WORKSHOP ON EFFECTS OF FUEL COMPOSITION ON PM1

December 8, 2016

Renaissance Chicago O'Hare Suites (Salon AB), Chicago

AGENDA

7:30 am Breakfast (Salon D)

INTRODUCTION AND BACKGROUND

Chair: David Foster, University of Wisconsin

- **8:30 am** Welcome and introduction to the workshop, *Daniel Greenbaum, Health Effects Institute*, and *Allen Robinson, Carnegie Mellon University*
- **8:50 am** Policy background and future directions in the US and Europe, *John German, International Council on Clean Transportation*
- **9:20 am** The gasoline engine as a system and the role of new technology, *Timothy Johnson, Corning*
- 9:50 am Gasoline fuel Formulation issues and constraints, and background to emissions testing, *John Farrell, National Renewable Energy Laboratory*
- 10:20 am Break

ATMOSPHERIC AND AMBIENT PM

Chair: Rashid Shaikh, Health Effects Institute

- **10:40 am** Trends and sources of primary PM emissions from gasoline and diesel vehicles, *Robert Harley, University of California at Berkeley*
- 11:10 am Linking tailpipe to ambient primary emissions versus secondary PM formation, *Allen Robinson, Carnegie Mellon University*

FUEL COMPOSITION, ENGINE TECHNOLOGY, AND PM EMISSIONS – PART 1

Chair: Robert Harley

11:40 am The results of EPAct/V2/E-89 study and data analysis – summary, *Aron Butler, Environmental Protection Agency*

12:15 pm Lunch (Salon D)

FUEL COMPOSITION, ENGINE TECHNOLOGY, AND PM EMISSIONS – PART 2

Chair: Allen Robinson

1:15 pm Effects of fuel properties on particle emissions from GDI vehicles: Role of the PM Index, *Imad Khalek, Southwest Research Institute*

¹ Planning Committee: Allen Robinson, Robert Harley, Maria Costantini, and Rashid Shaikh

- **1:40 pm** Fuel and after-treatment effects on particulate and toxic emissions from GDI and PFI vehicles: a summary of CE-CERT research, *Georgios Karavalakis, University of California at Riverside CE-CERT*
- **2:05 pm** Characterization of GDI particle emissions during start-stop operation with alcohol fuel blends, *John Storey, Oak Ridge National Laboratory*
- 2:30 pm Break
- **2:45 pm** Fuel effects on regulated emissions from modern gasoline vehicles, *Heather Hamje*, *CONCAWE*
- **3:10 pm** Black carbon particle emissions from GDI vehicles operating on different fuels, *Tak Chan, Environment and Climate Change Canada*
- **3:35 pm** Relative toxicity of old and new technology heavy- and light-duty mobile source PM, *Jorn Herner, California Air Resources Board*

PANEL DISCUSSION: INTEGRATING RESEARCH AND POLICY ISSUES

Chair: Daniel Greenbaum

- **4:00 pm** Opening comments: *Kathryn Sargeant, EPA; Geoff Cooper, Renewable Fuel Association; Matti Maricq, Ford Motor Company; Daniel Short, Marathon Petroleum Corporation*
- 5:00 pm Adjourn