



# ANTEC<sup>®</sup> ORLANDO

The Plastics Technology Conference

May 7-10, 2018 • Orange County Convention Center • Orlando, FL @



## Wednesday Morning

8:00 am - 11:30 am

8:00 am - 8:30 am

8:30 am - 9:00 am

9:00 am - 9:30 am

9:30 am - 10:00 am

10:00 am - 10:30 am

10:30 am - 11:00 am

11:00 am - 11:30 am

8:00 am - 11:30 am

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8:30 am - 9:00 am

9:00 am - 9:30 am

### **W1-Alloys and Blends: Morphology, Compatibilization and Performance of Polymer Blends(Moderator: Rubinder Kaur Lakhman)-Room S320D**

Semiconductive LLDPE Power Cable Insulation Shield

Jason Zhang, Lead Engineer , General Cable

Structure-property Relationships of Microporous Membranes Produced by Biaxial Orientation of Compatibilized PP/Nylon 6 Blends

Jingxing Feng, Ph.D Student, Case Western Reserve University

Investigation of Droplet Behavior Under Real Mixing Conditions

Oguz Celik, Research Assistant, Institut für Kunststofftechnik – University of Stuttgart

Influence of processing and formulation on the properties of PP-PET-blends

Christoph Burgstaller, Managing Director and Head of R&D, TCKT

Nylon 12/PMMA/San Alloys for Translucent Medical Catheters

Timothy Largier, Thermoplastic Development Chemist, Foster Corporation

Design of Extensional Flow Static Mixers for Blending of Ternary Nanoparticle-Polymer-Polymer Blends

Rakesh Gupta, Berry Professor and Chair of Chemical Engineering, West Virginia University

*KEYNOTE:Bio-polymer Alloys and Blends: Past, Present and Future*

Roger Avakian, Fellow, PolyOne

### **W2-Automotive: Materials Development(Moderator: Matt Carroll)-Room S320E**

Innovations in Automotive Plastics “Materials and Processes”

Suresh Shah, Delphi -Retired

Reflections on Evolution and Growth of TPOs.

Mark Barrera, Senior Project Engineer, Asahi Kasei Plastics NA, Inc.

Low Birefringent Cellulose Acetate Propionates for Plastic Display Lens Covers

9:30 am - 10:00 am	Laura Weaver, Plastics Application Development, Eastman Chemical Introduction to the usage of thermally conductive compounds in automotive lighting
10:00 am - 10:30 am	Paula Kruger, Application Development Engineer, DSM New resin for liquid cooled modules in electric vehicle battery packs (EVBP's)
10:30 am - 11:00 am	Rudy Gorny, Senior Principal Scientist, Covestro LLC Improving long term corrosion resistance in electronic applications
11:00 am - 11:30 am	Josh McIlvaine, Manager, Automotive Electronics Business, DuPont Advances in Hydrolysis resistance PBT resins for electronic applications including connectors and HEV components
8:00 am - 11:30 am	Dave Spritzer, DuPont <b>W3-Bioplastics: Processing, Blends and Composites(Moderator: Margaret Sobkowicz-Kline)-Room S320A</b>
8:00 am - 8:30 am	PHYSICAL FOAMING USING HIGH PRESSURE GAS SATURATION FOR BIOPOLYMER APPLICATIONS. Juan Fernando Campuzano Vallejo, Mechanical Engineer, ICIPC (Instituto de Capacitación e Investigación del Plástico y del Caucho)
8:30 am - 9:00 am	STUDY OF BIOCOMPATIBILIZER FOR NEW RENEWABLE BLENDS OF POLYPROPYLENE CARBONATE AND POLYBUTYLENE SUCCINATE Barbara Calderon, Umass Lowell
9:00 am - 9:30 am	Mechanical Properties and Effects of Microfibrillation of 100 % Biomass Sisal-PLA Composite Hiroyuki Nishimura, Kyoto Institute of Technology
9:30 am - 10:00 am	Synthesis of high hardness polyester resin for powder coatings JUNSEOP IM, SAMYANG CORPORATION
10:00 am - 10:30 am	EFFECTS OF MOLDING CONDITIONS ON MECHANICAL BEHAVIOR OF DIRECT INJECTION MOLDED PLA/WOOD-FIBER COMPOSITES Gangjian Guo, Bradley University
10:30 am - 11:00 am	Hierarchical Micro/Nanostructures of Poly (lactic acid) Scaffolds for Medical Applications Shujie Yan, Visiting Student, University of Wisconsin-Madison
11:00 am - 11:30 am	WHEAT PROTEIN AS A PARTICIPANT IN THE SULFUR-CURING OF ISOPRENE RUBBER Barbara DeButts, Virginia Tech
8:00 am - 10:30 am	<b>W4-Blow Molding(Moderator: Ken Carter)-Room S320H</b>
8:00 am - 8:30 am	DEVELOPMENT OF A RAPID THERMAL CYCLING BLOW MOLDING TECHNOLOGY AND MOLD HEATING SYSTEM OPTIMIZATION Cheng-Long Xiao, University of South China
8:30 am - 9:00 am	Simulative preform optimization for improved toplod behavior of PET-bottles manufactured in the two stage stretch blow molding process Benjamin Twardowski, Research Associate , IKV Aachen
9:00 am - 9:30 am	PET Advancements in Extrusion Blow Molding

