



**UNIVERSITY
OF MALAYA**



UNIVERSITY OF MALAYA RESEARCH

UM CENTRALISED EQUIPMENT DIRECTORY

Contents

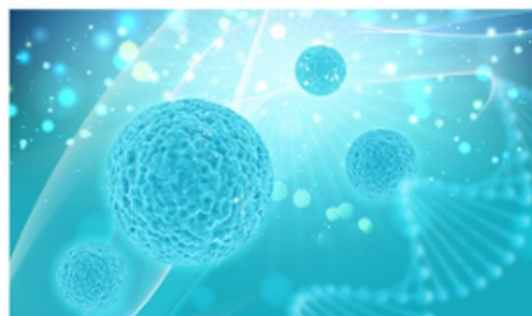
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Chemical Analysis



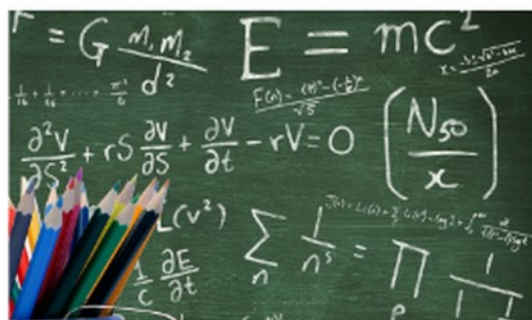
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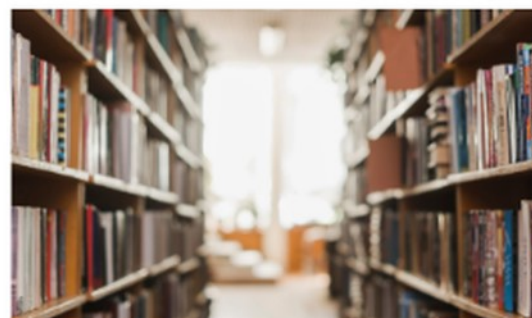
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CHEMICAL ANALYSIS

CENTRE FOR FOUNDATION STUDIES

DIFFERENTIAL SCANNING CALORIMETRY (DSC)**Brand:** Setaram**Model:** DSC 131 Evo**Location:** Bilik Pencirian 5, Makmal Penyelidikan, Aras
2**Person-in-charge:** Mdm Saripah Ismail,
Ms Noor Fhadzilah Mansur**Ext. no.:** 2339**Email:** saripah68@um.edu.my,
fhadzilahmansur@um.edu.my**FOURIER TRANSFORM SPECTROMETER INFRA RED (FTIR)****Brand:** Perkin Elmer**Model:** Frontier**Location:** Bilik Pencirian 2, Makmal Penyelidikan, Aras
2**Person-in-charge:** Mdm Saripah Ismail,
Ms Noor Fhadzilah Mansur**Ext. no.:** 2340**Email:** saripah68@um.edu.my,
fhadzilahmansur@um.edu.my**THERMAL GRAVIMETRIC ANALYSIS (TGA)****Brand:** Setaram**Model:** Labsys EVO**Location:** Bilik Pencirian 4, Makmal Penyelidikan, Aras
2**Person-in-charge:** Mdm Saripah Ismail,
Ms Noor Fhadzilah Mansur**Ext. no.:** 2338**Email:** saripah68@um.edu.my,
fhadzilahmansur@um.edu.my**UV/VIS SPECTROPHOTOMETER****Brand:** Perkin Elmer**Model:** Lambda 750**Location:** Bilik Pencirian 2, Makmal Penyelidikan, Aras
2**Person-in-charge:** Mdm Saripah Ismail,
Ms Noor Fhadzilah Mansur**Ext. no.:** 2340**Email:** saripah68@um.edu.my,
fhadzilahmansur@um.edu.my**CENTRE FOR RESEARCH SERVICES (PPP),
INSTITUTE OF RESEARCH MANAGEMENT & SERVICES (IPPP)****INFRA ANALYSIS****DIFFERENTIAL SCANNING CALORIMETRY (DSC)****Brand:** Perkin Elmer**Model:** DSC 8000**Location:** INFRA Analysis Laboratory, Level 3, Research
Management & Innovation Complex**Person-in-charge:** Mdm Jauhar Aisyah Junaidi,
Ms Fatimah Zahrah Mohamad**Ext. no.:** 7022 ext 2320**Email:** jauharaisyah@um.edu.my,
fatimahzahrah@um.edu.my**FOURIER TRANSFORM NUCLEAR MAGNETIC
RESONANCE (FT-NMR)****Brand:** Bruker**Model:** AVANCE 600**Location:** Advanced INFRA Laboratory, Level G,
Research Management & Innovation
Complex**Person-in-charge:** Mdm Rosyida Rosli,
Mr. Hasbullah Ibrahim**Ext. no.:** 7022 ext 2327**Email:** rosyidarosli@um.edu.my,
hasbullah_85@um.edu.my

**CENTRE FOR RESEARCH SERVICES (PPP),
INSTITUTE OF RESEARCH MANAGEMENT & SERVICES (IPPP)****INFRA ANALYSIS****GAS CHROMATOGRAPHY-MASS SPECTROMETER
(GC-MS)**

Brand: Shimadzu

Model: QP2010 ULTRA

Location: Advanced INFRA Laboratory, Level G,
Research Management & Innovation
Complex

Person-in-charge: Mr. Jebri Sulaiman,
Mdm Rahimah Ismail

Ext. no.: 7022 ext 2327

Email: jebri@um.edu.my,
rahimah_ismail@um.edu.my

**GAS CHROMATOGRAPHY-MASS SPECTROMETER
(GC-MS) - QQQ**

Brand: Shimadzu

Model: TQ 8030

Location: Advanced INFRA Laboratory, Level G,
Research Management & Innovation
Complex

Person-in-charge: Mr. Jebri Sulaiman,
Mdm Rahimah Ismail

Ext. no.: 7022 ext 2327

Email: jebri@um.edu.my,
rahimah_ismail@um.edu.my

**LIQUID CHROMATOGRAPHY-MASS
SPECTROMETER (LC-MS) - QTOF**

Brand: Agilent Technologies

Model: 6550 iFunnel

Location: Advanced INFRA Laboratory, Level G,
Research Management & Innovation
Complex

Person-in-charge: Mdm Jauhar Aisyah Junaidi,
Mdm Rahimah Ismail

Ext. no.: 7022 ext 2327

Email: jauharaisyah@um.edu.my,
rahimah_ismail@um.edu.my

MICROPLATE SPECTROPHOTOMETER

Brand: Biotek Instruments

Model: EPOCH

Location: INFRA Analysis Laboratory, Level 3, Research
Management & Innovation Complex

Person-in-charge: Mdm Jauhar Aisyah Junaidi,
Mdm Rahimah Ismail

Ext. no.: 7022 ext 2327

Email: jauharaisyah@um.edu.my,
rahimah_ismail@um.edu.my

SIMULTANEOUS THERMAL ANALYZER

Brand: Perkin Elmer

Model: STA 6000

Location: INFRA Analysis Laboratory, Level 3, Research
Management & Innovation Complex

Person-in-charge: Mdm Jauhar Aisyah Junaidi,
Ms Fatimah Zahrah Mohamad

Ext. no.: 7022 ext 2320

Email: jauharaisyah@um.edu.my,
fatimahzahrah@um.edu.my

**ULTRA HIGH PERFORMANCE LIQUID
CHROMATOGRAPHY-DAD DETECTOR (UHPLC-
DAD)**

Brand: Agilent Technologies

Model: Infinity 1290

Location: Advanced INFRA Laboratory, Level G,
Research Management & Innovation
Complex

Person-in-charge: Mdm Jauhar Aisyah Junaidi,
Mdm Rahimah Ismail

Ext. no.: 7022 ext 2327

Email: jauharaisyah@um.edu.my,
rahimah_ismail@um.edu.my

**CENTRE FOR RESEARCH SERVICES (PPP),
INSTITUTE OF RESEARCH MANAGEMENT & SERVICES (IPPP)****INFRA MICROBIOLOGY****MULTIMODE MICROPLATE READER**

Brand: Molecular Devices

Model: Versamax

Location: INFRA Microb Laboratory, Level 4, Research
Management & Innovation Complex

Person-in-charge: Puan Fakhrurodziah Hamzah

Ext. no.: 2328

Email: fakhrurodziah_hamzah@um.edu.my

INFRA HIR**ATOMIC EMISSION SPECTROMETER**

Brand: Agilent Technologies

Model: 4100

Location: Fumehood Room, Level 1, HIR Building

Person-in-charge: Mr. Amirul Fatih Japri

Ext. no.: 7080

Email: fatih92@um.edu.my

CAPILLARY ELECTROPHORESIS (CE)

Brand: Agilent Technologies

Model: 7100

Location: Bilik Khas 3, Level G, HIR Building

Person-in-charge: Mr. Amirul Fatih Japri

Ext. no.: 7080

Email: fatih92@um.edu.my

DUCTLESS FUME HOOD

Brand: Esco

Model: Ascent Max

Location: Machine Room G3, Level G, HIR Building

Person-in-charge: Mr. Amirul Fatih Japri

Ext. no.: 7080

Email: fatih92@um.edu.my

DUCTLESS FUME HOOD

Brand: Esco

Model: ADC-4C1

Location: Central Facility 2.1, Level 2, HIR Building

Person-in-charge: Ms Nur Syairah Azimi

Ext. no.: 2578

Email: syairah.azimi91@um.edu.my

FAST PROTEIN LIQUID CHROMATOGRAPH (FPLC)

Brand: GE Healthcare

Model: Akta Purifier Plus

Location: Central Facility 2, Level 1, HIR Building

Person-in-charge: Mr. Amirul Fatih Japri

Ext. no.: 7080

Email: fatih92@um.edu.my

FAST PROTEIN LIQUID CHROMATOGRAPH (FPLC)

Brand: Biorad

Model: NGC Quest 10 Plus Chrom System

Location: Central Facility 2.1, Level 2, HIR Building

Person-in-charge: Ms Nur Syairah Azimi

Ext. no.: 2578

Email: syairah.azimi91@um.edu.my

**CENTRE FOR RESEARCH SERVICES (PPP),
INSTITUTE OF RESEARCH MANAGEMENT & SERVICES (IPPP)****INFRA HIR****FILTER-BASED MICROPLATE READER**

Brand: Tecan

Model: F200PRO

Location: Central Facility 2, Level 1, HIR Building

Person-in-charge: Mdm Alfatiha Ahmad

Ext. no.: 2577, 2578

Email: alfatiha93@um.edu.my

**FOURIER TRANSFORM NUCLEAR MAGNETIC
RESONANCE (FT-NMR)**

Brand: Bruker

Model: AVANCE 600

Location: Bilik NMR, Level G, HIR Building

Person-in-charge: Mr. Amirul Fatih Japri

Ext. no.: 7080

Email: fatih92@um.edu.my

**FOURIER TRANSFORM NUCLEAR MAGNETIC
RESONANCE (FT-NMR)**

Brand: Bruker

Model: AVANCE 300

Location: Bilik NMR, Level G, HIR Building

Person-in-charge: Mr. Amirul Fatih Japri

Ext. no.: 7080

Email: fatih92@um.edu.my

FUME HOOD (DUCTED BYPASS)

Brand: Esco

Model: EFH-5A1

Location: Fumehood Room, Level 1, HIR Building

Person-in-charge: Mdm Alfatiha Ahmad

Ext. no.: 2577, 2578

Email: alfatiha93@um.edu.my

**GAS CHROMATOGRAPHY-MASS SPECTROMETER
(GC-MS)**

Brand: Agilent Technologies

Model: GC 7890A/MS 5975C

Location: Bilik Khas 3, Level G, HIR Building

Person-in-charge: Mr. Amirul Fatih Japri

Ext. no.: 7080

Email: fatih92@um.edu.my

GAS CHROMATOGRAPHY-MIDI (GC-MIDI)

Brand: Agilent Technologies

Model: GC 7890A

Location: Bilik Khas 3, Level G, HIR Building

Person-in-charge: Mr. Amirul Fatih Japri

Ext. no.: 7080

Email: fatih92@um.edu.my

**GAS CHROMATOGRAPHY-MASS SPECTROMETER
(GC-MS) - QTOF**

Brand: Agilent Technologies

Model: 7200

Location: Bilik Khas 3, Level G, HIR Building

Person-in-charge: Mr. Amirul Fatih Japri

Ext. no.: 7080

Email: fatih92@um.edu.my

ISOTHERMAL TITRATION CALORIMETER

Brand: GE Healthcare

Model: MicroCal VP-ITC

Location: Central Facility 2, Level 1, HIR Building

Person-in-charge: Mdm Alfatiha Ahmad

Ext. no.: 2577, 2578

Email: alfatiha93@um.edu.my

**CENTRE FOR RESEARCH SERVICES (PPP),
INSTITUTE OF RESEARCH MANAGEMENT & SERVICES (IPPP)****INFRA HIR****LIQUID CHROMATOGRAPHY-MASS
SPECTROMETER (LC-MS) - QQQ****Brand:** Agilent Technologies**Model:** 6490**Location:** Bilik Khas 3, Level G, HIR Building**Person-in-charge:** Mr. Amirul Fatih Japri**Ext. no.:** 7080**Email:** fatih92@um.edu.my**MONOCHROMATOR BASED MICROPLATE
READER - 2 UNITS****Brand:** Tecan**Model:** M200PRO**Location:** Central Facility 2, Level 1, HIR Building**Person-in-charge:** Mdm Alfatiha Ahmad**Ext. no.:** 2577, 2578**Email:** alfatiha93@um.edu.my**MULTIPLEX BEAD-BASED FLUOROANALYZER****Brand:** Luminex®**Model:** 200™**Location:** Central Facility 2, Level 1, HIR Building**Person-in-charge:** Mdm Alfatiha Ahmad**Ext. no.:** 2577, 2578**Email:** alfatiha93@um.edu.my**ORBITRAP FUSION BASIC SYSTEM****Brand:** Thermo Scientific**Model:** Fusion Tribrid**Location:** Machine Room G1, Level G, HIR Building**Person-in-charge:** Mr. Amirul Fatih Japri**Ext. no.:** 7080**Email:** fatih92@um.edu.my**ROTARY EVAPORATOR****Brand:** Fisher Scientific**Model:** EyeLa OSB 2100**Location:** Fumehood Room, Level 1, HIR Building**Person-in-charge:** Mdm Alfatiha Ahmad**Ext. no.:** 2577, 2578**Email:** alfatiha93@um.edu.my**ULTRA HIGH PERFORMANCE LIQUID
CHROMATOGRAPHY-DAD, FLD, ELSD****Brand:** Agilent Technologies**Model:** Infinity 1290**Location:** Bilik Khas 3, Level G, HIR Building**Person-in-charge:** Mr. Amirul Fatih Japri**Ext. no.:** 7080**Email:** fatih92@um.edu.my**UV/VIS SPECTROPHOTOMETER****Brand:** Agilent Technologies**Model:** Cary60**Location:** Central Facility 1, Level 1, HIR Building**Person-in-charge:** Mdm Alfatiha Ahmad**Ext. no.:** 2577, 2578**Email:** alfatiha93@um.edu.my

FACULTY OF DENTISTRY

AUTOTRITATOR

Brand: Radiometer Analytical

Model: TIM965

Location: Makmal Penyelidikan Bio Bahan, Aras 7,
Menara Pakar Pergigian & Penyelidikan

Person-in-charge: Mdm Chanthiriga A/P
Ramasindarum

Ext. no.: 6460

Email: chanthi@um.edu.my

COLOR SPECTROPHOTOMETER

Brand: Konica Minolta

Model: CM-5

Location: Makmal Penyelidikan Bio Bahan, Aras 7,
Menara Pakar Pergigian & Penyelidikan

Person-in-charge: Mdm Sumiati Pool

Ext. no.: 6460

Email: sumiati@um.edu.my

DIFFERENTIAL SCANNING CALORIMETRY (DSC)

Brand: TA Instruments

Model: Discovery DSC

Location: Thermal Lab, Aras G, Blok D

Person-in-charge: Mdm Nurul Khairiyah

Ext. no.: 6499

Email: nurulkhabas@um.edu.my

FAST PROTEIN LIQUID CHROMATOGRAPH (FPLC)

Brand: GE Healthcare

Model: Akta EXPLORER

Location: Makmal Proteomik, Makmal Bioteknologi
Perubatan, Aras 4, Blok B

Person-in-charge: Mdm Nosriah Ismail

Ext. no.: 7535

Email: nosriah@um.edu.my

FOURIER TRANSFORM SPECTROMETER INFRARED (FTIR)

Brand: Thermo Scientific

Model: FTIR6700 SYSTEM

Location: Makmal Penyelidikan Bio Bahan, Aras 7,
Menara Pakar Pergigian & Penyelidikan

Person-in-charge: Mdm Zarina Idris

Ext. no.: 6460

Email: zarina@um.edu.my

HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC)

Brand: Agilent Technologies

Model: Infinity 1220

Location: Makmal Histologi, Tingkat 1, Balai Ungku
Aziz

Person-in-charge: MLT BUARL

Ext. no.: 7450

Email: N/A

MICROPLATE READER

Brand: Tecan

Model: INFINITE 200 PRO

Location: Makmal CMBRL, Aras 7, Menara Pakar
Pergigian & Penyelidikan

Person-in-charge: Mdm Intan Syaheera Binti Abdul
Hamid

Ext. no.: 6461

Email: syaheera@um.edu.my

MULTIMODE MICROPLATE READER

Brand: Tecan

Model: INFINITE M1000 PRO

Location: Fasiliti Genomik, Makmal Bioteknologi
Perubatan, Aras 4, Blok B

Person-in-charge: Puan Nur Liyana Azmi

Ext. no.: 7579

Email: lyana@um.edu.my

FACULTY OF DENTISTRY

THERMAL GRAVIMETRIC ANALYSIS (TGA)**Brand:** TA Instruments**Model:** Discovery TGA**Location:** Thermal Lab, Aras G, Blok D**Person-in-charge:** Mdm Nurul Khairyah**Ext. no.:** 6499**Email:** nurulkhabas@um.edu.my**UV/VIS SPECTROPHOTOMETER****Brand:** Shimadzu**Model:** UV-1800**Location:** Makmal Biologi Molekul, Tingkat 1, Balai
Ungku Aziz**Person-in-charge:** MLT BUARL**Ext. no.:** 7450**Email:** N/A**UV/VIS SPECTROPHOTOMETER****Brand:** Shimadzu**Model:** UV-1700**Location:** Makmal Biologi Molekul, Tingkat 1, Balai
Ungku Aziz**Person-in-charge:** MLT BUARL**Ext. no.:** 7450**Email:** N/A**UV/VIS SPECTROPHOTOMETER****Brand:** Thermo Scientific**Model:** Multiscan Go**Location:** Stem Cell Research Lab, Level 3, Block D**Person-in-charge:** Mdm Junaida @ Maimunah Hassan
Basari**Ext. no.:** 6461/7492**Email:** junaida@um.edu.my

FACULTY OF ENGINEERING

DIFFERENTIAL SCANNING CALORIMETER (DSC)**Brand:** Perkin Elmer**Model:** DSC4000**Location:** Energy Laboratory 2, Level 3, Block R**Person-in-charge:** Dr. Nurin Wahidah Mohd Zulkifli**Ext. no.:** 4462**Email:** nurinmz@um.edu.my**FOURIER TRANSFORM SPECTROMETER INFRARED (FTIR) - 2 UNITS****Brand:** Bruker**Model:** Tensor 27**Location:** Energy Efficiency Laboratory 1, Ground
Floor, Block M**Person-in-charge:** N/A**Ext. no.:** 5356**Email:** generaloffice_fkej@um.edu.my

FACULTY OF ENGINEERING

GAS CHROMATOGRAPHY-MASS SPECTROMETER (GC-MS)**Brand:** Agilent Technologies**Model:** 7890A**Location:** Energy Efficiency Laboratory 1, Ground Floor, Block M**Person-in-charge:** N/A**Ext. no.:** 5356**Email:** generaloffice_fkej@um.edu.my**MODULAR POTENTIOSTAT/GALVANOSTAT****Brand:** Metrohm**Model:** Autolab PGSTAT302N**Location:** High Voltage Laboratory, Ground Floor, Block Y**Person-in-charge:** Assoc. Prof. Ir. Dr. Hazlee Azil Illias**Ext. no.:** 4483**Email:** h.illias@um.edu.my**POTENTIOSTAT-4 POINT PROBE****Brand:** Gamry Instruments**Model:** Reference 600**Location:** NanoMicro Engineering Laboratory, Level 3, Block M**Person-in-charge:** N/A**Ext. no.:** 5356**Email:** generaloffice_fkej@um.edu.my**ROTARY EVAPORATOR****Brand:** IKA**Model:** RV10**Location:** Energy Efficiency Laboratory 1, Ground Floor, Block M**Person-in-charge:** Mr. Mohd Khairil Bin Roslan**Ext. no.:** 2657**Email:** mohdkhairilroslan@um.edu.my

FACULTY OF MEDICINE

FUME HOOD**Brand:** ESCO**Model:** -**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Mdm Nurul Syahida**Ext. no.:** 03-7949 6385**Email:** syahidaharman@um.edu.my**FUME HOOD****Brand:** ESCO**Model:** Ascent Max**Location:** Lab 1, Cell and Molecular Biology Laboratory, Faculty of Medicine**Person-in-charge:** Asmad Rizal Bin Mohd Khir**Ext. no.:** 03-7967 7587**Email:** asmadrizal@um.edu.my

FACULTY OF MEDICINE

FLAMMABLE CABINET

Brand: Ultratech

Model: -

Location: Makmal 1, Translational Core Laboratory

Person-in-charge: Mdm Jumriah

Ext. no.: 03-7949 6385

Email: jum_ash@um.edu.my

FACULTY OF SCIENCE

DEPARTMENT OF CHEMISTRY

ATOMIC ABSORPTION SPECTROMETER (AAS)

Brand: Perkin Elmer

Model: N/A

Location: Bilik GC & AAS, (L1-26), Aras 1, Bangunan
Makmal Kimia

Person-in-charge: Mr. Mohd. Hazni Abd Taib

Ext. no.: 5844

Email: mhazni@um.edu.my

ATOMIC ABSORPTION SPECTROMETER (AAS)

Brand: Shimadzu

Model: AA-6200

Location: Bilik GC & AAS, (L1-26), Aras 1, Bangunan
Makmal Kimia

Person-in-charge: Mr. Mohd. Hazni Abd Taib

Ext. no.: 5844

Email: mhazni@um.edu.my

CAPILLARY ELECTROPHORESIS (CE)

Brand: Beckman Coulter

Model: P/ACE MDQ CE System

Location: Makmal Peralatan Berpusat (D306), Blok D

Person-in-charge: Mr Sugakumar Varuthan

Ext. no.: 2120

Email: vs_kumar@um.edu.my

COMPACT POTENTIOSTAT/GALVANOSTAT

Brand: Metrohm

Model: Autolab

Location: Makmal HIR (D316), Blok D

Person-in-charge: Ms Kumuthini Chandrasekaram

Ext. no.: 5160

Email: kumuthinic@um.edu.my

FACULTY OF SCIENCE

DEPARTMENT OF CHEMISTRY

DART-TOF-MASS SPECTROMETER**Brand:** Jeol**Model:** N/A**Location:** Makmal HPLC, Bilik C209, Blok A**Person-in-charge:** Mdm Noor Azlin Che Din**Ext. no.:** 2122**Email:** azlin_cd@um.edu.my**DIFFERENTIAL SCANNING CALORIMETRY (DSC)****Brand:** Perkin Elmer**Model:** N/A**Location:** Makmal DSC, Aras 1, Bangunan Makmal Kimia**Person-in-charge:** Mdm Noor Azlin Che Din**Ext. no.:** 2122**Email:** azlin_cd@um.edu.my**ELECTROANALYTICAL SYSTEM (VOLTAMMETRY) - 2 UNITS****Brand:** Metrohm**Model:** 797 VA**Location:** Makmal Peralatan Berpusat (D306), Blok D**Person-in-charge:** Mdm Ruhaida Bahru**Ext. no.:** 2124**Email:** i_da@um.edu.my**ELEMENTAL ANALYZER (CHN)****Brand:** Perkin Elmer**Model:** N/A**Location:** Makmal CHN, Bilik C14A, Blok A**Person-in-charge:** Mr. Fateh Ngaliman**Ext. no.:** 7171**Email:** fateh@um.edu.my**ELEMENTAL ANALYZER (CHNS)****Brand:** LECO**Model:** N/A**Location:** Makmal CHN & AAS, Bilik C14A, Blok A**Person-in-charge:** Mr. Fateh Ngaliman**Ext. no.:** 7171**Email:** fateh@um.edu.my**FOURIER TRANSFORM NUCLEAR MAGNETIC RESONANCE (FT-NMR)****Brand:** Bruker**Model:** AVANCE 600**Location:** Makmal NMR3, Bilik C014, Blok A**Person-in-charge:** Mr. Nordin Mohamed**Ext. no.:** 4057**Email:** nordin@um.edu.my**FOURIER TRANSFORM NUCLEAR MAGNETIC RESONANCE (FT-NMR)****Brand:** Bruker**Model:** AVANCE 400**Location:** Makmal NMR3, Bilik C014, Blok A**Person-in-charge:** Mr. Nordin Mohamed**Ext. no.:** 4057**Email:** nordin@um.edu.my**FOURIER TRANSFORM NUCLEAR MAGNETIC RESONANCE (FT-NMR)****Brand:** Jeol**Model:** ECA 400**Location:** Makmal NMR2, Bilik C017, Blok A**Person-in-charge:** Mr. Zakaria Ahmat**Ext. no.:** 6707**Email:** zack9@um.edu.my

FACULTY OF SCIENCE

DEPARTMENT OF CHEMISTRY

FLUORESCENCE SPECTROPHOTOMETER**Brand:** Agilent Technologies**Model:** Cary Eclipse**Location:** M/PEN.ORGANIK (T3/D4/1), Tingkat Biru,
Blok B**Person-in-charge:** Assoc. Prof. Dr. Hairul Anuar**Ext. no.:** 4053**Email:** hairul@um.edu.my**FOURIER TRANSFORM NUCLEAR MAGNETIC
RESONANCE (FT-NMR)****Brand:** Jeol**Model:** ECX 400**Location:** Makmal NMR, FD2-GF, Bangunan Makmal
Kimia**Person-in-charge:** Mdm Dara Fiona**Ext. no.:** 4168**Email:** fiona@um.edu.my**FOURIER TRANSFORM NUCLEAR MAGNETIC
RESONANCE (FT-NMR)****Brand:** Jeol**Model:** ECX 500**Location:** NMR2, H019, Blok C**Person-in-charge:** Mr. Zakaria Ahmat**Ext. no.:** 6707**Email:** zack9@um.edu.my**FOURIER TRANSFORM SPECTROMETER INFRA RED
(FTIR) - 2 UNITS****Brand:** Perkin Elmer**Model:** SPECTRUM RX1**Location:** Bilik IR Spektrometer, L1-34, Aras 1,
Bangunan Makmal Kimia**Person-in-charge:** Mdm Nor Lela Mat Ali**Ext. no.:** 7115**Email:** lela@um.edu.my**FOURIER TRANSFORM SPECTROMETER INFRA RED
(FTIR)****Brand:** Perkin Elmer**Model:** Frontier MIR**Location:** Bilik IR Spektrometer, L1-34, Aras 1,
Bangunan Makmal Kimia**Person-in-charge:** Mdm Nor Lela Mat Ali**Ext. no.:** 7115**Email:** lela@um.edu.my**FOURIER TRANSFORM SPECTROMETER INFRA
RED/ATTENUATED TOTAL REFLECTION (FTIR/
ATR)****Brand:** Perkin Elmer**Model:** SPECTRUM 400**Location:** Bilik IR Spektrometer, L1-34, Aras 1,
Bangunan Makmal Kimia**Person-in-charge:** Mdm Nor Lela Mat Ali**Ext. no.:** 7115**Email:** lela@um.edu.my**FOURIER TRANSFORM SPECTROMETER INFRA
RED/ATTENUATED TOTAL REFLECTION (FTIR/
ATR)****Brand:** Perkin Elmer**Model:** SPECTRUM II**Location:** Makmal Kimia Makmal L7-20, Aras 7,
Bangunan Makmal Kimia**Person-in-charge:** Mdm Maermawati Mohamad**Ext. no.:** 2120**Email:** watie@um.edu.my**GAS CHROMATOGRAPHY-MASS SPECTROMETER
(GC-MS)****Brand:** Shimadzu**Model:** GC-2010**Location:** Makmal GC, Bilik C013, Blok A**Person-in-charge:** Mr. Mohamad bin Akasah**Ext. no.:** 4251**Email:** mohamad@um.edu.my

