# **Online Bids**

(through E-Procurement Portal of CPPP)

are invited

for

# Supply, installation, demonstration of Thermal-Mechanical Physical Simulator and Testing Equipment at IIT(BHU) Varanasi

Tender No.: IIT (BHU)/CIF/2022-23/TMPST/64

Tender Publishing Date: 19.01.2023 Last Date of Submission: 20.02.2023 Tender Opening Date: 21.02.2023



Chairman of Purchase Committee & Professor In-charge Central Instrument Facility Indian Institute of Technology (Banaras Hindu University) Varanasi-221005

E-mail: cifc@itbhu.ac.in

# INDIAN INSTITUTE OF TECHNOLOGY (BANARAS HINDU UNIVERSITY) VARANASI – 221005

#### DEPARTMENT/SCHOOL/CENTRE: CIF, IIT (BHU) VARANASI

### **GLOBAL TENDER ENQUIRY DOCUMENTS**

#### (NOTICE INVITING TENDER)

IIT (BHU) Varanasi invites online tender from manufacturers (or their 'authorized' dealers that they have been authorized to quote in response to this NIT) of the following items are invited:

Sl.	Tender No. and Date	Specifications & Quantity	Earnest Money Deposit
No.		of the item	to be submitted
1.	IIT (BHU)/CIF/2022-23/ TMPST/64 dated 19.01.2023	As per Annexure I	Bid Security Declaration Form as per as per Annexure-VII

Tender Documents may be downloaded from Central Public Procurement Portal <u>http://eprocure.gov.in/eprocure/app.</u> Tenderers can access tender documents on the CPP Portal. Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website <u>http://eprocure.gov.in/eprocure/app as</u> per the schedule given in the next page.

Aspiring Bidders who have not enrolled / registered in e-procurement should enroll / register before participating through the website <u>http://eprocure.gov.in/eprocure/app</u>. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at 'Instructions for online Bid Submission'.

No manual bids will be accepted. All quotation (both Technical and Financial should be submitted in the E- procurement portal).

The Tender should be addressed to Chairman of Purchase Committee and Prof In-charge, Central Instrument Facility, Indian Institute of Technology (Banaras Hindu University), Varanasi – 221005, U.P., and should be submitted online on or before the date and time of Bid closing date as mentioned in critical date sheet.

The Institute shall not be responsible for any delay in submitting online Bids. The Institute reserves the right to accept or reject any bid, cancel the Tender without assigning any reason thereof. No correspondence in this regard will be entertained.

Chairman of Purchase Committee & Professor In-charge Central Instrument Facility Indian Institute of Technology (Banaras Hindu University), Varanasi – 221005

# INDIAN INSTITUTE OF TECHNOLOGY (BANARAS HINDU UNIVERSITY) VARANASI – 221005

#### DEPARTMENT/SCHOOL/CENTRE: CIF, IIT (BHU) VARANASI

#### TENDER FOR SUPPLY, INSTALLATION, DEMONSTRATION OF THERMAL-MECHANICAL PHYSICAL SIMULATOR AND TESTING EQUIPMENT AT IIT (BHU) VARANASI

#### Name of Organization Indian Institute of Technology (Banaras Hindu University) Open/Global Global Type/Form of Contract (Work/Supply/ SUPPLY Auction/ Service/ Buy/ Empanelment/ Sell) Date of Issue/Publishing Original Tender 19.01.2023 (03.00 PM) Document Download Start Date 19.01.2023 (03.00 PM) Document Download End Date 20.02.2023 (03.00 PM) Pre Bid Meeting Date\* 30.01.2023 at 12:00 pm \*Queries, if any, to be discussed, MUST be Venue- CIF, IIT(BHU) Varanasi-221005 emailed to cifc@iitbhu.ac.in, before the date of Pre Bid meeting for consideration. Corrigendum, if any As and when required. Last Date and Time for Uploading of Bids 20.02.2023 (03.00 PM) Date and Time of Opening of Technical Bids 21.02.2023 (03.00 PM) Tender Processing Fee : Rs. 23,600.00/-Tender Processing Fee (including GST as To be paid through RTGS/NEFT as per the following applicable) details: Name of Account - Registrar, IIT(BHU) EMD (Bid Security Declaration Form as per Name of the Bank - State Bank of India as per Annexure-VII) Name of Branch - IT, BHU, Varanasi Account No. - 32778803937 IFSC Code - SBIN0011445 The proof of payment of Tender processing fees & Bid Security Declaration Form must be enclosed with Technical Bid. No. of Covers (1/2/3/4)02 **Bid Validity days** 365 days (From last date of opening of tender) **Chairman of Purchase Committee &** Address for Communication **Professor In-charge Central Instrument Facility Indian Institute of Technology (Banaras Hindu** University), Varanasi - 221005, U.P. cifc@iitbhu.ac.in E-mail Address

#### **CRITICAL DATA SHEET**

# INDIAN INSTITUTE OF TECHNOLOGY (BANARAS HINDU UNIVERSITY) VARANASI – 221005

#### DEPARTMENT/SCHOOL/CENTRE: CIF, IIT (BHU), VARANASI

#### TENDER FOR SUPPLY, INSTALLATION, DEMONSTRATION OF THERMAL-MECHANICAL PHYSICAL SIMULATOR AND TESTING EQUIPMENT AT IIT (BHU) VARANASI

# **INVITATION FOR BIDS**

1. Online bids are invited from eligible bidders for the following:

Sl.	Tender no.	Specifications & quantity of	Earnest Money Deposit
No.		the item	(EMD)
1.	IIT (BHU)/CIF/2022-23/ TMPST/64	As per Annexure I	Bid Security Declaration Form as per as per Annexure-VII

- 2. Interested eligible Bidders may obtain further information from IIT (BHU) website: <u>https://www.iitbhu.ac.in/tenders</u> or from Central Public Procurement Portal (CPPP) <u>https://eprocure.gov.in/eprocure/app</u>.
- 3. Intending bidders are advised to visit IIT (BHU) website <u>https://www.iitbhu.ac.in/tenders</u> and CPPP website <u>https://eprocure.gov.in/eprocure/app</u> regularly till closing date of BID submission of tender for any corrigendum / addendum/ amendment.
- 4. Tender Processing Fee is to be deposited electronically by RTGS/NEFT in the account of Registrar, IIT (BHU) in the Bank details mentioned above. Bidders are required to submit the scan copy of payment receipt details of Tender fees payment and EMD (Bid Security Declaration Form as per Annexure-VII) at the time of Bid Preparation.
- 5. This Tender Document contains the following:
  - A. Instructions for Online Bid Submission
  - **B.** Instruction to Bidders
  - **C.** General conditions of contract (GCC)
  - **D.** Special Condition of Contracts
  - **E.** Check-list for Bid/Tender submission
  - **F.** Declaration Certificate
  - G. Technical specifications for the complete project (Annexure 1)
  - H. Compliance Sheet

# **SECTION 1: INSTRUCTION FOR ONLINE BID SUBMISSION**

As per the directives of Department of Expenditure, this tender document has been published on the Central Public Procurement Portal (<u>http://eprocure.gov.in/eprocure/app</u>). The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: <u>http://eprocure.gov.in/eprocure/app</u>.

#### 1. Registration

- 1. Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL:<u>http://eprocure.gov.in/eprocure/app)</u> by clicking on the link "Click here to Enroll". Enrolment on the CPP Portal is free of charge.
- 2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile.
- 5. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.
- 6. Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / eToken.

#### 2. Searching for Tender Documents

- 1. There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.
- 2. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

#### **3. Preparation of Bids**

- 1. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF formats. Bid documents may be scanned with 100 dpi with black and white option.
- 4. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

#### 5. Submission of Bids

- 1. Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3. Bidder has to select the payment option as "on-line" to pay the tender fee / EMD as applicable and enter details of the instrument. Whenever, EMD / Tender fees is sought, bidders need to pay the tender fee / EMD separately on-line through RTGS.
- 4. A standard BoQ format has been provided with the tender document to be filled by all the bidders.

Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.

- 5. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 6. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done.
- 7. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 8. Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 9. Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

#### 6. Assistance to Bidders

- 1. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

#### 7. General Instructions to the Bidders

- 1. The tenders will be received online through portal <u>http://eprocure.gov.in/eprocure/app</u>. In the Technical Bids, the bidders are required to upload all the documents in **.pdf format**.
- 2. Possession of a Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/e-token in the company's name is a prerequisite for registration and participating in the bid submission activities through https://eprocure.gov.in/eprocure/app. Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site https://eprocure.gov.in/eprocure/app under the link "Information about DSC".
- 3. Tenderer are advised to follow the instructions provided in the 'Instructions to the Tenderer for the e-submission of the bids online through the Central Public Procurement Portal for e Procurement at https://eprocure.gov.in/eprocure/app.

### A. Introduction

#### 1. Scope of Work TENDER FOR SUPPLY, INSTALLATION, DEMONSTRATION OF THERMAL-MECHANICAL PHYSICAL SIMULATOR AND TESTING EQUIPMENT AT IIT (BHU) VARANASI

#### 2. Cost of Bidding

The Bidder shall bear all costs associated with the preparation and submission of its bid, and "the Purchaser", will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

#### **B. The Bidding Documents**

#### **3. Tender Processing Fees**

The Tender Processing fees (For Indian Bidders : Rs. 23,600.00/-) should be submitted ONLINE as per the details mentioned above. Further, the proof of payment must be uploaded with Technical Bid. The exemption will be applicable as per Govt. of India norms.

#### 4. Content of Bidding Documents

The goods required, bidding procedures and contract terms are prescribed in the bidding documents. In addition to Invitation of Bids, the bidding documents include:

- (a) Instructions for Online Bid Submission
- (b) Instruction to Bidders (ITB);
- (c) General Conditions of Contract (GCC);
- (d) Special Conditions of Contract (SCC)
- (d) Schedule of requirements;
- (e) Tender form (technical bid).
- (f) Tender form (financial bid)

The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in rejection of its bid.

#### **5.** Amendment of Bidding Documents

At any time prior to the deadline for submission of bids, the Purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents by amendment.

All prospective bidders who have received the bidding documents will be notified of the amendment in writing, which will be binding on them.

In order to allow prospective bidders reasonable time within which to take the amendment into account in preparing their bids, the Purchaser, at its discretion, may extend the deadline for the submission of bids.

#### **C.Preparation of Bids**

#### 6. Language of Bid

The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Purchaser shall be written in English language.

