

INTER - UNIVERSITY ACCELERATOR CENTRE

(An Autonomous Centre of UGC)
Aruna Asaf Ali Marg, New Delhi - 110067

NOTICE INVITING E - TENDER

Tender No: IUAC/NIT/13-R/SMK/2020-21

Dated: 14/12/2020

Inter - University Accelerator Centre (IUAC) invites online bids on behalf of the Director IUAC, New Delhi through e-procurement Portal under two bid system, viz., Technical and Financial bids, from eligible / experienced parties for the **“supply of Cryogenic Sensors, Meters and other Low Temperature Measurement Accessories as per the Annexure-I-II”**.

Tender Documents may be downloaded from Central Public Procurement (CPP) Portal free of cost <https://eprocure.gov.in/eprocure/app>. Aspiring Bidders who have not enrolled / registered in e-procurement portal should enroll / register before participating through the website <https://eprocure.gov.in/eprocure/app>. Bids should be submitted online only at website: <https://eprocure.gov.in/eprocure/app>. Tenderers / Contractors / Bidders are advised to follow the instructions provided in the e-procurement portal. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned documents.

Only bids received through e-procurement portal will be considered for opening. Bids not covering full scope of work/supply of the products/goods will be rejected and only complete bids will be considered. IUAC reserves the right to accept / reject any / all tenders in part / full without assigning any reasons whatsoever, and the decision of IUAC in this regard will be binding on all the bidders.

As per notification no. F/9/4/2020-PPD dated 12.11.2020 issued by Ministry of Finance, Department of Expenditure, Govt. of India, bidders have to submit “Bid Security Declaration” accepting that if they withdraw or modify their bids during period of validity etc., they will be suspended for the time specified in the tender documents”. Tenderers registered with MSME/NSIC (the unit being registered for the item/work tendered) are required to upload copy of valid registration certificate in the website <https://eprocure.gov.in/eprocure/app> along with technical bid.

Bidders are advised to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard .XLS BOQ Format with the tender document, then the same is to be downloaded and to be filled and submitted online without modifying the format. **If the BOQ file is found to be modified by the bidder, the bid will be rejected.**

Any Corrigendum / Amendments in respect of above tender shall be issued on website <https://eprocure.gov.in> and www.iuac.res.in only. Bidders should take into account any corrigendum published on the tender document before submitting their bids. The Director, IUAC reserves the right to accept/reject any/all tenders in part/full without assigning any reasons thereof.

INTER-UNIVERSITY ACCELERATOR CENTRE

(An Autonomous Centre of UGC)

Aruna Asaf Ali Marg, New Delhi-110 067

E-TENDER DOCUMENT

Name of the work	“Supply of Cryogenic Sensors, Meters and other Low Temperature Measurement Accessories as per the Annexure- I-II”.
Tender Number	IUAC/NIT/13-R/SMK /2020-21
Estimated Tender Amount	₹11,00,000.00 (Eleven lakhs only)
Last Date and Time of Submission of Tender	04/01/2021 at 3.00 p.m.
Date & Time for opening of Tender (Techno-commercial bid – Part-A)	05/01/2021 at 3.30 p.m.
Date & time for opening of Price Bid (Part - B)	To be intimated later on to technically qualified bidders
Contact Person & Address	Administrative Officer (S&P), Email: iuacstores@gmail.com Phones: 011-2412 6018, 2412 6022

Part-I: GENERAL TERMS & CONDITIONS

1. Submission of Tender:

Tenders should be uploaded on CPP portal in two Parts i.e. “Technical Bid” (Part-A) and “Price Bid/BOQ” (Part-B).

2. Technical Bid (Part-A):

In this bid, the bidder shall upload the following relevant documents which are essential for technical qualification:

- a. Copies of PAN Number, GST Registration Number certificates of bidding agency
- b. A duly signed authorization certificate from the OEM in case the bidder is not the original manufacturer of the components listed in Annexure-I.**
- c. Catalogues or data sheet and other technical specifications of the products indicating its ability to meet the technical specifications as per Annexure-II
- d. Tender Acceptance Letter shall be duly signed & stamped by the bidder.
- e. The bidder shall not be black listed by any government or government department in centre/state/district levels across India. An undertaking in this regard as per Annexure-IV be enclosed with the technical bid.

