

JOB NO.: \_\_\_\_\_

## ANALYSIS REQUEST FORM

### CUSTOMER INFORMATION

Full Name			
Contact number			
Email			
Company/Laboratory Name			
Company/Laboratory Address			
Sample Description <small>(attached details e.g. datasheet)</small>			
Sample Hazard	Yes		No
Form Submission Date <small>(For delivery date, please refer T&amp;C (5) at page 2)</small>			

Rev no. 7

Please consult with laboratory personnel and read thoroughly the Acceptance and Rejection Criteria (page 3&4) before choosing any service(s) below:

### SERVICES/FACILITIES

		TYPE	TICK (√)	QUANTITY/ PACKAGE	UNIT PRICE (RM)	EXTENDED PRICE (RM)
1.	<b>PHYSICAL &amp; CHEMICAL ANALYSIS</b>	Surface Area Analyzer (BET) <i>ISO 17025 certified</i>				
2.		Nuclear Magnetic Resonance (NMR)				
3.		GCMS				
4.		GCMS/MS				
5.		LC-MS Q-TOF or LC-MS/MS				
6.		UHPLC				
7.		Dynamic Mechanical Analyzer (DMA)				
8.		Differential Scanning Calorimeter (DSC)				
9.		Simultaneous Thermal Analyzer (STA) - TGA				
10.		Particle Image Velocimetry (PIV)				
11.		Ellipsometer				
12.		Rheometer				
13.		Tensiometer				
14.	<b>IMAGING</b>	Field Emission Scanning Electron Microscope (FESEM)				
15.		Energy-Dispersive X-Ray (EDX)				
16.		Package FESEM + EDX				
17.		Chemical Treatment or Critical Point Drying (CPD)				
18.		Sputter Coating (Carbon/Gold)				
19.	Confocal Laser Scanning Microscope					
20.	<b>BIO</b>	DNA Sequencer				
21.		Real Time PCR				
22.	<b>OTHERS</b>	Portable Autoclave				
22.		-80°C Freezer				
23.		Consumables				
<b>TOTAL PRICE (RM)</b>						

**TERMS AND CONDITIONS**

1. **Documentation:** Please submit this Analysis Request Form together with proof of payment (Internal Money Transfer/Purchase Order/ online transfer slip) before booking a slot or analysis. For UM grant, if your faculty process the payment, kindly give a copy of transfer letter for our records. Besides, please attached the supplemental documents as requisitioned in Acceptance/Rejection Criteria or as described in Customer Information Section.
2. **Payment terms:** Internal Money Transfer shall be made to UM.0000096/KWJ.AK (Akaun Aktiviti Makmal Perkhidmatan IPPP) and payment of Purchase Order is due 30 days after the invoice date. All payment terms is 100% upon agreement and valid for one (1) year from date of submission.
3. **Charges:** All charging rate is valid only for one-time analysis. If any analysis or sub-analysis needs to be repeated for any circumstances (other than laboratory's mistakes), new charges will be incurred.
4. **Sample:** Make sure all samples are in an appropriate container with proper label before hand-in to the laboratory personnel and please collect your sample within 30 days after the report date otherwise it will be disposed by following the disposal guidelines. We will not liable for any violation regulation by customer.
5. **Delivery date:** The laboratory will deliver the analysis result along with the test report within 15 working days (or more, with agreement by both parties) calculated upon receiving this form with proof of payment.
6. **Cancellation/Rejection:** Cancellation can be requested but no refund will be provided for any payment that has been made without getting any consultation from respective laboratory personnel and the laboratory personnel has the rights to reject any samples that failed to follow the Acceptance/Rejection Criteria.
7. The laboratory reserves the right to change these terms and conditions at any time without prior notice.

**I have read the Acceptance and Rejection Criteria and agree with all the Terms and Conditions stated above**

<b>Payment Details</b>	Mode of payment:
	Reference number:
	WBS number (for UM Grant):

CUSTOMER DECLARATION	FOR LABORATORY USE ONLY
<p>I agree to allow IPPP/Bendahari UM to debits total amount of RM_____ from stated payment details to <b>Akaun Aktiviti Makmal Perkhidmatan IPPP</b> for this service charge.</p> <p>Customer Signature : ..... <i>(no digital signature allowed)</i></p> <p>Date : .....</p>  <p>Supervisor : ..... Signature &amp; Stamp <i>(no digital signature allowed)</i></p> <p>Date : .....</p>	<p>Received and : ..... checked by</p>  <p>Date : .....</p>  <p>Approved by : ..... (TM/DTM/Laboratory Personnel)</p>  <p>Date : .....</p>

