AVIT
AARUPADAI VEEDU INSTITUTE OF TECHNOLOGY

VINAYAKA MISSION'S RESEARCH FOUNDATION
(Deemed to be University under section 3 of the UGC Act 1956)

RESEARCH CENTRE FOR ALTERNATE FUELS TESTING

Consultancy Brochure

Department of Mechanical Engineering
Aarupadai Veedu Institute of Technology

Research Centre for Alternate Fuels testing was established in the Department of Mechanical Engineering of Aarupadai Veedu Institute of Technology on June 13, 2015. Research Centre for Alternate Fuels testing is dedicated to develop advanced concepts and methods for performance analysis of bio fueled IC engines, and pursuing solutions through wide-ranging industrial collaborations, discussions and seminars.

The aim of this laboratory is to carry out world class research in the area of internal combustion engines with an objective of increasing fuel efficiency, emission control and engine durability and new technology development. Fuel for IC Engine is one of the most important issue facing our country today, and therefore, the development of affordable and efficient fuel alternatives is paramount.

VISION

Research Centre for Alternate Fuels testing is dedicated to develop advanced concepts and methods for performance analysis of bio fueled IC engines, and pursuing solutions through wide-ranging industrial collaborations, discussions and seminars. The center is committed to achieving its mission using innovative science, technology, education and Management, strategies having high impact for all stakeholders.

MISION

Research Centre for Alternate Fuels testing is an important research community that expands the visibility of research understanding and findings. It aims to create the awareness to the research fraternity about the alternative fuels derived from organic matters (vegetable substance). Since, biofuels derived from organic matters has played a vital role in the environmental issues to reduce the harmful automobile emissions.

Major Research Areas

- ► Engine combustion
- ► Alternative fuels
- ► Exhaust gas after-treatment
- ► Biodiesel and other biofuels
- ► Primary alcohols and bio-butanol
- ► HCCI of gasoline and diesel like fuels
- ► Regulated and unregulated emissions
- ► GDI Engine
- ► Split Ignition Strategy

Major Equipments

- ► Research Engine ► Exhaust Gas Analyzer
- ► Bosch Smoke Meter
- ► EGR Set Up ► Turbo Charger
- ► Bio Fuel Production Set Up
- ► Split Injection Engine

Major Research Facilities

- ► Computerized Research engine set up, Diesel and Petrol mode VCR
- ► Engine Soft for Engine performance and combustion analysis
- ► Performance and combustion analysis Using EGR Concept
- ► Performance and combustion analysis Using Turbo Charger Set up
- ► Programmable open ECU for engine tuning in Petrol mode
- ► Programmable open ECU for engine tuning in Diesel mode
- ► Split Injection Strategies
- ► HCCI, PCCI and RCCI Engine
- ► Port fuel injection
- ► Exhaust gas analyzer (5 Gas)
- ► Bosch Smoke meter
- ► Production of biodiesel using Advanced Bio Fuel Plant

TERMS & CONDITIONS

We do not need any information that you feel may breach the confidentiality of your work.

Plastic or glass vials with snap caps can be used as containers for biofuels samples. Please make sure that the seal of your vials are tight and that the vials are wrapped properly to prevent breakage during shipment.

Samples must include SDS/MSDS – We must have a copy on file. Please include it in the package to avoid delays. If we already have the latest version of an SDS on file for your product, please indicate so on your submittal form.

Analyses are started immediately upon receipt of samples to ensure meet our promised experiments and commitments.

Change experiments are welcome, but please be aware that partial or full charges will apply based on how much work has been completed by the time of the change request.

The relinquished by, shall make no deduction from the invoice price of the Services on account of any set-offs or claim or counter-claim unless both the validity and the amount thereof have been admitted by an authorized representative of the sample provider.

CONSULTANCY FEE DETAILS : TEST WITH SINGLE BLEND

Single Compression ratio Variable Load	-	Rs. 1750/-
Variable Compression ratio Variable Load	-	Rs. 1750/-
Single Compression ratio Variable Load Variable Nozzle Hole	-	Rs. 2500/-
Single Compression ratio Variable Load with EGR	-	Rs. 2000/-
Variable Compression ratio Variable Load with EGR	-	Rs. 2000/-
Single Compression ratio Variable Load with Turbocharger	-	Rs. 2200/-
Variable Compression ratio Variable Load with Turbocharger	-	Rs. 2800/-
Single Compression ratio Variable Load with EGR & Turbocharger	-	Rs. 2250/-
Variable Compression ratio Variable Load with EGR & Turbocharger	-	Rs. 3250/-
GDI Engine application per cycle of operation	-	Rs. 2500/-
HCCI/PCCI Engine operation per cycle of operation	-	Rs. 2500/-

Contact Address: Dr.M.Prabhahar,
Research Centre For Alternate Fuels Testing, Department Of Mechanical Engineering,
Aarupadai Veedu Institute Of Technology, Vinakaya Mission's Research Foundation,
Paiyanoor – 603 104 Mobile No : 9444310236. Mail Id : mprabhahar@gmail.com