

SIAT 2024 PROGRAMME SCHEDULE: VERSION 2



																						Progress through Rese	earch
		т.	DA uesday, 23rd	Y 1 Manuary 20	024					We		Y 2 th January 2	0024					TH	D <i>A</i> nursday, 25t	Y 3 h. January 20	n24		
			-	tration	U24						Morni (9:00 to	ng Tea 9:30 hrs) ARAI and BMW						"	Morni (9:00 to	ing Tea 9:30 hrs) by HDFC Bank)	02 - 4		
				9:45 hrs)								Session III 11:00 hrs)								Session VI 11:00 hrs)			
								Hall - 1	Hall - 2	Hall - 3	Hall - 4	Hall - 5	Hall - 6	Hall - 7	Hall - 8	Hall - 1	Hall - 2	Hall - 3	Hall - 4	Hall - 5	Hall - 6	Hall - 7	Hall - 8
								Session 17	Session 18	Session 19	Session 20	Session 21	Session 22	Session 23	Session 24	Session 41	Session 42	Session 43	Session 44	Session 45	Session 46	Session 47	Session 4
			(9:00 to 9	ing Tea .45:00 hrs)				KEYNOTE	NO KEYNOTE	KEYNOTE	KEYNOTE	KEYNOTE	NO KEYNOTE	KEYNOTE	KEYNOTE	KEYNOTE	NO KEYNOTE	NO KEYNOTE	KEYNOTE	KEYNOTE	KEYNOTE	KEYNOTE	KEYNOT
			(Sponsored by	Bank of Barod	la)			Dr. Amitab Saran (Altigreen)	NO KEYNOTE	Mr. Kiran Mulukutla (FEV)	Mr. Amardeep Singh (Maruti Suzuki)	Mr. Anil Kumar (TATA Motors Limited)	NO KEYNOTE	Mr.Alfred Nixon Mendez (Ashok Leyland)	Dr. Krishna (KOEL)	(Dassult Systems) NO KEYNOTE NO KEYNOTE (Ashok Levland) (Seattle Safety) (Altair) Pandey				Mr. Ramashankar Pandey (Tata Green Battery	Mr. S A Sundaresha (Ashok Leyla		
			Plenary	Session 1				E-mobility (3) Simulation and Modeling (3) Alternative Fuels (2) Advanced Vehicle Dynamics (2) Active and Passive Safety (2) Noise, Vibration & Harshness (NVH) (3) (1) Testing & Evaluation (3) (3)					Materials & Manufacturing (2)	Simulation and Modeling (6)	Alternative Fuels (3)	(2)	Active and Passive Safety (3)	Noise, Vibration & Harshness (NVH) (5)	Automotive Lighting (1)	Testing & Eval			
		(10.00	to 11.30 hrs		ain Hall)			2024-26-0121	2024-26-0305	2024-26-0077	TECHNIC/ 2024-26-0048	2024-26-0008	2024-26-0211	2024-26-0383	2024-26-0327	2024-26-0190	2024-26-0239	2024-26-0074	2024-26-0382	AL PAPERS 2024-26-0012	2024-26-0210	2024-26-0082	2024-26-03
								2024-26-0132 2024-26-0095	2024-26-0255 2024-26-0257 2024-26-0280	2024-26-0072 2024-26-0076	2024-26-0050 2024-26-0053	2024-26-0014 2024-26-0006	2024-26-0199 2024-26-0230 2024-26-0125	2024-26-0385 2024-26-0381	2024-26-0337 2024-26-0353	2024-26-0187 2024-26-0174 2024-26-0228	2024-26-0268 2024-26-0313 2024-26-0301	2024-26-0078 2024-26-0081 2024-26-0079	2024-26-0386 2024-26-0387	2024-26-0011 2024-26-0016	2024-26-0067 2024-26-0208	2024-26-0083 2024-26-0084	2024-26-03 2024-26-03
	Inaugural Function (11.45 to 13:00 hrs) (Venue: Main Hall)									(11:15 1		Session 2 (Venue: Ma	ain Hall)					(11:15	Plenary to 13:00 hrs	Session 3) (Venue: Ma	ain Hall)		
	Networking Lunch (13:00 to 14:00 hrs) (Sponsored by Kirloskar Oil Engines Limited)										Network (13:00 to	ng Lunch 14:00 hrs)								ing Lunch 14:00 hrs)			
				l Session I 16:00 hrs)							Technical (14:00 to	Session IV 16:00 hrs)											
Hall - 1	Hall - 2	Hall - 3	Hall - 4	Hall - 5	Hall - 6	Hall - 7	Hall - 8	Hall - 1	Hall - 2	Hall - 3	Hall - 4	Hall - 5	Hall - 6	Hall - 7	Hall - 8								
Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Session 7	Session 8	Session 25	Session 26	Session 27	Session 28	Session 29	Session 30	Session 31	Session 32	Panel discussion (14:00-15:00 hrs)							
KEYNOTE	KEYNOTE	KEYNOTE	KEYNOTE	KEYNOTE	KEYNOTE	NO KEYNOTE	KEYNOTE	KEYNOTE	NO KEYNOTE	KEYNOTE	NO KEYNOTE	NO KEYNOTE	NO KEYNOTE	NO KEYNOTE	KEYNOTE	(14.00-13.00 1115)							
Dan Zethraeus (Elonroad)	Ms. Ines Lama (Applus+ IDIADA)	Mr.Andreas Geisselmann (Umicore)	Mr. Chinmay Pawaskar (Tech-M)	Mr. Laxman Malshetty (Skoda)	Mr. Steven Dom (Siemens)	NO KEYNOTE	Mr. Narayan Jadhav (TATA Motors Limited)	Dr. Prabhakar Patil (Ex-LGChem)	NO KEYNOTE	Mr. Mahesh P (Ashok Leyland)	NO KEYNOTE	NO KEYNOTE	NO KEYNOTE	NO KEYNOTE	Mr. Ramnik Singh (Gamma Technologies)								