Special Note:

- 1. All documents uploaded by the bidder should be self-attested along with stamp.*
- 2. Technical bids which are not confirming to the technical specifications will be disqualified.*

3. Price Bid / BOQ (Part-B):

In this bid, the bidder is required to quote his price (in INR) of items upto its delivery at IUAC basis in the standard .XLS format provided and no other format is acceptable. IUAC would provide GST/Custom certificate. Appropriate certificates will be issued to the successful bidder. Bidders are advised to quote all items in the BOQ. Incomplete price bid will be rejected. The bidders should quote unconditional rates, neatly written without any overwriting and all pages should be duly signed & stamped.

4. Validity of Tender:

Tender shall be valid for our acceptance without any change in the rates and NIT conditions for a period of 90 days from the date of opening the price bid. No escalation of cost will be acceptable in any condition after opening of the tender.

5. Escalation / Deviation:

No escalation or deviation shall be allowed till execution of order / contract.

6. Terms of Payment

The payment will be done after delivery of the items at IUAC and submission original invoice certified by the concerned official at IUAC -New Delhi.

A payment of 90% will be released after delivery of the items at IUAC

The remaining 10% payment will be released against a Performance Bank Guarantee (PBG) in the form of fixed deposit or Bank Guarantee from a commercial bank within 10 days from the issuance of LOI / purchase order. PBG should remain valid for a period of 60 days beyond the completion of all contractual obligations of the supplier including warrantee obligation.

7. Guarantee/Defect liability period

The supplied material should guarantee for the manufacturing / engineering defect and bad material/workmanship for a minimum period of 1 (one) year from the date of acceptance of the goods by IUAC. During this period if any replacement of item, repairs/rectification etc. is needed, the supplier shall do the same free of cost to IUAC.

8. Delivery Period

The material should be supplied within 90 days from the date of issue of LOI / purchase order. Any delay in completion of the supply due to reasons attributable to the vendor / manufacturer is liable to liquidated damages as per clause 09 of this NIT. However, under the force-majeure conditions as per clause 10 of NIT, IUAC may grant suitable time extension for which vendor has to request along with the justification / reasons well in advance to the Director, IUAC for approval without any prejudice or price escalation.

09. Liquidated Damage

In case supply is delays beyond the specified delivery date, deductions on account of liquidate damage @1% per week or thereof will be deducted subjected to maximum of 10% of order value.

10. Force Majeure

IUAC may grant an extension of time limit set for the supply items in case it is delayed by force majeure beyond the supplier's control. Force majeure is defined an event of effect that cannot reasonably be anticipated such as acts of God (like earthquakes, floods, tsunami etc.), the direct and indirect consequences of wars (declared or undeclared), national emergencies, civil commotions and strikes (only those which exceeds a duration of ten continuous days) at vendor's factory. Apart from the extension of the time limit, force majeure does not entitle the successful tenderer to any relaxation or to any compensation of damage or loss suffered. The decision of the Director, IUAC will be final and binding for the vendor.

11. Correspondence:

All the correspondence in respect of tender / contractual obligation shall be made to "*The administrative Officer (S&P), Inter University Accelerator Centre, Aruna Asaf Ali Marg, New Delhi – 110067*". E-mail: iuacstores@gmail.com, Telephone: +91-11-24126018, 24126022.

12. Tender Liable to Rejection:

- a. The Director, IUAC reserves the right to accept/reject any/all tenders in part/full without assigning any reason whatsoever and the decision of the IUAC in this regard will be binding on all the bidders.
- b. Bids received by means other than e - procurement portal will be rejected.
- c. Bids not covering full scope of supply of the products will be rejected and only complete bids will be considered.
- d. If BOQ file is found to be modified by the bidder, the bid will be rejected.
- e. Tenders not complying with any of the terms and condition stated in this tender document are liable to be rejected.