#### 7. Documents Comprising the Bid

**Techno commercial un-priced bid and priced Bids:** The bids are to be submitted in two parts i.e. Techno commercial un-priced bid and priced Bids.

- (a) Techno commercial un-priced bid along with Bid Securing Declaration Form (as Earnest Money Deposit) as shown in invitation to bids shall be submitted through CPP Portal. If the proof of payment of EMD/ Bid Security Declaration Form as per as per Annexure-VII is not received along with the technical bid, such bid will not be considered. The samples (if required) of all the items shown in the schedule of requirements of each tender should also accompany the techno commercial un-priced bid in a separate sealed envelope.
- (**b**) Priced bid.

**Techno commercial un-priced bid:** The Techno commercial un-priced bid prepared by the bidder shall be provided in the following Model Response format:

#### **Model Response format**

- (a) Standing of each Bidder Manufacturer/Dealer and past experience in supply of the material (certificates to be enclosed), proof of manufacturing Unit/Dealership alongwith all the documents required for proving the credentials regarding the fulfillment of essential pre-bid criteria.
- (b) List of other IITs/NITS/Govt. Offices/PSUs/Govt. Funded Universities/ Govt. Funded Autonomous Bodies/Govt. Bodies for which the bidder has supplied or supplying material or having the similar type of contracts and a certificate regarding the satisfactory performance of the contract (In the Annexure III format).
- (c) Copy of the audited balance sheet of the Bidder for the previous financial year indicating the turnover in supply of the relevant materials/service.
- (d) Details of Permanent Account Number and latest income tax clearance certificate.
- (e) Details of GST No. along with a copy of certificate to be attached.
- (f) Submission of samples if required, for all items indicated in the schedule of requirements. The make of items proposed to be supplied should be indicated in the format of the schedule of requirements and submitted along with the techno commercial un-priced bid without indicating the pricing components.
- (g) Willingness to execute all orders which are placed to meet emergency requirement on priority basis. The Bidder shall note that standards for workmanship, material and equipment, and references to brand names designated by the Purchaser in the schedule of requirements are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names and/or catalogue numbers in his bid, provided that it demonstrates to the Purchaser's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

#### **Price Bid**

The price bid shall comprise the techno commercial bid along with the price component indicating the Unit prices for each and every item indicated in the schedule of requirements (Annexure I).

- (a) The prices quoted must be net per unit as shown in the Schedule and must include all charges for delivery at the designated stores i.e. DPU, IIT (BHU), Varanasi and should be mentioned clearly.
- (b) The rate must be stated for each item separately both in words and figures. If there is a discrepancy between the price quoted in word and figures the higher price quoted will be treated as final.

- (c) Quoted prices should be firm and inclusive of all taxes/duties, freight and forwarding charges, handling charges, loading and unloading charges, and insurance charges etc. However, the prices must be reflected clearly in BoQ format by mentioning basic rate, GST, Freight charges, Any other Taxes/Duties/Levies and exemptions thereon as applicable to IITs.
- (d) Further, if required the Institute will make direct payment to Custom Department against receipt of Challan from the supplier.
- (e) The prices once accepted by the Institute shall remain valid till the successful execution of the order and till supplies is fully effected and accepted or **365 days** from the date of acceptance of tender whichever is later. The Institute shall not entertain any increase in the rates during the period. However, in the event there is a reduction or increase in Government levy/duties/taxes during the period of execution of the order, the rates shall be suitably adjusted with effect from the date notifying the said reduction or increase in the Government levy/taxes/duty, if any.

#### 8. Bid Prices

The Bidder shall indicate on the Schedule of requirements (BoQ), the unit prices of the goods it proposes to supply under the Contract and enclose it with the priced bid.

Prices indicated on the Price Schedule shall be entered separately in the following manner:

- (i) The prices quoted must be net per unit as shown in the schedule of requirements and must include all charges for delivery at the designated stores.
- (ii) Any Indian duties, GST and other taxes which will be payable on the goods, if this Contract is awarded;

Prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account.

#### 9. Clarification regarding Price Bid and BoQ

- (a) In case of import, the order will be placed to OEM and LC will also be opened in favour of OEM.
- (b) In case of import, the bidder is not required to quote the rate for Custom Duty charges and IGST thereof. The Institute will make direct payment to Custom Department as per actual against receipt of Challan from the bidder. The Institute will issue CDEC certificate as and when required.
- (c) The bidder is required to quote the rate for Freight charges, insurance etc. in INR.
- (d) The clearance of shipment from Custom, its safely delivery, installation and demonstration at IIT (BHU) site shall be the sole responsibility of bidder/their authorized agent.
- (e) The Institute will provide all the necessary documents as and when required to bidder for clearance of shipment. However, bidder has to intimate the requirement of same in well advance.

#### **10. Bid Currencies**

Prices shall be quoted in Indian Rupees/USD/EURO only.

#### **11. Period of Validity of Bids**

Bids shall remain valid for **365** days after the date of bid opening prescribed by the Purchaser. A bid valid for a shorter period shall be rejected by the Purchaser as non-responsive.

In exceptional circumstances, the Purchaser may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. A Bidder may refuse the request without forfeiting its EMD, if any. A Bidder granting the request will not be required nor permitted to modify the bid.

Bid evaluation will be based on the bid prices without taking into consideration the above modifications.

#### **D.** Submission of Bids

**12.** The tender has to be submitted ONLINE before the due date. The offers received after the due date and time will not be considered. **No manual bids will be considered**.

#### 13. Deadline for Submission of Bids

Bids must be received by the Purchaser ONLINE not later than the time and date specified in the Invitation for Bids.

The Purchaser may, at his discretion, extend this deadline for submission of bids by amending the bid documents in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

#### 14. Late/Delayed Bids

The offers received after the due date and time will not be considered.

#### 15. Modifications and Withdrawal of Bids

The Bidder may modify or withdraw its bid after the ONLINE bid's submission, as per the provision of CPP Portal.

No bid may be modified subsequent to the deadline for submission of bids. No documents will be accepted in support of essential pre-bid criteria after the last date of submission of bids.

No bid may be withdrawn in the interval between the deadline for submission of bids and the expiry of the period of bid validity specified by the Bidder on the bid form. Withdrawal of a bid during this interval may result in the Bidder's forfeiture of its EMD, if any.

#### E. Bid Opening and Evaluation of Bids

#### **16. Opening of Techno commercial un-priced Bids**

The purchaser will open all techno commercial un-priced bids in the first instance.

#### **17. Clarification of Bids**

During evaluation of the bids, the purchaser may, at its discretion, ask the Bidder for clarification of its bid. The request for clarification and the response shall be in writing and no change in price or substance of the bid shall be sought, offered or permitted.

No Bidder shall contact the purchaser on any matter relating to its bid from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Institute it should be done in writing.

Any effort by a Bidder to influence the purchaser in its decisions on bid evaluation, bid comparison or contract award decisions may result in rejection of the Bidder's bid.

#### 18. Evaluation of Techno commercial un-priced Bid

Prior to the detailed technical evaluation, the purchaser will determine the substantial responsiveness of each bid. A substantially responsive bid is one, which conforms to all the terms and conditions of the Bidding Documents without material deviations and meets all the essential pre-bid criteria. If any bidder does not meet the essential pre-bid criteria as laid down in the Instruction to Bidders, then his bid will be summarily rejected. No documents will be accepted in support of essential pre-bid criteria after the last date of submission of bids.

The purchaser will reject a bid determined as not substantially responsive.

The bidders may be called for discussion and may be allowed to modify their technical bids to suit the organization's requirement. The idea is to arrive at a threshold level of acceptability above which all the bidders shall be treated on par. Those whose technical specifications do not reach the threshold

level of acceptability shall be rejected as technically unsuitable. The price bids of the bidders who finally emerge as technically acceptable shall be opened, evaluated and the contract awarded to the lowest evaluated bidder.

The bidders short-listed by the purchaser based on meeting the essential pre-bid criteria and detailed evaluation regarding satisfying the technical criteria laid down in this tender document may be called for detailed discussions with a team selected for the purpose, at a specified date, time and venue, if needed.

#### **19. Opening of Priced Bids**

The Purchaser will open the Priced Bids of only those bidders who meet the essential pre-bid criteria and whose techno commercial un-priced bids have been found to be substantially responsive.

The priced Bids of the technically qualified bidders shall be opened by the tender committee.

#### **20. Evaluation and Comparison of priced Bids**

Arithmetical errors will be rectified on the following basis: If there is a discrepancy between words and figures, whichever is the higher of the two shall be taken as bid price. If the Bidder does not accept the correction of errors, its bid will be rejected

Bidders shall state their bid price for the payment schedule outlined in the Clause 14 of General Conditions of Contract. Bids will be evaluated on the basis of this base price. Bidders are, however, permitted to state an alternative payment schedule and indicate the reduction in bid price they wish to offer for such alternative payment schedule. The purchaser may consider the alternative payment schedule offered by the selected Bidder but it may not be binding on the purchaser.

The purchaser, at its option may ask some more bidders to match the rates of the lowest bidder for creating parallel suppliers.

The currency that shall be used for bid evaluation and comparison purposes to convert all bid prices expressed in various currencies into a single currency is: **Indian Rupees/USD/EURO.** 

The source of exchange rate shall be: Reserve Bank of India/Any other authentic source.

The date for the exchange rate shall be: Last day for submission of Bids.

#### 21. Purchasers right to accept any bid and to reject any bid or all bids

The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the Purchaser's action.

#### 22. Award Criteria

- i. IIT (BHU) shall award the contract to the technically qualified eligible BIDDER whose bid has been determined as the lowest evaluated commercial bid.
- ii. In case of abnormally high and abnormally low quoted price, the bidder will be rejected out rightly.

#### **23.** Notification of Award

Prior to the expiration of the period validity, the purchaser will notify the successful Bidder in writing by letter or by fax, to be confirmed in writing by speed post or hand delivered letter, that its bid has been accepted.

#### 24. Factors Affecting the Award of Supply

• The bidder should have its own Contract support facilities. The support facilities should be fully owned and managed by the bidder.

- Conformity with the Request for Bid/Tender required and conditions.
- The assessment based on the response to Model Response Outline.
- The assessment of the capability of the bidder to meet the terms and conditions.
- The bidders must have executed similar orders, for which the bidder is quoting, as indicated in clause 1 for IITs/NITS/Govt. Offices/PSUs/Govt. Funded Universities/ Govt. Funded Autonomous Bodies/Govt. Bodies.
- The cost and the discount offered, if any.