E-mobility (1)	Simulation and Modeling (1)	Emission Measurement & Control Technology (1)	Advanced Vehicle Dynamics (1)	Active and Passive Safety (1)	e Noise, Vibration & Harshness (NVH) (1)	Hydrogen Fuel Cell and Hydrogen I.C. Engine (1)		E-mobility (4)	Simulation and Modeling (4)	Emission Measurement & Control Technology (2)	Advanced Vehicle Dynamics (3)	CV & Agriculture Tractors (1)	Advanced Powertrain Technology (1)	Hydrogen Fuel Cell and Hydrogen I.C. Engine (2)	Testing & Evaluation (4)				Walasha a				
024-26-0092	2024-26-0343	2024-26-0156	2024-26-0060	AL PAPERS 2024-26-0004	2024-26-0224	2024-26-0180	2024-26-0318	2024-26-0130	2024-26-0269	2024-26-0148	TECHNICA 2024-26-0051	2024-26-0063	2024-26-0040	2024-26-0172	2024-26-0331			(15:00	to 16:30 hrs	ry Function) (Venue: Ma			
024-26-0103 024-26-0100 024-26-0114	2024-26-0288 2024-26-0252 2024-26-0294	2024-26-0158 2024-26-0161 2024-26-0345	2024-26-0056 2024-26-0059 2024-26-0052	2024-26-0010 2024-26-0019 2024-26-0003	2024-26-0216 2024-26-0222 2024-26-0215	2024-26-0171 2024-26-0254 2024-26-0146 2024-26-0176	2024-26-0373 2024-26-0344 2024-26-0371	2024-26-0096 2024-26-0134 2024-26-0119	2024-26-0244 2024-26-0270 2024-26-0258 2024-26-0287	2024-26-0140 2024-26-0150 2024-26-0159	2024-26-0054 2024-26-0058 2024-26-0274 2024-26-0049	2024-26-0068 2024-26-0089 2024-26-0069 2024-26-0065	2024-26-0046 2024-26-0042 2024-26-0324 2024-26-0091	2024-26-0173 2024-26-0166 2024-26-0179 2024-26-0170	2024-26-0352 2024-26-0278 2024-26-0350								
			(16:00 to	ng Tea 16:30 hrs) by SML Isuzu)				2024-26-0287 2024-26-0049 2024-26-0065 2024-26-0091 2024-26-0170 Evening Tea						Evening Tea (16:30 to 17:00 hrs)									
			Technical	Sessions II 18:00 hrs)							Technical	Session V 18:00 hrs)											
Hall - 1	Hall - 2	Hall - 3	Hall - 4	Hall - 5	Hall - 6	Hall - 7	Hall - 8	Hall - 1	Hall - 2	Hall - 3	Hall - 4	Hall - 5	Hall - 6	Hall - 7	Hall - 8								
ession9	Session 10	Session 11	Session 12	Session 13	Session 14	Session 15	Session 16	Session 33	Session 34	Session 35	Session 36	Session 37	Session 38	Session 39	Session 40								
Dr. Dhinagar	KEYNOTE Mr. Nitin Badhe (Altair)	Mr. Koushik (bosch)	Mr. Suyog Panse (TATA Motors	Mr.Girikumar Kumaresh (bosch)	Dr. Niraj Kumar Jha	Mr. Joonas Sokka (EFlexFuel)	Mr. P.K. Banerjee (SIAM) Mr. P S Gowrishankar	KEYNOTE Dr. Julien Plet (Motul)	KEYNOTE Mr. Abhijit Londhe (Mahindra)	KEYNOTE Dr. Jyotirmoy Barman	Mr. Kamal Suhalka	KEYNOTE Mr. Martin Fritz (4A)	KEYNOTE Dr. Rabah Hadjit (ESI)	NO KEYNOTE	NO KEYNOTE								
•			Limited)	Advanced Driver			(TATA Motors Limited)		, ,	(Simpson) Advanced	(CEAT)	Advanced Driver	, ,	Materials 0		Dispersal							
E-mobility (2)	Simulation and Modeling (2)	Testing & Evaluation (2)	(1)	Assistance System (ADAS) (1)) ITS & Regulation	E-mobility (5)	Simulation and Modeling (5)	Powertrain Technology (2)		Assistance Systems (ADAS) (2)	Noise, Vibration & Harshness (NVH) (4)	Materials & Manufacturing (1)	Testing & Evaluation (5)								
024-26-0097 024-26-0133 024-26-0117	2024-26-0120 2024-26-0249 2024-26-0272	2024-26-0342 2024-26-0348 2024-26-0361	2024-26-0323 2024-26-0321 2024-26-0322	2024-26-0025 2024-26-0020 2024-26-0027	2024-26-0207 2024-26-0204 2024-26-0213	2024-26-0080 2024-26-0155 2024-26-0152	2024-26-0165 2024-26-0184	2024-26-0094 2024-26-0332 2024-26-0102	2024-26-0315 2024-26-0311 2024-26-0263	2024-26-0036 2024-26-0038 2024-26-0039	2024-26-0377 2024-26-0375 2024-26-0358	2024-26-0028 2024-26-0026 2024-26-0030 2024-26-0087	2024-26-0218 2024-26-0206 2024-26-0221 2024-26-0212	2024-26-0192 2024-26-0194 2024-26-0186 2024-26-0193	2024-26-0359 2024-26-0363 2024-26-0354 2024-26-0335								
				SIAT Expo 19:00 hrs)				Visit to SIAT Expo															
		Cultural	Program Spons	•	edes-Benz			(18:00 to 19:00 hrs)End of day 2															
			Networki	ing Dinner - Onwards)																			
EDIA PART	NED	Drotesia Drotessia		Aut@.com	MotoringTre	nps	rollers.	MOBILITY	l ln	association	with S	EINDIA			With Support	From:MHI MoF	OTH MOSE Mo	DNG SIAM AC	MA TMA CIRT	VPDE			

