

**INBIOSIS EQUIPMENT RENTAL RATE AND SERVICE CHARGES (updated 06 February 2025)**

No	Name of equipment/ Facility	Brand / Model	Analysis / Usage / Notes	Responsible Research Fellow and Officer	Location	Unit of measurement	Charges for INBIOSIS user (RM)	Charges for UKM user (RM)	Charges for non-UKM user (RM)	
1	Nano Liquid Chromatography-Time of Flight-Mass Spectrometry (NanoLC-TOF-MS)	Bruker / MictoTOF QIII	Large Molecules (Proteins) identification based on accurate mass and true isotopic pattern in MS and MS/MS	Hazim Syahmi Elias	Chemical Analysis Laboratory	Per injection	440	467	550	
2	Liquid Chromatography-Trapped Ion Mobility Time Of Flight-Mass Spectrometry (LC-TIMSTOF-MS)	Bruker	A high-resolution mass spectrometer equipped with the latest dual-Trapped Ion Mobility Spectrometry (TIMS) analyzer	Sarah Ibrahim		Per injection	Metabolomics 3D analysis (MS/MS) : RM300 Metabolomics 4D Analysis (PASEF) : RM400	Metabolomics 3D analysis (MS/MS) : RM340 Metabolomics 4D Analysis (PASEF) : RM425	Metabolomics 3D analysis (MS/MS) : RM400 Metabolomics 4D Analysis (PASEF) : RM500	
3	High Performance Liquid Chromatography (HPLC)	Perkin-Elmer / Flexar	To separate, detect and identify potential chemicals of particular compound	Hazim Syahmi Elias		Per sample	150	200	250	
4	High Performance LiquidChromatography (HPLC) Recycling System	Japan Analytical Industry (JAI)/ R1-700-II	To isolate potential chemicals of particular compound in a sample	Hazim Syahmi Elias		Per day	160	170	200	
5	Gas Chromatography-Mass Spectrometry (GC-MS)	Perkin-Elmer / Clarus600T	To analyze and quantify organic volatile and semi-volatile compounds	Syahmi Afiq Mustaza		Per sample	200	250	300	
6	Gas Chromatography-Flame Ionization Detector (GC-FID)	Perkin-Elmer / Clarus580	To provide quantitative analysis of volatile and semi-volatile organic compounds found in a variety of matrices (gases, liquids and solids).			Per injection	150	200	250	
7	Fourier Transform Infrared Spectroscopy (FTIR)	Perkin-Elmer / Frontier	To identify compound of sample mixtures of organic and inorganic compounds both in solid and liquid form	Rafidah Ahmad		Per sample	ATR & KBr: 50 2D-FTIR: 100	ATR & KBr: 75 2D-FTIR: 150	ATR & KBr: 100 2D-FTIR: 175	
8	Rotary evaporator	Eyela / N-1100S-WD	To remove solvent from sample by evaporation	Hazim Syahmi Elias	Metabolomics Laboratory	Per run	0 (max.: 300ml)	42 (max.: 300ml)	50 (max.: 300ml)	
9	Freeze dryer	Christ / RVC2-18/MZ2C	To dry sample using freeze dry technique			Per sample	32/sample (max.: 30ml)	34/sample (max.: 30ml)	40/sample (max.: 30ml)	
10	Flash chromatography self-packed column	Customized	Enable sample separation in a series of fractions based on solvent eluent			Per day	0	68	80	
11	Hydro-distillation	Favorit	To obtain essential oil from plant/sample			Per day	0	25	50	
12	Soxhlet extractor	Favorit	To extract lipids from solid material			Per day	0	51	60	
13	Microplate reader	BioRad / iMark13390	To detect biological, chemical or physical events of samples in microtiter plates			Per plate	0	42	50	
14	Incubator shaker	Sastec / ST-H2Q-X500C	Provide agitation for optimal cell growth			Per day	0	102	120	
15	Biohazard Cabinet Class I & II	Bioair/ Top Safe 1.3	To provide safe workspace for researchers working with pathogens requiring a defined biosafety level			Per day	0	127	150	

