

The Development of a Small Engine Based Ash Loading Protocol

Poster P-2, Monday

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and Adam Youngquist**

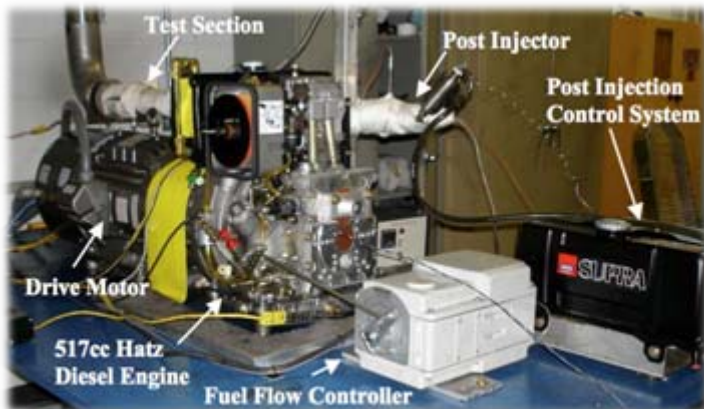
Oak Ridge National Laboratory

Ke Nguyen

University of Tennessee - Knoxville

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Office of Vehicle Technologies**

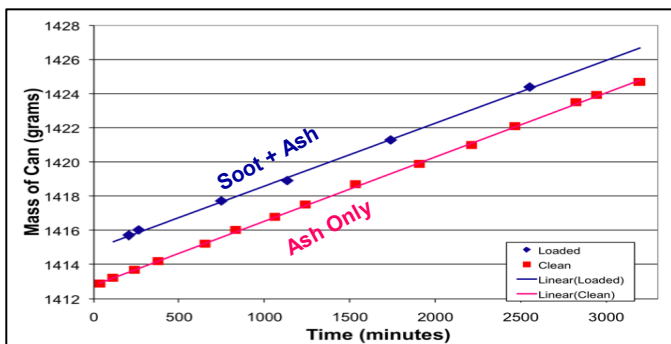
Components supplied by Umicore, BASF, NGK, and Dow



**Small engine based protocol,
5% lube oil added to fuel**

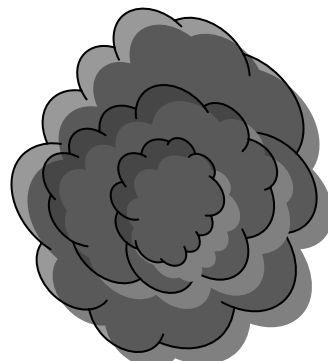
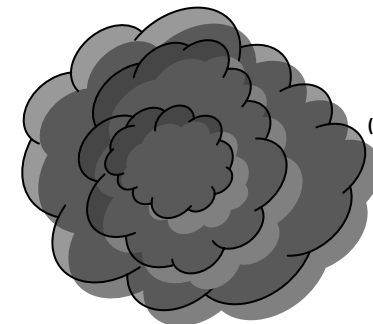
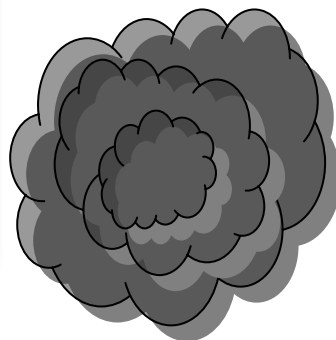


**Continuous ash loading,
periodic soot regeneration**

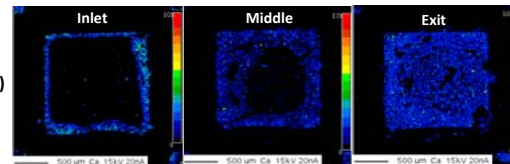


Ash increases linearly

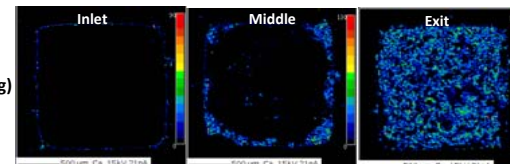
Poster P-2



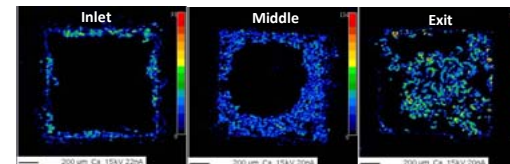
Cordierite
(low PGM loading)



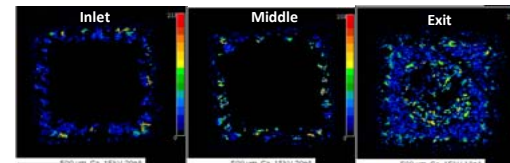
Cordierite
(high PGM loading)



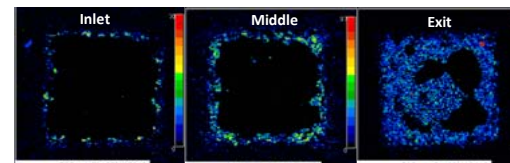
SiC
(uncatalyzed)



Mullite
(uncatalyzed)



Mullite
(high PGM loading)



**Ash accumulates at back of
filter, some differences by
substrate and wash-coat type**

MORE DETAIL, SAE 2008-01-2496, THIS FALL