

Wednesday, November 4, 2020 - Day 1

9:30 AM	9:40 AM	Tom Lavertu - Welcome (Live) Sibendu Som Keynote Introduction and Moderator (Live) Thomas Costabile (Live)		
9:40 AM	10:25 AM	Keynote 1 (Live) Dr. John Farrell, Laboratory Program Manager for Vehicle Technologies at the National Renewable Energy Lab (NREL) Laboratory Program Manager for Vehicle Technologies at National Renewable Energy Laboratory, " Our evolving fuels: from petroleum, to biomass, to e-fuels?" Q&A		
10:25 AM	10:30 AM	Break		
10:30 AM	11:30 AM	Room #1 - Matthew Hart, Dustin Osborne Session 01-01 - Large Bore Engines	Room #2 - Xin He Session 02-01: Compression Ignition II (Alternative Fuels)	Room #3 - Pinaki Pal Session 06-01 Kinetic and Combustion Modeling
		ICEF2020-2963 - Fouling Mitigation for Laser Igniters in Natural Gas Engines Presenter: Sreenath Gupta	ICEF2020-2923 - Formation of Nitrogen Dioxide and Formaldehyde in a Medium Duty Diesel Engine With Oxygenated Fuels Presenter : Denis Notheis	ICEF2020-2916 - Accelerating Computational Fluid Dynamics Simulations of Engine Knock Using a Concurrent Cycles Approach Presenter: Daniel Probst
		ICEF2020-2906 - Validation of a Directed Energy Ignition System on a Large-Bore Single Cylinder Gas-Fueled Engine Presenter: Forrest Pommier	ICEF2020-2936 - Combustion of Hydrotreated Vegetable Oil in a Diesel Engine: Sensitivity to Split Injection Strategy and Exhaust Gas Recirculation Presenter : Maciej Mikulski	ICEF2020-2924 - Parametric Studies of a Novel Combustion Modelling Approach for Low Temperature Diesel Spray Simulation Presenter : Xiaohang Fang
		ICEF2020-2920 - An Experimental and Numerical Study of a Hydrogen Fueled, Directly Injected, Heavy Duty Engine at Knock-Limited Conditions	ICEF2020-3010 - Rcci Investigation With High Reactivity S8-Ulsd Blend and Low Reactivity N- Butanol Presenter : Valentin Soloiu	ICEF2020-2942 - Validation of Species-Based Extended Coherent Flamelet Model in a Large Eddy Simulation of a Homogeneous Charge Spark Ignition Engine
11:30AM	11:40AM	Room #1 - 15 mins Q&A LIVE	Room #2 - 15 mins Q&A	Room #3 - 15 mins Q&A
Break				
11:40AM	12:25PM	Keynote 2 (Live) Sibendu Som - Introduction and Moderator Dr. Prith Banerjee, Chief Technology Officer of ANSYS, " AI/ML and Simulation in the Context of Product Innovation"		
12:25PM	12:55PM	Lunch Break		
12:55PM	1:55PM	Room #1 - Munidhar Biruduganti, Dustin Osborne Session 01-02 - Large Bore Engines	Room #2 - Mozghan Rahimi Session 05-01 - Fuel Injection and Sprays	Room #3 - Jihad Badra Session 06-02 Machine Learning
		ICEF2020-2928 - Use of a Thermodynamic Cycle Simulation to Identify Fundamental Thermodynamic Factors of Nox Formation in a Natural Gas Engine Presenter : Kevin Wallace	ICEF2020-2913 - Simultaneous High-speed Formaldehyde PLIF and schlieren imaging of multiple injections from an ECN spray D injector Presenter : Noud Maes	ICEF2020-2911 - Prediction of Nox Emissions for a Range of Engine Hardware Configurations Using Artificial Neural Networks Presenter : Nick Papaioannou
		ICEF2020-2956 - Quantification of Losses and Irreversibilities in a Marine Engine for Gas and Diesel Fuelled Operation Using an Exergy Analysis Approach Presenter : Beichuan Hong	ICEF2020-2938 - Evaluation of Soot Production Near a Cold Surface for an Impinged Diesel Spray Combustion Presenter : Zhihao Zhao	ICEF2020-3000 - An Automated Machine Learning-Genetic Algorithm (AutoML-GA) Framework with Active Learning for Design Optimization Presenter : Opeoluwa Owoyele