Technical Session I

(14:00 to 16:00 hrs)

SESSIONS	Day	Hall no.	TOPIC NAME	PAPER NUMBER	PAPER TITLE	COMPANY NAME	KEYNOTE SPEAKER			
				2024-26-0092	Optimization of Charging Infrastructure for Fleet Customers	Daimler Truck				
	DAY 1			2024-26-0103	A Multistage Adaptive Charging Algorithm for Li-Ion Battery-Based EV Applications	SIMPLEENERGY PRIVATE LIMITED	Mr.Dan Zethraeus			
Session 1	Tuesday, 23rd January 2024	Hall no.1	E-mobility (1)	2024-26-0100	Study on hardware and software requirements of Heavy-Duty Electric Vehicles to support Megawatt Charging	FEV India Pvt Ltd	(Elonroad)			
				2024-26-0114	A Fast Charger for Lithium-Ion Battery Based on A Unique Current Profile Protocol	InnovMon Technologies Pvt, Ltd.				
		Hall no.2		2024-26-0343	Effectiveness of the Load Legs in Enhancing the Passive Safety of Rear-Facing Child Seats in Frontal Crash	Thorbole Simulation Technologies LLC				
Session 2	DAY 1 Tuesday, 23rd January		Simulation and Modeling (1)	2024-26-0288	Investigation of real-world crash using an accident reconstruction methodology employing crash test data	TATA Motors Limited	Ms Ines Lama			
36351011 2	2024	Hall 110.2	Simulation and Modeling (1)	2024-26-0252	A Multi-Disciplinary Optimization Approach for Lightweighting and Performance Improvement of Electric Light Commercial Vehicle	Altair Engineering	(Applus+ IDIADA)			
				2024-26-0294	The Impact of Uncertainty Quantification and Sensitivity Analysis in CAE Simulation based Regulatory Compliance	Automotive Research Association of India				
				2024-26-0156	Gasoline Particulate Filter Calibration Approach for BS6 Market	Bosch Global Software Technologies				
Session 3	DAY 1 Tuesday, 23rd January	Hall no.3	Emission Measurement & Control	2024-26-0158	Measurement & Control Methodologies of Road Side Ambient Air Emissions & Identification of New Species of Air Pollutants in Delhi / NCR	Indian Oil Corporation Limited	Andreas Geisselmann			
	2024		Technology (1)	2024-26-0345	Novel Exhaust system architecture for Petroleum Oil Tanker Application vehicle	TATA Motors Limited	(Umicore)			
				2024-26-0161	SDPF Application DOE For BS6 RDE/OBD2 using MATLAB/SGB/ETB/CDT	Umicore				
							2024-26-0060	Exploring capabilities of hydraulic actuators to achieve vehicle ride targets in frequency range beyond their operational bandwidth	Jaguar Land Rover India, Ltd.	
	DAY 1			2024-26-0056	Impact of Toe and Thrust Angle Misalignment on Roll Behaviour of a Heavy Commercial Road Vehicle	IIT Madras				
Session 4	Tuesday, 23rd January 2024	Hall no.4	Advanced Vehicle Dynamics (1)	2024-26-0059	Adopting Pothole Mitigation System for Improved Ride, Handling and Enhanced Component Life	TATA Motors Limited	Mr. Chinmay Pawaskar (Tech-M)			
				2024-26-0052	Methods to Enhance Vehicle Handling by Improving Steering on Centre Feel and Return Ability in Commercial Vehicles Equipped with Hydraulic Assisted Steering System	TATA Motors Limited				
		Hall no.5		2024-26-0004	Safer Buses for Passengers and Pedestrians: Crashes and Injury Analyses from Indian and German In-Depth Data	AUTOLIV India Pvt, Ltd.				
Session 5	DAY 1 Tuesday, 23rd January		Active and Passive Safety (1)	2024-26-0010	Prediction of Involuntary Knee Engagement on Dashboard Controls to Prevent Potential Accidents for Drivers in a Passenger Car	Mercedes Benz	Mr. Laxman Malshetty (Skoda)			
	2024		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2024-26-0019	Importance of Pole Side Impact Test for Assessment of Curtain Airbags	Automotive Research Association of India	(Skoda)			
				2024-26-0003	Seatback Failures and Human Tolerance in Severe Rear Impacts	Thorbole Simulation Technologies LLC	1			
				2024-26-0224	Electric vehicle road noise analysis through systematic virtual prototyping	Siemens				
	DAY 1		Noise, Vibration & Harshness (NVH)	2024-26-0216	Challenges in NVH refinement of electric vehicle built on ICE platform	TCS	Mr. Steven Dom			
Session 6	Tuesday, 23rd January 2024	Hall no.6	(1)	2024-26-0222	Solving Whine Noise in Electric Vehicles: A Comprehensive Study Using Experimental and Multiphysics Techniques	Mahindra & Mahindra, Ltd.	(Siemens)			
				2024-26-0215	Noise reduction on electric two wheeler by structural modification and gear design optimization	Automotive Research Association of India				
				2024-26-0180	Development challenges for Hydrogen test cell facility requirements and safety constraints	Cummins Technologies India Pvt. Ltd.				
				2024-26-0171	Optimised Air Management System for Heavy Duty Hydrogen Engines	FEV India Pvt Ltd	1			
Session 7	DAY 1 Tuesday, 23rd January	Hall no.7	Hydrogen Fuel Cell and Hydrogen I.C. Engine (1)	2024-26-0254	A Machine Learning Approach for Hydrogen Internal Combustion (H2ICE) Mixture Preparation	Volvo India Pvt, Ltd.	NO KEYNOTE			
	2024		2	2024-26-0146	Exhaust After Treatment Solution for H2-ICE for selective NOx removal in the presence of high amount of water content	BASF Catalysts India Pvt Ltd]			
				2024-26-0176	Hydrogen refilling optimizations through 1-D simulations for commercial vehicles	TATA Motors Limited]			

