



**INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR
KHARAGPUR, W.B., 721302, INDIA**

NOTICE INVITING TENDER

No. IIT/AE/ENQ/SK/TGA/2018-19/01

Date: 12/10/2018

Sub: “Procurement of High temperature thermal analyzer (Simultaneous TGA/DSC/DTA)”

Indian Institute of Technology, Kharagpur, an Institute of National Importance invites sealed bids from reputed manufacturer or their authorized Distributor/Dealer (Foreign Firms or their Indian Representative Company) who have adequate credential for supply of “**High temperature thermal analyzer (Simultaneous TGA/DSC/DTA)**” as per **Annexure – I** for the **Department of Aerospace Engineering, Indian Institute of Technology, Kharagpur, India.**

Interested parties may submit their sealed bids under the Two-Bid system as per **Technical Specifications** are given at **Annexure – I**, and **General Terms & Conditions and Special Instructions** given at **Annexure – II and Annexure – III**. Bidders are required to submit their **Details** in the format given at **Annexure – IV** along with their technical bids. They are also required to submit a signed **Declaration** in the format given at **Annexure – V**. A **Checklist and Compliance Statement** against each item of **Annexure I – III** thereon severally and individually shall also be submitted. Kindly refer to the Institute website **www.iitkgp.ac.in** [link: Tenders] for complete tender details.

The tender be sent in a sealed packet, containing two separate sealed envelopes (one each for **Technical Bid and Commercial Bid**) along with **prescribed Tender Fee and Earnest Money Deposit (EMD)** duly superscripted with Tender Notice **No. IIT/AE/ENQ/SK/TGA/2018-19/01, Date: 12/10/2018**, to **The Office of the Head, Department of Aerospace Engineering, Indian Institute of Technology Kharagpur, P.O. Kharagpur Technology, PIN-721302, West Bengal, India on or before 13/11/2018 by 3.00 PM (IST).**

For any query pertaining to this bid document, communication is addressed to **The Head, Department of Aerospace Engineering, Indian Institute of Technology Kharagpur – 721302 [Ph: +91 – 3222 – 283012].**

The technical bid will be evaluated first and Commercial and Price bids will be opened in respect of those Original Equipment Manufacturers (OEMs)/Vendors, who are found technically qualified after evaluation of Technical bids.

The Technical bids will be opened on **13/11/2018 at 4.00 PM (IST)** in **The Office of the Head, Department of Aerospace Engineering, Indian Institute of Technology Kharagpur-721302.**

Copy to: 1. Institute website,
2. CPPP
3. Notice Board

**Head of the Department,
Department of Aerospace Engineering
IIT Kharagpur**

IMPORTANT DETAILS

Tender Reference	No. IIT/AE/ENQ/SK/TGA/2018-19/01 Dated: 12/10/2018
Tender fee	Rs. 1000 /-
EMD	Rs. 70,000/-
Last Date and Time for submitting the tender document	13/11/2018 by 3:00 PM (IST)
Time and Date of Opening of Technical Bids	13/11/2018 at 4:00 PM (IST)
Place of Opening Tender	The Office of the Head, Department of Aerospace Engineering, Indian Institute of Technology Kharagpur – 721 302, West Bengal, India
Address of Communication	Same as above
Contact Telephone Numbers for technical query	+91-3222-283012 (O), +91-7872027541 (M)
E-mail	skarmakar@aero.iitkgp.ac.in

ANNEXURE – I

HIGH TEMPERATURE THERMAL ANALYZER (SIMULTANEOUS TGA/DSC/DTA)