9:30 am - 10:00 am	Scott Steele, SWS Consluting, LLC A SIMULATION FRAMEWORK FOR BLOW-MOLDING: A PRELIMINARY CASE STUDY ON INJECTION STRETCH BLOW MOLDING FOR BULB COVERS Raghavendra Janiwarad, SABIC
10:00 am - 10:30 am	NUMERICAL SIMULATION OF SHRINKAGE AND WARPAGE DEFORMATION OF AN INTERMITTENT-EXTRUSION BLOW MOLDED PART: VALIDATION CASE STUDY Zohir Benrabah, National Research Council Canada
8:00 am - 11:30 am	<b>W5-Engineering Properties and Structure: Polymer Physical Properties II(Moderators: Gerry Billovits and Paul Hans)-Room S320B</b>
8:00 am - 8:30 am	Foam Structure and Thermal Comfort in Polyurethane Mattress Foams Douglas Brune, The Dow Chemical Company
8:30 am - 9:00 am	PREDICTION OF FIBER REINFORCED PLASTICS CONSIDERING LOCAL FIBER LENGTH AND ORIENTATION Fabian Willems, Institut für Kunststofftechnik
9:00 am - 9:30 am	Practical Simulation of Liquid Crystal Polymer Directionality During Processing Anthony Sullivan, Tufts University
9:30 am - 10:00 am	Crystallization mechanism of Polyvinylidene Fluoride via non-isothermal crystallization and supercritical CO <sub>2</sub> processing Ji Eun Lee, York University
10:00 am - 10:30 am	Macromolecular Spectroscopy for Determining Mechanical Properties of Polydimethylsiloxane (PDMS) Ahmed Anwer, University of Toronto
10:30 am - 11:00 am	FLOW PROBLEMS THAT COULD ARISE FROM ADDING BIOMASS MATERIALS TO PLASTICS Carrie Hartford, Senior Project Engineer, Jenike & Johanson
11:00 am - 11:30 am	ROTOMOLDING PROCESSES FOR POLY(ARYL KETONES) AND OTHER HIGH TEMPERATURE POLYMERS Manuel Garcia-Leiner, Exponent
8:00 am - 11:30 am	<b>W6-Extrusion: General(Moderator: Kevin Laux)-Room S320F</b>
8:00 am - 8:30 am	FURTHER IMPROVEMENTS IN PROCESSING OF SEMI-CRYSTALLINE AND AMORPHOUS POLYMERS FOR THERMOFORMING SHEET IN MULTIPLE NIP SYSTEMS Peter Rieg, battenfeld-cincinnati
8:30 am - 9:00 am	EFFECT OF DIE EXIT STRESS STATE, DEBORAH NUMBER AND EXTENSIONAL RHEOLOGY ON NECK-IN PHENOMENON Martin Zatloukal, Research Professor, Tomas Bata University in Zlin
9:00 am - 9:30 am	MICRO-LAYERED TUBING AND PIPES VIA MULTI-LAYER CO-EXTRUSION Tyler Schneider, Case Western Reserve University
9:30 am - 10:00 am	ROLE OF INTERFACIAL CRYSTALLIZATION IN DESIGNING POLYOLEFIN BLENDS FROM MIXED STREAM RECYCLE FEEDS