		DAY 1 uesday, 23rd January Hall no.8 Testing & Evaluation 2024		2024-26-0318	Development of Duty Cycle for Transmission System Components in a Two-Wheeled Electric Vehicle	Ather Energy Private Limited	
Session 8	DAY 1 Tuesday, 23rd January		Testing & Evaluation (1)	2024-26-0373	Development of methodology for accelerated validation of axle components in relation to static load capacity	Automotive Research Association of India	Mr. Narayan Jadhav
				2024-26-0344	Accelerated Lab Test facility for NRS Leaf Spring bracket for HCV Application	Ashok Leyland Ltd	(TATA Motors Limited)
				2024-26-0371	An experimental approach to investigate the FEAD cover failure & its design optimization.	Maruti Suzuki India Ltd	

					Technical Sessions II (16:30 to 18:00 hrs)											
SESSIONS	Day	Hall no.	TOPIC NAME	PAPER NUMBER	PAPER TITLE	COMPANY NAME	KEYNOTE SPEAKER									
	-			2024-26-0097	Measurement uncertainty and its influence on e-Drive optimization applications	AVL LIST GmbH										
Session9	DAY 1 Tuesday, 23rd January 2024	Hall no.1	E-mobility (2)	2024-26-0133	Comparative Analysis of Electromagnetic Radiated Emission for electric powertrain and conventional Spark Ignition (SI) powertrain	Automotive Research Association of India	Dr. Dhinagar (Ola Electric)									
	2024			2024-26-0117	Electric Powertrain - Standardization of Adaptable Software in Loop System	Bosch Global Software										
	DAY 1			2024-26-0120	Methodology Development for E-Axle NVH Performance Evaluation through Virtual Simulation	CAE										
Session 10	Tuesday, 23rd January 2024	Hall no.2	Simulation and Modeling (2)	2024-26-0249	Simulation methodology development for vibration test of Bus Body Structure code AIS 153:2018	TATA Motors Limited	Mr. Nitin Badhe (Altair)									
	2024			2024-26-0272	Predictive Underhood Thermal Management Model	Ashok Leyland Technical Center]									
	DAY 1			2024-26-0342	ePNC Diffusion-Charging Based Particle Number Counting Technology as Alternative to Condensation Particle Counting Based Methods.	Dekati, Ltd.										
Session 11	Tuesday, 23rd January	Hall no.3	Testing & Evaluation (2)	2024-26-0348	Design And Development of EGR Valve Controller for Bench Test	Research & Devlopment Institute	Mr. Koushik (Bosch)									
	2024			2024-26-0361	A Novel approach to define and validate market representative routes for IUPRm development in India.	Maruti Suzuki India Ltd	(Boscii)									
		ry Hall no.4		2024-26-0323	Reliability prediction and demonstration for wear failure mechanism	Eaton										
Session 12	DAY 1 Tuesday, 23rd January 2024		Structural Reliability (1)	2024-26-0321	New Generation Front Axle for EV and FCEV Buses.	TATA Motors Limited	Mr. Suyog Panse (TATA Motors Limited)									
	2024			2024-26-0322	Development of India specific biaxial test cycle for fatigue testing of wheel rims and wheel hub bearings for Heavy Commercial Vehicles	Automotive Research Association of India	Ý									
				2024-26-0025	Drive GPT – An Al Based Generative Driver Model	Altigreen Propulsion Labs	Mr.Girikumar Kumaresh									
Session 13	DAY 1 Tuesday, 23rd January 2024	Hall no.5	Hall no.5	Hall no.5	Hall no.5	Hall no.5	Hall no.5	Hall no.5	Hall no.5	Hall no.5	Hall no.5	Advanced Driver Assistance Systems (ADAS) (1)	2024-26-0020	Synthetic Scenario Generation from Real Road Data for Indian Specific ADAS Function Verification and Validation	Automotive Research Association of India	(Bosch)
	2024			2024-26-0027	Comprehensive Assessment of Driver Monitoring System for Commercial Vehicle Applications Using Innovative Lab Testing Approach	TATA Motors Limited										
				2024-26-0207	A Detailed Study to Evaluate Sporty Sound Character of Passenger Cars	TATA Motors Limited										
Session 14	DAY 1 Tuesday, 23rd January	Hall no.6	Noise, Vibration & Harshness (NVH)	2024-26-0204	Intelligent classification of automotive horn sound quality	IIT Hyderabad	Dr. Niraj Kumar Jha									
	2024		(2)	2024-26-0213	Implementation Of Machine Learning In Acoustics Source Detection by Leveraging Synthetic Sound Data Generation Approach	Bosch Global Software	(REML)									
				2024-26-0080	Ammonia as a Green and Zero Carbon Dioxide Internal Combustion Engine Fuel	FEV India Pvt Ltd										
Session 15	DAY 1 Tuesday, 23rd January	Hall no.7	Alternative Fuels (1)	2024-26-0155	Experimental Emission Characteristics Study of Ethanol-Gasoline Fuel Blends on a GDI Engine with a Three-Way Catalyst	Mahindra & Mahindra, Ltd.	Mr. Joonas Sokka (EFlexFuel)									
	2024		Alternative Facis (1)	2024-26-0152	Environmental and Cancer Risk Potential Assessment of Unregulated Emissions from Methanol-Diesel Dual Fuel RCCI Engine	Indian Institute Of Technology Ropar	LI IEXI UEI)									
	DAY 1			2024-26-0165	Regulatory trends for enhancement of Road Safety	Automotive Research Association of India	Mr. P.K. Banerjee (SIAM)									
Session 16	Tuesday, 23rd January 2024	Hall no.8	ITS & Regulation	2024-26-0184	Cyber Threats and its Mitigation to Intelligent Transportation System	TATA Motors Limited	Mr. P S Gowrishankar (TATA Motors Limited)									

Technical Session III

(09:30 to 11:00 hrs)

