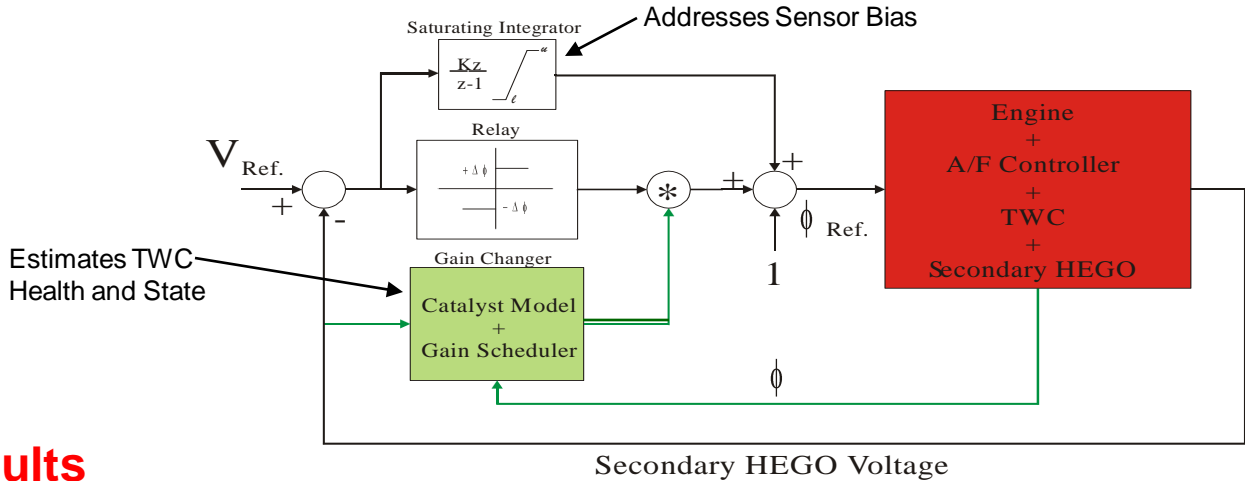


Three Way Catalyst Control & Diagnostics

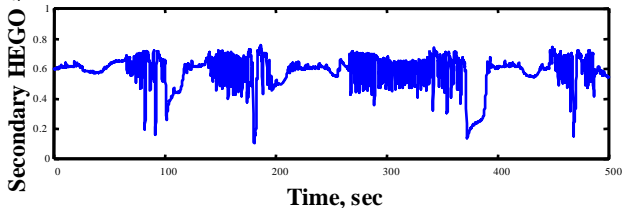
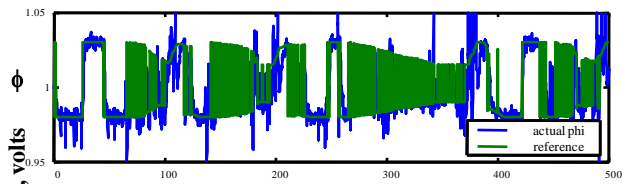
Research Summary:

Demonstrated is the adaptive control of a Three-Way Catalyst (TWC). **The objective is to maximize the TWC conversion efficiencies despite TWC health and drive cycle.** The control solution requires the calibration of **only 2 parameters**. Since on-line TWC parameter estimation is part of the control solution, TWC health estimation is also achieved.

Controller Architecture



Results



	NOx (g/mi)	NMHC (g/mi)
Standards	0.07	0.055
Targets	0.054	0.046
UEGO Emissions*	0.0435	0.0398

