अंतर - विश्वविद्यालय त्वरक केंद्र INTER-UNIVERSITY ACCELERATOR CENTRE (विश्वविद्यालय अनुदान आयोग का स्वायत्त निकाय) (An Autonomous C-entre of UGC) अरुणा आसफ अली मार्ग, नई दिल्ली - 110067 Aruna Asaf Ali Marg, New Delhi - 110067

ई-निविदा आमंत्रण सूचना / NOTICE INVITING E-TENDER

निविदा संख्या: IUAC/NIT/05/SK/2025-26 दिनांक: 21/07/2025

Tender Number: IUAC/NIT/05/SK/2025-26 Dated:21/07/2025

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 1.8W double stage 4.2K GM cryocooler system" at IUAC, New Delhi.

निविदा दस्तावेज, सेंट्रल पब्लिक प्रोक्योरमेंट (सीपीपी) पोर्टल https://eprocure/app से मुफ्त में डाउनलोड किए जा सकते हैं। इच्छुक बोलीदाता, जिन्होंने ई-प्रोक्योरमेंट पोर्टल में नामांकन/पंजीकरण नहीं किया है, उन्हें भाग लेने से पहले https://eprocure.gov.in/eprocure/app वेबसाइट के माध्यम से नामांकन/पंजीकरण करना होगा। बोलियां केवल https://eprocure.gov.in/eprocure/app वेबसाइट पर ऑनलाइन जमा करनी होगी। निविदाकारों/ठेकेदारों/बोलीदाताओं को सलाह दी जाती है कि वे ई-प्रोक्योरमेंट पोर्टल में दिए गए निर्देशों का पालन करें। बोली दस्तावेजों को 100 डी.पी.आई. में ब्लैक एंड व्हाइट स्कैन करें, जो स्कैन किए गए दस्तावेजों के आकार को कम करने में मदद करता है।

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.

केवल ई-प्रोक्योरमेंट पोर्टल के माध्यम से प्राप्त बोलियों को ही खोला जाएगा। जो बोलियाँ उत्पादों/वस्तुओं के कार्य/आपूर्ति के वांछित प्रयोजनों को संपूर्ण रूप से पूर्ण करने में अक्षम होगी, उन बोलियों को अस्वीकार कर दिया जाएगा और केवल पूर्ण बोलियों पर विचार किया जाएगा। अंतर-विश्वविद्यालय त्वरक केंद्र के पास बिना कोई कारण बताए किसी भी/सभी निविदाओं को आंशिक/पूर्ण रूप से स्वीकार/अस्वीकार करने का अधिकार सुरक्षित है और इस संबंध में आईयूएसी का निर्णय सभी बोलीदाताओं के लिए बाध्यकारी होगा।

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.

ई.एम.डी. का भुगतान करने के लिए बोलीदाता को "ऑनलाइन" भुगतान विकल्प का चयन करना होगा, जो https://services.sabpaisa.in/pages/iuac.html लिंक पर जाकर लागू होगा। बयाना राशि ऑनलाइन भुगतान के रूप में होगी और इसे बोली खोलने से पहले जमा किया जाना चाहिए। एम.एस.एम.ई./एन.एस.आई.सी. में पंजीकृत बोलीदाताओं को ई.एम.डी. के भुगतान से छूट दी गई है। एम.एस.एम.ई./एन.एस.आई.सी.(निविदा की गई वस्तु/कार्य के लिए पंजीकृत इकाई) से पंजीकृत निविदाकारों को तकनीकी बोली के साथ वैध पंजीकरण प्रमाणपत्र की प्रति https://eprocure.gov.in/eprocure/app वेबसाइट पर अपलोड करनी होगी।

Bidder has to select the payment option as "online" to pay the EMD as applicable by going to the link https://services.sabpaisa.in/pages/iuac.html . The Earnest Money Deposit shall be in the form of online payment and it should be deposited before the bid opening. Bidders registered with MSME/NSIC are exempted from payments of EMD subject to having exemption certificate in the relevant category. However, they have to submit Bid Security Declaration Form. 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.

बोलीदाताओं को इस बात को विशेष ध्यान में रखने की सलाह दी जाती है कि वे अनिवार्य रूप से उपलब्ध कराए गए प्रारूप में ही अपनी वित्तीय बोलियां जमा करें और कोई अन्य प्रारूप स्वीकार्य नहीं होगा। यदि मूल्य बोली निविदा दस्तावेज के साथ मानक .XLS BOQ प्रारूप के रूप में दी गई है, तो इसेही डाउनलोड करना होगा और प्रारूप को संशोधित किए बिना ऑनलाइन भरना और जमा करना होगा। यदि बोलीदाता द्वारा BOQ फाइल को संशोधित पाया जाता है, तो बोली को अस्वीकार कर दिया जाएगा।

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.

उपरोक्त निविदा के संबंध में कोई भी शुद्धिपत्र/संशोधन केवल https://eprocure.gov.in और www.iuac.res.in वेबसाइट पर जारी किया जाएगा। बोलीदाता, अपनी बोली जमा करने से पहले निविदा दस्तावेज से संबंधित, प्रकाशित होने वाले किसी भी शुद्धिपत्र की जानकारी रखें। निदेशक, अंतर-विश्वविद्यालय त्वरक केंद्र के पास बिना कोई कारण बताए किसी भी/सभी निविदाओं को आंशिक/पूर्ण रूप से स्वीकार/अस्वीकार करने का अधिकार सुरक्षित है।

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 consider 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.

1. Inter-University Accelerator Centre (IUAC), New Delhi is an autonomous body of the University Grants Commission, Ministry of Education, Government of India. IUAC intends to purchase an "1.8W double stage 4.2K GM cryocooler system" as per the technical specifications (Annexure A) given in this document.