SESSIONS	Day	Hall no.	TOPIC NAME	PAPER NUMBER	(09:30 to 11:00 hrs) PAPER TITLE	COMPANY NAME	KEYNOTE SPEAKER			
22010110	Duy	nan no.	I OF TO MAINE	2024-26-0121	A Study on Traction Battery Mounting Arrangements in Different EV Buses	TATA Motors Limited	TETTI OF EATHER			
Session 17	DAY 2 Wednesday, 24th January	Hall no.1	E-mobility (3)	2024-26-0132	Study on Range Improvement Controls and Method for Electric Vehicles	TCS	Dr. Amitab Saran			
00001011 11	2024	riaii iio. i	E mosmity (o)	2024-26-0095	Adaptive EV Range Estimation and Optimization Based on Rider Demand and Terrain	SIMPLEENERGY PRIVATE LIMITED	(Altigreen)			
				2024-26-0305	Requirements A General Workflow for Static Failure Criteria and Allowable Defect Size Calculation in Presence of Defects due to Manufacturing Process and Abusive Loads	Eaton				
	DAY 2			2024-26-0255	Coupled FEM-DEM for determination of payload distribution on Tipper load body	Ashok Leyland Ltd	1			
Session 18	Wednesday, 24th January 2024	Hall no.2	Simulation and Modeling (3)	2024-26-0280	Multi-Parameter Optimization of 400V e-Compressor Motor Using Magnet Sizing and Flux Barrier Topology Using JMAG Simulation	Valeo India Pvt. Ltd.	NO KEYNOTE			
				2024-26-0257	Estimation of gear utilization and durability test specifications through Virtual Road Torque Data Collection for Light Commercial Vehicles.	TATA Motors Limited	1			
				2024-26-0077	Comparison of Different Energy Carrier's WTW Emission Factors and Their Role For Meeting Net Zero Climate Targets Aligned With Science Based Target Initiatives – An Extension For India Market	VOLVO Group				
Session 19	DAY 2 Wednesday, 24th January 2024	Hall no.3	Alternative Fuels (1)	2024-26-0072	Experimental and Numerical Investigation of a Single-Cylinder Methanol Port-Fuel Injected Spark Ignition Engine for Heavy-Duty Applications	FEV India Pvt Ltd	Mr. Kiran Mulukutla (FEV)			
				2024-26-0076	Assessing the Potential of CBG as an Alternative Fuel: An Experimental Study on Vehicle Performance and Emissions in BS VI Compliant Three-Wheeler and Passenger Car	Indian Oil Corporation Limited				
		January Hall no.4	Hall no.4				2024-26-0048	SUV Multi-Link Rigid Axle Control Links Optimization for Ride and Handling Improvement	Mahindra & Mahindra, Ltd.	
Session 20	DAY 2 Wednesday, 24th January			Advanced Vehicle Dynamics (2)	2024-26-0050	An Integrated Approach Using Multi-Body Dynamics Simulation & Driving Simulator towards Chassis Development for an SUV Vehicle	TATA Motors Limited	Mr. Amardeep Singh (Maruti Suzuki)		
	2024			2024-26-0053	Vehicle Dynamics Simulation Correlation: Impact of Flexible Tyre and Flexible Frame in Comfort Prediction of Two Wheelers Motorcycles and Scooters	Ather Energy Private Limited	(
	B.17.0				2024-26-0008	FOAM AND FRP SHEETS PACKAGING FOR HEADLINER STIFFNESS AT CURTAIN AIRBAG AREA	Mahindra & Mahindra, Ltd.			
Session 21	DAY 2 Wednesday, 24th January 2024	Hall no.5	Active and Passive Safety (2)	2024-26-0014	Calibration of an Inertial Measurement Unit and Its Impact on Antilock Braking System Performance	IIT Madras	Mr. Anil Kumar (TATA Motors Limited)			
	2024			2024-26-0006	Digital Methodology for Simulating Autonomous Vehicle Sensor Cleaning	Mercedes Benz				
				2024-26-0211	Challenges for Indian Road Traffic with Sound Alert Devices on Electric and ICE Vehicles	Dr. Ambardekar (CONSULTANT)				
Sansian 22	DAY 2	Hall wa C	Noise, Vibration & Harshness (NVH)	2024-26-0199	New Pass-By Noise Regulatory Norms IS 3028:2023 (Part 2) - An Analysis of Acceleration and Noise Source Contribution	TATA Motors Limited	NO KENNOTE			
Session 22	Wednesday, 24th January 2024	Hall no.6	(3)	2024-26-0230	A Simulation methodology to design the AVAS system to meet safety regulations and create the expected perception for the vulnerable road user	ESI Group	NO KEYNOTE			
				2024-26-0125	Analytical tool for Design and Optimization of Double Isolation Mounting System for Electric Powertrain	Mahindra & Mahindra, Ltd.				
				2024-26-0383	Investigation of Synchronizer Ring Failure in a Commercial Vehicle Transmission	Mahindra & Mahindra, Ltd.				
Session 23	DAY 2 Wednesday, 24th January	Hall no.7	Vehicular Systems (1)	2024-26-0385	Design and Development of Rack and pinion steering gear assembly for passenger car vehicle	International Centre For Automotive Tech.	Mr.Alfred Nixon Mendez (Ashok Leyland)			
	2024			2024-26-0381	A New Holistic Approach for System-Level Development of Seat Features	Jaguar Land Rover India, Ltd.				
	DAY 2			2024-26-0327	Integrated testing at lab from road by doing conversion and correlation between Subjective to objective assessment on ride comfort parameter of gear shifting quality in Two- wheeler.	TVS Motor Company	Dr. Krishna			
Session 24	Wednesday, 24th January 2024	Hall no.8	Testing & Evaluation (3)	2024-26-0337	High Speed Driveline Power Loss & Influencing Factors	AVL Technical Centre Pvt. Ltd.	(KOEL)			
				2024-26-0353	Automotive EMC Analysis of Touch Sensing IC	Infineon Technologies AG				

Technical Session IV

(14:00 to 16:00 hrs)