TECHNICAL SPECIFICATIONS

- Temperature Range: Room Temperature to 1600 °C
- TGA should have ultra-microbalance with 0.2 µg or better sensitivity/resolution
- Balance precision: ±0.02% or better
- Atmospheres: Inert, Oxidizing
- Built-in Mass Flow controller for switching of gases
- Heating rate: 0.1 to 50 °C/min with a step of 1 °C (from room temperature to 1000°C) and 0.1 to 25 °C/min or higher with a step of 1 °C (from 1000 °C to 1600°C)
- Temperature accuracy: Ambient to 1000°C ±0.5 °C, 1000°C to 1600 °C ±1.0 °C or better
- The gas flows to be controlled through built-in Mass Flow Controller and Software. The flows to be set through software as well as gas switching at the desired temperature.
- Maximum Sample mass: 1500 mg.
- The system should have built-in DTA mode with simultaneous scanning facility in single run.
- DTA signal should have provision to convert into DSC mode/signal for quantitative studies for the whole temperature range.
- All the three curves/parameters like TGA/DTA/DTG or DSC to be displayed on single screen.
- Quoted instrument should have the provision to hyphenate with FTIR and GCMS for evolved gas analysis. Heated interface, FTIR, TGA and GCMS from single vendor for future upgradation is preferred.
- Ceramic pans (10 nos), Pt pans (2 nos) must be quoted with the instrument.

Suitable PC, suitable online UPS, Chiller, UHP grade nitrogen gas filled cylinder with regulator should be quoted.

Warranty terms: Comprehensive 3 years warranty for whole instrument including furnace

Application: Oxidation analysis of boron particles and other energetic particles such as aluminium, iron, magnesium and titanium and their composites. Other samples may be tested under inert or oxidizing atmosphere in future.

OTHER ESSENTIAL REQUIREMENTS:

- i. Options for annual maintenances in the subsequent years must be provided.
- ii. The firm has to guarantee support for the system and spares for a minimum period of 10 years beyond the warranty period.
- iii. The firm must have proven knowledge and expertise in standard system installation, commissioning and providing training. Supporting documents evidencing the above must be enclosed.
- iv. Compliance of all listed specifications terms and conditions should be indicated on a separate sheet.
- v. All maintenance and service requests must be attended within 48 hours.

- vi. The firm must have a dedicated service center in the eastern region of India preferably in Kolkata having atleast 2 or 3 service engineers for guaranteed up-time of the instrument.
- vii. Only those manufacturers/their Indian Agents are eligible to bid who have supplied and installed such or similar equipment during the past five years preferably in India. Copies of recent user satisfaction certificates from these users and their complete contact details must accompany the bid. IIT Kharagpur reserves the right to verify confidentially the information in this regard from the users.

OPTIONAL ITEMS

FTIR Specification

- Spectral Range : 8,300 – 350cm⁻¹
- Spectral Resolution : 0.5cm⁻¹ or better
- Signal to noise ratio: >50000:1 peak to peak for 1 min scan
- The spectrometer must utilize a rotary interferometer providing inherent immunity to mirror tilt and shear and require no scanning mirror dynamic alignment.
- The mid -IR source must be pre-aligned and incorporate electronic stabilization.
- DTGS/DLATGS detector
- Long life diode laser for reference beam calibration

Hyphenation Specification

- Must have zero gravity effect technology.
- The transfer line and cell must be capable of heating up to 350 °C.
- Must be capable of controlling gas flow throughout the entire system
- Must have mass flow control of the evolved gas.
- Must have automatic accessory detection and IR parameter setting.
- Must have option of direct to column or sample collection loops

GENERAL TERMS AND CONDITIONS

- 1) **Last Date of Submission of Sealed Bids (both technical and price bids, separately):**
13.11. 2018 up to 3.00 P.M.

The Technical bids will be opened on 13.11.2018 at 4.00 P.M. in the Office of the Head, Department of Aerospace Engineering, I.I.T. Kharagpur, India.