FACULTY OF SCIENCE

DEPARTMENT OF CHEMISTRY

GAS CHROMATOGRAPHY FLAME IONISATION DETECTOR (GC-FID)**Brand:** Shimadzu**Model:** GC-2010**Location:** Makmal Analisis 1, Aras 5, Bangunan Makmal Kimia**Person-in-charge:** Mr. Mohamad bin Akasah**Ext. no.:** 4251**Email:** mohamad@um.edu.my**GAS CHROMATOGRAPHY FLAME IONISATION DETECTOR (GC-FID)****Brand:** Agilent Technologies**Model:** 7890A**Location:** Bilik GC & AAS, (L1-26), Aras 1, Bangunan Makmal Kimia**Person-in-charge:** Mdm Ruhaida Bahru**Ext. no.:** 2124**Email:** i_da@um.edu.my**GAS CHROMATOGRAPHY FLAME PHOTOMETRIC DETECTOR (GC-FHD)****Brand:** Shimadzu**Model:** GC-2010 Plus**Location:** Bilik GC & AAS, (L1-26), Aras 1, Bangunan Makmal Kimia**Person-in-charge:** Mdm Ruhaida Bahru**Ext. no.:** 2124**Email:** i_da@um.edu.my**GAS CHROMATOGRAPHY ELECTRON CAPTURE DETECTOR (GC-ECD)****Brand:** Agilent Technologies**Model:** 7890A**Location:** Bilik GC & AAS, (L1-26), Aras 1, Bangunan Makmal Kimia**Person-in-charge:** Mdm Ruhaida Bahru**Ext. no.:** 2124**Email:** i_da@um.edu.my**GAS CHROMATOGRAPHY ELECTRON CAPTURE DETECTOR (GC-ECD)****Brand:** Shimadzu**Model:** GC-2010 Plus**Location:** Bilik GC & AAS, (L1-26), Aras 1, Bangunan Makmal Kimia**Person-in-charge:** Mdm Nurul Hasmah Razman**Ext. no.:** 4251**Email:** nurul_hr@um.edu.my**GEL PERMEATION CHROMATOGRAPHY****Brand:** Waters**Model:** N/A**Location:** Makmal Bahan, Aras 4, n (FD-L4-4), Bangunan Makmal Kimia**Person-in-charge:** Mr. Muhamad Hafizie**Ext. no.:** 2126**Email:** fiziekedah@um.edu.my**GEL PERMEATION CHROMATOGRAPHY****Brand:** MAX**Model:** N/A**Location:** Makmal Bahan, Aras 4, n (FD-L4-4), Bangunan Makmal Kimia**Person-in-charge:** Mr. Muhamad Hafizie**Ext. no.:** 2126**Email:** fiziekedah@um.edu.my**GRAPHITE FURNACE AAS-HYDRIDE****Brand:** N/A**Model:** N/A**Location:** Bilik GC & AAS, (L1-26), Aras 1, Bangunan Makmal Kimia**Person-in-charge:** Mr. Mohd. Hazni Abd Taib**Ext. no.:** 5844**Email:** mhazni@um.edu.my

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**GRAVIMETRIC ANALYSIS GAS
CHROMATOGRAPHY MASS SPECTROMETER (TGA
-GC-MS)**

Brand: Perkin Elmer

Model: Clarus SQ 8T

Location: Makmal TG-GCMS, L1-45 Aras 1, Bangunan
Makmal Kimia

Person-in-charge: Mr. Hashim Mohd. Salleh

Ext. no.: 4252

Email: hashims@um.edu.my

**HIGH PERFORMANCE LIQUID CHROMATOGRAPHY
(AUTOPURIFICATION SYSTEM)**

Brand: Waters

Model: N/A

Location: Makmal HPLC, Bilik C209, Blok A

Person-in-charge: Ms Zailawati Zakaria

Ext. no.: 2123

Email: zailawati@um.edu.my

**HIGH PERFORMANCE LIQUID CHROMATOGRAPHY-
ULTRA VIOLET DETECTOR (HPLC-UVD) - 2 UNITS**

Brand: Waters

Model: N/A

Location: Makmal HPLC, Bilik C209, Blok A

Person-in-charge: Ms Zailawati Zakaria

Ext. no.: 2123

Email: zailawati@um.edu.my

**HIGH PERFORMANCE LIQUID CHROMATOGRAPHY-
ULTRA VIOLET DETECTOR (HPLC-UVD)**

Brand: Shimadzu

Model: N/A

Location: Makmal Alam Sekitar, Aras 5, Bangunan
Makmal Kimia

Person-in-charge: Mdm Ruhaida Bahru

Ext. no.: 2124

Email: ida@um.edu.my

**INDUCTIVE COUPLED PLASMA-MASS
SPECTROMETER (ICP-MS)**

Brand: Agilent

Model: N/A

Location: Makmal ICP-MS, Blok A

Person-in-charge: Mr. Saharudin Zainal

Ext. no.: 2124/2109

Email: dinmela@um.edu.my

ION CHROMATOGRAPHY

Brand: Metrohm

Model: N/A

Location: Makmal HIR, D316, Blok D

Person-in-charge: Ms Kumuthini Chandrasekaram

Ext. no.: 5160

Email: kumuthinic@um.edu.my

IONIC CHROMATOGRAPHY ANALYZER

Brand: Dionex

Model: N/A

Location: Makmal Alam Sekitar, Aras 5, Bangunan
Makmal Kimia

Person-in-charge: Ms Juriah Seko

Ext. no.: 2125

Email: cahayainsani@um.edu.my

**LIQUID CHROMATOGRAPHY-MASS
SPECTROMETER (LC-MS) - QQQ**

Brand: Agilent Technologies

Model: N/A

Location: Makmal Mass Spectrometer, Aras 1
Bangunan Makmal Kimia

Person-in-charge: Mdm Siti Nur Faridatul Asyikin

Ext. no.: N/A

Email: syikin@um.edu.my

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LIQUID CHROMATOGRAPHY-MASS SPECTROMETER (LC-MS) - QTOF**Brand:** Agilent Technologies**Model:** N/A**Location:** Makmal GC, Bilik C013, Blok A**Person-in-charge:** Mr. Mohamad bin Akasah**Ext. no.:** 4251**Email:** mohamad@um.edu.my**MICROWAVE DIGESTER****Brand:** N/A**Model:** N/A**Location:** Makmal Analisis I (L5-18/L5-20) Aras 5, Bangunan Makmal Kimia**Person-in-charge:** Mdm Ruhaida Bahru**Ext. no.:** 2124**Email:** i_da@um.edu.my**MULTI CHANNEL DIFFERENTIAL SCANNING CALORIMETRY (MCDSC)****Brand:** Perkin Elmer**Model:** N/A**Location:** Makmal DSC, Aras 1, Bangunan Makmal Kimia**Person-in-charge:** Mdm Noor Azlin Che Din**Ext. no.:** 2122**Email:** azlin_cd@um.edu.my**POTENTIOSTAT/GALVANOSTAT****Brand:** Metrohm**Model:** Autolab**Location:** Makmal HIR (D316), Blok D**Person-in-charge:** Ms Kumuthini Chandrasekaram**Ext. no.:** 5160**Email:** kumuthinic@um.edu.my**POTENTIOSTAT/GALVANOSTAT/EIS SYSTEM****Brand:** Gambry**Model:** N/A**Location:** Makmal HIR (D316), Blok D**Person-in-charge:** Ms Kumuthini Chandrasekaram**Ext. no.:** 5160**Email:** kumuthinic@um.edu.my**SYSTEM UV/VIS/NIR SPECTROMETER****Brand:** Shimadzu**Model:** N/A**Location:** Makmal HIR (D316), Blok D**Person-in-charge:** Ms Kumuthini Chandrasekaram**Ext. no.:** 5160**Email:** kumuthinic@um.edu.my**THERMAL GRAVIMETRIC ANALYSIS (TGA)****Brand:** Perkin Elmer**Model:** TGA 4000**Location:** Makmal Polimer, Aras 5, Bangunan Makmal Kimia**Person-in-charge:** Mr. Muhamad Hafizie**Ext. no.:** 2126**Email:** fiziekedah@um.edu.my**THERMAL GRAVIMETRIC ANALYSIS/ DIFFERENTIAL THERMAL ANALYSIS (TGA/DTA)****Brand:** Perkin Elmer**Model:** N/A**Location:** Makmal Polimer 3, Aras 5, Bangunan Makmal Kimia**Person-in-charge:** Mr. Muhamad Hafizie**Ext. no.:** 2126**Email:** fiziekedah@um.edu.my

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TOTAL ORGANIC CARBON**Brand:** N/A**Model:** N/A**Location:** Makmal Analisis 1 (L5-18/L5-20), Aras 5,
Bangunan Makmal Kimia**Person-in-charge:** Mr. Mohd. Hazni Abd Taib**Ext. no.:** 5844**Email:** mhazni@um.edu.my**ULTRA VIOLET SPECTROMETER (UV) - 3 UNITS****Brand:** Shimadzu**Model:** N/A**Location:** Bilik UV Specktrometer, L1-41, Aras 1,
Bangunan Makmal Kimia**Person-in-charge:** Mr. Mohd. Hakim Zakaria**Ext. no.:** 2121**Email:** hakim@um.edu.my**ULTRA VIOLET SPECTROMETER (UV) - 2 UNITS****Brand:** Shimadzu**Model:** N/A**Location:** Makmal L7-19, Aras 7, Bangunan Makmal
Kimia**Person-in-charge:** Mr. Mohd. Hakim Zakaria**Ext. no.:** 2121**Email:** hakim@um.edu.my**ULTRA VIOLET SPECTROMETER (UV)****Brand:** Shimadzu**Model:** N/A**Location:** Makmal Analisis I (L5-18/L5-20) Aras 5,
Bangunan Makmal Kimia**Person-in-charge:** Mdm Ruhaida Bahru**Ext. no.:** 2124**Email:** i_da@um.edu.my**ULTRA VIOLET SPECTROMETER (UV)****Brand:** Shimadzu**Model:** N/A**Location:** Makmal Peralatan Berpusat (D306), Blok D**Person-in-charge:** Mdm Ruhaida Bahru**Ext. no.:** 2124**Email:** i_da@um.edu.my**VACUUM OVEN****Brand:** Shimadzu**Model:** N/A**Location:** Makmal HIR, D316, Blok D**Person-in-charge:** Ms Kumuthini Chandrasekaram**Ext. no.:** 5160**Email:** kumuthinic@um.edu.my

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DEPARTMENT OF GEOLOGY

ATOMIC ABSORPTION SPECTROMETER (AAS)**Brand:** ANALYTIK JENA**Model:** A 7000**Location:** Makmal Serapan Atom, GB115, Aras Bawah, Bangunan Baru (J21)**Person-in-charge:** Mdm Zaiton Yusof**Ext. no.:** 6730**Email:** zaiyusof@um.edu.my**EVAPORATOR/SOLVENT EXTRACTOR****Brand:** Thermo Scientific**Model:** N/A**Location:** Makmal Petroleum Geokimia 1, GB107, Aras Bawah, Bangunan Baru (J21)**Person-in-charge:** Mr. Mohammad Zamri**Ext. no.:** 7104**Email:** mzamri@@um.edu.my**FOURIER TRANSFORM SPECTROMETER INFRA RED (FTIR)****Brand:** Perkin Elmer**Model:** SPECTRUM 100**Location:** Makmal Petroleum Geokimia 2, GB108, Aras Bawah, Bangunan Baru (J21)**Person-in-charge:** Mr. Mohammad Zamri**Ext. no.:** 7104**Email:** mzamri@@um.edu.my**FOURIER TRANSFORM SPECTROMETER INFRA RED (FTIR)****Brand:** Perkin Elmer**Model:** SPECTRUM Spotlight 300**Location:** Makmal Petroleum Geokimia 2, GB108, Aras Bawah, Bangunan Baru (J21)**Person-in-charge:** Mr. Mohammad Zamri**Ext. no.:** 7104**Email:** mzamri@@um.edu.my**GAS CHROMATOGRAPHY****Brand:** Agilent Technologies**Model:** 6890A**Location:** Makmal Petroleum Geokimia 2, GB108, Aras Bawah, Bangunan Baru (J21)**Person-in-charge:** Mr. Mohammad Zamri**Ext. no.:** 7104**Email:** mzamri@@um.edu.my**GAS CHROMATOGRAPHY-MASS SPECTROMETER (GC-MS)****Brand:** Agilent Technologies**Model:** 5975**Location:** Makmal Petroleum Geokimia 2, GB108, Aras Bawah, Bangunan Baru (J21)**Person-in-charge:** Mr. Mohammad Zamri**Ext. no.:** 7104**Email:** mzamri@@um.edu.my**GAS CHROMATOGRAPHY FLAME PHOTOMETRIC DETECTOR (GC-FHD)****Brand:** Perkin Elmer**Model:** N/A**Location:** Makmal Petroleum Geokimia 2, GB108, Aras Bawah, Bangunan Baru (J21)**Person-in-charge:** Mr. Mohammad Zamri**Ext. no.:** 7104**Email:** mzamri@@um.edu.my**ION CHROMATOGRAPHY****Brand:** Methrom**Model:** 300 861 Advance Compact IC**Location:** Makmal Hidrogeologi, GB109, Aras Bawah, Bangunan Baru (J21)**Person-in-charge:** Ms Nursyahira Ismail**Ext. no.:** 7162**Email:** syahira@um.edu.my

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DEPARTMENT OF GEOLOGY

MACHINE INDUCTIVE COUPLED PLASMA-OES

Brand: Perkin Elmer

Model: Optima 5300DV

Location: Makmal Hidrogeologi, GB109, Aras Bawah, Bangunan Baru (J21)

Person-in-charge: Ms Nursyahira Ismail

Ext. no.: 7162

Email: syahira@um.edu.my

MULTI GAS ANALYZER

Brand: Frontier Lab

Model: Microjet Cryotrap MJT/-1035E

Location: Makmal Petroleum Geokimia 2, GB108, Aras Bawah, Bangunan Baru (J21)

Person-in-charge: Mr. Mohammad Zamri

Ext. no.: 7104

Email: mzamri@um.edu.my

THERMAL GRAVIMETRIC ANALYSIS (TGA)

Brand: Perkin Elmer

Model: N/A

Location: Makmal Petroleum Geokimia 2, GB108, Aras Bawah, Bangunan Baru (J21)

Person-in-charge: Mr. Mohammad Zamri

Ext. no.: 7104

Email: mzamri@um.edu.my

DEPARTMENT OF PHYSICS

DIFFERENTIAL SCANNING CALORIMETRY (DSC)

Brand: TA Instruments

Model: TGA Q 200

Location: Makmal Struktur & Termal, Blok B

Person-in-charge: Mr. Mohd Zieuddin Kufian

Ext. no.: 2117

Email: mzkufian@um.edu.my

ELECTROCHEMICAL WORKSTATION (POTENTIOSTAT) - 3 UNITS

Brand: Metrohm

Model: Autolab

Location: Bangunan AMCAL

Person-in-charge: Dr. Chiu Wee Siong

Ext. no.: N/A

Email: w.s.chiu@um.edu.my

FACULTY OF SCIENCE

DEPARTMENT OF PHYSICS

**ELECTROCHEMICAL WORKSTATION
(POTENTIOSTAT)****Brand:** Princeton Applied**Model:** N/A**Location:** Bangunan AMCAL**Person-in-charge:** Dr. Chiu Wee Siong**Ext. no.:** N/A**Email:** w.s.chiu@um.edu.my**ELECTROLUMINESCENCE****Brand:** Labsphere**Model:** N/A**Location:** Bangunan AMCAL**Person-in-charge:** Dr. Ahmad Shuhaimi**Ext. no.:** 4206/3422**Email:** shuhaimi@um.edu.my**FOURIER TRANSFORM SPECTROMETER INFRARED
(FTIR)****Brand:** Thermo Scientific**Model:** Nicolet iS 10**Location:** Makmal Struktur & Termal, Blok B**Person-in-charge:** Mr. Mohd Zieuddin Kufian**Ext. no.:** 2117**Email:** mzkufian@um.edu.my**GAS CHROMATOGRAPHY****Brand:** Agilent Technologies**Model:** N/A**Location:** Bangunan AMCAL**Person-in-charge:** Dr. Chiu Wee Siong**Ext. no.:** N/A**Email:** w.s.chiu@um.edu.my**FTNIR/MIR/FTIR SPECTROMETER****Brand:** Perkin Elmer**Model:** System 2000**Location:** Bilik LDMRC 1**Person-in-charge:** Mr. Mohd Arif Sarjidan**Ext. no.:** 4147**Email:** mohd.arif@um.edu.my**LUMINESCENCE SPECTROMETER****Brand:** Perkin Elmer**Model:** LS50B**Location:** Bilik LDMRC 1**Person-in-charge:** Mr. Mohd Arif Sarjidan**Ext. no.:** 4147**Email:** mohd.arif@um.edu.my**POTENTIOSTAT & GALVANOSTAT****Brand:** IJCambria Scientific**Model:** 600D & CH1600D**Location:** Pusat Penyelidikan Ionik, Bangunan Sains Baru, Aras Bawah**Person-in-charge:** Mr. Mohd Zieuddin Kufian**Ext. no.:** 2117**Email:** mzkufian@um.edu.my**THERMAL GRAVIMETRIC ANALYSIS (TGA)****Brand:** TA Instruments**Model:** TGA Q 500**Location:** Makmal Struktur & Termal, Blok B**Person-in-charge:** Mr. Mohd Zieuddin Kufian**Ext. no.:** 2117**Email:** mzkufian@um.edu.my

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DEPARTMENT OF PHYSICS

UV-VIS-NIR OPTICAL SPECTROPHOTOMETER

Brand: Perkin Elmer

Model: Lambda 750

Location: Bilik LDMRC 1

Person-in-charge: Mr. Mohd Arif Sarjidan

Ext. no.: 4147

Email: mohd.arif@um.edu.my

VACUUM EVAPORATOR SYSTEM

Brand: Edwards

Model: PI-400

Location: Bilik LDMRC 1

Person-in-charge: Mr. Mohd Arif Sarjidan

Ext. no.: 4147

Email: mohd.arif@um.edu.my

INSTITUTE OF BIOLOGICAL SCIENCES

AUTOMATED MICROPLATE READER

Brand: Tecan

Model: Sunrise

Location: Makmal Sel Kultur, Blok D, Aras Bawah

Person-in-charge: Ms Siti Rugayah Mohd Hashim

Ext. no.: 6746

Email: ctrugayah@um.edu.my

AUTOSAMPLER FOR GAS CHROMATOGRAPHY

Brand: Thermo Scientific

Model: N/A

Location: BTF7, Makmal Bioproses, Tingkat 4, Blok B

Person-in-charge: Mr. Razali Bin Md Jonit

Ext. no.: 7183

Email: razali@um.edu.my

BIOSPECTROPHOTOMETER

Brand: Eppendorf

Model: Basic

Location: Makmal Projek Biokimia, Aras 3, Blok D,
Jabatan Kimia

Person-in-charge: Ms Hazwani Ab Lazak

Ext. no.: 6791

Email: wani_lazak@um.edu.my

CIRCULAR DICHROISM SPECTROPOLARIMETER

Brand: Jasco

Model: J-815

Location: Bilik GCMS, Blok E, Aras Bawah

Person-in-charge: Mdm Norhaya Binti Abdul Rahim

Ext. no.: 2771

Email: norhaya@um.edu.my

DIFFERENTIAL SCANNING CALORIMETER (DSC)

Brand: TA Instruments

Model: NANO-DSC

Location: Makmal HIR Fungsi Molekul, Aras 3, Blok D,
Jabatan Kimia

Person-in-charge: Mdm Norhaya Binti Abdul Rahim

Ext. no.: 2771

Email: norhaya@um.edu.my

DIODE ARRAY DETECTOR FOR HPLC

Brand: Shimadzu

Model: SPD-M10A

Location: F2 Bilik HPLC, Blok A, Aras 1

Person-in-charge: Mr. Faisal Hadi Bin Mohd Amizam

Ext. no.: 6704

Email: faisalhadi@um.edu.my

FACULTY OF SCIENCE

INSTITUTE OF BIOLOGICAL SCIENCES

ELISA READER**Brand:** Tecan**Model:** Sunrise**Location:** Pusat Penyelidikan Bioteknologi Kulat, Blok A**Person-in-charge:** Mr. Khairul Nizam Bin Jamaluddin**Ext. no.:** 4208**Email:** niezam_kk5@um.edu.my**FAST ISOTHERMAL TITRATION CALORIMETER****Brand:** TA Instruments**Model:** NANO-ITC**Location:** Makmal HIR Fungsi Molekul, Aras 3, Blok D,
Jabatan Kimia**Person-in-charge:** Mdm Norhaya Binti Abdul Rahim**Ext. no.:** 2771**Email:** norhaya@um.edu.my**FAST PROTEIN LIQUID CHROMATOGRAPH (FPLC)****Brand:** GE Healthcare**Model:** Akta Avant 25**Location:** Makmal HIR Fungsi Molekul, Aras 3, Blok D,
Jabatan Kimia**Person-in-charge:** Mdm Norhaya Binti Abdul Rahim**Ext. no.:** 2771**Email:** norhaya@um.edu.my**FAST PROTEIN LIQUID CHROMATOGRAPH (FPLC)****Brand:** GE Healthcare**Model:** Akta Purifier**Location:** Makmal E1.2, Aras 2, Blok E**Person-in-charge:** Mr. Mohd Mazlan Bin Ahmad**Ext. no.:** 4208**Email:** mazlan76@um.edu.my**FAST PROTEIN LIQUID CHROMATOGRAPH (FPLC)****Brand:** GE Healthcare**Model:** Akta Prime Plus**Location:** Makmal Proteomik, E1.1, Aras 2, Blok E**Person-in-charge:** Mr. Mohd Mazlan Bin Ahmad**Ext. no.:** 4208**Email:** mazlan76@um.edu.my**FAST PROTEIN LIQUID CHROMATOGRAPH (FPLC)****Brand:** GE Healthcare**Model:** Akta Prime Plus**Location:** Makmal E2.5, Aras 3, Blok E**Person-in-charge:** Mdm Norlidawati Mohamed Sapi**Ext. no.:** 6791**Email:** N/A**FLUORESCENCE SPECTROPHOTOMETER****Brand:** Jasco**Model:** FP-6500**Location:** Bilik GCMS, Blok E, Aras Bawah**Person-in-charge:** Mdm Norhaya Binti Abdul Rahim**Ext. no.:** 2771**Email:** norhaya@um.edu.my**GAS CHROMATOGRAPHY-MASS SPECTROMETER (GC-MS)****Brand:** Agilent Technologies**Model:** 6890, 5975**Location:** Makmal E2.5, Aras 3, Blok E**Person-in-charge:** Mdm Norlidawati Mohamed Sapi**Ext. no.:** 6791**Email:** N/A

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GAS CHROMATOGRAPHY FLAME IONISATION DETECTOR (GC-FID)**Brand:** Shimadzu**Model:** GC-2010A**Location:** Makmal E2.5, Aras 3, Blok E**Person-in-charge:** Mdm Norlidawati Mohamed Sapi**Ext. no.:** 6791**Email:** N/A**GAS CHROMATOGRAPHY-MASS SPECTROMETER (GC-MS)-QQQ****Brand:** Agilent Technologies**Model:** N/A**Location:** Bilik GCMS, Blok E, Aras Bawah**Person-in-charge:** Mdm Siti Zubaidah Binti Baharuddin,
Mr. Faisal Hadi Bin Mohd Amizam**Ext. no.:** 4353, 6704**Email:** eyda@um.edu.my, faisalhadi@um.edu.my**HIGH PERFORMANCE LIQUID CHROMATOGRAPHY-DIODE ARRAY DETECTOR (HPLC-DAD)****Brand:** Agilent Technologies**Model:** Infinity 1260**Location:** Makmal HIR Fungsi Molekul, Aras 3, Blok D,
Jabatan Kimia**Person-in-charge:** Mdm Norhaya Binti Abdul Rahim**Ext. no.:** 2771**Email:** norhaya@um.edu.my**HIGH PERFORMANCE LIQUID CHROMATOGRAPHY-REFRACTIVE INDEX DETECTOR (HPLC-RID)****Brand:** Agilent Technologies**Model:** Infinity 1260**Location:** Makmal HIR Fungsi Molekul, Aras 3, Blok D,
Jabatan Kimia**Person-in-charge:** Mdm Norhaya Binti Abdul Rahim**Ext. no.:** 2771**Email:** norhaya@um.edu.my**HIGH PERFORMANCE LIQUID CHROMATOGRAPHY-REFRACTIVE INDEX DETECTOR (HPLC-RID)****Brand:** Agilent Technologies**Model:** Infinity 1220 & 1260**Location:** BTF7, Makmal Bioproses, Tingkat 4, Blok B**Person-in-charge:** Mr. Razali Bin Md Jonit**Ext. no.:** 7183**Email:** razali@um.edu.my**HIGH PERFORMANCE LIQUID CHROMATOGRAPHY-PHOTODIODE ARRAY DETECTOR (HPLC-PDA)****Brand:** Shimadzu**Model:** Prominence**Location:** Makmal Projek Biokimia, Aras 3, Blok D,
Jabatan Kimia**Person-in-charge:** Mdm Zanariah Adris**Ext. no.:** 6795**Email:** zanariah@um.edu.my**HIGH PERFORMANCE LIQUID CHROMATOGRAPHY-ULTRA VIOLET DETECTOR (HPLC-UVD)****Brand:** Waters**Model:** DeltaPrep 150**Location:** Makmal E2.5, Aras 3, Blok E**Person-in-charge:** Mdm Norlidawati Mohamed Sapi**Ext. no.:** 6791**Email:** N/A**ION CHROMATOGRAPHY****Brand:** Metrohm**Model:** 882 Compact IC Plus**Location:** Makmal Projek SPAS, Blok E, Tingkat 1**Person-in-charge:** Ms Norizan Binti Moez,
Mr. Muhammad Faiz Zakria**Ext. no.:** 6754/4353/4208**Email:** janmoez@um.edu.my, faiz_zakria@um.edu.my

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MICROPLATE READER

Brand: Molecular Devices

Model: Emax

Location: Makmal HIR Fungsi Molekul, Aras 3, Blok D,
Jabatan Kimia

Person-in-charge: Mdm Norhaya Binti Abdul Rahim

Ext. no.: 2771

Email: norhaya@um.edu.my

MICROPLATE READER

Brand: N/A

Model: N/A

Location: Makmal Genetik Microbiology, Blok B08,
Aras 1, Mikrobiologi

Person-in-charge: Mdm Hafizatul Anis Binti Mohamed
Zan

Ext. no.: 5860

Email: anismz@um.edu.my

MICROPLATE READER

Brand: ASYS Hitech

Model: UVM340

Location: Makmal E2.5, Aras 3, Blok E

Person-in-charge: Mdm Norlidawati Mohamed Sapi

Ext. no.: 6791

Email: N/A

MULTIMODE MICROPLATE READER

Brand: Biotek Instruments

Model: SYNERGY H1M

Location: Makmal HIR Fungsi Molekul, Aras 3, Blok D,
Jabatan Kimia

Person-in-charge: Mdm Norhaya Binti Abdul Rahim

Ext. no.: 2771

Email: norhaya@um.edu.my

MULTIVAPOR

Brand: Buchi

Model: P-12

Location: Makmal HIR Fungsi Molekul, Aras 3, Blok D,
Jabatan Kimia

Person-in-charge: Mdm Norhaya Binti Abdul Rahim

Ext. no.: 2771

Email: norhaya@um.edu.my

PORTABLE SPECTROPHOTOMETER

Brand: Hach

Model: DR 2400

Location: Makmal PEB 2, Blok B, Aras 1

Person-in-charge: Mr Faisal Hadi Bin Mohd Amizam

Ext. no.: 6704

Email: faisalhadi@um.edu.my

POTENTIOMETRIC AUTOMATIC TITRATOR

Brand: Kyoto

Model: AT510

Location: BTF7, Makmal Bioproses, Tingkat 4, Blok B

Person-in-charge: Mr. Razali Bin Md Jonit

Ext. no.: 7183

Email: razali@um.edu.my

POTENTIOMETRIC TITRATOR

Brand: Methrohm

Model: N/A

Location: E213-Makmal Fikologi, Blok E, Aras 2

Person-in-charge: Mr. Faisal Hadi Bin Mohd Amizam

Ext. no.: 6704

Email: faisalhadi@um.edu.my

REFRACTIVE INDEX DETECTOR FOR HPLC

Brand: Jasco

Model: RI-2031 PLUS

Location: F2 Bilik HPLC, Blok A, Aras 1

Person-in-charge: Mr. Faisal Hadi Bin Mohd Amizam

Ext. no.: 6704

Email: faisalhadi@um.edu.my

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INSTITUTE OF BIOLOGICAL SCIENCES

