

CONFERENCE DAY ONE

	WEDNESDAY 5 TH JUNE 2019	
08:30	REGISTRATION AND REFRESHMENTS	
09:00	CHAIR'S OPENING REMARKS	
09:10	KEYNOTE SESSION: THERMAL MANAGEMENT FOR FUTURE POWERTRAINS <i>David Greenwood, Professor of Advanced Propulsion Systems and Director of Energy at WMG, The University of Warwick</i> Energy management for low and zero emission vehicles The importance of minimising parasitic losses Management of battery temperature for optimum range Impact of potential future battery chemistries	
09:40	HIGH PERFORMANCE ELECTRIC VEHICLES <i>Jason King, Business Development Director, Integral Powertrain</i>	
10:05	OEM CASE STUDY <i>Speaker to be announced</i>	
10:30	Question and Answer Session	
10:45	NETWORKING REFRESHMENT BREAK	
	SIMULATION AND CONTROL	INTERNAL COMBUSTION ENGINE
11:15	KEYNOTE PRESENTATION: SOLUTIONS FOR THERMAL ENERGY MANAGEMENT DESIGN BEFORE PROTOTYPES <i>Ed Tate, Simulia</i>	KEYNOTE PRESENTATION <i>Robin Francis, CTO, Kernoit Ltd</i>
11:40	UNDERHOOD THERMAL SYSTEMS ANALYSIS FOR A DIESEL BUS <i>Konssasantinos Karamanos, Queen's University Belfast</i>	AN IN-DEPTH STUDY OF ANTI-DETONATION INJECTION ON A SMALL TURBOCHARGED GASOLINE PASSENGER CAR ENGINE <i>George Corfield and Emily Tao, SAIC Motor Technical Centre</i>
12:05	<i>Speaker to be announced</i>	LUBRICATION CIRCUIT THERMAL MANAGEMENT SOLUTIONS FOR LOW CO2 EMISSIONS <i>Scott Porteous; Ricardo UK Ltd</i>

12:30	QUESTION AND ANSWER SESSION	QUESTION AND ANSWER SESSION
12:45	NETWORKING LUNCH	
	SIMULATION AND CONTROL	INTERNAL COMBUSTION ENGINE CONTINUED
13:45	HUMAN THERMAL COMFORT PREDICTION DURING VEHICLE COOL-DOWN USING COMPUTATIONAL FLUID DYNAMICS <i>Mustafa Nomani; Tata Motors Ltd</i>	POWERTRAIN ENCAPSULATION FOR LOW CO2 EMISSIONS Cedric Rouaud Ricardo UK Ltd
14:10	TRANSIENT HOT SHUT DOWN, CFD SIMULATION TECHNIQUE FOR UNDERHOOD THERMAL MANAGEMENT <i>Rajesh Pawar, Preetam Ghodake, Tata Motors Ltd and Ravindra Tupake, Tata Technologies</i>	VEHICLE THERMAL MANAGEMENT OPTIMISED THROUGH THE USE OF ADDITIVE MANUFACTURE. CASE STUDY - INTERNALLY COOLED AND LIGHTWEIGHT RADIAL TURBINE WHEELS <i>Alex Redwood, Head of Design, HiETA Technologies Ltd</i>
14:35	BRAZEABILITY AND CORROSION PERFORMANCE OF INDUSTRIAL SCALE MATERIAL COMBINATIONS USING LOW MELTING CLAD ALLOY FOR HEAT EXCHANGER PRODUCTION <i>Arne Schlegel, Research Engineer Heat Exchanger, Aleris</i>	VEHICLE THERMAL MANAGEMENT OPTIMISED THROUGH THE USE OF ADDITIVE MANUFACTURE. CASE STUDY- NOVEL WASTE HEAT RECOVERY SYSTEM BASED ON THE INVERTED BRAYTON CYCLE <i>Andy Jones, Design Engineer, HiETA Technologies Ltd</i>
	ENERGY MANAGEMENT (E-MACHINE)	ENERGY MANAGEMENT (X EV)
15:00	KEY CHALLENGES FOR THE THERMAL MANAGEMENT OF ELECTRICAL MACHINES <i>Dr Peter Connor, Senior Research Fellow, University of Nottingham</i>	THERMAL MANAGEMENT SYSTEMS AND TOTAL COST OF OWNERSHIP – HOW DIFFERENT HVAC COMPONENTS AND ARCHITECTURES INFLUENCE YEARLY ENERGY CONSUMPTION

		<i>Christian Rathberger, Senior Manager department - Thermal and Manufacturing Solutions, Magna Powertrain Mike Kean, Sunamp</i>
15:25	QUESTION AND ANSWER SESSION	QUESTION AND ANSWER SESSION
15:50	NETWORKING REFRESHMENT BREAK	
	CABIN COMFORT	
16:20	OPTIMISATION OF CABIN ENERGY MANAGEMENT AND HUMAN COMFORT FOR XEVS <i>Michael Hauenstein, Autoneum Management and Antoine Delacroix, Toyota Europe SA, Belgium</i>	
16:45	A CONSISTENT METHODOLOGY FOR 1D-3D SIMULATION COUPLING APPLIED TO VEHICLE HVAC SYSTEM FOR AIR-CONDITIONING CYCLE AND INTERNAL CABIN RESOLUTION <i>Diego Davila, Siemens Industry Software</i>	
17:10	<i>Speaker to be announced</i>	
17:35	QUESTION AND ANSWER SESSION	
17:45	CHAIR'S CLOSING REMARKS	
17:50	END OF CONFERENCE DAY 1	
18:00	Drinks	
19:00	Dinner	

