

# ENVIRONMENTAL LAB 2

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**POST: ASSISTANT ENGINEER**



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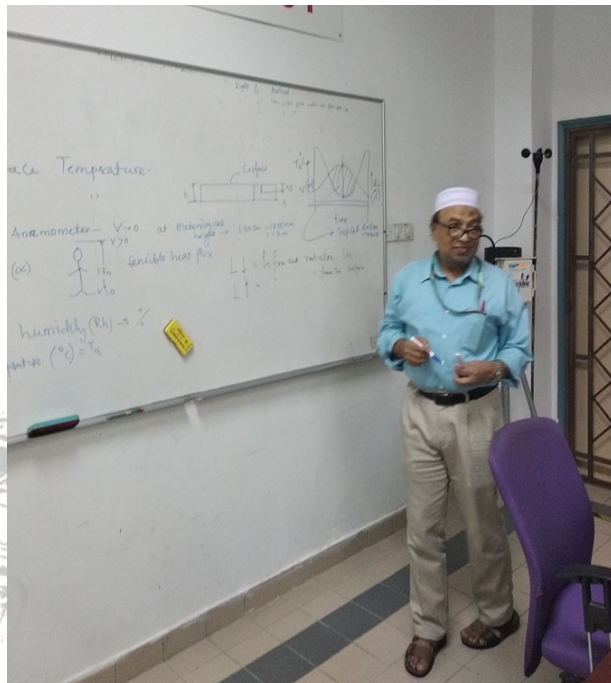
# Introduction

The lab is used as classroom all courses undergraduate ,post graduate and research purpose.



- Opportunities for learning new instruments relate with environment
- Hands –on training using instruments based on class environmental science
- A place providing opportunity for experimentation, observation, or practice in a field of study .









# List of equipment



Instruments		Purpose
Hygrometer c/w Type K thermocouple– 4 unit		Triple display to show the temperature° C and humidity % from a handheld probe and can display data from a separate K type thermocouple connected via a standard SMP type miniature connector to the T2 input.
Anemometer c/w temperature–4 unit		Measure and display the Air velocity ( wind speed ) expressed m/s and temperature ° C value at the same time. Low-friction ball bearing mounted vane wheel design provides high accuracy at high and low air velocity




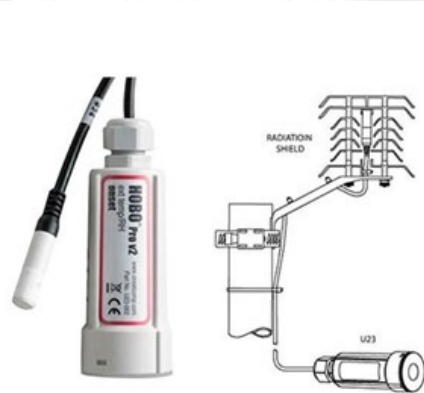
# List of equipment

Instruments		Purpose
Sound level meter– 4 unit		sound level meter designed for one hand operations. Frequency and time weighting meet IEC 61672 class 2 . 3 manual ranges - 30 to 80 dB, 50 to 100 dB, 80 to 130 dB
Lux meter–4 unit		Digital light meter ideal for measuring illumination within the workplace. Unit lux/ FC (Foot candles)

# List of equipment


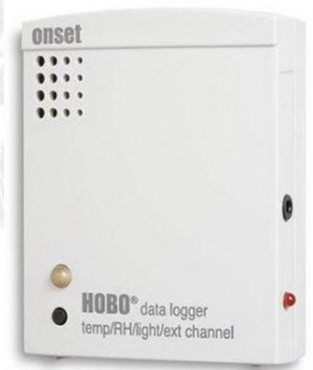
Instruments		Purpose
Infrared thermometer – 4 unit		Designed for application required user to initially measure temperature in hard or hot to reach area. Unit in ° C and ° F
Sling psychrometer –2 unit		accurately measuring ambient temperature humidity and dew point. Use whatever method is available (psychrometric computer, Skew-T diagram, or table) to compute the dew point and relative humidity

