CONFERENCE SCHEDULE

WEDNESDAY, SEPTEMBER 21 | *Monona Terrace, Hall of Ideas-Room H*

7:00	REGISTRATION | BREAKFAST & REFRESHMENTS
8:00	**WELCOME** | Kelly Senecal | *Convergent Science*
8:10	**KEYNOTE | Development and Application of High-Fidelity, Multi-Physics Numerical Models to Develop Propulsion System Components for Electric Vehicles** Scott Parrish | *General Motors R&D*
8:50	**Thermal Runaway and Vent Gas Ignition Simulation of a Battery Pack Using LES** Veeraraghavan Viswanathan | *Convergent Science*
9:15	**Simulation of Thermal Runway Propagation in a Lithium-Ion Battery Module** Adèle Poubeau | *IFP Energies nouvelles*
9:40	**Advances in CONVERGE Battery Modeling Tools** | Kislaya Srivastava | *Convergent Science*
10:05	BREAK
10:30	**Go With the Flow: Modeling FSI and Complex Moving Boundaries With CONVERGE** Jasim Sadique | *Convergent Science*
10:55	**CFD Simulation of Face Shield Effects on an Emitter During a Cough Process** Teng Deng | *Huazhong University of Science and Technology*
11:20	**CFD Validation of a Controllable Pitch Marine Propeller Using Truly Autonomous Mesh Generation With Adaptive Mesh Refinement** | Mathias Vangö | *Convergent Science*
11:45	**Development of a Data-Driven Wall Function Methodology for Complex Flows** Erwan Rondeaux | *IFP Energies nouvelles*
12:10	**SPONSOR** | TotalCAE
12:25	LUNCH
1:30	**SPONSOR** | Tecplot
1:45	**KEYNOTE | The Role of High Fidelity and High Throughput Computational Modeling in Developing Low Climate Impact Transport Technologies** Yuanjiang Pei | *Aramco Americas' Detroit Research Center*
2:25	**Automated Optimization of Pre-Chamber Geometry Using CFD** Ahmad Hadi Bakir | *University of Tennessee Space Institute*
2:50	**Heavy-Duty Flex-Fuel Mixing Controlled Combustion Enabled by Prechamber Ignition** Jared Zeman | *Marquette University*
3:15	**An Overview of the Pre-Chamber Engine Modeling at KAUST** Mickael Silva | *Clean Combustion Research Center at KAUST*
3:40	BREAK
4:05	**4D Flow MRI-Based CFD for Flow Dynamics Assessment in Coarctation of the Aorta** Labib Shahid | *University of Wisconsin–Madison*
4:30	**Introducing CONVERGE Horizon** | Cooper Burns | *Convergent Science*
4:55	**Rapid Exhaust Port Optimization Using High Performance Computing and Machine Learning Methodologies** | Jacob Hanson | *Polaris Industries*
5:20	**CLOSING** | *Convergent Science*
6:00	**NETWORKING EVENT** | Scavenger Hunt + Dinner at The Coopers Tavern

CONFERENCE SCHEDULE

THURSDAY, SEPTEMBER 22 | *Monona Terrace, Hall of Ideas-Room H*

7:00	REGISTRATION | BREAKFAST & REFRESHMENTS
8:00	**WELCOME** | Kelly Senecal | *Convergent Science*
8:10	**KEYNOTE | Predicting Hydrogen Combustion in Heavy Duty ICE** Amer Avdić | *Daimler Truck AG*
8:50	**Development of an Optimal H2 Combustion Engine: Comprehension and Requirements** Olivier Laget | *IFP Energies nouvelles*
9:15	**Numerical Modeling of Fuel-Air Mixing in a Direct Injection Hydrogen Engine** Bifen Wu | *Argonne National Laboratory*
9:40	**Computational Study of Hydrogen CI Combustion in an OP2S Engine** Ming Huo | *Achates Power*
10:05	BREAK
10:30	**Modeling Hydrogen Combustion in IC Engines Using Detailed Chemistry** Sameera Wijeyakulasuriya | *Convergent Science*
10:55	**High Hydrogen Blends Combustion in Microturbine Combustors** Joshua Christopher | *Argonne National Laboratory*
11:20	**Simulation of Mode Transition in Hydrogen-Based Rotating Detonation Engine (RDE)** Veeraraghava Raju Hasti | *Purdue University*
11:45	**Numerical Investigation of Vaporization and Ignition of Ammonia Sprays** Ahmad Hadi Bakir | *University of Tennessee Space Institute*
12:10	LUNCH
1:10	**Impact of Thermophysical Properties on Materials Temperature Predictions** Charles E.A. Finney | *Oak Ridge National Laboratory*
1:35	**Simulation of Combustion Systems Using Neural Networks** Cédric Mehl | *IFP Energies nouvelles*
2:00	**CFD Simulations of an Optical RCM Using Gasoline/Ethanol Blends** Musharrat Chowdhury | *Marquette University*
2:25	**Non-Reacting and Reacting Spray A Simulations With Synthetic Biofuels** Prashant Goel | *Politecnico di Torino*
2:50	**Exploiting the Potential of LES for Ducted Fuel Injection Investigation** Andrea Bianco | *POWERTECH Engineering*
3:15	BREAK
3:40	**CFD Simulations of Stratification and Charge Cooling Effects on a GDCI Engine** Haiwen Ge | *Texas Tech University*
4:05	**ChemNODE: A Robust ML Framework for Efficient Chemical Kinetic Solvers** Tadbhagya Kumar | *Argonne National Laboratory*
4:30	**Effect of Impurities on Condensation of SCO2 in De Laval Nozzle Using RFM** Harshit Bhatia | *IFP Energies nouvelles*
4:55	**What's New & What's Coming in CONVERGE** | Keith Richards | *Convergent Science*
5:20	**CLOSING** | *Convergent Science*
5:30	**RECEPTION** | Snacks and Refreshments