

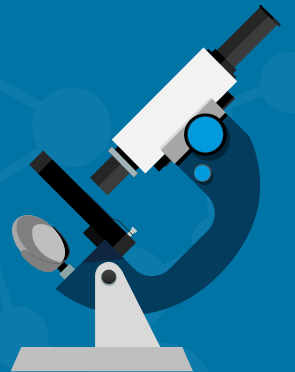


Facilities Use in CfES

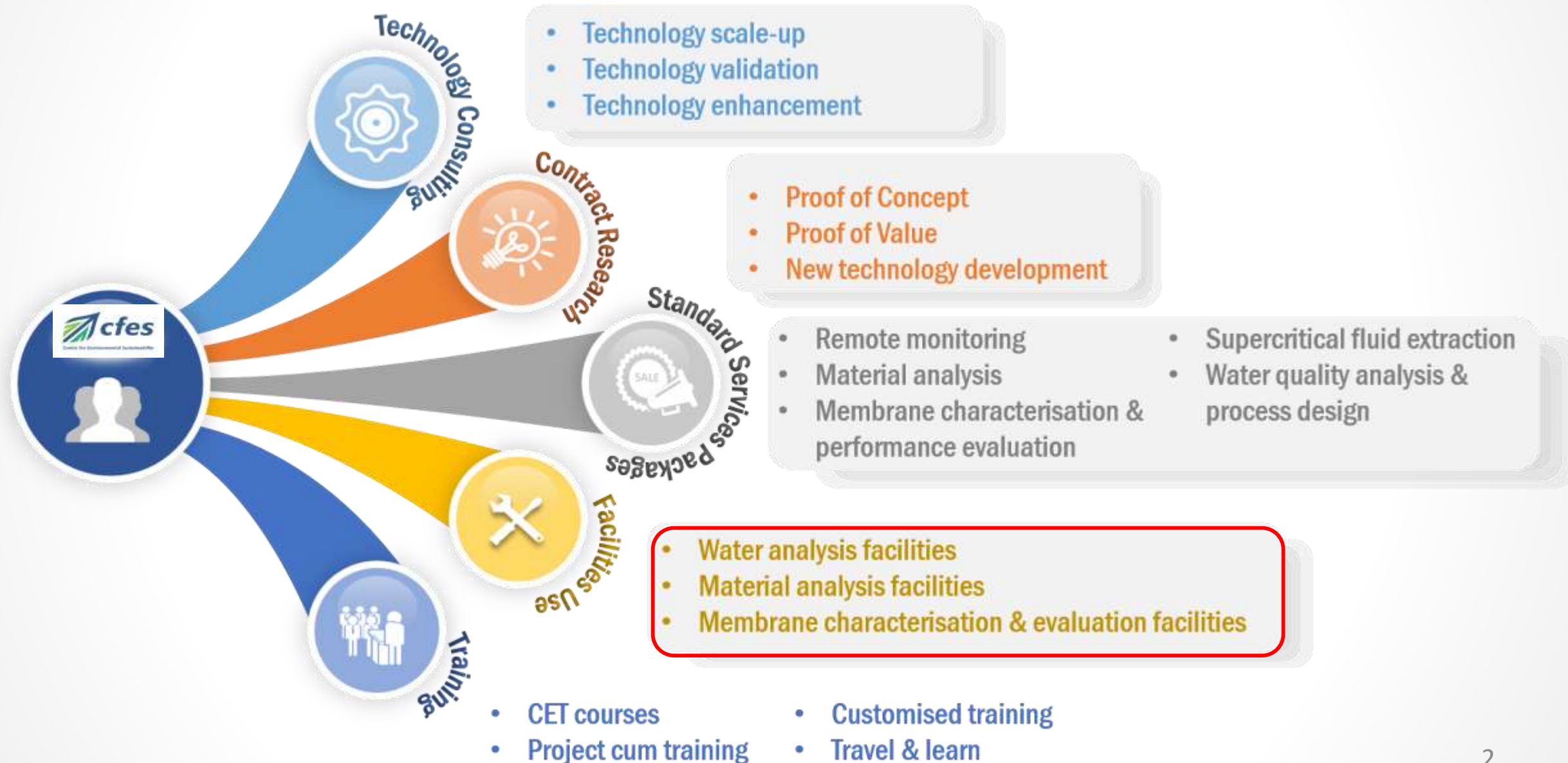
Yan Xiaoli

Maung Tin Win