Name of Work	"Supply of <u>1.8W double stage 4.2K GM</u> cryocooler system as mentioned in Annexure <u>A</u> " at IUAC, New Delhi.
Tender Number	IUAC/NIT/05/SK/2025-26
Tender Value / Estimate only	Rs 45 Lakhs
Earnest Money Deposit	Rs. 90000/- (Ninety thousand only) Rs. Nil for MSME
Tender Document Fee	NIL
Bid Submission End Date and Time (Part - A and Part - B)	11/08/2025 at 3.00 pm
Technical Bid Opening Date (Part - A)	12/08/2025 at 3.30 pm
Price Bid Opening Date (Part - B)	To be intimated later on to the technically qualified bidders
Mandatory Minimum Local Content	Nil
Contact Persons	Administrative Officer (S&P) Inter University Accelerator Centre, Aruna Asaf Ali Marg, New Delhi 110067 E-mail: iuacstores@gmail.com , Phone: 011-24126018, 24126022.

2. The Director, IUAC reserves the right to accept or reject any or all tenders/offers either in part or in full or to split the order without assigning any reasons.

Section I

1. <u>Submission of Tender</u>: Tenders should be uploaded on the CPP Portal in two parts, i.e., Technical Bid (Part - A) and Price Bid / BOQ (Part - B).

1.1 Technical Bid (Part - A):

Prequalification of the bidder

The following criteria/information are essential to qualify the technical bid for the said item(s):

- i. Confirmation of full technical details as given in Annexure A of the equipment should be submitted for technical evaluation. There must be proper technical information along with the details. The supplier must submit a point-wise compliance statement (Annexure F) with the documentary proof of the offer. Failing to do this may disqualify the bid.
- ii. The bidder should be an indigenous supplier only. The original manufacturers (OM) or their authorized representatives quoting on behalf of the original manufacturers are eligible to participate in the bid. The authorized representative has to submit a copy of a valid authorization certificate from the original manufacturer at the time of bid; otherwise, their offer is liable for rejection.
- iii. The supplier must submit necessary catalogues, data sheets, application notes, etc., along with the bid for validating the specification. The quoted item should be a standard catalogue product, displayed prominently in the product catalogue / OEM website.
- iv. Proof of supply of 4K double stage GM cryocooler having cooling capacity \geq 1.5W to any government research institute/universities/PSU/ companies in India in the form of One copy of successfully executed purchase order value more than 80% of the estimated value or two copies of order value each of 50% of the estimated value or three copies of order value each of 40% of the estimated value in the last 3 years.

1.2 Price Bid (Part B):

In this bid, the bidder is required to quote unconditional rates/prices for the SITC of the mentioned items as per the technical specifications given in *Annexure A*. Quotes in INR will only be accepted. The price bid format is given in *Annexure E* and it must not be modified.

<u>SECTION -II</u> GENERAL CONDITIONS OF TENDER

1. Bid Opening and Evaluation of Bids

- 1.1 The E-bids shall be opened on-line. The technical bids will be evaluated to shortlist the eligible bidders. The scoring matrix, as per the table given in annexure I, will be prepared and bids will be technically evaluated accordingly.
- 1.2 The technical bids of only eligible bidders shall be considered for further processing.
- 1.3 Bidder whose technical bid is found to be acceptable and meeting the eligibility requirements as specified in this tender will be considered as technically qualified.
- 1.4 IUAC will open commercial bids of only the technically qualified bids.
- 1.5 In case the day of bid opening is declared a holiday by the government, the E-bids will be opened on the next working day at the same time. No separate intimation shall be sent to the bidders in this regard.
- 1.6 Since the CPP portal is an online process, the E-bid opening or any other process may be delayed due to any technical/server issue. If any such issue arises, this will not be tantamount to process delay, and IUAC will not be responsible for the same.

2. Bid Security (BS)/Earnest Money Deposit (EMD)

- 2.1 The bidder shall furnish, as part of bid, a Bid Security (BS)/ Earnest Money Deposit (EMD) of amount as specified in the bid in the form of a bank guarantee/demand draft drawn on any scheduled/commercial/nationalized bank in favor of Inter University Accelerator Centre, New Delhi.
- 2.2 The EMD shall be submitted by the manufacturer or their specifically authorized dealer/bidder.
- 2.3 EMD @ 2% of the total estimate value, Rs 90,000 (Rupees Ninety thousand only) is payable by the bidder. Bidder has to select the payment option as "online" to pay the EMD as applicable by going to the link https://services.sabpaisa.in/pages/iuac.html. The Earnest Money Deposit shall be in the form of online payment, and it should be deposited before the bid opening. Bid Security shall be refunded to the unsuccessful bidders on award of contract and to the successful bidders on receipt of the Performance Security.
- 2.4 EMD is the mandatory requirement; however, the MSMEs/NSIC registered with Government Agencies are exempted from payment of Earnest Money Deposit (EMD) and are required to submit the Bid Security Declaration form, subject to conditions given below: -
- 2.5 MSMEs participating in the tender must submit a valid & authorized copy of the certificate of registration. The MSME's Bidder to note and ensure that the nature of services and goods/items manufactured mentioned in the MSME's certificate matches with the nature of the services and goods /items to be supplied as per the Tender.
- 2.6 The registration certificate issued by agencies must be valid as of the bid closing date of the tender. Bidder shall ensure the validity of the registration certificate in case the bid closing date is extended.
- 2.7 The MSMEs who have applied for registration or renewal of registration with any of the authorized agencies/bodies but have not obtained the valid certificate as on the closing date of the tender, are not eligible for exemption.
- 2.8 The Bid security of the unsuccessful bidder will be discharged/returned as promptly as possible but positively within a period 30 days after the expiration of the period of bid validity or placement of order, whichever is later, without any interest.
- 2.9 The successful Bidder's bid security will be discharged upon the Bidder furnishing the Performance Security, without any interest. Alternatively, the BS could also be adjusted against Performance Security. Any unavoidable delay in tender will be applicable to the submission of EMD as well.
- 2.10The bid security/EMD may be forfeited:

If Bidder withdraws or amends or modifies or impairs or derogates its bid during the period of bid validity specified by the Bidder on the Bid Form;

OR

In case of a successful Bidder, if the Bidder fails to furnish order acceptance within 15 days of the order or fails to sign the contract or fails to furnish Performance Security within 21 days from the date of contract/order.

3. Reasonability of Prices

- 3.1 The bidder must quote the best minimum prices applicable for a premier Research institution/university/organization, and **Indian companies**
- 3.2 The quoting party should give a certificate to the effect that the quoted prices are the minimum and they have <u>not quoted</u> the same item(s) on lesser rates than those being offered to IUAC or to any other customer during the current financial year.
- 3.3 Copies of supply orders received by the bidder during the last 3 years for the item/model to be submitted for assessing the reasonability.

4. Escalation:

No cost escalation over and above the item rates quoted by the bidder will be entertained.

5. Declaration of local content:

As per para 9 (a) of PPP-MII Order, 2017 (as amended on 16.09.2020), the bidders are required to self-certify the local content in their product for purchase value less than Rs.10 crore. For purchases more than Rs.10 crore, as per para 9 (b) of PPP-MII Order, 2017, a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) is required to be submitted.

PPP-MII Order, 2017 (as amended on 16.09.2020) classifies the suppliers into the following 3 categories:

- a. 'Class-I local supplier' Suppliers offering items with equal to or more than 50% local content
- b. 'Class-II local supplier' Suppliers offering items with equal to or more than 20% but less than 50% local content
- c. 'Non-local supplier' Suppliers offering items with Less than 20% local content.

Bidders are required to submit a local content declaration as per Annexure C. IUAC has the right to conduct random audits to ensure that declarations are accurate and substantiated.

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

6. **Performance Security (PS)**

- 6.1 Within 15 days of receipt of the notification of award of Contract/Purchase Order, the Supplier shall furnish performance security.
- 6.2 The amount of the Performance Security shall be 5% of the total contract value (in INR), valid up to the completion of contract obligation, i.e. till Supply Installation, Testing, commissioning (SITC) and acceptance.
- 6.3 The proceeds of the Performance Security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the contract.
- 6.4 The Performance Security shall be in one of the following forms:-
 - (a) A Bank Guarantee issued by a nationalized/scheduled bank located in India or a bank located abroad in the form provided after the award of the contract.

OR

- (b) A Banker's cheque or account payee Demand Draft in favour of IUAC.
- 6.5. The performance security will be forfeited and credited to the IUAC's bank account in the event of a breach of contract by the Bidder. It will be refunded to the bidder without interest after he/she duly performs and completes the contract in all respects (full performance security will be forfeited, even if the bidder has partially executed the work), but not later than 60 (sixty) days of completion of all

such obligations under the contract. The Performance Security will be discharged by the Purchaser and returned to the Supplier not later than 60 days following the date of completion of the Supplier's performance obligations.

6.6 In the event of a breach of contract by the supplier, the performance security shall be forfeited.

7. Warranty / Support:

- **7.1** Bidder shall be responsible for installation, Commissioning, Demonstration, Inspections and Tests wherever applicable and for after-sales service during the warranty and thereafter as specified.
- **7.2** In case of any manufacturing defect or failure of the system or its part during the warranty period, which is valid from the date of acceptance at IUAC, New Delhi and valid for a period of 36 months, the replacement of the same should be provided by the vendor free of cost.
- **7.3** The items covered by the schedule of requirements shall carry a minimum of **one year of comprehensive warranty** from the date of acceptance of the equipment by IUAC Delhi.
- **7.4** The defects, if any, during the guarantee/warranty period are to be rectified free of charge by arranging free replacement wherever necessary. This includes cost, insurance, freight, custom duty, octroi, and local taxes, if any, should be borne by the beneficiary or his agent. A clear confirmation should be given for this item.
- **7.5** The equipment must be supported by a representative in India, manned by the principal vendor's technical support engineers.
- **7.6** An undertaking from the manufacturer is required in this regard, stating that they would facilitate the BIDDER on a regular basis with technology/product updates & extend support for the warranty as well.

8. COMMENCEMENT OF WARRANTY PERIOD:

The warranty period of an item shall commence after receipt of the item in good working condition and from the date of its acceptance at IUAC New Delhi. The warranty period with all the obligations and validity of the Performance Guarantee will be extended for the period of delay in satisfactory installation of parts/items and/or delay in warranty services as mentioned in Clause 7.4.

9. **Validity of Tender**:

- 9.1 The rates quoted in the tender shall hold good for 180 days from the date of opening of the price bid.
- 9.2 In exceptional circumstances, the Purchaser may further solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing (E-mail). The bid security provided shall also be suitable for extension. A bidder may refuse the request without forfeiting its bid security. A Bidder granting the request will not be required nor permitted to modify its bid.

10. Terms of Payment:

- 10.1 90% of the payment shall be made after confirming the supply and acceptance at IUAC.
- 10.2 The remaining 10% will be paid after submission of the Performance Bank Guarantee (PBG) for the defective liability period (DLP) of successful operation.
- 10.3 The payment process will be initiated on submission of the bills by the bidder and after due certification by the concerned IUAC personnel.
- 10.4 All payments will be made after statutory deductions.