		ICEF2020-3018 - Turbulence Aided Dual Compounding Engine :Presenter : Yngvi Ouyang	ICEF2020-3007 - Comparing global spray combustion characteristics and local shot-to-shot variations in a reacting n-heptane spray Presenter : Shawn Reggeti	ICEF2020-2919 - Combining Machine Learning With 3d-Cfd Modeling for Optimizing a Disi Engine Performance Under Cold-Start Operating Conditions Presenter : Arun Ravindran
1:55PM	2:00PM	Room #1 - 15 mins Q&A LIVE	Room #2 - 15 mins Q&A	Room #3 - 15 mins Q&A
Break				
2:00PM	3:00PM	Room #1 - Sandeep Viswanathan Session 04-01 - Emission Systems	Room #2 - Isaac Ekoto, Hui Xu, Giacomo Belgioro Session 03-01 Combustion Fundamentals and Thermodynamics	Room #3 - Roberto Torelli Session 06-03 - CI Engine Modeling
		ICEF2020-2904 - The Influence of Cycle-to-Cycle Hydrocarbon Emissions on Cyclic No:No2 Ratio From a Hsdi Diesel Engine Presenter : Felix Leach	ICEF2020-2968 - Improving Machine Learning Model Performance in Predicting the Indicated Mean Effective Pressure of a Natural Gas Engine Presenter : Cosmin Dumitrescu	ICEF2020-2946 - Development of an Efficient Conjugate Heat Transfer Modeling Framework to Optimize Mixing-Limited Combustion of Ethanol in a Diesel Engine Presenter : Gina Magnotti
		ICEF2020-3027 - Influence of Fuel Properties on Gdi Pm Emissions Over First 200 Seconds of Wltp Using an Engine Dynamometer and Novel "Virtual Transmission" Software Presenter : Noah Bock	ICEF2020-2969 - Optimization of Direct Water Injection Parameters to Improve the Tradeoff Between Efficiency and Nox Emissions for a Lean-Burn Chp Ng Engine Presenter : Youssef Beltaifa	ICEF2020-2990 - Piston Bowl Geometry Effects on Gasoline Compression Ignition in a Heavy-Duty Diesel Engine Presenter : Meng Tang
		ICEF2020-2932 - Influence of Low Ambient Temperatures on the Exhaust Gas and Deposit Composition of Gasoline Engines Presenter : Dominik Appel	ICEF2020-2979 - Controlled End Gas Auto Ignition With Exhaust Gas Recirculation on a Stoichiometric, Spark Ignited, Natural Gas Engine Presenter : Scott Bayliff	ICEF2020-3015 - Co-Optimization of Piston Bowl and Cooling Gallery Designs Using Coupled Cfd and Conjugate Heat Transfer for Heavy-Duty Diesel Engines Presenter : Chao Xu
3:00PM	3:10PM	Room #1 - 15 mins Q&A LIVE	Room #2 - 15 mins Q&A	Room #3 - 15 mins Q&A
Break				
3:10PM	4:10PM	Room #1 - Stani Bohac Session 04-02: Modeling Control - 1	Room #2 - Hunter Mack Session 02-02: Spark Ignition II (Alternative Fuels)	Room #3 - Tiegang Fang Session 05-02 - Fuel Injection and Sprays
		ICEF2020-3024 - Study on Design Method of Combustion Reference Values for Model-Based Control of Advanced Diesel Engine Presenter : Yudai Yamasaki	ICEF2020-2971 - Optimization and Simulation of a Cfr Engine Fueled by Dilute Anode Tail-Gas Presenter : Alexander Balu	ICEF2020-2945 - Assessments of Primary Atomization Models for Spray Simulations Presenter : Haiwen Ge
		ICEF2020-3025 - Study on Automatic Adaptation for Control-Oriented Model of Advanced Diesel Engine Presenter : Yudai Yamasaki	ICEF2020-2939 - Numerical Analysis of Fuel Effects on Advanced Compression Ignition Using a Virtual Cooperative Fuel Research Engine Model Presenter : Pinaki Pal	ICEF2020-2962 - Accuracy Verification of 2-Dimensional Velocity Field Derived From Optical Flow With Respect to Piv Flow Field Measurement Presenter : Mingli Cui
		ICEF2020-2951 - The Sensitivity Study of a Mechanical Loss Model in Turbocharger System Presenter : Haizhu Wang	ICEF2020-2978 - Predicting the Cetane Number, Yield Sooting Index, Kinematic Viscosity, and Cloud Point for Catalytically Upgraded Pyrolysis Oil Using Artificial Neural Networks Presenter : Travis Kessler	ICEF2020-2972 - A Multi-Wavelength Extinction Imaging Diagnostic for Quantifying Diesel Spray Mixing at Engine-Relevant Conditions Presenter : Conner Godbold