10:00 am - 10:30 am	Alex Jordan, University of Minnesota EVALUATION OF THERMOPLASTIC POLYURETHANE (TPU) RESINS AS POSSIBLE SUBSTITUTES OF CURRENT RESINS FOR ESCALATOR HANDRAILS
10:30 am - 11:00 am	Qingping Guo, EHC Canada PRELIMINARY STUDY OF BIREFRINGENCE DISTRIBUTION IN BLOWN FILM
11:00 am - 11:30 am	Jin Wang, The Dow Chemical Company ENERGY GAP METHOD (EGM) APPLIED TO IMPROVE EXTRUSION ENERGY PERFORMANCE: SUCCESSFUL CASE STUDIES
8:00 am - 11:30 am	Juan Carlos Ortiz Pimienta, ICIPC-Instituto de Capacitación e Investigación del Plástico y del Caucho <b>W7-Thermoplastic Materials and Foams: Frontiers(Moderator: Maxwell Wingert)-Room S320G</b>
8:00 am - 9:00 am	Thermoplastic Foam; 1930-2020 Shau-Tarng Lee
9:00 am - 9:30 am	Auxetic Foam Sensor with Silver Nanowire Md Faisal Ahmed, Florida State University
9:30 am - 10:00 am	Poly(Vinylidene Fluoride)/ Graphene Nanoplatelets Composites with Microcellular Structure to Enhance Electromagnetic Shielding Properties Biao Zhao, University of Toronto
10:00 am - 10:30 am	ENHANCING ELECTROMAGNETIC SHIELDING PERFORMANCE OF PVDF/MWCNT COMPOSITES THROUGH FOAMING Chenyinxia Zuo, Student, University of Toronto
10:30 am - 11:00 am	Piezoelectric Foams with High Thermal Stability and Flexibility Zhe Liu, Florida State University
11:00 am - 11:30 am	Resorcinol Formaldehyde Aerogel Nano-network Structural Assembly and its Thermal Properties Correlation Mohammed Alshrah, University of Toronto
8:00 am - 12:00 pm	<b>W8-Technical Marketing: Additives(Moderator: Joe Golba)-Room S320C</b>
8:00 am - 8:30 am	A novel synergist for halogen free flame retardants Amit Paul, Paxymex
8:30 am - 9:00 am	New technology for improving halogen free flame retardant performance in polymer application Ido Offenbach, Evonik
9:00 am - 9:30 am	New Generation Flame Retardants Based on Ionic Liquids Yanjie "Jeff" Xu, Founder, Inovia Materials LLC
9:30 am - 10:00 am	Novel Approach to Controlled Migration of Antifog Additives in Multilayer Packaging Films Michal Schreiber, Product Manager, Packaging Application, Tosaf
10:00 am - 10:30 am	Novel Dispersants Enabled by Natural Oil Metathesis Frederyk Ngantung, Elevance Renewable Sciences
10:30 am - 11:00 am	Advances in Thermal Stability

11:00 am - 11:30 am	Bradley Sparks, Ascend Performance Materials TUBALL™ SINGLE WALL CARBON NANOTUBES FOR THERMOPLASTICS
11:30 am - 12:00 pm	Maus Christian, Product Development Leader, OCSIAL Surface Enhancement via Polypropylene Metallic Compounds
8:00 am - 10:00 am	Tanmay Pathak, R&D Engineer, A. Schulman <b>W9-Flexible Packaging: Film Sealing and Barrier(Moderator: Lora Liang)-Room S322</b>
8:00 am - 8:30 am	<i>KEYNOTE-Rethinking Machine Direction Sealing</i> Michael Pilolli, D.R. Joseph, Inc.
8:30 am - 9:00 am	<i>KEYNOTE:Heat Transfer Modelling in Multilayer Films used for Flexible Packaging</i> Dan Ward, Technical Service Specialist, NOVA Chemicals
9:00 am - 9:30 am	Thermo-Rheological Modeling and Simulation of Heat Sealing Process for Multi-Layer Flexible Packaging Applications Vinod Kumar Konaganti, NOVA Chemicals Corporation
9:30 am - 10:00 am	Barrier Materials Having Layer-Like Morphology for Packaging Use:Extruded Film and Oriented Film Guojun Zhang, A. Schulman inc
10:00 am - 11:30 am	<b>W10-Thermoplastics Elastomers(Moderator: Mukul Kaushik)-Room S322</b>
10:00 am - 10:30 am	KEYNOTE: SHIFTING MARKETPLACE DYNAMICS AND POSITIONING TPEs FOR FUTURE PROFITABILITY, DIVERSIFICATION AND GROWTH Robert Eller, President, Robert Eller Associates LLC
10:30 am - 11:00 am	ELASTIC RECOVERY AND ACTUATION IN POLYOLEFIN THERMOPLASTIC ELASTOMERS Barbara DeButts, Virginia Tech
11:00 am - 11:30 am	From Recycled Tires to Plastic Parts: Micronized Recycled Rubbers in Thermoplastic Polyolefins Haikun Xu, R&D, Entech, Inc