16	Laminar Flow Cabinet	ESCO/ AVC-4A1	Enclosed bench designed to prevent contamination of biological samples	Hazim Syahmi Elias	Metabolomics Laboratory	Per day	0	102	120		
17	Sewaan Perisian Komputer -SIMCA-P+ 12.0 -Data Analysis -Profile Analysis	Umetrics (USA)/ SIMCA-P+ 12.0	To interpret complex chemical analysis dataset			Per day	0	51	60		
18	Metabolomics Laboratory (including all equipment in the laboratory)					Per day	0	425	500		
19	Crystallization incubator (18-20 °C chiller)	HI-TEN / DEI/DEI625E	To incubate crystals obtained	Munirah Mahizan, Rohana Mahayadin	Proteomics Laboratory	Per plate	0	5	10		
20	Electrophoresis unit (1D)	BioRad / Mini Protean3 cell	To separate protein with moderate resolution			Per run	0	25	50		
21	Electrophoresis unit (1D)	BioRad / Mini ProteanTetrapore				Per run	0	25	50		
22	Electrophoresis unit (1D)	Atto / AE-6500 DualMini Slab				Per run	0	25	50		
23	Vacuum heated gel dryer	Cleaver Scientific /OMNI	To heat and dry gel at controlled temperature and time			Per day	0	15	30		
24	Sonicator	Q-Sonica / Q500-220	To agitate particles in a sample by applying sound energy			Per hour	0	7	15		
25	Ultrasonic bath	Elma / ElmaSonic S30H	To clean glassware			Per hour	0	5	10		
26	Stereo microscope (trinocular)	Olympus / SZ61	To analyze sample at low magnification with light reflection on the surface of sample with a built-in c-mount optically matched to the zoom body			Per day	0	10	20		
27	Handheld Homogenizer	Ika / Ultra-Turrax T25 digital	To homogenize sample			Per hour	0	5	10		
28	Fast Performance Liquid Chromatography (FPLC) (2 units)	GE Healthcare/ Akta Pure and Akta Purifier	To purify and isolate desired protein								
a)	Own column					Per analysis	0	25	30		
b)	Prepacked column. HiLoad 16/600 Superdex 75pg / 200pg or TSKgel					Per run	0	127	150		
c)	Empty column. XK16/26 × 20cm					Per run	0	25	50		
d)	Empty column. XK16/26 × 40cm					Per run	0	50	100		
e)	Empty column. XK16 × 100cm					Per run	0	75	150		
f)	Empty column. XK26 × 70cm					Per run	0	75	150		
g)	Column with resin. XK16/26 × 20cm					Per run	0	50	100		
h)	Column with resin. XK16/26 × 40cm					Per run	0	100	200		
i)	Column with resin. XK16 × 100cm					Per run	0	150	300		
j)	Column with resin. XK26 × 70cm					Per run	0	150	300		
29	Spectrophotometer	Dlab Scientific/ SP-V1000	To quantify micro-volumes of sample	Faridda Hannim Ahmad@Hashim	Genomics Laboratory	Per Hour	0	25	30		
30	UV-Vis 220v Nanodrop	Nanodrop/ ND-1000	To quantitatively determine different analytes			Per Hour	0	17	20		
31	Trinocular microscope with camera system	Olympus/ SZ61				Per Hour	0	17	20		
32	Proteomics Laboratory (including all equipment in the laboratory except FPLC)					Per day	0	425	500		
33	Quantitative Real Time-PCR (RT-qPCR)	BioRad / 170-9780	To detect and quantify RNA expression	Faridda Hannim Ahmad@Hashim	Genomics Laboratory	Per hour	0	68	80		
34	PCR thermal cycler gradient (2 units)	Applied Biosystems /Veriti	To amplify a particular DNA sequence with option for thermal gradient technology			Per hour	0	10	20		
36	PCR thermal cycler	BioRad / T100	To amplify a particular DNA sequence			Per hour	0	13	15		

36	Spectrophotometer	NanoDrop / ND-1000	To quantify micro-volumes of sample	Faridda Hannim Ahmad@Hashim	<b>Genomics Laboratory</b>	Per hour	0	10	20		
37	Gel imaging system	UVP / BioDoc-It	To generate gel image for documentation			Per hour	0	10	20		
38	Fume Cupboard	Laboff / GPF-1200	To limit exposure to hazardous or toxic fumes, vapors or dusts			Per day	0	50	100		
39	Hybridization oven (2 units)	FinePCR / Combi-H12	To distribute evenly probes to identified gene / protein			Per day	0	25	50		
40	Water bath 20L (4 units)	Thermo / Precision	To incubate samples in water at a constant temperature over long period of time			Per day	0	10	20		
41	Dry block heater	Labtech / Daihan	To heat samples in microcentrifuge tube with dry temperature control			Per day	0	10	20		
42	Refrigerated benchtop centrifuge	Sartorius / Sigma 3-18K	To separate substance of different densities with temperature control (-20 - 40 °C)			Per day	0	75	150		
43	Gel electrophoresis	Clever Scientific / Multisub Midi & Choice	For running gel electrophoresis at high numbers of samples			Per day	0	20	40		
44	Electroporator	Eppendorf / Eporator	For fast and controlled electroporation of bacteria, yeasts and other microbes			Per day	0	20	40		
45	UV Transilluminator	Vilber Lourmat / ETX-35M	To visualize ethidium bromide-stained nucleic acids / gene fragments			Per day	0	10	20		
46	Ultraviolet crosslinkers	UVP / CLP-1000 Crosslinkers	To fix nucleic acid to membrane			Per day	0	10	20		
47	Stereo microscope	Olympus / SZ51	To analyze sample at low magnification with light reflection on the surface of sample			Per day	0	10	20		
48	UV-Vis 220v Nanodrop	Nanodrop/ ND-1000	To quantitatively determine different analytes			Per hour	0	17	20		
49	Nanopore (MiniON)	Nanopore	To determine the sequence of DNA/RNA bases.								
	1 sample					9600	10200	12000			
	2 samples					10000	10625	12500			
	3 samples					10400	11050	13000			
	4 samples					10800	11475	13500			
	5 samples					11200	11900	14000			
	6 samples					11680	12410	14600			
	7 samples					12080	12835	15100			
	8 samples					12480	13260	15600			
	6 samples					11680	12410	14600			
50	Genomics Laboratory (including allequipment in the laboratory)					12 samples	14160	15045	17700		
51	Biosafety cabinet class I & II	Bioair / Top Safe 1.3	To provide safe workspace for researchers working with pathogens requiring a defined biosafety level			18 samples	16640	17680	20800		
						24 samples	19120	20315	23900		
						Per day	0	425	500		
						Per day	0	127	150		