4:10PM	4:15PM	Room #1 - 15 mins Q&A LIVE	Room #2 - 15 mins Q&A	Room #3 - 15 mins Q&A
Break				
4:15PM	5:15PM	Room #1 - Sandeep Viswanathan Session 04-03: Modeling and Control - 2	Room #2 - Brian Fisher, Marcis Jansons, Siddhartha Banerjee Session 03-02 Combustion Diagnostics	Room #3 - Anqi Zhang Session 06-04 Ignition and Knock Modeling
		ICEF2020-3042 - An Experimental Study of the Inner Insulated Turbocharger Turbine Presenter : Yang Liu	ICEF2020-2961 - Effect of the Split Injection on Combustion Characteristics in a Disi Optical Engine Under Lean Combustion Condition Presenter : Sun Zhe	ICEF2020-2922 - A Transported Livengood-Wu Integral Model for Knock Prediction in CFD Simulation Presenter : Zongyu Yue
		ICEF2020-2930 - Effect of Support Materials on Pd Methane Oxidation Catalyst Using Dynamic Estimation Method Presenter : Yoshifuru Nitta	ICEF2020-2964 - Engine Performance and Emissions for a Heavy-Duty Diesel Engine Converted to Stoichiometric Natural Gas Operation Presenter : Cosmin Dumitrescu	ICEF2020-2934 - Towards Integrated Spark and Combustion Modeling for Engines Presenter : Anand Karpatne

		ICEF2020-2996 - Development of a Methodology for the Investigation of Residual Gases Effects on Gasoline Compression Ignition Presenter : Vittorio Ravaglioli	ICEF2020-2912 - Infrared Experimental Investigations on the Effects of Direct Water Injection in an Optical Engine Presenter : Amer Farhat	ICEF2020-2992 - Multi-Dimensional Modeling of the Cfr Engine for the Investigation of Si Natural Gas Combustion and Controlled End-Gas Autoignition Presenter : Diego Bestel
		Room #1 - 15 mins Q&A LIVE	Room #2 - 15 mins Q&A	Room #3 - 15 mins Q&A
5:15PM	6:00PM	Awards Ceremony		
Thursday, November 5, 2020 - Day 2				
9:30AM	10:20AM	Welcome Sibendu Som - Introduction and Moderator (Live) Prof. Bryan Willson, Executive Director of the Energy Institute at Colorado State University. "The Role of Internal Combustion Engines in a Decarbonizing World"		
10:20AM	10:30AM	Break		
10:30AM	11:30AM	Room #1 - Valentin Soloiu Session 02-03: Compression Ignition I	Room #2 - Sotirios Mamalis, Hongsheng Guo, Gokul Vishwanathan, Swaminathan Subramanian, Lorenzo Bartolucci Session 03-03 Novel/Advanced Combustion Concepts	Room #3 - Roberto Torelli Session 06-05 Numerical Simulation
		ICEF2020-2907 - The Relationship Between Steady-State Cetane Combustion Changes and Cold Start Engine Performance Presenter : Jim Cowart	ICEF2020-2909 - Experimental and Numerical Analysis on the Influences of Direct Fuel Injection Into O2-Depleted Environment of a Gdi-Hcci Engine Presenter : Ratnak Sok	ICEF2020-3004 - Role of Inlet Boundary Conditions on Fuel-Air Mixing at Supercritical Conditions Presenter : Joshua Bittle
		ICEF2020-3017 - Comparing Cetane Number Measurement Methods Presenter : Riley Abel	ICEF2020-2941 - Statistical Quantification of Knock With Spark Ignition and Pre-Chamber Jet Ignition in a Light Duty Gasoline Engine Presenter : Xin Yu	ICEF2020-2918 - Challenges of Using Detailed Chemistry Model for Modeling Disi Cold-Start Combustion Presenter : Arun Ravindran
		ICEF2020-2925 - Practical Application of Microalgal Oil in an Internal Combustion Engine and Simulation of the In-Cylinder Process Parameters Presenter : Laurencas Raslavicius	ICEF2020-3035 - Impact of Geometric Compression Ratio and Variable Valve Actuation on Gasoline Compression Ignition in a Heavy-Duty Diesel Engine Presenter : Yu Zhang	ICEF2020-3026 - Computational Optimization of the Prechamer of a Spark Ignition Engine Presenter : Haiwen Ge
