

Thursday Morning

8:00 am - 11:00 am	**TH1-Electrical & Electronic and Advanced Energy(Moderator: Wei Zhao)-Room S320A**
8:00 am - 8:30 am	One-step Electrochemical Treatment of Metal Inserts for Tight Polymer-Metal Hybrid Applications Tobias Kleffel, Institute of Polymer Technology
8:30 am - 9:00 am	Effects of processing variables on crystallization phases of P(VDF-TrFE-CFE) thin films hao pan, Umass-lowell
9:00 am - 9:30 am	NEW TRANSPARENT HIGH HEAT POLYCARBONATE COPOLYMER RESINS FOR THERMO-OPTICAL APPLICATIONS Mark van der Mee, SABIC
9:30 am - 10:00 am	High Temperature Dielectric Film Matthew Niemeyer, Chief Scientist, SABIC
10:00 am - 10:30 am	HIGHLY FILLED BIOCHAR/ULTRA-HIGH MOLECULAR WEIGHT POLYETHYLENE/LINEAR LOW DENSITY POLYETHYLENE COMPOSITES FOR ELECTROMAGNETIC INTERFERENCE SHIELDING Suiyi Li, Visiting Scholar, UW-Madison
10:30 am - 11:00 am	Thermoelectric Properties of Open Cellular Polymer Templates Coated With 1D and 2D Carbon-Based Nanoparticles Siu Ning (Sunny) Leung, York University
8:00 am - 11:30 am	**TH2-Automotive: Design & Applications(Moderator: Norm Kakarala)-Room S320E**
8:00 am - 8:30 am	*KEYNOTE-Intelligent Automotive Design with Plastics* Jeff Helms, Celanese
8:30 am - 9:00 am	Innovations in Automotive Plastics “Applications” Suresh Shah, Delphi -Retired
9:00 am - 9:30 am	Chemical Resistance of PMMA, ASA and ASA+PC for Automotive Exterior Trim

	Applications Tom Pickett, SPE Automotive
9:30 am - 10:00 am	Recycled and Waste Materials in Selected Automotive Applications Karnik Tarverdi, Director of Extrusion Technology, Brunel University London
10:00 am - 10:30 am	Hybrid Pedestrian-Safe Solution for the Automotive Industry Dinesh Munjurulimana, SABIC
10:30 am - 11:00 am	AERODYNAMIC OPTIMIZATION OF A DAY-CAB FAIRING carlos pereira, SABIC
11:00 am - 11:30 am	Computational Modeling of Impedance Tube and Validation for Tuning the Acoustic Transmission Loss of Polymeric Materials Vasudev Nilajkar, SABIC
7:30 am - 11:30 am	**TH3-Composites: Processing and Properties, Natural and Biobased Composites(Moderators: John Busel and Richie Anfinsen)-Room S320D**
7:30 am - 8:00 am	Damange Induced Surface Texturing of Short Fiber PDMS Composite Materials Navid Namdari, Ph.D Student, University of Toledo
8:00 am - 8:30 am	The influence of hygrothermal aging on the material properties of endless fiber-reinforced thermoplastics Matthias Huettner, Paderborn University
8:30 am - 9:00 am	INFLUENCE OF THE FIBER-MATRIX-INTERACTION ON THE FRACTURE BEHAVIOR OF REGENERATED CELLULOSE FIBER REINFORCED POLYPROPYLENE Jan-Christoph Zarges, University of Kassel
9:00 am - 9:30 am	Effect of Freeze-Drying on the Morphology of Dried Cellulose Nanocrystals (CNCs) and Tensile Properties of Poly(lactic) Acid-CNC Composites Nicole Stark, USDA Forest Service, Forest Products Lab
9:30 am - 10:00 am	Effects of Tris(nonylphenyl) Phostite on Mechanical Property of Poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) Takashi Kuboki, University of Western Ontario
10:00 am - 10:30 am	Potential of Biocarbon as Reinforcement for PBT in Automotive Applications Boon Peng Chang, University of Guelph
10:30 am - 11:00 am	CRYSTALLIZATION BEHAVIOR OF POLY(LACTIC ACID) COMPOSITE NANOFIBERS BY ANNEALING Jian-hua Hou, Zhengzhou University
7:30 am - 11:30 am	**TH4-Composites: Composites Industrial Session(Moderators: Rich Caruso, Steve Bassetti and Jim Griffing)-Room S321**
7:30 am - 8:15 am	*KEYNOTE: An Overview of the NIST FIBERS Roadmap -- Mapping the Course to Advance Composites Manufacturing in the U.S.* Jim Sherwood, Associate Dean for Graduate Studies, UMass Lowell
8:15 am - 8:30 am	Questions, Discussions and SPE CD Awards
8:30 am - 9:00 am	Stiffer is Better: The Case for Carbon Fiber Filled Thermoplastics Philip Schell, Executive Vice President, Carbon Fiber , Zoltek

