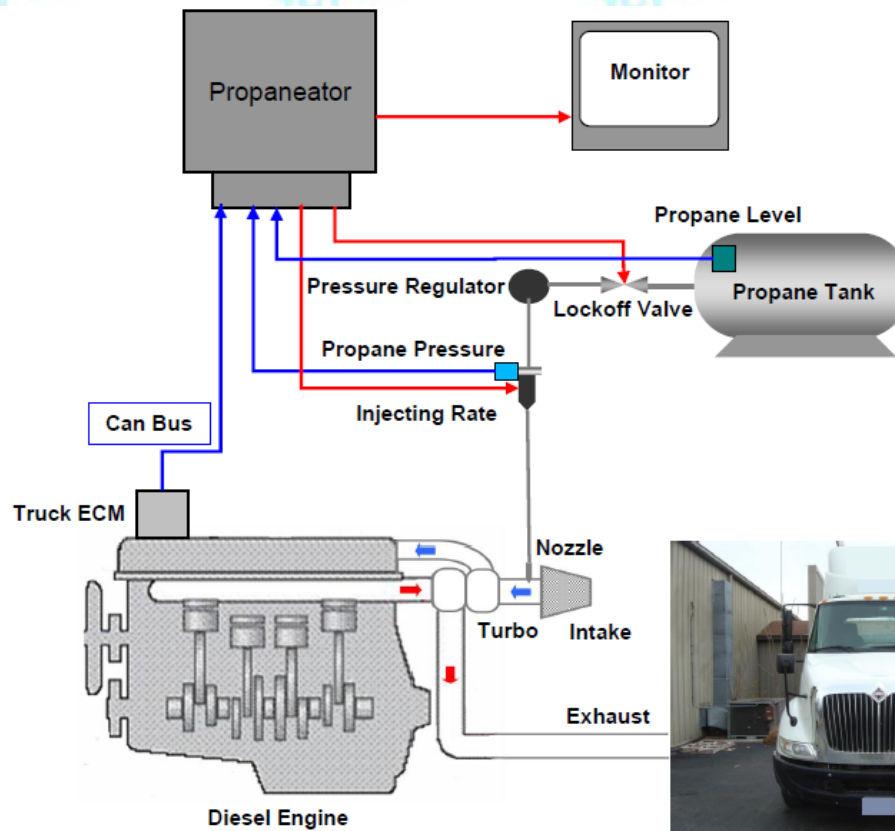


Objectives:

- A- Develop an advanced dual fuel system for diesel engines to reduce diesel fuel consumption and in conjunction
- B- Develop an exhaust aftertreatment system to achieve 2014 Class 8 truck emissions



Dr. Hamid Servati, PhD
Steve Marshall, Wei Zhou

POSTER P-18



Technology

- Electronically controlled propane injection providing a controlled Propane-Diesel dual fuel
- Propane injection controlled by an electronic controller (Propaneator) based on the engine operating information via CAN Bus (Unlike the conventional method utilizing only the boost pressure)

Test Vehicle

- International diesel semi-truck (2007 MY, Cummins ISM 11L engine)
- With a 53 Ft trailer and 17,400 Lbs load
- Average speed of about 65 mph

Test Results

CO2 Reduction	NOx Reduction	Diesel Fuel Reduction	Overall Energy Savings
13%	42%	20%	7%