8:30 am - 11:00 am

Extrusion- Forming Processes I
JW Grand Ballroom 8
Moderator: Karen Xiao

8:30 am - 9:00 am

Invited Paper: Properties, Processing, and Handling of Ethylene Vinyl Alcohol Copolymer Resins

Michail Dolgovski, Technical Service and Development Engineer , Kuraray
Gene Medlock, Kuraray

9:00 am - 9:30 am

Troubleshooting Extrusion Using chillWARE Computer Simulation For Sagging And Collapsing Of Pipe Ends

Kenny Saul, Managing Director, SHS plus GmbH

9:30 am - 10:00 am	Improvement of the extrusion foaming properties of externally plasticized cellulose acetate by reactive melt mixing using a multifunctional reactive oligomer Sven Hendriks, Institute of Plastics Processing at RWTH Aachen University
10:00 am - 10:30 am	Cycle time reduction by water spray cooling in thermoforming Jonathan Martens, Institute of Plastics Processing at RWTH Aachen University
8:30 am - 11:00 am	**Extrusion-Reactive & Mixing Processes I** JW Grand Ballroom 7 Moderator: David Bigio
8:30 am - 9:00 am	Invited Paper:Trends in Single and Twin Screw Extrusion for Industrial and Pharmaceutical Applications Maria del Pilar Noriega, ICIPC
9:00 am - 9:30 am	Usin Co-Rotating Twin Screw Extruder for Fibre Reinforced Karnik Tarverdi, Brunel University London
9:30 am - 10:00 am	Melt Devolatilization Extrusion Process for Brominated Polymeric Flame Retardant Eungkyu Kim, Dow Chemical
10:00 am - 10:30 am	The Mixing of Flame Retardant Polymer Materials In a Novel Co-Rotating Non-Twin Screw Extruder Baiping Xu, Guangdong Industry Polytechnic
10:30 am - 11:00 am	The Planetary Extruder: PVC Direct Extrusion Michael Batton, Entex Rust & Mitschke GmbH
8:30 am - 10:30 am	**Joining of Plastics and Composites- Mechanical and Hybrid Joining** Room 102 Moderator: Phil Bates
8:30 am - 9:00 am	Experiments with Hot Tool Joining of HDPE to Mild Steel Avraham Benatar, The Ohio State University
9:00 am - 9:30 am	Joining Investigations of Polymer-Metal-Hybrids for Permanantly Non-Leaking Applications Stefan Jarka, Uni Kassel
9:30 am - 10:00 am	Preliminary Analytical Modeling of Heat Iinput In Friction Riveting Sergio Amancio, Helmholtz-Zentrum Geesthacht
10:00 am - 10:30 am	Research On Mechanical Coupling Strength and Coupling Design of The ABS Injection Molding

	Lili Chen, Donghua University
8:00 am - 11:00 am	**Flexible Packaging-Structure-Property Relationship and End-Use Applications**
	White River C/D
	Moderator: Tom Dunn, Flexpacknology
8:00 am - 8:30 am	Long Chain Branched / High Melt Strength Linear Low Density Polyethylene for Blown and Cast Film Applications
	Edward Phillips, Polyolefins Specialist
8:30 am - 9:00 am	Coating Trials for an Antimicrobial Coating Containing Nisin (2.5%) Using Gravure and Flexographic Converting Processes
	Kay Cooksey, Clemson University
9:00 am - 9:30 am	Predicting the Impact Puncture Response of Multilayer Flexible Food Packages Using Explicit Finite Element Models
	Barry Morris, Technical Fellow, DuPont
9:30 am - 10:00 am	Capillary Coextrusion: A New Process for Creating Small-Scale Coextruded Films
	Patrick Lee, Assistant Professor, University of Vemont
10:00 am - 10:30 am	Case Studies of PP Based OBC for Multilayer Packaging
	Yushan Hu, The Dow Chemical Company
10:30 am - 11:00 am	Agility Performance LDPE as a Blend Component in High Throughput and High Bubble Stability Blown Film Applications
	Teresa Karjala, The Dow Chemical Company
8:30 am - 10:00 am	**Sustainabilty Session- Sustainable Materials and Processes**
	White River H
	Moderator: Louis Reifschneider
8:30 am - 9:00 am	Farmlands for Plastics, Textiles, Dyes or Food? Are Bio-based Materials Really Sustainable?
	Majid Sarmadi, Professor, University of WI-Madison
9:00 am - 9:30 am	PC/ABS Recovered From Shredded Waste Electrical and Electronic Equipment
	Brian Riise, Director of Research and Development, MBA Polymers Inc.
9:30 am - 10:00 am	A Stude On the Mechanical Properties of Recycling PC/ABS Blends Produced By Vent-Type Injection Molding
	Yongli Wang, Donghua University
8:30 am - 11:00 am	**Rotational Molding Session**