#### 25. Fall clause

The price quoted by the supplier should not be higher than the maximum retail price, if any, for the stores and the same shall not be higher than the price usually charged by the supplier for stores of the same nature, class or description to any other purchaser.

The price charged for the stores supplied under the contract by the supplier shall in no event exceed the lowest price at which the supplier sells the stores of identical description to any other person during the period till performance of all supply orders placed during the currency of the contract is completed. If at any time during the period the supplier reduces the sale price of such stores or sells such stores to any other person including his dealers at a price lower than the price chargeable under the contract, he shall forthwith notify such reduction or sale to the purchaser and the price payable under the contract for these items of stores supplied after the date of coming into force of such reduction or sale shall stand correspondingly reduced.

If it is discovered that the supplier has contravened the above conditions, then without prejudice to any other action which might be taken against him, it shall be lawful for the purchaser to (a) revise the price at any stage so as to bring it in conformity with sub-clause(i) above, or (b) to terminate the contract and purchase the items of stores at the risk and cost of the supplier and in that event the provisions of Clause 28 of General Conditions of Contract shall, as far as possible, be applicable or recover the loss.

### **SECTION 3 : GENERAL CONDITION OF CONTRACTS**

#### 1. Definitions

In this Contract, the following terms shall be interpreted as indicated:

- (a) "The order" means the agreement entered into between the Purchaser and the Supplier including all the attachments and appendices and all documents incorporated as per notification of award.
- (b) "The Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations;
- (c) "The Goods" means all the items, which the Supplier is required to supply to the Purchaser under the Contract;
- (d) "Services" means services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services training and other obligations of the Supplier covered under the Contract;
- (e) "GCC" means the General Conditions of Contract contained in this section.
- (f) "The Purchaser" means the organization purchasing the Goods i.e. IIT (BHU), VARANASI.
- (g) "The Purchaser's country" is India.
- (h) "The Supplier" means the individual or firm supplying the Goods and Services under this Contract.
- (i) "Day" means calendar day.

#### 2. Application

These General Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

#### 3. Standards

The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the Goods' country of origin and such standards shall be the latest issued by the concerned Institution.

#### 4. Use of Contract Documents and Information

The Supplier shall not, without the Purchaser's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Supplier in performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.

The Supplier shall not, without the Purchaser's prior written consent, make use of any document or information except for purposes of performing the Contract.

Any document, other than the Contract itself, shall remain the property of the Purchaser and shall be returned (in all copies) to the Purchaser on completion of the Supplier's performance under the Contract if so required by the Purchaser.

#### 5. Patent Rights

The Supplier shall indemnify the Purchaser against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods or any part thereof in India.

#### 6. Submission of the bids.

All bids complete in all respect must be submitted online on or before the Bid Closing date and time as mentioned on Critical Data Sheet. Tenders received without earnest money etc. shall be rejected.

Tender documents are available on IIT (BHU) website: <u>https://iitbhu.ac.in/tenders</u> or from Central Public Procurement Portal (CPPP) <u>https://eprocure.gov.in/eprocure/app</u>.

Interested bidders may submit their bid through Central Public Procurement Portal (CPPP) <u>https://eprocure.gov.in/eprocure/app</u>.

#### 7. Inspections and Tests

The Purchaser or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Purchaser.

The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at point of delivery and/or at the Goods final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data shall be furnished to the inspectors at no charge to the Purchaser.

Should any inspected or tested Goods fail to conform to the specifications, the Purchaser may reject the goods and the Supplier shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to the Purchaser.

The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival at Project Site shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Purchaser or its representative prior to the Goods shipment.

Nothing in GCC Clause 7 shall in any way release the Supplier from any warranty or other obligations under this Contract.

#### 8. Consequences of rejection

If in the event the stores are rejected by the purchaser at the destination and the supplier fails to make

satisfactory supplies within the stipulated period of delivery, the purchaser will be at liberty to:

- (a) Allow the supplier to resubmit the stores in replacement of those rejected, within a specified time without any extra cost to the purchaser or
- (b) Reject the material, which shall be final and binding on the contractor.
- (c) Procure the rejected materials of comparable quality from the open market/Govt. stores and the supplier shall be liable to pay the difference in price over the RC prices or get the amount adjusted from the outstanding bills of the supplier or EMD, if any.

#### 9. Packing

The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be provided for in the Contract including additional requirements, in any subsequent instructions ordered by the Purchaser.

#### **10. Delivery and Documents**

The Supplier shall make **delivery and installation** of the Goods within 6 months from the placement of purchase order in pursuance of the notification of award. However, the supplier shall also arrange to execute all orders on priority basis which would be placed to meet any emergent requirements.

In case the purchaser decides to conclude parallel rate contracts, then the requirements would be split on different firms on equitable basis as per the discretion of the purchaser.

The delivery of Stores shall be affected at the premises of the Institute free of all delivery charges and within the stipulated time and as may be elucidated in the confirmed order, accompanied by a delivery challan. No extension of time for delivery of Stores shall normally be accorded.

The supplier shall mail the following documents to the purchaser with a copy to the insurance company:

- 1. 3 Copies of the Supplier invoice showing contract number, goods' description, quantity unit price, total amount;
- 2. Installation Certificate
- 3. Insurance Certificate if applicable;
- 4. Manufacturer's/Supplier's warranty certificate;
- 5. Inspection Certificate issued by the nominated inspection agency, if any
- 6. Supplier's factory inspection report; and
- 7. Certificate of Origin (if possible by the beneficiary);
- 8. The above documents should be received by the Purchaser before arrival of the Goods (except where the Goods have been delivered directly to the Consignee with all documents) and, if not received, the Supplier will be responsible for any consequent expenses.

**Time and date of delivery – the essence of the contract:** The time for and the date of delivery of the stores stipulated shall be deemed to be of the essence of the contract and delivery must be completed not later than the date(s) specified.

#### **11. Insurance**

The Goods supplied under the Contract shall be fully insured against loss or damage incidental to

manufacture or acquisition, transportation, storage and delivery. The insurance shall be obtained by the suppliers of the value of the goods on "all risks" basis.

#### **12. Transportation**

Where the Supplier is required under the Contract to transport the Goods within India defined as Project site, transport to such place of destination in India including insurance, as shall be specified in the Contract, shall be arranged by the Supplier, and the related cost shall be included in the contract Price.

#### 13. Warranty

The Supplier warrants that the Goods supplied under this Contract are new, unused, of the most recent or current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under this Contract shall have no defect arising from design, materials or workmanship or from any act or omission of the Supplier that may develop under normal use of the supplied Goods in the conditions prevailing in India.

This warranty shall remain valid for at least **60 months** (or as specified) after the Goods or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the Contract, unless specified otherwise. The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall with all reasonable speed, repair or replace the defective Goods or parts thereof, without any extra cost to the Purchaser. If the Supplier, having been notified, fails to remedy the defect(s) within a reasonable period, the Purchaser may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

#### 14. Payment

#### For indigenous supply:

The payment shall be made 100% payment against Supply, Installation and Commissioning and submission of satisfactory PBG.

#### For imports:

100% payment shall be made through Letter of Credit. Out of this, 70% payment will be released against the invoice, inspection certificate, shipping documents & other required documents as per LC and remaining 30% payment will be released after receiving of materials at IIT (BHU), their successful installation, acceptance of machine & submission of PBG by bidder and its confirmation from the Bank.

The Supplier's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and the Services performed, and by documents, submitted pursuant to GCC Clause 10, and upon fulfillment of other obligations stipulated in the contract.

#### 15. Prices

Prices charged by the Supplier for Goods delivered and Services performed under the Contract shall not vary from the prices quoted by the Supplier in his bid. The bidder must mention the applicable taxes/duty and exemptions thereon, if any, as per the Government of India norms. The Institute will provide requisite certificate, if any, required by the bidder as per the applicable Govt. of India norms.

#### 16. Change Orders

The Purchaser may at any time, by written order given to the Supplier, make changes within the general scope of the Contract in any one or more of the following:

(a) Drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;

- (b) The method of shipping or packing;
- (c) The place of delivery; and/or
- (d) The services to be provided by the Supplier.

If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this clause must be asserted within thirty (30) days from the date of the Supplier's receipt of the Purchaser's change order.

#### **17.** Contract Amendments

Subject to GCC Clause 16, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

#### 18. Assignment

The Supplier shall not assign, in whole or in part, its obligations to perform under the Contract, except with the Purchaser's prior written consent.

#### **19. Subcontracts**

The Supplier shall notify the Purchaser in writing of all subcontracts awarded under this Contract if not already specified in the bid. Such notification, in his original bid or later, shall not relieve the Supplier from any liability or obligation under the Contract.

#### **20. Delays in the Supplier's Performance**

Delivery of the Goods and performance of the Services shall be made by the Supplier in accordance with the time schedule specified by the Purchaser as per GCC clause 10.

If at any time during performance of the Contract, the Supplier or its sub-contractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may, at its discretion, extend the Supplier's time for performance with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of the Contract.

Except as provided under GCC Clause 23, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of penalty pursuant to GCC Clause 21, unless an extension of time is agreed upon pursuant to GCC Clause 20.2 without the application of liquidated damages.

#### 21. Penalty

Subject to GCC Clause 23, if the Supplier fails to deliver and install any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as penalty, a sum equivalent to1% per week and the maximum deduction is 10% of the contract price of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance. Once the maximum is reached, the Purchaser may consider termination of the Contract pursuant to GCC Clause 22.

#### **22. Termination for Default**

The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part:

- (a) If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the purchase order, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 20; or
- (b) If the Supplier fails to perform any other obligation(s) under the Contract.
- (c)If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

'For the purpose of this Clause:

"Corrupt practice" means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution etc. as per GOI norms.

"Fraudulent practice: a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition;" etc. as per GOI norms.

In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 22.1, the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess costs for such similar Goods or Services. However, the Supplier shall continue the performance of the Contract to the extent not terminated.

#### 23. Force Majeure

Notwithstanding the provisions of GCC Clauses 20 & 21, the Supplier shall not be liable for imposition of liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

#### **24. Termination for Insolvency**

The Purchaser may at any time terminate the Contract by giving written notice to the Supplier, if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without Compensation to the Supplier provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the Purchaser.

#### **25. Termination for Convenience**

The Purchaser, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.

