

No. IIT/KGP/Cryo/LNP/2018

Date: 02.02.2018

**Sub : Procurement of "Liquid Nitrogen Plant" unit in the
Cryogenic Engineering Centre- reg.**

Indian Institute of Technology Kharagpur, an Institute of National Importance, invites sealed bids from principal manufacturers or their authorized distributors (foreign firms or their Indian representative companies), who have adequate credential for the **Procurement of "Liquid Nitrogen Plant" unit in the Cryogenic Engineering Centre, IIT Kharagpur.**

Interested parties may submit their sealed bids under Two-cover system as per the guidelines mention below.

Time schedule of various tender related events

Bid calling date	03.02.2018
Bid Document fee (Non refundable)	Rs. 5,000/- (By way of DD from any Nationalized Bank /Commercial Bank and paid in favour of "Indian Institute of Technology Kharagpur", payable at Kharagpur)
Pre-bid Meeting	16.02.2018 @03:00PM (in the meeting room of Cryogenic Engineering Centre, IIT Kharagpur)
Last date for submission of sealed tenders/quotations	16 .03.2018 at 11:30 AM
Pre-qualification & Technical Bid opening date/time	16.03.2018 at 03:00 PM
Contact person	PROF. T. K. Nandi, Professor In-Charge, Liquid Nitrogen Plant, Cryogenic Engineering Centre [Ph.: 03222-283598/9434040897(M), Fax: 03222-282258]
Reference No	IIT/KGP/Cryo/LNP/2018 dated:02.02.2018

Head, Cryogenic Engineering Centre
for Director, IIT Kharagpur

Copy to :

1. Institute website
2. CPPP
3. News Paper
4. Notice Board

Technical Specifications for the New Liquid Nitrogen Plant

Rated Production Capacity:	20 liters / hour at atmospheric pressure
Purity:	≥ 99% at 1 bar(g)
Storage Vessel Pressure:	upto 5 bar(g)
Re-start-up Time after power failure:	preferably less than 15 minutes
Storage Capacity:	At least 1000 litre capacity, multilayered super insulated, with level sensor & level display, adjustable liquid pressure maintaining system, pressure indicator, safety valves. Boil- off rate should be mentioned.
Total Rated Power:	Indicate the total power consumption including all accessories with breakups.
Cooling Water Supply:	Closed Loop Water-Chilling unit from a reputed brand which is to be indicated in the offer. All heat rejection has to be done in the open air outside the room where the liquefier would be installed.
Specific power consumption:	Power consumption per litre of liquid nitrogen produced should be less than 2.5 kWhr. However, power to produce chilled water, if any, should be excluded from calculating specific power consumption.
Air Compressor:	Oil lubricated compressor with closed loop water cooling system for intercooler, aftercooler, oil cooler etc. and sufficient motor protection. Inlet temperature of water should not exceed 30° C all through the year. All heat rejection has to be done in the open air outside the room where the liquefier would be installed.
Space requirement:	Total footprint area (in square meter) of the entire liquefier system should be mentioned
Maintenance Interval:	At least 6000 hours of operation
Operation and Control:	Should be fully automatic, single-switch, PLC controlled operation.
Nominal Operating Conditions:	Temperature 5-45C, RH 20-95%, Voltage (3ph): 415 V±5%, Frequency : 50Hz ± 2%
Documents:	complete set of user/service manual in English both hard copy and soft copy
System Diagnostics:	Should be system integrated with visual display
Noise Level:	Should be less than 85 db
Assembly & Testing:	Should be factory assembled and rigorously tested with certificates.
Commissioning:	Installation and commissioning should be completed with on site compliance of rated production capacity and purity of liquid nitrogen.

Customer Base in India:	Vendor should have supplied at least 5 similar plants in last five years in India. Contact details of all such customers to be provided as reference. Commissioning/performance certificates for such installed plants must be attached.
Warranty:	Offers must be with comprehensive warranty of 2 years. Cost of additional 3 years warranty, on completion of initial 2 years, should also be indicated as a separate option.
After Sales Services:	After Sales service should be from India with minimum response time of 24-48 hours. Vendor must ensure that they will keep inventory of critical Spare parts / Components to ensure round the clock availability of the liquid nitrogen from the supplied liquid nitrogen plant at site.
Accessories and spare parts:	All spare parts of the liquefier which have history of failure within first 5 years of operation anywhere in India and regular consumables/spares should be listed and quoted separately. However, the price of the spares will not be considered in price comparison.