ROTARY EVAPORATOR**Brand:** Buchi**Model:** R-114**Location:** Pusat Penyelidikan Bioteknologi Kulat, Blok A**Person-in-charge:** Mdm Rusidah Binti Ahmad**Ext. no.:** 6714**Email:** rusidah@um.edu.my**ROTARY EVAPORATOR****Brand:** Buchi**Model:** R-210**Location:** Makmal HIR Fungsi Molekul, Aras 3, Blok D,
Jabatan Kimia**Person-in-charge:** Mdm Norhaya Binti Abdul Rahim**Ext. no.:** 2771**Email:** norhaya@um.edu.my**SCANNING SPECTROFLUOROMETER****Brand:** N/A**Model:** N/A**Location:** Makmal Ekologi Mikroorganisma. Blok 08,
Aras Bawah, Mikrobiologi**Person-in-charge:** Mdm Hafizatul Anis Binti Mohamed
Zan**Ext. no.:** 5860**Email:** anismz@um.edu.my**TITROTERM****Brand:** Metrohm**Model:** 857**Location:** BTF7, Makmal Bioproses, Tingkat 4, Blok B**Person-in-charge:** Mr. Razali Bin Md Jonit**Ext. no.:** 7183**Email:** razali@um.edu.my**ULTRA VIOLET SPECTROMETER (UV)****Brand:** Devonix**Model:** N/A**Location:** Makmal BGM2, Blok B03, Aras 1, Genetik**Person-in-charge:** Ms Nur Izana Binti Mohd Noor**Ext. no.:** 5801**Email:** nurizana@um.edu.my**UV/VIS SPECTROPHOTOMETER****Brand:** Perkin Elmer**Model:** Lambda 25**Location:** Makmal Microbiology 2, Blok B08, Aras 2,
Mikrobiologi**Person-in-charge:** Ms Annie Liza Binti Baharah**Ext. no.:** N/A**Email:** annieliza@um.edu.my**UV/VIS SPECTROPHOTOMETER****Brand:** N/A**Model:** N/A**Location:** Makmal Teknologi Penapaian, Blok B08, Aras
Bawah, Mikrobiologi**Person-in-charge:** Mdm Hafizatul Anis Binti Mohamed
Zan**Ext. no.:** 5860**Email:** anismz@um.edu.my**UV/VIS SPECTROPHOTOMETER****Brand:** Jasco**Model:** V-630**Location:** Makmal Fungal Genetik, Blok B08, Aras 1,
Mikrobiologi**Person-in-charge:** Mr Abdul Hamiz Bin Abdul Hamid**Ext. no.:** 5969**Email:** hamiz@um.edu.my

FACULTY OF SCIENCE

INSTITUTE OF BIOLOGICAL SCIENCES

UV/VIS SPECTROPHOTOMETER

Brand: Shimadzu

Model: UV-1700

Location: Makmal SBK, Blok D, Aras Bawah

Person-in-charge: Mdm Hazulina Binti Che Ab Aziz

Ext. no.: 6746

Email: hazu@um.edu.my

UV/VIS SPECTROPHOTOMETER

Brand: Shimadzu

Model: UV-1601

Location: Makmal SBK, Blok D, Aras Bawah

Person-in-charge: Mdm Hazulina Binti Che Ab Aziz

Ext. no.: 6746

Email: hazu@um.edu.my

UV/VIS SPECTROPHOTOMETER

Brand: Hitachi

Model: U-2001

Location: Makmal E2.5, Aras 3, Blok E

Person-in-charge: Mdm Norlidawati Mohamed Sapi

Ext. no.: 6791

Email: N/A

UV/VIS SPECTROPHOTOMETER

Brand: Shimadzu

Model: CPS-240A

Location: Makmal E2.5, Aras 3, Blok E

Person-in-charge: Mdm Norlidawati Mohamed Sapi

Ext. no.: 6791

Email: N/A

UV/VIS SPECTROPHOTOMETER

Brand: Jasco

Model: V-630

Location: BTF7, Makmal Bioproses, Tingkat 4, Blok B

Person-in-charge: Mr. Razali Bin Md Jonit

Ext. no.: 7183

Email: razali@um.edu.my

UV/VIS SPECTROPHOTOMETER

Brand: Thermo Scientific

Model: GENESYS 10 UV

Location: Makmal BT1 & BT2, Level 1 Blok C

Person-in-charge: Mdm Nurziha Sarah Binti Abdul Rahman

Ext. no.: 7183

Email: nurzihasarah@um.edu.my

UV/VIS SPECTROPHOTOMETER

Brand: Perkin Elmer

Model: Lambda 25

Location: Makmal Biologi Molekul, Aras Bawah, Blok E MUCED

Person-in-charge: Mdm Norlida Binti Hussain

Ext. no.: 4135

Email: eidda@um.edu.my

UV/VIS SPECTROPHOTOMETER

Brand: Jasco

Model: V730

Location: F2 Bilik HPLC, Blok A, Aras 1

Person-in-charge: Mr. Faisal Hadi Bin Mohd Amizam

Ext. no.: 6704

Email: faisalhadi@um.edu.my

UV/VIS SPECTROPHOTOMETER

Brand: Merck

Model: SPECTROQUANT PHARO 300

Location: Makmal Projek SPAS, Blok E, Tingkat 1

Person-in-charge: Mdm Norizan Binti Moez

Ext. no.: 6754/4353

Email: janmoez@um.edu.my

UV/VIS SPECTROPHOTOMETER

Brand: Scinco

Model: N/A

Location: Makmal Sistemik Tumbuhan

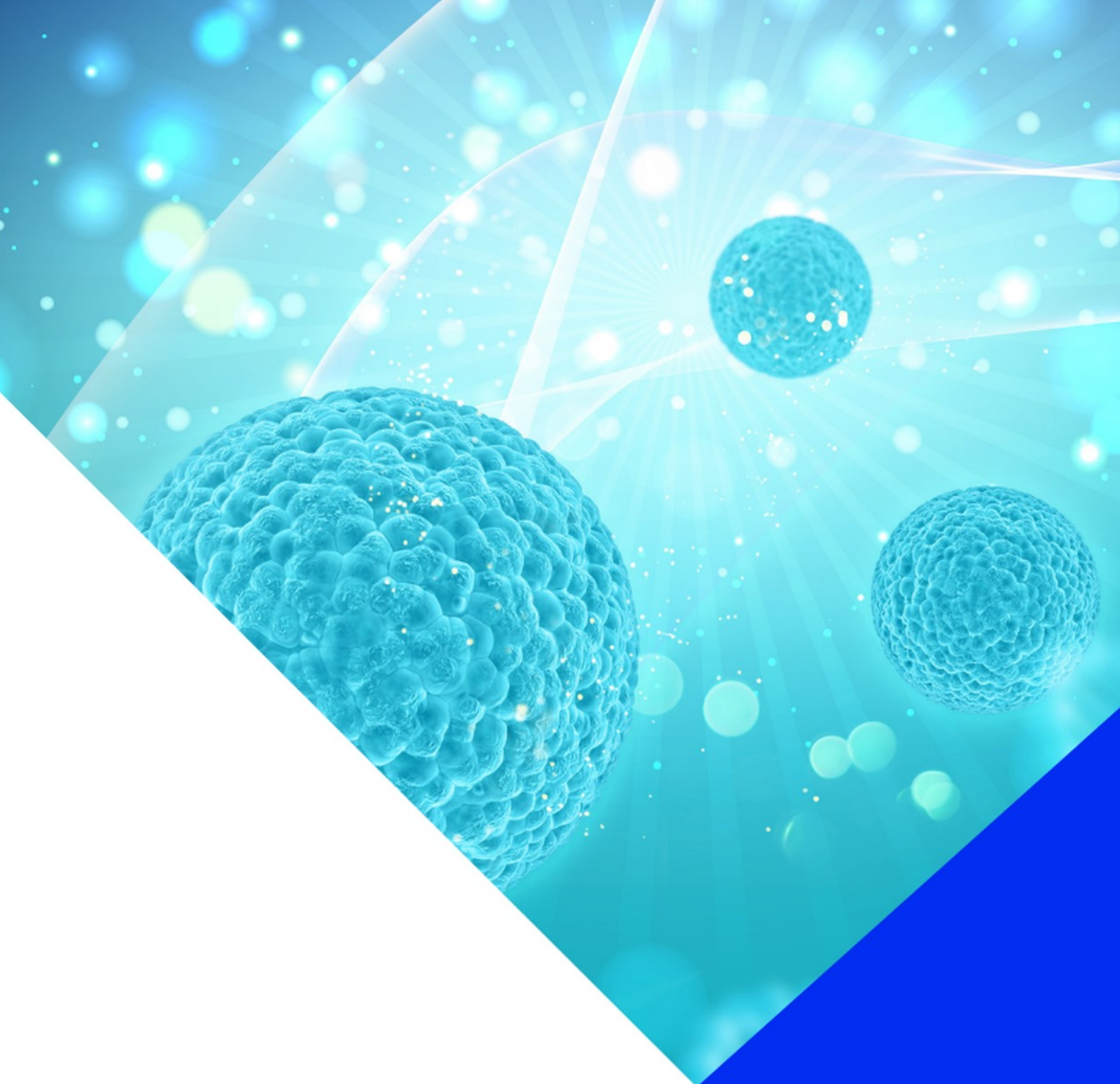
Person-in-charge: Mdm Nor Yati Binti Jamil @ Shafil

Ext. no.: 6713

Email: yatinadia@um.edu.my

SPORT & EXERCISE SCIENCES CENTRE

**HIGH PERFORMANCE LIQUID CHROMATOGRAPHY-
PHOTODIODE DETECTOR (HPLC-PDA)****Brand:** Shimadzu**Model:** Prominence**Location:** Makmal Analitikal, Ground Floor UM Arena**Person-in-charge:** Mr. Mohd Hafiszan Mohd Yusuf**Ext. no.:** 2496**Email:** fiz05@um.edu.my**MICROPLATE READER****Brand:** Biotek Instruments**Model:** EON**Location:** Makmal Analitikal, Ground Floor UM Arena**Person-in-charge:** Mr. Mohd Hafiszan Mohd Yusuf**Ext. no.:** 2496**Email:** fiz05@um.edu.my**MICROPLATE STRIP WASHER****Brand:** Biotek Instruments**Model:** ELX 50**Location:** Makmal Analitikal, Ground Floor UM Arena**Person-in-charge:** Mr. Mohd Hafiszan Mohd Yusuf**Ext. no.:** 2496**Email:** fiz05@um.edu.my**UV/VIS SPECTROPHOTOMETER****Brand:** Shimadzu**Model:** UV-1800**Location:** Makmal Analitikal, Ground Floor UM Arena**Person-in-charge:** Mr. Mohd Hafiszan Mohd Yusuf**Ext. no.:** 2496**Email:** fiz05@um.edu.my



BIOLOGICAL ANALYSIS

**CENTRE FOR RESEARCH SERVICES (PPP),
INSTITUTE OF RESEARCH MANAGEMENT & SERVICES (IPPP)****INFRA ANALYSIS****-80°C FREEZER****Brand:** ESCO LEXICON ULT**Model:** UUS-552A-1-SS**Location:** INFRA Analysis Laboratory, Level 3, Research Management & Innovation Complex**Person-in-charge:** Mdm Jauhar Aisyah Junaidi,
Mdm Rahimah Ismail**Ext. no.:** 7022 ext 2320**Email:** jauharaisyah@um.edu.my,
rahimah_ismail@um.edu.my**AUTOClave - 3 UNITS****Brand:** Tomy**Model:** ES-315**Location:** B301, Autoclave Room, Institute of Postgraduate Studies Building**Person-in-charge:** Mr Jasmi Abd Aziz**Ext. no.:** N/A**Email:** jazz@um.edu.my**CENTRIFUGE****Brand:** Thermo Scientific**Model:** Multifuge X3 FR**Location:** INFRA Analysis Laboratory, Level 3, Research Management & Innovation Complex**Person-in-charge:** Mdm Jauhar Aisyah Junaidi,
Mdm Rahimah Ismail**Ext. no.:** 7022 ext 2320**Email:** jauharaisyah@um.edu.my,
rahimah_ismail@um.edu.my**CLASS II MICROBIOLOGICAL SAFETY CABINET****Brand:** BIOAIR®**Model:** S@FEMATE 1.2**Location:** INFRA Analysis Laboratory, Level 3, Research Management & Innovation Complex**Person-in-charge:** Mdm Jauhar Aisyah Junaidi,
Mdm Rahimah Ismail**Ext. no.:** 7022 ext 2320**Email:** jauharaisyah@um.edu.my,
rahimah_ismail@um.edu.my**DNA SEQUENCER****Brand:** Applied Biosystems**Model:** 3730XL DNA ANALYZER**Location:** INFRA Analysis Laboratory, Level 3, Research Management & Innovation Complex**Person-in-charge:** Mdm Jauhar Aisyah Junaidi,
Mdm Rahimah Ismail**Ext. no.:** 7022 ext 2320**Email:** jauharaisyah@um.edu.my,
rahimah_ismail@um.edu.my**GEL DOCUMENTATION SYSTEM****Brand:** Gel Company**Model:** Omega LUM™ G**Location:** INFRA Analysis Laboratory, Level 3, Research Management & Innovation Complex**Person-in-charge:** Mdm Rosyida Rosli**Ext. no.:** 7022 ext 2320**Email:** rosyidarosli@um.edu.my

**CENTRE FOR RESEARCH SERVICES (PPP),
INSTITUTE OF RESEARCH MANAGEMENT & SERVICES (IPPP)****INFRA ANALYSIS****THERMAL CYCLER**

Brand: Peqlab

Model: PeqSTAR 2X Dual Block Gradient

Location: INFRA Analysis Laboratory, Level 3, Research Management & Innovation Complex

Person-in-charge: Mdm Jauhar Aisyah Junaidi,
Mdm Rahimah Ismail

Ext. no.: 7022 ext 2320

Email: jauharaisyah@um.edu.my,
rahimah_ismail@um.edu.my

ULTRAPURE WATER SYSTEM

Brand: PALL/CASCADE

Model: PAL-CAXXXLSM2

Location: INFRA Analysis Laboratory, Level 3, Research Management & Innovation Complex

Person-in-charge: Mdm Jauhar Aisyah Junaidi,
Mdm Rahimah Ismail

Ext. no.: 7022 ext 2320

Email: jauharaisyah@um.edu.my,
rahimah_ismail@um.edu.my

INFRA MICROBIOLOGY**-80°C ULTRA LOW TEMP FREEZER**

Brand: ESCO

Model: UUS-793B-1

Location: INFRA Microb Laboratory, Level 4, Research Management & Innovation Complex

Person-in-charge: Mdm Fakhrudziah Hamzah

Ext. no.: 2328

Email: fakhrudziah_hamzah@um.edu.my

AUTOMATIC COLONY COUNTER

Brand: INTERSCIENCE

Model: SCAN500

Location: INFRA Microb Laboratory, Level 4, Research Management & Innovation Complex

Person-in-charge: Mdm Fakhrudziah Hamzah

Ext. no.: 2328

Email: fakhrudziah_hamzah@um.edu.my

AUTOMATIC SPIRAL PLATER

Brand: INTERSCIENCE

Model: EASY SPIRAL®

Location: INFRA Microb Laboratory, Level 4, Research Management & Innovation Complex

Person-in-charge: Mdm Fakhrudziah Hamzah

Ext. no.: 2328

Email: fakhrudziah_hamzah@um.edu.my

BIOLOGICAL SAFETY CABINET CLASS II

Brand: BIOAIR®

Model: S@FEMATE 1.2

Location: INFRA Microb Laboratory, Level 4, Research Management & Innovation Complex

Person-in-charge: Mdm Fakhrudziah Hamzah

Ext. no.: 2328

Email: fakhrudziah_hamzah@um.edu.my

**CENTRE FOR RESEARCH SERVICES (PPP),
INSTITUTE OF RESEARCH MANAGEMENT & SERVICES (IPPP)****INFRA MICROBIOLOGY****GEL DOCUMENTATION SYSTEM**

Brand: Vilber Lourmat

Model: INFINITY VX2

Location: INFRA Microb Laboratory, Level 4, Research Management & Innovation Complex

Person-in-charge: Mdm Fakhrudziah Hamzah

Ext. no.: 2328

Email: fakhrudziah_hamzah@um.edu.my

INCUBATOR

Brand: Memmert

Model: IN260

Location: INFRA Microb Laboratory, Level 4, Research Management & Innovation Complex

Person-in-charge: Mdm Fakhrudziah Hamzah

Ext. no.: 2328

Email: fakhrudziah_hamzah@um.edu.my

NANODROP SPECTROPHOTOMETER

Brand: IMPLIN

Model: P-300

Location: INFRA Microb Laboratory, Level 4, Research Management & Innovation Complex

Person-in-charge: Mdm Fakhrudziah Hamzah

Ext. no.: 2328

Email: fakhrudziah_hamzah@um.edu.my

PORTABLE AUTOCLAVE

Brand: HIRAYAMA

Model: HVE-50

Location: INFRA Microb Laboratory, Level 4, Research Management & Innovation Complex

Person-in-charge: Mdm Fakhrudziah Hamzah

Ext. no.: 2328

Email: fakhrudziah_hamzah@um.edu.my

PULSED FIELD GEL ELECTROPHORESIS

Brand: BioRad

Model: CHEF MAPPER

Location: INFRA Microb Laboratory, Level 4, Research Management & Innovation Complex

Person-in-charge: Mdm Fakhrudziah Hamzah

Ext. no.: 2328

Email: fakhrudziah_hamzah@um.edu.my

REAL TIME PCR SYSTEM

Brand: Applied Biosystems

Model: AB ViiA7

Location: INFRA Microb Laboratory, Level 4, Research Management & Innovation Complex

Person-in-charge: Mdm Fakhrudziah Hamzah

Ext. no.: 2328

Email: fakhrudziah_hamzah@um.edu.my

REALTIME TURBIDIMETER

Brand: EIKEN

Model: LA-500

Location: INFRA Microb Laboratory, Level 4, Research Management & Innovation Complex

Person-in-charge: Mdm Fakhrudziah Hamzah

Ext. no.: 2328

Email: fakhrudziah_hamzah@um.edu.my

STOMACHER (LAB BLENDER)

Brand: INTERSCIENCE

Model: BagMixer® 400

Location: INFRA Microb Laboratory, Level 4, Research Management & Innovation Complex

Person-in-charge: Mdm Fakhrudziah Hamzah

Ext. no.: 2328

Email: fakhrudziah_hamzah@um.edu.my

**CENTRE FOR RESEARCH SERVICES (PPP),
INSTITUTE OF RESEARCH MANAGEMENT & SERVICES (IPPP)****INFRA MICROBIOLOGY****THERMAL CYCLER**

Brand: Peqlab

Model: PEQSTAR96X

Location: INFRA Microb Laboratory, Level 4, Research Management & Innovation Complex

Person-in-charge: Puan Fakhrudziah Hamzah

Ext. no.: 2328

Email: fakhrudziah_hamzah@um.edu.my

ULTRAPURE WATER SYSTEM

Brand: Merck Millipore

Model: Direct-Q 8 UV-Remote

Location: INFRA Microb Laboratory, Level 4, Research Management & Innovation Complex

Person-in-charge: Mdm Fakhrudziah Hamzah

Ext. no.: 2328

Email: fakhrudziah_hamzah@um.edu.my

INFRA HIR**-20°C UPRIGHT LAB-GRADE FREEZER**

Brand: Liebherr

Model: LGex 3410 MediLine

Location: Central Facility 2, Level 1, HIR Building

Person-in-charge: Mdm Alfatiha Ahmad

Ext. no.: 2577, 2578

Email: alfatiha93@um.edu.my

-86°C ULTRA LOW TEMP FREEZER

Brand: INNOVA

Model: U725

Location: Central Wetlab, Level G, HIR Building

Person-in-charge: Mr Amirul Fatih Japri

Ext. no.: 7080

Email: fatih92@um.edu.my

-86°C ULTRA LOW TEMP FREEZER

Brand: INNOVA

Model: U725

Location: Fumehood Room, Level 1, HIR Building

Person-in-charge: Mdm Alfatiha Ahmad

Ext. no.: 2577, 2578

Email: alfatiha93@um.edu.my

96 WELL THERMAL CYCLER

Brand: Applied Biosystems

Model: Veriti

Location: Machine Room G4, Level G, HIR Building

Person-in-charge: Mr. Amirul Fatih Japri

Ext. no.: 7080

Email: fatih92@um.edu.my

**CENTRE FOR RESEARCH SERVICES (PPP),
INSTITUTE OF RESEARCH MANAGEMENT & SERVICES (IPPP)****INFRA HIR****96 WELL THERMAL CYCLER - 2 UNITS****Brand:** Applied Biosystems**Model:** Veriti**Location:** Central Facility 2.3, Level 2, HIR Building**Person-in-charge:** Mdm Zuliana Zainal Abidin**Ext. no.:** 2577, 2578**Email:** zulianazainal@um.edu.my**96 WELL THERMAL CYCLER****Brand:** Applied Biosystems**Model:** Veriti**Location:** Central Facility 2, Level 1, HIR Building**Person-in-charge:** Mdm Alfatiha Ahmad**Ext. no.:** 2577, 2578**Email:** alfatiha93@um.edu.my**ADVANCED BIOIMAGING SYSTEM****Brand:** UVP**Model:** BioSpectrum Multispectral Imaging system**Location:** Bilik Khas 2, Level G, HIR Building**Person-in-charge:** Mr. Amirul Fatih Japri**Ext. no.:** 7080**Email:** fatih92@um.edu.my**AUTOCLAVE****Brand:** HIRAYAMA**Model:** HV-110**Location:** Autoclave Room, Level G, HIR Building**Person-in-charge:** Mr. Amirul Fatih Japri**Ext. no.:** 7080**Email:** fatih92@um.edu.my**AUTOCLAVE****Brand:** Tomy**Model:** SX-700**Location:** Autoclave room, Level 2, HIR Building**Person-in-charge:** Mdm Zuliana Zainal Abidin**Ext. no.:** 2577, 2578**Email:** zulianazainal@um.edu.my**AUTOMATED DNA SIZE SELECTION SYSTEM****Brand:** Sage Science**Model:** BluePippin**Location:** Central Facility 2, Level 1, HIR Building**Person-in-charge:** Mdm Alfatiha Ahmad**Ext. no.:** 2577, 2578**Email:** alfatiha93@um.edu.my**BENCH/TABLE TOP CENTRIFUGE****Brand:** Heraeus**Model:** Multifuge X3R**Location:** Central Facility 2, Level 1, HIR Building**Person-in-charge:** Mdm Alfatiha Ahmad**Ext. no.:** 2577, 2578**Email:** alfatiha93@um.edu.my**BENCHTOP REFRIGERATED CENTRIFUGE****Brand:** Beckman Coulter**Model:** Allerga X15-R**Location:** Central Wetlab, Level G, HIR Building**Person-in-charge:** Mr Amirul Fatih Japri**Ext. no.:** 7080**Email:** fatih92@um.edu.my**BENCHTOP REFRIGERATED CENTRIFUGE****Brand:** Beckman Coulter**Model:** Allerga X15-R**Location:** Fumehood Room, Level 1, HIR Building**Person-in-charge:** Mdm Alfatiha Ahmad**Ext. no.:** 2577, 2578**Email:** alfatiha93@um.edu.my**BENCHTOP REFRIGERATED CENTRIFUGE****Brand:** Eppendorf**Model:** Centrifuge 5810 R**Location:** Central Wetlab 2.1, Level 2, HIR Building**Person-in-charge:** Mdm Zuliana Zainal Abidin**Ext. no.:** 2577, 2578**Email:** zulianazainal@um.edu.my

**CENTRE FOR RESEARCH SERVICES (PPP),
INSTITUTE OF RESEARCH MANAGEMENT & SERVICES (IPPP)****INFRA HIR****BIOLOG OMNILOG**

Brand: Biolog

Model: GEN III Combo Plus System

Location: Central Facility 1, Level 1, HIR Building

Person-in-charge: Mdm Alfatiha Ahmad

Ext. no.: 2577, 2578

Email: alfatiha93@um.edu.my

COMPACT AUTOMATED SYSTEM (BIORUPTOR)

Brand: Diagenode

Model: IP-Star SX-8G

Location: Demo Teaching Lab, Level G, HIR Building

Person-in-charge: Mr. Amirul Fatih Japri

Ext. no.: 7080

Email: fatih92@um.edu.my

**COMPREHENSIVE BACTERIAL BIOLUMINESCENCE
IMAGING SYSTEM**

Brand: Hamamatsu Photonics

Model: CCD Camera

Location: Bilik Khas 2, Level G, HIR Building

Person-in-charge: Mr. Amirul Fatih Japri

Ext. no.: 7080

Email: fatih92@um.edu.my

ELECTROPHORESIS BIOANALYZER

Brand: Agilent Technologies

Model: 2100

Location: Central Facility 2, Level 1, HIR Building

Person-in-charge: Mdm Alfatiha Ahmad

Ext. no.: 2577, 2578

Email: alfatiha93@um.edu.my

FERMENTER

Brand: Sartorius

Model: Biostat B Plus

Location: Autoclave Room, Level G, HIR Building

Person-in-charge: Mr. Amirul Fatih Japri

Ext. no.: 7080

Email: fatih92@um.edu.my

FLOWCYTOMETER

Brand: MacsQuant

Model: MacsQuant Analyser 10

Location: Central Facility 1, Level 1, HIR Building

Person-in-charge: Mdm Alfatiha Ahmad

Ext. no.: 2577, 2578

Email: alfatiha93@um.edu.my

GEL IMAGING SYSTEM

Brand: BioRad

Model: ChemiDoc™ MP System

Location: Central Facility 2.1, Level 2, HIR Building

Person-in-charge: Mdm Zuliana Zainal Abidin

Ext. no.: 2577, 2578

Email: zulianazainal@um.edu.my

**GRADIENT 384-WELL PCR THERMAL CYCLER - 2
UNITS**

Brand: BioRad

Model: C-1000 Touch

Location: Machine Room G4, Level G, HIR Building

Person-in-charge: Mr. Amirul Fatih Japri

Ext. no.: 7080

Email: fatih92@um.edu.my

**CENTRE FOR RESEARCH SERVICES (PPP),
INSTITUTE OF RESEARCH MANAGEMENT & SERVICES (IPPP)****INFRA HIR****HIGH PERFORMANCE BLOT IMAGER****Brand:** GE Healthcare**Model:** Typhoon FLA9500**Location:** Central Facility 2, Level 1, HIR Building**Person-in-charge:** Mdm Alfatiha Ahmad**Ext. no.:** 2577, 2578**Email:** alfatiha93@um.edu.my**HIGH THROUGHPUT NGS SYSTEM****Brand:** Illumina**Model:** HiSeq 2500**Location:** Bilik Khas 1, Level G, HIR Building**Person-in-charge:** Mr Amirul Fatih Japri**Ext. no.:** 7080**Email:** fatih92@um.edu.my**ICE MAKER****Brand:** Hoshizaki**Model:** Flake Model**Location:** Autoclave room, Level 2, HIR Building**Person-in-charge:** Mdm Zuliana Zainal Abidin**Ext. no.:** 2577, 2578**Email:** zulianazainal@um.edu.my**INVERTED MICROSCOPE****Brand:** Leica**Model:** DFC 5405 C**Location:** Central Facility 2, Level 1, HIR Building**Person-in-charge:** Mdm Alfatiha Ahmad**Ext. no.:** 2577, 2578**Email:** alfatiha93@um.edu.my**ION TORRENT PERSONAL GENOME MACHINE****Brand:** Life Technologies**Model:** Ion Torrent**Location:** Machine Room G1, Level G, HIR Building**Person-in-charge:** Mr Amirul Fatih Japri**Ext. no.:** 7080**Email:** fatih92@um.edu.my**LABCHIP DS AUTOMATED****Brand:** Caliper Life Sciences**Model:** Lab Chip DS**Location:** Central Wetlab, Level G, HIR Building**Person-in-charge:** Mr. Amirul Fatih Japri**Ext. no.:** 7080**Email:** fatih92@um.edu.my**LABCHIP GX****Brand:** Caliper Life Sciences**Model:** Lab Chip GX**Location:** Machine Room G2, Level G, HIR Building**Person-in-charge:** Mr. Amirul Fatih Japri**Ext. no.:** 7080**Email:** fatih92@um.edu.my**LIQUID HANDLING SYSTEM****Brand:** Biomerieux**Model:** Nuclisens easymag**Location:** Central Facility 2, Level 1, HIR Building**Person-in-charge:** Mdm Alfatiha Ahmad**Ext. no.:** 2577, 2578**Email:** alfatiha93@um.edu.my**MALDI-TOF MASS SPECTROMETRY SYSTEM****Brand:** Bruker**Model:** Microflex**Location:** Central Facility 2, Level 1, HIR Building**Person-in-charge:** Mdm Alfatiha Ahmad**Ext. no.:** 2577, 2578**Email:** alfatiha93@um.edu.my**MICROARRAY SYSTEM****Brand:** Nanostring**Model:** nCounter® Prep Station 5S**Location:** Central Facility 2, Level 1, HIR Building**Person-in-charge:** Mdm Alfatiha Ahmad**Ext. no.:** 2577, 2578**Email:** alfatiha93@um.edu.my