The Goods that are complete and ready for shipment within 30 days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices.

#### **26. Resolution of Disputes**

The Purchaser and the supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

If, after thirty (30) days from the commencement of such informal negotiations, the Purchaser and the Supplier have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred for resolution to the formal mechanisms as specified below. These mechanisms may include, but are not limited to, conciliation mediated by a third party, adjudication in an agreed national or international forum, and national or international arbitration.

In case of Dispute or difference arising between the Purchaser and a supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Arbitration and Conciliation Act, 1996 as amended from time to time.

#### 27. Governing Language

The contract shall be written in English language. Subject to GCC Clause 28, English language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract which are exchanged by the parties shall be written in the same language.

#### 28. Applicable Law

The contract shall be governed by the Law of Contract for the time being in force.

Irrespective of the place of delivery, the place of performance or place of payment under the contract, the contract shall be deemed to have been made at the place from which the acceptance of tender has been issued.

Jurisdiction of Courts: The courts of the place from where the acceptance of tender has been issued shall alone have jurisdiction to decide any dispute arising out of or in respect of this contract.

One month notice will be given by either party for termination of Contract during the tenure of Contract for breach of Clause or otherwise.

#### **29. Taxes and Duties**

Suppliers shall be entirely responsible for all taxes, duties, license fees, road permits, etc., incurred until delivery of the contracted Goods to the Purchaser.

Further, if required the Institute will make direct payment to Custom Department against receipt of Challan from the supplier.

#### **30. Performance Security:**

Successful bidder have to furnish 3% of the order value as a performance security in the shape of Fixed Deposit Receipt / Bank Guarantee in favour of the Registrar, Indian Institute of Technology (BHU) valid for a period of 60 days beyond the end of all warranty period / obligations (i.e. must valid for 62 months). Fixed Deposit Receipt / Bank Guarantee should be issued from a schedule bank in India.

#### **31. Supplier Integrity**

The Supplier is responsible for and obliged to conduct all contracted activities in accordance with the Contract using state of the art methods and economic principles and exercising all means available to achieve the performance specified in the contract.

- 1. Reject the quotation in absence of not furnishing the documentary evidence in respect of Trade Tax Registration (G.S.T), Income Tax and Trade Tax clearance certificates together with the performance of supplies in various branches/institutions.
- 2. Reject the quotation in the event of non-furnishing the authentic documentary evidence in respect of Testing reports / Performance report of the concerned Govt. Organization / Institutions about the products being manufactured and marketed. The performance test of the product can be conducted at Institute level also for which charge will have to be borne by the suppliers.
- **3.** Reject the supplies already made, if not found up to the mark. Thorough checking may be adopted to test the correctness of the supply. In such an event further action may call to conform or discard the supply.
- 4. To reject any addition/alteration in respect of local dealerships intimated by the Principals after consideration of the case by the committee appointed by the Institute for the purpose.
- 5. Cancel this Tender at any point of time without assigning any reason thereof.
- 6. The Institute also reserves the right to reject the bid of any participated bidder
- 7. The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part:
  - (a) If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the purchase order, or within any extension thereof granted by the Purchaser.
  - (b) If the Supplier fails to perform any other obligation(s) under the Contract.
  - (c) If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.
- 8. To reject any or all the offers without assigning any reasons thereof.
- 9. All disputes are subject to *"Varanasi Jurisdiction"* only.
- **10.** The decisions of the Institute in all respect shall be final and binding on all.
- 11. The Institute reserves the right to ask the successful bidder to produce all the original documents submitted alongwith the bids for verification at any point of time. During the verification of the document, if it is found that the bidder has concealed/falsified/fabricated any information, the bid and/or purchase order will be cancelled and EMD, if any and/or performance security will be forfeited and action including blacklisting will be taken against the bidder as per norms of the Institute.
- 12. Please ensure that your offer is complete in all respect as no further clarifications shall be sought from you and reaches us within the last date mentioned above. The Institute shall not be responsible for any delay etc.

# Chairman of Purchase Committee &

Professor In-charge Central Instrument Facility Indian Institute of Technology (Banaras Hindu University), Varanasi – 221005

NOTE: 1- While arranging the Tender Documents, check list should be placed on TOP.

# **SECTION 4 : SPECIAL CONDITIONS OF CONTRACT**

(to be defined by the Purchaser as per the requirement)

#### 1. Essential Pre Bid Criteria

#### Mandatory requirements from the bidders. A bid will be disqualified if any of the criteria provided in I-VII is not fulfilled. Bidders are required to upload the supporting documents for each of the following points under cover 1.

- I. Bidders should be the manufacturer (OEM)/authorized dealer. In case the bid is submitted by the Authorized dealer, the currently valid Authorization letter for participating in this Tender (by clearly mentioning the Reference of this Tender) issued by the OEM must be uploaded (in Annexure V format). The Letter of authorization shall remain valid during execution of supply and installation.
- II. An undertaking from the OEM is required stating that they would facilitate the bidder on a regular basis with technology/product updates and extend all support for the warranty period and ten years beyond the warranty in confirmation with this bid for the quoted items. In case the OEM withdraws its authorization from bidder, the above service will continued to be provided by the OEM.
- III. An undertaking on letterhead of bidder issued on/after the date of publish of this Tender to be submitted by the bidder that it has never been black-listed by any IITs/NITs/Govt. Offices/PSUs/Govt. Funded Universities/Govt. Funded Autonomous Bodies/Govt. Bodies must be uploaded along with the technical Bid under cover 1, failing which the Bid shall be rejected. The original shall be submitted before the award of bid by the lowest evaluated successful bidder. This affidavit must be issued on or after issuance of this tender.
- IV. The OEM/bidder must have executed at least two similar natures of supply and installation in any IITs/NITS/Govt. Offices/PSUs/Govt. Funded Universities/Govt. Funded Autonomous Bodies/Govt. Bodies with order value of at least Rs. 5 crore OR 0.5 million USD each during the 1<sup>st</sup> April 2012 to 31<sup>st</sup> March 2022. Copies of purchase order, satisfactory installation certificate, names of user, their mobile number/ phone number and email id need to be uploaded. The purchaser may ask for input from user where the quoted instrument has been installed.
- V. Adherence to all specifications is compulsory.
- VI. Manufacturer's 5 years comprehensive warranty.
- VII. Certificate as per Annexure-VI, Annexure-VII on the letterhead of the company must be uploaded.

# NOTE: THE BID OF THOSE BIDDERS WHO FAILS TO COMPLY THE ABOVE ESSENTIAL CRITERIA WILL NOT BE CONSIDERED FOR TECHNICAL EVALUATION.

#### 2. Documents Comprising the Bid

The tender/Bid shall be submitted online in two part, viz., Technical Bid and Commercial Bid.

#### I. Technical Bid

The following documents are to be scanned and uploaded as part of the Technical Bid as per the tender document:

- (a) Scanned copy of Tender Forms (Techno Commercial Un-Priced Bid), Declaration, and Tender Acceptance Letter;
- (b) Scanned copy of proof for submission of Tender Document Fee/ Earnest Money Deposit/ Declaration Form as per as per Annexure-VII/Exemption Certificate, if any etc.;
- (c) Scanned copy of written confirmation authorizing the signatory of the Bid to commit the Bidder;
- (d) Scanned copy of quoted product brochure
- (e) Scanned copy of completely filled Annexure III with supporting documents
- (f) Scanned copy of Technical Bid and essential Pre-bid Details, if any.
- i. Scanned copy of documentary evidence establishing the Bidder's qualifications to perform the contract if its bid is accepted and the Bidder's eligibility to bid;

- ii. Scanned copy of documentary evidence, that the Goods and Related Services to be supplied by the Bidder are of eligible origin and conform to the Bidding Documents, and
- (g) Scanned copy of Checklist, compliance of Essential pre-bid criteria and Technical Compliance Sheet (Annexure II) and any other document required as per the tender;
- (h) Certificate as per Annexure VI.

#### **II.** Commercial Bid

The commercial bid comprises of :

- (i) Scanned copy of Tender Form (Price Bid)
- (ii) Price bid in the form of **.xls format** and to be uploaded in .xls & signed copy to be uploaded in **.pdf format**.

The Price bid format is provided as .xls format along with this Tender Document at <u>http://eprocure.gov.in/eprocure/app</u>. Bidders are advised to download this .xls format and quote their offer/rates in the prescribed column.

In addition to the above requirements, bids submitted by a Joint Venture, shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful bid shall be signed by all members and submitted with the bid, together with a copy of the proposed Agreement, there to.

The Bidder shall furnish in the Tender Forms information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid.

#### **3. Installation & Demonstration**

The supplier is required to complete the installation and demonstration of the equipment within **two** weeks of the arrival of materials at the IIT (BHU) site of installation, otherwise the penalty clause will be the same as per the supply of materials.

In case of any mishappening/damage to equipment and supplies during the carriage of supplies from the origin of equipment to the installation site, the supplier has to replace it with new equipment/supplies immediately at his own risk. Supplier will settle his claim with the insurance company as per his convenience. IIT (BHU) will not be liable to any type of losses in any form.

#### 4. Application Specialist

The Tenderer should mention in the Techno-Commercial bid the availability and names of Application Specialist and Service Engineers in the nearest regional office.

#### 5. Spares

The Manufacturer/Supplier is required to provide state availability of spares for ten years, if required.

#### 6. Training of Personnel

The supplier shall be required to undertake to provide the technical training to the personnel involved in the use of the equipment at the Institute premises, immediately after completing the installation of the equipment for a minimum period of one week at the supplier's cost.

#### 7. User List

The bidder must provide the list of users where they have deployed similar nature of equipments in last **10** years in prescribed format of Annexure III.

#### 8. Manuals/Documents

1 set of hard copy and 1 set of soft copy in English (preferred as following).

- i. Operating manual
- ii. Servicing & Maintenance manual
- iii. Spare parts list with source of supply and prices
- iv. Pre-installation requirements.

#### **10. Services**

Bidder must submit Factory Acceptance Test procedure supported with relevant printed literature and certificates.