- 2) **Payment Terms & Performance Bank Guarantee (PBG):** 90% payment will be made on submission of shipping documents and balance 10% payment will be made on installation, commissioning and submission of PBG for performance period if the payment is made by LC, otherwise 90% will be released after receipt of stores and 10% after successful installation and submission of PBG for the performance period. The security deposit so retained may be refunded on submission of Bank Guarantee towards Performance Guarantee valid for **3 years throughout comprehensive warranty period plus sixty days** drawn on any commercial bank. No advance/mobilization support, is payable against supply of stores. In the event of failure to deliver the stores beyond the specified date, liquidated damages At the rate 1% per month or part thereof in respect of the value of stores will be deducted, subject to a maximum of 5%; alternately the order will be cancelled and the undelivered stores purchased from elsewhere at the risk and expense of the vendor.
- 3) **Warranty/Guarantee & On-site skill support:** **Three years** onsite comprehensive OEM warranty from the date of successful installation and commissioning. The firm has to guarantee supply of spares for a minimum period of 10 years. **The OEMs/Authorized Distributors and Dealers must attach certificate about their after sales and service facilities with Technical Bids**, escalation support for on-call service or station engineer etc.
- 4) **Earnest Money Deposit (EMD):** An amount of **Rs. 70,000/-**(Rupees Seventy thousand only) in the form of Demand Draft drawn in favour of **“IIT Kharagpur”**, payable at Kharagpur.

E.M.D. should be enclosed separately in an envelope and stapled with the Technical Bid document superscribing EMD. The validity of the EMD should be 3 (three) months from the date of issue. **Any bid without EMD will summarily be rejected. No interest is payable on EMD.** EMD will be refunded to the unsuccessful bidder after finalization of the tender process. No interest is payable on EMD. EMD shall be forfeited if the selected vendor after award of contract, fails to execute the same.

- 5) **Tender Fee:** An amount of **INR 1,000** (Rupees One thousand only) as tender fee (non-refundable) is to be paid. The payment shall be made by Demand Draft from any Nationalized Bank /Commercial Bank and paid in favour of **“Indian Institute of Technology Kharagpur”**, payable at Kharagpur. **Bids without Tender Fee will not be accepted. This should be enclosed separately in an envelope and stapled with the Technical Bid document superscribing Tender fee.**

Note : Exemption of submission of Tender fee and Earnest Money Deposit (EMD) will be considered as per Government of India rule.

6) **Delivery of Stores:** The store items are to be supplied within 30 days from the date of receipt of the Purchase Order or from opening of LC whichever is later.

7) Price :

PRICE may be quoted either in INR or in foreign currency.

Where bidder intends to quote in Indian Rupees (INR), the price should be quoted “FOR IIT Kharagpur “ basis. The price should be all inclusive including GST.

IIT Kharagpur is registered DSIR, Govt. of India. GST rate for scientific goods is 5% as per the Notification No. 47/2017-Integrated Tax (Rate) dated 14th November, 2017. Necessary certificate in this regard will be issued as per requirement and on request of the successful bidder. Where bidder intends to quote in foreign currency FCA/FOB source port price by Air/Sea to be quoted. In case of comparison between FOR IIT Kharagpur (quoted in INR) and FOB/FCA price (quoted in foreign currency) 20% will be added on FOB/FCA price after conversion to INR.

IIT Kharagpur is registered DSIR, Govt. of India and eligible for exemption for payment of Customs Duties in Terms of Government of India Notification No.51/96-Customs dated 23.07.96. Necessary certificate in this regard will be issued as per requirement and on request of the successful bidder.

- (i) Agency Commission, if any will be paid to the Indian agents in Rupees on receipt of the equipment and after satisfactory installation. Agency Commission will not be paid in foreign currency under any circumstances.
- (ii) The unit prices should be for the same unit as indicated in the Schedule to tender enquiry and not for any other unit.
- (iii) Prices quoted should be for supply, installation and commissioning at I.I.T. Kharagpur.
- (iv) Discount, if any, should be indicated separately/prominently.
- (v) Offers should normally be on fixed and firm price basis. Any clause making price variation will not be acceptable.

8) **Bid:** Technical Bid and Price Bid should be submitted in two separate sealed envelopes quoting reference number on the top of the envelope. Tender Fee and EMD should be enclosed with the Technical Bid documents, in separate sealed envelopes, stapled with the packet containing Technical Bid documents. The OEMs may either bid directly or Country/Regional/State Distributors /Dealers/Vendors, to quote authorized with valid authorization certificate, capability to sale and service of the products.