**CENTRE FOR RESEARCH SERVICES (PPP),
INSTITUTE OF RESEARCH MANAGEMENT & SERVICES (IPPP)****INFRA HIR****MICROARRAY SYSTEM**

Brand: Affymetrix
Model: GeneChip GCS3000 7G Scanner
Location: Central Facility 2, Level 1, HIR Building
Person-in-charge: Mdm Alfatiha Ahmad
Ext. no.: 2577, 2578
Email: alfatiha93@um.edu.my

MISEQ - 2 UNITS

Brand: Illumina
Model: MiSeq
Location: Wetlab 3, Level 2, HIR Building
Person-in-charge: Mdm Zuliana Zainal Abidin
Ext. no.: 2577, 2578
Email: zulianazainal@um.edu.my

NANODROP SPECTROPHOTOMETER

Brand: Thermo Scientific
Model: Nanodrop 200 C
Location: Central Facility 2, Level 1, HIR Building
Person-in-charge: Mdm Alfatiha Ahmad
Ext. no.: 2577, 2578
Email: alfatiha93@um.edu.my

NEXTSEQ

Brand: Illumina
Model: NextSeq 500
Location: Wetlab 3, Level 2, HIR Building
Person-in-charge: Mdm Zuliana Zainal Abidin
Ext. no.: 2577, 2578
Email: zulianazainal@um.edu.my

OVEN

Brand: Memmert
Model: UF 256
Location: Fumehood Room, Level 1, HIR Building
Person-in-charge: Mdm Alfatiha Ahmad
Ext. no.: 2577, 2578
Email: alfatiha93@um.edu.my

PROTEAN

Brand: BioRad
Model: XPR36 System
Location: Central Facility 2.1, Level 2, HIR Building
Person-in-charge: Mdm Zuliana Zainal Abidin
Ext. no.: 2577, 2578
Email: zulianazainal@um.edu.my

PROTEIN FRACTIONATOR

Brand: BioRad
Model: MicroRotorTM
Location: Central Facility 2.1, Level 2, HIR Building
Person-in-charge: Mdm Zuliana Zainal Abidin
Ext. no.: 2577, 2578
Email: zulianazainal@um.edu.my

PULSED FIELD GEL ELECTROPHORESIS

Brand: BioRad
Model: CHEF MAPPER
Location: Bilik Khas 2, Level G, HIR Building
Person-in-charge: Mr. Amirul Fatih Japri
Ext. no.: 7080
Email: fatih92@um.edu.my

REAL TIME PCR SYSTEM

Brand: Applied Biosystems
Model: Quantstudio 12K
Location: Central Facility 1, Level 1, HIR Building
Person-in-charge: Mdm Alfatiha Ahmad
Ext. no.: 2577, 2578
Email: alfatiha93@um.edu.my

REAL TIME PCR SYSTEM

Brand: BioRad
Model: CFX96
Location: Central Facility 1, Level 1, HIR Building
Person-in-charge: Mdm Alfatiha Ahmad
Ext. no.: 2577, 2578
Email: alfatiha93@um.edu.my

**CENTRE FOR RESEARCH SERVICES (PPP),
INSTITUTE OF RESEARCH MANAGEMENT & SERVICES (IPPP)****INFRA HIR****REAL TIME PCR SYSTEM****Brand:** Illumina**Model:** ECO**Location:** Central Facility 2, Level 1, HIR Building**Person-in-charge:** Mdm Alfatiha Ahmad**Ext. no.:** 2577, 2578**Email:** alfatiha93@um.edu.my**RO WATER****Brand:** Sartorius**Model:** Arium BagTank 100**Location:** Machine Room G3, Level G, HIR Building**Person-in-charge:** Mr. Amirul Fatih Japri**Ext. no.:** 7080**Email:** fatih92@um.edu.my**SINGLE CELL ANALYZER****Brand:** Fluidigm**Model:** BioMark HD Reader**Location:** Central Facility 2.2, Level 2, HIR Building**Person-in-charge:** Mdm Zuliana Zainal Abidin**Ext. no.:** 2577, 2578**Email:** zulianazainal@um.edu.my**STACKABLE INCUBATOR SHAKERS - 2 UNITS****Brand:** Sartorius**Model:** CERTOMAT BS-1**Location:** Fumehood Room, Level 1, HIR Building**Person-in-charge:** Mdm Alfatiha Ahmad**Ext. no.:** 2577, 2578**Email:** alfatiha93@um.edu.my**THERMOMIXER - 2 UNITS****Brand:** Eppendorf**Model:** ThermoMixer® C**Location:** Central Facility 2, Level 1, HIR Building**Person-in-charge:** Mdm Alfatiha Ahmad**Ext. no.:** 2577, 2578**Email:** alfatiha93@um.edu.my**THERMOMIXER - 2 UNITS****Brand:** Eppendorf**Model:** ThermoMixer® C**Location:** Central Facility 2.3, Level 2, HIR Building**Person-in-charge:** Mdm Zuliana Zainal Abidin**Ext. no.:** 2577, 2578**Email:** zulianazainal@um.edu.my**ULTRACENTRIFUGE****Brand:** Beckman Coulter**Model:** Optima XPN-100**Location:** Bilik Khas 2, Level G, HIR Building**Person-in-charge:** Mr. Amirul Fatih Japri**Ext. no.:** 7080**Email:** fatih92@um.edu.my**ULTRAPURE WATERSYSTEM****Brand:** Merck Millipore**Model:** INTEGRAL 5**Location:** Fumehood Room, Level 1, HIR Building**Person-in-charge:** Mdm Alfatiha Ahmad**Ext. no.:** 2577, 2578**Email:** alfatiha93@um.edu.my**ULTRAPURE WATERSYSTEM****Brand:** Merck Millipore**Model:** INTEGRAL 5**Location:** Central wetlab 2.1, Level 2, HIR Building**Person-in-charge:** Mdm Zuliana Zainal Abidin**Ext. no.:** 2577, 2578**Email:** zulianazainal@um.edu.my**ULTRASONIC HOMOGENIZER****Brand:** Omni**Model:** Ruptor 4000**Location:** Central Facility 1, Level 1, HIR Building**Person-in-charge:** Mdm Alfatiha Ahmad**Ext. no.:** 2577, 2578**Email:** alfatiha93@um.edu.my

**CENTRE FOR RESEARCH SERVICES (PPP),
INSTITUTE OF RESEARCH MANAGEMENT & SERVICES (IPPP)****INFRA HIR****ULTRASONICATOR****Brand:** Covaris**Model:** Focus M220 AFA**Location:** Central Wetlab, Level G, HIR Building**Person-in-charge:** Mr. Amirul Fatih Japri**Ext. no.:** 7080**Email:** fatih92@um.edu.my**UNIVERSAL REFRIGERATED BENCHTOP
CENTRIFUGE****Brand:** Sigma**Model:** 4-16K**Location:** Bilik Khas 2, Level G, HIR Building**Person-in-charge:** Mr. Amirul Fatih Japri**Ext. no.:** 7080**Email:** fatih92@um.edu.my**VACUUM CONCENTRATOR****Brand:** Thermo Scientific**Model:** Savant SpeedVac**Location:** Bilik Khas 2, Level G, HIR Building**Person-in-charge:** Mr. Amirul Fatih Japri**Ext. no.:** 7080**Email:** fatih92@um.edu.my**VITEK****Brand:** Biomerieux**Model:** Vitek 2**Location:** Central Facility 2, Level 1, HIR Building**Person-in-charge:** Mdm Alfatiha Ahmad**Ext. no.:** 2577, 2578**Email:** alfatiha93@um.edu.my**FACULTY OF DENTISTRY****-80°C FREEZER****Brand:** TELSTAR IGLOO**Model:** U830**Location:** Makmal Biologi Molekul, Tingkat 1, Balai
Ungku Aziz**Person-in-charge:** MLT BUARL**Ext. no.:** 7450**Email:** N/A**2D ELECTROPHORESIS****Brand:** BIORAD**Model:** GS 800**Location:** Makmal Biologi Molekul, Tingkat 1, Balai
Ungku Aziz**Person-in-charge:** MLT BUARL**Ext. no.:** 7450**Email:** N/A

FACULTY OF DENTISTRY

AUTOMATED DNA EXTRACTOR

Brand: QIAGEN

Model: QIACUBE

Location: Makmal CMBRL, Aras 7, Menara Pakar
Pergigian & Penyelidikan

Person-in-charge: Mdm Intan Syaheera Binti Abdul
Hamid

Ext. no.: 6461

Email: syaheera@um.edu.my

AUTOMATIC TISSUE PROCESSOR

Brand: LEICA

Model: TP1020

Location: Bilik Trimming, Tingkat 2, Makmal Diagnostik
Patologi Mulut Dan Penyelidikan

Person-in-charge: Mdm Rusnani Binti Kamil @ Kamal

Ext. no.: 4815

Email: rusnanik@um.edu.my

BIOANALYZER

Brand: Agilent Technologies

Model: G2938C/2100

Location: Makmal CMBRL, Aras 7, Menara Pakar
Pergigian & Penyelidikan

Person-in-charge: Mdm Intan Syaheera Binti Abdul
Hamid

Ext. no.: 6461

Email: syaheera@um.edu.my

CLASS II BOSAFETY CABINET (2 UNIT)

Brand: Labogene & Thermo Scientific

Model: MARS 1200 & 1300 Series A2

Location:

Person-in-charge: Mdm. Junaida Hassan Basari

Ext. no: 6461/7492

Email: junaida@um.edu.my

CO2 INCUBATOR

Brand: New Brunswick & Thermo Scientific

Model: Galaxy 170R & Steri-cycle 381

Location: Makmal CMBRL, Aras 7, Menara Pakar
Pergigian & Penyelidikan

Person-in-charge: Mdm. Junaida Hassan Basari

Ext. no.: 6461/7492

Email: junaida@um.edu.my

COMPOUND MICROSCOPE

Brand: OLYMPUS

Model: BX51

Location: Makmal Penyelidikan Bio Bahan, Aras 7,
Menara Pakar Pergigian & Penyelidikan

Person-in-charge: Mdm Siti Nurul mardhiah

Ext. no.: 6460

Email: nurulmardhiah@um.edu.my

CONCENTRATOR PLUS

Brand: EPPENDORF

Model: 5305

Location: Makmal CMBRL, Aras 7, Menara Pakar
Pergigian & Penyelidikan

Person-in-charge: Mdm Intan Syaheera Binti Abdul
Hamid

Ext. no.: 6461

Email: syaheera@um.edu.my

DEIONIZED WATER

Brand: ELGA

Model: OPTION S 7BP, CLASSIC UVF

Location: Makmal Biologi Molekul, Tingkat 1, Balai
Ungku Aziz

Person-in-charge: MLT BUARL

Ext. no.: 7450

Email: N/A

farid90@um.edu.my

FACULTY OF DENTISTRY

DIGITAL SLIDE SCANNER

Brand: 3D Histech

Model: Panoramic Desk

Location: RDL, Aras 6, Menara Pakar Pergigian & Penyelidikan

Person-in-charge: Mdm Nurull Khairyah, Mr Farid Aizat

Ext. no.: 6499, 6451

Email: nurulkhabas@um.edu.my

ENCLOSED TISSUE PROCESSOR

Brand: SHANDON

Model: EXCELSIOR ES

Location: Bilik Trimming, Tingkat 2, Makmal Diagnostik Patologi Mulut Dan Penyelidikan

Person-in-charge: Mdm Rusnani Binti Kamil @ Kamal

Ext. no.: 4815

Email: rusnanik@um.edu.my

GEL IMAGING SYSTEM

Brand: N/A

Model: COOL SNAP PRO

Location: Makmal Biologi Molekul, Tingkat 1, Balai Ungku Aziz

Person-in-charge: MLT BUARL

Ext. no.: 7450

Email: N/A

LOW SPEED PRECISION SAWING MACHINE

Brand: METKON

Model: MIRACUT176

Location: Makmal Penyelidikan Bio Bahan, Aras 7, Menara Pakar Pergigian & Penyelidikan

Person-in-charge: Mdm Sumiati Pool

Ext. no.: 6460

Email: sumiati@um.edu.my

HIGH SPEED REFRIGERATED CENTRIFUGE

Brand: Tomy

Model: MX 305

Location: Makmal Biologi Molekul, Tingkat 1, Balai Ungku Aziz

Person-in-charge: MLT BUARL

Ext. no.: 7450

Email: N/A

HIGH SPEED ULTRA CENTRIFUGE

Brand: TOMY

Model: SUPREMA 21

Location: Makmal Biologi Molekul, Tingkat 1, Balai Ungku Aziz

Person-in-charge: MLT BUARL

Ext. no.: 7450

Email: N/A

HIGH SPEED PRECISION CUTTING MACHINE

Brand: METKON

Model: Miracut 2000

Location: Makmal Penyelidikan Bio Bahan, Aras 7, Menara Pakar Pergigian & Penyelidikan

Person-in-charge: Mdm Siti Nurul Mardhiah

Ext. no.: 6460

Email: nurulmardhiah@um.edu.my

INCUBATOR SHAKER

Brand: IKA

Model: KS 4000

Location: Makmal Biologi Molekul, Tingkat 1, Balai Ungku Aziz

Person-in-charge: MLT BUARL

Ext. no.: 7450

Email: N/A

FACULTY OF DENTISTRY

INVERTED MICROSCOPE

Brand: Olympus

Model: CKX41

Location: Stem Cell Research Lab, Level 3, Block D

Person-in-charge: Mdm Junaida @ Maimunah Hassan
Basari

Ext. no.: 6461/7492

Email: junaida@um.edu.my

LASER CAPTURE MICRODISECTION

Brand: Applied Biosystems

Model: Arcturus

Location: RDL, Aras 6, Menara Pakar Pergigian &
Penyelidikan

Person-in-charge: Mdm Nurull Khairyah, Mr Farid
Aizat

Ext. no.: 6499, 6451

Email: nurulkhabas@um.edu.my,
farid90@um.edu.my

MICROLOG BIOLOG

Brand: BIOTECH INSTRUMENTS

Model: BIOLOG GEN III

Location: Makmal Biologi Molekul, Tingkat 1, Balai
Ungku Aziz

Person-in-charge: MLT BUARL

Ext. no.: 7450

Email: N/A

MICROSCOPE BINOCULAR

Brand: NIKON

Model: OPTIPHOT-2

Location: Makmal Biologi Molekul, Tingkat 1, Balai
Ungku Aziz

Person-in-charge: MLT BUARL

Ext. no.: 7450

Email: N/A

MOTORISED FLUORESCENCE MICROSCOPE

Brand: Applied Spectral Imaging

Model: ENG - Olympus

Location: RDL, Aras 6, Menara Pakar Pergigian &
Penyelidikan

Person-in-charge: Mdm Nurull Khairyah, Mr Farid
Aizat

Ext. no.: 6499, 6451

Email: nurulkhabas@um.edu.my,
farid90@um.edu.my

NANODROP SPECTROPHOTOMETER

Brand: Thermo Scientific

Model: ND 2000

Location: Makmal CMBRL, Aras 7, Menara Pakar
Pergigian & Penyelidikan

Person-in-charge: Mdm Intan Syaheera Binti Abdul
Hamid

Ext. no.: 6461

Email: syaheera@um.edu.my

PRECISION CUTTING SYSTEM

Brand: EXACT

Model: EXACT

Location: Bilik Trimming, Tingkat 2, Makmal Diagnostik
Patologi Mulut Dan Penyelidikan

Person-in-charge: Mdm Rusnani Binti Kamil @ Kamal

Ext. no.: 4815

Email: rusnanik@um.edu.my

REAL TIME PCR SYSTEM

Brand: Applied Biosystems

Model: 7500 Fast

Location: Makmal CMBRL, Aras 7, Menara Pakar
Pergigian & Penyelidikan

Person-in-charge: Mdm Intan Syaheera Binti Abdul
Hamid

Ext. no.: 6461

Email: syaheera@um.edu.my

FACULTY OF DENTISTRY

RESEARCH INVERTED MICROSCOPE**Brand:** LEICA**Model:** DMI3000B**Location:** Makmal CMBRL, Aras 7, Menara Pakar
Pergigian & Penyelidikan**Person-in-charge:** Mdm Nuzaimah Binti Ideris**Ext. no.:** 6461**Email:** nuzaimahideris@um.edu.my**STEREO MICROSCOPE****Brand:** OLYMPUS**Model:** SZX7-ILST-SET**Location:** Makmal Penyelidikan Bio Bahan, Aras 7,
Menara Pakar Pergigian & Penyelidikan**Person-in-charge:** Mdm Siti Nurul Mardhiah**Ext. no.:** 6460**Email:** nurulmardhiah@um.edu.my**STEREO MICROSCOPE (For Stem cell work only)****Brand:** Nikon**Model:** SMZ1270**Location:** Stem Cell Research Lab (SCRL)**Person-in-charge:** Mdm. Junaida Hassan Basari**Ext. no:** 6461/7492**Email:** junaida@um.edu.my**THERMAL CYCLER - 2 UNITS****Brand:** Applied Biosystems**Model:** Veriti**Location:** Makmal CMBRL, Aras 7, Menara Pakar
Pergigian & Penyelidikan**Person-in-charge:** Mdm Intan Syaheera Binti Abdul
Hamid**Ext. no.:** 6461**Email:** syaheera@um.edu.my**THERMOCYCLING MACHINE****Brand:** N/A**Model:** ATDM-T6-PD**Location:** Makmal Penyelidikan Bio Bahan, Aras 7,
Menara Pakar Pergigian & Penyelidikan**Person-in-charge:** Mdm Zarina Idris**Ext. no.:** 6460**Email:** zarina@um.edu.my**THERMAL CYCLER (2 UNIT)****Brand:** Biorad**Model:** T100**Location:** Stem Cell Research Lab (SCRL)**Person-in-charge:** Mdm. Junaida Hassan Basari**Ext. no:** 6461/7492**Email:** junaida@um.edu.my**THIN SECTIONING****Brand:** BUEHLER**Model:** PETROTHIN**Location:** Makmal Penyelidikan Bio Bahan, Aras 7,
Menara Pakar Pergigian & Penyelidikan**Person-in-charge:** Mdm Sumiati Pool**Ext. no.:** 6460**Email:** sumiati@um.edu.my**TISSUE EMBEDDING STATION****Brand:** LEICA**Model:** EG1160**Location:** Bilik Trimming, Tingkat 2, Makmal Diagnostik
Patologi Mulut Dan Penyelidikan**Person-in-charge:** Mdm Rusnani Binti Kamil @ Kamal**Ext. no.:** 4815**Email:** rusnanik@um.edu.my**TWIN WHEEL GRINDER POLISHER****Brand:** BUEHLER**Model:** BETA 8**Location:** Makmal Penyelidikan Bio Bahan, Aras 7,
Menara Pakar Pergigian & Penyelidikan**Person-in-charge:** Mdm Siti Nurul Mardhiah**Ext. no.:** 6460**Email:** nurulmardhiah@um.edu.my

FACULTY OF ENGINEERING

16 CHANNEL DATA ACQUISITION SYSTEM FOR LIFE SCIENCE RESEARCH APPLICATION

Brand: Biopac

Model: MP150

Location: Asian Cardiac Laboratory, Level 5, Block M

Person-in-charge: Associate Prof. Dr. Lim Einly

Ext. no.: 7612

Email: einly_lim@um.edu.my

MODULE FOR PREPARATION OF CELLULAR

Brand: Laurell

Model: WS-650MZ-23NPP

Location: Clinical Engineering Laboratory, Level 3,
Block A

Person-in-charge: Assoc Prof. Ir. Dr. Belinda Murphy

Ext. no.: 4491

Email: bpingguan@um.edu.my

MODULE FOR PREPARATION OF CELLULAR

Brand: Segar Alatan Sains

Model: N/A

Location: Artificial Organ Laboratory, Level 4, Block M

Person-in-charge: Prof Ir Dr Noor Azuan Abu Osman

Ext. no.: N/A

Email: azuan@um.edu.my

NON-INVASIVE HEMODYNAMIC MONITORING SYSTEM

Brand: Portapres

Model: Model-2

Location: Asian Cardiac Laboratory, Level 5, Block M

Person-in-charge: Associate Prof. Dr. Lim Einly

Ext. no.: 7612

Email: einly_lim@um.edu.my

PORTABLE SYSTEM WITH CONTINUOUS VO2 MAX MEASUREMENT

Brand: Cosmed

Model: Fitmate Pro

Location: Asian Cardiac Laboratory, Level 5, Block M

Person-in-charge: Associate Prof. Dr. Lim Einly

Ext. no.: 7612

Email: einly_lim@um.edu.my

WATER PURIFICATION SYSTEM

Brand: Segar Alatan Sains

Model: N/A

Location: Artificial Organ Laboratory, Level 4, Block M

Person-in-charge: Prof Ir Dr Noor Azuan Abu Osman

Ext. no.: N/A

Email: azuan@um.edu.my

FACULTY OF MEDICINE

-20°C FREEZER**Brand:** Thermo Fisher**Model:** -**Location:** Makmal Genomik, Makmal Bioteknologi
Perubatan, Blok B , Fakulti Perubatan**Person-in-charge:** Mdm Nadiah Nasharuddin**Tel. no.:** 03-79677579**Email:** nadiah@um.edu.my**-20°C FREEZER****Brand:** Liebherr**Model:** -**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Mdm. Jumriah**Tel. no.:** 03-7949 6385**Email:** jum_ash@um.edu.my**-80°C FREEZER****Brand:** Thermo Revco**Model:** -**Location:** Makmal Genomik, Makmal Bioteknologi
Perubatan, Blok B**Person-in-charge:** Mdm Nadiah Nasharuddin**Tel. no.:** 03-79677579**Email:** nadiah@um.edu.my**-80°C FREEZER****Brand:** New Brunswick Scientific**Model:** -**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Mdm. Jumriah**Tel. no.:** 03-7949 6385**Email:** jum_ash@um.edu.my**-80°C FREEZER (20 UNITS)****Brand:** Panasonic**Model:** MDFU700VX**Location:** Biobank Unit Freezer Facility, Lvl G Block M**Person-in-charge:** Mr Mohd Syafiq Salleh**Tel. no.:** 03-7967 7899**Email:** msyafiq@um.edu.my**4°C CHILLER (DOUBLE DOOR)****Brand:** Labmart**Model:** -**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Mdm. Jumriah**Tel. no.:** 03-7949 6385**Email:** jum_ash@um.edu.my**1 DOOR FRIDGE****Brand:** Panasonic**Model:** -**Location:** Main Cell Culture Room, Lab 1, Cell and
Molecular Biology Laboratory**Person-in-charge:** Mr. Asmad Rizal Bin Mohd Khir**Tel. no.:** 03-7967 7587**Email:** asmadrizal@um.edu.my**ANALYTICAL BALANCE****Brand:** Mettler Toledo**Model:** Dragon 204**Location:** Makmal Proteomik, Makmal Bioteknologi
Perubatan, Blok B , Fakulti Perubatan**Person-in-charge:** Nur Athirah Hussin**Tel. no.:** 03-79677535**Email:** n.athirah@um.edu.my**ANALYTICAL BALANCE****Brand:** A&D**Model:** -**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Nurul Syahida**Tel. no.:** 03-7949 6385**Email:** syahidaharman@um.edu.my**AUTOCLAVE****Brand:** ALP**Model:** -**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Nurul Syahida**Tel. no.:** 03-7949 6385**Email:** syahidaharman@um.edu.my

FACULTY OF MEDICINE

BIO HAZARD CABINET (CLASS II, TYPE B2)**Brand:** ESCO**Model:** AB2-4S1**Location:** Bilik Penyediaan, Makmal Bioteknologi
Perubatan, Aras 4, Blok B**Person-in-charge:** Nor Haslina Hayani**Tel. no.:** 0379677535**Email:** hasyani@um.edu.my**BIOSAFETY CABINET****Brand:** ESCO**Model:** AB2-4S1**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Nurul Syahida**Tel. no.:** 03-7949 6385**Email:** syahidahman@um.edu.my**BIOSAFETY CABINET****Brand:** Thermo Scientific**Model:** 1300 Series A2**Location:** Main Cell Culture Room, Lab 1, Cell and
Molecular Biology Laboratory**Person-in-charge:** Asmad Rizal Bin Mohd Khir**Tel. no.:** 03-7967 7587**Email:** asmadrizal@um.edu.my**CELL SORTER****Brand:** BD**Model:** FACSAria III**Location:** Makmal Genomik, Makmal Bioteknologi
Perubatan, Blok B**Person-in-charge:** Mohamad Zulkefly Bin Mohamad
Nazri**Tel. no.:** 03-79677523**Email:** zulkeflynazri61@um.edu.my**CELL CULTURE COMPACT CENTRIFUGE****Brand:** Corning**Model:** -**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Jumriah**Tel. no.:** 03-7949 6385**Email:** jum_ash@um.edu.my**CO2 INCUBATOR****Brand:** Memmert**Model:** -**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Nurul Syahida**Tel. no.:** 03-7949 6385**Email:** syahidahman@um.edu.my**CO2 INCUBATOR****Brand:** Thermo Scientific**Model:** -**Location:** Main Cell Culture Room, Lab 1, Cell and
Molecular Biology Laboratory**Person-in-charge:** Asmad Rizal Bin Mohd Khir**Tel. no.:** 03-7967 7587**Email:** asmadrizal@um.edu.my**CRYOSTAT****Brand:** SLEE**Model:** -**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Jumriah**Tel. no.:** 03-7949 6385**Email:** jum_ash@um.edu.my**DRY BATH INCUBATOR****Brand:** Allsheng-China**Model:** -**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Nurul Syahida**Tel. no.:** 03-7949 6385**Email:** syahidahman@um.edu.my**DRYING OVEN****Brand:** Binder**Model:** -**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Nurul Syahida**Tel. no.:** 03-7949 6385**Email:** syahidahman@um.edu.my