Updated in March 2024



OUR SERVICES

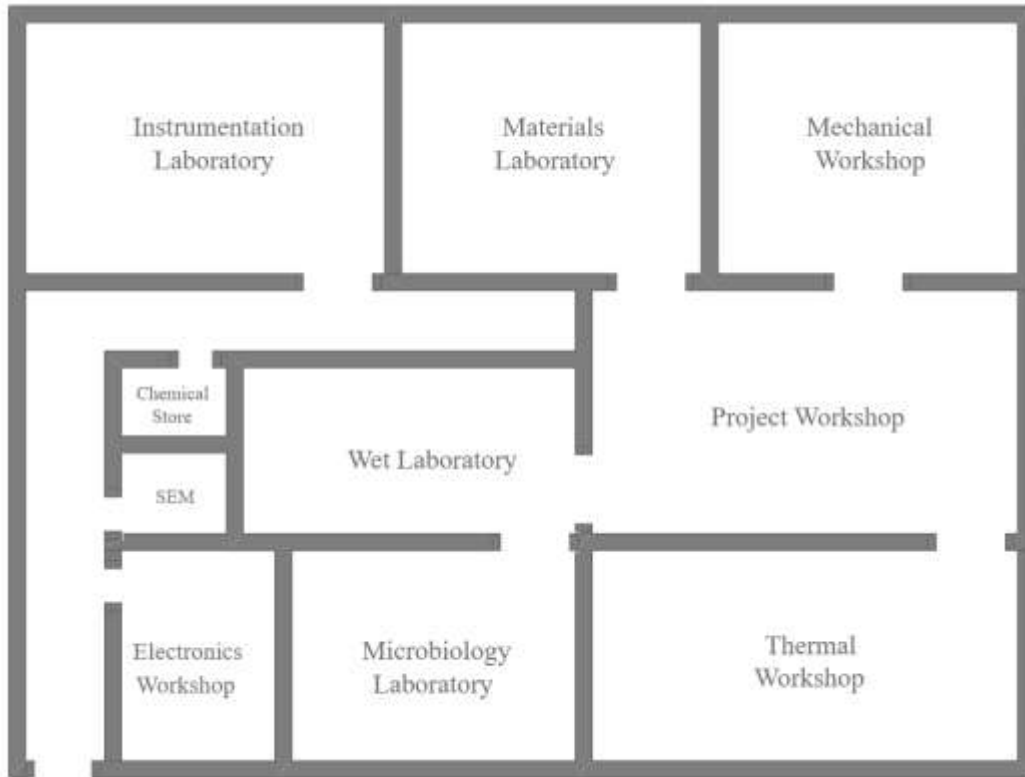


Our Facilities

Blk 39

General Laboratory