11. Guarantee/Defect liability period:

- 11.1 The supplied system should be guaranteed from manufacturing/engineering defect and bad material/workmanship for a minimum period of 36 months (3 years) from the date of acceptance of the goods by IUAC. During this period, if any replacement/ repairs/ rectification of any of the supplied items, etc., is needed, the supplier shall do the same free of cost to IUAC.
 - 11.2 If the equipment/ part needs to be shipped to the vendor's site for repair/rectification during the guarantee period, the shipment charges shall be borne by the supplier. The supplier shall guarantee that all equipment will work satisfactorily and that the performance and efficiency of the equipment shall not be less than the specified values.

12. Timeline for completion of work:

The system should be supplied to IUAC within 180 days from the date of issue of the work/purchase order. Any delay in completion of the work/supply due to reasons attributable to the vendor/manufacturer is liable to liquidated damages as per Clause 13 of this tender document. However, under the force-majeure conditions as per clause 14 of this tender document, IUAC may grant a suitable time extension for which the vendor has to request along with the justification/reasons, well in advance to the Director, IUAC, for approval without any prejudice or price escalation.

13. Liquidated damages:

In case of completion of the project is delayed beyond the specified period of 180 days for reasons attributable to the supplier, deductions on account of liquidated damages @ 0.5% per week, subject to a maximum of 5% of the total order value, will be deducted.

14. Force Majeure (FM):

- IUAC may grant an extension of the time limit set for the supply items in case it is delayed by 14.1 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, pandemics/epidemics, civil commotions and strikes (only those which exceeds a duration of ten continuous days) at successful Tenderer'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 Vendor must give notice of FM within a reasonable time as the conditions permit (not later than 14 days after its occurrence), and it cannot be claimed ex-post facto. There may be an FM situation affecting the purchase organization only. In such a situation, the purchase organization is to communicate with the supplier along similar lines as above for further necessary action. If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of FM for a period exceeding 90 (ninety) days, either party may, at its option, seek to terminate the contract without any financial repercussion on either side. The decision of the Director, IUAC will be final and binding for the bidder.
- 14.2 Notwithstanding the punitive provisions contained in the contract for delay or breach of contract, the supplier would not be liable for imposition of any such sanction so long as the delay and/or failure of the supplier in fulfilling its obligations under the contract is the result of an event covered in the Force Majeure clause.

15. Final Acceptance:

The final acceptance of the system is defined as successful supply, installation and acceptance tests at IUAC to substantiate compliance with the specification mentioned in Annexure A.

16. Price Negotiation

Normally, there shall not be any negotiation. Negotiations, if at all, shall be as per Rule 173 (xiv) of GFR 2017.

17. Termination for Insolvency

IUAC 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.

18. **Dispute Resolution:** Any dispute and or difference arising out of or relating to this contract will be resolved through joint discussion of the authorities' representatives of the concerned parties. However, if the disputes are not resolved by joint discussions, then the matter will be referred for adjudication to a sole Arbitrator appointed by the Director, IUAC, New Delhi. The decision of the sole Arbitrator shall be final and binding on all the parties. The arbitration proceedings shall be governed by the Indian Arbitration and Conciliation Act 1996 as amended from time to time. The cost of Arbitration shall be borne by the respective parties in equal proportions. Arbitration proceedings will be held at Delhi/New Delhi only. "

This notice inviting tender will form part of the contract agreement to be executed by the successful tenderer.

19. Integrity Pact:

19.1The bidder is required to enter into an integrity pact with the IUAC in the format at Annexure H. The integrity pact enclosed as Annexure H will also be signed by IUAC at the time of execution of the agreement with the successful bidder. While submitting the bid, the integrity pact shall be signed by the duly authorized signatory of the bidder. In the case of failure to submit the integrity pact duly signed and witnessed along with the bid, the bid is likely to be rejected.

In case of any contradiction between the terms and conditions of the bid document and the integrity pact, the former will prevail.

Independent External Monitors (IEMs) on the panel of the Ministry of Education/University Grants Commission (if any) will be monitoring the integrity pact.

20. Clarification of Bids and Shortfall Documents

During the evaluation of Techno commercial or Financial Bids, Indenter on behalf of IUAC may, at its discretion, but without any obligation to do so, ask the Bidder to clarify its bid by a specified date. Bidder should answer the clarification within the specified date (or, if not specified, 7 days from the date of receipt of such request). The request for clarification shall be submitted in writing or electronically, and no change in prices or substance of the bid shall be sought, offered, or permitted that may grant any undue advantage to such bidder.

If discrepancies exist between the uploaded scanned copies and the Originals submitted by the bidder, the original cop etc. shall prevail. Any substantive discrepancy shall be construed as a violation of the Code of Integrity, and the bid shall be liable to be rejected as non-responsive in addition to other punitive actions under the Tender Document for violation of the Code of Conduct. IUAC reserves its right to, but without any obligation to do so, to seek any shortfall information/documents only in case of historical documents which pre-existed at the time of the tender opening, and which have not undergone change since then and does not grant any undue advantage to any bidder.

21. Alternate Dispute Resolution (ADR) mechanism and Mediation procedure

The authorized officials of the bidder signing the integrity pact shall not approach the courts while representing the matter to IEMs, and he/she will await their decision in the matter. The integrity pact shall be deemed as part of the Bid document.

