



WEDNESDAY, SEPTEMBER 26<sup>th</sup>, 2018

08:30	Registration	
09:15	Introductory Remarks Kevin Laboe, <i>FCA Group, Chair Engine ORC Consortium</i>	
09:25	Welcome and introduction Richard Tilagone, <i>Director of the Powertrain and Vehicle Division, IFPEN</i>	
09:40	Keynote Presentation Marc Lejeune, <i>Research Director Renault Trucks</i> Future Technologies for Commercial Vehicles	
10:30	Coffee break	
	Technical Session ONE: WHR Applications	Technical Session TWO: Systems Modelling
11:00	<p><i>Experimental study of a compact ORC for low grade heat conversion to electricity</i></p> <p>Quentin Blondel <i>CEA</i></p>	<p><i>Modelling and Design of a R1233ZD(e) Multiexpander ORC prototype for WHR application in Marine Vessels</i></p> <p>Xabier Peña <i>Tecnalia</i></p>
11:30	<p><i>High-grade Waste Heat Recovery (WHR) from Residential Scale Gensets</i></p> <p>Davide Ziviani <i>Purdue University</i></p>	<p><i>Model-based sizing of the components for an automotive ORC recovery unit</i></p> <p>Davide Di Battista <i>University of L'Aquila</i></p>
12:00	<p><i>ORC turbo-pump for waste heat recovery in the coolant of automotive engines: design and performance evaluation</i></p> <p>Gael Leveque <i>Enogia</i></p>	<p><i>Assessment of an Organic Rankine Cycle (ORC) based Waste heat recovery (WHR) system by simulations and tests</i></p> <p>Thomas Reiche <i>Volvo</i></p>

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12:30	Lunch	
	Technical Session ONE: WHR Applications	Technical Session ONE: WHR Applications
14:00	<p><i>Experimental Investigation of Entropea's 20 kW Commercial Unit For High Temperature Applications</i></p> <p>Lorenzo Tocci <i>Entropea Labs</i></p>	<p><i>Exploratory Study of the Combined Cycle Powertrain Concept</i></p> <p>Karthik Subramani <i>Delft University of Technology</i></p>
14:30	<p><i>Heat recovery with Organic Rankine Cycle in Engine Coolant for HD Truck Applications</i></p> <p>Pascal Smague <i>IFPEN</i></p>	<p><i>Grid Adaptive Harmonic Adsorption Recuperative Power and Cooling System</i></p> <p>Pete McGrail <i>Pacific Northwest National Laboratory</i></p>
15:00	<p><i>Combined waste heat recovery and air conditioning systems for increased system efficiency</i></p> <p>Richard Merrett <i>Mentor, A Siemens Business</i></p>	<p><i>Experimental investigation of an innovative architecture to valorize the waste heat of a passenger car through the use of a Rankine cycle</i></p> <p>Olivier Dumont <i>University of Liège</i></p>
15:30	Coffee break	
16:00	Panel Discussion – chaired by Oliver Dingel, IAV Technical Drivers to ORC market acceptance in the current HD CO2 Legislation Environment	
16.45	Wrap up and close Kevin Laboe, FCA Group, Chair Engine ORC Consortium	
17:00	Welcome reception and networking, <i>Exhibition Area, IFPEN</i>	

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THURSDAY, SEPTEMBER 27<sup>th</sup>, 2018

