



# 10<sup>th</sup> ANNUAL INTERNATIONAL PEMS CONFERENCE

March 11th & 12th  
2021

[CERT.UCR.EDU/PEMS](https://cert.ucr.edu/pems)

**FROM THE LABORATORY TO THE REAL WORLD:  
UNDERSTANDING COMMUNITY IMPACTS**



Thank you for your interest in 10th Annual International Portable Emissions Measurement Systems (PEMS) Virtual Conference, presented by the University of California at Riverside (UCR) Bourns College of Engineering Center for Environmental Research and Technology (CE-CERT). For ten years, the PEMS International Conference has served a highly recognized forum that gathers top researchers from industry, government, and academia to discuss the evolving nature, application and significance of PEMS in emission and fuels research. Participants and presenters over the course of this conference have ranged in background bringing together individuals working with a broad range of measurement systems, including fully compliant regulatory PEMS (1065 Compliant PEMS) and small systems, which include everything from micro PEMS ( $\mu$ PEMS), nano PEMS (nPEMS), in-situ sensors, portable activity measuring systems (PAMS), to Real Emissions Assessment and Logging (REAL).

At this years conference we will explore the notion of From the Laboratory to the Real World: Understanding Community Impacts. The focus in 2021 will be on seeking answers to the most pressing questions in today's world pertaining to climate and health. Topics covered will include the latest developments in compliant and non-compliant PEMS; the benefits of PAMS and prediction of in-use emissions; and new developments for on-road measurements from an international perspective, such as Real Driving Emissions.

Thank you,  
Kent Johnson, Ph.D.  
Principal Investigator, Emissions and Fuels Research  
UC Riverside CE-CERT

# AGENDA DAY 1

9:00 AM

## Opening Remarks and Keynote

Sterling Imfeld, Director, Engine Testing Center at the National Vehicle and Fuel Emissions Laboratory, Environmental Protection Agency

10:00 AM

## Exposure & Measurements

Nick Molden, Emissions Analytics, Ltd.

Robin Smit, Transport Energy/Emissions Research (TER)

Daisy Thomas, 3DATX

Sebastian Tolvett, Metropolitan University of Technology, Chile

11:00 AM

## Government Policy

Tim Dallman, The International Council on Clean Transportation

William (Bill) Robertson, California Air Resources Board

Kent Johnson, OSAR Consortium, CE-CERT

12:00 PM

## Break

1:00 PM

## SEMS Research Development

Kotaro Tanaka, Ibaraki University, Japan

Mu (Sumumu) Sato, Tokyo Institute of Technology

1:40 PM

## Panel Discussion

William (Bill) Robertson, California Air Resources Board

Tim French, Chicago Law Partners

TBD



# AGENDA DAY 2

9:00 AM

## Research & Development

Kay-Oliver Denking, CPK Automotive

Ehsan Hosseini, California Air Resources Board

André Forcetto, Environmental Company of Sao Paulo State

Karl Ropkins, Institute for Transport Studies, University of Leeds

Phil Roberts, Horiba

Samaras Zissis, Aristotle University, Greece

10:15 AM

## Policy & Technology

Fred Jazquelin, AVL

Yi Tan, California Air Resources Board

Samaras Zissis, Aristotle University, Greece

11:15 AM

## On-Board Sensing

Filiz Kazan, West Virginia University

Imad Khalek, SwRI

Cavan McCaffery, University of California, Riverside

Chris Reuhl, California Air Resources Board

12:15 AM

## Closing Remarks

Kent Johnson, Center for Environmental Research & Technology,  
University of California, Riverside