SESSIONS	Day	Hall no.	TOPIC NAME	PAPER NUMBER	PAPER TITLE	COMPANY NAME	KEYNOTE SPEAKER							
020010110	Duy	Han Ho.	TOTIO WAILE	2024-26-0130	A Novel Approach to Make an Efficient Thermal Management of a Solar Electric Four-	Altair Engineering	Name of a state of							
	DAY 2			2024-26-0096	Wheeler through Model-Based System Simulation Anti-Rollback Function for Electric Vehicles without ABS/HSA System.	TATA Motors Limited								
Session 25	Wednesday, 24th January	Hall no.1	E-mobility (4)	2024-26-0134	Comparison between State of Art Performance of GaN and SiC Converters for Electric	AVL Technical Centre Pvt. Ltd.	Dr Prabhakar Patil (Ex-LGChem)							
	2024				Vehicle Application Design and Development of E-axle as a Retro and OE Fitment Solution for Light		(EX EGONOM)							
				2024-26-0119	Commercial Vehicles Ranging from 1.5 to 5 Ton GVW	Automotive Research Association of India								
				2024-26-0269	Devising Guidelines and Architecture for Efficient Auto-Generation of HIS Compliant Code.	Mercedes Benz								
	DAY 2			2024-26-0244	Multiphysics Simulation Supporting Systems Engineering for Fuel Cell Vehicles	AVL LIST GmbH								
Session 26	Wednesday, 24th January	Hall no.2	Simulation and Modeling (4)	2024-26-0270	Numerical Modelling of Stone Lofting by a Treaded Tyre	Mercedes Benz	NO KEYNOTE							
	2024			2024-26-0258	Method of Generating Real-Time Digital Customer Feedback Loop for Connected Vehicle Applications.	TATA Motors Limited								
				2024-26-0287	Static Seat Comfort CAE DOE Variation Study to Understand the Impact of Seating Adjustment and Occupant Posture on Seat Pressure Distribution	TCS								
				2024-26-0148	24SIAT-0899: After-treatment Improvement in Mahindra BS VI Stage-1 to Stage-2	Johnson Matthey India Pvt. Ltd.								
	DAY 2		Emission Measurement & Control	2024-26-0140	GPF: An Effective Technology to Minimize Two Wheeler (2Wh) Particulate Emission	Corning India	Mr. Mahesh P							
Session 27	ession 27 Wednesday, 24th January 2024	Hall no.3	Hall no.3	Hall no.3	Hall no.3	Hall no.3	Technology (2)	2024-26-0150	Study of changes in Exhaust after treatment system components in M & N category vehicles from RDE Monitoring stage to RDE Compliance stage	Automotive Research Association of India	(Ashok Leyland)			
				2024-26-0159	Data driven decisions to calculate CO2 emission for materials derived from estimated vehicle weight	Mercedes Benz								
					2024-26-0051	Cab RLDA Using VI & DI Approach: A Co-Simulation of ADAMS/Acar & DESTRUCTION OF ADAMS Car & DESTRUCTION OF ADAMS CAR APPLICATION OF ADAMS CAR APPL	TATA Motors Limited							
	DAY 2			2024-26-0054	Experimental Analysis of Multi-Link Rigid Axle Suspension Camber Variation with Vehicle Load	Mahindra & Mahindra, Ltd.								
Session 28	Wednesday, 24th January	Hall no.4	Advanced Vehicle Dynamics (3)	Advanced Vehicle Dynamics (3)	Advanced Vehicle Dynamics (3)	Advanced Vehicle Dynamics (3)	Advanced Vehicle Dynamics (3)	Advanced Vehicle Dynamics (3)	Advanced Vehicle Dynamics (3)	Advanced Vehicle Dynamics (3)	2024-26-0058	A Novel Approach for Combi Braking System Design Considering Tire's Nonlinear Behavior	SIMPLEENERGY PRIVATE LIMITED	NO KEYNOTE
	2024			2024-26-0274	Reduced Order Single Parameter Tuning using Dynamic Mode Decomposition: An Application in Vehicle Dynamics	Jaguar Land Rover India, Ltd.								
				2024-26-0049	Effect of Lift Axle Suspension Design on Heavy Commercial Vehicle Handling Performance	Mahindra & Mahindra, Ltd.								
				2024-26-0063	Fixed High Ground Clearance Tractor	Mahindra & Mahindra, Ltd.								
	DAY 2				Duty Cycle Based Fuel Consumption Calculation Using Simulation Methodology for Agricultural Tractor	Automotive Research Association of India								
Session 29	Wednesday, 24th January	Hall no.5	CV & Agriculture Tractors (1)	2024-26-0089	Regulatory Framework for Construction Equipment Vehicles in India	Automotive Research Association of India	NO KEYNOTE							
	2024			2024-26-0069	A holistic approach of DPF calibration to address challenges of various Off Highway field implements.	Robert Bosch India Ltd								
				2024-26-0065	Viability of Alternative Fuels to Decarbonize the World's Largest Agricultural Tractor Market	AVL LIST GmbH								
				2024-26-0040	Development of Low Viscosity Fuel Economy Engine Oil for Commercial Vehicles	TATA Motors Limited								
	DAY 2			2024-26-0046	Weight and Drivetrain Optimization via Fuel Pump & Drive Integration on Engine Camshaft in a Pushrod Type Valve Actuated Engine	Mahindra & Mahindra, Ltd.								
Session 30	Wednesday, 24th January	Hall no.6	Advanced Powertrain Technology (1)	2024-26-0042	Optimization of Cooling Air Flow for Improved Heat Dissipation through Radiator	Mercedes Benz	NO KEYNOTE							
	2024			2024-26-0324	Development of System Level Testing Method for Passenger Car Engine Mounts	Automotive Research Association of India								
				2024-26-0091	Structural Development and Improvement of SCR Assembly Design for Exhaust after Treatment System of a Construction Equipment off Highway Vehicle	Mahindra & Mahindra, Ltd.								