FACULTY OF MEDICINE

DRYING OVEN**Brand:** Binder**Model:** -**Location:** Lab 1, Cell and Molecular Biology Laboratory**Person-in-charge:** Asmad Rizal Bin Mohd Khir**Tel. no.:** 03-7967 7587**Email:** asmadrizal@um.edu.my**ELECTROPHORESIS EQUIPMENT (2D ELECTROPHORESIS)****Brand:** BIORAD**Model:** Dodeca Cell**Location:** Makmal Proteomik, Makmal Bioteknologi
Perubatan, Blok B**Person-in-charge:** Nosrihah Ismail**Tel. no.:** 03-79677535**Email:** nosrihah@um.edu.my**ELECTROPHORESIS EQUIPMENT (IEF)****Brand:** Ettan**Model:** IPGPHOR3**Location:** Makmal Proteomik, Makmal Bioteknologi
Perubatan, Blok B**Person-in-charge:** Nosrihah Ismail**Tel. no.:** 03-79677535**Email:** nosrihah@um.edu.my**ELECTROPHORESIS EQUIPMENT (IEF)****Brand:** BIORAD**Model:** PROTEAN i12, Dodeca Cell**Location:** Makmal Proteomik, Makmal Bioteknologi
Perubatan, Blok B**Person-in-charge:** Nor Haslina Hayani**Tel. no.:** 03-79677535**Email:** hasyani@um.edu.my**ELECTROPHORESIS EQUIPMENT (2D ELECTROPHORESIS)****Brand:** GE Healthcare**Model:** SE Ruby 600**Location:** Makmal Proteomik, Makmal Bioteknologi
Perubatan, Blok B**Person-in-charge:** Nor Haslina Hayani**Tel. no.:** 03-79677535**Email:** hasyani@um.edu.my**ELECTROPHORESIS EQUIPMENT (WESTERN BLOT)****Brand:** GE Healthcare**Model:** Multiphor II Novablot**Location:** Makmal Proteomik, Makmal Bioteknologi
Perubatan, Blok B**Person-in-charge:** Nosrihah Ismail**Tel. no.:** 03-79677535**Email:** nosrihah@um.edu.my**ELECTRIC-CELL SUBSTRATE IMPEDANCE SENSING (ECIS)****Brand:** Applied Biosystem**Model:** ECISZ0**Location:** Main Cell Culture Room, Lab 1, Cell and
Molecular Biology Laboratory**Person-in-charge:** Asmad Rizal Bin Mohd Khir**Tel. no.:** 03-7967 7587**Email:** asmadrizal@um.edu.my**FLOWCYTOMETRY****Brand:** BD**Model:** FACS Canto II**Location:** Makmal Genomik, Makmal Bioteknologi
Perubatan, Blok B**Person-in-charge:** Nadiah Nasharuddin**Tel. no.:** 03-79677579**Email:** nadiah@um.edu.my**FREEZE CRYOTOME****Brand:** Thermo**Model:** Shandon Cryotome**Location:** Makmal Genomik, Makmal Bioteknologi
Perubatan, Blok B**Person-in-charge:** Nadiah Nasharuddin**Tel. no.:** 03-79677579**Email:** nadiah@um.edu.my**GEL DOCUMENTATION SYSTEM****Brand:** UVP**Model:** Biospectrum810**Location:** Makmal Proteomik, Makmal Bioteknologi
Perubatan, Blok B**Person-in-charge:** Nosrihah Ismail**Tel. no.:** 03-79677535**Email:** nosrihah@um.edu.my

FACULTY OF MEDICINE

HEATING BLOCKS**Brand:** Dry Bath**Model:** -**Location:** Lab 1, Cell and Molecular Biology Laboratory**Person-in-charge:** Asmad Rizal Bin Mohd Khir**Tel. no.:** 03-7967 7587**Email:** asmadrizal@um.edu.my**HOT PLATE & STIRRER****Brand:** Heidolph**Model:** -**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Jumriah**Tel. no.:** 03-7949 6385**Email:** jum_ash@um.edu.my**HYBRIDIZATION OVEN****Brand:** N-Biotek**Model:** -**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Nurul Syahida**Tel. no.:** 03-7949 6385**Email:** syahidarahman@um.edu.my**HYPOXIA INCUBATOR****Brand:** ESCO**Model:** -**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Nurul Syahida**Tel. no.:** 03-7949 6385**Email:** syahidarahman@um.edu.my**ICE MAKER****Brand:** SAINS ALATAN SEGAR**Model:** -**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Jumriah**Tel. no.:** 03-7949 6385**Email:** jum_ash@um.edu.my**ICE FLAKE MAKER****Brand:** Scotsman**Model:** -**Location:** Lab 1, Cell and Molecular Biology Laboratory**Person-in-charge:** Asmad Rizal Bin Mohd Khir**Tel. no.:** 03-7967 7587**Email:** asmadrizal@um.edu.my**INVERTED RESEARCH MICROSCOPE****Brand:** NIKON**Model:** ECLIPSE Ti-S**Location:** Makmal Genomik, Makmal Bioteknologi
Perubatan, Blok B**Person-in-charge:** Nadiyah Nasharuddin**Tel. no.:** 03-79677579**Email:** nadiyah@um.edu.my**INVERTED PHASE CONTRAST MICROSCOPE****Brand:** Euromax**Model:** -**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Nurul Syahida**Tel. no.:** 03-7949 6385**Email:** syahidarahman@um.edu.my**INVERTED LIGHT MICROSCOPE****Brand:** Optika**Model:** -**Location:** Main Cell Culture Room, Lab 1, Cell and
Molecular Biology Laboratory**Person-in-charge:** Asmad Rizal Bin Mohd Khir**Tel. no.:** 03-7967 7587**Email:** asmadrizal@um.edu.my**LIQUID CHROMATOGRAPHY -MASS SPECTROMETRY
(LCMS QTOF)****Brand:** Agilent**Model:** 6550 iFunnel**Location:** Bilik QToF, Makmal Proteomik, Blok B**Person-in-charge:** Nosriah Ismail**Tel. no.:** 03-79677535**Email:** nosriah@um.edu.my

FACULTY OF MEDICINE

LIQUID NITROGEN TANK**Brand:** MVE**Model:** MVE Tank HE SERIES**Location:** Liquid Nitrogen Room, Lvl G, AEU**Person-in-charge:** Mr Mohd Syafiq Salleh**Tel. no.:** 03-7967 7899**Email:** msyafiq@um.edu.my**MASS SPECTROMETRY (MALDI TOF/TOF)****Brand:** SCIEX**Model:** MALDI ToF/ ToF 5800**Location:** Bilik Mass Spectrometry, Makmal Proteomik, Blok B**Person-in-charge:** Nur Athirah Hussin**Tel. no.:** 03-79677535**Email:** n.athirah@um.edu.my**MINI CENTRIFUGE****Brand:** Fisher Scientific**Model:** -**Location:** Lab 1, Cell and Molecular Biology Laboratory**Person-in-charge:** Asmad Rizal Bin Mohd Khir**Tel. no.:** 03-7967 7587**Email:** asmadrizal@um.edu.my**MINI CENTRIFUGE****Brand:** Dragonlab**Model:** -**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Jumriah**Tel. no.:** 03-7949 6385**Email:** jum_ash@um.edu.my**MINI REFRIGERATED CENTRIFUGE****Brand:** Sorvall**Model:** Legend Micro 17R Centrifuge**Location:** Makmal Genomik, Makmal Bioteknologi Perubatan, Blok B**Person-in-charge:** Nadiah Nasharuddin**Tel. no.:** 03-79677579**Email:** nadiah@um.edu.my**MINI VORTEX MIXER****Brand:** Crystal**Model:** -**Location:** Lab 1, Cell and Molecular Biology Laboratory**Person-in-charge:** Asmad Rizal Bin Mohd Khir**Tel. no.:** 03-7967 7587**Email:** asmadrizal@um.edu.my**MULTIMODE READER & HYDROFLEX MICROPLATE WASHER****Brand:** Tecan**Model:** M1000**Location:** Makmal Genomik, Makmal Bioteknologi Perubatan, Blok B**Person-in-charge:** Mohamad Zulkefly Bin Mohamad Nazri**Tel. no.:** 03-79677523**Email:** zulkeflynazri61@um.edu.my**NANODROP****Brand:** Thermo Scientific**Model:** NANODROP2000 Spectrophotometer**Location:** Makmal Genomik, Makmal Bioteknologi Perubatan, Blok B**Person-in-charge:** Mohamad Zulkefly Bin Mohamad Nazri**Tel. no.:** 03-79677523**Email:** zulkeflynazri61@um.edu.my**pH METERS****Brand:** Mi 150**Model:** -**Location:** Lab 1, Cell and Molecular Biology Laboratory**Person-in-charge:** Asmad Rizal Bin Mohd Khir**Tel. no.:** 03-7967 7587**Email:** asmadrizal@um.edu.my

FACULTY OF MEDICINE

**PROTEIN ANALYZER (SURFACE PLASMON
RESONANCE TECHNOLOGY)****Brand:** BIACORE**Model:** 300 GE Healthcare**Location:** Makmal Proteomik, Makmal Bioteknologi
Perubatan, Blok B**Person-in-charge:** Nosrihah Ismail**Tel. no.:** 03-79677535**Email:** nosrihah@um.edu.my**REAL- TIME PCR SYSTEM****Brand:** Applied Biosystem**Model:** StepOneplus**Location:** Lab 1, Cell and Molecular Biology Laboratory**Person-in-charge:** Asmad Rizal Bin Mohd Khir**Tel. no.:** 03-7967 7587**Email:** asmadrizal@um.edu.my**REAL- TIME PCR SYSTEM****Brand:** Applied Biosystem**Model:** StepOneplus**Location:** Makmal Genomik, Makmal Bioteknologi
Perubatan, Blok B**Person-in-charge:** Nur Liyana Azmi**Tel. no.:** 03-79677579**Email:** lyana@um.edu.my**REFRIGERATED CENTRIFUGE****Brand:** Thermo Scientific**Model:** Heraeus Megafuge 8R**Location:** Lab 1, Cell and Molecular Biology Laboratory**Person-in-charge:** Asmad Rizal Bin Mohd Khir**Tel. no.:** 03-7967 7587**Email:** asmadrizal@um.edu.my**REFRIGERATED CENTRIFUGE****Brand:** Tomy**Model:** -**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Jumriah**Tel. no.:** 03-7949 6385**Email:** jum_ash@um.edu.my**REAL TIME CELL ANALYZER****Brand:** Acea xCELLigence**Model:** -**Location:** Makmal Genomik, Makmal Bioteknologi
Perubatan, Blok B**Person-in-charge:** Nadiah Nasharuddin**Tel. no.:** 03-79677579**ROCKER****Brand:** Labnet**Model:** -**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Nurul Syahida**Tel. no.:** 03-7949 6385**Email:** syahidarahman@um.edu.my**SONICATOR****Brand:** KUDOS**Model:** -**Location:** Bilik Penyediaan, Makmal Bioteknologi
Perubatan, Aras 4, Blok B**Person-in-charge:** Nor Haslina Hayani**Tel. no.:** 03-79677535**Email:** hasyani@um.edu.my**SPECTROPHOTOMETER****Brand:** Amersham Biosciences**Model:** Ultrospec 2100 Pro**Location:** Makmal Proteomik, Makmal Bioteknologi
Perubatan, Blok B, Fakulti Perubatan**Person-in-charge:** Nur Athirah Hussin**Tel. no.:** 03-79677535**Email:** n.athirah@um.edu.my**THERMAL CYCLER****Brand:** BIOMETRA**Model:** TProfessional Thermocycler**Location:** Makmal Genomik, Makmal Bioteknologi
Perubatan, Blok B**Person-in-charge:** Nur Liyana Azmi**Tel. no.:** 03-79677579**Email:** lyana@um.edu.my

FACULTY OF MEDICINE

TRINOCULAR MICROSCOPE WITH LCD PANEL**Brand:** NIKON**Model:** Eclipse 200**Location:** Biobank Unit, LVL 4, Block I**Person-in-charge:** Mr Mohd Syafiq Salleh**Tel. no.:** 03-7967 7899**Email:** msyafiq@um.edu.my**VORTEX MIXER****Brand:** Dragonlab**Model:** -**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Nurul Syahida**Tel. no.:** 03-7949 6385**Email:** syahidarahman@um.edu.my**WATER BATH****Brand:** Memmert**Model:** -**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Nurul Syahida**Tel. no.:** 03-7949 6385**Email:** syahidarahman@um.edu.my**WATER BATH****Brand:** PolyScience**Model:** -**Location:** Makmal 1, Translational Core Laboratory**Person-in-charge:** Nurul Syahida**Tel. no.:** 03-7949 6385**Email:** syahidarahman@um.edu.my**WATER BATH****Brand:** Fisher Scientific**Model:** -**Location:** Lab 1, Cell and Molecular Biology Laboratory**Person-in-charge:** Asmad Rizal Bin Mohd Khir**Tel. no.:** 03-7967 7587**Email:** asmadrizal@um.edu.my**WEIGHING BALANCE****Brand:** Mettler Toledo**Model:** Dragon 3002**Location:** Makmal Proteomik, Makmal Bioteknologi
Perubatan, Blok B, Fakulti Perubatan**Person-in-charge:** Nur Athirah Hussin**Tel. no.:** 03-79677535**Email:** n.athirah@um.edu.my**WEIGHING BALANCE (200 g)****Brand:** Mettler Toledo**Model:** Dragon 3002**Location:** Lab 1, Cell and Molecular Biology Laboratory**Person-in-charge:** Asmad Rizal Bin Mohd Khir**Tel. no.:** 03-7967 7587**Email:** asmadrizal@um.edu.my

FACULTY OF SCIENCE

DEPARTMENT OF PHYSICS

HIGH SPEED ULTRA CENTRIFUGE

Brand: Hitachi

Model: N/A

Location: Bilik LDMRC 2

Person-in-charge: Dr. Chiu Wee Siong

Ext. no.: N/A

Email: w.s.chiu@um.edu.my

DEPARTMENT OF GEOLOGY

MICROSCOPE

Brand: Motic

Model: B310

Location: Makmal Optik, 305, Aras 1, Bangunan Utama (J22)

Person-in-charge: Ms Zaleha Abdullah

Ext. no.: 7145

Email: leha@um.edu.my

MICROSCOPE

Brand: LEICA

Model: DM6000

Location: Makmal Petrologi Organik, 310, Aras 1, Bangunan Utama (J22)

Person-in-charge: Ms Zaleha Abdullah

Ext. no.: 7145

Email: leha@um.edu.my

MICROSCOPE

Brand: LEICA

Model: DMRX

Location: Makmal Mineralogi, 404, Aras 2, Bangunan Utama (J22)

Person-in-charge: Ms Zaleha Abdullah

Ext. no.: 7145

Email: leha@um.edu.my

MOTORISED FLUORENCE MICROSCOPE

Brand: N/A

Model: N/A

Location: Bilik Pensyarah, 316, Aras 1, Bangunan Utama (J22)

Person-in-charge: Dr Mear Hakif Amir Hassan

Ext. no.: 4233

Email: meorhakif@um.edu.my

FACULTY OF SCIENCE

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3D FACIAL SCANNER**Brand:** VECTRA**Model:** N/A**Location:** Makmal Biokomputasi & Bioinformatik,
Crystal, Aras 1, Blok D, Bangunan
Bioinformatik**Person-in-charge:** Dr. Moh Heng Hing**Ext. no.:** 4609**Email:** moh@um.edu.my**3D SURFACE BODY SCANNER SYSTEM****Brand:** TC2**Model:** NX-16**Location:** Makmal Kemudahan Pengimejan Digital
Manusia, Crystal, Aras Bawah, Blok D,
Bangunan Bioinformatik**Person-in-charge:** Dr. Moh Heng Hing**Ext. no.:** 4609**Email:** moh@um.edu.my**-80°C CHEST FREEZER****Brand:** New Brunswick**Model:** U535**Location:** PBRL, Blok C, Aras 2, Bangunan Sains Baru**Person-in-charge:** Mdm Norazlina Binti Abdul Rahman**Ext. no.:** 4380**Email:** nora@um.edu.my**-80°C UPRIGHT FREEZER****Brand:** Esco**Model:** UVS-439A-1**Location:** Makmal Penyelidikan 3, Blok B12, Aras
Bawah, Mikrobiologi**Person-in-charge:** Mr Joohari Bin Ismail**Ext. no.:** 5926**Email:** joohari@um.edu.my**-86°C CHEST FREEZER****Brand:** N/A**Model:** N/A**Location:** Makmal Bioteknologi Persekitaran, Aras 1,
Blok D, Bangunan Bioinformatik**Person-in-charge:** Mdm Nurziha Sarah Binti Abdul
Rahman**Ext. no.:** 7183**Email:** nurzihasarah@um.edu.my**-80°C ULTRA LOW TEMP FREEZER - 2 UNITS****Brand:** Thermo Scientific**Model:** 88300V**Location:** Koleksi Kulit & Rangka, Blok Muzium, Aras
Bawah**Person-in-charge:** Mr Ngadiran Bin Dowree**Ext. no.:** N/A**Email:** ngadiran@um.edu.my**-80°C ULTRA LOW TEMP FREEZER****Brand:** Thermo Scientific**Model:** N/A**Location:** Makmal Sains Genom, Blok B06, Aras Bawah,
Genetik**Person-in-charge:** Mr Hassan Bin M'Dius**Ext. no.:** 5827**Email:** hassanm@um.edu.my**-80°C UPRIGHT FREEZER****Brand:** Ing Climas Vertica**Model:** N/A**Location:** Makmal Penyelidikan 3, Blok B12, Aras
Bawah, Mikrobiologi**Person-in-charge:** Mr Joohari Bin Ismail**Ext. no.:** 5926**Email:** joohari@um.edu.my

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-86°C UPRIGHT FREEZER**Brand:** Haier**Model:** ULT Freezer**Location:** Makmal Biokimia, Aras 3, Blok D, Jabatan Kimia**Person-in-charge:** Mdm Zanariah Adris**Ext. no.:** 6795**Email:** zanariah@um.edu.my**-86°C UPRIGHT FREEZER****Brand:** Thermo Scientific**Model:** N/A**Location:** Makmal Penyelidikan 3, Blok B12, Aras Bawah, Mikrobiologi**Person-in-charge:** Mdm Nor Shahidah Binti Mustapha**Ext. no.:** 5801**Email:** nor.shahidah@um.edu.my**96 WELL THERMAL CYCLER****Brand:** Applied Biosystems**Model:** Veriti**Location:** Koleksi Kulit & Rangka, Blok Muzium, Aras Bawah**Person-in-charge:** Mr Ngadiran Bin Dowree**Ext. no.:** N/A**Email:** ngadiran@um.edu.my**AUTOCLAVE****Brand:** Selecta**Model:** JP SELECTA PRESOLAVE 75**Location:** Makmal SBK, Blok D, Aras Bawah**Person-in-charge:** Mdm Hazulina Binti Che Ab Aziz**Ext. no.:** 6746**Email:** hazu@um.edu.my**AUTOCLAVE****Brand:** ALP**Model:** CL-40M**Location:** Makmal HIR Fungsi Molekul, Aras 3, Blok D, Jabatan Kimia**Person-in-charge:** Mdm Norhaya Binti Abdul Rahim**Ext. no.:** 2771**Email:** norhaya@um.edu.my**AUTOCLAVE****Brand:** H+P Labortechnik GmbH**Model:** N/A**Location:** Makmal Persediaan Mikrob, Blok 08, Aras Bawah, Mikrobiologi**Person-in-charge:** Mr Joohari Bin Ismail**Ext. no.:** 5926**Email:** joohari@um.edu.my**BIOREACTOR****Brand:** Sartorius**Model:** BIOSTAT B-Plus**Location:** BTF7, Makmal Bioproses, Tingkat 4, Blok B**Person-in-charge:** Mr Razali Bin Md Jonit**Ext. no.:** 7183**Email:** razali@um.edu.my**BIOREACTOR SYSTEM****Brand:** Biosys Oxy**Model:** N/A**Location:** BTF7, Makmal Bioproses, Tingkat 4, Blok B**Person-in-charge:** Mr Razali Bin Md Jonit**Ext. no.:** 7183**Email:** razali@um.edu.my

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BIOREACTOR SYSTEM

Brand: Biosys Air

Model: N/A

Location: BTF7, Makmal Bioproses, Tingkat 4, Blok B

Person-in-charge: Mr Razali Bin Md Jonit

Ext. no.: 7183

Email: razali@um.edu.my

BIOREACTOR SYSTEM

Brand: Metler Toledo

Model: M300

Location: E213-Makmal Fikologi, Blok E, Aras 2

Person-in-charge: Mr Faisal Hadi Bin Mohd Amizam

Ext. no.: 6704

Email: faisalhadi@um.edu.my

BIOSYS CONTROLLER

Brand: Ferme Type Resources

Model: N/A

Location: PBRL, Blok C, Aras 2, Bangunan Sains Baru

Person-in-charge: Mdm Norazlina Binti Abdul Rahman

Ext. no.: 4380

Email: nora@um.edu.my

CENTRIFUGE

Brand: Eppendorf

Model: 5430R

Location: PBRL, Blok C, Aras 2, Bangunan Sains Baru

Person-in-charge: Mdm Norazlina Binti Abdul Rahman

Ext. no.: 4380

Email: nora@um.edu.my

CENTRIFUGE

Brand: Eppendorf

Model: 5804R

Location: Makmal Microbiology 2, Blok B08, Aras 2,
Mikrobiologi

Person-in-charge: Ms Annie Liza Binti Baharah

Ext. no.: N/A

Email: annieliza@um.edu.my

CLASS II BIOSAFETY CABINET

Brand: Esco

Model: Airstream® AC2-4D1

Location: Makmal HIR Fungsi Molekul, Aras 3, Blok D,
Jabatan Kimia

Person-in-charge: Mdm Norhaya Binti Abdul Rahim

Ext. no.: 2771

Email: norhaya@um.edu.my

CO₂ INCUBATOR

Brand: Binder

Model: CB210

Location: Makmal EMIL, Blok B, Aras 4

Person-in-charge: Mdm Norzuliana Binti Ismail

Ext. no.: 6746

Email: norzuliana@um.edu.my

CO₂ INCUBATOR

Brand: RS Biotech

Model: GALAXY R

Location: Makmal E2.5, Aras 3, Blok E

Person-in-charge: Mdm Norlidawati Mohamed Sapi

Ext. no.: 6791

Email: N/A

COMPOUND TRINOCULAR MICROSCOPE

Brand: N/A

Model: N/A

Location: Makmal Mikroteknik, Blok B, Aras 3

Person-in-charge: Mdm Mashitah Binti Mohamed Ali

Ext. no.: N/A

Email: masha@um.edu.my

CRYOGENIC FREEZE DRYER

Brand: Thermo Scientific

Model: ULT-7150-9W

Location: Makmal HIR Fungsi Molekul, Aras 3, Blok D,
Jabatan Kimia

Person-in-charge: Mdm Norhaya Binti Abdul Rahim

Ext. no.: 2771

Email: norhaya@um.edu.my

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DCODE SYSTEM**Brand:** BioRad**Model:** N/A**Location:** Makmal Penyelidikan 3, Blok B12, Aras Bawah, Mikrobiologi**Person-in-charge:** Mr Joohari Bin Ismail**Ext. no.:** 5926**Email:** joohari@um.edu.my**DISSECTING WITH CCD CAMERA MICROSCOPE****Brand:** Olympus**Model:** SZ61**Location:** Koleksi Kulit & Rangka, Blok Muzium, Aras Bawah**Person-in-charge:** Ms Amni Bazilah Binti Sulaiman**Ext. no.:** 5175**Email:** amnibuzz@um.edu.my**ELECTROPHORESIS/NUCLEIC ACID SYSTEM****Brand:** N/A**Model:** N/A**Location:** Makmal BGM2, Blok B03, Aras 1, Genetik**Person-in-charge:** Ms Nur Izana Binti Mohd Noor**Ext. no.:** 5801**Email:** nurizana@um.edu.my**ELECTROPHORESIS SYSTEM****Brand:** Multiphor**Model:** 11**Location:** Makmal Proteomik, E1.1, Aras 2, Blok E**Person-in-charge:** Mr Mohd Mazlan Bin Ahmad**Ext. no.:** 4208**Email:** mazlan76@um.edu.my**FERMENTER****Brand:** B Braun Biotech**Model:** BIostat B**Location:** Makmal E1.2, Aras 2, Blok E**Person-in-charge:** Mr Mohd Mazlan Bin Ahmad**Ext. no.:** 4208**Email:** mazlan76@um.edu.my**FERMENTER****Brand:** N/A**Model:** N/A**Location:** Makmal Bioteknologi Persekitaran, Aras 1, Blok D, Bangunan Bioinformatik**Person-in-charge:** Mdm Rosfizah Zuki**Ext. no.:** 5845**Email:** rosfizah@um.edu.my**FLOWCYTOMETER****Brand:** BD Accury**Model:** C6**Location:** Makmal Biologi Molekul, Aras Bawah, Blok E MUCED**Person-in-charge:** Mdm Norlida Binti Hussain**Ext. no.:** 4135**Email:** eidda@um.edu.my**FLUORESCENCE MICROSCOPE****Brand:** Olympus**Model:** BX51**Location:** E213-Makmal Fikologi, Blok E, Aras 2**Person-in-charge:** Mr Faisal Hadi Bin Mohd Amizam**Ext. no.:** 6704**Email:** faisalhadi@um.edu.my

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FREEZE DRYER**Brand:** Scanvac**Model:** N/A**Location:** Makmal Genetik Microbiology, Blok B08,
Aras 1, Mikrobiologi**Person-in-charge:** Mr Mohd Hafiz Bin Mansor**Ext. no.:** 5969**Email:** hafiz_20@um.edu.my**FREEZE DRYER****Brand:** ThermoFisher Scientific**Model:** SUPERMODULO 230**Location:** Bilik Peralatan, Makmal Penyelidikan 1.3,
Blok B12, Aras Bawah, Mikrobiologi**Person-in-charge:** Mr Joohari Bin Ismail**Ext. no.:** 5926**Email:** joohari@um.edu.my**FREEZE DRYER****Brand:** Christ Beta**Model:** 2-8LD PLUS**Location:** Pusat Penyelidikan Bioteknologi Kulat, Blok A**Person-in-charge:** Mr Khairul Nizam Bin Jamaluddin**Ext. no.:** 4208**Email:** niezam_kk5@um.edu.my**FREEZE DRYER****Brand:** LabConco**Model:** N/A**Location:** Makmal Biologi Molekul, Aras Bawah, Blok E
MUCED**Person-in-charge:** Mr Syed Azminnudin Bin Syed
Azizuddin**Ext. no.:** 7183**Email:** azmin@um.edu.my**FREEZE DRYER CONDENSER****Brand:** Masterflex**Model:** N/A**Location:** BTF7, Makmal Bioproses, Tingkat 4, Blok B**Person-in-charge:** Mr Razali Bin Md Jonit**Ext. no.:** 7183**Email:** razali@um.edu.my**FREEZER****Brand:** Esco**Model:** ULT 80**Location:** Makmal HIR Fungsi Molekul, Aras 3, Blok D,
Jabatan Kimia**Person-in-charge:** Mdm Norhaya Binti Abdul Rahim**Ext. no.:** 2771**Email:** norhaya@um.edu.my**FREEZING MICROTOME****Brand:** N/A**Model:** N/A**Location:** Makmal Mikroteknik, Blok B, Aras 3**Person-in-charge:** Mdm Mashitah Binti Mohamed Ali**Ext. no.:** N/A**Email:** masha@um.edu.my**FRONT LOADING AUTOCLAVE****Brand:** Tuttnauer**Model:** N/A**Location:** Makmal Persediaan Mikrob, Blok 08, Aras
Bawah, Mikrobiologi**Person-in-charge:** Mr Joohari Bin Ismail**Ext. no.:** 5926**Email:** joohari@um.edu.my