- 9) **Acceptance of Tender:** The Authority of IIT Kharagpur does not bind itself to accept the lowest priced bid and reserves the right to reject any or the entire tender bids received without assigning any reason thereof.
- 10) The addendum/corrigendum if any shall be published on Institute's Website i.e. www.iitkgp.ac.in and on CPP Portal.
- 11) The Bidders are requested to submit the bids after issue of clarifications only considering the changes made if any. Bidders are totally responsible for incorporating/complying the changes/amendments issued if any, in their bid.
- 12) **Extra Features:** If the bidder provides any other extra features on the Hardware or Software which are not mentioned in the tender product specifications, then that shall be highlighted in clear terms, with documentary evidence/literature.
- 13) **Compliance List:** The proposal should be properly indexed and a compliance list against the technical specifications should be provided.
- 14) **Service:** Response to ensure quality of services, the deputed Engineer from the OEM/Vendor shall have a minimum of 2 years of experience in the relevant field and must be in the payroll of the OEM/Vendor. Service during warranty, onsite support should be provided within 48 hours of the lodging of the complaint. Telephonic attendance to the problem should be made available.
- 15) **Installation and Commissioning:** Free of cost at IIT, Kharagpur. The OEM must ensure timely installation of '**High temperature thermal analyzer (Simultaneous TGA/DSC/DTA)**' with necessary support to the indenters, as per details and lists to be made available by the Stores & Purchase Section or the indenting Departments/Centres/Schools.
- 16) **Validity of licenses:** Software's licensing price or policy (if any) shall be clearly mentioned. All licenses should be perpetual.
- 17) The OEM should have ISO-9001 or equivalent certification with due credits to energy conservation and green earth compliance.
- 18) **Relevant documents of the OEM shall be enclosed, along with the Technical Bid. Any explanation on this account shall be supported with documentary evidence from the principals.**
- 19) **Conditional Offer** will not be accepted.
- 20) **Period of Validity:** Bids shall remain valid for acceptance for a **period of 90 days** from the date of opening of the price bid.

21) The benefit of any downward price revision (revision on account of budget/financial policy, tax revision, EPZ etc.) is to be given to IIT Kharagpur by the selected OEM/vendor.

22) **Past Performance of the Vendors will be judged at the time of Technical Evaluation.**

23) **The Institute does not bind** itself to offer any explanation to those bidders whose technical bids have not been found acceptable by the Technical Evaluation Committee of the Institute.

24) **Bidders should** enclose the following documents:

- I. Certificate of Registration / Trade License
- II. Attested copy of PAN card and GST registration papers
- III. Authorized Distributors/Vendors must submit **two separate** appropriate authorization certificates and letters from their OEMs, for **(i) participation in the said tender and (ii) to submit the bids in favour of OEM (to be attached with technical bids)**
- IV. Name and address of past satisfactory supplies or minimum three clients to whom such items/stores have been supplied should be mentioned in the technical bid.
- V. Copy of mandatory test reports, national testing/reliability and endurance test reports etc., certified or conducted at the manufacturing site, granted by the bureaus/quality control departments/national testing laboratories.
- VI. Copy of product literature, for which the prices have been quoted.
- VII. The firm must have proven knowledge and expertise in standard system installation, commissioning and providing training. Supporting documents evidencing the above must be enclosed. All maintenance and service requests must be attended within 48 hours. The firm must have a dedicated service center in the eastern region of India preferably in Kolkata having atleast 2 or 3 service engineers for guaranteed up-time of the instrument.
- VIII. Signed copy of the tender document, with company seal, agreeing to the terms & conditions and declaration should be provided.
- IX. **Proforma Price Bid (without mentioning the price rate) may be attached with technical bids**
- X. **Port of Shipment and Country of origin: Should be mentioned in the quotation.**
- XI. **Purchase order to be placed on: Should be mentioned in the quotation with full address.**
- XII. The OEMs/Vendors need to submit a certificate that they are not currently debarred or blacklisted in IIT Kharagpur or in any national organization or educational institute / university for any supplies, products or services,.

