

ANTEC ® 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

 $Oguz\ Celik,\ Research\ Assistant,\ Institut\ f\"ur\ Kunststofftechnik\ -\ University\ of\ Stuttgart$

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

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Laura Weaver, Plastics Application Development, Eastman Chemical

Introduction to the usage of thermally conductive compounds in automotive lighting

Paula Kruger, Application Development Engineer, DSM

New resin for liquid cooled modules in electric vehicle battery packs (EVBPs)

Rudy Gorny, Senior Principal Scientist, Covestro LLC

Improving long term corrosion resistance in electronic applications

Josh McIlvaine, Manager, Automotive Electronics Business, DuPont

Advances in Hydrolysis resistance PBT resins for electronic applications including connectors and HEV components

Dave Spritzer, DuPont

W3-Bioplastics: Processing, Blends and Composites (Moderator: Margaret Sobkowicz-Kline)-Room S320A

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)

STUDY OF BIOCOMPATIBILIZER FOR NEW RENEWABLE BLENDS OF POLYPROPYLENE CARBONATE AND POLYBUTYLENE SUCCINATE

Barbara Calderon, Umass Lowell

Mechanical Properties and Effects of Microfibrillation of 100 % Biomass Sisal-PLA Composite

Hiroyuki Nishimura, Kyoto Institute of Technology

Synthesis of high hardness polyester resin for powder coatings

JUNSEOP IM, SAMYANG CORPORATION

EFFECTS OF MOLDING CONDITIONS ON MECHANICAL BEHAVIOR OF DIRECT INJECTION MOLDED PLA/WOOD-FIBER COMPOSITES

Gangjian Guo, Bradley University

Hierarchical Micro/Nanostructures of Poly (lactic acid) Scaffolds for Medical Applications Shujie Yan, Visiting Student, University of Wisconsin-Madison

WHEAT PROTEIN AS A PARTICIPANT IN THE SULFUR-CURING OF ISOPRENE **RUBBER**

Barbara DeButts, Virginia Tech

W4-Blow Molding(Moderator: Ken Carter)-Room S320H

DEVELOPMENT OF A RAPID THERMAL CYCLING BLOW MOLDING TECHNOLOGY AND MOLD HEATING SYSTEM OPTIMIZATION

Cheng-Long Xiao, University of South China

Simulative preform optimization for improved topload behavior of PET-bottles manufactured in the two stage stretch blow molding process

Benjamin Twardowski, Research Associate, IKV Aachen

PET Advancements in Extrusion Blow Molding

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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

NUMERICAL SIMULATION OF SHRINKAGE AND WARPAGE DEFORMATION OF AN INTERMITTENT-EXTRUSION BLOW MOLDED PART: VALIDATION CASE STUDY Zohir Benrabah, National Research Council Canada

W5-Engineering Properties and Structure: Polymer Physical Properties II(Moderators: Gerry Billovits and Paul Hans)-Room S320B

Foam Structure and Thermal Comfort in Polyurethane Mattress Foams

Douglas Brune, The Dow Chemical Company

PREDICTION OF FIBER REINFORCED PLASTICS CONSIDERING LOCAL FIBER LENGTH AND ORIENTATION

Fabian Willems, Institut für Kunststofftechnik

Practical Simulation of Liquid Crystal Polymer Directionality During Processing Anthony Sullivan, Tufts University

Crystallization mechanism of Polyvinylidene Fluoride via non-isothermal crystallization and supercritical CO2 processing

Ji Eun Lee, York University

Macromolecular Spectroscopy for Determining Mechanical Properties of

Polydimethylsiloxane (PDMS)

Ahmed Anwer, University of Toronto

FLOW PROBLEMS THAT COULD ARISE FROM ADDING BIOMASS MATERIALS TO PLASTICS

Carrie Hartford, Senior Project Engineer, Jenike & Johanson

ROTOMOLDING PROCESSES FOR POLY(ARYL KETONES) AND OTHER HIGH TEMPERATURE POLYMERS

Manuel Garcia-Leiner, Exponent

W6-Extrusion: General(Moderator: Kevin Laux)-Room S320F

FURTHER IMPROVEMENTS IN PROCESSING OF SEMI-CRYSTALLINE AND AMORPHOUS POLYMERS FOR THERMOFORMING SHEET IN MULTIPLE NIP SYSTEMS