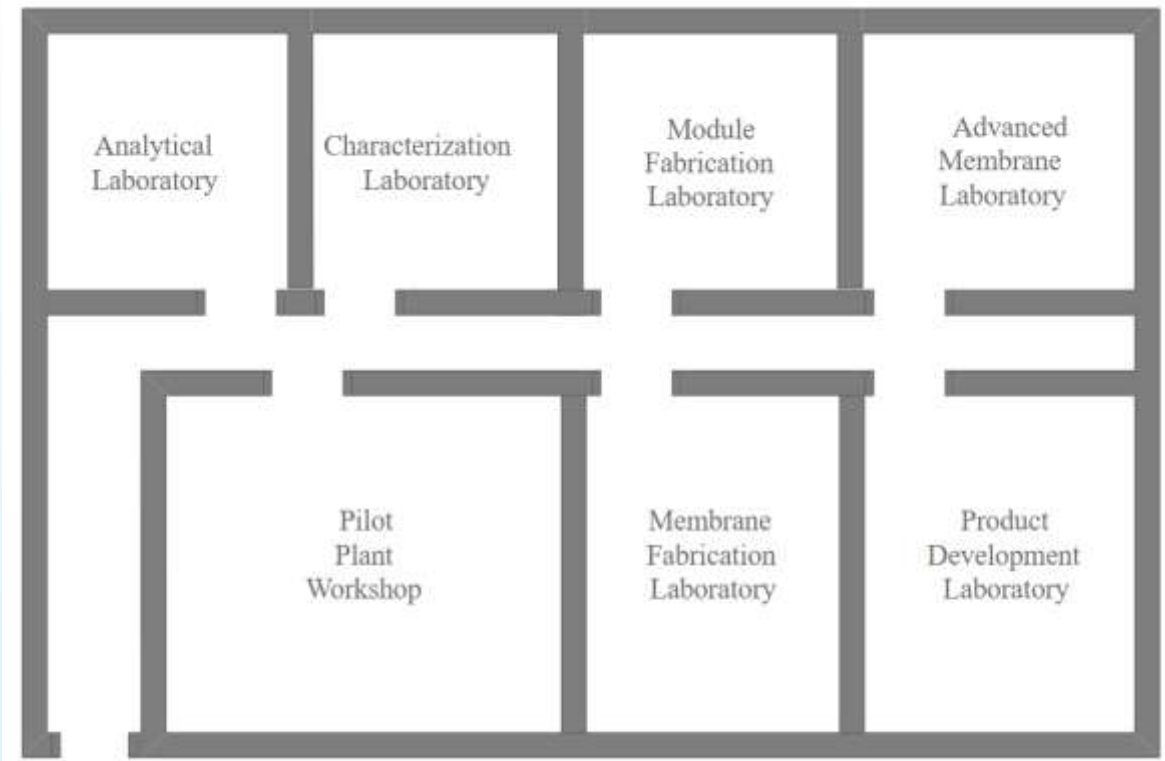
[Click here for Virtual Tour!](#)



Blk 40

Advanced Membrane Scale-up Facilities

[Click here for Virtual Tour!](#)