- **11.** The Tender document should also indicate what kind of service/maintenance is required for the system. Whether this service has to be carried out by a company engineer or it can be carried by trained service personnel within India. The frequency of visit and the charges should be mentioned.
- 12. The Tender should be enclosed with proper certifications like Authorization Certificate and Proprietary Certificate (in case of Proprietary items).
- 13. Pre-installation site preparation/inspection requirements to be indicated and specified along with the bid.
- **14.** Bid should include DPU, IIT(BHU), Varanasi prices. The Institute will provide requisite certificate, if any, required by the bidder as per the applicable Govt. of India norms.
- **15.** The Bidder to provide compliance statement with respect to each technical specification in the tender document duly supported by the manufacturer's literature. Any other claim will not be accepted and may lead to rejection of the bid.
- 16. Printed literature in support of compliance to the prescribed specifications is to be submitted.
- 17. Compliance report needs to be submitted as a part of the technical bid.
- **18.** Exemption is allowed from payment of Tender fees and EMD as per Government of India norms against submission of currently valid certificate specifically for the item(s) proposed to be procured through this Tender.
- **19.** The Institute will provide Custom Duty Exemption Certificate as and when required.
- **20.** Bidder should confirm their acceptance that they comply with the provisions with report to "Guidelines for eligibility of a bidder from a country which shares a land border with India as detailed at Annexure-VI. The bidder should submit Certificate for "Bidder from/ Not from Country sharing Land border with India & Registration of Bidder with Competent Authority" as per Order of DoE F.No.6/18/2019-PPD dated 23.07.2020 as mentioned. A certificate shall be submitted by bidders in the tender documents regarding their compliance with the said order. If the certificate submitted by a bidder whose bid is accepted is found to be false, this would be a ground for immediate termination and further legal action in accordance with law. Annexure VI.
- **21. Defective Equipment:** If any of the equipment supplied by the Tenderer is found to be substandard, refurbished, un-merchantable or not in accordance with the description/specification or otherwise faulty, the committee will have the right to reject the equipment or its part. The prices of such equipment shall be refunded by the Tenderer with 18% interest if such payments for such equipment have already been made. All damaged or unapproved goods shall be returned at suppliers cost and risk and the incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if found before installation and/or during warranty period, shall be replaced within 30 days on receipt of the intimation from this office at the cost and risk of supplier including all other charges. In case supplier fails to replace above item as per above terms & conditions, IIT (BHU) may consider "Banning" the supplier.

#### **IMPORTANT NOTE:**

- 1. Non-compliance of tender terms, non-uploading of required documents, lack of clarity of the specifications, contradiction between bidder specifications and supporting literature etc. may lead to rejection of the bid.
- 2. In the tender, either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.
- If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.
   All documents in support of above essential pre-bid criteria shall be scanned and uploaded under cover 1.

# **SECTION 5 : CHECKLIST FOR BID/TENDER SUBMISSION**

# (The following check-list must be filled in and submitted with the bid documents)

Sl. No.	Particulars	Yes/No
1	Have you mentioned the page no. and authorized signatory signature on each page of your bid document.	
2	Have you attached the techno commercial unpriced bid form duly filled in appropriately?	
3	Have you attached a copy of the last audited balance sheet of your firm as per tender requirement	
4	Have you attached the details of the income tax clearance certificate, proof of manufacturing unit/ dealership letter/ general order suppliers and copy of GST registration certificate?	
5	Have you executed the similar nature of work during 1 <sup>st</sup> April 2012 to 31 <sup>st</sup> March 2022 in IITs/NITS/Govt.Offices/PSUs/Govt. Funded Universities/ Govt. Funded Autonomous Bodies/Govt. Bodies	
6	Have you attached the copies of relevant work orders from IITs/NITS/Govt. Offices/PSUs/Govt. Funded Universities/ Govt. Funded Autonomous Bodies/Govt. Bodies in prescribed Format?	
7	EMD/ Bid Security: Have you submitted EMD/ Declaration Form as per as per Annexure-VII asked for.	
8	Have you submitted samples of all items indicated in the respective schedule of requirements at the address of tender inviting authority within due date.	
9	Have you enclosed the schedule of requirement indicating the make offered without indicating the pricing components along with the techno commercial unpriced bid?	
10	Have you submitted the bids both techno commercial unpriced and priced bid separately for each tender?	
11	Have you enclosed the statement of deviations from financial terms and conditions, if any?	
12	Have you submitted the Technical Compliance Sheet?	
13	Have you attached Manufacturer's Authorization certificate for this Tender?	
14	Have you attached the Declaration on the letter pad of Bidder?	
15	Have you attached the compliance of Pre-qualification criteria?	
16	Have you attached the signed Tender acceptance letter?	
Price	e Bid	
1	Have you signed and attached the priced bid form?	
2	Have you attached the schedule of requirements duly priced i.e BoQ in both .xls format and in .pdf format	

### **COMPLIANCE SHEET OF ESSENTIAL PRE BID CRITERIA**

Sl. No.	Essential Pre Bid Criteria	Compliance	Page No.
1.	Bidders should be the manufacturer (OEM)/authorized dealer. In case the bid is submitted by the Authorized dealer, the currently valid Authorization letter for participating in this Tender (by clearly mentioning the Reference of this Tender) issued by the OEM must be uploaded (in Annexure V format). The Letter of authorization shall remain valid during execution of supply and installation.		
2.	An undertaking from the OEM is required stating that they would facilitate the bidder on a regular basis with technology/product updates and extend all support for the warranty period and ten years beyond the warranty in confirmation with this bid for the quoted items. In case the OEM withdraws its authorization from bidder, the above service will continued to be provided by the OEM.		
3.	An undertaking on letterhead of bidder issued on/after the date of publish of this Tender to be submitted by the bidder that it has never been black-listed by any IITs/NITs/Govt. Offices/PSUs/Govt. Funded Universities/Govt. Funded Autonomous Bodies/Govt. Bodies must be uploaded along with the technical Bid under cover 1, failing which the Bid shall be rejected. The original shall be submitted before the award of bid by the lowest evaluated successful bidder. This affidavit must be issued on or after issuance of this tender		
4.	The OEM/bidder must have executed at least two similar natures of supply and installation in any IITs/NITS/Govt. Offices/PSUs/Govt. Funded Universities/Govt. Funded Autonomous Bodies/Govt. Bodies with order value of at least Rs. 5 crore OR 0.5 million USD each during the 1 <sup>st</sup> April 2012 to 31 <sup>st</sup> March 2022. Copies of purchase order, satisfactory installation certificate, names of user, their mobile number/ phone number and email id need to be uploaded. The purchaser may ask for input from user where the quoted instrument has been installed.		
5.	Adherence to all specifications is compulsory		
6.	Manufacturer's 5 years Comprehensive warranty		
7.	Certificate as per Annexure-VI on the letterhead of the company must be uploaded		

#### **SECTION 6**

#### **DECLARATION**

(On the letter head of the firm submitting the bid)

- 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 besides liabilities towards prosecution under 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.
- **6.** This is certified that our organization has been authorized (Copy attached) by the OEM to participate in Tender. We further certified that our organization meets all the conditions of eligibility criteria laid down in this tender document. Moreover, OEM has agreed to support on regular basis with technology / product updates and extend support for the warranty.
- **7.** The prices quoted in the price bids are subsidized due to academic discount given to IIT (BHU), Varanasi.
- 8. We, further specifically certify that our our organization has never been Black Listed/De Listed or put to any Holiday by any IITs/NITS/Govt. Offices/PSUs/Govt. Funded Universities/ Govt. Funded Autonomous Bodies/Govt. Bodies till date.

Signature of the Authorized Person

Date: -----

Full Name -----

Place: -----

Company Address with Seal

# SECTION 7

#### **TENDER FORM**

### (Techno commercial un-priced Bid)

(On the letter head of the firm submitting the bid)

Tender No.

То

The Chairman of Purchase Committee & Professor In-charge Central Instrument Facility Indian Institute of Technology (Banaras Hindu University), Varanasi – 221005

Dear Sir,

- 1. I/We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders;
- 2. I/We meet the eligibility requirements and have no conflict of interest ;
- 3. I/We have not been suspended nor declared ineligible in India;
- 4. I/We offer to supply in conformity with the Bidding Documents and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Goods: *[insert a brief description of the Goods and Related Services]*;
- 6. I/we shall be bound by a communication of acceptance issued by you.
- 7. I/We have understood the Instruction to bidders and Conditions of Contract in the form as enclosed with the invitation to the tender and have thoroughly examined the specifications quoted in the Schedule hereto and am/are fully aware of the nature of the goods required and my/our offer is to supply the goods strictly in accordance with the specifications and requirements.
- 8. Bid Security Declaration Form as per Annexure-VII has been enclosed.
- 9. The following have been added to form part of this tender.
  - (a) Schedule of requirements, quoting the make only duly signed and stamped.(without indicating price)
  - (b) Income Tax clearance certificate.
  - (c) Copy of last audited balance sheet.
  - (d) Copy of Valid GST registration certificate.
  - (e) Copy of similar relevant major purchase orders executed during last 10 years in IITs/NITS/Govt. Offices/PSUs/Govt. Funded Universities/ Govt. Funded Autonomous Bodies/Govt. Bodies.
  - (f) Proof of manufacturing Unit, dealership certificate/general order suppliers.
  - (g) Statement of deviations from financial terms & conditions, if any.
  - (h) Any other enclosure. (Please give details)

- 10. We undertake to execute all orders which have been placed to meet emergent requirements on priority basis.
- 11. Certified that the bidder is:
  - (a) A sole proprietorship firm and the person signing the bid document is the sole proprietor/constituted attorney of the sole proprietor,

(b) A partnership firm, and the person signing the bid document is a partner of the firm and he has authority to refer to arbitration disputes concerning the business of the partnership by virtue of the partnership agreement/by virtue of general power of attorney.

#### Or

(c) A company and the person signing the document is the constituted attorney.

#### (NOTE: Delete whatever is not applicable. All corrections/deletions should invariable be duly attested by the person authorized to sign the bid document).

- 12. We do hereby undertake that, until a formal notification of award, this bid, together with your written acceptance thereof shall constitute a binding contract between us.
- 13. If our bid is accepted, we commit to obtain a performance security in accordance with the Bidding Documents:
- 14. We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process, other than alternative bids submitted;
- 15. We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in any type of fraud and corruption

Name of the Bidder\* .....

Name of the person duly authorized to sign the Bid on behalf of the Bidder\*\* .....

Title of the person signing the Bid .....

Signature of the person named above .....

Date signed ..... day of .....

\* In the case of the Bid submitted by joint venture specify the name of the Joint Venture as Bidder \*\* Person signing the Bid shall have the power of attorney given by the Bidder to be attached with the Bid Schedules. Yours faithfully,

(Signature of bidder with company seal)

ted this day of
-----------------

Address: .....