25) **All tenders are to** be handed over in a sealed box in the **Office of the Head, Department of Aerospace Engineering, IIT Kharagpur-721302**. The bids (technical and price bids) once submitted shall be the property of the Institute and shall not be returned to the vendor in future. **For speed post, the Postal Address is “Office of the Head, Department of Aerospace Engineering, IIT Kharagpur-721302”**

26) **Opening of Price Bids:** The Price Bid(s) of only those vendor(s) who are found technically qualified will be opened and the same will be opened before the technically qualified vendor(s). **The date for opening of price bids will be notified separately.**

27) Bidder or his/her authorized representative (with proper authorization letter for attending opening of technical bids and also for opening of price bids) may choose to be present at the time of opening of Technical Bids/Price Bids.

28) **IMPORTANT**

I. Director, IIT Kharagpur may accept or reject any or all the bids in part or in full without assigning any reason and does not bind himself to accept the lowest bid. The Institute at its discretion may change the quantity/upgrade the criteria/drop any item or part thereof at any time before placing the Purchase Order.

II. A bid submitted with false information will not only be rejected but also the OEM/vendor will be debarred from participation in future tendering process.

III. In case of any dispute, the decision of the Director, IIT Kharagpur shall be final and binding on the bidders.

IV. For any query pertaining to this bid document, correspondence is to be addressed to the End user:

Department of Aerospace Engineering,
Indian Institute of Technology
Kharagpur- 721302, West Bengal, India
[Ph:+91-03222- 282242]
Email :- dkmaid@aero.iitkgp.ac.in

V. In case the due date for opening tender happens to be a holiday, the same will be opened on the next working day. The timings will however remain unchanged. Please Note that the Institute remains closed on Saturday & Sunday.

INSTRUCTIONS & SPECIAL CONDITIONS

1. **GENERAL:** Bidder(s), who are Indian Agents of OEMs should furnish a clear declaration as follows: We declare that I am/we are Accredited Agents of the suppliers aboard. DGS&D enlistment certificate needs to be attached (applicable only for the Indian Agents)

Documents to be furnished by the Indian agent in respect of their foreign principals:

- (a) Foreign Principal's pro forma invoice indicating the commission payable to the Indian agent and nature of after sales service to be rendered by the Indian agent.
- (b) Certificate from the foreign principal authorising the Indian company to act on their behalf in fulfilling this contract.
- (c) Copy of the agency agreement with the foreign principal and the precise relationship between them and their mutual interest in the business.

2. **DETERMINATION OF THE SUCCESSFUL BIDDER:**

Bidders will have to meet the technical criteria laid down in Annexure-I before their price offerings can be considered. Among those bidders who satisfy the technical criteria, normally the one whose prices are lowest for the items listed in Annexure-I will be awarded the order. Prices quoted against **Optional items** listed in Annexure-I will not influence the choice of the successful bidder.

3. **DEVIATION FROM SPECIFICATIONS:**

It is in the interest of the bidder to study the specifications in the tender schedule thoroughly before quoting so that, if the bidder makes any deviations, the same are prominently brought out in the body of the tender. If you need to add any optional items to your system in order to meet our specifications, you are requested to quote for the total including the option required to suit our requirements. Otherwise, your tender will not be considered at all.

4. **BIDDER SHALL SUBMIT ALONG WITH THEIR TENDER:**

- (i) Complete address and tele links for contact persons of principals and Indian agent offices dealing with this purchase.
- (ii) Name and full address of the OEM's Banker and their swift code.
- (iii) Port of shipment and Country of origin is to be provided for each item.
- (iv) Purchase order to be placed on: Should be mentioned in the quotation with full address

5. **PERFORMANCE BANK GUARANTEE:** On behalf of the Principal, Indian Agent must be able to provide Performance Bank Guarantee of the amount equivalent to the 10% of the cost of equipment from any Nationalized Bank. The Performance Bank Guarantee is required for the entire period of Warranty. Performance Bank Guarantee must remain valid for a period sixty days beyond the expiry of the Warranty Period. Bid security will be refunded back on submission of performance Security.

