

Enabling Low Temperature Combustion Through Thermo-Chemical Recuperation



Nigel N. Clark, Clint Bedick, Francisco Posada

Center for Alternative Fuels, Engines & Emissions (CAFEE)
Department of Mechanical and Aerospace Engineering
West Virginia University
Morgantown, WV

John Pratapas, Aleksandr Kozlov, Martin Linck and Dmitri Boulanov

Gas Technology Institute (GTI),
Des Plaines, IL

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Project Summary

- Provide efficient, low emissions power by enabling LTC through the use of waste heat fuel reforming
- LTC Benefits and Drawbacks
 - High efficiency
 - Low emissions
 - Load range limitations and control issues
- Control may be achieved using two separate fuel streams
 - Diesel primary fuel
 - Secondary fuel generated on-board using waste exhaust heat and TCR technology
- Approach based on trading lower power density for increased displacement
- Combustion, friction and auxiliary losses, and heat transfer models run to compare LTC and CIDI

