

## Laboratory Equipment at JiT CoE procured through ExiST Project

# LOT 1 Supplied by **F.UNDÜTSCH**

<b>Name of equipment</b>	<b>QTY</b>
LCD Projector/beamer	2
Spare bulbs for EB-X39	4
Ceiling mounting kit	2
Laptop computer	3
Adsorption demonstration unit	1
Peristaltic pump	1
Sediment sampling equipment1	1
Sediment sampling equipment2	1
Sediment sampling equipment3	1
Sediment sampling equipment4	1
Sediment sampling equipment5	1
Sediment sampling equipment6	1
Sediment sampling equipment7	1
AquaCalc Pro Plus Comp	1
Differential Scanning calorimeter	1
Thermo gravimetric analyzer	1
Computer controlled biodiesel process unit	1
Pyranometer sensor	1
Biogas process unit	1
Portable co meter	2
PEM fuel cell unit	1
Photovoltaic solar energy modular trainer (demo unit)	1
High performance multifunction I/O USB data Acquisition	2
Portable pm 2.5 meter I/O USB data acquisition...	2
Heat pump unit for laboratory use	1
Pc based data logger with lab view software	2
Biogas analyzer	1
Principles of solar thermal energy collection (demo unit)	1
Parabolic trough solar collector unit	1
Rotometer discontinued-Substituted	5
pH meter	2
Digital micro manometer	2
Handheld pm2.5 counter	1
CO2+CO+RH/T portable	1
Turbine type flow meter	3
Handheld rotating vane	3
Rotometer discontinued-Substituted	5

Simulation of a gas. Turbine	1
Steam Turbine module	1
Portable heat flux sensor	1
Wind energy unit	1
Ultra-sensitive heat flux Plate	2
Exhaust gas analyzer	2
Differential manometers	2
Fuel lab 1 Cleveland flash and Fire point apparatus Open cup	1
Fuel lab 2 Pensky marten flash and Fire point apparatus Closed cup	1
Fuel lab 3 Saybolt –Redwood Viscometer bath	1
Fuel lab 4 Digital Redwood Viscometer	1
Fuel lab 5 Digital Bomb calorimeter	1
Fuel lab 6- Junkers Calorimeter	1

Equipment Supplied by AB Desta (GUNT)

<b>Name of Equipment</b>	<b>Qty</b>
Diesel Engine Test Rig Fully Instrumented for testing Biodiesel and its blends consisting of 1XCT110 Test stand for single cylinder engines with software and PC 1XCT100.11 Exhaust gas calorimeter 1XCT100.13 Electronic Engine Indicating System 1XCT159.02 Exhaust Gas Analyzing Unit 1XCT 100.23 Water cooled 4 stroke Diesel Engine 1XCT100.15 Pressure Transducer	1
Petrol Engine Test Rig Fully Instrumented for testing Bioethanol and its blends consisting of 1XCT110 Test stand for single cylinder engines with software and PC 1XCT100.11 Exhaust gas calorimeter 1XCT100.13 Electronic Engine Indicating System 1XCT159.02 Exhaust Gas Analyzing Unit 1XCT 100.22 4 stroke Diesel Engine 1XCT100.16 Pressure Transducer 1XCT100.20 4-stroke petrol Engine 1XCT100.14 Pressure Transducer	1
Heat Transfer in the Fluidized Bed consisting of 1XWL 225 Heat Transfer in the Fluidized Bed with Compressor and PC	1
Studies in Hydrology consisting of 1XHM165 Studies in Hydrology	1
Groundwater Flow Consisting of	1

**Equipment Supplied by GRAIDCO**

<b>Name of the Equipment</b>	<b>Qty</b>
Gas Chromatography Part A	1
Gas Chromatography Part B	1
UV/VIS Spectrophotometer	1
EC Meter	1
Thermal Conductivity meter for liquid	1
Thermistors Positive Type	50
Thermistors Negative Type	50
Thermocouple wire for temperature Measurement	100
Thermocouple wire for temperature Measurement	100
Thermocouple wire for temperature Measurement	100
Resistance Thermometer Detector(RTD)	3
Constant temperature bath(Water)	1
Handheld ultrasonic flow meter	1
Ultrasonic Doppler Area Flow Meter	1
Pressure Transducers for Continuous Pressure Measurement, Gage Type	5
Pressure Transducers for Continuous Pressure Measurement, Absolute Type	5
Differential Pressure Transmitter with field selectable Range	2
Digital Oscilloscope	1
High Speed Data Acquisition PC-Based Oscilloscope and Spectrum Analyzer	1
Hot Wire Anemometer for flow velocity and Turbulence Measurements	1
Gear Motor with High Torque	1
Plate Heat Exchanger with Heat Exchanger supply Unit	1
Kinematic Viscosity meter/diesel fuel quality Test Equipment	1
DC Power Supply Unit	1
Autoclave A stainless steel Autoclave with a Mechanic Agitation and An Electric Heater by a PID control	1
Lyophilizer	1

High Pressure Reactor(Bioreactor)	1
GPS	2
Water Hamer and Surge chamber	1
Visualization of streamlines in open channel	1
Visualization of seepage flow	1
Determination of the settling velocity	1
High Pressure blower Part A	2
High Pressure blower Part B	2
Polished Aluminum Sheet	1
Online Gas Analyzer	1