22. Code of Integrity for Public Procurement

22.1 Corrupt or Fraudulent Practices

IUAC requires that the bidders who wish to bid for this project have the highest standards of ethics. IUAC will reject a bid if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices while competing for this contract. IUAC may declare a vendor ineligible, either indefinitely or for a stated duration, to be awarded a contract if it at any time determines that the vendor has engaged in corrupt and fraudulent practices during the execution of the contract. The integrity pact should be signed by the competent authority of the vendor. In Pursuit of this policy, the following are defined.

S. N.	Term	Meaning	
(a)	Corrupt practice	The offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution.	
(b)	Fraudulent practice	a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract.	
(c)	Collusive practice	means a scheme or arrangement between two or more bidders, with or without the knowledge of the purchaser, designed to establish bid prices at artificial, non-competitive levels.	
(d)	Coercive practice	means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract.	
(e)	Anti-competitive practice	any collusion, bid rigging or anti-competitive arrangement, or any other practice coming under the purview of the Competition Act, 2002, between two or more bidders, with or without the knowledge of the purchaser, that may impair the transparency, fairness and the progress of the procurement process or to establish bid prices at artificial, non-competitive levels	
(f)	Conflict of interest	participation by a bidding firm or any of its affiliates that are either involved in the consultancy contract to which this procurement is linked; or if they are part of more than one bid in the procurement; or if the bidding firm or their personnel have relationships or financial or business transactions with any official of purchaser who are directly or indirectly related to tender or execution process of contract; or improper use of information obtained by the (prospective) bidder from the purchaser with an intent to gain unfair advantage in the procurement process or for personal gain.	

(g)	Obstructive	materially impede the purchaser's investigation into allegations of one or more of the
	Practice	above mentioned prohibited practices either by deliberately destroying, falsifying,
		altering; or by concealing of evidence material to the investigation; or by making
		false statements to investigators and/or by threatening, harassing or intimidating any
		party to prevent it from disclosing its knowledge of matters relevant to the
		investigation or from pursuing the investigation; or by impeding the purchaser's
		Entity's rights of audit or access to information.

- 23. No deviations in respect of Tender conditions are acceptable. In this bid, the bidder should upload the following documents:
 - 1. Technical specifications / datasheets / user manual of the product indicating its ability to meet the technical specifications laid down in **Annexure A** of this NIT.
 - 2. Tender Acceptance Letter (written on company letterhead, duly signed and stamped) as per format provided in **Annexure B**, as a token of acceptance of the NIT conditions, with this bid.
 - 3. Declaration of local content as per **Annexure C**.
 - 4. Profile of the Tenderer as per **Annexure D**.
 - 5. Price bid/BOQ as per the **Annexure E**.
 - 6. List of documents (checklist/compliance sheet) to be attached as per **Annexure F**.
 - 7. Details of similar instruments supplied & service support as per **Annexure-G**
 - 8. Code of Integrity undertaking on letterhead as per Annexure H
 - 9. Technical eligibility criteria table as per Annexure I
 - 10. An authorized Distribution Certificate with a valid authorization from the OEM / undertaking on letterhead about authorized distributorship for the tendered items in India should be provided.
 - 11. The bidder should not be blacklisted by any Government, or Government Department, whether at the Central/State/District levels across India. An undertaking in this regard, as per **Annexure-F** should be enclosed.
 - 12. Copies of the previous three financial years (2021-22, 2022-23 & 2023-24) Income Tax Return (ITR) as part of Annexure-F
 - 13. Average annual turnover during the last three financial years ending 31st March, 2024, (2021-22, 2022-23 & 2023-24) shall be at least Rs. 10 Crores. Duly audited financial statement/balance sheet/certified by CA to be submitted as supporting documents, as part of **Annexure-F**
 - 14. Proof of Earnest Money Deposit. MSMEs have to submit a Bid Securing Declaration in lieu of EMD/Bid Security, as per **Annexure J**.
 - 15. Price reasonability Certificate.
 - 16. Self-attested copies of GST registration and PAN number.
 - 17. IUAC appointed committee reserves the right to conduct on-site demonstration of the quoted specification on the existing instrument installed in India at any point of time during the tendering process/before placement of the purchase order.

Section III

1. Technical specifications: The bidder should agree on the technical specifications as mentioned in Annexure-A, and should provide all the necessary documents supporting the technical specifications mentioned below. A duly constituted committee has the right to ask for the demonstration of technical specifications.

<u>Annexure – A (Technical Specifications)</u>

Technical specifications of 1.8W Double Stage 4.2K GM cryocooler system:

IUAC is in the process to a 1.8W double-stage 4.2K GM Cryocooler for its application of cooling the existing superconducting magnet system.

4K Two-stage GM Gifford-McMahon Cryocooler

S No.	Requirements
A	Cold Head Unit:
1	Two-stage GM (Gifford-McMahon) cold head
2	Refrigeration Cycle: Modified Gifford-McMahon (2-Stage)
3	Site Condition Indoor
4	Cryocooler Cooling power at the second stage: 1st stage ≥ 40W @ 50 K (50Hz) 2nd Stage ≥ 1.8W @ 50 K (50Hz)
5	Lowest Temperature ≤ 3.2 K @ no load
6	Cool Down Time ≤ 60 min. (300K to 4.2K, 2nd Stage)
7	The 2 nd stage of the cold head should have a copper flange with 8 X M5 tapped Holes/ 8 X Φ5.2mm through hole PCD of the Hole is 58mm
8	The 1 st stage of the cold head should have a copper flange with 8 X M5 tapped Holes/ 8 X Φ5.2mm through hole PCD of the Hole is 110mm
9	Orientation: Free from any orientation
10	Ambient Temperature Range 5 to 45 °C
11	Humidity Range 25 to 90 % RH
12	Recommended Cold head Maintenance: after ≥Min 10,000 hours