13. Actual Quantity

The number of items and the corresponding quantities may vary in actual order. IUAC has right to select the final list of items and quantity in the actual order. Order will be given to the bidder with the lowest price for the finally selected items with their desired quantities.

14. The Director, IUAC reserves the right to reject or accept any or all the tenders in full or in part without assigning any reasons whatsoever, and the decision of the Centre in this regard will be binding on all the bidders. Tenders not complying with any of the provisions stated in this tender document are liable to be rejected.
15. This notice inviting tender will form part of the contract agreement to be executed by the successful tenderer with the IUAC. The successful bidder shall have to sign the contract agreement within 10 days of the allotment of work.
16. The contract shall be governed by the Indian Laws. Any dispute arising out of this contract will be subjected to jurisdiction of New Delhi / Delhi.

Accepted
(Signature of Bidder)

Annexure - I

List of items and their tentative quantities*

<u>Item Sl. No.</u>	<u>Manufacturer Product Code</u>	<u>Make</u>	<u>Qty</u>
1	Cernox Sensor in SD Package	Lakeshore Cryotronics Inc	1
2	Cernox Sensor in CU Package	Lakeshore Cryotronics Inc	1
3	Eight channel Cryogenic Temperature Monitor	Lakeshore Cryotronics Inc	1
4	Silicon Diode in SD Package	Lakeshore Cryotronics Inc	1
5	Silicon Diode in CU Package	Lakeshore Cryotronics Inc	1
6	Phosphor Bronze Quad Twist 32 AWG Wire	Lakeshore Cryotronics Inc	30m
7	Phosphor Bronze Deo Twist 32 AWG Wire	Lakeshore Cryotronics Inc	150m
8	Phosphor Bronze Quad Twist 36 AWG Wire	Lakeshore Cryotronics Inc	30m
9	Phosphor Bronze Deo Twist 36 AWG Wire	Lakeshore Cryotronics Inc	150m
10	Manganin Wire	Lakeshore Cryotronics Inc	30m
11	Cartridge Heater	Watlow /Lakeshore Cryotronics Inc	2
12	Apiezon N Grease	Apiezon/ Lakeshore Cryotronics Inc	2

* The number of items and quantities may vary in the actual order

Name & Signature of Tenderer
Company with Seal

Annexure - II

Detailed Technical Specification

1. Cernox Sensor in SD Package	
Description	Specifications
Temperature range	1.4 to 325 K
Recommended excitation	10 mV or less for T > 1.2 K
Reproducibility	±3-5 mK at 4.2 K
Thermal response time (typical)	< 20 ms at 4.2 K, ≤ 1s at 77 K, ≤ 1 s at 273 K
Dissipation at recommended excitation	< 10 ⁻⁶ W at 4.2 K
Calibration	Calibrated chart (1050 band)
Package	SD
2. Cernox Sensor in CU Package	
Description	Specifications
Temperature range	1.4 to 325 K
Recommended excitation	10 mV or less for T > 1.2 K
Reproducibility	±3-5 mK at 4.2 K
Dissipation at recommended excitation	< 10 ⁻⁶ W at 4.2 K,
Calibration	Calibrated chart (1050 band)
Package	CU
3. Eight Channel Cryogenic Temperature Monitor	
Description	Specifications
Number of inputs	8
Measurement type	4-lead differential
Excitation	Eight constant current source
Input Configuration	Two groups of four. Each group must contain same input type
Supported sensors	RTDs: Cernox®, 100Ω Platinum, 1000 Ω Platinum, Germanium, Carbon-Glass, and Rox™ carbon resistors, silicone diode
Standard curves	DT-470, DT-670, , PT-100, PT-1000,
Input connector	25-pin D-sub
Software support	LabVIEW™ driver
Serial Interface	RS 232C
Update rate	To 16 rdg/s
Power requirement	220, 240 VAC, ±10%, 50 Hz, 35 VA
Voltage output	Analog Voltage / at least 2 No
4. Silicon Diode in SD Package	
Description	Specifications
Temperature range	1.4 to 325 K
Standard curve	Curve DT-670
Recommended excitation	10 μA ±0.1%