Telephone No. :

FA	Х

#### **TENDER FORM**

#### (Priced Bid)

(On the letter head of the firm submitting the bid document)

The Chairman of Purchase Committee & Professor In-charge, Central Instrument Facility Indian Institute of Technology (Banaras Hindu University), Varanasi – 221005

Ref: Tender No..... Dated: .....

Sir,

To.

Having examined the bidding documents and having submitted the techno commercial unpriced bid for the same, we, the undersigned, hereby submit the priced bid for supply of goods and services as per the schedule of requirements and in conformity with the said bidding documents.

- 1. We hereby offer to supply the Goods/Services at the prices and rates mentioned in the enclosed schedule of requirement.
- 2. We do hereby undertake that, in the event of acceptance of our bid, the supply of Goods/Services shall be made as stipulated in the schedule of requirement and that we shall perform all the incidental services.
- 3. The prices quoted are inclusive of all charges net DPU, IIT(BHU) Varanasi and should be mentioned clearly. We enclose herewith the complete Financial Bid as required by you. This includes:
  - a. Price Schedule (Bill of Quantity-BOQ).
  - b. Statement of deviations from financial terms and conditions.
- 4. We agree to abide by our offer for a period of 365 days from the date fixed for opening of the bid documents and that we shall remain bound by a communication of acceptance within that time.
- 5. We have carefully read and understood the terms and conditions of the bid document and we do hereby undertake to supply as per these terms and conditions. The Financial Deviations are only those mentioned in the statement of deviations from financial terms and conditions.
- 6. We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract: [insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]

Name of Recipient	Address	Reason	Amount

(If none has been paid or is to be paid, indicate "none.")

- 7. We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed; and
- 8. We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Certified that the bidder is:

A sole proprietorship firm and the person signing the bid document is the sole proprietor/ constituted attorney of sole proprietor,

Or

A partnership firm, and the person signing the bid document is a partner of the firm and he has authority to refer to arbitration disputes concerning the business of the partnership by virtue of the partnership agreement/by virtue of general power of attorney,

Or

#### A company and the person signing the bid document is the constituted attorney. (NOTE: Delete whatever is not applicable. All corrections/deletions should invariably be duly attested by the person authorized to sign the bid document.)

We do hereby undertake that, until a formal notification of award, this bid, together with your written acceptance thereof, shall constitute a binding contract between us.

Dated this day of	
Signature of Bidder	
Details of enclosures	
Full Address:	

Telephone No.	
Mobile No. :	
Fax No. :	
E-mail:	

Company Seal

#### TENDER ACCEPTANCE LETTER

(To be given on Company Letter Head)

Date:

The Chairman of Purchase Committee & Professor In-charge Central Instrument Facility Indian Institute of Technology (Banaras Hindu University), Varanasi – 221005

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No.\_\_\_\_\_

#### Name of Tender/ Work: TENDER FOR SUPPLY, INSTALLATION, DEMONSTRATION OF THERMAL-MECHANICAL PHYSICAL SIMULATOR AND TESTING EQUIPMENT AT IIT (BHU) VARANASI

Dear Sir,

 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).

- 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 section(s), schedules(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.
- I/We hereby unconditionally accept the tender conditions of above mentioned tender document(s)/ corrigendum(s) in its totality/entirety.
- 5. In case any provisions of this tender are found violated, then your department/organisation shall without prejudice to any other right or remedy be at liberty to reject this tender/bid.

Yours faithfully,

(Signature of the Bidder, with Official Seal)

#### FORMAT FOR PERFORMANCE BANK GUARANTEE (PBG)/ PERFORMANCE SECURITY

#### (TO BE ESTABLISHED THROUGH ANY OF THE **NATIONALISED COMMERCIAL BANKSOF INDIA** (WHETHER SITUATED AT VARANASI OR OUTSTATION WITH A CLAUSE TO ENFORCE THE SAME ON THEIR LOCAL BRANCH AT VARANASI)

To, The Registrar, Indian Institute of Technology (BHU), Varanasi-221005

#### **LETTER OF GUARANTEE**

This Bank further agrees that the decision of Indian Institute of Technology (BHU), Varanasi (Buyer) as to whether the said bidder (Seller) has committed a breach of any of the conditions referred in tender document / Award of Contract shall be final and binding.

We, ...... (name of the Bank & branch) hereby further agree that the Guarantee herein contained shall not be affected by any change in the constitution of the bidder (Seller) and/ or Indian Institute of Technology (BHU), Varanasi (Buyer). Notwithstanding anything contained herein:

2. This Bank Guarantee shall be valid up to ......(date) and

Yours truly,

Signature and seal of the guarantor: Name of Bank: Address: Date:

# **SCHEDULE OF REQUIREMENTS**

#### I. TECHNICAL SPECIFICATIONS

#### TENDER FOR SUPPLY, INSTALLATION, DEMONSTRATION OF THERMAL-MECHANICAL PHYSICAL SIMULATOR AND TESTING EQUIPMENT AT IIT (BHU) VARANASI Quantity : 1

A versatile dynamic testing system for simulation of various thermal and mechanical metallurgical processes is required for the in-depth understanding needed for further optimising metallurgical processing & development of next generation materials/alloys for various applications such as automotive, construction/structural, oil and gas, aerospace, high-temperature materials as well as others. The thermal mechanical physical simulator should be an integrated system to meet the various simulations and testing with the required hardware and software for physically simulating materials processing and testing conditions. The system must include excellent integration of various component parts, subsystems and software.

Parameter	Specification range	
Peak temperature	1700°C	
Heating rate	Better than 8000°C/s on 6 mm diameter with 10 mm free span	
Temperature (resolution)	1°C	
Cooling rate	Up to 300°C /s during normal cooling and up to 8000°C/s	
	during accelerated cooling	
Accuracy of temperature control	± 1°C	
Force measurement accuracy	$\pm$ 1 % of full scale	
Force measurement resolution	1 kg	
Stroke Rate	0.001 -2000 mm/s	
Stroke measurement accuracy	+/- 0. 5% of full scale	
Stroke measurement resolution	0.002 mm or better	
Strain rate	0.001 s-1;10 s-1; 40 s-1; 80 s-1	
Extensometers & Devices	Suitable for measuring above test parameters	

#### Table 1: Thermal system with closed-loop control

Table 2: Mechanical system	n closed-loop high	speed servo-hydraulic control

Parameter	Specification range
Test Frame	Horizontal type with dual columns
Maximum force/load in tension	10,000 kg (~ 22,000 lbs.) (98 kN)
Maximum force/load in compression	20,000 kg (~ 44,000 lbs.) (196 kN)
Maximum stroke rate	2000 mm/sec in tension or compression
Minimum stroke rate	0.001 mm/sec in tension or compression
Maximum stroke distance	125 mm *
Maximum number of compression strokes	10 strokes (hits)
Force measurement accuracy	$\pm$ 1.0 % of full scale
Stroke measurement accuracy	$\pm 0.5$ % of full scale
C-strain measurement accuracy	$\pm 0.5\%$ of full scale
Force measurement resolution	± 1 Kg
Stroke measurement resolution	0.002 mm
C-strain measurement resolution	0.002 mm
Extensometers & Devices	Suitable for measuring above test parameters

Equipmen	t	
A	Thermal Mechanical Physical Simulation & Testing Equipment (TMPST) should facilitate material testing, basic material study and physically simulate the metallurgical processes in laboratory.	<ul> <li>The TMPST system must include the ability to physically simulate on laboratory scale using samples at different temperatures and other related parameters which is an essential part of the testing system and process simulator Typical process simulation:</li> <li>Continuous casting</li> <li>Mushy zone processing</li> <li>Hot rolling</li> <li>Forging</li> <li>Extrusion</li> <li>Weld HAZ cycles</li> <li>Upset butt welding</li> <li>Diffusion bonding</li> <li>Heat treating</li> <li>Quenching</li> <li>Powder Metallurgy (Sintering)</li> <li>Typical Testing applications:</li> </ul>
		<ul> <li>Hot/warm tensile testing on a wide variety of specimen geometries</li> <li>Hot/warm compression testing <ul> <li>Uniaxial compression</li> <li>Plane strain compression</li> <li>Strain Induced Crack Opening (SICO)</li> </ul> </li> <li>Stress vs. Strain curves</li> <li>Melting and solidification</li> <li>Nil strength testing</li> <li>Hot ductility testing</li> <li>Thermal cycling/heat treatment</li> <li>Dilatometry/phase transformation <ul> <li>During heating or cooling</li> <li>Continuous or non-continuous</li> <li>Isothermal</li> <li>Post deformation</li> </ul> </li> <li>Stress relaxation studies</li> <li>Creep/stress rupture</li> <li>Fatigue – Thermal/mechanical fatigue CCT, TTT diagrams</li> </ul>
В	TMPST equipment must include following basic functional systems:	<ul> <li>a) The system must be capable of applying tension and compression to samples, ideally the maximum compression force at a level of 20 metric tons, and the maximum level of tension at a level of 10 metric tons. Force measurement accuracy of +/- 1% of full scale.</li> <li>b) Dynamic tension and compressive force at a ram speed of 2000 mm/s. The force measurement resolution is required to be at a level of 1 Kg. The system should achieve a high stroke rate. The maximum stroke rate should be 2000 mm/sec. The system must accommodate both fast and slow stroke rates from 0.001 to 2000 mm/second. The system must accurately measure stroke. Stroke</li> </ul>

# Table 3: Technical Specification for TMPST to ascertain the provision of a system that meets the following specification

