



**INDIAN INSTITUTE OF TECHNOLOGY, KANPUR**  
**GT ROAD, KALYANPUR, KANPUR – 208016**  
**UTTAR PRADESH, INDIA**

**TENDER REFERENCE NO.: IITK/AE/VA/CPRI/SEE/2021-22/05**

**Bid Submission End Date- 21.04.2022**

**Tender Document**

**For**

**“Purchase of Heat Flux Transducer”**

## Tender document

Department of Aerospace Engineering  
Indian Institute of Technology Kanpur  
Kanpur (UP) 208016 India

**Tender Ref. No.: IITK/AE/VA/CPRI/SEE/2021-22/05**

**Bid Submission Start Date: 01.04.2022**

**End Date: 21.04.2022 16:00 hrs**

Sealed quotations are invited for Purchase of Heat Flux Transducer in two bid system ie. Technical bid & Financial bid.

Both Technical bid and financial bid in separate envelopes must be kept in a big envelop which must be superscribed by **Name of Tender, Tender Reference number and bid submission end date.** Only Technically qualified bidders will be eligible for opening of financial bid.

The detailed specifications and address for bid submission is given below:

### **Technical Specification for Heat Flux Transducer**

- ❖ *Type: Radiation transducer with sapphire window, gas purge and water cooling provision, smooth body with flange.*
- ❖ *Range: Full scale design heat flux 200 Btu/ft<sup>2</sup>-s*
- ❖ *Size: 1 inch basic diameter*
- ❖ *Output signal: linear output, 10 millivolts nominal at full range*
- ❖ *Maximum allowable operating body temperature: 400<sup>0</sup>F*
- ❖ *Over range capability: to 150% range*
- ❖ *Maximum non linearity: ±2% of full range*
- ❖ *Repeatability: ±½%*
- ❖ *Calibration expanded uncertainty: ±3% for approximate 95% confidence level*
- ❖ *Calibration: certified radiant flux comparison calibration to ANSI/NCSL 2540-1 and ISO/IEC 17025*
- ❖ *Sensor absorbtance (Hemispherical): Gardon gages, 0.92 nominal – from 0.6 to 15.0 μm*
- ❖ *Spectral transmitted by sapphire window: 85% normal from 0.15 to 5.0 μm*
- ❖ *Lead wire: 24 AWG standard copper twisted pair, Teflon insulation over each, braided copper shield, Teflon jacket overall, 36” standard length with stripped ends.*
- ❖ *Time constant (63.2% response to a step radiant heat input): less than 100 ms*
- ❖ *Sensor type: Gordon gage*
- ❖ *Nominal impedance: less than 10 ohms on Gardon Gages*
- ❖ *Maximum purge gas pressure: 150 psi over ambient*

**Quotations must reach on or before the bid submission end date to the address given below:**

**Dr. Vaibhav Arghode**

Department of Aerospace Engineering  
Indian Institute of Technology Kanpur  
Kanpur 208 016, India  
Email: [varghode@iitk.ac.in](mailto:varghode@iitk.ac.in)

**Terms and Conditions:**

1. All equipment must be compatible with Indian electrical standards and codes. Engineering documentation on the physical sizes and weights of all major and minor components must be submitted.
2. TENDER Specific Manufacturer Authorization Form from OEM Required.
3. IIT Kanpur is partially exempted from payment of GST (@5% only), IIT Kanpur will provide GST exemption certificate for the same (Govt. Notification and date of issue: 47/2017-Integrated Tax (Rate), dt. 14-11-2017).
4. The Institute reserves the right of accepting or rejecting any/all quotations without assigning any reason thereof.
5. All prices should be F.O.R.
6. Installation by OEM is preferred.
7. IIT Kanpur is fully exempted from payment of GST on Imported Goods against our DSIR certificate.
8. IIT Kanpur is partially exempted from payment of Customs Duty (We will provide Custom Duty Exemption Certificate, CD applicable is 5.5%).

**TENDER ACCEPTANCE LETTER**  
**(To be given on Company Letter Head)**

Date: \_\_\_\_\_

To,

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No: \_\_\_\_\_

Name of Tender / Work: -

\_\_\_\_\_

Dear Sir,

1. I / We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely: \_\_\_\_\_ as per your advertisement, given in the above mentioned website(s).

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No. \_\_\_\_\_ to \_\_\_\_\_ (including all documents like annexure(s), schedule(s), etc .), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/ organisation too have also been taken into consideration, while submitting this acceptance letter.

4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.

5. I / We do hereby declare that our Firm has not been blacklisted/ debarred/ terminated/ banned by any Govt. Department/Public sector undertaking.

6. I / We certify that all information furnished by our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organisation shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

**Yours Faithfully,**  
**(Signature of the Bidder, with Official Seal)**

**Declaration for Local Content**

**(To be given on Company Letter Head - For tender value below Rs.10 Crores)  
(To be given by Statutory Auditor/Cost Auditor/Cost Accountant/CA for tender value above  
Rs.10 Crores)**

Date: \_\_\_\_\_

To,  
The Director,  
Indian Institute of Technology Kanpur,  
GT Road, Kalyanpur, Kanpur -208016

Sub: Declaration of Local content

Tender Reference No: \_\_\_\_\_

Name of Tender / Work: - \_\_\_\_\_

1. Country of Origin of Goods being offered: \_\_\_\_\_
2. We hereby declare that items offered has \_\_\_\_% local content.

*“Local Content”* means the amount of value added in India which shall, be the total value of the item being offered minus the value of the imported content in the item (including all customs duties) as a proportion of the total value, in percent.

*“False declaration will be in breach of Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.”*

**Yours Faithfully,  
(Signature of the Bidder, with Official Seal)**