2025 Vehicle Technologies Office Annual Merit Review Offroad, Marine, and Aviation (ORMA) Oral Presentation Detailed Schedule

Tuesday, June 3, 2025		Wednesday, June 4, 2025			Thursday, June 5, 2025	
9:00 AM 9:15 AM	ORMA001: Overcoming key barriers to H2ICEs – mixing, pre-ignition, and ultra-lean operation, Ales Srna, Sandia National Laboratories	9:00 AM 9:15 AM 9:30 AM	ORMA041: Reducing Low-load Emissions and N2O, Dhruba Deka, Pacific Northwest National Laboratory ORMA027 (ACE170): control of aldehyde emissions from alcohol-	9:00 AM 9:15 AM	ORMA048 : Medium Duty Off-Road DME Engine Achieving High Efficiency And Ultra Low Emissions, Andre Boehman, University of Michigan	
9:30 AM 9:45 AM	ORMA002: Alcohol combustion in CI engines – understanding mixing, ignition and pollutant emissions, Dario Lopez-Pintor, Sandia National Laboratories	9:45 AM 10:00 AM	fueled non-road engines, Sreshtha Sinha Majumdar, Oak Ridge National Laboratory ORMA043: Low-load cycle emission control, Yong Wang, Pacific	9:30 AM 9:45 AM	ORMA050 : A Low Greenhouse Gas Advanced Spark Ignition Engine that can Operate on Natural Gas and Natural Gas-Hydrogen Blends with Dissel Jeff Naber, Michigan Technical University	
10:00 AM 10:15 AM	ORMA005: Alcohol spray and H2 jet experiments and modeling, Lyle Pickett, Sandia National Laboratories	10:15 AM 10:30 AM 10:45 AM	ORMA042: Unforseen challenges with renewable fuels, Kenneth G. Rappe, Pacific Northwest National Laboratory	10:00 AM 10:15 AM	ORMA052: Simulation of Jet Engine Performance using SAF Blends, Shashank Yellapantula, National Renewable Energy Laboratory	
10:30 AM 10:45 AM	ORMA004: Mixing-controlled compression-ignition combustion with low-lifecycle-CO2 fuels, Chuck Mueller, Sandia National Laboratories	11:00 AM 11:15 AM	ORMA045: Biodiesel poisoning of clos-coupled SCR catalysts for off-road engines, Todd Toops, Oak Ridge National Laboratory	10:30 AM 10:45 AM	ORMA066: High-Fidelity CFD Modeling of Aviation Emissions Chao Xu, Argonne National Laboratory	
11:00 AM	ORMA015: Predictive CFD Tools for Off-road Internal Combustion Engines Utilizing Alternative Fuels, Riccardo Scarcelli, Argonne National Laboratory	11:30 AM 11:40 AM 1:10 PM	Time Buffer Lunch Break ORMA061: Performance and Emissions Characteristics of a	11:00 AM 11:15 AM	ORMA038: Towards Accurate Modeling of Fuel and Combustion Characteristics of SATF, Debolina Dasgupta, Argonne National Laboratory	
11:30 AM 11:40 AM	Time Buffer Lunch Break	1:25 PM	Locomotive Engine using Biofuels, Muni Biruduganti, Argonne National Laboratory	11:30 AM	Time Buffer	
1:10 PM 1:25 PM	ORMA026: Articulated Dump Truck (ADT) Electrification - Commercialization of New Technology in Construction Vehicles, Brij Singh, John Deere	1:40 PM 1:55 PM	ORMA014: Implementing low lifecycle carbon fuels on locomotive engines – CRADA with Wabtec, Dean Edwards, Oak Ridge National Laboratory	1:10 PM 1:25 PM	ORMA020: Aviation Emissions Modeling, Matt McNenly, Lawrence Livermore National Laboratory	
1:40 PM 1:55 PM 2:10 PM	ORMA055: High Energy-Efficient Hybrid Excavator Powered by Hydrogen Combustion Engine, Andrea Vacca, Purdue ORMA056: Transient-capable Hydrogen-hybrid for Off-Road	2:10 PM 2:25 PM	ORMA012: Enabling Hydrogen Combustion for Large-Bore Locomotive Engines through Advanced CFD Modeling, Muhsin Ameen, Argonne National Laboratory	1:40 PM 1:55 PM	ORMA019: Multi-phase flow studies of SAFs for industry-relevant conditions and geometries, Brandon Sforzo, Argonne National Laboratory	
2:25 PM 2:40 PM	(THOR), Chad Koci, Cat ORMA040: Optimized Low Carbon Fuel Range Extender (HyREX), Ion Dickson Cummins	2:40 PM 2:55 PM 3:10 PM	ORMA059: Robust NH3-SCR Catalysts to Enable H2-ICEs, Yong Wang, Pacific Northwest National Laboratory	2:10 PM 2:25 PM 2:40 PM	ORMA018: SAF Combustion and Contrail Formation Research, Julier Manin, Sandia National Laboratories ORMA003: Soot Predictions from DNS of a lab-scale combustor with	
3:10 PM	Time Buffer Break	3:15 PM 3:45 PM	Break ORMA046: Ammonia for 4-stroke Marine Dual Fuel and Gas	2:55 PM	sustainable aviation fuels, Bruno Souza Soriano and Jackie Chen, Sandia National Laboratories	
3:45 PM	ORMA057: High Power, Ultra-Low Emissions HD H2 Engine, Nathan Peters, Dumarey USA	4:00 PM	Engines (Retrofits and New), Scott Curran and Daanish Tyrewala, Oak Ridge National Laboratory	3:10 PM 3:15 PM	Time Buffer Break	
4:00 PM 4:15 PM	ORMA021 (ACE171): Simultaneous Greenhouse Gas and Criteria Pollutants Emissions Reduction for Off-Road Powertrains, James McCarthy, Eaton	4:15 PM 4:30 PM	ORMA016: Methanol-fueled engines for marine and off-road applications, Derek Splitter, Oak Ridge National Laboratory	3:45 PM 4:00 PM 4:15 PM	ORMA037: Sustainable Aviation Fuel Characterization, Gina Fioroni, National Renewable Energy Laboratory ORMA006: Low Lifecycle Carbon Fuel combustion and emission	
4:30 PM 4:45 PM	ORMA058: Greatly Reduced Vehicle Platinum Group Metal (PGM) Content Using Engineered, Highly Dispersed	4:45 PM 5:00 PM	ORMA060: Development and Demonstration of a Medium-Duty Off- Road DME Engine with a Combustion Recipe for Ultra-Low	4:30 PM 4:45 PM	ORMA062: Low Encoyer Carbon Laboratory models, Scott Wagnon, Lawrence Livermore National Laboratory ORMA062: Measurements of Fundamental Combustion Behavior:	
5:00 PM 5:15 PM	University Day 1 Ends	5:15 PM 5:30 PM	Day 2 Ends	5:00 PM 5:15 PM	Laboratory Day 3 Ends	