

# Method Development: Identification of the Soluble Organic Fraction of Particulate Matter on DPF Soot.



**Andrea Strzelec<sup>1,2</sup>**

**Stuart Daw<sup>1</sup>, Sam Lewis<sup>1</sup>  
and John Storey<sup>1</sup>,**

**David E. Foster<sup>2</sup> and  
Christopher J. Rutland<sup>2</sup>**

<sup>1</sup>ORNL <sup>2</sup>UW-Madison ERC

Poster P-4

# Identification of Extractable Organics from DPF Soot is Part of Overall Soot Oxidation Project.

Studies of oxidation kinetics are being conducted in a 3-phase approach.

- Phase 1: Do adsorbed HC species have an effect on oxidation kinetics? (CLEERS)
- Phase 2: How do HC species effect kinetics?
  - Chemical and physical characterization of PM deposits in 1"x3" DPF cores.
  - Under what conditions do relevant HCs exist on the PM? (fuel, engine conditions, combustion type)
- Phase 3: How do these observed changes in kinetics relate to DPF regeneration?

