

**FACULTY OF CHEMICAL AND PROCESS  
ENGINEERING TECHNOLOGY,  
UNIVERSITY MALAYSIA PAHANG AL-SULTAN  
ABDULLAH (UMPSA)**

**TECHNICAL SERVICES PRICE LIST**

**LAB : ANALYTICAL LAB & ANALYTICAL INSTRUMENT LAB**

**PIC : HAFIZAH BINTI RAMLI**



**EQUIPMENT : MELTING/BOILING POINT**

**SERVICE RATE :**

**EXTERNAL : RM 150.00/Sample**

**UMPSA : RM 90.00/Sample**



**EQUIPMENT : THERMOGRAVIMMETRIC ANALYZER  
(TGA)**

**SERVICE RATE :**

**EXTERNAL : RM 200.00/Sample**

**UMPSA : RM 120.00/Sample**



**EQUIPMENT : GAS CHROMATOGRAPHY (GC) FID**

**SERVICE RATE :**

**EXTERNAL : RM 110.00/Sample**

**UMPSA : RM 66.00/Sample**

**\* Price does not include SST 8%**

## **LAB : ANALYTICAL LAB & ANALYTICAL INSTRUMENT LAB**

**PIC : HAFIZAH BINTI RAMLI**



**EQUIPMENT : GAS CHROMATOGRAPHY (GC) MS**

**SERVICE RATE :**

**EXTERNAL : RM 200.00/Sample**

**UMPSA : RM 120.00/Sample**



**EQUIPMENT : GAS CHROMATOGRAPHY (GC) TCD**

**SERVICE RATE :**

**EXTERNAL : RM 150.00/Sample**

**UMPSA : RM 120.00/Sample**



**EQUIPMENT : FOURIER TRANSFORM INFRARED  
SPECTROSCOPY (FTIR)**

**SERVICE RATE :**

**EXTERNAL : RM 150.00/Sample**

**UMPSA : RM 90.00/Sample**



**EQUIPMENT : DIFFERENTIAL SCANNING  
CALORIMETRY (DSC)**

**SERVICE RATE :**

**EXTERNAL : RM 200.00/Sample**

**UMPSA : RM 120.00/Sample**

**\* Price does not include SST 8%**

**LAB : ANALYTICAL LAB & ANALYTICAL INSTRUMENT LAB**

**PIC : HAFIZAH BINTI RAMLI**



EQUIPMENT : CT3 TEXTURE ANALYZER

SERVICE RATE :

EXTERNAL : RM 100.00/Sample

UMPSA : RM 60.00/Sample

**\* Price does not include SST 8%**

**LAB : ENVIRONMENTAL LAB AND MUD & RESERVOIR LAB  
(SPT CLUSTER)**

**PIC : MOHD. NAJIB BIN NASOHA**



EQUIPMENT : ATOMIC ABSORPTION  
SPECTROMETER (AAS)

SERVICE RATE :  
EXTERNAL : RM 150.00/Sample  
UMPSA : RM 90.00/Sample



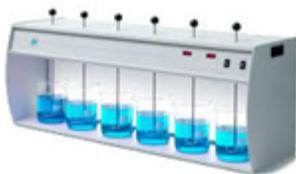
EQUIPMENT : CHEMICAL OXYGEN DEMAND (COD)

SERVICE RATE :  
EXTERNAL : RM 50.00/Sample  
UMPSA : RM 30.00/Sample



EQUIPMENT : BIOCHEMICAL OXYGEN DEMAND 5  
(BOD5)

SERVICE RATE :  
EXTERNAL : RM 50.00/Sample  
UMPSA : RM 30.00/Sample



EQUIPMENT : JAR TEST

SERVICE RATE :  
EXTERNAL : RM 50.00/Day  
UMPSA : RM 30.00/Day  
MAN POWER: RM100.00/HOUR (Option)

**\* Price does not include SST 8%**

**LAB : ENVIRONMENTAL LAB AND MUD & RESERVOIR LAB  
(SPT CLUSTER)**

**PIC : MOHD. NAJIB BIN NASOHA**



EQUIPMENT : TURBIDITY

SERVICE RATE :

EXTERNAL : RM 50.00/Day

UMPSA : RM 30.00/Day

MAN POWER: RM100.00/HOUR (Option)



EQUIPMENT : DISSOLVED OXYGEN METER (DO)

SERVICE RATE :

EXTERNAL : RM 50.00/Day

UMPSA : RM 30.00/Day

MAN POWER: RM100.00/HOUR (Option)



EQUIPMENT : FURNACE

SERVICE RATE :