Room 312
Moderator: Denis Rodrigue

8:30 am - 9:00 am	Studying Polymer Particle Sintering With an Automated Imaging System
	Michael Thompson, McMaster University
9:00 am - 9:30 am	Impact Properties Analysis of Roto-Molded Polyehtylene and Polypropylene at Wide Range of Temperature
	Abu Saifullah, Bournemouth University
9:30 am - 10:00 am	Multi-Layer Rotational Molding of PE-PA Utilizing a Multiphase Interlayer to Generate Mechanical Adhesion
	Martin Löhner, Institut of Polymer Technology, Friedrich-Alexander-Universität Erlangen-Nürnberg
10:00 am - 10:30 am	A Three-layer Foamed Composite Prepared by Rotational Molding
	Ruben Gonzalez-Nunez, Universidad de Guadalajara
10:30 am - 11:00 am	Fiber Surface Treatment As An Approach To Increase Fiber Content In Agave-LMDPE Composites Produced By Rotomolding
	Erick Omar Cisneros Lopez
11:00 am - 11:30 am	Thermal Analysis of the Rotational Molding Cycle Followed by Internal Air Temperature Profiles: An Application for Foamed Polyehtylene
	Denis Rodrigue
8:00 am - 11:00 am	**Color & Appearance Session I**
	Room 302/303
	Moderator: Ann Smeltzer
8:00 am - 9:00 am	Keynote: Color Trends for 2016
	Doreen Becker, ASI
9:00 am - 9:30 am	Fundamental Factors for Opacity and Tint Generated with Titanium Dioxide
	Philipp Niedenzu, Chemours
9:30 am - 10:00 am	Impact of Pigments on the Dimensional Stability of Plastics
	James Rediske, Technical Specialist, BASF
10:00 am - 10:30 am	Color Development for Non Warping Thin Wall Injection Molding
	Brian West, Techmer PM
10:30 am - 11:00 am	Continued Studies of the Effects of Metallic Pigment Dispersions on the Physical Properties of Thermoplastics

	Jeffrey Drusda, Silberline
8:30 am - 12:30 pm	**Injection Molding- Simulation 1**
	White River A
	Moderator: Ray McKee
8:30 am - 9:00 am	An Approach to Decomposition of Deformation From a Molding Simulation
	Prasanna Kondapalli, Sr. Application Development Engineer, BASF Corp.
9:00 am - 9:30 am	Accounting for Pressure Dependant and Elongational Viscosities to Improve Injection Pressure Predictions in Mold Filling Analysis
	Erik Foltz, The Madison Group
9:30 am - 10:00 am	A Research Framework for Cooling Rate-Dependant PVT Models
	Peter Cook, Autodesk Australia Pty Ltd
10:00 am - 10:30 am	Warpage Simulation Of Injection Over-Molding Plastics On Continuous Fiber Reinforced Composites
	Zhihao Zuo, Autodesk
10:30 am - 11:00 am	Verification of Numerical approach and experiment in Using PvT Properties of Polymer to control Injection Molded Products
	Che-Wei Chang, Chung Yuan Christian University
8:30 am - 11:30 am	**Injection Molding and Thermoplastic Materials and Foam- Microcellular Foam**
	White River J
	Moderator:Shu-Kai Yeh
8:30 am - 9:00 am	Use of Core Retraction to Achieve Low Density Foams in Microcellular Injection Molded Polypropylene Parts
	Thomas Ellingham, UW-Madison Hrishikesh Kharbas, University of Wisconsin
9:00 am - 9:30 am	Thick Part Microcellular Foam Injection Molding
	Lun Howe Mark, University of Toronto
9:30 am - 10:00 am	Mechanism of Cell Nucleation In High-Pressure Foam Injection Molding Followed By Precise Mold-Opening
	Vahid Shaayegan, University of Toronto
10:00 am - 10:30 am	Analysis of the Foam Injection Molding Process Using a Chemical Blowing Agent
	Sejin Han, Autodesk
10:30 am - 11:00 am	Foam Injection Molding Of Polylactide with In-Situ Fibrillated Polytetrafluoroethylene

	Raymond Chu, University of Toronto
11:00 am - 11:30 am	Development of PLA/Cellulosic Fibre Composite Foams Using Injection Molding: Foaming and Mechanical Properties
	WeiDan Ding, University of Toronto
9:00 am - 11:00 am	**Composites- Natural / Bio Composites**
	White River G
	Moderator: Tim Johnson
9:00 am - 9:30 am	Characterization of Polypropylene/Bamboo Fiber Composites Modified With Polyethylene Grafted Maleic Anhydride
	Jitlada Boonlertsamut, Kyoto Institute of Technology
9:30 am - 10:00 am	Green Plastics: Utilizing Chicken Feather Keratin to Improve the Thermo-Mechanical Properties of Polyurethane Composites
	Firoozeh Pourjavaheri, Ph.D Student, RMIT University
10:00 am - 10:30 am	Improving the Impact Properties of PLA by Incorporation of PHA, TPU and Carbon Nanofibers
	Muhammad Anwer, University of Toronto
10:30 am - 11:00 am	Study on high-performance of WPC (Wood Polymer Composite)
	Hu YongXu
8:00 am - 11:30 am	**Engineering Properties and Structure: Novel & Packaging Applications**
	Room 103/104
	Moderator: Rajen Patel
	Moderator: John Trent
8:00 am - 8:30 am	Development of Advanced Microlayer Coextruded Films for Optical and Packaging Applications
	CC Chau, Rainbow Package Industrial
8:30 am - 9:00 am	Thermally Triggered Shape Memory Sensors via Nanolayered Coextrusion of Commercial Polymers Materials
	Michael Ponting, PolymerPlus LLC
9:00 am - 9:30 am	Packaging Supplier Partnerships: Critical for Innovation
	John Garnett, ConAgra Foods
9:30 am - 10:00 am	High Performance High Density Polyethylene (HDPE) for Hot Fill Closure Applications
	Yijian Lin, The Dow Chemical Company