GENERAL TERMS AND CONDITIONS

- 1. Last Date of Submission of Sealed Bids: 16.03.2018 upto 11.30 AM.**
The Technical bids will be opened on 16.03.2018 at 03.00 PM in the Office of the Head, Cryogenic Engineering Centre, IIT Kharagpur.

- 2. Payment Terms & Performance Guarantee:** 90% payment will be made on successful installation and commissioning duly certified by the concerned Head of the Department/Centre/School/Unit. A sum of 10% of the invoice value shall be retained as **Security Deposit** towards **Performance Guarantee**. The security deposit so retained may be refunded on submission of Bank Guarantee towards Performance Guarantee for the equivalent value of security Deposit valid for **two years warranty period plus sixty days** drawn on any commercial bank.
No advance/mobilization support, is payable against supply of stores.
In the event of failure to deliver the stores beyond the specified date, liquidated damages @ 1% per month or part thereof in respect of the value of stores will be deducted, subject to a maximum of 5%; alternately the order will be cancelled and the undelivered stores purchased from elsewhere at the risk and expense of the vendor.

- 3. Warranty/Guarantee & On-site skill support : Two years** onsite comprehensive OEM warranty (two years from the date of successful installation and commissioning) covering repair and replacement for all the hardware (other than the consumables), software and any software upgradation. All spares and accessories to be replaced under warranty must be imported (if required) by the vendor at their own cost (including every possible expense). IIT Kharagpur will not take responsibility for the import of any replacement under Warranty. The OEMs/Authorized Distributors and Dealers must attach certificate about their after sales and service facilities, escalation support for on-call service or station engineer etc.

- 4. Delivery of Stores:** The store items be supplied within 120 days from the date of receipt of the Purchase Order.

- 5. Tender Fee:** An amount of Rs. 5,000.00 (Rupees five thousand only) as tender fee (non refundable) is to be paid. The payment shall be made by Demand Draft from any Nationalized Bank /Commercial Bank and paid in favour of "Indian Institute of Technology Kharagpur", payable at Kharagpur. **Bids without Tender Fee will not be accepted. This should be enclosed separately in an envelope and stapled with the Technical Bid document superscribing Tender fee.**

6. Earnest Money Deposit (EMD): An amount of **Rs.6,00,000.00** (Rupees Six lakhs only) in the form of Demand Draft drawn in favour of “**Indian Institute of Technology Kharagpur**”, payable at Kharagpur or Fixed Deposit Receipt or Banker’s Cheque or Bank Guarantee as per format at **Annexure V. E.M.D. should be enclosed separately in an envelope and stapled with the Technical Bid document superscribing EMD.** The validity of the EMD should be 6 (six) months from the date of issue. **Any bid without EMD will be summarily rejected. No interest is payable on EMD.** EMD will be refunded to the unsuccessful bidder, finalization of the tender process. The EMD of vendor awarded with the contract to be treated as part of security deposit towards Performance Guarantee. No interest is payable on Security Deposit. Security Deposit shall be forfeited if the selected vendor after award of contract, fails to execute the same.

7. Price: Domestic tenders are to quote and accept their payment in Indian currency; Indian agents of foreign suppliers are to receive their agency commission in Indian currency; cost of imported goods, which are directly imported against the contract, may quote in foreign currency (currencies) and will be accordingly in that currency; and the portion of the allied work and services, which are to be undertaken in India (like installation & commissioning of equipment) are to be quoted and will be paid in Indian currency. The price shall be quoted with cost break-up indicating the applicable prices for each component (custom duty, import duty, landing and clearing charges and commission to Indian agents). Excise Duty Exemption/Custom Duty Exemption Certificate and Inter-state transit Way Bill (Form-50) will be issued only in favour of the bidder and address as mentioned in the Purchase Order.

7.1 Indian Institute of Technology Kharagpur is a Public Funded Academic & Research Institute under the Ministry of Human Resource Development and is eligible for GST @5% vide Notification No: 47/017 dated 14/11/2017 by the Ministry of Finance, Department of Revenue.

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

9. Acceptance of Tender: The Authority of IIT Kharagpur does not bind itself to accept the lowest priced bid and reserves the right to reject any or the entire tender bids received without assigning any reason thereof.

10. Extra Features: If the bidder provides any other extra features on the Hardware or Software which are not mentioned in the tender product specifications, then that shall be highlighted in clear terms, with documentary evidence/literature.