Peter Rieg, battenfeld-cincinnati

EFFECT OF DIE EXIT STRESS STATE, DEBORAH NUMBER AND EXTENSIONAL RHEOLOGY ON NECK-IN PHENOMENON

Martin Zatloukal, Research Professor, Tomas Bata University in Zlin

MICRO-LAYERED TUBING AND PIPES VIA MULTI-LAYER CO-EXTRUSION

Tyler Schneider, Case Western Reserve University

ROLE OF INTERFACIAL CRYSTALLIZATION IN DESIGNING POLYOLEFIN BLENDS FROM MIXED STREAM RECYCLE FEEDS

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Alex Jordan, University of Minnesota

EVALUATION OF THERMOPLASTIC POLYURETHANE (TPU) RESINS AS POSSIBLE SUBSTITUES OF CURRENT RESINS FOR ESCALATOR HANDRAILS

Qingping Guo, EHC Canada

PRELIMINARY STUDY OF BIREFRINGENCE DISTRIBUTION IN BLOWN FILM Jin Wang, The Dow Chemical Company

ENERGY GAP METHOD (EGM) APPLIED TO IMPROVE EXTRUSION ENERGY PERFORMANCE: SUCCESSFUL CASE STUDIES

Juan Carlos Ortiz Pimienta, ICIPC-Instituto de Capacitación e Investigación del Plástico y del Caucho

W7-Thermoplastic Materials and Foams: Frontiers(Moderator: Maxwell Wingert)-Room S320G

Thermoplastic Foam; 1930-2020

Shau-Tarng Lee

Auxetic Foam Sensor with Silver Nanowire

Md Faisal Ahmed, Florida State University

Poly(Vinylidene Fluoride)/ Graphene Nanoplatelets Composites with Microcellular

Structure to Enhance Electromagnetic Shielding Properties

Biao Zhao, University of Toronto

ENHANCING ELECTROMAGNETIC SHIELDING PERFORMANCE OF PVDF/MWCNT COMPOSITES THROUGH FOAMING

Chenyinxia Zuo, Student, University of Toronto

Piezoelectric Foams with High Thermal Stability and Flexibility

Zhe Liu, Florida State University

Resorcinol Formaldehyde Aerogel Nano-network Structural Assembly and its Thermal Properties Correlation

Mohammed Alshrah, University of Toronto

W8-Technical Marketing: Additives(Moderator: Joe Golba)-Room S320C

A novel synergist for halogen free flame retardants

Amit Paul, Paxymer

New technology for improving halogen free flame retardant performance in polymer application

Ido Offenbach, Evonik

New Generation Flame Retardants Based on Ionic Liquids

Yanjie "Jeff" Xu, Founder, Inovia Materials LLC

Novel Approach to Controlled Migration of Antifog Additives in Multilayer Packaging Films Michal Schreiber, Product Manager, Packaging Application, Tosaf

Novel Dispersants Enabled by Natural Oil Metathesis

Frederyk Ngantung, Elevance Renewable Sciences

Advances in Thermal Stability

11:00 am - 11:30 am 11:30 am - 12:00 pm 8:00 am - 10:00 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 - 11:30 am 10:00 am - 10:30 am 10:30 am - 11:00 am 11:00 am - 11:30 am Bradley Sparks, Ascend Performance Materials

TUBALL™ SINGLE WALL CARBON NANOTUBES FOR THERMOPLASTICS

Maus Christian, Product Development Leader, OCSIAL

Surface Enhancement via Polypropylene Metallic Compounds

Tanmay Pathak, R&D Engineer, A. Schulman

W9-Flexible Packaging: Film Sealing and Barrier(Moderator: Lora Liang)-Room S322

KEYNOTE-Rethinking Machine Direction Sealing

Michael Pilolli, D.R. Joseph, Inc.

KEYNOTE:Heat Transfer Modelling in Multilayer Films used for Flexible Packaging Dan Ward, Technical Service Specialist, NOVA Chemicals

Thermo-Rheological Modeling and Simulation of Heat Sealing Process for Multi-Layer Flexible Packaging Applications

Vinod Kumar Konaganti, NOVA Chemicals Coroporation

Barrier Materials Having Layer-Like Morphology for Packaging Use:Extruded Film and Oriented Film

Guojun Zhang, A. Schulman inc

W10-Thermoplastics Elastomers(Moderator: Mukul Kaushik)-Room S322

KEYNOTE: SHIFTING MARKETPLACE DYNAMICS AND POSITIONING TPES FOR FUTURE PROFITABILITY, DIVERSIFICATION AND GROWTH

Robert Eller, President, Robert Eller Associates LLC

ELASTIC RECOVERY AND ACTUATION IN POLYOLEFIN THERMOPLASTIC ELASTOMERS

Barbara DeButts, Virginia Tech

From Recycled Tires to Plastic Parts: Micronized Recycled Rubbers in Thermoplasitc Polyolefins

Haikun Xu, R&D, Entech, Inc