

BORANG PERMOHONAN / REQUEST FORM

- Sila lengkapkan Borang Permohonan untuk perkhidmatan analisis/ bayaran pukal/ sebut harga.
Please fill in the Request Form for analytical services/bulk payment/quotation.
- Sila rujuk lampiran untuk senarai harga, terma dan syarat.
Please refer to the attachment for price list, terms and conditions.
- Borang yang telah lengkap diisi perlu di e-mel ke **pegawai makmal yang bertanggungjawab**.
Please send the complete form to lab officer incharge.
- Semasa penghantaran sampel, sila bawa Borang Permohonan asal atau Bukti Pembayaran untuk rujukan pegawai.
Please bring the original Request Form or Payment Receipt for Officer's reference.
- Sampel yang telah siap dianalisis perlu diambil semula atau akan dilupuskan jika tidak dituntut lebih dari 2 minggu. *Samples need to be collected after respective analysis or will be disposed after 2 weeks.*

A. Maklumat Pemohon / Applicant Information			
Nama / Name			
Nombor Matrik / Matric Number			
Alamat Jabatan / Department Address			
Nombor Telefon / Telephone No.	E-mel / Email		
Kategori / Category (Sila Tanda/ Please Tick)	IMEN		Kakitangan UKM / UKM Staff
	Luar UKM / Non-UKM		

B.Maklumat Analisis/ Analysis Information <small>Satu jenis Instrumen sahaja / One instrument type only</small>				
No.	Kod Analisis / Analysis Code	Bilangan / No. of Sample	Keterangan Sampel / Sample Details (Method, temperature, etc.)	Kod Promosi / Promotional Code (If applicable)

C.Bayaran Pukal (jika berkaitan)/ Bulk Payment (if applicable)	
Jumlah / Amount (RM)	Catatan / Remarks

D.Pengesahan/ Acknowledgement	
Tandatangan pemohon / Applicant Signature:	Tandatangan Ketua Projek & Cop Rasmii / Project Leader Signature & Official Stamp:
Kod Peruntukan (Pengguna UKM) / Project Code (UKM User):	
Kos Analisis / Analysis Cost:	Tarikh / Date:

E.Penerimaan / Acceptance	
Tandatangan Pegawai Makmal / Signature Lab Officer: Cop / Stamp:	Tarikh / Date:

TERMA DAN SYARAT / TERMS AND CONDITIONS

Perkara	Terma & Syarat
Kod Promosi (jika berkaitan) / Promotional Code (if applicable)	<p>Kod Promosi ini hanya tertakluk kepada promosi semasa sahaja dan hanya sah bagi penghantaran sampel dalam tempoh 1 tahun dari tarikh borang diterima. <i>This Promotion Code is only applicable during a promotion period and the samples need to be submitted within 1 year after the date of application.</i></p> <p>Pengguna boleh melayari laman sesawang rasmi IMEN di https://www.ukm.my/imen untuk maklumat lanjut berkenaan sebarang promosi. <i>Please refer to our official website https://www.ukm.my/imen for further information regarding any promotion.</i></p>
Bayaran balik / Bulk Payment	<p>Pengguna boleh membuat akaun pukal secara pra-pembayaran untuk sebarang perkhidmatan yang ditawarkan. Tempoh aktif akaun pukal adalah dalam masa 2 tahun dari tarikh permohonan. <i>Users can set up a pre-paid bulk account for any services offered. The account is active within 2 years after the date of application.</i></p> <p>Pengguna boleh memanjangkan tempoh aktif akaun dengan menambah bayaran seterusnya. Setelah tamat tempoh aktif, baki tidak akan dipulangkan. <i>Users can extend the account's active period by adding further payment. In the event of account expiry, any remaining amount in the account will not be refunded.</i></p> <p>Semasa penghantaran sampel, sila bawa bersama salinan Borang Permohonan yang telah diluluskan berserta maklumat sampel analisis pada bahagian 8. Maklumat Analisis. <i>During sampel submission, please bring a copy of the approved application form with added information regarding the sampel / analysis at section B. Analysis Information.</i></p>

