

Received requisition on:

Sr.No.

Status: Completed/Delayed/ Cancelled

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**Metallurgical Engineering and Materials Science (MEMS) IIT Bombay**  
**Requisition form for LFA 467HT (room temperature to 1200°C)**

**Instructions**

- 1) Please note the designated sample dimensions provided for different types of bulk materials.
  - 2). Please provide information of the sample densities
  - 3) In order to safeguard the instrument from damage **it is absolutely essential** that the material does not decompose or soften in the measured temperature range.
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Name of the user:

Designation/Roll No.:

E-mail address:

Department:

Intercom No:

Name of Guide:

Nature of Project\*: B.Tech / Dual Degree / M.Tech /Ph.D./Consultancy /Sponsored Project  
(Consultancy/ Sponsored Project):

Material details:

Sample Dimension:

Temperature Range:

Number of Samples:

Your requirement:      Diffusivity    ☐ (density:                      )  $C_p$     ☐

***Declaration:***

*I hereby declare, that to the best of my knowledge, the material/s does-not undergo any degradation/softening in the requested temperature range of measurement. This information is based on literature reports/other measurements. It is mandatory for the user to acknowledge CSIF- IoE funded Laser Flash Analyser facility at Dept. of Metallurgical Engineering and Materials Science, IIT Bombay, in their publications and thesis and communicate the same to the laboratory.*

## Sample Dimension

	Sample Type	Sample Dimensions (mm)
1	Bulk (Ceramic)	Diameter( $\phi$ ):10 or 12.7
2	Bulk (Semiconductor)	Diameter( $\phi$ ):10 or 12.7
3	Bulk (Metal)	Diameter( $\phi$ ):10, Square: 10x10
4	Bulk (Polymer)	Square: 10x10
5	Thin Film	Square: 10x10

<sup>#</sup>***thickness:*** for bulk samples: 1mm-2mm, thin films: limited by the thermal diffusivity

<sup>##</sup>***Standard sample for  $C_p$  measurement to be decided by temperature range and absolute values.***

## Thermal Conductivity Usage Charges

### Charges are per slot

Temperature Range	IITB Internal Users (INR)	No of samples	Total
Room Temperature	400		
RT-500 <sup>0</sup> C (Standard)*	600		
RT-1000 <sup>0</sup> C (Standard)*	1000		
Total :			

\*Additional charges for more temperature points, temperature steps can be user defined.

1. **Charges are per slot.** Each slot can have upto **3 (max)** samples for thermal conductivity and **4 (max)** samples for thermal diffusivity measurements.
2. **RT-500<sup>0</sup>C (standard):** Six temperature points (RT, 100<sup>0</sup>C, 200<sup>0</sup>C, 300<sup>0</sup>C, 400<sup>0</sup>C, 500<sup>0</sup>C)
3. **RT-1000<sup>0</sup>C (standard):** Eleven temperature points (RT to 1000<sup>0</sup>C in intervals of 100<sup>0</sup>)
4. Additional temperature step: INR 100 (per point)

To IRCC, Transfer..... (Rs.) from \_\_\_\_\_  
To Project code: RD/0424-IRIOE90-060 GL : 835180

\_\_\_\_\_  
Student's Name and Signature

\_\_\_\_\_  
Supervisor's Name and Signature

\_\_\_\_\_  
Prof. Titas Dasgupta (Facility In-Charge)

\_\_\_\_\_  
Head of the dept Signature  
(For non-dept users)