9:00 am - 9:30 am	A Novel High Performance Chopped Strand Glass Fiber for Reinforcing Polypropylene - ThermoFlow® 641 Derek Bristol, Research Associate, Johns Manville
9:30 am - 10:00 am	BioComposites: Design, Testing, and Engineering Trey Riddle, CEO, Sunstrand LLC
10:00 am - 10:30 am	Fundamentals and emerging technologies of fiber sizing and interfacial adhesion Steve Bassetti, Group Marketing Director, Michelman
10:30 am - 11:00 am	An Introduction to Mafic and Basalt Fiber Jeff Thompson, Head of Sales and Marketing , Mafic
11:00 am - 11:30 am	Affordable recycled carbon fiber for additive manufacturing (3D printing) and automotive thermoplastics Andrew Maxey, CEO, Vartega
8:00 am - 11:00 am	**TH5-Decorating and Assembly(Moderator: Chris DeMell)-Room S322**
8:00 am - 8:30 am	Digital Printing Technologies for Plastics – Focus on Color Inkjet and Laser Marking Scott Sabreen, The Sabreen Group
8:30 am - 9:00 am	Robotic use in Pad Printing Micah Swett, Diversified Printing Techniques
9:00 am - 9:30 am	Digital Inkjet for Direct to Object Printing Ben Adner, InkCups
9:30 am - 10:00 am	Applications for low energy ebeam curing technology in consumer product flexible packaging applications Anthony Carignano, eBeam Technologies
10:00 am - 10:30 am	CARBON BLACK SELECTION FOR SUCCESSFUL THROUGH TRANSMISSION LASER WELDING AND JOINING Scott Sabreen, The Sabreen Group Avraham Benatar, Associate Professor, The Ohio State University
10:30 am - 11:00 am	EFFECTS OF SURFACE TREATMENT ON HARD TO BOND PLASTICS Matthew Miner, Henkel
8:00 am - 11:30 am	**TH6-Flexible Packaging: Film Manufacturing, Treatment and Performance(Moderator: David Constant)-Room S320B**
8:00 am - 8:30 am	*KEYNOTE-All Encompassing Extrusion Technology for Producing a Wide Spectrum of Simultaneously Bioriented Films* Adolfo Edgar, Kuhne Anlagenbau GmbH
8:30 am - 9:00 am	*KEYNOTE:Transportation and Storage Film* Tom Stalun, Sr. Market Development Manager for Flexible Packaging, Sabic
9:00 am - 9:30 am	*KEYNOTE:New Surface Treatment Protocol Discovery for Extrusion Coating* Rory Wolf, Business Unit Manager, ITW Pillar Technologies
9:30 am - 10:00 am	Changeover time for a lab-scale blown film line Christopher Thurber, Senior Engineer, The Dow Chemical Company
10:00 am - 10:30 am	Biaxially Oriented Polyethylene (BOPE) Films Fabricated via Tenter Frame Process and

	Applications Thereof Lin Yijian, Dow
10:30 am - 11:00 am	Biaxially Oriented Barrier Film (BOPP) with Nanostructured Additives Krishnamurthy Jayaraman, Professor and a Withrow Distinguished Scholar, Michigan State University
11:00 am - 11:30 am	Method to measure oxygen permeance in sealed flexible packaging Alejandro Serna, ICIPC
8:00 am - 11:30 am	**TH7-Injection Molding: Simulations(Moderator: David Okonski)-Room S320H**
8:00 am - 8:30 am	DEFORMATION AND STRESS PREDICTION OF INJECTION MOLDED COMPONENTS AFTER BEING MOUNTED INTO DESIGNED POSITION Zhiliang Fan, Senior Principal Research Engineer, Moldflow R&D Center, Autodesk
8:30 am - 9:00 am	MOLDFLOW OPTIMIZATION OF MICRO-CAVITIES FILLING DURING INJECTION MOLDING PROCESS John Coulter, Lehigh univeristy
9:00 am - 9:30 am	DEEP LEARNING ON CAE BASED ON THE INTEGRATION OF THE TAGUCHI METHOD AND NEURAL NETWORK Yu-Wei Chen, Postdoctoral Researcher, Chung Yuan Christian University
9:30 am - 10:00 am	How to use CAE to Diagnose the Under-performance Problem of the Existed Machine in Injection Molding to Face Automation Challenge Chao-Tsai Huang, Assistant Professor, Tamkang University
10:00 am - 10:30 am	Using New Anisotropic Rotational Diffusion Model To Improve Prediction of Short Fibers In Thermoplastic Injection Molding Alexander Bakharev, Autodesk
10:30 am - 11:00 am	Empirical Modeling and Simulation of the microstructure replication in injection molding Torben Fischer, Chief Engineer and Deputy Director , Institute of Plastics Processing (IKV) at RWTH Aachen University
11:00 am - 11:30 am	Simulation Study of Injection Compression Moulding Process for a 0.6mm Thin Polymeric Microfluidic Chip Ge Chen, Singapore Institute of Manufacturing Technology
8:00 am - 11:30 am	**TH8-Mold Technologies Session(Moderator: Brenda Clark)-Room S320F**
8:00 am - 8:30 am	*KEYNOTE: The Evolving and Involving Role of the Toolmaker* John Berg, Director of Marketing, Sussex IM
8:30 am - 9:00 am	*PLENARY:Research Credits for the Plastics Industry* Michael Devereux, CPA, Mueller Prost CPAs + Business Advisors
9:00 am - 9:30 am	EFFECT OF DIFFERENT MOLD COATINGS ON FLOW RESISTANCE IN THIN-WALL INJECTION MOLDING OF POLYSTYRENE PARTS Marco Sorgato, Researcher in Micro Manufacturing Engineering, University of Padova
9:30 am - 10:00 am	HD Plastics™: Roctool Material Characterizations Steven Verschaeve, Vice President of Business Development, Roctool