CONFERENCE DAY TWO

	THURSDAY 6 TH JUNE 2019	
08:30	REGISTRATION AND REFRESHMENTS	
09:00	CHAIR'S OPENING REMARKS	
09:05	KEYNOTE SESSION <i>Speaker to be announced</i>	
09:30	QUESTION AND ANSWER SESSION	
	SIMULATION AND CONTROL (X EV)	HEAT EXCHANGE
09:40	ADDRESSING EV'S THERMAL MANAGEMENT CHALLENGES BY MEANS OF SYSTEM SIMULATION <i>Dig Vijay, Gamma Technologies</i>	<i>Speaker to be announced</i>

10:05	FRONTLOADING CFD FOR ELECTRIC VEHICLE THERMAL MANAGEMENT <i>Anna Rubekina, Mentor Graphics Corp., Russia</i>	<i>Speaker to be announced</i>
10:30	QUESTION AND ANSWER SESSION	QUESTION AND ANSWER SESSION
10:40	NETWORKING REFRESHMENT BREAK	
	SIMULATION AND CONTROL (X EV) CONTINUED	HEAT EXCHANGE CONTINUED
11:10	AN INTEGRATED SIMULATION STRATEGY FOR THE THERMAL DESIGN AND ANALYSIS OF ELECTRIC VEHICLES <i>Dr.-Ing. Gerald Seider, InDesA GmbH</i>	A FEASIBILITY STUDY INTO THE PERFORMANCE POTENTIAL OF PLASTIC ADDITIVE MANUFACTURE HEAT EXCHANGERS <i>Dom Dathan, D2H</i>
11:35	THERMAL MANAGEMENT MODULE CONTROL OPTIMISATION THROUGH AN INTEGRATED SIMULATION APPROACH <i>Fabien Fiquet, Project Engineer- Simulation Ricardo</i>	DEEP NEURAL NETWORK BASED PREDICTION OF ANTI-FREEZE CONCENTRATIONS IN CARS <i>Alexander Herzog, Rhein-Waal University of Applied Sciences</i>
12:00	VEM THROUGH THE VEHICLE PROGRAM <i>Diego Davila, Siemens Industry Software Ltd</i>	INDUSTRIAL EXPERIENCE WITH TRILLIUM® LEAN <i>Torkel Stenqvist; Slawomir Koscielski; Richard Westergård, Gränges</i>
12:25	OPTIMIZED THERMAL MANAGEMENT FOR HYBRID VEHICLES USING THE EXAMPLE OF MAHLE D13 <i>Robert Corbishley, MAHLE Powertrain Ltd</i>	DURABILITY OF ALUMINIUM LASER WELDED COLD PLATE FOR BATTERY THERMAL MANAGEMENT <i>Jeremy Kroeker, Dana Incorporated</i>
12:50	QUESTION AND ANSWER SESSION	QUESTION AND ANSWER SESSION
13:05	NETWORKING LUNCH	
	BATTERY THERMAL MANAGEMENT	
14:05	BATTERY LIFETIME MODELING FOR EFFECTIVE THERMAL MANAGEMENT <i>Zachary J. Edel, Thermo Analytics</i>	

14:30	MOBICUS PROJECT: BATTERY AGEING TESTING, MODELLING, AND DURABILITY IMPROVEMENT BY THERMAL STRATEGIES <i>Philippe Gyan, RENAULT</i>
14:55	MODEL BASED PREDICTIVE BATTERY THERMAL MANAGEMENT SYSTEM DESIGN <i>Paul McGahan; Anuradha Wijesingh; Cedric Rouaud; Peter Fussey, Ricardo</i>
15:20	QUESTION AND ANSWER SESSION
15:30	NETWORKING REFRESHMENT BREAK
	BATTERY THERMAL MANAGEMENT CONTINUED
16:00	LI-ION BATTERY CELL TEMPERATURE IN HIGH PERFORMANCE ELECTRIC CARS: ELECTRO-THERMAL VS CONVENTIONAL CFD MODELS <i>Ian Turner, Lead Aerodynamicist, Williams Advanced Engineering</i>
16:25	A REAL-WORLD STUDY INTO BATTERY COOLING OPTIONS <i>Chris Hebert, Engineering Director D2H Aero Ltd.</i>
16:50	MODELLING OF CYLINDRICAL LI-ION BATTERIES THERMAL BEHAVIOUR UNDER DIFFERENT COOLING CONFIGURATIONS <i>Dr Antonino La Rocca, University of Nottingham</i>
17:15	QUESTION AND ANSWER SESSION
17:25	CHAIR'S CLOSING REMARKS
17:30	END OF CONFERENCE