Materials Characterization Facilities



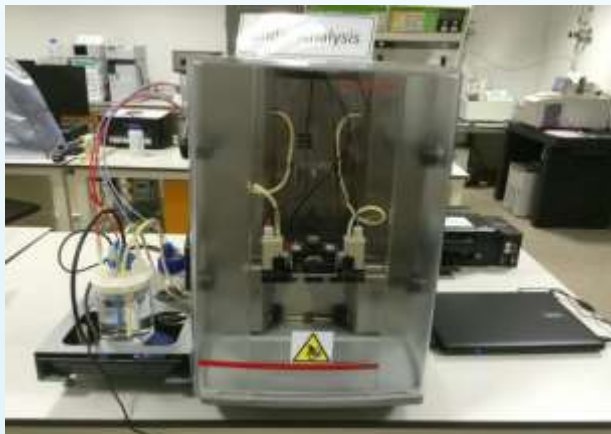
Fourier Transform Infrared Spectroscopy



Raman Spectroscopy



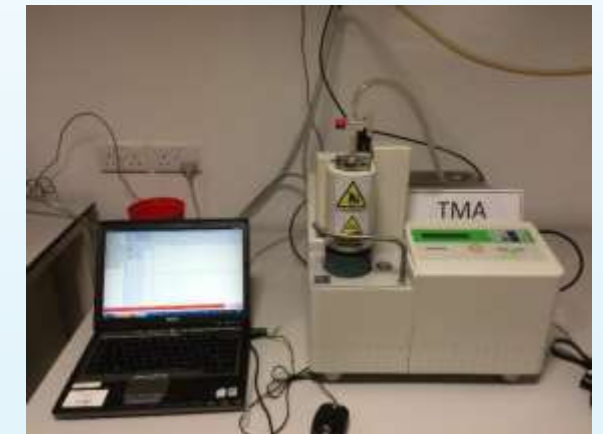
Melt Flow Index Tester



Surface charge/Zeta-potential analyzer



Thermo-Gravimetric Analyzer



Thermo-Mechanical Analyzer

Materials Characterization Facilities



Gas Sorption Analyzer
Quantachrome Autosorb IQ



Optical Fiber Cleaver
Fujikura CT106+



Filter media Test system – IAQ
Gester GT-RA09B PFE



Pilot Scale Electrospinning System
Inovenso PE300



Tunable Monochrome Light Source
Zolix Omni 200i

Membrane Characterization Facilities



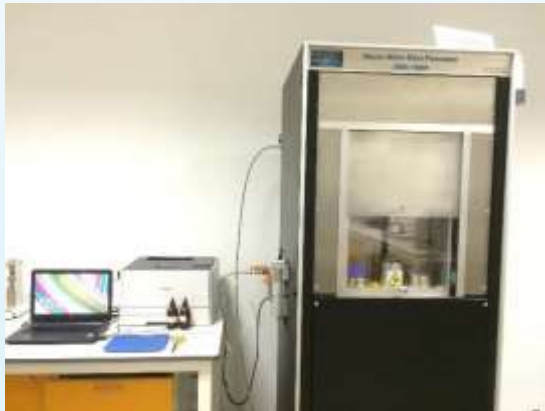
Scanned Electron Microscope (SEM) with Energy Dispersive X-Ray Analysis (EDX)



Morphology Microscope



Tensile Strength Testing Machine



Porometer (up to 2nm)



Flat Sheet Membrane Contact Angle Analyzer



Hollow fiber membrane Contact Angle Analyzer

Membrane Performance Evaluation Facilities



**Membrane Fiber
Fouling Evaluation System**



**Hollow Fiber Membrane
Evaluation System**



**UF Membrane Performance
Comparison System x3**



**Membrane Distillation
Performance Evaluation System**

Water Quality Analysis Facilities



Liquid chromatography mass spectrometer
SHIMADZU LCMS8030



Inductively coupled plasma
AGILENT 5100



Particle size analyzer
MALVERN MASTERSIZER3000



Total organic carbon
SHIMADZU TOC-L Series



UV spectrophotometer
SHIMADZU UV-1800



Extraction system
FOSS ST255SOXTEC



Rotary evaporator
HEIDOLPH Hei-VAP



Benchtop meter
FISHER SCIENTIFIC ACCUMETXL600



Portable meter
EUTECH ECOSCAN



Total organic carbon
LAR QUICK TOC ULTRA

Microbiology Laboratory



Biofermenter



Flow Cytometer



**Protein Liquid
Chromatography**



**Biosafety
Cabinet x3**



**Refrigerated
Centrifuge x3**



Incubator x4

Microbiology Laboratory



Microfluidizer (LM20)