EXTERNAL : RM 150.00/Day

UMPSA : RM 90.00/Day

MAN POWER: RM100.00/HOUR (Option)



EQUIPMENT : FURNACE (NITROGEN GASES)

SERVICE RATE :

EXTERNAL : RM 250.00/Day

UMPSA : RM 150.00/Day

MAN POWER: RM100.00/HOUR (Option)

**\* Price does not include SST 8%**

**LAB : ENVIRONMENTAL LAB AND MUD & RESERVOIR LAB  
(SPT CLUSTER)**

**PIC : MOHD. NAJIB BIN NASOHA**



**EQUIPMENT : PARTICAL SIZER**

**SERVICE RATE :**

**EXTERNAL : RM 100.00/Sample**

**UMPSA : RM 60.00/Sample**



**EQUIPMENT : SPRAY DRY (LAB SCALE)**

**SERVICE RATE :**

**EXTERNAL : RM 150.00/Day**

**UMPSA : RM 90.00/Day**

**MAN POWER: RM100.00/HOUR (Option)**

**\* Price does not include SST 8%**

## **LAB : MATERIAL LAB & BIO SCALE UP-1 LAB (AMREC CLUSTER)**

**PIC : MOHD. ARMAN BIN ABD KADIR**



**EQUIPMENT : HOT & COLD PRESS**

**SERVICE RATE :**

**EXTERNAL : RM 200.00/Day**

**UMPSA : RM 120.00/Day**

**MAN POWER: RM100.00/HOUR (Option)**



**EQUIPMENT : EXTRUDER**

**SERVICE RATE :**

**EXTERNAL : RM 200.00/Day**

**UMPSA : RM 120.00/Day**

**MAN POWER: RM100.00/HOUR (Option)**



**EQUIPMENT : UNIVERSAL TESTING MACHINE**

**SERVICE RATE :**

**EXTERNAL : RM 100.00/Day**

**UMPSA : RM 60.00/Day**

**MAN POWER: RM100.00/HOUR (Option)**



**EQUIPMENT : ACCELERATED WEATHERING TESTER**

**SERVICE RATE :**

**EXTERNAL : RM 250.00/Day**

**UMPSA : RM 120.00/Day**

**\* Price does not include SST 8%**

## **LAB : SCIENCE LAB & PRODUCT DEVELOPMENT LAB (CPMT CLUSTER)**

**PIC : MOHD. HASHSIIM BIN NAWOK KANI**



**EQUIPMENT : ZETA SIZER**

**SERVICE RATE :**

**EXTERNAL : RM 80.00/Day**

**UMPSA : RM 48.00/Day**

**MAN POWER: RM100.00/HOUR (Option)**



**EQUIPMENT : ROTARY EVAPORATOR**

**SERVICE RATE :**

**EXTERNAL : RM 80.00/Day**

**UMPSA : RM 48.00/Day**

**MAN POWER: RM100.00/HOUR (Option)**



**EQUIPMENT : HOMOGENIZER**

**SERVICE RATE :**

**EXTERNAL : RM 50.00/Day**

**UMPSA : RM 30.00/Day**

**MAN POWER: RM100.00/HOUR (Option)**



**EQUIPMENT : MINI RAPID MIXER GRANULATOR**

**SERVICE RATE :**

**EXTERNAL : RM 100.00/Day**

**UMPSA : RM 60.00/Day**

**MAN POWER: RM100.00/HOUR**

**\* Price does not include SST 8%**

# LAB : SCIENCE LAB & PRODUCT DEVELOPMENT LAB (CPMT CLUSTER)

**PIC : MOHD. HASHIIM BIN NAWOK KANI**



EQUIPMENT : DOUBLE CONE BLENDER

SERVICE RATE :

EXTERNAL : RM 100.00/Day

UMPSA : RM 60.00/Day

MAN POWER: RM100.00/HOUR



EQUIPMENT : SEMI-AUTO CAPSULE FILLING

SERVICE RATE :

EXTERNAL : RM 150.00/Day

UMPSA : RM 90.00/Day

MAN POWER: RM100.00/HOUR



EQUIPMENT : DISINTEGRATION TESTER

SERVICE RATE :

EXTERNAL : RM 100.00/Day

UMPSA : RM 60.00/Day

MAN POWER: RM100.00/HOUR



EQUIPMENT : FRIABILATOR TESTER

SERVICE RATE :

EXTERNAL : RM 50.00/Day

UMPSA : RM 30.00/Day

MAN POWER: RM100.00/HOUR (Option)