		Room #1 - 15 mins Q&A LIVE	Room #2 - 15 mins Q&A	Room #3 - 15 mins Q&A
11:30AM	11:35AM	Break		
11:35AM	12:35PM	Room #1 - Douglas Longman Session 02-04: Compression Ignition I	Room #2 - Tiegang Fang, Isaac Ekoto, Hui Xu, Giacomo Belgiorio Session 03-04 Combustion Fundamentals and Thermodynamics	Room #3 - Josh Bittle Session 05-03 - Fuel Injection and Sprays
		ICEF2020-2983 - AN INVESTIGATION INTO OME3 ON A HIGH COMPRESSION RATIO ENGINE Presenter : Simon Leblanc	ICEF2020-2914 - Modelling of Soot Formation and Experimental Study for Different Octane Number Fuels in Dual Fuel Combustion Engine With Diesel Presenter : Krishnamoorthi M	ICEF2020-2991 - Comparison Between a Center-Mounted and a Side-Mounted Injector for Gasoline Applications: A Computational Study Presenter : Lorenzo Nocivelli
		ICEF2020-3032 - Combustion and Emission Characteristics of a Diesel Engine Working With Diesel-Joboba-Higher Alcohol Blends Presenter : Ahmed I. El-Seesy	ICEF2020-2933 - Computational Fluid Dynamics Investigation of Multiple Injectors With Swirl in a Heavy-Duty Engine Presenter : Gustav Nyrenstedt	ICEF2020-2994 - Cavitation-Suppressing Orifice Design Applied to a Heavy-Duty Diesel Engine Injector Operating With Gasoline Presenter : Roberto Torelli
		ICEF2020-3033 - Replacement of Diesel by Biogas Generated From Wastewater Treatment in a Small Diesel Generator by Dual Fuel Technology Presenter : Hongsheng Guo	ICEF2020-3029 - Turbulence Anisotropy Investigations in an Internal Combustion Engine Presenter : James Macdonald	ICEF2020-2974 - X-Ray Characterization of Real Fuel Sprays for Gasoline Direct Injection Presenter : Brandon Sforzo
		Room #1 - 15 mins Q&A LIVE	Room #2 - 15 mins Q&A	Room #3 - 15 mins Q&A
12:35PM	1:00PM	Room #1 - Kalyan Srinivasan Session 06-06 - Undergraduate Presentations		
		Impact of Diesel Injection Pressure on Dual Fuel Low Temperature Combustion: Performance and Emissions Presenter - Austin Pearson		
		Predicting Ignition Delay and Soot Emissions Using Homogenous Reactor CFD Simulations: The Fingerprint of a Fuel Combustion Chemistry Mechanism & Soot Model Presenter - Chaimaa Maghfour		
1:00PM	1:20PM	Lunch Break		
1:20PM	1:50PM	Poster Session in the Poster Gallery		
1:20PM	1:50PM	Active Heating of Catalytic Converters - a Possibility to Mitigate Cold-Start Emissions, Presenter: Lukas Moeltner Deterioration of Fatty ACid Methyl Esters - Mechanisms, Consequences, and Countermeasures Presenter: Lukas Moeltner Low-Temperature Heat Release Investigations of Fischer-Tropsch Synthetic Kerosene Blends with Ultra-Low Sulfur Diesel in a Constant Volume Combustion Chamber Presenter: Richard Smith Are BEV Pickup Trucks the Future? Presenter : Nick Sharpen		
1:50PM	2:35PM	Room #1 - Christopher Stoos, Dustin Osborne Session 01-03 - Large Bore Engines	Room #2 - Sundar Krishnan Session 03-05 - Advanced Combustion Concepts	Room #3 - Ron Grover Session - 06-07 Large Bore Engines and Numerical Simulation
		ICEF2020-3038 - Experimental and Numerical Study on the Motion Law of Cylinder Oil and the Suppressing Methods for Its Auto-Ignition in Low-Speed Dual-Fuel Marine Engine Presenter : Zhen Gong	ICEF2020-2929 - Gasoline Compression Ignition (GCI) on a Light-Duty Multi-Cylinder Engine Using a Wide Range of Fuel Reactivities and Heavy Fuel Stratification Presenter: Adam Dempsey	ICEF2020-3043 - Effect of Thermal Boundary Conditions on Propagation of Non-Equidiffusive Flames Presenter : V'yacheslav Akkerman
