

## **CRC -22**

Don Stedman

Dominic introduced Dr. Mani for a “new improved” workshop.  
He reintroduced Dominic for necktie removal before it got the chop!

### **1. Emission Trends and Modeling**

John is a modeler for EPA because he looks real good on the runway?  
Rob reports truck NO<sub>x</sub> ahead after the 2000 year,  
While Chris' 35 cars could show that MOVES can be used without fear.  
John failed to force himself to walk the walk. You can't show 27 slides in a 10 minute talk.  
NCTCOG's doing a speed limit check before the SIP ship sails with all of us on deck.

## **2. Particulate Matter Characterization**

Besch dragged his WVU lab across the USA with a modern Mack Hot DPFs emit nanoparticles, but much less than a single cigarette smoker driving the same track!

Nigel's inserted his sampling probe in the tail of a bus from Florida Transit.

While CMU's smog chamber's looking at SOA formation before the EPA bans it?

Imad's making a "standard" mix of aerosol soot and wax.

Minnesota has well-built strippers fashioning fractal particle "facts."

## **3. Measurement Methods**

T.D. has a faster ammonia TDL. Compared to his old one, works just as well.

Dr. Marshik came to show us that you can always use more flow.

Robert's message in the main; particle instruments you must maintain.

Sherry Zhang has a new song. Setting standards that cannot be measured.

Regulators can do no wrong.

AVL PEMS, Dr. Johnson says, great data can produce.

Daniele has a 2200 horsepower vacuum to suck up anything loose.

A sparrow may not matter, but when it ingests a Canada goose?

## **The Midway**

The party on the Midway was certainly a delight.

Thank you CRC for arranging at least simulated flight.

Enhanced by the free booze that did not wear off until the night.

The USS Midway is only 67 years old and has not seen much abuse.

Two years younger than me. Perhaps it still has some use?

## **Keynote Address**

Dr. John came to spoil those who predict the end of oil.

Biofuel is a tragic example of a deeply flawed mandate.

The stone age didn't end for lack of stone at any rate.

#### **4. Fuel Effects: Compression Ignition**

Dr. Norm says don't follow a smoker; you're better off trailing a truck that is new.

Ross has an amazing database. Correlations too good to be true.

Biodiesel increases NO<sub>x</sub>. Maryam's blank slide can mitigate it too.

Six buses define the B20 world for older Matt. Too few?

Younger Matt has over 700 buses doing real-world cycles

Dr. Jorn shows GREAT reductions but one day we'll all be on ZEV bicycles.

#### **5. Fuel Effects: Spark Ignition**

Two cars Long is chairing Long to ensure that he does not? talk too much.

Four bus Dr. Yoon tests a stoichiometric CNG with tiny emissions and such.

Imad's making fuels with the aid of a moonshine still.

With one new car, he can a PM matrix fill.

Are biofuels regulations as "deeply flawed" as prohibition?

Tom's triplicate tests might leave mixed alcohols subject to suspicion.

Matti Maricq, Ford's aerosol geek, continues ethanol effects to seek.

## **6. Off Road / Portable PM Measurement**

Nigel's become some sort of provost but he's still having fun with NO<sub>x</sub> impact.

Lyons reports on E.I. They are perfectly correct is a bureaucratic fact.

Nox is on Naylor's mind too. NO and NO<sub>2</sub> inversely do react.

Leonidas reports that Pegasor will sell a unit that's an ETaPS and works just as well.

Carder's back with the long-distance track

Morgantown to Riverside with five friends in their Mack.

## **7. Emission Rates and Inventory**

California's dreaming of 2032 with Todd Sax,

But their dream is comprehensive to the max.

Chris Frey uses MAP as a tool to show why he has a desirable graduate school.

Koupal MOVES with PEMS all around Houston's port.

LII sees trucks and cars but SP2 can only trucks report.

Gross evaps aren't seen by OBD, but they are picked up by RSD.

Alessio got a Fiat Panda and then squashed in a PEMS and hydrogen.

PEMS are everywhere! Carol Wong has fun with one around Hong Kong.

25 years ago the Van Nuys tunnel showed models off a long way.

They are nearer now, DRI's Dave is happy to say.

## **8. Emission Control Measures**

Anna Wong is a regulator, so she can do no wrong.

We see ZEVs with RSDs but you MUST remove those gross emitters, please.

Michael St. Denis says RSD finds many high evap.

You all need an HDDV tent, the highest emitter to trap.

Karim's PEMS pickup has to Baker gone,

But it comes back with the MIL light on.

Dr. Rachel's got a PEMS too on a school bus and a dozer that's not new.

Opposed piston two-stroke would be a mechanically simple pair.

If it didn't have a supercharge and a turbo – boost for air.

## **9. Inspection / Maintenance**

Gary says you gotta scrap the top 1% if you can.

Peter agrees and Clean Screen will pay for the RSD and the van.

Michael St. Denis thinks that I/M will work using OBD.

We like OBD too but for I/M we disagree.

Sandeep for Jim. OBD for I/M might be useful and neat,

But his drivers had no incentive to cheat.

NCTCOG's Chris finds fraudulent I/M testers and puts them in jail!

Hans-Juergen has results from Europe's diesel I/M. Some fail!

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