Thermoelectric Conversion of Waste Heat to Electricity in an IC Engine Powered Vehicle

Presented by:
Harold Schock
Dept. of Mechanical Engineering
Michigan State University
8/21/2006

Supported By:
US Department of Energy
Energy Efficiency Renewable Energy (EERE)
Waste Heat Recovery and Utilization Research and Development for Passenger Vehicle and Light/Heavy Duty Truck Applications
What’s Required to Achieve a 10% Improvement in Efficiency with TEGs?

• Application is an OTR truck
• Realistic cruise condition simulation shown
• Heat transfer options and implications
• How does one find the optimum TE material for a given application?
• Discuss these and other issues related to powder processing and power electronics at booth P18