В	Compressor Unit: (Suitable compressor unit for the 1.8W @ 4.2K cold head unit	
1	Cooling system: Water Cooled compressor	
2	Site Condition: Indoor	
	Power supply Requirement: a) The system must be operable on the electrical supply parameters available at the institute as 3-phase 415 VAC±10%, 50Hz or single phase 220 VAC ±10%, 50Hz c) The offer must certify that all the machinery, equipment, instruments and controls will keep working and remain safe at these parameters of the electrical supply. If the electrical supply parameters change beyond the above range, the system may shut down, but all its components remain safe from damage.	
3	Built-in Circuit Breaker	
4	Ambient Temperature Range 5 to 45 °C	
5	Humidity Range 25 to 90 %RH	
6	Maintenance schedule for the replacement of adsorber every ≥30,000 hrs.	

С	Accessories The vendor should provide the following accessories along with equipment
1	Flexible Gas Line 20A x 6 m (F-F) (Supply) x 1 20A x 6 m (F-F) (Return) x 1
	Two sets of spare aeroquip joints for Flexible gas line
2	Cold Head Power Cable 6 m
3	Input Power Cable 5 m
4	Hose Nipple OD:12.7mm x PT3/8 (male) x 2 Qty
5	Tool Kit: The vendor should supply all necessary tools. Gas Charge Valve x 1 Open-end wrench (29mm) x 1 Open-end wrench (26mm) x 1 Quick Wrench x 1
6	The vendor should provide the load map of the cryocooler of the Same model, along with cooling data to 4.2K
7	The Vendor Should provide a detailed operation manual along with troubleshooting should be provided. Also, provide the all parts list with drawings, the electrical and control panel wiring manual with drawings, and all the tests certificates. All these should be provided in soft copy as well as hard copy. Technical instructions for both the compressor unit and cold head unit should be provided
8	Offer must contain the full details of the equipment, such as make, model number, type, etc.
9	A complete technical datasheet for the quoted equipment and accessories should be given.

D	Scope of Supply
1	a) Cold Head Unit b) Compressor Unit c) Input Power Cable d) Flexible Gas Lines (Supply and Return) e) Cold Head Power Cable f) Hose Nipple g) Tool Kit h) Operation Manual

ANNEXURE-B: Terms & Conditions

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.

Name of Tender / Work: -

Dear Sir,

I/ We have downloaded / read and examined the tender document(s) for the abovementioned

Tender /Work from the web site(s) namely:

as non-violan advantisament, given in the above mentioned website(s)

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 our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organization 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)

Annexure C

DECLARATION OF LOCAL CONTENT

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

To, The Director, Inter University Accelerator Centre Aruna Asaf Ali Marg, New Delhi- 110 067

Subject: - Declaration of Local Content

Tender Reference No :______

Name of Tender/ Work:

1. Country of Origin of Goods being offered: ______

2. We hereby declare that items offered has _______% local content

3. Details of the Location at which the Local Value Addition is made_______

4. Details of Local Content

"Local Content" means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of the imported content in the item (including all customs duties) as a proportion of the total value, in percent.

Bidders offering Imported products will fall under the category of Non-Local Suppliers. They cannot claim themselves as Class-I or Class –II Local Suppliers by claiming the services such as Transportation, Insurance, Installation, Commissioning, Training and After Sale Service Support like AMC/ CMC etc. as Local Value Addition.

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

Yours faithfully,

(Signature of the bidder, with Official Seal)

Note: Preference shall be given to local suppliers as per revised Public Procurement (Preference to Make in India), Order 2017, No. P-45021/2/2017-PP (B.E-II) dated 16.09.2020 issued by DPIIT, Ministry of Commerce and Industry, Govt. of India. (Submit duly filled Declaration of Local Content for the same). The Declaration once submitted in the Technical Bid will be final. Submission of Revised Declaration will NOT be accepted.

Annexure D: PROFILE OF THE TENDERER

(To be given on Company Letter Head)

- 1. Name of the Firm / Organization:
- 2. Address:
- 3. Telephone No. / Mobile No. & Name of the Contact Person:
- 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. PAN number:
- 10. GST Registration No.

Signature of the Tenderer &Seal

Annexure E : BOQ/PRICE BID

 $(Price\ shall\ be\ quoted\ in\ the\ BOQ\ /Price\ Bid\ section\ only,\ which\ is\ given\ separately)$

Tender Inviting Authority:	INTER UNIVERSITY ACCELERATOR	CENTRE

Name of Work: Supply of 1.8W double-stage 4.2K GM cryocooler system

as mentioned in Annexure A

Tender Number:	IUAC/NIT/
Name of Bidder	:

Sr. no.	Supply of 1.8W double stage 4.2K GM cryocooler system as mentioned in Annexure A	Quantity Required	Unit Price	Total price
1.	a) Cold Head Unit b) Compressor Unit c) Input Power Cable d) Flexible Gas Lines (Supply and Return) e) Cold Head Power Cable f) Hose Nipple g) Tool Kit h) Operation Manual Other required items as per specifications given in <i>Annexure-A</i> .	1 set		
2.	Charges such as Packing, Transportation, Insurance etc.			
3.	GST (if any)			
Total	Price (INR) in Figures*		•	
Total	Price (INR) in words*			

^{*}Any deviation in cost mentioned in Figures and words then cost mentioned in word will be considered.

