FINAL AGENDA

Portable Emissions Measurement Systems International Conference & Workshop Shaping the Future of the Emissions in our Global Environment

http://www.cert.ucr.edu/events/pems

University of California, Riverside

College of Engineering - Center for Environmental Research and Technology (CE-CERT)

1084 Columbia Ave, Riverside, CA 92507

March 17 & 18, 2016

March 16-6:30 PM – 9:30 PM SEMA Facility in Diamond Bar	AVL Sponsored Reception (please RSVP)
March 17- 7:00 AM – 5:00 PM	Day 1 Conference
March 17- 6:00 PM - 9:00 PM	CE-CERT Reception
March 18- 8:30 AM – 12:30 PM	Day 2 Conference & Short Course

Day 1 Conference – March 17, 2016 07:00 AM Check-in and Continental Breakfast

	07:00 AM Check-in and Continental Breakfast			
	08:00 AM Introduction			
	University of California Riverside	Matthew Barth	Introduction & Welcome to UC Riverside, CE-CERT	
1	U.S. EPA	Ed Nam	Keynote Speaker	
2	NREL	Matthew Thornton	The Increasing Importance of Vehicle Real-World Data	
	University of California, Riverside	Kent Johnson	In-use Testing, Trends & Predictions	
	09:00 AM Regulatory Developments and Trends			
3	U.S. EPA	Carl Fulper	New Methodologies and Improved Data Gathering Developed for the Heavy-Duty Vehicle SCR TEST Program	
4	Volvo Penta	Jonas Holmberg	EU Development of In-Use Evaluation Method for Non-Road Mobile Machinery	
5	Environmental Protection Department Hong Kong	Carol Wong	On-Board Vehicle Emissions Measurements for Hybrid Buses and Light Duty Vehicles in Hong Kong	
	10:00 AM-10:20 AM – Break			
	10:20 AM Approaches for Measuring In-Use PM			
6	AVL	Dan Meyer	Six-Sigma Implications of Particulate Mass Measurements at a Milligram per Mile	
7	Horiba Instruments, Inc.	Michael Akard	OBS-ONE PEMS Particulate Measurement Devices and New Platform Features	
8	Sensors Inc.	David Booker	Challenges for PEMS under RDE Regulations	
9	Ford Motor Company	Matti Maricq	Investigating the Operating Principle of the Emisense PMTrac Sensor	
10	Southwest Research Institute	Imad A. Khalek	Spark-Plug Sized Exhaust Particle Sensors for OBD and Emissions Monitoring	
11	Pegasor	Erkka Saukko	Expanded Capabilities of Dual Pegasor PPS-M Sensor	

12:20 PM-1:20 PM Lunch

1:20 PM Development of New Instrumentation for In-Use and PEMS Measurements

12 **HEAT RSD** Stewart Hager Remote Sensing - Connecticut Study Development of Novel NOx Sensors and System 13 CoorsTek Sensors Leta Woo Integration with Alumina Heater Elements Vasileios South Coast Air Quality Management 14 Low Cost Sensor Evaluation Update District Papapostolou **Evaluation of NGK Spark Plug Compact Emission UC** Riverside 15 Yu Jiang Measurement System 2:40 PM-3:00 PM - Break 3:00 PM Research Developments The VW Story and Its Impact on Future In-use **Daniel Carder** 16 West Virginia University **Emissions Compliance and Control Technologies** The Role of In-use PEMS Testing to Ensure **Emissions Analytics** Nick Molden 17 **Regulatory Compliance and Policy Effectiveness** Sensitivity of Light Duty Gasoline Vehicle Emissions-18 North Carolina State University Chris Frey Based Scoring to Real-World Emissions Versus **Emission Standards**

4:00 PM Panel Discussion

Panel: This will be a roundtable discussion on trends, tools, and needs for in-use testing.

U.S. Environmental Protection Agency Ed Nam

NREL Matt Thornton

California Air Resources Board Tao Huai

Ford Motor Company Matti Maricq

University of California Riverside Kent Johnson

5:00 PM End of Day 1 Workshop

6:00 PM – 9:00 PM – Reception with Refreshments UC Riverside- College of Engineering –Center for Environmental Research and Technology (CE-CERT) 1084 Columbia Avenue Riverside, CA 92507

Day 2 Conference and Workshop 08:30 AM Introductions by Matthew Barth

19 Department of Energy Leo Breton Keynote Speaker: Thinking Off-Cycle About the Future of PEMS

09:00 AM Instrumentation and Approaches for In-Use Measurements

20	University of Leeds	Karl Ropkins	Next Generation (Smaller, Lower Cost, Lower Energy Consumption) PEMS
21	InFoWedge	Andrew Burnette	Next Generation (Smaller, Lower cost, Lower Energy Consumption) PEMS
22	Texas Southern Research Institute	Fengxiang Qiao	Using Portable Emission Measurement System to Test Emissions of Light Duty Vehicle on Texas Highways with Different Pavement Roughness
23	Aerosol D.O.O	Irena Jezek	Real-World Black Carbon, Particle Number Concentration and Nitrogen Oxide Vehicle Emission Factors: On-Road Chasing Campaign Results

010:20 AM-10:40 AM Break 10:40 AM Comparison of In-Use Data Analysis Approaches

24	U.S. EPA	Carl Fulper	Activity Measurement Systems (PAMS) with Cellular Link
25	UC Riverside	George Scora	Truck Activity Project
26	UC Riverside	Kent Johnson	Developing Individual and Fleet Survey Forms for Better Data Analysis for Heavy-Duty Vehicles
27	Eastern Research Group	Michael Sabisch	Developing a Set of Heavy-Duty Vehicle Data Fields (SAE J1939) For Better Data Analysis

12:00 PM - Lunch

12:30 PM - 01:30 PM

Short Course University of California, Riverside Same location as main conference