

## 5. UV-VIS Spectrophotometer

- Features:
  - Double-beam spectrophotometer with single monochromator
  - Silicon photodiode detectors
  - Wide wavelength range 190 - 1100 nm
  - Fixed band pass 1.0 nm for high resolution measurement
  - High speed scanning up to 8,000 nm/min
  - Dedicated V-730 bio for bio-physical analysis

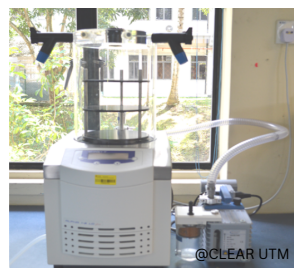
Price: RM30/sample



## 6. Freeze Dryer (Alpha 1-2 LDplus)

- 1 lab scale unit
- Potential application:
  - retaining product characteristics
  - maintaining initial shapes
  - conditioning the material
  - chemical analysis

Price: RM150/24 hour



### *For more info:*

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## CENTRE OF LIPIDS ENGINEERING AND APPLIED RESEARCH (CLEAR)



## Lab Services

## 1. Supercritical Fluid Extractor (SFE)

- 2 units of full operating SCCO<sub>2</sub> (CO<sub>2</sub>) system with range from 10 ml to 100 ml
- Pressure range between CO<sub>2</sub> critical point to 400 bar
- Types of services:
  - Extraction
  - Optimisation
  - Thermodynamic Studies
  - SCCO<sub>2</sub> Ups calling

### Applications

- Nutraceutical industry
- Healthcare industry
- Essential oils industry
- Pure vitamin production
- Pharmaceuticals industry
- Production of fine chemicals

Price: RM160/run



## 2. miVac Sample Concentrators

### *Key features and benefit*

- Compost modular units
- Easy to use
- Precise temperature control
- Heat & run timers
- Novel frost free SpeedTrap
- Unique solid aluminium rotors
- Fast evaporation
- Environmentally friendly

### Applications

- Clinical & Diagnostic Testing
- DNA & Oligonucleotides
- Protein & Peptides
- Environmental Analysis
- Food & Beverage

Price: RM120/4 hours (12 x 6 ml (15 ml))



## 3. Subcritical Water Extraction (SWE)



- 1 unit lab SWE with the range of 1-10 gram sample
- Range of water flow 1-10 ml/min
- Types of services:
  - Extraction
  - Optimization

Price: RM150/run

## 4. Laboratory Grinder & Sieving

- Sample preparation of particle size
- Purpose:
  - Food and herbs only

Price: RM50/sample

