

- 7:00-8:15 Registration & Continental Breakfast
- 8:20-8:35 Opening Remarks(Auditorium): David Okonski, General Motors, Conference Chair
- 8:35-9:05 **Conference Executive Chair and Keynote:** Ankil Shah, Vice President for Material Engineering and Performance Analysis and Evaluation, Toyota Motor North America R&D
- 9:05-9:15 Technical Program Overview: Sandra McClelland, Conference Technical Chair
- 9:15-9:25 Student Poster Session
- 9:25-9:40 Break

9:25-9:40	Dieak		
	Salon A	Salon B	Salon C
	I. Additive Manufacturing page 11	<b>II. Sustainability</b> page 13	III. Simulation page 16
9:40 - 10:05	Optimizing Additive Mold Inserts with Simulation	Enabling Circularity: Mono-material Design for Automotive Applications	Lightweighting – Simulating the weight reduction strategies to enhance fuel economy
	Jeffrey Higgins AUTODESK	David Schmitz EVONIK CORPORATION	Anand Bora MOLDEX3D NORTHERN AMERICA, INC.
10:05 - 10:30	Additive Manufactured Continuous Carbon Fiber Reinforced Thermoset Composites	Diminishing Boundary Between Fossil-Based and Sustainable ABS	Successful Metal Replacement with Advanced CAE-Simulations
	Chad Ulven NORTH DAKOTA STATE UNIVERSITY	Tom Chu ELIX POLYMERS	Bernd Henkelmann, RADICI HIGH PERFORMANCE POLYMERS
10:30 - 10:55	Liquid Crystalline Polymer Reinforced Wholly Thermoplastic Composites	HellermannTyton Expands Recycled Product Portfolio with Ocean Plastic for Automotive Parts	Injection Molding Simulation: What Can I Trust?
	Cailean Pritchard VIRGINIA TECH	Anisia Peterman, HELLERMANN TYTON Luis Giraldez, HELLERMANN TYTON	Jennifer Schmidt AIM INSTITUTE
10:55 - 11:20	Break sponsored by Solvay		
11:20 - 11:45	PANEL: The use of Additive Manufacturing in the Automotive Industry, from the Shop Floor to Production	Sustainable Solutions for Lightweighting in EV and IC Engine Vehicle Structures	Break your limits - The Development of Foam Injected Molding Parts by using Simulation and its Optimization
		Somasker Bobba Venkat SABIC	Christoph Hinse SIMPATEC INC.
11:45 - 12:10	Moderator: David Tucker, New Wave Mfg/Implement AM; Panelist: Sophie Dower, Carbon; Prof. Michael Bortner, VA Tech; Jay Haubenstricker, Ford Motor	Closed Loop Recycling of High Performance Fiber Reinforced Polyphthalamide	Plastic Part Shrinkage Compensation Workflows within Injection Molding Simulation Software
	Company; Andrew Roderick, Extol; Brent Ewald, Autodesk; Joe Staperfenne, Stratasys	Morgan Chamberlain PURDUE UNIVERSITY	Timothy VanAst AUTODESK
12:10 - 1:00		Lunch	

1:00 - **KEYNOTE:** EV Impossible: North American light vehicle production outlook

1:30 SPEAKER: Joe Langley, Associate Director S&P Global

1:30 -	of Lindex, oue Langley, insolate Director Ser Global			
1:40	Break			
	Salon A	Salon B	Salon C	
	IV. Materials page 18	V. Flame Retardant Materials for E-Mobility	VII. Electrification page 24	
		page 20		
1:40 - 2:05	Laser Marking and Laser Welding the Automotive Plastics PA6, PA66 and ABS	Novel Polyamide compounds for Structural & Flame Retardant applications in E-Mobility	Using High Performance Polymers to Improve Fuel Cell Efficiency	
	Benjamin Campbell ROBERT MORRIS UNIVERSITY	Jeremy Berger ASAHI KASEI	Gill Biesold SOLVAY	
2:05 - 2:30	Advanced Material Qualification and Repair	Flame Retardant Automotive Parts: Materials Make The Difference!	Enabling Technologies for Automotive LED Thick Lens Molding	
	Royal Lovingfoss NIAR-WSU	Derek LaRock RTP COMPANY	Brian Guinn VALEO LIGHTING SYSTEMS	
2:30 - 2:50	Break			
2:50 - 3:05	Student Recognition and Awards			
3:05 - 3:35	<b>KEYNOTE: For EVs, the Word is Plastic</b> <b>SPEAKER:</b> Sandy Munro, CEO Munro and Associates			
3:35 - 3:40	Break			
3:40 - 4:05	Development of Automotive Grade Carbon Fiber Composite Performance Standards	Drip Suppressants in Halogen Free Flame Retardant Systems	New Materials for the Continuously Evolving Automotive Market	
	Brian Knouff OAK RIDGE NATIONAL LABS	Maggie Baumann PERFORMANCE POLYMERS AND ADDITIVES LLC	Doug Thornhill EMS-GRIVORY	
4:05 - 4:30	Lower-cost high-performance carbon fiber materials through valorization of asphaltene waste	Engineering Plastics for the Future: Materials to Meet Demands	Thermoplastic Composite Injection Overmolding	
	Yasmine Abdin UNIVERSITY OF BRITISH COLUMBIA	Mark Elkovitch TEKNOR APEX	Tanner Alauzen ALLEGHENY PERFORMANCE PLASTICS	
4:30 - 4:50	COC: Modifier for Polyolifins	Polyamide 6 Recycling from Waste Fishing Net		
	Mitchell Baker POLYPLASTICS	Jaehyun Chang SAMYANG CORPORATION		
4:45 - 5:00		Reception: Sponsored by SPE Det ling Division & Additive Manufac		