**\* Price does not include SST 8%**

**LAB : SCIENCE LAB & PRODUCT DEVELOPMENT LAB (CPMT CLUSTER)**

**PIC : MOHD. HASHIIM BIN NAWOK KANI**



**EQUIPMENT : TABLET HARDNESS TESTER**

**SERVICE RATE :**

**EXTERNAL : RM 100.00/Day**

**UMPSA : RM 60.00/Day**

**MAN POWER: RM100.00/HOUR (Option)**



**EQUIPMENT : SIEVE SHAKER**

**SERVICE RATE :**

**EXTERNAL : RM 50.00/Day**

**UMPSA : RM 30.00/Day**

**MAN POWER: RM100.00/HOUR (Option)**

**\* Price does not include SST 8%**

## LAB : UNIT OPERATION LAB & THERMODYNAMIC LAB

PIC : MOHD. FARIED BIN ABDULLAH



EQUIPMENT : ROTARY EVAPORATOR (PILOT PLANT SCALE)

SERVICE RATE :

EXTERNAL : RM 200.00/Day

UMPSA : RM 120.00/Day

MAN POWER: RM100.00/HOUR



EQUIPMENT : SIEVE SHAKER

SERVICE RATE :

EXTERNAL : RM 50.00/Day

UMPSA : RM 30.00/Day

MAN POWER: RM100.00/HOUR (Option)



EQUIPMENT : REACTOR 10 LITER

SERVICE RATE :

EXTERNAL : RM 200.00/Day

UMPSA : RM 120.00/Day

MAN POWER: RM100.00/HOUR



EQUIPMENT : SHORT PATH EVAPORATOR

SERVICE RATE :

EXTERNAL : RM 200.00/Day

UMPSA : RM 120.00/Day

MAN POWER: RM100.00/HOUR

\* Price does not include SST 8%

## **LAB : CHEMICAL REACTION ENGINEERING LAB & PILOT PLANT 2 (RISE CLUSTER)**

**PIC : ZAINAL BIN GIMAN**



EQUIPMENT : REACTOR 20 LITER

SERVICE RATE :

EXTERNAL : RM 200.00/Day

UMPSA : RM 120.00/Day

MAN POWER: RM100.00/HOUR



EQUIPMENT : KILOCLAVE PRESSURE REACTOR

SERVICE RATE :

EXTERNAL : RM 200.00/Day

UMPSA : RM 120.00/Day

MAN POWER: RM100.00/HOUR



EQUIPMENT : VACUUM DRYER

SERVICE RATE :

EXTERNAL : RM 200.00/Day

UMPSA : RM 120.00/Day

MAN POWER: RM100.00/HOUR



EQUIPMENT : DISTILLATION COLUMN

SERVICE RATE :

EXTERNAL : RM 200.00/Day

UMPSA : RM 120.00/Day

MAN POWER: RM100.00/HOUR

**\* Price does not include SST 8%**

**LAB : CHEMICAL REACTION ENGINEERING LAB & PILOT  
PLANT 2 (RISE CLUSTER)**

**PIC : ZAINAL BIN GIMAN**



EQUIPMENT : PHYSISORPTION ANALYZER (BET)

SERVICE RATE :

EXTERNAL : RM 150.00/Sample

UMPSA : RM 80.00/Sample

**\* Price does not include SST 8%**

**LAB : BASIC SCIENCE & ENGINEERING LAB**

**PIC : WAN RUZLAN BIN WAN HASHIM**

EQUIPMENT : BOMB CALORIMETER



SERVICE RATE :

EXTERNAL : RM 200.00/Sample

UMPSA : RM 200.00/Sample

**\* Price does not include SST 8%**

**LAB : MICRO BIOLOGY LAB & CELL CULTURE LAB**  
**PIC : AWANG HARUN ALRASHID BIN HAMZAH**



EQUIPMENT : VACUUM OVEN

SERVICE RATE :

EXTERNAL : RM 50.00/Day

UMPSA : RM 30.00/Day

MAN POWER: RM100.00/HOUR (Option)



EQUIPMENT : AUTOCLAVE

SERVICE RATE :

EXTERNAL : RM 50.00/Day

UMPSA : RM 30.00/Day

MAN POWER: RM100.00/HOUR (Option)



EQUIPMENT : CO<sup>2</sup> INCUBATOR

SERVICE RATE :

EXTERNAL : RM 50.00/Day

UMPSA : RM 30.00/Day

MAN POWER: RM100.00/HOUR (Option)



EQUIPMENT : UV VIS SPECTROMETER

SERVICE RATE :