				2024-26-0172	Application of Coated Metallic Bipolar Plate for Proton Exchange Membrane (PEM) Fuel Cell	Schaeffler	
	DAY 2			2024-26-0173	Development of an efficient vehicle energy management system for fuel cell electric vehicles.	TATA Motors Limited	
Session 31 Wee	Wednesday, 24th January 2024	Hall no.7	Hydrogen Fuel Cell and Hydrogen I.C. Engine (2)	2024-26-0166	Optimal operation of purge valve to reduce the H2 wastage in the fuel cell	Daimler Truck	NO KEYNOTE
	2024			2024-26-0170	Development of 8L Hydrogen IC Engine	Volvo Group India Pvt. Ltd.	
				2024-26-0179	Fuel Cell Electric Train Concept – Zero Emission Rail Transport Solution for India	FEV India Pvt Ltd	
				2024-26-0331	A Comparative Analysis of RocksDB, LMDB, and MongoDB: Exploring Key Differences and Use Cases.	Mercedes Benz	
Session 32	DAY 2 Wednesday, 24th January	Hall no.8	Testing & Evaluation (4)	/U/4-/b-U35/	Big Data Analytics (Telematics) for real time testing improvements and integration back to Development of Future Models/EVs	Maruti Suzuki India Ltd	Mr. Ramnik Singh
00001011 02	2024	Tiuli IIO.O	resting & Evaluation (4)	2024-26-0278	Data-Driven Toe Misalignment Detection in Single-Unit Twin-Axle Trucks	IIT Madras	(Gamma Technologies)
				2024-26-0350	Outrigger design & development for vehicle testing as per AIS 133	International Centre For Automotive Tech.	

					Technical Session V (16:30to 18:00 hrs)							
SESSIONS	Day	Hall no.	TOPIC NAME	PAPER NUMBER	PAPER TITLE	COMPANY NAME	KEYNOTE SPEAKER					
	2440			2024-26-0094	Methodology for Calculating Use-Phase Emissions for eMobility Subsystem Products	Eaton						
Session 33	DAY 2 Wednesday, 24th January	Hall no.1	E-mobility (5)	2024-26-0332	Automation of PID Calibration for Close Loop Control System in an Electric Vehicle to Achieve Objective Driveability Performance	TATA Motors Limited	Dr. Julien Plet (Motul)					
	2024			2024-26-0102	A Traffic Microsimulation Based Study of an Electric Road System with Dynamic Wireless Power Transfer	TIFAC						
	DAY 2			2024-26-0315	Integrated Simulation Methodology to Predict Engine Head, Block, and Piston temperatures.	Cummins Technologies India Pvt. Ltd.						
Session 34	Wednesday, 24th January	Hall no.2	Simulation and Modeling (5)	2024-26-0311	Gasket joint sealing behavior prediction using simplified FEA approach.	AAM India Manufacturing Corporation Pvt	Mr. Abhijit Londhe (Mahindra)					
	2024			2024-26-0263	Numerical analyses of Ad-Blue thawing performance according to EU Norms	Daimler Truck	, ,					
	DAY 2			2024-26-0036	Dynamic Automatic Transmission Fluid Life Prediction Using Machine Learning	Aishwaryalaxmi Nagesh	Dr. Jyotirmoy Barman (Simpson)					
Session 35	Wednesday, 24th January 2024	Hall no.3	Advanced Powertrain Technology (2)	2024-26-0038	The effect of different Air Path based ATS thermal management strategy on a Non- EGR Medium Duty Diesel Engine's performance and emissions.	AVL Technical Centre Pvt. Ltd.	(Olimpson)					
	2024			2024-26-0039	After Treatment Sensors Positioning for BS6.2 Diesel Engine	Mahindra & Mahindra, Ltd.						
	DAY 2	Hall no.4	Hall no.4	Hall no.4	Hall no.4	Hall no.4	Hall no.4		2024-26-0377	Study of Parametric Variation on Braking Performance of a Tyre	HASETRI	
Session 36	Wednesday, 24th January 2024							Hall no.4	Hall no.4	Hall no.4	Hall no.4	Tyre Technology (1)
	2024			2024-26-0358	A Novel Method for Evaluation of Tyre Structural Durability Performance	Hasetri	,					
				2024-26-0028	Development & De	Automotive Research Association of India						
0	DAY 2		Advanced Driver Assistance	2024-26-0026	Anomaly Detection and Quality Indicators for Digital Maps Used in ADAS Applications	Daimler Truck	Dr. Martin Fritz					
Session 37	Wednesday, 24th January 2024	Hall no.5	Systems (ADAS) (2)	2024-26-0030	A Novel Method to Select Hyperparameters of The DBSCAN Algorithm for RADAR Applications	Varroc Engineering Pvt, Ltd.	(4A)					
				2024-26-0087	The Scope of Autonomous Vehicle Mobility with an Indian Context	FEV India Pvt Ltd						
				2024-26-0218	Analysis and Mitigation of Grunt Noise in Hydraulic Power Assisted Steering Systems	TATA Motors Limited						
	DAY 2		Noise, Vibration & Harshness (NVH)	2024-26-0206	HVAC NVH Refinement in Electric Vehicle	Mahindra & Mahindra, Ltd.	Dr. Rabah Hadjit					
Session 38	Wednesday, 24th January 2024	Hall no.6	Noise, Vibration & Harshness (NVH) (4)	2024-26-0221	Intelligent Diagnosis for Fuel Line Fault of Diesel Engine based on Vibration Signatures	John Deere India Pvt, Ltd.	(ESI)					
				2024-26-0212	Intake and Exhaust System Optimization of a Single Cylinder Engine Using 1D Simulation Approach	FEV India Pvt Ltd						

				2024-26-0192	Scientific Approach for Pickup Cargo Weight Reduction	Mahindra & Mahindra, Ltd.	
				/0/4-/0-0104	An Experimental Approach towards Sustainable Solution for Material Recycling of ELV Plastic Bumpers and EV Batteries	Maruti Suzuki India Ltd	
Session 39	DAY 2 Wednesday, 24th January	Hall no.7	Materials & Manufacturing (1)	2024-26-0194	Thermal management of On-Board Electrical Vehicle Charger Through AIN coating	UNO MINDA LTD	NO KEYNOTE
	2024		.,	2024-26-0186	Geometry, Sizing and Optimization of Honeycomb Structures along with Embedded Metal Inserts on the Floor for Truck-Mounted Container Applications	TATA Motors Limited	
				2024-26-0193	Review on Laser welding of High Strength Aluminium alloy for Automotive Applications	TATA Motors Limited	
				2024-26-0359	Powertrain and Cabin cooling module performance improvement by optimization of its components	Stellantis	
Session 40	DAY 2 2024-26-0354 Study and analysis of dynamic seat pressure distribut	ŭ	Mahindra & Mahindra, Ltd.	NO KEYNOTE			
	2024		no.o resuling & Evaluation (5)	2024-26-0335	Failure Analysis and Design Improvements for Ductile Cast Iron Multi-Piece Exhaust Manifold from Medium Duty Diesel Engine	Cummins Technologies India Pvt. Ltd.	NO KENTOTE
				2024-26-0363	Effect of torsional vibration on transmission and validation process	TATA Motors Limited	