11. **Compliance List:** The proposal be properly indexed and a compliance list against the technical specifications must be provided.
12. **Service:** Response to ensure quality of services, the deputed Engineer from the OEM/Vendor shall have a minimum of 3 years of experience in the relevant field and must be in the payroll of the OEM/Vendor.
13. **Installation and Commissioning:** Free of cost at IIT, Kharagpur. The OEM must ensure timely installation of the complete Liquid Nitrogen Plant with necessary support to the indenters, as per details and lists to be made available by the Stores & Purchase Section or the indenting Departments/Centers/Schools.
14. **Validity of licenses:** Software's licensing price or policy (if any) shall be clearly mentioned.
 1. All licenses should be perpetual.
 2. All the accessories shall be from the same OEM.
15. The OEM should be an ISO-9000 and ISO-14001 certified company with due credits to energy conservation and green earth compliance.
16. **Relevant documents of the OEM shall be enclosed, along with the Technical Bid. Any explanation on this account shall be supported with documentary evidence from the principals.**
17. **Conditional Offer** will not be accepted.
18. **Period of Validity:** Bids shall remain valid for acceptance for a period of 120 days from the date of opening of the price bid.
19. The benefit of any downward price revision (revision on account of budget/financial policy, tax revision, EPZ etc.) is to be given to IIT Kharagpur by the selected OEM/vendor.
20. **Past Performance of the Vendors will be judged at the time of Technical Evaluation.**
21. **The Institute does not bind** itself to offer any explanation to those bidders whose technical bids have not been found acceptable by the Technical Evaluation Committee of the Institute.
22. **Bidders should** enclose the following documents:
 1. Certificate of Registration / Trade License.
 2. Enlistment form (R1), complete in all respect Attested copy of PAN card, Service Tax, GST registration papers.
 3. Banker's Solvency Certificate.
 4. Audited statement of accounts and IT returns for the last three years.
 5. Authorized Distributors/Vendors must submit appropriate authorization certificate and letter from their OEMs, for participation in the said tender.
 6. Name and address of past satisfactory supplies or minimum three clients to whom such items/stores have been supplied should be mentioned in the technical bid.
 7. Copy of mandatory test reports, national testing/reliability and endurance test

reports etc., certified or conducted at the manufacturing site, granted by the bureaus/quality control departments/national testing laboratories.

8. Copy of product literature, for which the prices have been quoted.
9. A write up on service and maintenance capability, mitigation of risks or breakdown and replacement capability, with the escalation support matrix suggested for the Institute. Vendors must indicate their sales and support service centre in India and their plan to address issues about services, maintaining minimum service inventory etc.
10. Signed copy of the tender document, with company seal, agreeing to the terms & conditions and declaration.
23. **All tenders are to** be dropped in a sealed box in the **Office of the Head, Cryogenic Engineering Centre, IIT Kharagpur, P.O.- Kharagpur Technology, Pin: 721 302, India**. The bids (technical and price bids) once submitted shall be the property of the Institute and shall not be returned to the vendor in future.
24. **The person/officer signing** the tender/bid documents should be delegated with an appropriate Power of Attorney (duly endorsed by a Notary Public) by the Chief Executive Office/Managing Director of the Company to sign such documents.
25. **Opening of Price Bids** : The Price Bid(s) of only those vendor(s) who are found technically qualified will be opened and the same will be opened before the technically qualified vendor(s). **The date for opening of price bids will be notified separately.**
26. Tenderer or his/her authorized representative (with proper authorization letter for attending opening of technical bids and also for opening of price bids) may choose to be present at the time of opening of Technical Bids/Price Bids.
27. Parties who are not enlisted with the Institute are also required to submit Form R1 along with the tender
28. Bidders are required to submit their **Details** in the format given at **Annexure III** along with their technical bids. They are also required to submit a signed **Declaration** in the format given at **Annexure IV**. A **Checklist** and **Compliance statement** against each item of Annexure I & III thereon severally & individually shall also be submitted.
29. **IMPORTANT**
 1. Director may accept or reject any or all the bids in part or in full without assigning any reason and does not bind himself to accept the lowest bid. The Institute at its discretion may change the quantity/upgrade the criteria/drop any item or part thereof at any time before placing the Purchase Order.
 2. A bid submitted with false information will not only be rejected but also the OEM/vendor will be debarred from participation in future tendering process.
 3. The OEMs/Vendors need to submit a certificate during opening of technical bids that they are not currently debarred or blacklisted in IIT Kharagpur for any supplies, products or services, or at present in any national organization or

educational institute/university.