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Instruments		Purpose
Weather station (Davis vantage pro 2) – 1 unit	 <p>The image shows a Davis Vantage Pro 2 weather station. It consists of a black console with a large LCD screen displaying various weather metrics like temperature, humidity, and wind speed. A separate sensor assembly is mounted on a silver tripod stand, featuring a wind vane and a rain collector. The background is a grassy field under a dramatic, cloudy sky.</p>	<p>A integrated sensor suite that can be customized by adding consoles or special-purpose options. A 40-foot (12-meter) anemometer cable allows the anemometer to be mounted separately from the rain collector. used around the world by emergency professionals, farmers, researchers, and others to monitor temperature, wind and moisture conditions, irrigation requirements .</p>
Data logger temperature /humidity (Hobo-pro v2) – 6 unit	 <p>The image displays a Hobo Pro v2 data logger, which is a small, white, rectangular device with a black cable attached. Next to it is a radiation shield, a metal frame with a grid of horizontal bars designed to protect the sensor from direct solar radiation. A small cylindrical component, likely the sensor, is also shown at the bottom right of the shield assembly.</p>	<p>data logger is a weatherproof data logger with built-in temperature and relative humidity sensors. The Relative Humidity sensor provides superior durability in humid environments and is user-replaceable. For avoid any drift in measurement mostly use with solar radiation shield</p>





# List of equipment



Instruments		Purpose
Data logger temperature /humidity (Hobo-u10-003) –24 unit	 A white, rectangular data logger with a ventilation grille on the top left. The text 'onset' is at the top, and 'HOBO® data logger temp/RH' is printed on the front.	is a two channel logger with 10-bit resolution and can record up to 52,000 measurements or events. The logger uses a direct USB interface for launching and data readout by a computer . Measure temperature and humidity
Data logger temperature /humidity/light (Hobo-u12-012) –1 unit	 A white, rectangular data logger with a ventilation grille on the top left. The text 'onset' is at the top, and 'HOBO® data logger temp/RH/light/ext channel' is printed on the front.	Measuring temperature , humidity and light. Can records interval time, start method depends users requirement.



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Instruments		Purpose
Data logger temperature /humidity (Hobo-ux100 - 003) –8 unit	 A white, rectangular Onset Hobo-ux100-003 data logger. The front features a green LCD screen displaying '72.65 °F' and '36.9 %RH'. Above the screen is a 'STOP' button, and below it are 'MEMORY' and 'LOGGING' buttons. The device has a carrying handle on the right and a speaker grille on the front.	Data logger records temperature and relative humidity in an indoor environment. Easy to view LCD display
Globe thermometer –1 unit	 A globe thermometer with a black, spherical globe at the bottom and a vertical scale with a yellow and black frame. The scale has markings for temperature in degrees Celsius and degrees Fahrenheit.	To measure radiant heat ,the instrument absorb heat and transfer to scale as temperature ° C or °F

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Instruments		Purpose
Solar power meter (Amprobe) –2 unit	 A red handheld digital solar power meter with a black cable connected to a black circular sensor head. The meter's LCD screen displays '00.3'.	The device measures solar output that is used to calculate the overall energy, efficiency, and placement of solar systems. Measures the solar power and transmission up to 2000 W/m <sup>2</sup> , 634BTU / (ft <sup>2</sup> x h)
Anemometer (Kestrel)– 3 unit	 A blue handheld anemometer with a black cable connected to a black sensor head. The device has a digital display showing '37.2' and the Kestrel logo.	handheld wind speed meter (anemometer) is a simple reliable and extremely accurate air velocity measurement device, easily change unit between mph, km/h, ft/min, m/s, knots and Beaufort



# Gallery





# Opening Hours

## Monday to Thursday

8.00am – 1.00pm

2.00pm – 5.00pm

## Friday

8.00am – 12.15pm

2.45pm – 5.00pm

## Non-working hours

Kindly contact  
person in charge