					Technical Session VI (09:30 to 11:00 hrs)			
SESSIONS	Day	Hall no.	TOPIC NAME	PAPER NUMBER	PAPER TITLE	COMPANY NAME	KEYNOTE SPEAKER	
				2024-26-0190	Headliner Composition Optimization without Compromising the Safety and Performance	Mahindra & Mahindra, Ltd.		
	DAY 3	,		2024-26-0187	Effect of spot weld parameter on HAZ of advanced high strength steel joint.	TATA Motors Limited	Mr. Rajas Majumdar	
Session 41	Thursday, 25th January 2024	Hall no.1	Materials & Manufacturing (2)	2024-26-0228	Effect of Environmental Factors on the Function of an Automotive Luggage Cover of a Passenger Vehicle – A Case Study	Maruti Suzuki India Ltd	(Dassult Systems)	
				2024-26-0174	Effects of Low Temperature on Forged Steel Materials in Hydrogen Internal Combustion Engines Applications: Assessing Ductile-Brittle Transition	Automotive Research Association of India		
		Hall no.2			2024-26-0239	Enhanced Development Process for UPDs – Digital Approach	TATA Motors Limited	
Session 42	DAY 3 Thursday, 25th January 2024		Simulation and Modeling (6)	2024-26-0268	Fatigue Assessment & Test Correlation of Seam Welded Joints using Force Based Equivalent Structural Stress Solid Weld Approach	TATA Motors Limited	NO KEYNOTE	
Session 42				2024-26-0313	A Predictive Approach to Estimate Tyre Wear Characteristics	HASETRI	NO RETNOTE	
				2024-26-0301	Generation of tire digital twin for virtual MBD simulation of vehicles for durability, NVH and handling evaluation	Automotive Research Association of India		
				2024-26-0074	Dynamic Spark Advance Technology for Gasoline Fuel Blends	TATA Motors Limited		
Session 43	DAY 3 Thursday, 25th January	Hall no.3	Alternative Fuels (2)	2024-26-0078	Effect of Diesel-Ethanol Blends on the Performance and Emissions of a CI Diesel Engine Suitable for Stationary Application	Bharat Petroleum Corp., Ltd.	NO KEYNOTE	
06331011 43	2024	Tiali iio.5	Aiternative rueis (2)	2024-26-0081	Methanol – As a Future Alternative Fuel for Indian Automotive	Automotive Research Association of India	NORETHOLE	
				2024-26-0079	Effect of Natural Gas Composition and Rail Pressure on Injector Performance	Maruti Suzuki India Ltd		
	DAY 3			2024-26-0382	Conversion of Diesel fuel system to CNG fuel system for Commercial Vehicles	TATA Motors Limited		
Session 44	Thursday, 25th January	Hall no.4	Vehicular Systems (2)	2024-26-0386	Effect Analysis of Form Factor on Thermo-Electric Generator Performance	Daimler Truck	Mr. Gopi Sankar (Ashok Leyland)	
	2024			2024-26-0387	Digital approach for design of modular, scalable Futuristic Instrument Panel for Commercial Vehicle	TATA Motors Limited	(== , = ,	

	DAY 2			2024-26-0012	A Review on Fire Prevention and Suppression Solutions for EV Battery Packs	SUN Mobility Private Limited					
Session 45	DAY 3 Thursday, 25th January 2024	Hall no.5	Active and Passive Safety (3)	2024-26-0011	Occupant Injury Severity Prediction in Road Traffic Accidents using Machine Learning Techniques	TATA Motors Limited	Mr.Philipp Tölke (Seattle Safety)				
	2024			2024-26-0016	RAMP Bracket Angle Optimization Coupled with Improved Head Room	Mahindra & Mahindra, Ltd.					
	DAY 3			2024-26-0210	Application of hydraulically controlled rear mount to mitigate Key on/Off requirement of passenger car	TATA Motors Limited					
Session 46		Hall no.6	Noise, Vibration & Harshness (NVH) (5)	2024-26-0067	Investigating the Factors Affecting Cabin Comfort for Agricultural Machinery	Mahindra & Mahindra, Ltd.	Mr. Atul Miskin (Altair)				
			(-7	2024-26-0208	Design optimization of Engine Mount bracket to reduce various gear noises in the passenger car cabin	Maruti Suzuki India Ltd	_ (x treat)				
		Hall no.7		2024-26-0082	Vehicle diagnostics and Vehicle to Infrastructure Communication through Visible Light Communication	Volvo India Pvt, Ltd.					
Session 47	DAY 3 Thursday, 25th January		Automotive Lighting (1)	2024-26-0083	Design methodology for avoiding condensation in automotive head lamps	Varroc Engineering Pvt, Ltd.	Mr. Ramashankar Pandey				
	2024								2024-26-0084	Moisture Condensation Management in Automotive Headlamp Using Super Hydrophilic Cross-Linked Polymer Composites	UNO MINDA LTD
	B4¥6			2024-26-0367	Optimization of Trim Clips Design for Performance Improvement	Mahindra & Mahindra, Ltd.					
Session 48	DAY 3 Thursday, 25th January	Hall no.8	Testing & Evaluation (6)	2024-26-0368	Test Bench Phase Shift - ICE to EV	TATA Motors Limited	Mr. S A Sundareshan (Ashok Leyland)				
	2024			2	2024-26-0351	Effect of Ceramifiable Silicone Rubber Composite based Thermal Insulators in Battery Packs	SUN Mobility Private Limited	(construction and)			