·	1	
C	The TMPST system must include or integrate a thermal sub-system for fast heating & cooling.	<ul> <li>measurement resolution of 0.002 mm is desired.</li> <li>c) The system should be hydraulically driven with closed-loop servo hydraulic control which can satisfy the essential control requirements.</li> <li>d) Mechanical data sampling rate System can collect 16 channels at 50 KHz simultaneously</li> <li>e) The system must be mounted on a frame with excellent stiffness, of at least 7.0 x 10<sup>-10</sup> meters/Newton The system should be equipped to add optional testing or simulation modules and attachments easily from one test configuration to another.</li> <li>a) The system must offer a responsive, dynamic, high-speed heating, using direct resistance high speed heating, for ferrous, non-ferrous metals and conductive material</li> <li>b) The system must offer accurate temperature control. Temperature range between ambient temperature and 1700°C with the capability of future expansion with attachment or separate test chamber to allow higher temperature. Provision to monitor a minimum of 4 thermocouple channels, or 3 thermocouple channels and one pyrometer channel simultaneously.</li> <li>c) Ability to utilize multiple thermocouple types such as type K, S, R, B thermocouples and sampling rate must be 100 times per second at 50 Hz</li> <li>d) Direct resistance heating as standard configuration (based on the Joule effect). Direct resistance with closed-loop control with +/- 1°C resolution of thermal control system.</li> <li>e) Heating rates of zero (steady state) to greater than 8,000°C/s on specific sample types of surface.</li> <li>f) Electrical power of&gt;= 70 KVA Thermocouple temperature control and 300 °C/s at 1000 °C without applying external quenching media. Quench cooling rates of up to 8,000 °C on specific sample types of surface.</li> <li>f) Electrical power of&gt;= 70 KVA Thermocouple temperature control with the option to utilize an optical pyrometer for thermal control</li> <li>g) Facility should have Induction Heating System for uniform temperature across the specime from anvil-to-anvil. Temperature range r</li></ul>
		Accuracy of Measurement $\pm 2^{\circ}$ C or $\pm 1^{\circ}$ C (steady state), Accuracy of Measurement $\pm 2^{\circ}$ C or $\pm 1^{\circ}$ K of temperature (whichever is greater). The two heating systems should be integrated to work on the same TMPST and software should select which heating system to be used in each test.
D	The TMPST equipment must be capable of carrying out the dynamic physical simulation of various thermal and mechanical processes	<ul> <li>a) Ability to produce isothermal planes through the sample thickness direction</li> <li>b) System must include highly accurate and reliable, the Dilatometer to generate CCT/TTT data and curves. Dilatometer should have a Linear Range: ±2.54 mm &amp; Linearity ±0.25 % of full scale</li> <li>c) Ability to conduct hot tensile testing and uniaxial and plane strain compression studies</li> <li>d) Ability to melt and perform controlled solidification after melting including semi-solid studies and continuous</li> </ul>

		<ul> <li>casting studies.</li> <li>e) Ability to perform in-situ quenching using water, air and gas mediums while maintaining the vacuum level in the chamber and without removing the heating system.</li> <li>f) System must contain provisions for the accurate measurement of both very high forces (consistent with the maximum capacity of the machine) as well as very low forces suitable for low strength tensile testing or the determination of nil-strength temperatures.</li> <li>g) System must be able to perform wide range of welding simulations and testing capabilities including weld HAZ simulation</li> <li>h) Suitable software and script writing languages to be provided to perform the simulations and testing of all aforementioned processes. All upgraded software should be provided free of cost within warranty period</li> </ul>
E	The system should include the following computer control and data acquisition features:	<ul> <li>a) The TMPST system must include required computer system with latest configuration and licensed software necessary to run tests, data acquisition and simulation programs and software capable of analyzing the data and making appropriate graphs, charts, etc. It should be supplied with digital touch control console system, a large display monitor, and required peripherals for operation of the</li> <li>b) The latest touch Control console for all testing and simulation operations through software to be included</li> <li>c) Provide suitable software to capture and analyse test data on the system while additional tests are being run.</li> <li>d) Automatic acquisition of data &amp; Compatibility with Ethernet / Internet</li> <li>e) User selectable data acquisition speed from zero to 50 KHz. The Supplier shall supply computers with appropriate latest specifications that shall be valid for future upgrades of the software for at least five (5) years from installation.</li> </ul>
F	The System feedback control	<ul> <li>a) Feedback inputs should be selectable for program control from computer or manual selection from the following variables:</li> <li>Stroke, C-Strain (Crosswise Strain) (measured in the hot zone), L-Strain (Lengthwise Strain measured across jaws)</li> <li>Optionally, Force, Stress (measured in hot zone), Engineering Strain, True Strain</li> <li>b) Automatic computer control with digital touch control console switching between program feedback inputs must be available <ul> <li>All transitions should be made digitally in software and there should be no discernible effect on the specimen during the transition.</li> </ul> </li> </ul>
G	The TMPST system must include an integrated vacuum system and inert gas purge system for testing in controlled	<ul> <li>a) Vacuum tank should surround the test area, with the possibility of testing under high vacuum. The system must include vacuum equipment capable of providing vacuum pressures of from atmospheric pressure to 5 x 10<sup>-5</sup> mm Hg.</li> <li>b) Testing in an inert gas environment by evacuating the</li> </ul>

atmospheres.tank and back filling with non-flammable gases such as argon, nitrogen, or helium should be available. Ability to quench with air, inert gas, water or water mist inside the vacuum tank. Quenching should be controlled by the computer system or test program through a digital bouch control console systemHThe system must accommodate different specimen sizes.a) Ideally, the specimen sizes for uniaxial tensile and compression between 5mm and 20mm diameter round or with a cost sectional area of up to 400 mm square or nettangular samples.HThe system must accommodate different specimen sizes.a) Ideally, the specimen size allowed: 6 mm (1/4 inch) diameter round & 5 mm (1/4 inch) diameter round & 5 mm (1/4 inch) diameter round & 5 mm (1/4 inch) square. Flat specimens with a cross sectional area of 25 mm (20038 in. <sup>2</sup> )IWater inlets and outlets. Compression for installation & Room requirement for installation & Room requirement for installation & Room requirement for installation & Room requirement for installation & Room requirementChiller should be suitable specification should he included. Suitable control system filters required in the machine to be included.JSpecial requirements for installation & Room requirement for installation & Room requirementThe whole system should be assembled with functional capability.JSpecial requirements for installation & Room requirement for installation & Room requirementChiller system for all computers should be included. Suface require			F
accommodate different specimen sizes.compression between 5mm and 20mm diameter round or with a cross sectional area of up to 400 mm square or rectangular samples.b) Plane strain compression testing specimen sizes of 10mm x 15mm x 20mm.b) Plane strain compression testing specimen size of 25 mm (1/4 inch) diameter round & 5 mm (1/4 inch) square. Flat specimens with a cross sectional area of 25 mm (20038 in.?)c) Minimum specimen size allowed: 6 mm (1/4 inch) diameter round & 5 mm (1/4 inch) square. Flat specimens with a cross sectional area of 25 mm (20038 in.?)d) The system must offer a wide selection of grips & anvils, etc. for tension, compression, Conditions on different sample types and sizes.e) Larger size samples could also be accommodated. Maximum specimen size allowed: 20 mm (3/4 inch) diameter round & 20 mm (3/4 inch) squareIWater inlets and outlets, Compressed Air and additional fittingsfittingsChiller should be suitably sized for the flow rate required by jaw/grip/parts of the machine with the equipment, fittings and accessories should be included.JSpecial requirements for Installation & Room requirementfor Installation & Room requirements for Installation & Room requirements for Installation & Room requirementKData control and managementKData control and managementK <t< td=""><td></td><td>atmospheres.</td><td><ul> <li>argon, nitrogen, or helium should be available. Ability to quench with air, inert gas, water or water mist inside the vacuum tank. Quenching should be controlled by the computer system or test program though a digital touch control console system</li> <li>Electrical and mechanical ports through the vacuum tank for thermocouples, strain transducers, quench media, etc. Transparent viewing window in the vacuum tank to allow viewing of the sample from multiple angles during testing</li> </ul></td></t<>		atmospheres.	<ul> <li>argon, nitrogen, or helium should be available. Ability to quench with air, inert gas, water or water mist inside the vacuum tank. Quenching should be controlled by the computer system or test program though a digital touch control console system</li> <li>Electrical and mechanical ports through the vacuum tank for thermocouples, strain transducers, quench media, etc. Transparent viewing window in the vacuum tank to allow viewing of the sample from multiple angles during testing</li> </ul>
IWater inlets and outlets, Compressed Air and additional fittingsChiller should be suitably sized for the flow rate required by jaw/grip/parts of the machine with the equipment with suitable specification. Air compressor of suitable specification should be included. Sufficient length of hoses suitable for the equipment, fittings and accessories should be included. Suitable control system, filters required in the machine to be included.JSpecial requirements for Installation & Room requirementThe whole system should be assembled with functional capability. The entire equipment including all materials, electronics and mechanical devices shall be operable in a typical clean laboratory environment with controlled temperature and low relative humidity. Space requirement information for the installation and maintenance shall be provided. Specific lighting associated with localized areas of the machine must be supplied with the machine.KData control and managementOperating system for all computers should be with latest Windows and the computers supplied as part of the instrument should comply with the data security standards of the institute/organisation including but not limited to virus software installation, security patch update for Windows and remote access requirements through internet communication. System should be compatible with all interfaces.LTools andTools and mountings to be supplied with the system for the	Н	accommodate different specimen	<ul> <li>compression between 5mm and 20mm diameter round or with a cross sectional area of up to 400 mm square or rectangular samples.</li> <li>b) Plane strain compression testing specimen sizes of 10mm x 15mm x 20mm.</li> <li>c) Minimum specimen size allowed: 6 mm (1/4 inch) diameter round &amp; 5 mm (1/4 inch) square. Flat specimens with a cross sectional area of 25 mm<sup>2</sup> (0.038 in.<sup>2</sup>)</li> <li>d) The system must offer a wide selection of grips &amp; anvils, etc. for tension, compression, HAZ, SICO and plane strain compression conditions on different sample types and sizes.</li> <li>e) Larger size samples could also be accommodated. Maximum specimen size allowed: 20 mm (3/4 inch) diameter round &amp; 20 mm (3/4 inch)</li> </ul>
for Installation & Room requirementcapability. The entire equipment including all materials, electronics and mechanical devices shall be operable in a typical clean 	Ι	outlets, Compressed Air and additional	Chiller should be suitably sized for the flow rate required by jaw/grip/parts of the machine with the equipment with suitable specification. Air compressor of suitable specification should be included. Sufficient length of hoses suitable for the equipment, fittings and accessories should be included. Suitable control system, filters required in the machine to be
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L Tools and Tools and mountings to be supplied with the system for the	K		Operating system for all computers should be with latest Windows and the computers supplied as part of the instrument should comply with the data security standards of the institute/organisation including but not limited to virus software installation, security patch update for Windows and remote access requirements through internet communication.
	L		Tools and mountings to be supplied with the system for the