10:00 am - 10:30 am	Standardized Components Economically in Large Molds Brenda Clark, Hasco
10:30 am - 11:00 am	Advantages of CT Scanning for Industrial Applications Melissa Butrie, Business Development, 3D ProScan
11:00 am - 11:30 am	Change Molds for Efficient Customer Development / Prototype Tom Worcester, Managing Director of Sales, Meusburger USA
8:00 am - 11:30 am	**TH9-Thermoplastic Materials and Foams: Fundamentals(Moderator:Anson Wong)-Room S320G**
8:00 am - 8:30 am	Effect of foam density on elastomeric nanocomposite foams based on polyisoprene rubber Ali Vahidifar, Assistant Professor, University of Bonab
8:30 am - 9:00 am	Effect of Soft Segments and Nucleation Agents on the Properties of Thermoplastic Polyurethane Foam Shu-Kai Yeh, National Taiwan University of Science and Technology
9:00 am - 9:30 am	Theoretical and Experimental Investigation of Bubble Growth in High-Pressure Foam Injection Molding Chongda Wang, University of Toronto
9:30 am - 10:00 am	STRAIN HARDENING OF LINEAR POLYMER ENHANCED BY HEAT SHRINKING FIBERS Sundong Kim, University of Vermont
10:00 am - 10:30 am	IN-SITU VISUALIZATION OF CRYSTAL NUCLEATION AND GROWTH BEHAVIORS OF POLYLACTIC-ACID (PLA) UNDER HIGH PRESSURE CO2 sandra romero, UVM
10:30 am - 11:00 am	In-situ PP/PET nano-fibrillated composites: the effect of viscosity ratio on fibrillation and foaming behavior Chongxiang Zhao, University of Toronto
11:00 am - 11:30 am	Modeling of Cell Growth Effects on the Percolation Threshold of Rod-like Fillers in Conductive Polymer Composite Foams Chul Park, University of Toronto
8:00 am - 12:00 pm	**TH10-Technical Marketing: Materials I(Moderator: Joe Golba)-Room S320C**
8:00 am - 8:30 am	Impact PP Copolymers for Home Appliance Applications Timothy Farrell, SABIC
8:30 am - 9:00 am	THERMOPLASTIC HEATSINK SOLUTION FOR LED LUMINAIRE Remesh Kuzhikkali, Lead Scientist, SABIC
9:00 am - 9:30 am	Wearable Insulin Pumps: Design and Everyday Use Performance Prediction Hossam Metwally, Principal Engineer , ANSYS Inc.
9:30 am - 10:00 am	A novel design of functionalized Organo-Modified Siloxanes for surface treatment of particles and fillers Ido Offenbach, Evonik
10:00 am - 10:30 am	Automotive Lightweighting with Reduced Density Polyamide Blends Ying Shi, A. Schulman Inc

10:30 am - 11:00 am	XENOYtm ENH2900 for high chemical resistance & Non-Br/Cl FR applications Emily He, SABIC
11:00 am - 11:30 am	Rheology and Big Data Tim Haake, GOETTFERT
11:30 am - 12:00 pm	Realistic Simulation solutions using FEA for Design, Optimization, and fabrication of Plastics Arindam Chakraborty, VP of Advanced Engineering, Virtual Integrated Analytics Solutions