7:00-8:10 **Registration & Continental Breakfast:** **Breakfast Sponsored by Moxietec**

8:10-8:25 **Opening Remarks (Auditorium):** David Okonski, General Motors, Conference Chair

8:25-8:40 **Conference Executive Chair:** Royal Lovingfoss, National Center for Advanced Material Performance, National Institute for Aviation Research

8:40-8:45 **Technical Program Overview:** Sandra McClelland, Solvay Materials, Conference Technical Chair

8:45-9:10 **KEYNOTE: Tale of Market Dualities**
SPEAKER: Joe Langley, Associate Director & Edwin Pope, Principal Analyst, IHS Markit

	I. Additive Manufacturing	II. Sustainability	III. Award Winning Applications	IV. Materials
9:20 - 9:45	Cost and Sustainability Comparison of Injection Molding With 3D and Injection Printing	Plastic Waste Managment Alternatives	Ford Transit Lightweight, Structural Mirror Housing Bracket	High Performance Polyamides for Today's Emerging Applications
	David Kazmer UMASS LOWEL	Kathy Minnich FORD MOTOR COMPANY RETIREE	Patti Tibbenham FORD MOTOR COMPANY Ricardo Mercado - BASF CORP	Gregory Beach EMS-GRIVORY
9:45 - 10:10	Liquid Crystalline Polymer Reinforced Wholly Thermoplastic Composites	End of life Automobile Recycling	The Jeep Grand Cherokee Composite Tunnel Reinforcement - A lighter, stronger solution to a High Strength Metal Assembly	Advantages of Polyamide Blends
	Cailean Pritchard VIRGINIA TECH	Kari Bliss PADNOS	Christopher Korson BASF CORP	Bryan Hildenbrand LYONDELLBASELL
10:10 - 10:35	3D Printing From SKY to Drive	LANXESS Sustainable Durethan Polyamide and POCAN Materials	Cost Effective Application of Injection Molded CFR Composites in High Volume Production	Novel Polyamide Solution for Damping Enhancement in Anti Vibration Structural Applications
	Walter Thompson SABIC	Dan Knapp LANXESS	Jason Schultz STELLANTIS	Bradley Sparks ASCEND PERFORMANCE MATERIALS
10:35 - 11:00	**Break Sponsored by Solvay**			
11:00 - 11:25	PPG ARE 3D Printing Materials	Duranex 330LW - Laser Weldable PBT, Durafide 616A7S Low Swell PPS and Duracon Sustainable POM	Rassini's Innovative Journey to HP-RTM Manufacturing	Thick Structurally Robust InjectionMolded Thermoplastic Foams
	Cindy Kutcho PPG	Ted Largent POLYPLASTICS	Reyes Baeza RASSINI	Alicyn Rhoades MOXITEC
11:25 - 11:50	Advancements of Photopolymer Resins for Aditive Manufacturing	Polyamide 11: An Advanced Bio-Circular Material for the Automotive Industry	Creamid S Semi-Aromatic Polyamides for Fan Disk Application	Emotional Materials for Automotive Interior/ Exterior Parts
	Brian Durand LOCTITE	Rob Kaminsky ARKEMA	Tariq Oweinreen TEKNOR APEX	DoYoung Bae SAMYANG CORP
11:50 - 12:20	**KEYNOTE: The Rapidly Disappearing ICE Age** **SPEAKER:** Sandy Munro, CEO, Munro and Associates			
12:20 - 1:20	**Lunch**			

	Salon A	Salon B	Dennison Salon	Salon C
	V. Additive Manufacturing page 21	VI. Sustainability page 25	VII. Electrification and Autonomous - page 27	VIII. Aerospace to Automotive - page 32
1:20 - 1:45	Fused Filament Fabrication vs Fused Granulate Fabrication (Direct Pellet Printing)	Application of Low-Cost Reclaimed Carbon Fiber Composites in Lightweight and Structural Automotive Parts	New Design for Electric Vechicle Charging Inlet	What the Automotive Industry Can Learn From Thermoplastic Solutions for Flammability and ToxicityRequirements in the Aerospace Industry
	Gregory Costantino COVESTRO ADDITIVE MFG. Zac DiVencenzo JUGGERBOT 3D	Birat KC UNIVERSITY of TORONTO	Beau Bacho LANXESS	Sebastian Alvarez, Colette Brunner SOLVAY
1:45 - 2:10	Charging Up With Additive Manufacturing	Solving BSR Issues With Non-PTFE Lubricated Compounds	PEI Based Thermoplastic Resin Lenses for Automotive LIDAR	What the Automotive Industry Can Learn from High-rate Manufacturing of Thermoplastic Aerospace Structure
	Fadi Abro STRATASYS	Ed Williams SABIC	Somasekhar Bobba Venkat SABIC	Trevor McCrea SOLVAY
2:10 - 2:35	Precision Metal 3DPrinting: A New Opportunity for Moldmakers and Molders	Bio-Based Engineering Plastics for Automotive Applications	New Innovations in V-0 Flame Resistant (PA66/6i) (PA66&PA6) and (PPE/PS) Grades for Electrified Drive and Battery Systems	Enabling Technologies and Future Direction for Increasing Composite Part Throughput From Aerospace to Low-Volume Automotive & Advanced Air Mobility Levels
	Paul DiLaura MANTLE INC	Kanatani Keiichiro MITSUBISHI CHEMICAL AMERICA	Jun Mikami ASAHI KASEI PLASTICS NA	Adrian Ohlfs TORAY COMPOSITES MATERIALS AMERICA
2:35 - 3:00	**Break Sponsored by Pinfa**			
3:00 - 3:30	**KEYNOTE: How Composites May Play a Role in Future Mobility** **SPEAKER:** Carla Bailo, CEO, Center for Automotive Research			
3:30 - 4:00	Panel Discussion: How and When to Choose an AM Solution *Panelists:* AM Materials: Rebecca Fecteau, Head of Sales, BASF 3D Printing Solutions NA AM Hardware: Fadi Abro, Director of Auto Business, Stratasys AM Printing Services: Charlie Wood, Senior Director of R&D, Fast Radius AM Design: David Kazmer, Professor, UMass Lowell	Beyond Pellet: Custom Compounding Enabler Sustainability	Novel Carbon Additive for High Performance EMI Shielding Materials	Automotive to Aerospace - Scalable Compression Molding
		Nick Sandland TEKNOR APEX	Limeng Chen CABOT CORPORATION	Jeffery Simek RCO ENGINEERING & RCO AEROSPACE
4:00 - 4:30		Additive Manufacturing of Recycled Carbon Fiber Reinforced Polyphenylene Sulfide for Lightweight Automotive Component	Emerging Technologies for Thermoplastics	Aerospace Thermoplastics - a Transformational Opportunity for Automotive
	Moderator: Pete Zelinski Editor in Chief Additive Mfg. Magazine	Mohammad Moin Garmabi UNIVERSITY of TORONTO	Greg Shoup ALLEGHENY PERFORMANCE PLASTICS	Scott James SEKISUI AEROSPACE
4:30 - 6:00	**Networking Reception: Sponsored by SPE Detroit Section, Injection Molding Division & Additive Manufacturing Section**			