

2<sup>nd</sup> Bioplastic Materials Tutorial & Topical Conference<sup>-</sup>

September 30 - October 2

The World of Biopolymers Expanding Markets, Materials & Applications



## Pre-Conference Tutorial – 1 Day, September 30, 2014



Dr. Kelvin T. Okamoto, Green Bottom Line Inc. Sustainability: Overview

- 1. Terminology and Definitions
- 2. Life Cycle Analysis
- 3. Regulations
- 4. Testing



Edwin Tam, Teknor Apex Company Bioplastic Materials: Overview

- 1. Classes of Biopolymers/Bioplastics
- 2. Chemistry
- 3. Typical Properties
- 4. 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 De Vos	SPE	Innovating in the Age of Interaction

Time	Speaker	Company	Title of Presentation
Noon - 1:30 pm			Lunch, Tabletop Display & Networking
			Effects of Temperature and Humidity on PLA
1:30 - 2:00 pm	Doug Hirt	Clemson University	Degradation
2:00 - 2:30 pm	Edwin Tam	Teknor Apex	Plasticized PLA Using Segetis Levulinic Acid
		Michigan State	Designing Poly(lactide) for Blown Film
2:30 - 3:00 pm	Jeff Schneider	University	Applications
3:00 - 3:30 pm			Break, Tabletop Display & Networking
			New Developments in Multifunctional PHA
3:30 - 4:00 pm	Richard Freundlich	Metabolix	Copolymer Technology and Applications
			A Comparative LCA of PP and PHBV Processed via
			Conventional and Microcellular Technologies for
4:00 - 4:30 pm	Ala Qattawi	Clemson University	Automotive Interior Applications
			Process Evaluation and Characterization of
		Bringham Young	Extrusion Blow Molded Potato Starch/High Density
4:30 - 5:00 pm	Alan Boardman	University	Polyethylene Compounds
			Poster Session, Tabletop Exhibits, Networking
5:30- 7:30 pm			Reception
Time	Name	Compony	Title of Poster
Time	Name	Company Michigan State	Synthesis of Flexible Polyurethane Foams Using
5:30- 7:30 pm	Bali, Atishi	-	Vegetable Oil Based Polyols
5.30- 7.30 pm	Ball, AUSII	University	Biobased Interpenetrating Polymer Networks
	Dowesthele	Michigan State	
F.20 7.20 mm	Dewasthale,	Michigan State	(IPNs) Based on Silylated Soybean Oil and
5:30- 7:30 pm	Sudhanwa	University	Polysiloxanes
F.20 7.20	Tamba Chata	Michigan State	Synthesis of Silylated Soybean Oil Via ENE
5:30- 7:30 pm	Tambe, Chetan	University	Reaction
F 20 7 20	7	Michigan State	Manufacture of Biobased Monomers and Value-
5:30- 7:30 pm	Zhao, Yanjie	University	added Products from Soybean Oil

# October 2 (Day 2)

Time	Speaker	Company	Title of Presentation
8:00 - 8:10 am	Edwin Tam	Teknor Apex	Welcome & House Keeping
		Advanced Materials	
8:10 - 8:40 am	Ron Walling	Center	Industrial Compostability Testing: An Update
8:40 -9:10 am	Kelvin Okamoto	Green Bottom Line	ASTM Biodegradation Standards: An Update
		Recycle Your	
9:10 - 9:40 am	Melanie Baugh	Organics	The Basics of Vermicomposting
		Mississippi State	Nanomechanical Properties of Bioplastics During
9:40 - 10:10 am	Keisha Walters	University	Degradation

#### October 2 (Day 2) continue

Time	Speaker	Company	Title of Presentation
10:10 - 10:30 am			Break, Tabletop Display & Networking
			Continuous-Fiber-Reinforced Engineering
			Thermoplastics from Renewable Raw Materials –
10:30 - 11:00 am	Maik Feldmann	University of Kassel	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
		University of	
	Margaret	Massachusetts,	Bioplastic Blends Compatibilized Using High Speed
1:15 - 1:45 pm	Sobkowicz-Kine	Lowell	Reactive Extrusion
			Unit Operation Based Approach to Designing
1:45- 2:15 pm	Alex Utracki	Coperion	Bioplastic Processes on a Twin Screw Extruder
		Innovative Plastics	Utilizing Thermoplastic Biopolymers for Light
2:15- 2:45 pm	Robert Joyce	& Molding	Weighting Parts in the Transportation Industry
2:45 - 2:55 pm	Edwin Tam	Teknor Apex	Thank You and Ending Remarks

### 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 and bioplastics
- Development engineers and research scientists working on new bioplastics developments.
- Bioplastics users and application specialists
- Sales, Marketing, Market Development and Business Developments

# **Online Registration:** <u>http://tinyurl.com/bioplasticstopcon</u>

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

#### **Questions? Contact:**

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#### **Event Sponsored by:**

The **<u>SPE Bioplastics SIG</u>** in partnership with the SPE <u>Chicago Section</u>.