		ICEF2020-3031 - Method for Estimating Compression Ratio and Heat Transfer Multiplier Using Gt-Power and Experimental Pressure Traces Presenter : Adam Klingbeil	ICEF2020-2981 - Heavy-Duty Natural Gas On-Highway Engine Concept to Achieve 44% Efficiency Presenter - Greg Hampson	ICEF2020-2949 - Assessment of Hydrogen and Natural Gas Mixtures in a Large Bore Gas Engine for Power Generation Presenter : Jan Zelenka
		Room #1 - 15 mins Q&A LIVE	Room #2 - 15 mins Q&A	Room #3 - 15 mins Q&A
2:35PM	2:45PM	Break		
2:45PM	3:45PM	Room #1 - David Rutledge, Dan Richardson, Kevin Anderson Session 07-01 Engine Design and Mechanical Development	Room #2 - Brian Fisher, Marcis Jansons, Siddhartha Banerjee Session 03-06 Combustion Diagnostics	Room #3 - Anqi Zhang Session 06-08 GDI Engine Modeling
		ICEF2020-2960 - Experimental Setup and Testing of a 4-Cylinder Gasoline Spark Ignited Variable Compression Ratio Engine Presenter : Tyler Miller	ICEF2020-3011 - Effect of Discharge Energy Distribution on Flame Kernel Development Presenter : Hua Zhu	ICEF2020-2917 - Dynamic Mode Decomposition for Extracting Cycle-to-cycle Variation of SIDI Engine In-cylinder Flow under Motoring Condition Presenter : Mengqi Liu
		ICEF2020-3045 - Fuel and Engine Management System for Gaseous-Fueled Spark-Ignition Non-Road Engines Presenter : Daniel Sherwin	ICEF2020-3034 - Assessment of Spark, Corona, and Plasma Ignition Systems for Gasoline Combustion Presenter : Sayan Biswas	ICEF2020-2940 - Simulations of Multi-Mode Combustion Regimes Realizable in a Gasoline Direct Injection Engine Presenter : Sayop Kim
		ICEF2020-2927 - Development of the Wabtec Additive Content Turbocharger Presenter : Adam Felton	ICEF2020-3049 - Rde Plus – Frontloading Powertrain and Vehicle Development Utilising Engine-in-the-Loop and Virtual Tools Presenter : Phil Roberts	ICEF2020-3006 - Modeling Nanosecond-Pulsed Spark Discharge and Flame Kernel Evolution Presenter : Joohan Kim
		Room #1 - 15 mins Q&A LIVE	Room #2 - 15 mins Q&A	Room #3 - 15 mins Q&A
3:45PM	3:50PM	Break		

		Room #1 - Richard Burke		Room #3 - Noan Van Dam	
		Session 04-04: New Engines and Facilities		Session 06-09 Advanced Engine Modeling	
3:50PM	4:50PM	ICEF2020-2955 - Three Pattern Recognition Approaches to the Reduction of Vehicle Driving Cycles Presenter : Samuel Le Corre		ICEF2020-2959 - Numerical Evaluation of Spray-Guided Glow Plug Assistance on Gasoline Compression Ignition During Cold Idle Operation in a Heavy-Duty Diesel Engine Presenter : Le Zhao	
		ICEF2020-2944 - Ultralow Cost, Ultralow Nox, Ultrahigh Efficiency - Furthering the Commercialization of the Opposed-Piston Engine Presenter : Ashwin Salvi		ICEF2020-2997 - Numerical Investigation of Pre-Chamber Jet Combustion in a Light-Duty Gasoline Engine Presenter : Anqi Zhang	
		ICEF2020-2998 - Homogeneous Ignition Delay, Flame Propagation Rate and End-Gas Autoignition Fraction Measurements of Natural Gas and Exhaust Gas Recirculation Blends in a Rapid Compression Machine Presenter : Anthony Marchese		ICEF2020-3003 - Large Eddy Simulation of Lean Mixed-Mode Combustion Assisted by Partial Fuel Stratification in a Spark-Ignition Engine Presenter : Chao Xu	
		Room #1 - 15 mins Q&A LIVE		Room #3 - 15 mins Q&A	
4:50PM	5:30PM	Networking Event			
Room 1 - Industry					
Room 2 - Academia					
Room 3- National Labs					
Conference Ends					
Friday, November 6, 2020 - Day 3					
8:00AM	12:30PM	AVL Workshop			
1:30PM	3:00PM	Associates Meeting			
3:00PM	5:00PM	Technical Committes Meeting			