Max reverse voltage	30-40 V
Max current before damage	1 mA continuous or 100 mA pulsed
Dissipation at recommended excitation	15-20 μ W at 4.2 K
Thermal response time SD	<15 ms at 4.2 K, < 150 ms at 77 K, < 250 ms at 305 K
Reproducibility	\pm 10-15 mK at 4.2 K
Calibration	Calibrated chart DT 600series
Package	SD

5. Silicon Diode in CU Package

Description	Specifications
Temperature range	1.4 to 325 K
Standard curve	Curve DT-670
Recommended excitation	10 μ A \pm 0.1%
Max reverse voltage	40 V
Max current before damage	1 mA continuous or 100 mA pulsed
Dissipation at recommended excitation	< 20 μ W at 4.2 K
Reproducibility	1 \pm 10 mK at 4.2 K
Calibration	Calibrated DT-600 Series
Package	CU

6. Phosphor Bronze Quad -Twist 32 AWG Wire

Description	Specifications
Melting range	1200 K to 1350 K
Coefficient of thermal expansion	< 2×10^{-5}
Material	Phosphor-Bronze
Electrical resistivity (at 293 K)	< 15 $\mu\Omega \cdot \text{cm}$
Thermal conductivity (W/(m•K)) at 4 K	1.6
Insulation	Polyimide insulated
AWG	32

7. Phosphor Bronze Deo -twist 32 AWG Wire

Description	Specifications
Melting range	1200 K to 1350 K
Coefficient of thermal expansion	< 2×10^{-5}
Material	Phosphor-bronze
Electrical resistivity (at 293 K)	< 15 $\mu\Omega \cdot \text{cm}$
Thermal conductivity (W/(m•K)) at 4 K	1.6
Insulation	Polyimide insulated
AWG	32

8. Phosphor Bronze Quad- Twist 36 AWG Wire

Description	Specifications
Melting range	1200 K to 1350 K
Coefficient of thermal expansion	< 2×10^{-5}
Material	Phosphorus Bronze
Electrical resistivity at 293 K	< 15 $\mu\Omega \cdot \text{cm}$
Thermal conductivity (W/(m•K)) at 4 K	1.6
Insulation	Formvar insulated

AWG	36
9. Phosphor Bronze Duo -Twist 36 AWG Wire	
Description	Specifications
Melting range	1200 K to 1350 K
Coefficient of thermal expansion	$< 2 \times 10^{-5}$
Material	Phosphorus Bronze
Electrical resistivity at 293K	$< 15 \mu\Omega \cdot \text{cm}$
Thermal conductivity (W/(m•K)) at 4 K	1.6
Insulation	Formvar insulated
AWG	36
10. Manganin wire	
Description	Specifications
Melting range	1250-1300 K
Coefficient of thermal expansion	$< 25 \times 10^{-6}$
Chemical composition (nominal)	83% copper, 13% manganese, 4% nickel
Electrical resistivity at 293 K	$48 \mu\Omega \cdot \text{cm}$
Thermal conductivity (W/(m•K)) at 4 K	0.5
Insulation	Formvar insulated
AWG	32
11. Cartridge Heater	
Description	Specifications
Heater Resistance	25 Ω
Power	100W
Temperature range	4.2 K to 373 K
Current	1 A at 100 VDC
Contacts	High nickel iron alloy
Insulation between leads and case	Magnesium oxide
12. Apiezon-N Grease	
Description	Specifications
Approximate melting point	$< 320 \text{ K}$
Thermal conductivity	0.005 W/ (m•K) at 4.2K
Vapor pressure at 293 K:	$< 3 \times 10^{-7} \text{ Pa}$

Annexure -III

(Price should be quoted in the standard BOQ.XLS format of this tender)

Name of Work/Supply: Supply of Cryogenic Sensors, Meters and other Low Temperature Measurement Accessories as per the Annexure- I".

