



# EVENT-AT-A-GLANCE CO-OPTIMIZATION OF FUELS AND ENGINES SYMPOSIUM

October 9-10, 2018



## October 9 TUESDAY

### 8:15 a.m. | Welcome Remarks and Keynote Presentation

Judea

Robert Wagner, Oak Ridge National Laboratory; John Farrell, US DOE - National Renewable Energy Lab.

### 8:30 a.m. | Keynote Presentation

Judea

Heinz Pitsch, RWTH Aachen Univ

### 9:15 a.m. | Keynote Presentation

Judea

John Farrell, US Dept. of Energy

### 10-10:30 a.m. | Networking Break

Garden Gallery

### 10:30-Noon | Coordinated Global Research

Judea

10:30 a.m. *Future Fuels in Support of a Reduced Internal Combustion Engine CO<sub>2</sub> Footprint*, Michael Potter, General Motors Global R & D  
11 a.m. *Fuel Considerations for Advanced Internal Combustion Engines*, David J. Cleary, Aramco Services Co.  
11:30 a.m. *Presentation*, Jason Miwa, Southwest Research Institute

### Noon-1 p.m. | Networking Lunch

Atrium

### 1 p.m. | Considerations in Different Combustion Modes – Part 1

Judea

1 p.m. *Co-Optima Initiative's Approach to Multimode Combustion*, Jim Szybist, Oak Ridge National Laboratory  
1:30 p.m. *Φ-Sensitivity and ITHR – Key Fuel Properties for Advanced Compression Ignition Engines*, John Dec, Sandia National Laboratories  
2 p.m. *Impacts of Fuel Physical and Chemical Properties and Implications for Co-optimization of Fuels and Conventional Compression-Ignition Engines*, David A. Rothamer, Univ. of Wisconsin

### 2:30-3 p.m. | Networking Break

Garden Gallery

### 3 p.m. | Considerations in Different Combustion Modes – Part 2

Judea

3 p.m. *Fuel Property Effects and Bioblendstock Selection for Spark-Ignition, Multimode, and Mixing Controlled Compression-Ignition Combustion*, Robert L. McCormick, National Renewable Energy Laboratory  
3:30 p.m. *High-fidelity simulations for Co-optimization of Engines and Fuels*, Sibendu Som, Argonne National Laboratory  
4 p.m. *Effects of Fuel Chemistry on Emissions and Emissions Control*, Brian West Oak Ridge National Laboratory

### 4:30-5:30 p.m. | Networking Reception

Garden Gallery

## October 10 WEDNESDAY

### 8:15 a.m. | Welcome and Recap of Day 1

Judea

Robert Wagner, Oak Ridge National Laboratory; John Farrell, US DOE - National Renewable Energy Lab.

### 8:30 a.m. | Keynote Presentation

Judea

Derek Regal, Andeavor

### 9:15 a.m. | Keynote Presentation

Judea

Coleman Jones, General Motors

### 10-10:30 a.m. | Networking Break

Garden Gallery

### 10:30-Noon | Spotlight on Global Research Efforts – Part 1

Judea

10:30 a.m. *Presentation*, Bengt Johansson, King Abdullah Univ. of Science & Tech  
11 a.m. *Fuel Property and Modification for Partially Premixed Combustion (PPC)*, Mingfa Yao, Tianjin University  
11:30 a.m. *Presentation*, Martin Tuner, Lund University

### Noon-1 p.m. | Networking Lunch

Atrium

### 1:30 p.m. | Spotlight on Global Research Efforts – Part 2

Judea

1:30 p.m. *Fuel Requirements and Selection for Compression Ignition Engines*, Shi-Jin Shuai, Tsinghua University  
2 p.m. *Impingement, Adhesion, and Vaporization on Cylinder Liners with Post Fuel Injection*, Gen Shibata, Hokkaido University  
2:30 p.m. *Panel Discussion*

## REGISTRATION HOURS

Monday 3-5 p.m.

Tuesday 7 a.m.-5 p.m.

Wednesday 7:30 a.m.-Noon