ACCEPTANCE AND REJECTION CRITERIA			
SERVICES/FACILITIES	SAMPLE CRITERIA	YES (√)	NO (√)
Surface Area Analyzer (BET)	Sample weight $\geq 0.1g$		
	Melting point $> 200^{\circ}C$		
	Surface area range $\geq 1m^2/g$		
	Sample in solid form and can fit into sample tube with diameter $\sim 10mm$		
Nuclear Magnetic Resonance (NMR)	Sample weight $\geq 20mg$ and homogenized		
	Sample is fully dissolved in $600\mu L$ or $4cm$ height deuterated solvents		
	Sample is in the appropriate $5mm$ NMR sample tube with no breakage		
	Sample must be free from bubble, metal and particulates		
GCMS / GCMS/MS	<b>Volatile compounds</b> must have boiling points below $280^{\circ}C$		
	If unknown concentration, prepare in 3 types of concentrations below: <ul style="list-style-type: none"> <li>• 2 ppm</li> <li>• 5 ppm</li> <li>• 10 ppm</li> </ul>		
	All samples completely dissolved in solvent preferably acetone or dichloromethane. Strictly <b>NO CHLOROFORM</b>		
	Provide method or parameter		
	Sample volume must be between $0.5 - 1.5ml$		
	Prepare in the appropriate GCMS vial		
	GCMS/MS - SIM <ul style="list-style-type: none"> <li>• Provide standard solution</li> <li>• At least 3 different standard concentrations for standard curve</li> </ul>		
	GCMS/MS - Direct Probe <ul style="list-style-type: none"> <li>• Pure sample</li> <li>• Homogeneous powder</li> <li>• Maximum boiling point <math>400^{\circ}C</math></li> </ul>		
LC-MS / LC-MS/MS / UHPLC	Please clarify the sample, solution used and method		
	Please attached analysis method(s) chromatography/spectra		
	Oily and polymer sample are <b>NOT ALLOWED</b>		
	Filter sample with $45$ micron PTFE filter and prepare into your own vial		
	Bring along your own solvent/buffer (at least HPLC grade). <b>DO NOT USE:</b> <ol style="list-style-type: none"> <li>1. Non polar solvent</li> <li>2. Non-volatile buffer</li> <li>3. Trifluoroacetic acid</li> </ol>		
Dynamic Mechanical Analyzer (DMA)	Sample must be in solid form and can be cut into below rectangle size: <ul style="list-style-type: none"> <li>• Width <math>0.1 - 10</math> mm</li> <li>• Thickness <math>0.1 - 5mm</math></li> <li>• Long <math>20 - 30mm</math></li> </ul>		
	Provide method or parameter (refer to journal)		
Differential Scanning Calorimeter (DSC)	Sample weight $\geq 5mg$ and homogenized		
	Preferably in small sample size and can fit into designated aluminum pan		
	Temperature range between $-70^{\circ}C$ to $550^{\circ}C$ depending on onset decompose temperature (provide STA/TGA results for reference)		
	For liquid sample, make sure the concentration is appropriate		
	Ionic and oil sample are <b>NOT ALLOWED</b>		
Simultaneous Thermal Analyzer (STA)	Sample weight $\geq 5mg$ and homogenized		
	Preferably in small sample size and can fit into designated ceramic crucible		
	Temperature range between $30^{\circ}C$ to $900^{\circ}C$		

Particle Image Velocimetry (PIV)	Experiment set-up must be appropriate with the room size and doesn't affect the environment cleanliness and must follow health and safety procedure for PIV analysis		
Ellipsometer	Sample in solid form and can fit the sample holder		
	Homogenous and has a flat surface		
Rheometer	Not an acidic, strong alkaline and chlorinated sample		
	Semi-solid sample <b>ONLY</b>		
	Temperature range between 0°C – 200°C		
	Provide method or parameter (refer to journal)		
Tensiometer	Provide method or parameter		
	Sample must be in liquid or soluble form		
	Homogenous sample		
Field Emission Scanning Electron Microscope (FESEM)	Sample size: Very minimal (solid or semi-solid ESEM)		
	For charging/live sample can proceed with sample preparation (gold coating/chemical treatment)		
Energy-Dispersive X-ray (EDX)	Sample size: Very minimal (solid or semi-solid ESEM)		
	Detection limit: Depend on element, KV and LLD		
Critical Point Drying (CPD)	Prepare sample in 4% gluteraldehyde solution		
	Minimum size: 2mm x 2mm (biology sample) and 10mm x 10mm (solid sample)		
	Sample is dissolve in pure acetone solution		
Sputter Coating	Mounted or fit on aluminum stub		
Confocal Laser Scanning Microscope	Stained with suitable fluorescent dye(s) and viewed under fluorescence microscope beforehand		
	Thickness of sample did not exceed 200µm and low opaqueness		
	Provide the excitation and emission wavelength		
	Fixed sample mounted on a glass slide covered with coverslip.		
DNA Sequencer	Perform all the purified and cycle sequencing method or any method necessary		
	Adequate DNA quantity		
Real Time PCR	Sample must be DNA or RNA		
	Specialized consumables to be used, appropriate for the sample blocks of the Quant Studio 12K Flex system <ul style="list-style-type: none"> <li>• Micro Amp 8-Tube Strips (0.1 ml)</li> <li>• Micro Amp Optical 96 – Well fast reaction plate with barcode</li> <li>• Micro Amp Optical 384 – Well reaction plate with barcode</li> <li>• Array card</li> </ul>		

**FOR LABORATORY USE ONLY**

DECISION	ACCEPT / REJECT
REVIEWED/ACCEPTED DATE	
REMARKS (if any)	