A. For Indian Vendor

Sl. No.	Items	Quantity
1	Cernox Sensor in SD Package	1
2	Cernox Sensor in CU Package	1
3	Eight channel Cryogenic Temperature Monitor	1
4	Silicon Diode in SD Package	1
5	Silicon Diode in CU Package	1
6	Phosphor Bronze Quad Twist 32 AWG Wire	30m
7	Phosphor Bronze Deo Twist 32 AWG Wire	150m
8	Phosphor Bronze Quad Twist 36 AWG Wire	30m
9	Phosphor Bronze Deo Twist 36 AWG Wire	150m
10	Manganin Wire	30m
11	Cartridge Heater	2
12	Apiezon N Grease	2
13	Packaging and forwarding upto IUAC Delhi	
14	GST	

Name & Signature of Tenderer
Company with Seal

INSTRUCTION TO BIDDERS FOR ONLINE BID SUBMISSION

The bidders are required to submit soft copies of their bids electronically on the CPP Portal. 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: <https://eprocure.gov.in/eprocure/app> .

REGISTRATION

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link “Online bidder Enrollment” on the CPP Portal which is free of charge.
- 2) As part of the enrollment process, the bidders will be required to choose a unique user name 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) Bidder then logs in to the site through the secured log-in by entering their user ID / password

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 Help desk.

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 /JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 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” or „“Other Important Documents”” 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.

SUBMISSION OF BIDS

1. Bidder should log into the site well in advance for bid submission so that they can 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. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. 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 file name. If the BOQ file is found to be modified by the bidder, the bid will be rejected.
4. 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.
5. 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. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
6. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
7. Upon the successful and timely submission of bids (ie after Clicking “Freeze Bid Submission” in the portal), 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.
8. The bid summary has to be printed and kept as an acknowledgment of the submission of the bid. This acknowledgment may be used as an entry pass for any bid opening meetings.

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 Help desk. The contact number for the help desk is 1800 3070 2232.

PROFILE OF THE TENDERER (On letterhead)

1. Name of the Firm / Organization :
2. Address :
3. Telephone No. / Mobile No. & Name of the Contact Person :
4. Fax No. :
5. E-mail ID :
6. Month and Year of establishment :
7. Name of proprietor / partners/director :
8. No. of years of experience in this field, with Reference, Certificates :
9. Annual Turnover during the last three years (Enclose copies of Audited Financial Statement)
2017-18 :
2018-19 :
2019-20 :
10. Whether the firm is an Income Tax Assessee? If so please give the details of PAN No. :
11. GST Registration No. :
12. Name of the OEM and address (if applicable) :

Signature of the Tenderer & Seal

BID SECURITY DECLARATION (on Letter head)

As per notification no.F/9/4/2020-PPD dated 12.11.2020 issued by Ministry of Finance, Department of Expenditure, Govt. of India, I/We hereby accepting that if the bids related to **Supply of Cryogenic Sensors, Meters and other Low Temperature Measurement Accessories** are withdrawn or modified by me/us during the period of validity etc., IUAC has right to suspend the bid for the time specified in the tender documents.

Signature of the Tenderer

Stamp

TENDER ACCEPTANCE LETTER

(To be given on Company Letter Head)

Date:

To,
The Director
IUAC, New Delhi-67

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No: IUAC/NIT/

Name of Tender / Work: -

Dear Sir,

I/ We have downloaded / read and examined 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).

1. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents (including all documents like annexure(s), schedule(s), etc ..), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.
2. The corrigendum(s) issued from time to time by your department/ organization too have also been taken into consideration, while submitting this acceptance letter.
3. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.
4. I / We do hereby declare that our Firm has not been blacklisted/ debarred by any Govt. Department/Public sector undertaking.
5. I / We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organisation shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy.

Yours Faithfully,

(Signature of the Bidder, with Official

Seal)