Name & Signature of Tenderer

Company with Seal

Annexure F: List of Documents to be attached

S.No.	Description	Supporting Documents required	Attached (YES/NO)
1	The Bidder shall be registered for at least 5 years as on 15.07.2025	Certificate of registration/Incorporation	
2	The bidder should be an indigenous supplier only. Original Equipment Manufacturer (OEM) or their authorised (sales and service) representatives are eligible to quote. An Authorised Distribution Certificate valid in the current financial year with authorization from the OEM/ undertaking on letterhead about authorized distributorship for the tendered items in India should be provided.	Valid Certificate of Authorization from OEM	
3	Bidder should have executed three IRMS orders to research laboratories/organization of National / International repute during the last 10 F.Y.	Purchase orders as per NIT	
4	Bidder should attach Copies of the previous 3 FY [2023-24, 2022-23& 2021-22] Income Tax Returns	Attach ITR copies	
5	The Bidder must have a positive net worth in the last 3 financial years	Audited reports	
6	The Bidder must have an average Annual turnover of 10Cr. of the bid value during the last 3 financial years.	Audited reports	
7	Bidder should not have been blacklisted for the last 3 years from any Central/State Govt. and PSU.	Undertaking on Letterhead	
1.	All the terms & conditions in the Complete bid document are acceptable.		
2.	Bid Validity (180 days after the date of bid opening).		
3.	Warranty of three years from installation, commissioning & date of acceptance.		
5.	Bidder information form Annexure- D		
6.	Price bid as per Annexure – E		
8.	Agree to submit Performance Security 5% of P.O. value after the award of the contract		
9.	Contact details Supply details Annexure - G		
10.	Signed Integrity Pact as per Annexure - H		
11	Bid security form as per Annexure- I	Undertaking on letterhead	
12	Compliance Form as per Annexure-J		

<u>Annexure - G</u> Contact details of the Personnel

Sr. No	List of similar types of equipment supplied & serviced in the past 3 years	

Signature and Seal of the manufacturer/Bidder
Place:
Date:

Annexure H

INTEGRITY PACT

(To be executed on plain paper and submitted along with technical bid/tender documents . To be signed by the bidder and $\,$ IUAC.)

Inter-University Accelerator Centre, (IUAC) hereinafter referred to as "The Principal".						
	AND					
	hereinafter referred to as "The					
Bi	dder/Contractor"					
	<u>PREAMBLE</u>					
co of In	The Principal intends to award, under laid down organizational procedures, contract/s for The Principal values full compliance with all relevant laws of the land, rules, regulations, economic use of and of fairness/transparency in its relations with its Bidder(s) and/or Contractor(s). In order to achieve these goals, the Principal will appoint an Independent External Monitor (IEM), who will monitor the tender process and the execution of the contract					
	r compliance with the principles mentioned above. etion 1 – Commitments of the Principal.					
1.	The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles: -					
a)	No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the personal is not legally entitled.					
b)	The Principal will during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the process or the contract execution.					

c) The Principal will exclude from the process all known prejudiced persons.

2. If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2 – Commitments of the Bidder(s)/Contractor(s)

- 1. The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
- a. The Bidder(s)/contractor(s) will not, directly or through any other persons or firm, offer promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage or during the execution of the contract.
- b. The Bidder(s)/Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- c. The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s)/Contractors will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or documents provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- d. The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly, the bidder(s)/contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. All the payments made to the India agent/representative have to be in Indian Rupees only.
- e. The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- f. The Bidder(s)/Contractor (s) who have signed the Integrity Pact shall not approach the courts while representing the matter to IEMs and shall wait for their decision on the matter.
- 2. The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3: Disqualification from tender process and exclusion from future contract

If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2 above or in any other form such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or to terminate the contract, if already signed, for such reasons.

Section 4 : Compensation for Damages

- 1. If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/Bid Security.
- 2. If the Principal has terminated the contract according to Section3, or if the Principal is entitled to terminate the contractaccording to Section3, The Principal shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value or the amount equivalent to Performance Bank Guarantee.

Section 5 : Previous Transgression

- 1. The Bidder declares that no previous transgressions occurred in the last three years with any other company in any country conforming to the TII's anti corruption approach or with any other public sector enterprise in India that could justify his exclusion from the tender process.
- 2. If the bidder makes incorrect statement on this subject, he can be disqualified from the tender process and appropriate action can be taken including termination of the contract, if already awarded, for such reason.

Section 6: Equal treatment of all Bidders / Contractors / Sub -contractors.

- 1. In case of sub –contracting, the Principal Contractor shall take the responsibility of adoption of Integrity Pact by the Sub Contractor.
- 2. The Principal will enter into agreements with the identical conditions as this one with all bidders and Contractors.
- 3. The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7: Criminal charges against violation Bidder(s) / Contractor(s) / Sub-contractors(s).

If the Principal obtains knowledge of conduct of a Bidder(s)/ Contractor(s) which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

Section 8 : Independent External Monitor/Monitors

- 1. The Principal appoints competent and credible Independent External Monitor for this Pact after approval of Central Vigilance Commission. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- 2. The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. The Monitor will have access to all contract documents, whenever required. It will be obligatory for him to treat the information and documents of bidders /contractors as confidential. Hereports to the Director, IUAC.
- 3. The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without restriction to all project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors.
- 4. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/Contractor(s)/Subcontractor(s) with confidentiality. The Monitor has also signed declarations on "Non Disclosure of Confidential Information" and of "Absence of Conflict of Interest" In case of any conflict of interest arising at a later date, the IEM shall inform Director, IUAC and recuse himself/herself from the case.
- 5. The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- 6. As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

- 7. The Monitor will submit a written report to the Director, IUAC within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.
- 8. If the Monitor has reported to the Director, IUAC, a substantiated suspicion of an offence under relevant IPC/PC Act, and the Director, IUAC has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.
- 9. The word "Monitor" word includes both singular and plural.

