

5th Conference on Emerging Trends in Polymer Compounding for Innovations in Plastics Industry 2014

Additives, Compounding, Coatings and Processing

**Atlanta, Georgia, USA
23 – 25 September 2014**

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InnoPlast Solutions Presents 5th Conference on “Emerging Trends in.....

Polymer Compounding

for

Innovations in Plastics Industry

Additives, Compounding, Coatings & Processing

Functional additives are key enablers in polymer formulations; they drive the performance and processing characteristics of polymeric compositions that are clearly NOT in line with their proportion in the formulation. Since there are often multiple additives for polymer modification, molders / converters find it more convenient to use a “Masterbatch / Concentrate” rather than dealing with minor components. As a result, **COMPOUNDERS** are uniquely placed in the plastics industry value-chain to continue delivering innovations to the industry. The theme for this year’s 2-day conference on “Polymer Compounding for Innovations in Plastics Industry” is to bring the participants up to speed on the newest trends and technical advances in developing & offering differentiated products to the marketplace. The target audience is R&D, Manufacturing, Sales, Marketing, and New Business Development leaders throughout the entire supply chain of the plastics industry.

Conference Chairman: **Roger Avakian**, VP - Scientific Development, **PolyOne**

September 23-25, 2014

Hilton @ Airport

Atlanta, GA 30354, USA

September 23, Tuesday, 2014Pre-Conference Course

12:30-1:00 Registration

1:00-1:30 **Critical Knowledge for Mastering Polymeric Materials 1**

1:30-2:15 **Speeding up New Product Development – Polymer Formulations**

Although radical innovations are getting harder in a maturing chemicals / plastics industry, there is always a continuous need for incremental improvements. Demands from the marketplace and customers while leading to “Incremental Innovations” can also present “Accidental Opportunities”; both leading to New Product Developments. 7-Principles of promoting accidental discoveries will be presented. In addition, Case-Histories will be discussed dealing with strategies on reducing failures and accelerating new product launches.

Dr. Yash Khanna, *InnoPlast Solutions*, USA

2:15-2:30 Coffee Break

2:30-5:00 **COMPOUNDERS in VALUE-DELIVERY: CASE-HISTORIES**

I. Role of Formulators in Plastics Industry: Delivering Value – Why & How ? 24

Roger Avakian, VP – Scientific Development, *PolyOne*, USA

II. Polypropylene Compounds: Value-Added Alloys/Blends in Numerous Market Segments 44

Dr. Deen Chundury, VP-R&D, *Wellman* Engineering Resins, USA

September 24, Wednesday, 2014Conference

7:00-8:00 Registration & Breakfast
8:00-8:10 Welcome and Opening Remarks
8:10-9:00 **Keynote address**

Differentiation through the use of Formulated Plastics for Medical Devices 67
Dr. Shishir Prasad, Staff Research Engineer-Advanced Materials, *Becton Dickinson*, USA

Session I: Delivering a KEY Property to Plastic Formulation

9:00-9:30 **Imparting Antimicrobial Properties to Compounded Plastics: How, Where & Why ? 76**
Thomas Robitaille, Global Tech Marketing Lead-Plastics, *Lonza*, USA

9:30-10:00 Coffee & Networking

10:00-10:30 **How to Improve Photo-Oxidative Stability of Filled & Flame-Retarded Plastics ? 85**
Dr. Rudolf Pfaendner, Head-Formulation Develop & Stability, *Fraunhofer* Institute, Germany

10:30-11:00 **Saturated Slip Additive: Performance of Erucamide with Superior Oxidative Stability 96**
Aaron Huguet, Key Account Manager-Polymer Additives & Lubricants, *Croda*, USA

11:00-11:30 **A Sticky Situation- Customized Release Agents for Plastic Films & Sheets 109**
Chris Kerscher, Marketing Manager-Masterbatch, *A. Schulman*, USA

11:30-12:00 **Carpet-to-Auto Parts: Truly Green Compound Innovations for Automotive Applications; 129**
Wellman EcoLon™
Dr. Deen Chundury, VP-R&D, *Wellman* Engineering Resins, USA

12:00-1:30 Lunch & Networking

1:30-2:00 **Innovative Ways to Increase Thermal Conductivity and Sell Plastics to Replace Metal 149**
Dr. Chandrashekar (Chandra) Raman, Global Application Development Leader-Ceramic Powders, *Momentive* Performance Materials, USA

2:00-2:30 **Functional Processing Additives: Improvements in the Modulus/Impact Strength Ratio of Polypropylene N/A**
Mike Fulmer, Product Manager- Plastic Additives, *Struktol*, USA

2:30-3:00 Coffee & Networking

Session II: Improving Surface Aesthetics - Beautification

3:00-3:30 **Controlling Surface Aesthetics of Injection Molded Parts via Additives Technology 176**
Dr. Jason Lyons, Manager-Polymer Additives R&D, *Arkema*, USA

3:30-4:00 **Best-in-Class Performing Polyvinylidene Fluoride (PVdF) Processing Aids: Kynar® 188**
Dr. Fabrice Chopinez, Business Development Manager-NA, *Arkema*, USA

- 4:00-4:30 **Metallic Pigments: Brilliant Visuals, Energy Savings, and More Functional Properties** 198
Mike Yockel, NAFTA Sales Manager-Plastics, *Altana* Group, USA
- 4:30-6:00 Cocktail Reception & Networking

September 25, Thursday, 2014Conference

- 7:30-8:30 Breakfast & Networking
- 8:30-9:30 **Accidental Opportunities for Business Growth Created via Additives & Coatings** 54;
Dr. Yash Khanna, President, *InnoPlast Solutions*, USA

Session III: Minerals & Reinforcements: New Developments

- 9:30-10:00 **Growing Carbon NanoStructures on Glass Fibers for Engineered Performance** 233
Dr. Patrick O'Connor, Director-Business Development & Strategy, Applied NanoStructured Solutions- *Lockheed Martin*, USA
- 10:00-10:30 Coffee & Networking
- 10:30-11:00 **Enhanced Mechanicals with Carbon Fibers: Polymer Specific Sizing & Coupling Agents** 245
Jason Carling, Global R&D Manager, Toho Tenax America-a *Teijin* Company, USA
- 11:00-11:30 **Surface Modification of Glass Fibers & Other Reinforcements using Ethylene-Maleic Anhydride Alternating Copolymer** 260
Dr. Ashok Adur, Global Commercial Develop Director-Plastics, *Vertellus* Specialties, USA
- 11:30-12:00 **Tailored Filler Dispersants for Thermoplastics** 276
Brett Robb, Applications Chemist, *TOTAL Cray Valley*, USA
- 12:00-1:00 Lunch & Networking

Session IV: Productivity Gains – Machinery & Techniques

- 1:00-1:30 **Productivity via Purging Compounds: Reducing Off-Spec Material / Downtime & Improving Yield** 298
Eric Procnier, Product Development Manager, *Sun Plastech–Asahi Kasei Group*, USA
- 1:30-2:00 **Introduction to TriVolution® Next Generation Compounding** 160
Michael Lazorchak, Global Project Manager-Mixing Systems, *B&P Process Equipment*, USA
- 2:00-2:30 **Troubleshooting Common Loss-in-Weight Feeder Issues in Polymer Compounding** 309
Andy Kovats, Senior Application Engineer, *Brabender Technologie*, Canada