

**INDIAN INSTITUTE OF TECHNOLOGY
KHARAGPUR – 721 302, INDIA**

No. IITKGP/CRF-LSD/DJ/UCF/AM/2018-19

Date. 08.10.2018

Indian Institute of Technology, Kharagpur, an Institute of National Importance invites sealed bids from reputed manufacturer or their authorized Distributor/Dealer (foreign firms or their Indian representative company) who have adequate credential for supply/installation of **preparative grade Ultracentrifuge**, for the Central Research Facility, Indian Institute of Technology, Kharagpur, India.

Interested parties may submit their sealed bids under Two-Bids system as per Technical Specifications given at **Annexure I**.

The tender be sent in a sealed packet, containing two separate sealed envelopes (one each for Technical Bid and Price Bid) along with prescribed Tender fee Rs. 2,000/- and EMD Rs. 25,000.00 (Pay to IIT, Kharagpur) duly superscripted with **Tender Notice No. No. IITKGP/CRF - LSD/DJ/UCF/AM/2018-19, Date. 08.10.2018** to the office of the Chairman, Central Research Facility, Indian Institute of Technology Kharagpur, P.O. Kharagpur Technology, PIN 721302, West Bengal, India on or before **5th November, 2018, 12:00 noon**.

For any query pertaining to this bid document, communication be address to Central Research Facility, Indian Institute of Technology Kharagpur-721302 [Ph: 03222-282481].

The technical bid will be evaluated first and price bids will be opened in respect of those OEMs/Vendors, who are found technically qualified after evaluation of Technical bids.

The Technical bids will be opened on 5th November, 2018 at 3.30 P.M. in office of the Chairman, Central Research Facility, Indian Institute of Technology Kharagpur-721302.

Chairman, Central Research Facility
For DIRECTOR, IIT KHARAGPUR

Copy to: 1) Institute Website 2) Central Public Procurement Portal 3) Notice Board.

1. Technical Specifications of Preparative Grade Ultracentrifuge

Rotation chamber material	Stainless steel
Maximum Speed	RPM: 100,000; g Force: 800,000
Speed control accuracy	±2RPM
Maximum sample volume/ Capacity:	1.5 liter
Drive type	Direct drive
Drive Cooling	Air cooled
Imbalance tolerance	Should be able to eye balance to within 5 mm
Accel / decel profiles	10 accel /11 decel
Temperature range	+0 to +40 °C, 1°C increment
Temperature Accuracy:	±0.5 °C
Ambient Operating Temp	10-35degC
Heat output	Should not be greater than 1kWh
Run Timer	System should be able to perform continuous runs of at least 200 hours or more
Refrigeration system:	Should be equipped with thermoelectric temperature control system (non-coolant based, CFC-free)
Vacuum System:	Systems should contain oil-rotary vacuum pump with moisture removal function and oil diffusion pump
Noise level	Noise level should not be more than 55dBA
Rotor tracking	System should be able to track individual rotors by serial number
Biosafety	Should be equipped with HEPA filtration system to resist spread of any contaminating aerosolic substances
Programmability	Should be able to create and store at least 1,000 programs within the inbuild memory storage
Run Log Database:	Should be able to store up to 5000 runs recorded in onboard memory
Heat output	Should not be more than 1kw
System control/ monitoring	Color LCD touch-screen display should have at least have the following features <ul style="list-style-type: none">• Both RCF/RPM mode• Vacuum display• Real time run graphing with the Speed/temperature vs. time plot

Remote monitoring system	Option of remote monitoring of the runs/ programs in real time should be present in the system
Advanced Security option	Should be equipped with advanced security feature like password protection and electronic signature.
Advanced calculation and simulation tool	Should be equipped with advanced features like calculation of pelleting time, creates simulations of a variety of run conditions.

2. Required Rotors and Tubes that should be included with the instrument

(Rotor installation should not involve any threads/ screws/ bolts):

- 1) The Instrument should be quoted with Titanium fixed angle rotor(s) with the flexibility of using different samples volumes as respective speeds as mentioned below. Required tubes (500 pieces of each type of one time use tubes and 200 of each type of reusable tubes as stated below), caps and adaptors supplied along with the instrument.

Sample/ Fill volume*	Speed in RPM	x g Force	Tube type
2ml (± 0.5 ml)	80,000 (minimum)	450,000 (minimum)	Polyallomer
5ml (± 0.5 ml)	80,000 (minimum)	450,000 (minimum)	Polyallomer
10-15ml	65,000 (minimum)	420,000 (minimum)	Polyallomer
25ml (± 2 ml)	60,000 (minimum)	350,000 (minimum)	Reusable Polypropylene/ polycarbonate
38ml (± 2 ml)	65,000 (minimum)	429,459 (minimum)	Thin wall Polyallomer

- 2) The Instrument should also be quoted with Titanium swing out rotor with the flexibility of using different samples volumes as respective speeds as mentioned below. Required tubes (500 pieces of each type of one time use tubes), caps and adaptors supplied along with the instrument.