4. In case of any dispute, the decision of the Director of this Institute shall be final and binding on the bidders.
5. For any query pertaining to this bid document, correspondence be addressed to :
ATTENTION : PROF. T. K. Nandi,
***Professor In-Charge, Liquid Nitrogen Plant, Cryogenic
Engineering Centre
IIT KHARAGPUR, INDIA - 721302***
[Ph.: 03222-283598/9434040897(M), Fax: 03222-282258]
6. In case the due date for opening tender happens to be a holiday, the same will be opened on the next working day. The timings will however remain unchanged. Please Note that the Institute remains closed on Saturday & Sunday.
7. The Bidders are requested to submit the bids after issue of clarifications duly considering the changes made if any. Bidders are totally responsible for **incorporating/complying the changes/ amendments** issued if any in their bid.

TECHNICAL BID DOCUMENT

Format to be filled by the manufacturers / indian agents (on behalf of their foreign principles) or their authorized country distributors/ representing dealers/ regional agencies, submitting tender for procurement of "LiquidNitrogenPlant" incryogenicengineeringcentre.

1. Name of the Tenderer :
2. Status of the Tenderer :
(attach documents, if registered company/partnership/proprietorship)
3. Whether OEM/representing foreign principle :
(attach copy of certificate/authorization)
4. Details of key top official/authorized official :
(attach details)
5. Details of tie-ups for supply/services, if any :
(attach details, agreements, escalation matrix)
6. Income Tax and Service Tax returns of :
previous three assessment year (copy)
7. Financial status of bidder and/or his :
associates including Annual Report & Balance Sheet/Statement of Account
of past three years with Registration of Companies (ROC) receipts
duly authenticated byChartered Accountant
8. Current list/address of clients where similar material :
has been supplied in last five years and successfully working:
9. Name, address and contact details of the :
vendor's five largest clients, to whom similar products and services were extended &
amountof transaction/annual bills to such clients
10. Name and address of Vendor's bankers :
and attach a Solvency Certificate from the Bank for a **minimum amount of Rs. 90.00 Lakh.**

11. Income Tax Permanent A/c No. (attach copy) :
12. **GST Registration No:**
13. Details of EMD/Bank Draft No
Issuing Branch and date :

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

Date:

Signature & seal of the
Authorized person of OEM/Vendor

NOTE: This is to be submitted in a separate sealed envelope super scribing "TECHNICAL BID", Notice inviting **Tender No.IIT/KGP/Cryo/LNP/2018** DATED : 02.02.2018 and name of the bidder. All technical documents like literature, catalogues etc., are to be put in the same envelope. Price bid of that company/firm only will be opened which do technically qualify, for further consideration. **Attach all relevant documents in the same serial order as above, properly indexed, duly signed and sealed.**

ANNEXURE - IV

DECLARATION

1. I, ----- Son /Daughter of Shri -----
----- Proprietor/Partner/CEO/MD/Director/
Authorized Signatory of M/s. ----- am
competent to sign this declaration and execute this tender document.
2. I have carefully read and understood all the terms and conditions of the tender and
hereby convey my acceptance of the same.
3. The information/ documents furnished along with the above application are true and
authentic to the best of my knowledge and belief.
4. I/ we/ am are well aware of the fact that furnishing of any false information/
fabricated document would lead to rejection of my tender at any stage 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.

Signature of the Authorized Person

Date : -----

Full Name : -----

Place : -----

Company Seal : -----

(Note: Parties who are not enlisted are also to submit form –R1)

FORM – R1

To
The Deputy Registrar
Stores & Purchase Section
Indian Institute of Technology
Kharagpur – 721 302 (WB)

*Passport size
Photograph
of the Proprietor/
Partner/Authorise
d signatory.*

SUB : ENLISTMENT AS A VENDOR OF THE INSTITUTE

Sir,

Details of particulars, as per your format are given below for your consideration and necessary action for **enlistment** with your Institute, as approved vendor.

1. Name of the Firm :
2. Status of the firm & Date of establishment :
(Proprietorship/Partnership/Joint
Stock Company/ Private Limited
Company/Public Limited Company/
Sole Distributor/Stockist/Dealer/Agent/ Reg. Society or NGO)
3. Name of the Proprietor/ Managing Partner :
Authorised Signatory/Chief Executive
4. Present Address (Head Office/ Registered Office) :
Phone /Fax /E-mail/ website/ Mobile contact)
5. Permanent address of the firm :
6. Do you have an office in Kolkata :
(if yes, give address and contact details)
7. Nature of stores being dealt with :
(range of product or category or group of
items
proposed to be enlisted - enclose item
catalogue)
8. Are you registered with DGS&D, NCCF, NSIC, :
Kendriya Bhandar or any Govt./State Agency