Microplate Reader with Washer



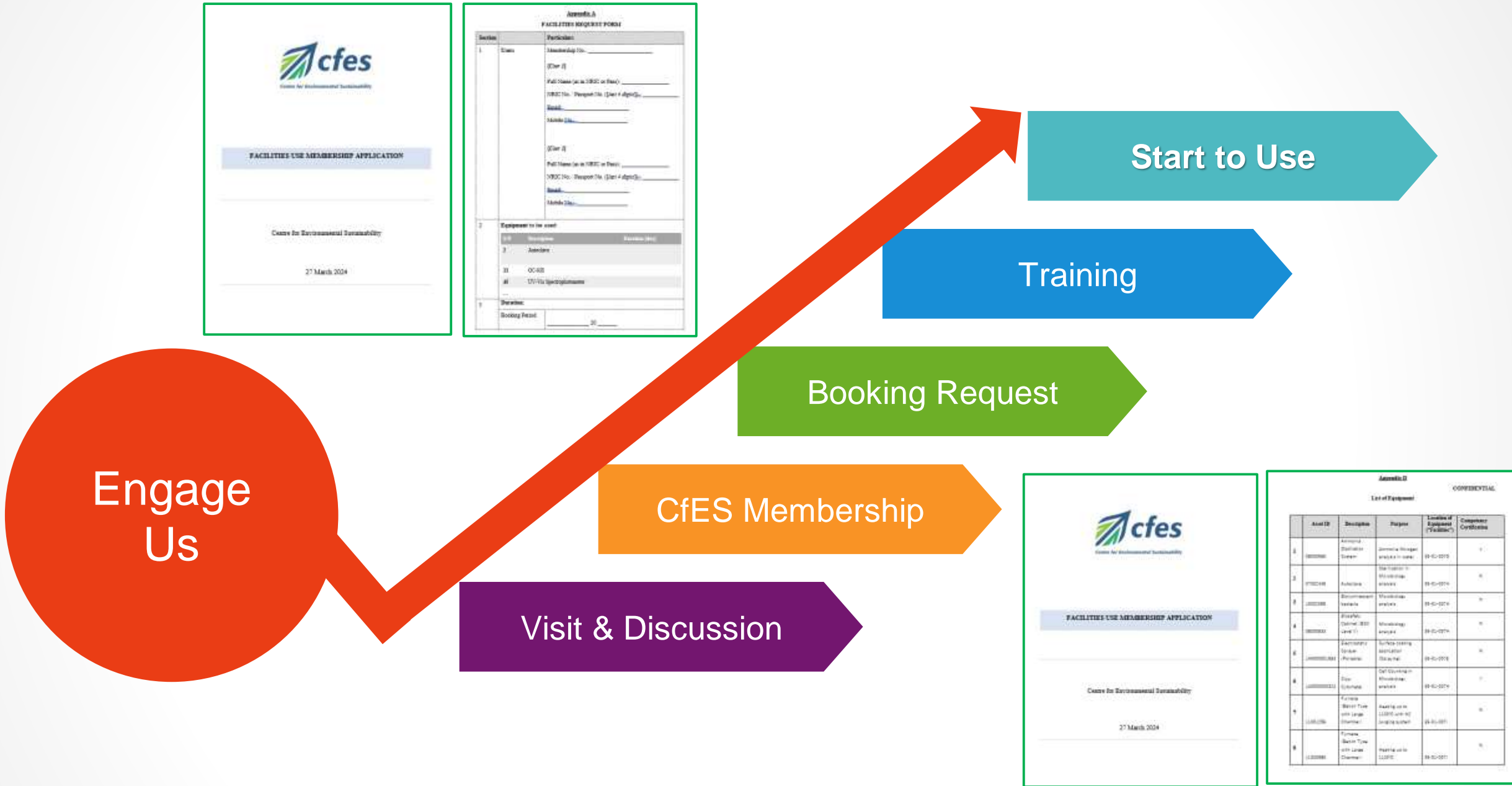
Epifluorescence Microscope



**Microvolume Spectrophotometer
(Nanodrop One C)**



Photo Bioreactor x2



Costs

Item	Cost	Remarks
Membership	\$1000/yr	<ul style="list-style-type: none"> • Payable upfront • Non-refundable • Up to 3 users • Up to 10 hours of complimentary training sessions • Access to facilities
Equipment Use	\$ xxxx	<ul style="list-style-type: none"> • Daily Based cost • The number of tests is not limited.



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