6. **GUARANTEE:** The tenderer has to declare that the goods sold to the buyer under this contract shall be of the best quality and workmanship and shall be strictly in accordance with the specifications.

7. JURISDICTION: All questions, disputes, or differences arising under, out of or in connection with the contract, if concluded, shall be subject to the exclusive jurisdiction at the place from which the acceptance of Tender is issued i.e. Jurisdiction of KOLKATA HIGH COURT. Acceptance to this effect is also necessary at the time of opening of Technical Bid.

8. ACKNOWLEDGMENT: It is hereby acknowledged that we have gone through all the points listed under “Instructions & Special Conditions” outlined above, and those in the accompanying note on “Important Conditions”, and we agree to abide by them under the penalty of permanent disqualification for Tender participation and for related penal actions for non-abidance of the conditions.

9. Interested vendors must be able to supply adequate spares and consumable during **three years of comprehensive warranty**. Vendor should also ensure trouble free service and performance for another **seven years beyond three years Comprehensive Warranty** Period with adequate spares and accessories.

ANNEXURE – IV TECHNICAL BID DOCUMENT

Format to be filled by the manufacturers/ Indian agents (on behalf of their foreign principles) or their authorized country distributors/ representing dealers/ regional agencies, submitting a tender for supply of High temperature thermal analyzer (Simultaneous TGA/DSC/DTA) for IIT Kharagpur (Department of Aerospace Engineering)

1. Name of the Tenderer:

2. Status of the Tenderer:

(Attach documents, if registered company/partnership/proprietorship)

3. Whether OEM/representing foreign principle:

(Attach a copy of certificate/authorization)

4. Details of key top official/authorized official:

(Attach details)

5. Details of tie-ups for supply/services, if any:

(Attach details, agreements, escalation matrix)

6. Income Tax and Service Tax returns of previous three assessment year (copy):

7. The financial status of the bidder and/or his associates including Annual Report & Balance Sheet/ Statement of Account of past three years with Registration of Companies (ROC) receipts duly authenticated by Chartered Accountant :

8. Current list/address of clients where similar material has been supplied and successfully working:

9. Name of the Vendor's three largest clients, to whom similar products and services were extended & amount of transaction/annual bills to such clients:

10. Name and address of Vendor's bankers and attach a Solvency Certificate from the Bank for a minimum amount of Rs. 20.00 Lakh.:

11. Income Tax Permanent A/c No. (Attach copy):

12. Details of EMD/Bank Draft No., issuing branch and date:

13. Details of Tender Fee/Bank Draft No., issuing branch and date:

14. Attach all other applicable details as mentioned in **Annexure – II, Point (4)**.

Certified that all above information is correct to the best of my/our information, knowledge and belief:

Dated signature & seal of the
Authorized person of OEM/Vendor

NOTE: This is to be submitted in a separate sealed envelope super-scribing “TECHNICAL BID”, Notice Inviting Tender *No.* **IIT/AE/ENQ/SK/TGA/2018-19/01**, **Date: 12/10/2018** and name of the bidder. All technical documents like literature, catalogues etc., are to be put in the same envelope. Price bid of that company/firm only will be opened which do technically qualify, for further consideration. **Attach all relevant documents in the same serial order as above, properly indexed, duly signed and sealed.**

ANNEXURE V

DECLARATION

1. I, ----- Son /Daughter of Shri -----
----- Proprietor/Partner/CEO/MD/Director/Authorized
Signatory of M/s. ----- am competent to sign this
declaration and execute this tender document.

2. I have carefully read and understood all the terms and conditions of the tender and hereby convey my acceptance of the same.

3. The information/ documents furnished along with the above application are true and authentic to the best of my knowledge and belief.

4. I/ we am/ are well aware of the fact that furnishing of any false information/fabricated document would lead to rejection of my tender at any stage beside liabilities towards prosecution under the appropriate law.

5. Each page of the tender document and papers submitted by my Company is authenticated, sealed and signed, and I take full responsibility for the entire documents submitted.

Signature of the Authorized Person

Date:

Full Name:

Place:

Company Seal: