Name:_____ Date:_____ Batch No: UPM/FSAINS/FIZ/LFA____/___

Department of Physics
Faculty of Science, Universiti Putra Malaysia

APPLICATION FOR THERMAL PROPERTIES MEASUREMENT USING LASER FLASH APPARATUS (NESZCH LFA457)

Section A: User's Particulars	
Name:	Matric / Staff No:
Faculty:	Department:
Contact No.:	Email:

Section B: Information of Samples		
Sample 1	Name: Composition:	Type: □ metallic □ ceramic □ polymeric □ composite □ electronic □ organic □ other:_____
	Diameter[1] : mm Thickness[2] : mm Density : g/cm^3 Melting Point[3]: °C	Surface descriptions: □ opaque □ porosity: _____% □ reflective □ color:_____ □ coated with _____
	Specific Heat[4] : J/gK Target mesurement temperatures/°C[5]: _____°C to _____°C step _____ Tolerance: ±_____°C	Measurement: □ thermal diffusivity, α □ thermal conductivity*, λ □ specific heat*, C_p
	Other Descriptions:	
Sample 2	Name: Composition:	Type: □ metallic □ ceramic □ polymeric □ composite □ electronic □ organic □ other:_____
	Diameter[1] : mm Thickness[2] : mm Density : g/cm^3 Melting Point[3]: °C	Surface descriptions: □ opaque □ porosity: _____% □ reflective □ color:_____ □ coated with _____
	Specific Heat[4] : J/gK Target mesurement temperatures/°C[5]: _____°C to _____°C step _____ Tolerance: ±_____°C	Measurement: □ thermal diffusivity, α □ thermal conductivity*, λ □ specific heat*, C_p
	Other Descriptions:	
Sample 3	Name: Composition:	Type: □ metallic □ ceramic □ polymeric □ composite □ electronic □ organic □ other:_____
	Diameter[1] : mm Thickness[2] : mm Density : g/cm^3 Melting Point[3]: °C	Surface descriptions: □ opaque □ porosity: _____% □ reflective □ color:_____ □ coated with _____
	Specific Heat[4] : J/gK Target mesurement temperatures/°C[5]: _____°C to _____°C step _____ Tolerance: ±_____°C	Measurement: □ thermal diffusivity, α □ thermal conductivity*, λ □ specific heat*, C_p
	Other Descriptions:	

Name:_____ Date:_____ Batch No: UPM/FSAINS/FIZ/LFA____/___

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Section C: Reservation	
Proposed date:	Time: From _____ to _____

Section D: Declaration
I hereby declare that the information provided is accurate within my knowledge[7]. Applicant's Signature _____ Name: Date:

Section E: Supervisor's Endorsement		
The above application is supported/not supported.		
_____	_____	_____
Signature	Chop	Date

For Administration Use Only		
Scheduled Date & Time[6]: Date & Time Sample(s) Received: Date & Time Sample(s) Measured:		
Results:		
Remarks:		
Measured by:	Signature	Name: Date:

[1]Acceptable diameter range: 11.7mm~12.7mm / 9.5mm~10mm
[2]Acceptable thickness range: Conductive material: 3mm~10mm, Non-conductive material: 1mm~3mm
[3]Supporting references/documents such as results of DSC, TGA, Dilatometry etc. are compulsory for polymeric materials to prove that sample deformations do not take place at the targeted measurement temperatures. Such references/documents are recommended for other materials.
[4]Required only if thermal conductivity measurement is selected
[5]Allowable temperature range: Room Temp.~ 450°C
[6]Scheduled date may be changed from time to time if any unforeseen conditions occurred. Kindly follow up with you authorized person-in-charge if necessary.
[7]The department reserves the right no to accept/measure a sample if it is deemed to cause potential damage or harm to the instruments or the operators.
*Optional field