10:00 am - 10:30 am	Holding Force Study of Polyolefin Resins for Stretch Hood Film Application
10:30 am - 11:00 am	Yi Jin, The Dow Chemical Compangy Modified PET compound with improved mechanical properties for thermoforming applications
11:00 am - 11:30 am	Zheng Tian, Bemis Company Investigation of the Preparation and Superiority Properties of the Novel Propylene-Based Elastic HMAs
	Hefei Chang, National Institute of Clean-and-Low-Carbon Energy
8:30 am - 11:00 am	**Bioplastics Session** White River I Moderator: David Grewell
8:30 am - 9:00 am	Soy protein isolate films with improved mechanical properties via bio-based dialdehydecarboxymethyl cellulose crosslinking
9:00 am - 9:30 am	Ting Zheng, Clemson University Energy-efficient Processing of Rendered Animal Proteins as Value Added Bio-crosslinkers in High-Strength Thermosets
9:30 am - 10:00 am	Xiaoyan Yu, Ph.D Student, Clemson University Reduced Post Crystallization of Polyhydroxybutyrate (PHB)
10:00 am - 10:30 am	Linda Goebel, University of Stuttgart Analysis on Mechanical Properties of Poly-lactic Acid Composites with Organic-Montmorillonite by Injection Molding
10:30 am - 11:00 am	Qi-Hong Liao, National Taiwan university of science and technology Mechanical Properties and Effects of Additives of Cellulose-PLA Composite
	Hiroki Sakamoto, Osaka Gas Co., Ltd.
8:30 am - 10:30 am	**Medical Plastics: Advances in Manufacturing and Materials for Medical Applications** Room 305/306 Moderator: Michael Wallick
8:30 am - 9:00 am	Getting to Compliance: a Guide to Setting Up a Medical Plastics Processing Operation
9:00 am - 9:30 am	Matt Zelkovich, General Manager, Medical , Conair Group Environmental Stress Cracking of Medical Thermoplastics: Assessing Lifetime of High Performance Amorphous Resins in Presence of Hospital Cleaners

	Robert Klein, Polymer Scientist, Stress Engineering
9:30 am - 10:00 am	Injection Molding of Solid Oral Dosage Forms
	Stephan Laske, Key Researcher, Research Center Pharmaceutical Engineering
10:00 am - 10:30 am	Microscopy of Intentionally Oxidized Mesh Material
	Stephanie Benight, Senior Scientist, Exponent
8:30 am - 11:30 am	**Additive Manufacturing/3D Session I**
	Room 101
9:00 am - 9:30 am	Solving FDM, SLA Material Problems
	No location
	Lance Pickens, Made Solid
9:30 am - 10:00 am	Thermoplastic Polyurethane for FDM
	Jake McDonough, R&D Manager, Ninja Tek/Fenner
10:00 am - 10:30 am	AM Tooling and Conformal Cooling
	John Tenbusch, Founder, Linear Mold, Moog
10:30 am - 11:00 am	Reinforced AM / 3Dp Parts
	John Balydon, Chief Manufacturing Officer, Impossible Objects
11:00 am - 11:30 am	Thermography and Weld Strength Characterization of Thermoplastic 3D Printing
	Kal Migler, Staff Scientist, NIST
8:00 am - 11:30 am	**Fellow's Fundamentals Forum**
	White River B
8:00 am - 8:30 am	Screw design for polyolefin resins and smooth-bore single-screw extruders
	Mark Spalding, Fellow in the Materials & Parts Processing Group , Dow Chemical Company
8:30 am - 9:00 am	Toughening Polymers with Functionalized Graphene Oxide
	Chris Macosko, Professor, University of Minnesota
9:00 am - 9:30 am	Smart Polymers and Composites with Multifunctional and Adaptive Properties
	Hani Naguib, Professor, University of Toronto
9:30 am - 10:00 am	Design of nanoscale polymeric building blocks for high efficiency separation problems
	Sadhan Jana, Professor, University of Akron
10:00 am - 10:30 am	Innovative Nano-fibril Technology

10:30 am - 11:00 am	Chul Park, Distinguished Professor, University of Toronto The Development of Novel Thermoplastic Composite Materials for Use in Additive Manufacturing
11:00 am - 11:30 am	Don Baird, Alexander F. Giacco Professor of Chemical Engineering, Virginia Tech Sustainable Plastics and the Center for Bioplastics and Biocomposites David Grewell, Professor, Iowa State University