<b>Delivery and</b>	Installation		
M	Delivery anda) Safe Delivery till IIT(BHU) Varanasi with necessary		
	Installation insurance of entire consignment.		
	details b) Delivery and Installation within 6 months of placing the		
	purchase order.		
Acceptance			
N	a) The Supplier shall provide a valid calibration certificate in original hard copy before		
	the system as whole shall be accepted.		
	b) Acceptance must be on completion of installation, commissioning, and acceptance		
	testing. At least one demonstration for each type of testing and simulation mentioned		
	in the specification is required of the full function of the instrument and the whole		
	system working in the laboratory as per Table 1, Table 2 and sections A - L of Table		
	3.		
	c) Standard samples for acceptance testing will be supplied by the supplier in sufficient		
	quantity.		
	d) Terms of acceptance of the equipment will adhere to the specification ranges and		
	performance parameters listed in Table 1, 2 and 3.		
Warranty & I	Maintenance Contract		
0	a) The proposed equipment must come with a 60 months minimum comprehensive		
	warranty period with defined terms, the warranty period will not commence until		
	commissioning is complete and the equipment is formally accepted at site through		
	signature of an appropriate acceptance document. The warranty period and terms		
	must be stated in the contract. Additional warranty to be quoted as optional.		
	b) The Supplier is required to provide the maintenance services/visits for the equipment		
	system as per the requirements.		
	c) System shall be of sound design, well-constructed and of suitable materials to ensure		
	safe and reliable operation in a laboratory environment.		
Other require			
Р	a) The supplier must provide one hard copy and an electronic copy of the following		
	documentation (in English);		
	Calibration certificates		
	c) Manufacturer's operating instructions detailing the safe operation of the equipment		
	(including any specific hazards or risks)		
	d) Manufacturer's maintenance and technical manual		
	e) Software manuals and licenses		
	f) Any issues & snags identified by the end-user after equipment acceptance will be		
	notified to the Supplier using an agreed method and must be resolved within a 2-3		
	<ul><li>weeks at the Supplier's cost.</li><li>g) The bidder is required to provide skilled operator support for the equipment</li></ul>		
	g) The bidder is required to provide skilled operator support for the equipment for 5 Years and submit the quote for the same in INR.		
Optional Iten	*		
Q	a) Facility for cryogenic treatment to simulate cryogenic hardening using suitable		
	media for property evaluation tests at sub-zero temperatures to be quoted. Minimum		
	Temperature must be -150°C. Average Cooling Rate must be 10 °C/sec from room		
	temp to -150°C		
	b) Suppliers must offer the option for a calibration & maintenance Contract, from the		
	end of the comprehensive warranty period.		
	c) The Supplier shall state the frequency and details of future calibrations including		
	service & logistical costs. This shall include lead times and duration of calibration.		
* Tha I.	stitute may or may not procure these items. Bidder shall not have any right in this regard.		

\* The Institute may or may not procure these items. Bidder shall not have any right in this regard. # The rate quoted shall not be considered for determining L1.

#### ESSENTIAL GENERAL INSTRUCTIONS FOR SPECIFICATION

- 1. Pre-installation site preparation requirements to be indicated and specified along with the bid.
- 2. Installation and training should be provided free of cost as per point no. 6 of Special Condition of contract.
- 3. The complete installation and commissioning must be carried out by the supplier at the destination in our premises. Machine package shall be opened by Bidder in presence of IIT(BHU) representative.
- 4. Adherence to all specifications is compulsory.
- 5. Only the bid of the firms quoting the rate for "all the Items together mentioned in the price bid" will be taken into consideration for evaluation.
- 6. Must have certified engineers in India. Contact details must be shared.
- 7. Must be able to update software remotely and must have digital advanced training as per requirement
- 8. Registration Certificate of the firm/Certificate of incorporation of company/agency.
- 9. Scanned Copy of Certificate/Undertaking indicating that the rates quoted for supply of said items by the firm are not higher than the rate of item supplied by the firm in any other Government Organization/Institutions/PSU etc. within last one year.
- 10. Catalogue must be enclosed containing details of equipment.
- 11. Services will be given free of cost during the warranty period.

#### Note:

- I. The bidding company/firm are requested to self-attest the scanned copies of documents, along with the bid, signed on each page with seal, to establish the bidder's eligibility and qualifications failing which their bid shall be summarily rejected and will not be considered. The original copies shall be produced by bidder as and when required by the purchaser.
- II. The technical bid must not include price bid, otherwise bid will be summarily rejected.
- III. Equipment must be supplied with required accessories in running condition.
- IV. Please note that all the uploaded documents must be clearly marked with page no. and signature of authorized signatory. Further, the bidder must mention the page no. against each compliance in order to enable the Institute to verify the document quickly and properly.

# **TECHNICAL COMPLIANCE STATEMENT**

(to be submitted on the letterhead of bidder)

#### TENDER FOR SUPPLY, INSTALLATION, DEMONSTRATION OF THERMAL-MECHANICAL PHYSICAL SIMULATOR AND TESTING EQUIPMENT AT IIT (BHU) VARANASI

SI. No.	Specification	Whether the instrument complies with the required specification (Yes / No / Better)	If no or better specificatio n, then provide your comment accordingly

The above compliance statement form is only indicative and can be modified according to requirements of the bidder.

Date : .....

Signature of the Authorised Official with Seal

### **SECTION 9**

#### PREVIOUS SIMILAR ORDER EXECUTED

The bidder give the details of purchase orders identical or similar equipment supplied to any IITs/NITS/Govt. Offices/PSUs/Govt. Funded Universities/ Govt. Funded Autonomous Bodies/Govt. Bodies as per below Format for the period of 1st April 2012 to 31st March 2022

Name of the Firm \_

Order	Order No.	Description	Value	Date of	Remarks	Has the	Contact
placed by	and Date	and	of	completion	indicating	Equipment	Person
(Full		quantity of	Order	of delivery	reasons for late	being	along
address of		ordered		as per	delivery, if any	installed	with
Purchaser)		equipment		contract	and	satisfactorily	Telephone
					justification for	(Attach a	No.,
					price	Certificate	Fax No.
					difference of	from	and e-
					their	the	mail
					supply order &	Purchaser/	address.
					those	Consigner)	
					quoted to us		

(Kindly enclose the scan copy of aforementioned purchase orders along with satisfactory installation reports)

#### **Details of Technical Expert**

Name of application specialist / Service Engineer who have the technical competency to handle and support the quoted product during the warranty period.					
Name of the organizationName of Contact PersonContact No.					

Signature and Seal of the Manufacturer / Bidder \_\_\_\_\_

Place : \_\_\_\_\_

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

#### **BID SUBMISSION**

### **Online Bid Submission:**

The Online bids (complete in all respect) must be uploaded online in two Envelops as explained below:-

	(Foll	<b>Envelope – 1</b> lowing documents to be provided as single PDF file)			
Sl. No.	Document	Content	File Types		
1.	Technical Bid	Technical Compliance Sheet, compliance sheet of essential pre bid criteria	.PDF		
2.		Organization Declaration Sheet	.PDF		
3.		Checklist, Tender Acceptance, Tender Form, Annexure I etc.	.PDF		
4.		List of organizations/ clients where the same products have been supplied during 1 <sup>st</sup> April 2012 to 31 <sup>st</sup> March 2022 along with their contact number(s). (Annexure-III)			
5.		Technical supporting documents in support of all claims made at Annexure-I	.PDF		
6.		EMD/Bid Security Declaration Form as per Annexure-VII and Tender fee submission proof	.PDF		
7.		Certificate as per Annexure VI on the letterhead of the company	.PDF		
8.		Brochure of quoted product, Other Documents, if any which are not covered above	.PDF		
	Envelope – 2				
Sl. No.	Document	Content			
1.	Financial Bid	Price bid Form should be submitted in PDF format.	.PDF		
2.		BoQ in .xls Format	.XLS		
3.		BoQ in .pdf Format*	.PDF		

Note : In case any difference arises between the price quoted in BoQ in .xls format and BoQ in .pdf format, the highest quoted price between the two will be considered for the purpose of financial evaluation of bid.

#### ORIGINAL EQUIPMENT MANUFACTURER (OEM) Manufacturing Authorisation Form (MAF) (On Letter Head of Manufacturer)

Tender No. :- ..... Date:- ..... To **The Chairman of Purchase Committee** & **Professor In-charge Central Instrument Facility Indian Institute of Technology** (Banaras Hindu University), Varanasi – 221005

Dear Sir,

We manufactures of original equipment (.....address of at factory.....) do hereby authorize M/s (Name and address of Agent) to submit a the order format bid, negotiate and receive against your tender enquiry. M/s. ..... is authorized to bid and conclude the contract in regard to this business. We hereby extend our full guarantee and warranty as per clause......of the terms and conditions NIQ for the goods and services offered by the above firm.

Yours Faithfully,

(Name)

(Name & Seal of Manufacturers)

#### **DECLARATION**

(to be submitted on the letterhead of Company)

To, The Chairman of Purchase Committee & Professor In-charge Central Instrument Facility Indian Institute of Technology (Banaras Hindu University), Varanasi – 221005

#### We certify as under:

We have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries, and solemnly certify that we fulfill all requirements in this regard and are eligible to be considered.

We certify that:

(a) We are not from such a country or, if from such a country, we are registered with the Competent Authority (copy enclosed).

and;

(b) We shall not subcontract any work to a contractor from such countries unless such contractor is registered with the Competent Authority.

Yours faithfully,

(Signature of the Bidder, with Official Seal)

# **BID SECURING DECLARATION FORM** (on the Letterhead of the bidder)

То

The Chairman of Purchase Committee, & Professor In-charge Central Instrument Facility Indian Institute of Technology (Banaras Hindu University), Varanasi – 221005

I/We. The undersigned, declare that:

I/We understand that bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with IIT(BHU), Varanasi for a period of two years from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity or its extended period, if any; or

b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity

(i) fail or refuse to execute the contract, if required, or

(ii) fail or refuse to furnish the Performance Bank Guarantee, in accordance with the Instructions to Bidders.

c) If the bidder is found indulging in any corrupt, fraudulent or other malpractice in respect of the bid; or

d) If there is a discrepancy between words and figures quoted by the bidder then in that case the amount quoted in words will be treated as final.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed:

(Insert signature of person whose name and capacity are shown in Bid Securing Declaration) Name:

(insert complete name of person signing the Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of

(insert complete name of Bidder)

Dated on ......day of ...... (insert date of signing)

Corporate Seal (where appropriate) (Note: In case of a consortium, the Bid Securing Declaration must be in the name of all partners to the consortium that submits the bid).