FACULTY OF SCIENCE

INSTITUTE OF BIOLOGICAL SCIENCES

GEL DOCUMENTATION SYSTEM**Brand:** N/A**Model:** N/A**Location:** Makmal GM2 & GM3, Blok B09, Aras 1, Genetik**Person-in-charge:** Mdm Nor Rashina Binti Mohd Rashid**Ext. no.:** 5907**Email:** shina@um.edu.my**GEL DOCUMENTATION SYSTEM****Brand:** N/A**Model:** N/A**Location:** Mikrobiologi Makmal Teknologi Penapaian, Blok B08, Aras Bawah, Mikrobiologi**Person-in-charge:** Mdm Hafizatul Anis Binti Mohamed Zan**Ext. no.:** 5860**Email:** anismz@um.edu.my**GEL DOCUMENTATION SYSTEM****Brand:** UVP**Model:** N/A**Location:** Makmal SBK, Blok D, Aras Bawah**Person-in-charge:** Mdm Hazulina Binti Che Ab Aziz**Ext. no.:** 6746**Email:** hazu@um.edu.my**GEL DOCUMENTATION SYSTEM****Brand:** BioRad**Model:** EZ System**Location:** Makmal MBT1, Blok C, Aras 3, Bangunan Sains Baru**Person-in-charge:** Mr Mohamad Fakhrol Hisham Bin Hashim**Ext. no.:** 6746**Email:** syamyao@um.edu.my**GEL DOCUMENTATION SYSTEM****Brand:** Vilber**Model:** Fusion FX7-7026**Location:** Makmal Biologi Molekul, Aras Bawah, Blok E MUCED**Person-in-charge:** Mdm Norlida Binti Hussain**Ext. no.:** 4135**Email:** eidda@um.edu.my**GLASS TISSUE ORGAN BATH SYSTEM****Brand:** ADInstruments**Model:** RADNOTI**Location:** Makmal Biokimia, Aras 3, Blok D, Jabatan Kimia**Person-in-charge:** Mdm Zanariah Adris**Ext. no.:** 6795**Email:** zanariah@um.edu.my**GRADIENT THERMOCYCLER****Brand:** Biometra**Model:** T-Gradient**Location:** Makmal Virology, Blok B03, Aras 1, Mikrobiologi**Person-in-charge:** Ms Izwani Binti Ismail**Ext. no.:** N/A**Email:** izwani@um.edu.my**GROWTH CHAMBER****Brand:** Protech**Model:** GC-1600**Location:** Makmal Mikologi, Level 2, Blok B**Person-in-charge:** Mdm Rusidah Binti Ahmad**Ext. no.:** 6714**Email:** rusidah@um.edu.my

FACULTY OF SCIENCE

INSTITUTE OF BIOLOGICAL SCIENCES

HYDRAULIC CONDUCTANCE FLOWMETER

Brand: Dynamax

Model: HCFM-XP GEN 3

Location: Makmal Ekofisiologi, Blok B, Tingkat Bawah

Person-in-charge: Ms Nurul Liyana Binti Mohd Johari

Ext. no.: 4390

Email: yana2172@um.edu.my

IMAGE SCANNER

Brand: Epson

Model: J181A

Location: Makmal Proteomik, E1.1, Aras 2, Blok E

Person-in-charge: Mr Mohd Mazlan Bin Ahmad

Ext. no.: 4208

Email: mazlan76@um.edu.my

INCUBATOR SHAKER

Brand: Jeiotech

Model: S1900R

Location: Makmal Biokimia, Aras 3, Blok D, Jabatan Kimia

Person-in-charge: Mdm Zanariah Adris

Ext. no.: 6795

Email: zanariah@um.edu.my

INCUBATOR SHAKER

Brand: Inforst

Model: ECOTRON

Location: Makmal Molekular Genetik, Blok B08, Aras 1, Mikrobiologi

Person-in-charge: Mr Abdul Hamiz Bin Abdul Hamid

Ext. no.: 5969

Email: hamiz@um.edu.my

INCUBATOR SHAKER

Brand: Thermo Scientific

Model: MAXQ 4001

Location: Makmal MBT1, Blok C, Aras 3, Bangunan Sains Baru

Person-in-charge: Mr Mohamad Fakhrul Hisham Bin Hashim

Ext. no.: 6746

Email: syamyao@um.edu.my

INCUBATOR SHAKER

Brand: Thermo Scientific

Model: FORMA 420

Location: Makmal Mikologi, Level 2, Blok B

Person-in-charge: Mdm Rusidah Binti Ahmad

Ext. no.: 6714

Email: rusidah@um.edu.my

INVERTED BINOC MICROSCOPE

Brand: Olympus

Model: IX71

Location: Makmal EMIL, Blok B, Aras 4

Person-in-charge: Mdm Norzuliana Binti Ismail

Ext. no.: 6746

Email: norzuliana@um.edu.my

INVERTED BINOC/TRINOC MICROSCOPE

Brand: Motic

Model: AE31

Location: Makmal E2.5, Aras 3, Blok E

Person-in-charge: Mdm Norlidawati Mohamed Sapi

Ext. no.: 6791

Email: N/A

FACULTY OF SCIENCE

INSTITUTE OF BIOLOGICAL SCIENCES

INVERTED BINOC/TRINOC MICROSCOPE**Brand:** Nikon**Model:** E200**Location:** Makmal HIR Fungsi Molekul, Aras 3, Blok D,
Jabatan Kimia**Person-in-charge:** Mdm Norhaya Binti Abdul Rahim**Ext. no.:** 2771**Email:** norhaya@um.edu.my**INVERTED FLUORESCENCE MICROSCOPE****Brand:** N/A**Model:** N/A**Location:** Makmal BGM2, Blok B03, Aras 1, Genetik**Person-in-charge:** Ms Nur Izana Binti Mohd Noor**Ext. no.:** 5801**Email:** nurizana@um.edu.my**INVERTED PHOTOMICROSCOPE****Brand:** Zeiss**Model:** A Xiovert 135m**Location:** Makmal EMIL, Blok B, Aras 4**Person-in-charge:** Mdm Norzuliana Binti Ismail**Ext. no.:** 6746**Email:** norzuliana@um.edu.my**INVERTED TRINOCULAR MICROSCOPE****Brand:** Leica**Model:** Leica DMI6000B**Location:** Makmal Sel Kultur, Blok D, Aras Bawah**Person-in-charge:** Ms Siti Rugayah Mohd Hashim**Ext. no.:** 6746**Email:** ctrugayah@um.edu.my**INVERTED TRINOCULAR MICROSCOPE****Brand:** Nikon Eclipse**Model:** TS100**Location:** Pusat Penyelidikan Bioteknologi Kulat, Blok A**Person-in-charge:** Mr Khairul Nizam Bin Jamaluddin**Ext. no.:** 4208**Email:** niezam_kk5@um.edu.my**INVERTED TRINOCULAR MICROSCOPE****Brand:** Leica**Model:** N/A**Location:** Makmal Toksikologi Persekitaran A.B, Level
Bawah, Blok D**Person-in-charge:** Mdm Nurziha Sarah Binti Abdul
Rahman**Ext. no.:** 7183**Email:** nurzihasarah@um.edu.my**INVERTED TRINOCULAR MICROSCOPE****Brand:** Nikon**Model:** ECLIPSE TS100**Location:** E213-Makmal Fikologi, Blok E, Aras 2**Person-in-charge:** Mr Faisal Hadi Bin Mohd Amizam**Ext. no.:** 6704**Email:** faisalhadi@um.edu.my**ISOELECTRIC FOCUSING SYSTEM - 2 UNITS****Brand:** Ettan**Model:** IPGPHOR 3**Location:** Makmal Proteomik, E1.1, Aras 2, Blok E**Person-in-charge:** Mr Mohd Mazlan Bin Ahmad**Ext. no.:** 4208**Email:** mazlan76@um.edu.my**LAMINAR FLOW CABINET****Brand:** Thermo Scientific**Model:** 1386**Location:** Makmal E2.5, Aras 3, Blok E**Person-in-charge:** Mdm Norlidawati Mohamed Sapi**Ext. no.:** 6791**Email:** N/A

FACULTY OF SCIENCE

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MASTERCYCLER

Brand: Eppendorf

Model: Mastercycler gradient

Location: Makmal BGM2, Blok B03, Aras 1, Genetik

Person-in-charge: Ms Nur Izana Binti Mohd Noor

Ext. no.: 5801

Email: nurizana@um.edu.my

MASTERCYCLER PCR SYSTEM

Brand: N/A

Model: N/A

Location: D31-Animal Genom, Blok B05 , Aras 1, Genetik

Person-in-charge: Assoc Prof. Dr. Subha A/p Bhassu

Ext. no.: 5829

Email: subhabhassu@um.edu.my

MAXI THERMAL CYCLER

Brand: N/A

Model: N/A

Location: Makmal Genetik Microbiology, Blok B08, Aras 1, Mikrobiologi

Person-in-charge: Mr Mohd Hafiz Bin Mansor

Ext. no.: 5969

Email: hafiz_20@um.edu.my

MAXI THERMAL CYCLER

Brand: Swift

Model: MAXI

Location: Makmal SBK, Blok D, Aras Bawah

Person-in-charge: Mdm Hazulina Binti Che Ab Aziz

Ext. no.: 6746

Email: hazu@um.edu.my

MICROBIAL BIOREACTOR

Brand: Biosys Str

Model: SRT 3-OXY

Location: Makmal Mikologi, Level 2, Blok B

Person-in-charge: Mdm Rusidah Binti Ahmad

Ext. no.: 6714

Email: rusidah@um.edu.my

MICROFORGE ICSI

Brand: TPI

Model: N/A

Location: Makmal EMIL, Blok B, Aras 4

Person-in-charge: Mdm Norzuliana Binti Ismail

Ext. no.: 6746

Email: norzuliana@um.edu.my

MICROPULLER

Brand: Sutter

Model: P-97

Location: Makmal EMIL, Blok B, Aras 4

Person-in-charge: Mdm Norzuliana Binti Ismail

Ext. no.: 6746

Email: norzuliana@um.edu.my

MICROSCOPYDIGITAL WORKSTATION CAMERA

Brand: Axio

Model: ERC5S

Location: Makmal HIR Fungsi Molekul, Aras 3, Blok D, Jabatan Kimia

Person-in-charge: Mdm Norhaya Binti Abdul Rahim

Ext. no.: 2771

Email: norhaya@um.edu.my

MICROSCOPE ANAEROBIC SYSTEM

Brand: Thermo Scientific

Model: 1025/1029

Location: Makmal Genetik Microbiology, Blok B08, Aras 1, Mikrobiologi

Person-in-charge: Mr Mohd Hafiz Bin Mansor

Ext. no.: 5969

Email: hafiz_20@um.edu.my

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MICROSCOPE DIGITAL IMAGING SYSTEM**Brand:** N/A**Model:** N/A**Location:** Makmal Ekologi Mikroorganisma. Blok O8, Aras Bawah, Mikrobiologi**Person-in-charge:** Mdm Hafizatul Anis Binti Mohamed Zan**Ext. no.:** 5860**Email:** anismz@um.edu.my**MICROTOME KNIFE SHARPENER****Brand:** Leica**Model:** SP9000**Location:** Makmal A, Blok A, Aras 1**Person-in-charge:** Mr Safulreduan Bin Ramli**Ext. no.:** 6701**Email:** paul_@um.edu.my**MILL GRINDER****Brand:** Polymix Px**Model:** MFC 90D**Location:** Makmal Mikologi, Level 2, Blok B**Person-in-charge:** Mdm Rusidah Binti Ahmad**Ext. no.:** 6714**Email:** rusidah@um.edu.my**NANODROP SPECTROPHOTOMETER****Brand:** Thermo Scientific**Model:** NANODROP 2000**Location:** Makmal Biologi Sel, Blok B08, Aras 1, Mikrobiologi**Person-in-charge:** Mr Mohd Hafiz Bin Mansor**Ext. no.:** 5969**Email:** hafiz_20@um.edu.my**NANODROP SPECTROPHOTOMETER****Brand:** Thermo Scientific**Model:** ND 2000**Location:** Makmal Biologi Molekul, Aras Bawah, Blok E MUCED**Person-in-charge:** Mdm Norlida Binti Hussain**Ext. no.:** 4135**Email:** eidda@um.edu.my**NITROGEN GENERATOR****Brand:** N/A**Model:** N/A**Location:** Bilik GCMS, Blok E, Aras Bawah**Person-in-charge:** Mdm Norhaya Binti Abdul Rahim**Ext. no.:** 2771**Email:** norhaya@um.edu.my**NON-INVASIVE BLOOD PRESSURE****Brand:** Kent Scientific Corporation**Model:** CODA**Location:** Makmal Biokimia, Aras 3, Blok D, Jabatan Kimia**Person-in-charge:** Mdm Zanariah Adris**Ext. no.:** 6795**Email:** zanariah@um.edu.my**PERISTALTIC PUMP MINIMATE SYSTEM****Brand:** Masterflex**Model:** N/A**Location:** BTF7, Makmal Bioproses, Tingkat 4, Blok B**Person-in-charge:** Mr Razali Bin Md Jonit**Ext. no.:** 7183**Email:** razali@um.edu.my**PHOTOSYNTHESIS SYSTEM****Brand:** ADC BioScientific**Model:** LCI-SD**Location:** Makmal Ekofisiologi, Blok B, Tingkat Bawah**Person-in-charge:** Ms Nurul Liyana Binti Mohd Johari**Ext. no.:** 4390**Email:** yana2172@um.edu.my

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PLANT GROWTH CHAMBER**Brand:** Sastec**Model:** N/A**Location:** Plant Breeding Lab, Blok B05, Aras Bawah
Mikrobiologi**Person-in-charge:** Ms Izwani Binti Ismail**Ext. no.:** N/A**Email:** izwani@um.edu.my**PLANT GROWTH CHAMBER****Brand:** Precision**Model:** N/A**Location:** BTF7, Makmal Bioproses, Tingkat 4, Blok B**Person-in-charge:** Mr Razali Bin Md Jonit**Ext. no.:** 7183**Email:** razali@um.edu.my**PLANT GROWTH CHAMBER****Brand:** Thermo Scientific**Model:** FORMA**Location:** Makmal Mikologi, Level 2, Blok B**Person-in-charge:** Mdm Rusidah Binti Ahmad**Ext. no.:** 6714**Email:** rusidah@um.edu.my**PORTABLE AUTOCLAVE****Brand:** Yamato**Model:** SM510**Location:** Bilik Persediaan Botani, Tingkat Bawah,
Bangunan Rimba Ilmu**Person-in-charge:** Mr Khairul Azmi Bin Abdul Rahman**Ext. no.:** 4685**Email:** khairul_azmi@um.edu.my**PORTABLE PHOTOSYNTHESIS SYSTEM****Brand:** Licor**Model:** LI6400**Location:** Makmal Ekofisiologi, Blok B, Tingkat Bawah**Person-in-charge:** Ms Nurul Liyana Binti Mohd Johari**Ext. no.:** 4390**Email:** yana2172@um.edu.my**POWER SUPPLY FOR ELECTROPHORESIS****Brand:** EPS**Model:** 3501 XL**Location:** Makmal E1.2, Aras 2, Blok E**Person-in-charge:** Mr Mohd Mazlan Bin Ahmad**Ext. no.:** 4208**Email:** mazlan76@um.edu.my**PROTEOMICS ELECTROPHORESIS SET****Brand:** Ettan Dalttwelve**Model:** Ettan Dalttwelve**Location:** Makmal HIR Fungsi Molekul, Aras 3, Blok D,
Jabatan Kimia**Person-in-charge:** Mdm Norhaya Binti Abdul Rahim**Ext. no.:** 2771**Email:** norhaya@um.edu.my**REAL TIME PCR SYSTEM****Brand:** ABI**Model:** STEPONE PLUS**Location:** Makmal HIR Fungsi Molekul, Aras 3, Blok D,
Jabatan Kimia**Person-in-charge:** Mdm Norhaya Binti Abdul Rahim**Ext. no.:** 2771**Email:** norhaya@um.edu.my**REAL TIME PCR SYSTEM****Brand:** N/A**Model:** N/A**Location:** Mikrobiologi Makmal Teknologi Penapaian,
Blok B08, Aras Bawah, Mikrobiologi**Person-in-charge:** Mdm Hafizatul Anis Binti Mohamed
Zan**Ext. no.:** 5860**Email:** anismz@um.edu.my

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REAL TIME PCR SYSTEM**Brand:** Qiagen**Model:** ROTOR GENE-Q**Location:** Makmal Genetik Microbiology, Blok B08, Aras 1, Mikrobiologi**Person-in-charge:** Mr Mohd Hafiz Bin Mansor**Ext. no.:** 5969**Email:** hafiz_20@um.edu.my**REAL TIME PCR SYSTEM****Brand:** Qiagen**Model:** ROTOR DISC-HEAT SEALER**Location:** Makmal E2.5, Aras 3, Blok E**Person-in-charge:** Mdm Norlidawati Mohamed Sapi**Ext. no.:** 6791**Email:** N/A**REAL TIME PCR SYSTEM****Brand:** BioRad**Model:** CFX 96**Location:** Makmal Biologi Molekul, Aras Bawah, Blok E MUCED**Person-in-charge:** Mdm Norlida Binti Hussain**Ext. no.:** 4135**Email:** eidda@um.edu.my**REFRIGERATED CENTRIFUGE****Brand:** Thermo Scientific**Model:** ST16R**Location:** Makmal Projek Biokimia, Aras 3, Blok D, Jabatan Kimia**Person-in-charge:** Ms Hazwani Ab Lazak**Ext. no.:** 6791**Email:** wani_lazak@um.edu.my**REFRIGERATED CENTRIFUGE****Brand:** N/A**Model:** N/A**Location:** Makmal GM2 & GM3, Blok B09, Aras 1, Genetik**Person-in-charge:** Mdm Nor Rashina Binti Mohd Rashid**Ext. no.:** 5907**Email:** shina@um.edu.my**REFRIGERATED CENTRIFUGE****Brand:** Heraeus**Model:** N/A**Location:** Makmal EMIL, Blok B, Aras 4**Person-in-charge:** Mdm Norzuliana Binti Ismail**Ext. no.:** 6746**Email:** norzuliana@um.edu.my**REFRIGERATED CENTRIFUGE****Brand:** Thermo Scientific**Model:** N/A**Location:** Makmal SBK, Blok D, Aras Bawah**Person-in-charge:** Mdm Hazulina Binti Che Ab Aziz**Ext. no.:** 6746**Email:** hazu@um.edu.my**REFRIGERATED CENTRIFUGE****Brand:** Thermofisher Scientific**Model:** Sorvall ST40R**Location:** Makmal MBT1, Blok C, Aras 3, Bangunan Sains Baru**Person-in-charge:** Mr Mohamad Fakhrul Hisham Bin Hashim**Ext. no.:** 6746**Email:** syamyao@um.edu.my

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REFRIGERATED CENTRIFUGE

Brand: Hermle

Model: Z383k

Location: Pusat Penyelidikan Bioteknologi Kulat, Blok A

Person-in-charge: Mdm Rusidah Binti Ahmad

Ext. no.: 6714

Email: rusidah@um.edu.my

REFRIGERATED CENTRIFUGE

Brand: Thermofisher Scientific

Model: SORVALL ST16R

Location: Makmal Ekofisiologi, Blok B, Tingkat Bawah

Person-in-charge: Mr Syed Azminnudin Bin Syed Azizuddin

Ext. no.: 7183

Email: azmin@um.edu.my

REFRIGERATED INCUBATOR

Brand: New Brunswick

Model: INNOVA 44

Location: Makmal Genetik Microbiology, Blok B08, Aras 1, Mikrobiologi

Person-in-charge: Mr Mohd Hafiz Bin Mansor

Ext. no.: 5969

Email: hafiz_20@um.edu.my

REFRIGERATED INCUBATOR

Brand: N/A

Model: N/A

Location: Makmal Genetik Microbiology, Blok B08, Aras 1, Mikrobiologi

Person-in-charge: Mdm Hafizatul Anis Binti Mohamed Zan

Ext. no.: 5860

Email: anismz@um.edu.my

SCANNER WITH WINRHIZON SOFTWARE SYSTEM

Brand: Epson

Model: V700

Location: Makmal Ekofisiologi, Blok B, Tingkat Bawah

Person-in-charge: Ms Nurul Liyana Binti Mohd Johari

Ext. no.: 4390

Email: yana2172@um.edu.my

SPERM ANALYZER

Brand: Hamilton Thorne

Model: HTM IVOS

Location: Ladang Mini

Person-in-charge: Mdm Norzuliana Binti Ismail

Ext. no.: 6746

Email: norzuliana@um.edu.my

STEREO MICROSCOPE

Brand: N/A

Model: N/A

Location: Bilik Mikroskopi, Blok B, Aras Bawah

Person-in-charge: Mdm Shamsiah Binti Mustafa

Ext. no.: 5177

Email: samsiahm@um.edu.my

STIRRED TANK GLASS REACTOR

Brand: Biosys

Model: SRT 5L

Location: Makmal Mikologi, Level 2, Blok B

Person-in-charge: Mdm Rusidah Binti Ahmad

Ext. no.: 6714

Email: rusidah@um.edu.my

TOP LOADING AUTOCLAVE

Brand: Hirayama

Model: HV-110

Location: Makmal Mikologi, Level 2, Blok B

Person-in-charge: Mdm Rusidah Binti Ahmad

Ext. no.: 6714

Email: rusidah@um.edu.my

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ULTRA CENTRIFUGE

Brand: Thermofisher Scientific

Model: SORVALL

Location: Makmal Biologi Molekul, Aras Bawah, Blok E MUCED

Person-in-charge: Mdm Norlida Binti Hussain

Ext. no.: 4135

Email: eidda@um.edu.my

VAPOUR PRESSURE OSMOMETER

Brand: Wescor

Model: 5520

Location: Makmal EMIL, Blok B, Aras 4

Person-in-charge: Mdm Norzuliana Binti Ismail

Ext. no.: 6746

Email: norzuliana@um.edu.my

VETERINARY ULTRASOUND SYSTEM

Brand: N/A

Model: N/A

Location: Makmal Biotek Haiwan, Blok Tengah, Aras 1, PPBGL, Jelebu, Negeri Sembilan

Person-in-charge: Mr Azman Bin Mat Nor

Tel. no.: 06-6113352

Email: azmn@um.edu.my

WATER PURIFICATION SYSTEM

Brand: Merck Miliipore

Model: INTEGRAL 5

Location: Makmal HIR Fungsi Molekul, Aras 3, Blok D, Jabatan Kimia

Person-in-charge: Mdm Norhaya Binti Abdul Rahim

Ext. no.: 2771

Email: norhaya@um.edu.my

WATER PURIFICATION SYSTEM

Brand: Sartorius Stedim

Model: Arium 61316

Location: Makmal Genetik Microbiology, Blok B08, Aras 1, Mikrobiologi

Person-in-charge: Mr Mohd Hafiz Bin Mansor

Ext. no.: 5969

Email: hafiz_20@um.edu.my

WATER PURIFICATION SYSTEM

Brand: Merck Miliipore

Model: DIRECT-Q5

Location: Makmal Fungal Genetik, Blok B08, Aras 1, Mikrobiologi

Person-in-charge: Mr Abdul Hamiz Bin Abdul Hamid

Ext. no.: 5969

Email: hamiz@um.edu.my

WATER PURIFICATION SYSTEM

Brand: Merck Miliipore

Model: N/A

Location: Makmal SBK, Blok D, Aras Bawah

Person-in-charge: Mdm Hazulina Binti Che Ab Aziz

Ext. no.: 6746

Email: hazu@um.edu.my

SPORT & EXERCISE SCIENCES CENTRE

-86°C FREEZER**Brand:** Medfrez**Model:** N/A**Location:** Makmal Analitikal, Ground Floor UM Arena**Person-in-charge:** Mr Mohd Hafiszan Mohd Yusuf**Ext. no.:** 2496**Email:** fiz05@um.edu.my**BENCHTOP REFRIGERATED CENTRIFUGE****Brand:** Thermo Scientific**Model:** Haraues Multifuged X1R**Location:** Makmal Analitikal, Ground Floor UM Arena**Person-in-charge:** Mr Mohd Hafiszan Mohd Yusuf**Ext. no.:** 2496**Email:** fiz05@um.edu.my**BODY SEGMENTAL ANALYZER****Brand:** BIOSPACE**Model:** InBody 370 / JMW140**Location:** Makmal Analitikal, Ground Floor UM Arena**Person-in-charge:** Ms Hafidzatulnur Mohd Rathy**Ext. no.:** 2496**Email:** hafidzatulnur@um.edu.my**CENTRIFUGE BLOOD ANALYZER****Brand:** Roche**Model:** Reflotron Plus**Location:** Makmal Analitikal, Ground Floor UM Arena**Person-in-charge:** Mr Abdul Rahman Mohd Yusof**Ext. no.:** 2496**Email:** manunic@um.edu.my**ELECTRIC STIMULATOR****Brand:** Digimeter**Model:** DS7A**Location:** Makmal Analitikal, Ground Floor UM Arena**Person-in-charge:** Mr Mohd Hafiszan Mohd Yusuf**Ext. no.:** 2496**Email:** fiz05@um.edu.my**INTERFACE DEVICE AND SOFTWARE****Brand:** National Instrument**Model:** NI PXI - 1033**Location:** Makmal Analitikal, Ground Floor UM Arena**Person-in-charge:** Mr Mohd Hafiszan Mohd Yusuf**Ext. no.:** 2496**Email:** fiz05@um.edu.my**ISOKINETICS - TESTING AND REHABILITATION SYSTEM****Brand:** HUMAC NORM**Model:** 502140**Location:** Makmal Analitikal, Ground Floor UM Arena**Person-in-charge:** Mr Mohd Hafiszan Mohd Yusuf**Ext. no.:** 2496**Email:** fiz05@um.edu.my**LACTATE ANALYZER****Brand:** YSI**Model:** 2300 STAT Plus**Location:** Makmal Analitikal, Ground Floor UM Arena**Person-in-charge:** Mr Mohd Hafiszan Mohd Yusuf**Ext. no.:** 2496**Email:** fiz05@um.edu.my**METABOLIC ANALYZER****Brand:** Cosmed**Model:** Quark CPET**Location:** Makmal Analitikal, Ground Floor UM Arena**Person-in-charge:** Mr Abdul Rahman Mohd Yusof**Ext. no.:** 2496**Email:** manunic@um.edu.my**PORTABLE CARDIOPULMONARY GAS EXCHANGE ANALYZER****Brand:** Cosmed**Model:** K4B2 TX**Location:** Makmal Analitikal, Ground Floor UM Arena**Person-in-charge:** Mr Abdul Rahman Mohd Yusof**Ext. no.:** 2496**Email:** manunic@um.edu.my

$$E = mc^2$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$F(n) = \frac{(\varphi)^n - (-\frac{1}{\varphi})^n}{\sqrt{5}}$$

$$\left(\frac{N_50}{x} \right)$$

$$-rV = 0$$

$$J(x) = Li(x) + \sum_p Li(x^p) - \log 2 + \int_x^\infty \frac{dt}{t(t^2-1)}$$

$$-\pi$$

PHYSICAL ANALYSIS

CENTRE FOR FOUNDATION STUDIES

DYNAMIC MECHANICAL ANALYZER (DMA)**Brand:** Perkin Elmer**Model:** DMA 8000**Location:** Bilik Pencirian 2, Makmal Penyelidikan, Aras
2**Person-in-charge:** Mdm Saripah Ismail,
Ms Noor Fhadzilah Mansur**Ext. no.:** 2342**Email:** saripah68@um.edu.my,
fhadzilahmansur@um.edu.my**IMPEDANCE ANALYZER****Brand:** Solartron**Model:** N/A**Location:** Bilik Pencirian 1, Makmal Penyelidikan, Aras
2**Person-in-charge:** Mdm Saripah Ismail,
Ms Noor Fhadzilah Mansur**Ext. no.:** 2344**Email:** saripah68@um.edu.my,
fhadzilahmansur@um.edu.my**LASER PARTICLE SIZER****Brand:** FRITSCH**Model:** Analysette 22 nanoTec Plus**Location:** Bilik Pencirian 1, Makmal Penyelidikan, Aras
2**Person-in-charge:** Mdm Saripah Ismail,
Ms Noor Fhadzilah Mansur**Ext. no.:** 2337**Email:** saripah68@um.edu.my,
fhadzilahmansur@um.edu.my**SCANNING ELECTRON MICROSCOPY (SEM) WITH
EDX SPECTROMETER****Brand:** Zeiss**Model:** EVO MA 10**Location:** Bilik Pencirian 7, Makmal Penyelidikan, Aras
2**Person-in-charge:** Mdm Saripah Ismail,
Ms Noor Fhadzilah Mansur**Ext. no.:** 2341**Email:** saripah68@um.edu.my,
fhadzilahmansur@um.edu.my

