

FRIDAY 11TH SEPTEMBER 2026

S3.1 THERMAL PHENOMENA ANALYSIS		Chairperson: Yolanda Bravo VALEO, Spain
8:30-9:00	KEYNOTE LECTURE: An Environmental Scan of Transportation and Fuels Policy Trends in the U.S. Paul Miles. Retired from Sandia National Laboratories, USA	
9:00-9:25	Assessment of Climate Control Systems Impact on Vehicle Energy Performance S. Gil-Sayas ^{1,2} , A. Broatch ¹ , G. Fontaras ² ¹ Universitat Politècnica de València, Spain · ² EC Joint Research Centre, Italy	
9:25-9:50	Design, Fabrication and Experimental Characterisation of a Cylindrical Thermal Dummy Cell for Battery Thermal Management Applications A. Salman ¹ , A. Nourian ¹ , M. Babaie ² , S. Mahboubi Heydarabad ¹ , J. Jahan Panah ³ , A. Andwari ³ ¹ University of Salford, UK · ² University of Leeds, UK · ³ University of Oulu, Finland	
9:50-10:15	High-Speed Infrared Thermography of Convective and Radiative Wall Heat Transfer in Jet-Mixed Turbulent Hydrogen Combustion F. Shimizu ¹ , M. Bardi ² , H. Quintens ^{2,3} , E. Daudre ^{2,3} , C. Bramoullé ² , T. Aizawa ¹ ¹ Meiji University, Japan · ² IFP Energies nouvelles, France · ³ Université de Poitiers, France	
10:15-10:45	Coffee break	
S3.2 MODELING OPTIMIZATION & ANALYSIS		Chairperson: Julien Manin Sandia National Laboratories, USA
10:45-11:10	Accelerating Model-Based Powertrain Optimisation: Meeting the Future Demands of Regulation Based on Real-Driving Scenarios L. Bates ¹ , J.G. Prior ² , S. Whelan ¹ ¹ HORIBA MIRA, UK · ² Loughborough University, UK	
11:10-11:35	A Flexible Lap Time Simulation Framework for Energy Management and Control of Hybrid Power Units M. Piunti, V. Ravaglioli, G. Silvagni, S. Scaiola Università di Bologna, Italy	
11:35-12:00	Multi-Objective Optimization of Engine Parameters for Improving Fuel Economy and Exhaust Emissions of Hybrid Agricultural Powertrain via Improved Crowding-Adaptive NSGA-II Considering Typical Operating Conditions Jingyu Zhu ¹ , Qinghan Yang ¹ , Keiya Nishida ^{1,2} , Mingliang Wei ³ ¹ Dalian University of Technology, China · ² University of Hiroshima, Japan ³ State Key Laboratory of Intelligent Agricultural Power Equipment, China	
12:00-12:25	Multi-Layered, Backend-Based, Model-Predictive Operating Strategy for a Serial PHEV M. Böhme ¹ , M. Gerdtz ¹ , C. Trapp ² ¹ Universität der Bundeswehr München, Germany · ² Technische Universität Graz, Austria	
12:25-12:50	Insights for an International Framework for Research-Oriented Automotive Life Cycle Assessment A. Bouter ^{1,2} , G. Di Pierro ¹ , G.L. Patrone ¹ , E. Paffumi ¹ , M. Lopez-Juarez ² , G. Fontaras ¹ ¹ EC Joint Research Centre, Italy · ² Universitat Politècnica de València, Spain	
12:50-14:30	Lunch	
14:30-15:30	Poster session 3 / Commercial exhibition	
S3.3 CARBON BASED SUSTAINABLE FUELS		Chairperson: José M. García-Oliver Universitat Politècnica de València, Spain
15:30-16:00	KEYNOTE LECTURE: NVH Challenges for Electrified Fuel-Cell & ICE Air-Handling systems Chris Hollingbery. Cummins, UK	
16:00-16:25	Effect of Neat Sustainable Aviation Fuels on Mechanical Behavior of Two Polymeric Materials Used in Aircraft A. Domínguez-Piedrafita ¹ , A. Romero ^{1,2} , R. García-Contreras ^{1,2} ¹ Institute of Applied Research for the Aeronautical Industry - UCLM, Spain ² School of Industrial and Aerospace Engineering - UCLM, Spain	
16:25-16:50	Effect of Intake Management and Active Stratification on Combustion and Emissions of Dimethyl Ether Ignited Ammonia-Fueled Engine Yuxiao Qiu ¹ , Yanyuan Zhang ² , Yingnan Yang ² , You Zhang ² , Ying Ding ¹ , Dong Han ¹ , Zhen Huang ¹ ¹ Shanghai Jiao Tong University, China · ² SJTU-Wuxi Carbon Neutral Energy & Power Institute, China	
16:50-17:15	From Acceleration to Pressure: ML-Based Virtual Sensing across Hydrogen and Methanol Spark-Ignition Engines M. Babić ^{1,2} , C. Laubichler ¹ , P. Christoforetti ² , P. Kappacher ² , S. Buchberger ² , E. Schutting ² , S. Posch ² ¹ Large Engines Competence Center, Austria · ² Technische Universität Graz, Austria	
17:15-17:40	Methanol/Ethanol Diffusive Combustion Initiated by Spark-Ignited Pilot Sprays T. Fuyuto, R. Ueda, K. Fukui, T. Kondo, K. Nishikawa, Y. Wakisaka Toyota Central R&D Labs., Japan	
17:40-18:00	CLOSURE: José-Ramón Serrano	
20:30-00:00	GALA DINNER	