9. Are you already registered with IIT Kharagpur :
(if yes, give details, Sr. No./date/year etc.)
10. Name and address of Banker / CBS Account :
(a) Name of the Bank
(b) Name/address/code of the Branch
(c) Account Number
(d) IFSC Code
(e) Enclose solvency certificate from Bank
(f) Does your Bank stands guarantee to your business
11. (a) Financial Capability (in rupees) :
(b) Annual turn over (last three years)
(c) Audited balance sheet (last
three years)
(d) IT returns filed (last three
years)
(e) GST Reg. No :
12. Registration/Trade License Number and date :
(attested copy to be enclosed)
13. Experience, with credentials :
(documents if any, to be enclosed)
14. Whether it is a Production Unit :
(if yes, please specify location and
area, number of skilled, semi-skilled &
unskilled employees, number of
qualified Engineer and list of
machinery and facilities available,
whether in EPZ, availing any tax
benefit etc.)
15. Whether having a Permanent Account
Number : (mention the ward number,
circle and Commissioner of Income Tax
under which you are registered, enclose
copy of PAN card)
16. Specimen Signature of the Proprietor/
Authorized Partner/Chief Executive/Signatory :

DECLARATION

I do hereby declare that all particulars furnished by me are true and correct to the best of my information, knowledge and belief. I understand that IIT Kharagpur can adopt any pre-qualification to identify suitable vendor(s) for a particular quotation/tender invitation and items, and conduct visit to our premises for verification. Mere submission of this registration form doesn't entitle us for any enquiry or award of work and I promise to be in the lookout for details in your website [www.iitkgp.ernet.in (link : tenders and quotations)]. I also undertake to inform you at the earliest any change in details mentioned above.

Encl:

Rubber Seal :

Name and signature of the Vendor/
Proprietor/Authorized Partner/CEO

MODEL BANK GUARANTEE FORMAT FOR FURNISHING EMD

Whereas(thereinafter called the “tenderer”)
has submitted their offer dated for the
supply of (hereinafter called the “tender”)
against the purchaser’s tender Notice No.
KNOW ALL MEN by these presents that WE of
..... having our registered office at
..... are bound unto(hereinafter called
the “Purchaser”) in the sum of
..... for which payment will and
truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns
by these presents. Sealed with the Common Seal of the said Bank thisDay of
..... 20

THE CONDITIONS OF THIS OBLIGATION ARE

- (1) If the tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
- (2) If the tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity:
 - (a) If the tenderer fails to furnish the Performance Security for the due performance of the contract.
 - (b) Fails or refuses to accept/execute the contract.

WE undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including 45 days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

(Signature of the authorized officer
of the Bank)

Name and designation of the officer

Seal, name & address of the Bank
and address of the Branch

(on the official Letterhead of the firm)

FINANCIAL BID**Supply and Installation, Testing and Commissioning of Liquid Nitrogen Plant
with 2 Years of comprehensive warranty.**

The Bidder shall fill all the required columns of Financial Bid:

S. No.	Description	Qty	Unit Price without taxes (in Rs.)	Taxes	Unit Price with Taxes (in Rs.)	Total Amount (in Rs.)
		A	B	C	D(B+C)	E (A * D)
1	Supply, Installation, Testing and Commissioning of Liquid Nitrogen Plant with Comprehensive Warranty of 2 years.					
Total Cost of the project						
Cost of additional 3 years warranty						

In words Rupees: _____

Note:-

1. In case of discrepancies between words and figures, the bid which is least of the two versions will be confirmed.
2. Should provide the cost of additional 3 years warranty.
3. Indian Institute of Technology Kharagpur is a Public Funded Academic & Research Institute under the Ministry of Human Resource Development and is eligible for GST @5% vide Notification No: 47/017 dated 14/11/2017 by the Ministry of Finance, Department of Revenue.

Signature of the bidder
along with seal

(on the official Letterhead of the firm)

Annexure – VII

Accessories and spare parts

The vendor should provide all spare parts of the liquefier which have history of failure within first 5 years of operation anywhere in India and regular consumables/spares should be listed and quoted separately. However, the price of the spares will not be considered in price comparison.

S. No	Description/Name of the Spare Part	Qty	Unit Price Rs)	Taxes @ GST%	Unit price including GST (in Rs.)	Total Amount (in Rs.)
		A	B	C	D (B+C)	E (A*D)

Note:

- 1. Should provide price of all the spare parts and regular consumables.**
2. Indian Institute of Technology Kharagpur is a Public Funded Academic & Research Institute under the Ministry of Human Resource Development and is eligible for GST @5% vide Notification No: 47/017 dated 14/11/2017 by the Ministry of Finance, Department of Revenue.

Signature of the bidder
along with seal