**CENTRE FOR RESEARCH SERVICES (PPP),
INSTITUTE OF RESEARCH MANAGEMENT & SERVICES (IPPP)****INFRA ANALYSIS****CONFOCAL LASER SCANNING MICROSCOPE**

Brand: Leica

Model: TCS SP5 II

Location: D107, Confocal Laboratory, Institute of Postgraduate Studies Building

Person-in-charge: Mdm Jauhar Aisyah Junaidi,
Ms Fatimah Zahrah Mohamad

Ext. no.: 4682

Email: jauharaisyah@um.edu.my,
fatimahzahrah@um.edu.my

CRITICAL POINT DRYER

Brand: POLARON

Model: CPD 7501

Location: C202, FESEM Laboratory, Institute of Postgraduate Studies Building

Person-in-charge: Mr Mohd. Zulhizan Zakaria,
Mr Hasbullah Ibrahim

Ext. no.: 4616

Email: mohd_zulhizan@um.edu.my,
hasbullah_85@um.edu.my

DYNAMIC MECHANICAL ANALYZER (DMA)

Brand: Perkin Elmer

Model: DMA 8000

Location: INFRA Analysis Laboratory, Level 3, Research Management & Innovation Complex

Person-in-charge: Mr Jebri Sulaiman,
Mdm Rahimah Ismail

Ext. no.: 7022 ext 2320

Email: jebri@um.edu.my,
rahimah_ismail@um.edu.my

ELLIPSOMETER

Brand: J. A. WOOLLAM

Model: M-2000V

Location: INFRA Advanced Laboratory, Level G,
Research Management & Innovation Complex

Person-in-charge: Mr Hasbullah Ibrahim

Ext. no.: 7022 ext 2327

Email: hasbullah_85@um.edu.my

ENERGY DISPERSIVE X-RAY (EDX)

Brand: OXFORD INSTRUMENTS

Model: XMAX 50

Location: C202, FESEM Laboratory, Institute of Postgraduate Studies Building

Person-in-charge: Mr Mohd. Zulhizan Zakaria,
Mr Hasbullah Ibrahim

Ext. no.: 4616

Email: mohd_zulhizan@um.edu.my,
hasbullah_85@um.edu.my

**FIELD EMISSION SCANNING ELECTRON
MICROSCOPE (FESEM)**

Brand: FEI

Model: QUANTA FEG 450

Location: C202, FESEM Laboratory, Institute of Postgraduate Studies Building

Person-in-charge: Mr Mohd. Zulhizan Zakaria,
Mr Hasbullah Ibrahim

Ext. no.: 4616

Email: mohd_zulhizan@um.edu.my,
hasbullah_85@um.edu.my

**CENTRE FOR RESEARCH SERVICES (PPP),
INSTITUTE OF RESEARCH MANAGEMENT & SERVICES (IPPP)****INFRA ANALYSIS****PARTICLE IMAGE VELOCIMETRY****Brand:** DANTEC DYNAMIC**Model:** NANO L135-15PIV**Location:** INFRA Advanced Laboratory, Level G,
Research Management & Innovation
Complex**Person-in-charge:** Mr Hasbullah Ibrahim, Mr
Muhammad Irfan Kamal**Ext. no.:** 7022 ext 2320**Email:** hasbullah_85@um.edu.my,
irfan_kamal@um.edu.my**RHEOMETER****Brand:** TA Instruments**Model:** DHR-2**Location:** INFRA Advanced Laboratory, Level G,
Research Management & Innovation
Complex**Person-in-charge:** Mdm Rosyida Rosli,
Mr Hasbullah Ibrahim**Ext. no.:** 7022 ext 2327**Email:** rosyidarosli@um.edu.my,
hasbullah_85@um.edu.my**SPUTTER COATER (GOLD/CARBON COATING)****Brand:** BIORAD**Model:** N/A**Location:** C202, FESEM Laboratory, Institute of
Postgraduate Studies Building**Person-in-charge:** Mr Mohd. Zulhizan Zakaria**Ext. no.:** 4616**Email:** mohd_zulhizan@um.edu.my**SURFACE AREA ANALYZER****Brand:** MICROMERITICS**Model:** ASAP 2020**Location:** INFRA Analysis Laboratory, Level 3, Research
Management & Innovation Complex**Person-in-charge:** Mr Jasmi Abd Aziz,
Mr Muhammad Irfan Kamal**Ext. no.:** 7022 ext 2320**Email:** jazz@um.edu.my,
irfan_kamal@um.edu.my**SURFACE AREA ANALYZER****Brand:** MICROMERITICS**Model:** TRISTAR II 3020**Location:** INFRA Analysis Laboratory, Level 3, Research
Management & Innovation Complex**Person-in-charge:** Mr Jasmi Abd Aziz,
Mr Muhammad Irfan Kamal**Ext. no.:** 7022 ext 2320**Email:** jazz@um.edu.my,
irfan_kamal@um.edu.my**TENSIOMETER****Brand:** ATTENSION**Model:** SIGMA 700**Location:** INFRA Advanced Laboratory, Level G,
Research Management & Innovation
Complex**Person-in-charge:** Mr Hasbullah Ibrahim,
Mr Jebri Sulaiman**Ext. no.:** 7022 ext 2327**Email:** hasbullah_85@um.edu.my,
jebri@um.edu.my

**CENTRE FOR RESEARCH SERVICES (PPP),
INSTITUTE OF RESEARCH MANAGEMENT & SERVICES (IPPP)****INFRA HIR****HIGH RESOLUTION COMPOUND MICROSCOPE****Brand:** Leica**Model:** DM6000B**Location:** Microscopy Room, Level 2, HIR Building**Person-in-charge:** Mdm Zuliana Zainal Abidin**Ext. no.:** 2577, 2578**Email:** zulianazainal@um.edu.my**LIVE CELL IMAGING MICROSCOPE****Brand:** Leica**Model:** STP 6000**Location:** Microscopy Room, Level 2, HIR Building**Person-in-charge:** Mdm Zuliana Zainal Abidin**Ext. no.:** 2577, 2578**Email:** zulianazainal@um.edu.my**TABLE TOP SCANNING ELECTRON MICROSCOPE****Brand:** Hitachi**Model:** TM3030**Location:** Makmal SEM, Level 2, HIR Building**Person-in-charge:** Mdm Zuliana Zainal Abidin**Ext. no.:** 2577, 2578**Email:** zulianazainal@um.edu.my**FACULTY OF BUILT ENVIRONMENT****ENVIRONMENTAL DATA LOGGER****Brand:** LSI Lastem**Model:** Babuc A**Location:** Makmal Fizik Persekitaran, Blok Ukur**Person-in-charge:** Mdm Nurshuhada Hilal**Ext. no.:** 6889**Email:** nurshuhadahilal@um.edu.my**IAQ MONITOR****Brand:** Yes Air**Model:** Yes Air-D**Location:** Makmal Fizik Persekitaran, Blok Ukur**Person-in-charge:** Mdm Nurshuhada Hilal**Ext. no.:** 6889**Email:** nurshuhadahilal@um.edu.my**IAQ MONITOR****Brand:** Gray Wolf**Model:** Advanced Sense Pro**Location:** Makmal Fizik Persekitaran, Blok Ukur**Person-in-charge:** Mdm Nurshuhada Hilal**Ext. no.:** 6889**Email:** nurshuhadahilal@um.edu.my

FACULTY OF BUILT ENVIRONMENT

LASER CUTTER MACHINE - 3 UNITS**Brand:** ENG-TH**Model:** TH13**Location:** Makmal Laser Fabrication, Aras Bawah, Blok Ukur**Person-in-charge:** Mdm Nurshuhada Hilal,
Mdm Nurulfazila Mohd Sajuti**Ext. no.:** 6889, 7610**Email:** nurshuhadahilal@um.edu.my,
nurulms@um.edu.my**THERMAL IMAGING TESTER****Brand:** Flukes**Model:** Flukes**Location:** Bilik Peralatan Pembelajaran, Tingkat 6**Person-in-charge:** Mr Syedi Muhamad**Ext. no.:** 5374**Email:** syedi@um.edu.my

FACULTY OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

BLADE SERVER**Brand:** COM - DELL POWER EDGE**Model:** COM - DELL POWER EDGE**Location:** B-3-7 Lecturer Room**Person-in-charge:** Professor Dr. Abdullah Gani**Ext. no.:** 6345**Email:** abdullah@um.edu.my**BLADE SERVER****Brand:** COM - IBM**Model:** COM - IBM**Location:** Server Room**Person-in-charge:** Assoc Professor Dr. Ling Teck Chaw**Ext. no.:** 6362**Email:** tchaw@um.edu.my**DATA ACQUISITION USING RFID MODULE LUCAS NULLE SO4204-9S****Brand:** MED - GTEC G.MOBILAB+**Model:** MED - GTEC G.MOBILAB+**Location:** Lecturer Room**Person-in-charge:** Mr Emran Mohd Tamil**Ext. no.:** 6437**Email:** emran@um.edu.my**ROBOT/ROBOTICS****Brand:** COM - NAO H-25**Model:** COM - NAO H-25**Location:** A-3-8 Lecturer Room**Person-in-charge:** Professor Dr. Loo Chu Kiong**Ext. no.:** 6314/6381**Email:** ckloo.um@um.edu.my**ROBOT/ROBOTICS****Brand:** COM - DARWIN-OP**Model:** COM - DARWIN-OP**Location:** A-3-8 Lecturer Room**Person-in-charge:** Professor Dr. Loo Chu Kiong**Ext. no.:** 6314/6381**Email:** ckloo.um@um.edu.my**ROBOT/ROBOTICS - WIRELESS MOBILE ROBOT****Brand:** COM - H20+**Model:** COM - H20+**Location:** A-3-8 Lecturer Room**Person-in-charge:** Professor Dr. Loo Chu Kiong**Ext. no.:** 6314/6381**Email:** ckloo.um@um.edu.my

FACULTY OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

ROBOTIC LIQUID HANDLING SYSTEM**Brand:** COM - NEUROELECTRICS BARCE**Model:** COM - NEUROELECTRICS BARCE**Location:** A-3-8 Lecturer Room**Person-in-charge:** Professor Dr. Loo Chu Kiong**Ext. no.:** 6314/6381**Email:** ckloo.um@um.edu.my**TOWER SERVER****Brand:** COM - HP ML370**Model:** COM - HP ML370**Location:** B-1-5 Lecturer Room**Person-in-charge:** Assoc Professor Dr. Por Lip Yee**Ext. no.:** 6410**Email:** porlip@um.edu.my**STORAGE SERVER****Brand:** COM - DELL POWERVAULT**Model:** COM - DELL POWERVAULT**Location:** NT/SERVER ROOM**Person-in-charge:** Professor Dr. Abdullah Gani**Ext. no.:** 6345**Email:** abdullah@um.edu.my

FACULTY OF DENTISTRY

DYNAMIC MECHANICAL ANALYSER (DMA)**Brand:** TA Instruments**Model:** RSA- G2**Location:** Thermal Lab, Aras G, Blok D**Person-in-charge:** Mdm Nurul Khairiyah**Ext. no.:** 6499**Email:** nurulkhabas@um.edu.my**HARDNESS TESTER****Brand:** SHIMADZU**Model:** HMV-2TFA**Location:** Makmal Penyelidikan Bio Bahan, Aras 7,
Menara Pakar Pergigian & Penyelidikan**Person-in-charge:** Mdm Helen Ng**Ext. no.:** 6460**Email:** leeching_helen@um.edu.my**HIGH RESOLUTION SCANNING ELECTRON
MICROSCOPE****Brand:** PHENOM SEM**Model:** G2**Location:** Makmal Biologi Molekul, Tingkat 1, Balai
Ungku Aziz**Person-in-charge:** MLT BUARL**Ext. no.:** 7450**Email:** N/A

FACULTY OF DENTISTRY

IMAGING SYSTEM**Brand:** ODYSSEY FC**Model:** LI-COR**Location:** Makmal CMBRL, Aras 7, Menara Pakar
Pergigian & Penyelidikan**Person-in-charge:** Mdm Intan Syaheera Binti Abdul
Hamid**Ext. no.:** 6461**Email:** syaheera@um.edu.my**MINI ROCKER SEE-SAW WAVE****Brand:** STUART**Model:** SSM4**Location:** Makmal Biologi Molekul, Tingkat 1, Balai
Ungku Aziz**Person-in-charge:** MLT BUARL**Ext. no.:** 7450**Email:** N/A**SURFACE ROUGHNESS****Brand:** ALICONA**Model:** INFINITE FOCUS REAL 3D ALICONA**Location:** Makmal Penyelidikan Bio Bahan, Aras 7,
Menara Pakar Pergigian & Penyelidikan**Person-in-charge:** Mdm Zarina Idris**Ext. no.:** 6460**Email:** zarina@um.edu.my**THERMAL MECHANICAL ANALYZER****Brand:** SHIMADZU**Model:** TMA60H**Location:** Makmal Penyelidikan Bio Bahan, Aras 7,
Menara Pakar Pergigian & Penyelidikan**Person-in-charge:** Mdm Zarina Idris**Ext. no.:** 6460**Email:** zarina@um.edu.my**ULTRA MICRO DYNAMIC HARDNESS TESTING MACHINE****Brand:** SHIMADZU**Model:** DUH-211S**Location:** Makmal Penyelidikan Bio Bahan, Aras 7,
Menara Pakar Pergigian & Penyelidikan**Person-in-charge:** Mdm Zarina Idris**Ext. no.:** 6460**Email:** zarina@um.edu.my**UNIVERSAL TESTING MACHINE****Brand:** SHIMADZU**Model:** AG-X**Location:** Makmal Penyelidikan Bio Bahan, Aras 7,
Menara Pakar Pergigian & Penyelidikan**Person-in-charge:** Mr Hassan ISmail**Ext. no.:** 6460**Email:** hassan@um.edu.my

FACULTY OF ENGINEERING

CHARACTERIZATION TOOL

Brand: Keithley

Model: 4200-SCS

Location: Microelectronics Lab, 3rd Floor, Block Y

Person-in-charge: Assoc Prof. Dr. Norhayati Binti Soin

Ext. no.: 4583

Email: norhayatisoin@um.edu.my

CLOUD & POUR POINT TESTER

Brand: Normalab

Model: NTE 450

Location: Makmal Kecekapan Tenaga 1, Ground Floor, Block M

Person-in-charge: Mr. Mohd Khairil Bin Roslan

Ext. no.: 2657

Email: mohdkhairilroslan@um.edu.my

CNC DICING/CUTTING SAW

Brand: N/A

Model: SYJ-400

Location: NanoMicro Engineering Laboratory, Level 3, Block M

Person-in-charge: N/A

Ext. no.: 5356

Email: generaloffice_fkej@um.edu.my

COLD FILTER PLUGGING POINT (CFPP)

Brand: Normalab

Model: NTL 450

Location: Makmal Kecekapan Tenaga 1, Ground Floor, Block M

Person-in-charge: N/A

Ext. no.: 5356

Email: generaloffice_fkej@um.edu.my

CONRADSON CARBON RESIDUE (CCR) TESTER

Brand: Normalab

Model: NPC 440

Location: Makmal Kecekapan Tenaga 1, Ground Floor, Block M

Person-in-charge: Mr. Mohd Khairil Bin Roslan

Ext. no.: 2657

Email: mohdkhairilroslan@um.edu.my

DENSITY METER

Brand: Mettler Toledo

Model: DM 40 LIQUIPHYSIC Excellence

Location: Makmal Kecekapan Tenaga 1, Ground Floor, Block M

Person-in-charge: N/A

Ext. no.: 5356

Email: generaloffice_fkej@um.edu.my

DIESEL GENERATOR

Brand: N/A

Model: SG-GMS5

Location: Makmal P/Motor, Pacuan & G/Pintar, Makmal LG, Wisma R&D

Person-in-charge: Dr. Tan Chia Kwang

Ext. no.: N/A

Email: ctan@um.edu.my

DIGITAL OSCILLOSCOPE

Brand: LeCroy

Model: WAVERUNNER 9000 ZI

Location: High Voltage Lab, Level G, Block Y

Person-in-charge: Associate Prof. Ir. Dr. Hazlee Azil Bin Illias

Ext. no.: 4483

Email: h.illias@um.edu.my

FACULTY OF ENGINEERING

DYNAMIC FULLY AUTOMATIC VISCOMETER**Brand:** Anton Paar**Model:** SVM 3000**Location:** Makmal Kecekapan Tenaga 1, Ground Floor,
Block M**Person-in-charge:** N/A**Ext. no.:** 5356**Email:** generaloffice_fkej@um.edu.my**DYNAMOMETER****Brand:** Bentham**Model:** DES411**Location:** Makmal P/Motor, Pacuan & G/Pintar,
Makmal LG, Wisma R&D**Person-in-charge:** N/A**Ext. no.:** 5356**Email:** generaloffice_fkej@um.edu.my**DYNO-PRO MULTI CHANNEL****Brand:** Yanmar**Model:** TF120M**Location:** Engine Lab Test Bed**Person-in-charge:** N/A**Ext. no.:** 5356**Email:** generaloffice_fkej@um.edu.my**ELECTRICAL CONTROL PANEL****Brand:** Wawawa**Model:** 63A MCCB**Location:** Makmal P/Motor, Pacuan & G/Pintar,
Makmal LG, Wisma R&D**Person-in-charge:** Dr. Tan Chia Kwang**Ext. no.:** N/A**Email:** ctan@um.edu.my**FABRICATION AND INSTALLATION OF HEAT EXCHANGER FACILITY****Brand:** N/A**Model:** N/A**Location:** Computational Fluid Dynamic Room**Person-in-charge:** Dr. Oon Cheen Sean**Ext. no.:** N/A**Email:** oonsean@um.edu.my**FLASH POINT TESTER****Brand:** Normalab**Model:** NPM 440**Location:** Makmal Kecekapan Tenaga 1, Ground Floor,
Block M**Person-in-charge:** Mr. Mohd Khairil Bin Roslan**Ext. no.:** 2657**Email:** mohdkhairilroslan@um.edu.my**FUEL CELL SYSTEM****Brand:** Heliocentris**Model:** 793**Location:** Makmal Elektronik Kuasa, Tingkat 15, Wisma
R&D**Person-in-charge:** N/A**Ext. no.:** 5356**Email:** generaloffice_fkej@um.edu.my**FURNACE OVEN****Brand:** N/A**Model:** XY-1400°C**Location:** NanoMicro Engineering Laboratory, Level 3,
Block M**Person-in-charge:** N/A**Ext. no.:** 5356**Email:** generaloffice_fkej@um.edu.my

FACULTY OF ENGINEERING

GRID EMULATOR**Brand:** N/A**Model:** SG/GE-GTR15**Location:** Makmal P/Motor, Pacuan & G/Pintar,
Makmal LG, Wisma R&D**Person-in-charge:** Dr. Tan Chia Kwang**Ext. no.:** N/A**Email:** ctan@um.edu.my**HIGH PRESSURE HOMOGENIZER****Brand:** MICROFLUIDICS/USA M-**Model:** 110P-UL-CE**Location:** Energy Laboratory 2, Level 3, Block R**Person-in-charge:** Dr. Nurin Wahidah Binti Mohd
Zulkifli**Ext. no.:** 4462**Email:** nurinmz@um.edu.my**HIGH VACUUM REFLOW OVEN****Brand:** LJ-UHV**Model:** N/A**Location:** Electronic Packaging Material**Person-in-charge:** Mr. Afendi Bin Ayob**Ext. no.:** 5383**Email:** afendi@um.edu.my**HIGH VOLTAGE AMPLIFIER****Brand:** Trek**Model:** TREK 20/20C**Location:** High Voltage Lab, Level G, Block Y**Person-in-charge:** Associate Prof. Ir. Dr. Hazlee Azil Bin
Illias**Ext. no.:** 4483**Email:** h.illias@um.edu.my**HIGH VOLTAGE GENERATION KIT****Brand:** Terco**Model:** HV 9000**Location:** High Voltage Lab, Level G, Block Y**Person-in-charge:** Associate Prof. Ir. Dr. Hazlee Azil Bin
Illias**Ext. no.:** 4483**Email:** h.illias@um.edu.my**HYDROGEN REFUELING SYSTEM****Brand:** H2 Nitidor**Model:** HSP200**Location:** Hydrogen Refueling Site (Near PALAPES)**Person-in-charge:** Assoc Prof. Ir. Dr. Mahidzal Bin
Dahari**Ext. no.:** 7659**Email:** mahidzal@um.edu.my**INFRARED THERMAL IMAGING CAMERA****Brand:** AVIO**Model:** R300SR-HD**Location:** NanoMicro Engineering Laboratory, Level 3,
Block M**Person-in-charge:** N/A**Ext. no.:** 5356**Email:** generaloffice_fkej@um.edu.my**KNEE TESTING KIT****Brand:** Amti**Model:** ADL-F5-K**Location:** Artificial Organ Laboratory, Level 4, Block M**Person-in-charge:** Prof Ir Dr Noor Azuan Abu Osman**Ext. no.:** N/A**Email:** azuan@um.edu.my**LARGE CHAMBER ELECTRIC FURNACE****Brand:** Locally fabricated**Model:** N/A**Location:** Heavy Structures Lab 2, Ground Floor, Block
N**Person-in-charge:** Mr Mohd Khairul Anwar Abu**Ext. no.:** 5278**Email:** anwarabu@um.edu.my**MECHANOTRANSDUCTION - 2 UNITS****Brand:** Segar Alatan Sains**Model:** N/A**Location:** Artificial Organ Laboratory, Level 4, Block M**Person-in-charge:** Prof Ir Dr Noor Azuan Abu Osman**Ext. no.:** N/A**Email:** azuan@um.edu.my

FACULTY OF ENGINEERING

MICRO VICKER HARDNESS TESTER

Brand: SHIMADZU

Model: G2

Location: Block Q

Person-in-charge: Dr. Iswadi Jauhari

Ext. no.: 5204

Email: iswadi@um.edu.my

NANOMECHANICAL TEST INSTRUMENT

Brand: Hysitron

Model: N/A

Location: Nanoindenter, Level 1, Block M

Person-in-charge: Mdm Siti Rohaya Binti Ahmad

Ext. no.: 5204

Email: s.rohaya_a@um.edu.my

OXIDATION STABILITY TESTER

Brand: Metrohm

Model: 873 Biodiesel Rancimat

Location: Makmal Kecekapan Tenaga 1, Ground Floor, Block M

Person-in-charge: N/A

Ext. no.: 5356

Email: generaloffice_fkej@um.edu.my

PARTIAL DISCHARGE (PD) DETECTOR

Brand: Omicron

Model: MPD 600

Location: High Voltage Lab, Level G, Block Y

Person-in-charge: Associate Prof. Ir. Dr. Hazlee Azil Bin Illias

Ext. no.: 4483

Email: h.illias@um.edu.my

PLANETARY MICRO MILL PREMIUM LINE 1

Brand: Fritsch

Model: N/A

Location: Electronic Packaging Material

Person-in-charge: Mr. Afendi Bin Ayob

Ext. no.: 5383

Email: afendi@um.edu.my

PLATE HEAT EXCHANGER PILOT PLANT

Brand: Sastec

Model: 1-DEC-176

Location: Energy Laboratory 2, Level 3, Block R

Person-in-charge: Dr. Nurin Wahidah Binti Mohd Zulkifli

Ext. no.: 4462

Email: nurinmz@um.edu.my

R/S CC RHEOMETER

Brand: Brookfield

Model: RS3115RS

Location: Advanced Computation Fluid Dynamic , 2nd Floor, Block M

Person-in-charge: Dr. Kazi Md. Salim Newaz

Ext. no.: 4582

Email: salimnewaz@um.edu.my

REACTOR SYSTEM

Brand: Local

Model: BP-170

Location: Pilot Lab, Ground Floor, Block V

Person-in-charge: Dr. Khan Mohammad Jakir Hossain

Ext. no.: N/A

Email: jakir@um.edu.my

REFLOW OVEN

Brand: Mancorp

Model: N/A

Location: NanoMicro Engineering Laboratory, Level 3, Block M

Person-in-charge: N/A

Ext. no.: 5356

Email: generaloffice_fkej@um.edu.my

REFRACTOMETER

Brand: Mettler Toledo

Model: RM40

Location: Makmal Kecekapan Tenaga 1, Ground Floor, Block M

Person-in-charge: N/A

Ext. no.: 5356

Email: generaloffice_fkej@um.edu.my

FACULTY OF ENGINEERING

SOLAR COLLECTOR WITH HEAT EXCHANGER**Brand:** E-BERQAT-003**Model:** N/A**Location:** Level 4, Block M**Person-in-charge:** Dr. Nurin Wahidah Binti Mohd Zulkifli**Ext. no.:** 4462**Email:** nurinmz@um.edu.my**SOLDERABILITY TESTER****Brand:** Prelude 202**Model:** R653-D57600**Location:** NanoMicro Engineering Laboratory, Level 3, Block M**Person-in-charge:** N/A**Ext. no.:** 5356**Email:** generaloffice_fkej@um.edu.my**SPIN COATER****Brand:** Mindo**Model:** Mindo 64 Coral, Mindo-4S Jellyfish, Mindo-4H Mermaid**Location:** Neuro Engineering Lab, 2nd Floor, Block A**Person-in-charge:** Dr. Ng Siew Cheok**Ext. no.:** 4485**Email:** siewcng@um.edu.my**SULFUR CONTENT TESTER****Brand:** Analytik Jena**Model:** Multi EA 5000**Location:** Makmal Kecekapan Tenaga 1, Ground Floor, Block M**Person-in-charge:** N/A**Ext. no.:** 5356**Email:** generaloffice_fkej@um.edu.my**TEMPERATURE CONTROLLER CHILLER****Brand:** Julabo**Model:** N/A**Location:** Nanoindenter, Level 1, Block M**Person-in-charge:** Mdm Siti Rohaya Binti Ahmad**Ext. no.:** 5204**Email:** s.rohaya_a@um.edu.my**UNWEIGHING SUPPORT SYSTEM****Brand:** Biodex**Model:** N/A**Location:** Makmal Analisis Gerakan**Person-in-charge:** Prof Ir Dr Noor Azuan Abu Osman**Ext. no.:** N/A**Email:** azuan@um.edu.my**VISCOMETER****Brand:** Normalab**Model:** N/A**Location:** Makmal Kecekapan Tenaga 1, Ground Floor, Block M**Person-in-charge:** N/A**Ext. no.:** 5356**Email:** generaloffice_fkej@um.edu.my**WAVE GENERATOR****Brand:** Dixson**Model:** FM230**Location:** Hydraulic Lab, Ground Floor, Block N**Person-in-charge:** Mr Ayob Sharif**Ext. no.:** 2751**Email:** ayobsharif@um.edu.my**WIND GRID CONNECTED INVERTER****Brand:** Marellimotori**Model:** BNWG-2KD**Location:** Makmal P/Motor, Pacuan & G/Pintar, Makmal LG, Wisma R&D**Person-in-charge:** Dr. Tan Chia Kwang**Ext. no.:** N/A**Email:** ctan@um.edu.my**WIRELESS ELECTROMYOGRAPH SYSTEM****Brand:** Delsys**Model:** 8-Channel**Location:** Makmal Analisis Gerakan**Person-in-charge:** Prof Ir Dr Noor Azuan Abu Osman**Ext. no.:** N/A**Email:** azuan@um.edu.my

FACULTY OF MEDICINE

DRY PACK CASE, SMALL/CRITICAL POINT DRYER (CPD)

