8:10 - 8:40 am	Ron Walling	Advanced Materials Center	Industrial Compostability Testing: An Update
8:40 - 9:10 am	Kelvin Okamoto	Green Bottom Line	ASTM Biodegradation Standards: An Update
9:10 - 9:40 am	Melanie Baugh	Recycle Your Organics	The Basics of Vermicomposting
9:40 - 10:10 am	Keisha Walters	Mississippi State University	Nanomechanical Properties of Bioplastics During Degradation
10:10 - 10:30 am			Break, Tabletop Display & Networking
10:30 - 11:00 am	Maik Feldmann	University of Kassel	Continuous-Fiber-Reinforced Engineering Thermoplastics from Renewable Raw Materials – Processing and Properties
11:00 - 12:00 am	Kenneth Miller	KFM-Associates	Role of Bio-Plastics in a Circular Economy
12:00 - 1:15 pm			Lunch, Tabletop Display & Networking
1:15 - 1:45 pm	Margaret Sobkowicz-Kine	University of Massachusetts, Lowell	Bioplastic Blends Compatibilized Using High Speed Reactive Extrusion
1:45- 2:15 pm	Alex Utracki	Coperion	Unit Operation Based Approach to Designing Bioplastic Processes on a Twin Screw Extruder
2:15- 2:45 pm	Robert Joyce	Innovative Plastics & Molding	Utilizing Thermoplastic Biopolymers for Light Weighting Parts in the Transportation Industry
2:45 - 2:55 pm	Edwin Tam	Teknor Apex	Thank You and Ending Remarks

Posters 5:30 – 7:30 pm

Name	Company	Presentation Title
Dewasthale, Sudhanwa	Michigan State University	Biobased Interpenetrating Polymer Networks (IPNs) Based on Silylated Soybean Oil and Polysiloxanes
MacDowell, Hugh	Michigan State University	Synthesis of Flexible Polyurethane Foams Using Vegetable Oil Based Polyols
Tambe, Chetan	Michigan State University	Synthesis of Silylated Soybean Oil Via ENE Reaction
Zhao, Yanjie	Michigan State University	Manufacture of Biobased Monomers and Value-added Products from Soybean Oil

WHO SHOULD ATTEND:

- This conference is intended for a range of companies and individuals involved in bioplastics development, production, sales, marketing, processing and end-use.
- R&D scientists and engineers, formulation scientists, process engineers, quality engineers and application engineers.
- Chemists and chemical engineers involved in development of biopolymers
- Development engineers and research scientists working on new bioplastics developments.
- Bioplastics users and application specialists
- Sales, Marketing, Market Development and Business Developments

Online Registration: <http://tinyurl.com/bioplasticstopcon>

Call Embassy Suite Hotel, Schaumburg, IL directly at 847-397-1313, Group Code: SPE

Questions? Contact:

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2014 BIOPLASTIC MATERIALS TOPCON & TUTORIAL



SPONSORSHIP FORM

September 30 – October 2, 2014

Embassy Suites Schaumburg
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- **Gold:** \$2,000*: 2 free admissions to conference only not tutorial; tabletop in exhibition; logo on flyer, website and display at conference event
- **Silver/Tabletop:** \$1,000*: 1 free admission to conference only not tutorial; tabletop in exhibition; logo on flyer, website and signs at conference event
- **Bronze:** \$500: No free admission to conference nor tutorial; literature to be handed out at event; logo on flyer, website and signs at conference event
- **Breakfast coffee and break coffee/drinks:** \$250 (signs at conference event only)

Exhibition open from Wednesday October 1 10:00 AM through Thursday October 2 1:00 PM. Exhibitors' Reception held Wednesday October 1 evening. All breaks held in exhibition room.

*Bioplastic Materials 2012 Exhibitors/Silver Sponsors receive a \$250 discount.

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Online registration: <http://tinyurl.com/bioplasticstopcon>

For Embassy Suites Schaumburg hotel reservations, please call hotel directly at (847) 397-1313 and ask for Bioplastic Materials TopCon special rate \$144 per night + tax, deadline for special rate: August 31, 2014

Contact: Kelvin Okamoto, Sponsor Chair, kelvin@greenbottomline.com, 847-271-9285

Co-sponsored by SPE Bioplastics Special Interest Group & SPE Chicago Section