

## **23rd Real World Emissions Workshop**

Holding things together, Mani is our brick. Aply assisted by Dominic.

### **Emission Rates and Inventory**

Chairing South Coast's Hogo must achieve before 2013.

Co-Chair John switched to the dark side. Now at ERG.

Rob has newer nifty gear. Tunnel is the same.

Gas and Diesel make the same OA. Lube oil is to blame.

Gary got 3000 trucks. SCR only works when hot.

D.H.'s prehistoric MOVES models more when cold, but accurate it was not.

Carl agonizes about activity...like traffic flow.

And when the US EPA will put everyone on furlough.

1000 truck emissions in a 20 second SHED screen.

Don's (futile?) attempt to revolutionize the truck I/M routine

## **Emissions Control Measures and Emerging Technologies**

Imad's 16 hour cycle really rocks with DOC DPF SCR and AMOX.

John's determining durability. Looks good even if not in NTE.

Uven's in Paddington. Platform 13 can't be found, but smokers still abound.

What does Mario's multidimensional response surface mean?

I thought that a "response surface" was a trampoline.

Use Yoder's Star Wars Laser spark to vaporize that other car to clear a place to park.

Gala's RSD feeds data to the cloud, so no one's in the dark.

## **I/M and In-Field Measurement Method Development**

Said Sherrie Sala-Moore, "Some believe passing ASM is repair evidence for sure."

Carl's DTCs are coded by VIN. The "Finding 4 gm/hr evaps" game is hard to win.

Dr. McCoy can check that the retrofits really do it right.

Chris can time it right with accuracy out of sight.

Athanasios can get it all from a PEMS. I am a bit less sure.

Kent can measure everything and on TV he looks so mature!!!

California Spirit in the sunset  
A great cruise although not free  
So many experts onboard we met  
Except the ones watching TV

## **Emission Trends and Modeling**

David for Megan introduced Andrew. To EPA they all belong.  
MOVES had better be useful because for sure it is wrong.  
The fired Bob Sawyer modeled 2025 for the National Academy  
And CARB kept Sam because EMFAC 13 is not blasphemy.  
David Chou is at CARB too.  
Snowmobiles are just too few.  
With simpler MOVES Chris Frey is back.  
For multiple talks he has a knack.

## **Laboratory Measurement Method Development**

Kent can measure so little that not measuring should not be missed.

Emission Standards that cannot be measured is not a new twist.

I know an agency that mandates sales of a cellulosic fuel that does not exist.

With Jim's presentation now I know why gross emitters never get on a dyno.

Jonathan from AVL listens to the soot buildup even at 1 mg load.

Imad separates us from lunch. Is "Certification" really "On-Road"?

Leonidas is a lion for Pegasor, coming from afar.

While Frazee from AVL reminded us how useful is FTIR.

Kittelson from Minnesota measures metal ash. Nanoparticle rocks.

Nigel's stopped fiddling with his Peterbilt because he's lost his repeatable NOx.

## **Particulate Matter Characterization**

Marc's DPFs really work unless in a regen. long.

Our National Lab's preparing pretend particles presented Heeje Seong.

Pragalath's real-world particles are emitted hot, crossing many states.

High speed Albert finds POA too and much evaporates.

Jorn, "Is diesel PM diesel PM?" an existential query.

Mario's shed is bigger than mine. Blown away in practice and in theory.

## Off-Road

For CRC Tim does overdress but his loader data can really regress.

CE-CERT Sam's doing PEMS off road.

He needs HEAVIER PEMS to increase load!

Matt spends his summers on railroad bridges without side guards.

While Louis predicts ship traffic; engine displacement in cubic yards!

Gysel for Khan can't get regenerative braking on a hybrid tug.

Frey's only got one loco and on soy biodiesel it tends to lug.

Only the U.S. Navy can afford algae fuel for Khan to have some fun.

The Spy Vessel is interesting, but how significant is an N of 1?

Does offroad really matter? Or has it had its day in the sun?

## **Fuel Effects: Spark Ignition**

Exhaust contains carcinogens says Sardar, but so does toast no less.

Since when was 2 mg/mile a high emitter of oxidative stress?

956 tests on irrelevant cars, including at least one Jeep.

Even more expensive low sulfur fuel will control Aron's dreaded NOx creep.

Purple Particle Peaks. Short used alcohols C2 and C4.

Arvind's abstractless talk can't be stopped. Red light he learned to ignore.

Congress, lobbyists and EPA know better than big oil how to make a fuel spill.

Be sure to e-mail your representative when their fuel turns on your MIL.

## **Fuel Effects: Compression Ignition**

Biodiesel and HV oil are OK said Georgios the Greek.

Olive oil might be better? Perhaps NOx would not peak?

Matt in Colorado helps ARB test hybrid trucks that travel far.

Sebastian shows benefits from a hybrid bus in Bogota.

Jan, Jane, Debbie, Brent and Chris;

Thanks again for a conference that nobody should miss.

And thanks to the sponsors too.

We can not do it without you.