Brand: Leica

Model: EM CPD 300

Location: Makmal Proses, Aras 3, Blok F

Person-in-charge: Associate Prof. Dr Tan Tian Chye

Ext. no.: 2610

Email: tantianchye@um.edu.my

ELECTRON MICROSCOPE/TEM

Brand: LEO

Model: LIBRA 120

Location: Makmal TEM Room, Aras 3, Blok F

Person-in-charge: Associate Prof. Dr Tan Tian Chye

Ext. no.: 2610

Email: tantianchye@um.edu.my

FIELD EMISSION SCANNING ELECTRON MICROSCOPE (FESEM)

Brand: FEI

Model: QUANTA FEG 650

Location: Makmal FESEM, Aras 3, Blok F

Person-in-charge: Associate Prof. Dr Tan Tian Chye

Ext. no.: 2610

Email: tantianchye@um.edu.my

PHOTOGRAPHICS STUDIO KIT/ENLARGER PHOTOGRAPHIC

Brand: DURST

Model: FENOKIT

Location: Makmal Proses, Aras 3, Blok F

Person-in-charge: Associate Prof. Dr Tan Tian Chye

Ext. no.: 2610

Email: tantianchye@um.edu.my

SPUTTER COATER

Brand: Leica

Model: EM SCD 005

Location: Makmal Proses, Aras 3, Blok F

Person-in-charge: Associate Prof. Dr Tan Tian Chye

Ext. no.: 2610

Email: tantianchye@um.edu.my

SUPERCRITICAL FLUID EXTRACTION/CRITICAL POINT DRYER (CPD)

Brand: Leica

Model: BAL-TEC CPD 030

Location: Makmal Proses, Aras 3, Blok F

Person-in-charge: Associate Prof. Dr Tan Tian Chye

Ext. no.: 2610

Email: tantianchye@um.edu.my

FACULTY OF SCIENCE

DEPARTMENT OF CHEMISTRY

FIELD EMISSION SCAN ELECTRON MICROSCOPE (FESEM)**Brand:** N/A**Model:** N/A**Location:** Makmal FE-SEM, Aras 1, Bangunan Makmal Kimia**Person-in-charge:** Mr Muhamad Shukri**Ext. no.:** 4251**Email:** shukriaziz@um.edu.my**RHEOMETER****Brand:** Anton-Paar**Model:** Physica MCR 301**Location:** Makmal Peralatan Berpusat (D306), Blok D**Person-in-charge:** Mdm Siti Haizura Md Salleh**Ext. no.:** 7115**Email:** haizura@um.edu.my**X-RAY DUAL WAVE LENGTH****Brand:** Oxford Supernova**Model:** N/A**Location:** Makmal X-RAY, C14B, Blok A**Person-in-charge:** Mr Muhamad Fauzan**Ext. no.:** 2539**Email:** fauzan@um.edu.my**X-RAY FLUORESCENCE (XRF)****Brand:** Shimadzu**Model:** μ EDX-1400**Location:** Makmal CHN, Bilik C14A, Blok A**Person-in-charge:** Mr Muhamad Fauzan**Ext. no.:** 2539**Email:** fauzan@um.edu.my**X-RAY POWDER DIFFRACTOMETER (LONG ANGLE)****Brand:** Pan analytical**Model:** N/A**Location:** A Makmal X-RD. FD-2-GF, Bangunan Makmal Kimia, Jabatan Kimia**Person-in-charge:** Mr Muhamad Fauzan**Ext. no.:** 2539**Email:** fauzan@um.edu.my**X-RAY POWDER DIFFRACTOMETER (SHORT ANGLE)****Brand:** Pan analytical**Model:** N/A**Location:** A Makmal X-RD. FD-2-GF, Bangunan Makmal Kimia, Jabatan Kimia**Person-in-charge:** Mr Muhamad Fauzan**Ext. no.:** 2539**Email:** fauzan@um.edu.my**X-RAY SINGLE WAVE LENGTH****Brand:** Bruker**Model:** Smart Apex CCD**Location:** Makmal X-RAY, C14B, Blok A**Person-in-charge:** Mr Muhamad Fauzan**Ext. no.:** 2539**Email:** fauzan@um.edu.my

FACULTY OF SCIENCE

DEPARTMENT OF PHYSICS

ALTERNATE LANGMUIR BLODGETT TROUGH

Brand: KSV NMA

Model: N/A

Location: Bilik LDMRC 1

Person-in-charge: Prof. Dr. Wan Haliza Abd Majid

Ext. no.: 4088

Email: q3haliza@um.edu.my

COATING UNIT

Brand: Edwards

Model: Auto 306

Location: Bilik LDMRC 1

Person-in-charge: Mr Mohd Arif Sarjidan

Ext. no.: 4147

Email: mohd.arif@um.edu.my

DYNAMIC MECHANICAL ANALYZER (DMA)

Brand: TA Instruments

Model: DMA Q 800

Location: Makmal Struktur & Termal, Blok B

Person-in-charge: Mr Mohd Zieuddin Kufian

Ext. no.: 2117

Email: mzkufian@um.edu.my

ELECTROMAGNETIC FIELD MONITOR

Brand: GEM SYSTEM

Model: N/A

Location: Makmal Geofizik, GB111, Aras Bawah,
Bangunan Baru (J21)

Person-in-charge: Mr Aizat Azahan

Ext. no.: 6761

Email: aizatazahan@um.edu.my

ELECTROMAGNETIC FIELD MONITOR

Brand: GISCO

Model: 200-T

Location: Makmal Geofizik, GB111, Aras Bawah,
Bangunan Baru (J21)

Person-in-charge: Mr Aizat Azahan

Ext. no.: 6761

Email: aizatazahan@um.edu.my

ELECTROMETER

Brand: Keithley

Model: N/A

Location: Bilik LDMRC 1

Person-in-charge: Dr. Thamil Selvi

Ext. no.: 2733

Email: t_selvi@um.edu.my

ELECTROMETER

Brand: Keithley

Model: 6517B

Location: Bilik LDMRC 1

Person-in-charge: Dr. Khaulah Sulaiman

Ext. no.: 4087

Email: khaulah@um.edu.my

FERROELECTRIC TESTER

Brand: RADIANT

Model: N/A

Location: Bilik LDMRC 1

Person-in-charge: Dr. Thamil Selvi

Ext. no.: 2733

Email: t_selvi@um.edu.my

FIELD EMISSION AUGER MICROPROBE

Brand: JEOL

Model: JAMP-9500F

Location: Makmal Peralatan Khas, Blok A

Person-in-charge: Mdm Zurina Marzuki

Ext. no.: 5174

Email: zurinam@um.edu.my

FACULTY OF SCIENCE

DEPARTMENT OF PHYSICS

FIELD EMISSION SCANNING ELECTRON MICROSCOPE (FESEM)**Brand:** JEOL**Model:** JSM-7600F**Location:** Makmal Peralatan Khas, Blok A**Person-in-charge:** Mdm Nor Endang binti Ariffin**Ext. no.:** 5174**Email:** nea53@um.edu.my**GAMMACELL****Brand:** Nordion**Model:** Nordion 196R**Location:** B121**Person-in-charge:** Mr Marzuki Mohd Khairi Mohd Nazir**Ext. no.:** 4293**Email:** mohdkhairi@um.edu.my**GAS SENSOR CHAMBER****Brand:** N/A**Model:** N/A**Location:** Bilik LDMRC 1**Person-in-charge:** Dr. Goh Boon Tong**Ext. no.:** 4147**Email:** gohbt@um.edu.my**HIGH POWER AC POWER SUPPLY****Brand:** RD Mathis**Model:** N/A**Location:** Bilik LDMRC 1**Person-in-charge:** Dr. Thamir Selvi**Ext. no.:** 2733**Email:** t_selvi@um.edu.my**HIGH RESOLUTION TRANSMISSION ELECTRON MICROSCOPY (HRTEM)****Brand:** Olympus BTX-II**Model:** BTX-324**Location:** Makmal Peralatan Khas, Blok A**Person-in-charge:** Mr Amir Shah Sigara, Mdm Aidahani Abdullah**Ext. no.:** 4191**Email:** assa@um.edu.my, aidahani@um.edu.my**HYDRAULIC PRESS****Brand:** Specac**Model:** N/A**Location:** Bilik LDMRC 1**Person-in-charge:** Dr. Thamir Selvi**Ext. no.:** 2733**Email:** t_selvi@um.edu.my**IMPEDANCE ANALYSER****Brand:** HIOKI**Model:** IM3570**Location:** Pusat Penyelidikan Ionik, Bangunan Sains Baru, Aras Bawah**Person-in-charge:** Mr Mohd Zieuddin Kufian**Ext. no.:** 2117**Email:** mzkufian@um.edu.my**LANGMUIR BLODGETT****Brand:** N/A**Model:** N/A**Location:** Bilik LDMRC 1**Person-in-charge:** Prof. Dr. Wan Haliza Abd Majid**Ext. no.:** 4088**Email:** q3haliza@um.edu.my

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METAL-ORGANIC CHEMICAL VAPOUR DEPOSITION (MOCVD) SYSTEM**Brand:** Taiyo Nippon Sanso**Model:** N/A**Location:** Bangunan AMCAL**Person-in-charge:** Dr. Ahmad Shuhaimi**Ext. no.:** 4206/3422**Email:** shuhaimi@um.edu.my**MICRO RAMAN SPECTROMETER****Brand:** Renishaw**Model:** inVia Reflex**Location:** Makmal Peralatan Khas, Blok A**Person-in-charge:** Mdm Zurina Marzuki**Ext. no.:** 5174**Email:** zurinam@um.edu.my**MONOCHROMATOR****Brand:** Newport Corporation**Model:** N/A**Location:** Bangunan AMCAL**Person-in-charge:** Dr. Khaulah Sulaiman**Ext. no.:** 4087**Email:** khaulah@um.edu.my**OSSILLOSCOPE WITH CURRENT PROBE****Brand:** Agilent Technologies**Model:** N/A**Location:** Bangunan AMCAL**Person-in-charge:** Dr. Khaulah Sulaiman**Ext. no.:** 4087**Email:** khaulah@um.edu.my**PHOTOLITHOGRAPHY SYSTEM****Brand:** MDAS**Model:** N/A**Location:** Bangunan AMCAL**Person-in-charge:** Dr. Ahmad Shuhaimi**Ext. no.:** 4206/3422**Email:** shuhaimi@um.edu.my**PLANETARY BALL MILLS****Brand:** Fritsch**Model:** N/A**Location:** Bilik LDMRC 1**Person-in-charge:** Dr. Thamir Selvi**Ext. no.:** 2733**Email:** t_selvi@um.edu.my**PLASMA PARALLEL PLATE ETCHER****Brand:** FISIONS**Model:** N/A**Location:** Bilik LDMRC 1**Person-in-charge:** Mr Mohd Arif Sarjidan**Ext. no.:** 4147**Email:** mohd.arif@um.edu.my**PRECISION IMPEDANCE ANALYSER****Brand:** Agilent Technologies**Model:** N/A**Location:** Bilik LDMRC 1**Person-in-charge:** Dr. Thamir Selvi**Ext. no.:** 2733**Email:** t_selvi@um.edu.my**PRECISION LC FERROELECTRIC TEST SYSTEM****Brand:** RADIANT**Model:** N/A**Location:** Bilik LDMRC 1**Person-in-charge:** Dr. Thamir Selvi**Ext. no.:** 2733**Email:** t_selvi@um.edu.my**RAMAN SPECTROSCOPY SYSTEM****Brand:** Renishaw**Model:** MicroRaman**Location:** Bilik LDMRC 1**Person-in-charge:** Mr Mohd Arif Sarjidan**Ext. no.:** 4147**Email:** mohd.arif@um.edu.my

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RF GENERATOR

Brand: MKS

Model: N/A

Location: Bilik LDMRC 1

Person-in-charge: Dr. Thamir Selvi

Ext. no.: 2733

Email: t_selvi@um.edu.my

ROLL PRESS MACHINE

Brand: WT:1000S

Model: WT:1000S

Location: Pusat Penyelidikan Ionik, Bangunan Sains
Baru, Aras Bawah

Person-in-charge: Mr Mohd Zieuddin Kufian

Ext. no.: 2117

Email: mzkufian@um.edu.my

SOLAR SIMULATOR

Brand: Newport Corporation

Model: N/A

Location: Bilik LDMRC 1

Person-in-charge: Mr Mohd Arif Sarjidan

Ext. no.: 4147

Email: mohd.arif@um.edu.my

SOURCEMETER

Brand: Keithley

Model: 2612B

Location: Bilik LDMRC 1

Person-in-charge: Dr. Richard Anak Ritikos

Ext. no.: 2734

Email: richardr@um.edu.my

SOURCEMETER

Brand: Keithley

Model: 2612B

Location: Bilik LDMRC 1

Person-in-charge: Mr Mohd Arif Sarjidan

Ext. no.: 4147

Email: mohd.arif@um.edu.my

SOURCEMETER

Brand: Keysight

Model: B2902A

Location: Bilik LDMRC 1

Person-in-charge: Dr. Khaulah Sulaiman

Ext. no.: 4087

Email: khaulah@um.edu.my

SPIN COATING SYSTEM

Brand: Laurell

Model: N/A

Location: Bilik LDMRC 2

Person-in-charge: Mr Mohd Arif Sarjidan

Ext. no.: 4147

Email: mohd.arif@um.edu.my

SPIN COATING SYSTEM

Brand: SCS

Model: N/A

Location: Bangunan AMCAL

Person-in-charge: Dr. Chiu Wee Siong

Ext. no.: N/A

Email: w.s.chiu@um.edu.my

SPIN COATING SYSTEM

Brand: Laurell

Model: N/A

Location: Bilik LDMRC 1

Person-in-charge: Mr Mohd Arif Sarjidan

Ext. no.: 4147

Email: mohd.arif@um.edu.my

SUBMICROM PROBER/PROBE HEAD

Brand: Karl Suss

Model: N/A

Location: Bilik LDMRC 1

Person-in-charge: Mr Mohd Arif Sarjidan

Ext. no.: 4147

Email: mohd.arif@um.edu.my

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SURFACE PROFILER

Brand: KLA Tencor

Model: P-6

Location: Bilik LDMRC 1

Person-in-charge: Mr Mohd Arif Sarjidan

Ext. no.: 4147

Email: mohd.arif@um.edu.my

THERMAL VACUUM STAGE SYSTEM

Brand: Instec

Model: N/A

Location: Bangunan AMCAL

Person-in-charge: Dr. Khaulah Sulaiman

Ext. no.: 4087

Email: khaulah@um.edu.my

TWO-ZONE TUBE FURNACE

Brand: Brother

Model: N/A

Location: Bangunan AMCAL

Person-in-charge: Dr. Ahmad Shuhaimi

Ext. no.: 4206/3422

Email: shuhaimi@um.edu.my

ULTRASONIC WEDGE BONDER

Brand: MEI

Model: N/A

Location: Bilik LDMRC 1

Person-in-charge: Mr Mohd Arif Sarjidan

Ext. no.: 4147

Email: mohd.arif@um.edu.my

VECTOR SIGNAL ANALYZER

Brand: Standford Research System

Model: N/A

Location: Bangunan AMCAL

Person-in-charge: Dr. Khaulah Sulaiman

Ext. no.: 4087

Email: khaulah@um.edu.my

X-RAY DIFFRACTION MACHINE

Brand: PANALYTICAL

Model: EMPYREAN

Location: Makmal Sinaran-X, 301, Aras 1, Bangunan Utama (J22)

Person-in-charge: Ms Nurfasyarina Azureen

Ext. no.: 4031

Email: fasyarina@um.edu.my

X-RAY DIFFRACTOMETER

Brand: Olympus BTX-II

Model: BTX-324

Location: Makmal Struktur & Termal, Blok B

Person-in-charge: Mr Mohd Zieuddin Kufian

Ext. no.: 2117

Email: mzkufian@um.edu.my

X-RAY FLOURENCE MACHINE

Brand: PANALYTICAL

Model: N/A

Location: Makmal Geofizik, GB111, Aras Bawah, Bangunan Baru (J21)

Person-in-charge: Mr Aizat Azahan

Ext. no.: 6761

Email: aizatazahan@um.edu.my

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DISPENSER/REAGENT (SUB PART PARTICLE SIZE ANALYZER)

Brand: Malvern

Model: Hydro 2000MU

Location: Makmal Sinaran-X, 301, Aras 1, Bangunan Utama (J22)

Person-in-charge: Ms Nurfasyarina Azureen

Ext. no.: 4031

Email: fasyarina@um.edu.my

ELECTRON MICROSCOPE

Brand: Zeiss

Model: Xradia 520

Location: Makmal Micro-CT, GB113, Aras Bawah, Bangunan Baru (J21)

Person-in-charge: Mdm Maisarah Yusoff

Ext. no.: 4159

Email: maisarah9985@um.edu.my

GEOMETRIC SMARTSEIS (LIDAR)

Brand: RIEGEL

Model: N/A

Location: Makmal Micro-CT, GB113, Aras Bawah, Bangunan Baru (J21)

Person-in-charge: Mdm Maisarah Yusoff

Ext. no.: 4159

Email: maisarah9985@um.edu.my

GRAVIMETER

Brand: Lacoste & Romberg

Model: N/A

Location: Makmal Geofizik, GB111, Aras Bawah, Bangunan Baru (J21)

Person-in-charge: Mr Aizat Azahan

Ext. no.: 6761

Email: aizatazahan@um.edu.my

HYDROGEOLOGY PUMP EQUIPMENT

Brand: N/A

Model: N/A

Location: Makmal Hidrogeologi, GB109, Aras Bawah, Bangunan Baru (J21)

Person-in-charge: Ms Nursyahira Ismail

Ext. no.: 7162

Email: syahira@um.edu.my

MICROWAVE SAMPLE PREPARATION

Brand: Perkin Elmer

Model: Titan MPS

Location: Makmal Hidrogeologi, GB109, Aras Bawah, Bangunan Baru (J21)

Person-in-charge: Ms Nursyahira Ismail

Ext. no.: 7162

Email: syahira@um.edu.my

PARTICLE SIZE ANALYZER

Brand: Malvern

Model: MSS

Location: Makmal Sinaran-X, 301, Aras 1, Bangunan Utama (J22)

Person-in-charge: Ms Nurfasyarina Azureen

Ext. no.: 4031

Email: fasyarina@um.edu.my

RESISTIVITY METER/DIRECT SHEAR TEST APPARATUS

Brand: Abem

Model: Terrameter SAS1000

Location: Makmal Geofizik, GB111, Aras Bawah, Bangunan Baru (J21)

Person-in-charge: Mr Aizat Azahan

Ext. no.: 6761

Email: aizatazahan@um.edu.my

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SEISMOMETER**Brand:** Abem**Model:** Terraloc MK8-24**Location:** Makmal Geofizik, GB111, Aras Bawah, Bangunan Baru (J21)**Person-in-charge:** Mr Aizat Azahan**Ext. no.:** 6761**Email:** aizatazahan@um.edu.my**SIEVE SHAKER****Brand:** Endecotts**Model:** Octagon Digital**Location:** Makmal Geofizik, GB111, Aras Bawah, Bangunan Baru (J21)**Person-in-charge:** Mr Aizat Azahan**Ext. no.:** 6761**Email:** aizatazahan@um.edu.my**TEMPERATURE CONTROLLER****Brand:** Harrick**Model:** ATC-024-1/ATC-024-2**Location:** Makmal Petroleum Geokimia 2, GB108, Aras Bawah, Bangunan Baru (J21)**Person-in-charge:** Mr Mohammad Zamri**Ext. no.:** 7104**Email:** mzamri@um.edu.my**ULTRASONIC LEVEL TRANSMITTER****Brand:** OYO Sonic Viewer**Model:** 5217 A**Location:** Makmal Sinaran-X, 301, Aras 1, Bangunan Utama (J22)**Person-in-charge:** Mr Aizat Azahan**Ext. no.:** 6761**Email:** aizatazahan@um.edu.my

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3-CHIP CAMERA SYSTEM PAL**Brand:** N/A**Model:** N/A**Location:** Makmal Biotek Haiwan, Blok Tengah, Aras 1, PPBGL, Jelevu, Negeri Sembilan**Person-in-charge:** Mr Azman Bin Mat Nor**Tel. no.:** 06-6113352**Email:** azmn@um.edu.my**3-D IMAGE CAPTURE SYSTEM****Brand:** DI3D**Model:** FTP001**Location:** Makmal Biokomputasi & Bioinformatik, Crystal, Aras 1, Blok D, Bangunan Bioinformatik**Person-in-charge:** Mdm Rosfizah Zuki**Ext. no.:** 5845**Email:** rosfizah@um.edu.my

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APPLICATION SERVER - 2 UNITS**Brand:** IBM**Model:** N/A**Location:** Pengkalan Data & Pengkomputeran
Berskala, Crystal, Aras 1, Blok D, Bangunan
Bioinformatik**Person-in-charge:** Dr. Moh Heng Hing**Ext. no.:** 4609**Email:** moh@um.edu.my**BACKUP SERVER - 2 UNITS****Brand:** IBM**Model:** N/A**Location:** Pengkalan Data & Pengkomputeran
Berskala, Crystal, Aras 1, Blok D, Bangunan
Bioinformatik**Person-in-charge:** Dr. Moh Heng Hing**Ext. no.:** 4609**Email:** moh@um.edu.my**BIOCLUSTER FOR VISUALIZATION SYSTEM****Brand:** APPLE**Model:** MAC PRO**Location:** Makmal Bio-Pengkomputeran & Analisis
Data 2, Crystal, Aras 1, Blok D, Bangunan
Bioinformatik**Person-in-charge:** Dr. Moh Heng Hing**Ext. no.:** 4609**Email:** moh@um.edu.my**BLADE SYSTEM FOR BIOINFORMATICS****Brand:** IBM**Model:** N/A**Location:** Pengkalan Data & Pengkomputeran
Berskala, Crystal, Aras 1, Blok D, Bangunan
Bioinformatik**Person-in-charge:** Dr. Moh Heng Hing**Ext. no.:** 4609**Email:** moh@um.edu.my**BLADECENTRE H CHASIS & ACCESSORIES/PART****Brand:** HP**Model:** ULTRIUM 448**Location:** Pengkalan Data & Pengkomputeran
Berskala, Crystal, Aras 1, Blok D, Bangunan
Bioinformatik**Person-in-charge:** Dr. Moh Heng Hing**Ext. no.:** 4609**Email:** moh@um.edu.my**COMPUTER SERVER****Brand:** IBM**Model:** X3650**Location:** Kemudahan Pengkalan Data &
Pengkomputeran Berskala, Crystal, Aras 1,
Blok D, Bangunan Bioinformatik**Person-in-charge:** Dr. Moh Heng Hing**Ext. no.:** 4609**Email:** moh@um.edu.my**DIGITAL IMAGE SYSTEM****Brand:** N/A**Model:** N/A**Location:** Makmal BIM3, Aras Bawah, Blok D,
Bangunan Bioinformatik**Person-in-charge:** Mdm Rosfizah Zuki**Ext. no.:** 5845**Email:** rosfizah@um.edu.my**FIELD EMISSION SCANNING ELECTRON
MICROSCOPE (FESEM)****Brand:** JUSCO**Model:** N/A**Location:** Bilik FESEM, Blok A, Aras 1
Person-in-charge: Mr Roslee Bin Halip**Ext. no.:** 4187**Email:** rosleeh@um.edu.my

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IMAGER KIT DIGITAL**Brand:** N/A**Model:** N/A**Location:** PBRL, Blok C, Aras 2, Bangunan Sains Baru**Person-in-charge:** Mdm Norazlina Binti Abdul Rahman**Ext. no.:** 4380**Email:** nora@um.edu.my**LINUX-BASED COMPUTATIONAL CLUSTER****Brand:** IBM**Model:** N/A**Location:** Pengkalan Data & Pengkomputeran
Berskala, Crystal, Aras 1, Blok D, Bangunan
Bioinformatik**Person-in-charge:** Dr. Moh Heng Hing**Ext. no.:** 4609**Email:** moh @um.edu.my**NOTEBOOK W 3D SOFTWARE****Brand:** N/A**Model:** N/A**Location:** Makmal Biokomputasi & Bioinformatik,
Crystal, Aras 1, Blok D, Bangunan
Bioinformatik**Person-in-charge:** Mdm Rosfizah Zuki**Ext. no.:** 5845**Email:** rosfizah@um.edu.my**SERVER RACK CABINET & ACCESSORIES****Brand:** IBM**Model:** N/A**Location:** Pengkalan Data & Pengkomputeran
Berskala, Crystal, Aras 1, Blok D, Bangunan
Bioinformatik**Person-in-charge:** Dr. Moh Heng Hing**Ext. no.:** 4609**Email:** moh @um.edu.my**STORAGE UNIT FOR SERVER****Brand:** HP**Model:** ULTRIUM 448**Location:** Pengkalan Data & Pengkomputeran
Berskala, Crystal, Aras 1, Blok D, Bangunan
Bioinformatik**Person-in-charge:** Ms Sugunadevi A/P Rajagopal**Ext. no.:** 4208**Email:** suguna@um.edu.my**SYSTEM STORAGE****Brand:** IBM**Model:** N/A**Location:** Pengkalan Data & Pengkomputeran
Berskala, Crystal, Aras 1, Blok D, Bangunan
Bioinformatik**Person-in-charge:** Dr. Moh Heng Hing**Ext. no.:** 4609**Email:** moh @um.edu.my

SPORT & EXERCISE SCIENCES CENTRE

DYNAVISION**Brand:** Dynavision**Model:** D2™**Location:** Makmal Psychomotor, Ground Floor UM Arena**Person-in-charge:** Mr Abdul Rahman Mohd Yusof**Ext. no.:** 2496**Email:** manunic@um.edu.my**ELECTROMYOGRAPHY SYSTEM****Brand:** DELSYS**Model:** Trigno Wireless**Location:** Makmal Fisiologi, Ground Floor UM Arena**Person-in-charge:** Mr Mohd Hafiszan Mohd Yusuf**Ext. no.:** 2496**Email:** fiz05@um.edu.my**MOTION CAPTURE AND ANALYSIS SYSTEM****Brand:** Qualysis**Model:** QTM - Qualysis Track Manager**Location:** Makmal Biomekanik, Ground Floor UM Arena**Person-in-charge:** Ms Hafidzatulnur Mohd Rathy**Ext. no.:** 2496**Email:** hafidzatulnur@um.edu.my**STABILITY PLATFORM****Brand:** Lafayette Instrument**Model:** 16030**Location:** Makmal Psychomotor, Ground Floor UM Arena**Person-in-charge:** Mr Abdul Rahman Mohd Yusof**Ext. no.:** 2496**Email:** manunic@um.edu.my**TRANSCRANIAL MAGNETIC SYSTEM****Brand:** Magstim**Model:** BiStim²**Location:** Makmal Fisiologi, Ground Floor UM Arena**Person-in-charge:** Mr Mohd Hafiszan Mohd Yusuf**Ext. no.:** 2496**Email:** fiz05@um.edu.my**TRANSCRANIAL MAGNETIC SYSTEM****Brand:** Magstim**Model:** 200²**Location:** Makmal Fisiologi, Ground Floor UM Arena**Person-in-charge:** Mr Mohd Hafiszan Mohd Yusuf**Ext. no.:** 2496**Email:** fiz05@um.edu.my**TREADMILL****Brand:** H/P/COSMOS**Model:** Quasar ®**Location:** Makmal Fisiologi, Ground Floor UM Arena**Person-in-charge:** Mr Abdul Rahman Mohd Yusof**Ext. no.:** 2496**Email:** manunic@um.edu.my**VIENNA TEST SYSTEM****Brand:** SCHUHFRIED**Model:** Vienna Test System Sport**Location:** Makmal Psychomotor, Ground Floor UM Arena**Person-in-charge:** Mr Abdul Rahman Mohd Yusof**Ext. no.:** 2496**Email:** manunic@um.edu.my



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Prepared by:
Center for Research Services
Institute of Research Management & Services (IPPP)
University of Malaya
50603 Kuala Lumpur
MALAYSIA

Tel: 603 - 7967 6289 / 6942 / 4651
Email: pengarah_ppp_ippp@um.edu.my