

LIST OF INSTRUMENTS AND CHARGES RATE for SAMPLE ANALYSIS

KULLIYAH OF SCIENCE

No	Instruments	Analysis/ Services	(RM)			Officer in Charge & Operator/ Phone No.	Location	Remarks
			KoS	IIUM	External			
1	Inductive Coupled Plasma (ICP-MS)	- Detection of inorganic element	25.00	35.00	80.00	Norrul Afzan Zainal Abidin 09-570 5104 Abdul Halim Ihsan 09- 570 2616	ICP-MS Room, Ground Floor, Biology Building, Kulliyah of Science	- Rate/ sample/ 10 elements - Analysis for common elements only - RM 10.00 for additional elements will charged - Applied for all students (UG&PG) and research purposes
2	High Pressure Liquid Chromatography (HPLC)	- To identify & quantify the individual components of mixture - Chemical screening & compound identification - Determination of amino acid	25.00	35.00	100.00	Norrul Afzan Zainal Abidin 09-570 5104 Mohammad Romizan 09- 570 2657	Instrumentation Room, Ground Floor, Physic Building, Kulliyah of Science	- Rate/ sample/ run - Applied for PG KoS, UG & PG from other Kulliyah and research purposes - Column, standard HPLC grade solvents (mobile phase) must be provided by applicant.
3	Fourier Transform Infrared Spectroscopy (FTIR)	- Detection of functional group of sample	15.00	35.00	80.00	Norrul Afzan Zainal Abidin 09-570 5104 Mohd Lazuardi 09-571 2657	Instrumentation Room, Ground Floor, Physic Building, Kulliyah of Science	- Rate/ sample analysis - Only applied for PG KoS, UG & PG from other Kulliyah and research purposes
4	CHNS Analyzer	-Elemental analysis of Carbon, Hydrogen, Nitrogen, Sulphur and Oxygen.	50.00	60.00	80.00	Norrul Afzan Zainal Abidin 09-570 5104 Noor Hafiah Izzati 09-570 2674	Instrumentation Room, Ground Floor, Physic Building, Kulliyah of Science	- Rate/ sample - Applied for all students UG&PG) and research purposes.
5	Atomic Absorption Spectrometry (AAS)	- Detection of heavy metals	15.00	35.00	80.00	Norrul Afzan Zainal Abidin 09-570 5104 Noor Hidayah Hasni 09-570 2691	AAS Room, Ground Floor, Biology Building, Kulliyah of Science	- Rate/ sample/element - Only applied for PG KoS, UG & PG from other Kulliyah and research purposes
6	Solvent Extraction	-Solvent extraction by using soxhlet, reflux condenser and maceration. Incl. rotary evaporator for solvent remover	-	150.00	230.00	Norrul Afzan Zainal Abidin 09-570 5104 Ahmad Muzammil 09-570 2688	Natural Product Ground Floor, Biology Building, Kulliyah of Science	- Rate/ sample - Applied for UG & PG from other Kulliyah and research purposes

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8	Distiller	- Distillation process by using steams distillation and hydro distillation. Incl. rotary evaporator for solvent remover	-	150.00	230.00	Norrul Afzan Zainal Abidin 09-570 5104 Ahmad Muzammil 09-570 2688	Natural Product Laboratory, Ground Floor, Biology Building, Kulliyyah of Science	- Rate/ sample - Applicable for UG & PG from other Kulliyyah and research purposes
9	Rotary Evaporator Only	- Sample Drying/ Solvent Remover	-	20.00	100.00	Norrul Afzan Zainal Abidin 09-570 5104 Ahmad Muzammil 09-570 2688	Natural Product Laboratory, Ground Floor, Biology Building, Kulliyyah of Science	- Rate/ 250ml (vol) - Applicable for UG & PG from other Kulliyyah and research purposes
10	Freeze Dryer Only	- Sample Drying	-	20.00	100.00	Norrul Afzan Zainal Abidin 09-570 5104 Ahmad Muzammil 09-570 2688	Natural Product Laboratory, Ground Floor, Biology Building, Kulliyyah of Science	- Rate/ 250ml (vol) - Applicable for UG & PG from other Kulliyyah and research purposes
12	Fluorescence Microscope	- Sample identification and colony	-	5.00	20.00	Norrul Afzan Zainal Abidin 09-570 5104 Mueizzah Afkaarrah 09-570 2690	Microscope Room, 2nd Floor, Biology Building, Kulliyyah of Science	- Rate/ hour - Applicable for UG & PG from other Kulliyyah and research purposes
13	DNA Analysis Package	- DNA Extraction - Quantifying DNA (Genomic DNA/ PCR Products) - PCR Amplification - Gel Electrophoresis & DNA Imaging	-	50.00	80.00	Norrul Afzan Zainal Abidin 09-570 5104 Noor Izyan Hassan 09-570 2689	Molecular Laboratory 3 rd Floor, Biology Building, Kulliyyah of Science	- Rate/ sample - Applicable for UG & PG from other Kulliyyah and research purposes. - DNA extraction kit provided by applicant
14	Gas Chromatography Mass Spectrometry	- Chemical Screening & Compound Identification - Identify different substance of sample	15.00	35.00	80.00	Norrul Afzan Zainal Abidin 09-570 5104 Maliza Azrain Sham 09-570 2612	Instrumentation Room, Ground Floor, Physic Building, Kulliyyah of Science	- Rate/ sample/run - Only applicable for post-graduate and research purposes - Applicant must provide column and standard.

- All samples should be prepared by applicant before analysis except DNA Analysis Package.
- Replicates are considered as sample.