

REF: PH/GEN/239/2018-19

Date: 2nd January 2019

Dear Sir,

Kindly send a quote for the following item on CIP Bangalore basis. Your quotation should clearly indicate the terms of delivery, delivery schedule, payment terms, warranty clause etc. The tender should be submitted in two separate sealed envelopes - one containing the technical bid and the other containing the commercial bid, both of which should reach us, duly signed on or before 1700 hours, 29th January 2019.

Please enclose a compliance certificate along with the technical bid.

Yours Sincerely,

Chair,
Department of Physics

Thermal Diffusivity Measurement by Laser Flash Technique
Specification

Temperature range	RT to 1100 deg C
Source	Nd: YAG Laser (Only Laser source) Pulse energy: 18 J/Pulse or more (Variable software controlled) Pulse width: 0.3 to 0.4 ms
Heating rate max	1K/min-50 K/min
Automatic sample changer	Minimum 4 samples
Sensor	InSb
Thermal diffusivity	0.01 mm ² /s to 1000 mm ² /s
Thermal Conductivity	0.1 W/(mK) to 2000 W/(mK)
Accuracy	Thermal Diffusivity \pm 3% Specific Heat \pm 5% for most material
Repeatability	Thermal Diffusivity \pm 2% Specific Heat \pm 3% for most material
Sample dimension	6mm, 8mm, 10mm, 12.7mm, 25.4mm for round samples, 6mm,8mm,10mm for square samples
Thin Film/ Thick film	Free standing film thickness from 0.1mm to 0.5 mm samples
Atmosphere	Inert, Oxidizing, Vacuum
Require	Vacuum system and controller should be quoted
	The system should be complete in every respect without any additional equipment supplied by us.