52	Laminar flow cabinet	Esco / AVC-4A1	Enclosed bench designed to prevent contamination of biological samples	Faridda Hannim Ahmad@Hashim	Microbiology Lab	Per day	0	102	120					
53	Microbiology Laboratory (Biosafety cabinet, laminar flow cabinet, carbondioxide incubator, micropipette set, access to water purification system, benchtop microcentrifuge)					Per day	0	425	500					
54	High Performance Linux Workstation	X299 Workstation/ X299 Workstation	To do variety of Bioinformatics analysis including Next Generation Sequencing analysis, Structural Bioinformatics analysis, Molecular modelling analysis	Intan Azlinda Ramlee	Bioinformatics Laboratory	Per day	48	51	60					
55	Linux Workstation	Ideal Ryzen PC/ Ideal Ryzen PC				Per day	24	25	30					
56	Stereo-imaging microscope	Carl Zeiss / Stemi DV4	To generate image at low magnificant with light reflection on the surface of sample	Munirah Mahizan	Microscopy/ Cell Culture Laboratory	Per day	0	15	25					
57	Stereo-imaging microscope	Carl Zeiss / Stemi 2000C				Per day	0	15	25					
58	Fluorescence microscope *RM35 surcharge per hour for fluorescence	Carl Zeiss / Carl ZE				Per day	0	15*	25*					
59	Cell Culture Facilities @bench fees (Biosafety Class II Cabinet, CO2 Incubator, Inverted Microscope, Refrigerated centrifuge, waterbath)	<ul style="list-style-type: none"> <li>Airtech class II biosafety cabinet</li> <li>Binder/CBS170 CO2 incubator</li> <li>Olympus ckx53 inverted microscope</li> <li>Beckman coulter/ allegra x30 refrigerated centrifuge</li> <li>Taitse water bath</li> </ul>	LTEK Multimode Microplate Spectrophotometer (Absorbance +Luminescence +Fluorescence)/ Model INNO-S			Per week	400/sem	425	500					
60	Light Microscope	M-shot				Per hour	0	8	10					
61	Microplate Spectrophotometer	LTEK Multimode Microplate Spectrophotometer (Absorbance +Luminescence +Fluorescence)/ Model INNO-S												
	Absorbance					Per plate	0	11	13					
	Endpoint flourescent					Per plate	0	41	48					
	Kinetic					Per hour	0	54	63					
62	Growth chamber	Conviron/ A1000	Plant growth chamber with control of temperature, light & humidity	Siti Fatimah Mohd Mokhtar	Ground level, INBIOSIS	Per day	0	6	10					
63	PC2-Certified Greenhouse	-	Growth space for genetically modified plants to be carried out within a secure and controlled environment			RPC2	Bench: 200 GH1: 800 GH2: 500	Bench: 200 GH1: 800 GH2: 500	Bench: 250 GH1: 900 GH2: 600					
64	Growth chamber	Conviron/ PG15	Plant growth chamber with control of temperature, light & humidity	Mohd Fauzi Abd Razak										
65	Laminar flow cabinet	Sastec	Enclosed bench designed to prevent contamination of biological samples		Per day	0	6	10						
66	Incubator Shaker	INFORS	Provide agitation for optimal cell growth		Per day	0	50	100						
67	Refrigerated Microcentrifuge	Sartorius-Sigma/1-15PK	To separate substance of different densities upto 14,000 rpm		Per day	0	25	50						
68	Thermal Cycler	Eppendorf/ 5331000010	To amplify a particular DNA sequence		Per day	0	35	75						
69	Portable Electrical Conductivity meter	Eutech ECTestr 11	To measure the capacity of ions in an aqueous solution to carry electrical current		Per hour	0	7	15						
					Per day	0	25	50						

70	PCR thermal cycler	BioRad / T100	To amplify a particular DNA sequence	PBT	Per hour	0	7	15	
71	Molecular Imaging System	Fujifilm/LAS-3000	To generate gel image for documentation		Per hour	0	10	20	
72	Spectrophotometer	NanoDrop / ND-1000	To quantify micro-volumes of sample		Per hour	0	10	20	
73	Orbital shaker	Protech/722	For aeration of in vitro culture		Per day	0	25	50	
74	Orbital shaker	Stuart/SSL1							

\* Per day: 9am - 5pm