



## Call for Presentations

The content for the COMVEC18 program will feature two management tracks one on Big Data and the second on Commercial Vehicle Efficiency, along with four technical tracks to address technologies related to aerodynamics, chassis design and vehicle dynamics, powertrain, and total vehicle mechatronics and integration. While the speakers of the management tracks will all be confirmed through personal invitations, the technical session organizers are now inviting abstracts on the below subjects of interest. Please note that the entire program will be comprised of oral only presentations, with scheduled time for questions and answers with the audience participants. If you are interested in making an oral only presentation, in one of the technical sessions, please upload a 300-word abstract by [clicking this link](#). (No written papers are required and none will be published from COMVEC18. If you wish to publish a paper, please visit [sae.org/attend/calls-for-papers](http://sae.org/attend/calls-for-papers).)

Topics of interest for COMVEC18 include:

### Aerodynamics:

- Understanding and Controlling the Operational Aspects of Aerodynamics (macro/micro levels)
- Safer Aerodynamics (smart systems, boundary layer control, lift augmentation and energy generation)
- The Organic Truck (next generation of aerodynamics)
- 2050 Hypo-drag levels (impact to industry, economy and environment)

### Chassis Design and Vehicle Dynamics:

- Balance and optimization of various vehicle system performances
- Bench testing development for system, subsystem and components
- Communication of Uncertainty in Engineering
- Customers' voice cascaded to vehicle performance
- Durability and Life Testing
- Leveraging Data and Analytics for Decision Making
- Methods for Validation of Models and Tests
- On- and Off-Road Vehicle Dynamics and Control
- Reliability Analysis and Uncertainty Quantification
- Robust Analysis and Design
- Tire Modeling and Parameterization for Vehicle System Simulations
- Vehicle system level performances cascades
- Vibration Isolation Techniques

### Powertrain:

- Alternative Fuels and Propulsion Systems (including EVs, Fuel Cells, Hybrids, Natural Gas, etc.)
- Exhaust Aftertreatment and Integration
- Fuel and Fluid Systems Hybrids
- Fuel Economy Improvements and CO2 Reductions

- Mechanical and Thermal Systems
- OBD
- Powertrain Performance, Emissions and Controls
- Product Development / Certification Technologies, Integration of Testing and Simulation

**Total Vehicle Mechatronics and Integration:**

- Autonomous / ADAS
- Artificial Intelligence and Machine Learning
- Connected Vehicles / Platooning
- Cybersecurity

**Important Deadlines:**

- Abstracts to be uploaded no later than March 1, 2018.
- All selections will be made by May 1, 2018.

*Please note the submitter will be contacted by SAE, if organizers find interest in the content of an abstract. New technologies that relate to the specified topics will be of highest interest. If anyone reading this document would like to join one of the technical committees and begin planning content for future SAE COMVECs, please email [colette.wright@sae.org](mailto:colette.wright@sae.org) with your area of interest.*