09:00	<b>Welcome back and recap</b> Kevin Laboe, <i>FCA Group, Chair Engine ORC Consortium</i>	
09:15	<b>KEYNOTE PRESENTATION 2</b> Roland Gravel, <i>US Department of Energy</i> <b>SuperTruck Waste Heat Recovery, Then and Now</b>	
	<b>Technical Session ONE: WHR Applications</b>	<b>Technical Session THREE: Expander Technologies</b>
10:00	<i>Operational and technological limits for an on-board ORC power unit fed by ICE exhaust gases</i>  <b>Roberto Cipollone</b> <i>University of L'Aquila</i>	<i>Free piston expander for low power ORC and Rankine</i>  <b>Danel Quentin</b> <i>Université de Liège</i>
10:30	<b>Coffee</b>	
11:00	<i>Selecting the optimum Organic Rankine Cycle Waste Heat Recovery System for on-highway truck market</i>  <b>Roman Carballido</b> <i>BorgWarner, Inc</i>	<i>Multiphysics Dynamic Model of a free piston gas expander for Organic Rankine Cycle Based Waste Heat Recovery Application</i>  <b>Muhammad Usman</b> <i>Brunel University, London</i>
	<b>Technical Session THREE: Expander Technologies</b>	<b>Technical Session FOUR: Working Fluids</b>
11:30	<i>Experimental improvement of efficiency on scroll expander and packaging improvement for the vehicle</i>  <b>Hirofumi Wada</b> <i>Sanden</i>	<i>Theoretical and experimental analysis of HCFO-1233zd(e) and HFO-1336mzz(z) as low-GWP alternatives to HFC-245fa in small-scale and low-temperature ORC</i>  <b>Marta Amat Albuixech</b> <i>ISTENER Research Group, Universitat Jaume I</i>
12:00	<i>Comparison of two heavy duty engines, two volumetric machines and related impacts on Rankine system performance</i>  <b>Nicolas Espinosa</b> <i>Volvo</i>	<i>Natural Working Fluid Comparison of Transcritical Rankine Cycle for Multi-Waste Heat Recovery of Truck Diesel Engines</i>  <b>Peng Liu</b> <i>Tianjin University, China</i>
12:30	<b>Lunch</b>	

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	<b>Technical Session THREE: Expander Technologies</b>	<b>Technical Session FOUR: Working Fluids</b>
14:00	<i>Scroll Expander Development for Exhaust Heat Recovery on a Heavy Duty Truck</i> <b>Rémi Daccord</b> <i>EXOES</i>	<i>Working fluid charge influence on a mini-CHP biomass fueled, ORC based, performance</i> <b>Márcio Santos</b> <i>Universidade de Coimbra</i>
14:30	<i>Robust Optimization of a Supersonic ORC Turbine Cascade: a Quantile-based Approach</i> <b>Nassim Razaaly</b> <i>Inria</i>	<i>Lubricating oil entrainment in an ORC system and its impact on performance rating</i> <b>Rémi Dickes</b> <i>University of Liège</i>
15:00	Coffee break	
	<b>Technical Session THREE: Expander Technologies</b>	<b>Technical Session FIVE: Heat Exchanger Technologies</b>
15:30	<i>Radial-Outflow Turbine Validation for ORC in a Wide Operating Range</i> <b>Dr Vasileios Pastrokakis</b> <i>SoftInWay</i>	<i>Supercritical heat transfer characteristics occurring in a heat exchanger operating under organic rankine cycle conditions</i> <b>Marija Lazova</b> <i>Ghent University</i>
16:00	Panel Discussion – chaired by Paul Ansell, BorgWarner System requirement impacts on ORC Working Fluid selection for mass markets	
16:45	Wrap Up and close Kevin Laboe, FCA Group, Chair Engine ORC Consortium	
19:30	Conference dinner, <i>Le Caro de Lyon, downtown Lyon</i>	

FRIDAY, SEPTEMBER 28<sup>th</sup>, 2018

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09:30	<b>Welcome back and recap</b> Kevin Laboe, <i>FCA Group, Chair, Engine ORC Consortium</i>	
09:45	<b>KEYNOTE PRESENTATION 3</b> Arthur Leroux, Founder & President, <i>Enogia</i>	
	<b>Technical Session FIVE: Heat Exchanger Technologies</b>	
10:30	<i>Experimental investigation of an Organic Rankine Cycle equipped with an eccentric rotary expander and fluids R365mfc and R245fa</i>  <b>Ebrahim Aeni</b> <i>Institute of Thermodynamics, Leibniz University of Hannover</i>	<i>Multiobjective optimization of plate heat exchanger using NSGA_II for zeotropic mixture of different fluids</i>  <b>Parth Prajapati</b> <i>Pandit Deendayal Petroleum University</i>
11:00	<i>An algorithm for calculation of the Organic Rankine Cycle with minichannel heat exchangers with low Reynolds number flows</i>  <b>Witold Rybiński</b> <i>Polish Academy of Sciences</i>	<i>Dual-purpose heat-exchanger for direct vaporization and condenser water post-heating in ORC based micro-CHP systems for residential applications</i>  <b>João Silva Pereira</b> <i>University of Coimbra</i>
11.30	<b>Closing Remarks</b> Kevin Laboe, <i>FCA Group, Chair Engine ORC Consortium</i>	
12:00	<b>Lunch and networking</b>	

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