Alat/Instrument	Kod/Code	Analysis/Analysis	Kos/Cost		
			IMEN	UKM	Non-UKM
Semiconductor Lab (Anezah)					
Macro-PL	IMN-PLRT	Room temperature emission	RM50/sample	RM150/sample	RM200/sample
	IMN-PLLT	Low temperature emission	RM100/sample	RM200/sample	RM300/sample
Lab-on-chip (Hayati)					
Plasma treatment	IMN-PT01	Argon/oxygen	RM50/sample	RM100/sample	RM150/sample
IV/CV 4 point probe system	IMN-4PP01	IV/CV measurement	RM50/sample	RM100/sample	RM150/sample
Impedance analyzer	IMN-IA	Plug-in impedance analyzer	RM70/sample	RM100/sample	RM150/sample
MEMS/NEMS Lab (Faizal)					
FESEM SIGMA	IMN-FESEM	Field emission electron scanning microscope	RM120/sample	RM180/sample	RM250/sample
EBL SYSTEM	IMN-EBL	Electron beam lithography	RM180/hour	RM250/hour	RM300/hour
Shaker LDS V406	IMN-SHK	Shaker	RM120/sample	RM150/sample	RM200/sample
XeF ₂ dry etching system	IMN-XEF2	Etches Si, a-Si, Mo, Ta	RM270/hour	RM320/hour	RM350/hour
Laser displacement meter	IMN-DISP	MEMS structure displacement	RM100/sample	RM150/sample	RM200/sample
EBL spin coater CY-SP4	IMN-SC01	Spin coat EBL resist	RM70/sample	RM100/sample	RM150/sample
Plasma sputtering coater	IMN-SPUT01	Aluminium	RM150/sample	RM200/sample	RM250/sample
LCR Meter 6020	IMN-LCR01	Impedance/capacitance/inductance	RM70/sample	RM100/sample	RM150/sample
MINES lab (Shafii)					
Altera Terasic DE1	IMN-ALT	SoC Development Board (2015)	RM150/day	RM300/day	RM600/day
LeCroy Wavestation 2012	IMN-FG	Function Generator (2014)	RM50/day	RM100/day	RM200/day
Textronix oscilloscope	IMN-OSC	Oscilloscope	RM120/day	RM240/day	RM500/day
Nanophotonic Lab (Hayati)					
Surface Plasmon Resonance	IMN-SPR1	Measures molecular interactions	RM100/sample	RM120/sample	RM150/sample
	IMN-SPR2	Using SPR+gold slide	RM800/sample	RM820/sample	RM850/sample
Digital Viscometer	IMN-VISCO	9 ml/sample	RM100/sample	RM120/sample	RM150/sample
CNC Machine	IMN-CNC	Please provide design	RM100/sample additional hour – RM50	RM120/sample additional hour – RM60	RM150/sample additional hour – RM70
Thin Film Lab (Faizal)					
E-beam/Thermal Evaporator	IMN-EBEAM	Al, Ag, Cu	RM150/process	RM250/process	RM350/process
Atomic Force Microscopy	IMN-AFM	Surface topography	RM70/sample	RM160/sample	RM260/sample
Hall Effect	IMN-HALL	Conductivity	RM60/sample	RM100/sample	RM150/sample
Picoammeter/tapping solenoid (Isc/Voc)	IMN-TAP	Applying force on thin film and measure generated current/voltage	RM50/sample	RM100/sample	RM250/sample
OHFEL Lab (Dr Siti Nurfadhlina)					
UV-Vis Spectrophotometer	IMN-UV	Absorbance/Transmittance/Reflectance (Solid/Liquid)	RM25/sample	RM50/sample	RM100/sample

Solar simulator Newport Oriel	IMN-SIMSOL	Natural sunlight simulator	RM70/sample	RM150/sample	RM250/sample
Spectrometer Scientific Grade	IMN-Spect	Raman measurement at 785 nm	RM70/sample	RM150/sample	RM300/sample
Luminescence Spectrometer	IMN-LS	Excitation/Emission	RM25/sample	RM50/sample	RM100/sample
Potentiostat	IMN-EIS	Electrochemical impedance spectroscopy (EIS)	RM70/sample	RM150/sample	RM300/sample
	IMN-EC	IV/ CV electrochemical	RM35/sample	RM70/sample	RM140/sample
MIPAC Lab (Saiful)					
Instron 5564	IMN-TENSILE	Tensile test (subjected to parameter analysis)	RM40/analysis	RM50/analysis	RM100/analysis
Nanoindenter	IMN-INDENT	Nanoindentation (subjected to parameter analysis)	RM40/indent	RM50/indent	RM100/indent
IFM (2D Analysis)	IMN-IFM2D	Infinite focus measurement (subjected to parameter analysis)	RM50/analysis	RM75/analysis	RM150/analysis
IFM (3D Analysis)	IMN-IFM3D	Infinite focus measurement (subjected to parameter analysis)	RM75/analysis	RM150/analysis	RM300/analysis
Digital Microscope	IMN-OM01	Microscopy observation	RM30/analysis	RM50/analysis	RM100/analysis
C-electronics Lab (Saiful)					
Four point probe station	IMN-4PP02	Measure IV	RM50/sample	RM100/sample	RM150/sample
Cryogenic Probe Station	IMN-4PPLT	Measure IV	RM100/sample	RM150/sample	RM300/sample
Tabletop Centrifuge	IMN-TC01	4000rpm isolation / separation Process	RM40/hour	RM50/hour	RM100/hour
Horizontal Tube Furnace	IMN-FURN01	Annealing Process	RM100/hour	RM150/hour	RM200/hour
Chemical Vapor Deposition Tube Furnace	IMN-CVD01	Synthesis Graphene (Gas Ar & H ₂)	RM150/process	RM200/process	RM300/process
Chemical Vapor Deposition Tube Furnace	IMN-CVD02	Synthesis Graphene (Gas CH ₄ & Ar H ₂)	RM150/process	RM200/process	RM300/process
Chemical Vapor Deposition Tube Furnace	IMN-CVD03	Synthesis GaO (Gas N ₂ & O ₂)	RM150/process	RM200/process	RM300/process
Chemical Vapor Deposition Tube Furnace	IMN-CVD04	Synthesis MOS ₂ (Gas Ar 90% H ₂ 10%)	RM150/process	RM200/process	RM300/process
Artificial Kidney Lab (Shafii)					
FDM 3D Printing	IMN-3DP01	minimum RM10	RM0.6/gram	RM1.0/gram	RM2.0/gram
MSLA 3D Printing	IMN-3DP02	minimum RM10	RM1.0/gram	RM2.0/gram	RM4.0/gram
Microfluidic Lab (Dr Siti Nurfadhlina)					
Fluorescence Microscope	IMN-FM	Molecules analysis	RM120/sample	RM150/sample	RM180/sample
Fluorescence Microscope	IMN-FM2	Molecules analysis	RM150/sample	RM170/sample	RM200/sample