Section 10: Pact Duration

This pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidder 6 months after the contract has been awarded.

If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by Director of IUAC.

Section 11: Other Provisions

- This agreement is subject to Indian Law. Place of performance and jurisdiction is the registered office of the principal i.e. in New Delhi
- Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- If the contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- Issues like Warranty/Guarantee etc. shall be outside the purview of the IEMs.
- In the event of any contradiction between the Integrity Pact and its Annexure, the clause in the Integrity Pact will prevail.

(For & on behalf of the Principal)	(For & on behalf of Bidder/Contractor)		
(Office Seal)	(Office Seal)		
PlaceDate			

Annexure-I

BID SECURING DECLARATION FORM

(TO BE SUBMITED BY MSME ONLY ON COMPANY LETTER HEAD)

Tender No.:	Date:
To The Director Inter University Accelerator Centre (IUAC), Dear Sir/Madam,	New Delhi
We, the undersigned, solemnly declare that:	
We understand that, according to the condit supported by a Bid Securing Declaration In li	tions of this Tender Document, the bid must be ieu of Bid Security.
we shall stand automatically suspended from	nis Bid Securing Declaration. We understand that being eligible for bidding in any tender in IUAC ning of this bid if we breach our obligation under
 withdraw/amend/impair/derogate, in a or being notified within the bid validity of 	any respect, from our bid, within the bid validity; of the acceptance of our bid by IUAC
Performance Security within the stidocuments.	original documents for scrutiny or the required ipulated time under the conditions of the tender shall expire if the contract is not awarded to us,
 receipt by us of your notification a) of cancellation of the entire tender b) of the name of successful bidder or 	-
2) Forty-five days after the expiration of	the bid validity or any extension to it.
Signed:	
Name:	
Dated on day of	
Corporate Seal (where appropriate)	

(Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid)

<u>Annexure – J (Technical Compliance sheet)</u>

4K Two-stage GM Gifford-McMahon Cryocooler

S No.	Requirements	Compliance [write compliance or non-compliance]
A	Cold Head Unit:	
1	Two-stage GM (Gifford-McMahon) cold head	
2	Refrigeration Cycle: Modified Gifford-McMahon (2-Stage)	
3	Site Condition Indoor	
4	Cryocooler Cooling power at the second stage:	
	1st stage > 40W @ 50 K (50Hz)	
5	Lowest Temperature ≤ 3.2 K @ no load	
6	Cool Down Time ≤ 60 min. (300K to 4.2K, 2nd Stage)	
7	The 2^{nd} stage of the cold head should have a copper flange with $8~X~M5$ tapped Holes/ $8~X~\Phi5.2mm$ through hole PCD of the Hole is $58mm$	
8	The 1 st stage of the cold head should have a copper flange with 8 X M5 tapped Holes/ 8 X Φ5.2mm through hole PCD of the Hole is 110mm	
9	Orientation: Free from any orientation	
10	Ambient Temperature Range 5 to 45 °C	
11	Humidity Range 25 to 90 % RH	
12	Recommended Cold head Maintenance: after ≥Min 10,000 hours	

В	Compressor Unit: (Suitable compressor unit for the 1.8W @ 4.2K cold head unit	
1	Cooling system: Water Cooled compressor	
2	Site Condition: Indoor	
	Power supply Requirement: a) The system must be operable on the electrical supply parameters available at the institute as 3-phase 415 VAC±10%, 50Hz or single phase 220 VAC ±10%, 50Hz c) The offer must certify that all the machinery, equipment, instruments and controls will keep working and remain safe at these parameters of the electrical supply. If the electrical supply parameters change beyond the above range, the system may shut down, but all its components remain safe from damage.	
3	Built-in Circuit Breaker	
4	Ambient Temperature Range 5 to 45 °C	
5	Humidity Range 25 to 90 %RH	
6	Maintenance schedule for the replacement of adsorber every ≥30,000 hrs.	

C	Accessories Vendor should provide the following accessories along with equipment	
1	Flexible Gas Line 20A x 6 m (F-F) (Supply) x 1 20A x 6 m (F-F) (Return) x 1	
	Two sets of spare aero quip joints for Flexible gas line	
2	Cold Head Power Cable 6 m	
3	Input Power Cable 5 m	
4	Hose Nipple OD:12.7mm x PT3/8 (male) x 2 Qty	
5	Tool Kit: The vendor should supply all necessary tools. Gas Charge Valve x 1 Open-end wrench (29mm) x 1 Open-end wrench (26mm) x 1 Quick Wrench x 1	
6	The vendor should provide the load map of the cryocooler of the Same model along with cooling data to 4.2K	
7	Vendor Should provide a detailed operation manual along with troubleshooting should be provided. Also, provide the all parts list with drawings, the electrical and control panel wiring manual with drawings, and All the test certificates. All these should be provided in soft copy as well as hard copy.	
	Technical Instruction for both the compressor unit and cold head unit should be provided	
8	Vendors should provide details of the similar equipment supplied (at least having cooling capacity ≥ 1.5W at 4.2K) in last five years in India. Contact details of all such customers will be provided as a reference for at least three purchases orders.	
9	Offer must contain the full details of equipment such as make,	
10	model number, type, etc. A complete technical datasheet for the quoted equipment and accessories should be given.	

D	Scope of Supply	
1	a) Cold Head Unit b) Compressor Unit c) Input Power Cable d) Flexible Gas Lines (Supply and Return) e) Cold Head Power Cable f) Hose Nipple g) Tool Kit h) Operation Manual	