EXTERNAL : RM 50.00/Day

UMPSA : RM 30.00/Day

MAN POWER: RM100.00/HOUR (Option)

**\* Price does not include SST 8%**

**LAB : MICRO BIOLOGY LAB & CELL CULTURE LAB**  
**PIC : AWANG HARUN ALRASHID BIN HAMZAH**



EQUIPMENT : FREEZE DRY

SERVICE RATE :  
EXTERNAL : RM 50.00/Day  
UMPSA : RM 30.00/Day  
MAN POWER: RM100.00/HOUR (Option)



EQUIPMENT : SONICATOR

SERVICE RATE :  
EXTERNAL : RM 50.00/Day  
UMPSA : RM 30.00/Day  
MAN POWER: RM100.00/HOUR (Option)



EQUIPMENT : REFRIGERATED CENTRIFUGE

SERVICE RATE :  
EXTERNAL : RM 80.00/Day  
UMPSA : RM 48.00/Day  
MAN POWER: RM100.00/HOUR (Option)



EQUIPMENT : REFRIGERATED HI SPEED  
CENTRIFUGE

SERVICE RATE :  
EXTERNAL : RM 100.00/Day  
UMPSA : RM 60.00/Day  
MAN POWER: RM100.00/HOUR (Option)

**\* Price does not include SST 8%**

**LAB : MICRO BIOLOGY LAB & CELL CULTURE LAB**  
**PIC : AWANG HARUN ALRASHID BIN HAMZAH**



EQUIPMENT : INCUBATOR

SERVICE RATE :

EXTERNAL : RM 50.00/Day

UMPSA : RM 30.00/Day

MAN POWER: RM100.00/HOUR (Option)



EQUIPMENT : MASTERCYCLER

SERVICE RATE :

EXTERNAL : RM 50.00/Day

UMPSA : RM 30.00/Day

MAN POWER: RM100.00/HOUR (Option)



EQUIPMENT : FLOW CYTOMETER

SERVICE RATE :

EXTERNAL : RM 80.00/Day

UMPSA : RM 48.00/Day

MAN POWER: RM100.00/HOUR (Option)



EQUIPMENT : INVERTED MICROSCOPE

SERVICE RATE :

EXTERNAL : RM 100.00/Day

UMPSA : RM 60.00/Day

MAN POWER: RM100.00/HOUR (Option)

**\* Price does not include SST 8%**

# LAB : PROCESS CONTROL & INSTRUMENT LAB (PROCESS CLUSTER LAB)

**PIC : MAHADHIR BIN MUHAMMAD**



EQUIPMENT : AIR FLOW PRESSURE TEMPERATURE (AFPT)

SERVICE RATE :

EXTERNAL : RM 500.00/Day

UMPSA : RM 500.00/Day

MAN POWER: RM100.00/HOUR



EQUIPMENT : WATER LEVEL FLOW PLANT (WLF)

SERVICE RATE :

EXTERNAL : RM 500.00/Day

UMPSA : RM 500.00/Day

MAN POWER: RM100.00/HOUR



EQUIPMENT : DENSITY LEVEL TEMPERATURE PLANT (DLT)

SERVICE RATE :

EXTERNAL : RM 500.00/Day

UMPSA : RM 500.00/Day

MAN POWER: RM100.00/HOUR

EQUIPMENT : DELTAV SIMULATION (WLF-AFT)

SERVICE RATE :

EXTERNAL : RM 1000.00/Day

UMPSA : RM 1000.00/Day

MAN POWER: RM100.00/HOUR



**\* Price does not include SST 8%**

**LAB : PILOT PLANT 1 & GAS ENGINEERING LAB**  
**PIC : MOHD. HAFIZ BIN ABD LATIB**



EQUIPMENT : EXTRACTION VESSEL, CONCENTRATOR, RECOVERY SOLVENT & SPRAY DRY (With Man Power)

SERVICE RATE EXTRACTION (20Kg/Batch) : RM 1,600.00/BATCH (Water)

SERVICE RATE EXTRACTION (20Kg/Batch) : RM 2,000.00/BATCH (Solvent)

SERVICE RATE SPRAY DRY (80 Liter/Batch) : RM 1,600.00/BATCH

SERVICE RATE : RM 2,790.00/BATCH (COMPLETE PACKAGE )



EQUIPMENT : BATCH AND CONTINUOUS REACTOR

SERVICE RATE : RM 300.00/DAY

MAN POWER (TECHNICAL STAFF) RATE : RM 100.00 /HOUR

**\* Price does not include SST 8%**