High speed camera	IMN-HSC	Equipment	RM150/sample	RM170/sample	RM200/sample
RF Plasma Surface Treatment	IMN-PT02	Surface treatment/cleaning/surface modification in oxygen plasma	RM20/hour	RM40/hour	RM80/hour
Microenergy Lab (Izzah)					
Portable Surface Plasmon Resonance	IMN-SPR3	Measures molecular interactions	RM100/sample	RM120/sample	RM150/sample
	IMN-SPR4	Using SPR+gold slide	RM200/sample	RM270/sample	RM350/sample
Yixist Visible Spectrometer	IMN-Vis	Absorbance/Transmittance/Reflectance (thin film)	RM25/sample	RM45/sample	RM65/sample
Centrifuge	IMN-TC02	Separation of liquid material	RM20/hour	RM30/hour	RM40/hour
Spin Coater	IMN-SC02	Polymer and carbon-based material	RM15/hour	RM20/hour	RM25/hour
Cleanroom Lab (Anezah)					
SEM (JEOL)	IMN-SEM	Scanning electron microscope	RM50/sample	RM100/sample	RM150/sample
Thin Film Mapping	IMN-MAP	SiO ₂ and Si ₃ N ₄	RM30/sample	RM60/sample	RM90/sample
Microscope (Olympus)	IMN-OM02	With depth analyzer	RM50/hour	RM100/hour	RM150/hour
PECVD	IMN-PECVD	SiO ₂ and Si ₃ N ₄	RM100/hour	RM150/hour	RM200/hour
DC/RF magnetron sputter	IMN-SPUT02	Mo, Ta, ZnO, Si, SiO ₂ , Al, Cu, Ti	RM100/hour	RM150/hour	RM200/hour
Gold sputter coater	IMN-SPUT03	Au (minimum 50nm)	RM100/jam	RM150/jam	RM200/jam
Oxidation furnace	IMN-FURN02	SiO ₂ wet oxidation (all in) Anneal (all in)	RM150/hour	RM200/hour	RM250/hour
RIE	IMN-RIE	Etch Si, SiO ₂ and Si ₃ N ₄	RM100/hour	RM150/hour	RM200/hour
Karl-Suss MJB Mask Aligner	IMN-KARL	UV exposure	RM50/hour	RM75/hour	RM100/hour
Midas Single Side Mask Aligner	IMN-MIDAS	UV exposure	RM50/hour	RM75/hour	RM100/hour
Spin Coater	IMN-SC03	SU8, PDMS	RM15/sample	RM20/sample	RM25/sample
Programmable Spin Coater	IMN-SC04	Photoresist	RM15/sample	RM20/sample	RM25/sample
LCR meter	IMN-LCR02	Impedance/capacitance/inductance	RM50/sample	RM100/sample	RM150/sample
Keithley semiconductor analyzer	IMN-4PP03	Semiconductor characterization/IV/CV	RM50/hour	RM100/hour	RM150/hour
Corona discharge	IMN-CORO	Corona treatment	RM20/sample	RM40/sample	RM80/sample
Cleaning (wet bench)	IMN-CLEAN	DI water, IPA, methanol, acetone, ethanol, ultrasonic bath	RM20/hour	RM60/hour	RM100/hour
Wet etching process (wet bench)	IMN-ETCH	Acids and bases	RM20/hour	RM60/hour	RM100/hour
Diamond cutter	IMN-WAFER	Wafer plus cutting	RM20/wafer	RM40/wafer	RM80/wafer