Sample/ Fill volume*	Speed in RPM	x g Force	Tube type
5ml (± 1 ml)	40,000 (minimum)	280,000 (minimum)	Polyallomer
13ml (± 0.5 ml)	40,000 (minimum)	280,000 (minimum)	Polyallomer

**the "sample/ Fill volume" should correspond to the volume of sample that can be loaded in the respective tubes and not the total volume of the tubes.*

3. Sealing or cramping machine for quick sealing of tubes (if any) should be included with the instrument
4. Warranty: Comprehensive warranty of 36 months should be provided on the machine and parts. Rotors should have separate warranty of 10 years or more
5. Additional two years comprehensive warranty should be quoted as optional.
6. Should be supplied with a suitable stabilizer.

Optional Accessories:

1. **A titanium Vertical rotor** with the flexibility of using different samples volumes as respective speeds as mentioned below. Required tubes (500 pieces of each type of one time use tubes), caps and adaptors supplied along with the instrument.

Sample/ Fill volume*	Speed in RPM	x g Force	Tube type
6ml (± 1 ml)	65,000 (minimum)	400,000 (minimum)	Polyallomer
14ml (± 0.5 ml)	65,000 (minimum)	400,000 (minimum)	Polyallomer

**the "sample/ Fill volume" should correspond to the volume of sample that can be loaded in the respective tubes and not the total volume of the tubes.*

2. A small undercounter refrigerator to house the rotors and an undercounter three-shelf unit to house the tubes and adapters specific to each rotor.

GENERAL TERMS AND CONDITIONS

- (1) **Last Date of Submission of Sealed Bids: 5th November, 2018 up to 12:00 noon.**

The Technical bids will be opened on 5th November, 2018, at 3.30 p.m. in the office of the Chairman, Central Research Facility, Life Science Division, I.I.T., Kharagpur, India.

- (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 **Preparative Ultracentrifuge (UCF) with accessories.**

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:** On-site training should be provided to the operators. Necessary documents, operational & system manual in the form of CD and hardcopy must be supplied with the system.

Comprehensive warranty of 36 months should be provided on the machine and parts. Rotors should have separate warranty of 10 years or more (after successful commissioning of the equipment).

Additional two years comprehensive warranty should be quoted as optional.

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.

Service response time, turn-around time & up-time of the equipment should be clearly specified. Service response time must be less than 72 hours.

Suitable service facility for computer hardware or software related problems should also be provided.

The manufacturer and/or their Indian representative must have a qualified and trained service engineer in India to be able to attend to service at CRF, IIT Kharagpur in seventy-two (72) hours.

- (4) **Delivery of Stores:** The store items be supplied within 30 days from the date of receipt of the Purchase Order.
- (5) **Tender Fee:** An amount of 2,000.00 (Rupees two 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 (MSME and NSE certificate holders are exempt from providing tender fee and EMD). **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 **25,000.00** (Rupees Twenty thousand 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. **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 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 favor of the bidder and address as mentioned in the Purchase Order.

Indian institute of Technology Kharagpur is a public Funded Academic & Research institute under the minister of Human Resource Development and is eligible for GST @5% vide Notification No. 47/2017 dated: 14.11.2017 and Notification no. 10/2018- Integrated Tax (Rate) dated: 25.01.2018 & Notification No. 45/2017- Central tax (Rate) dt: 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 should be provided.
- (12) **Installation and Commissioning:** Free of cost at IIT, Kharagpur. The OEM must ensure timely installation of preparative ultracentrifuge with accessories including consumable items with necessary support to the indenters, as required for the smooth running of the instrument.
- (13) **Validity of licenses:** Software's licensing price or policy (if any) shall be clearly mentioned.
 - (a) All licenses should be perpetual.
 - (b) All the accessories shall be from the same OEM.
- (14) The OEM should be an ISO-9000 and ISO-14001 certified company with due credits to energy conservation and green earth compliance.
- (15) **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.**
- (16) **Conditional Offer** will not be accepted.
- (17) **Period of Validity:** Bids shall remain valid for acceptance for a period of 120 days from the date of opening of the price bid.
- (18) 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.
- (19) **Past Performance of the Vendors will be judged at the time of Technical Evaluation.**
- (20) **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.

- (21) **Bidders should** enclose the following documents:
- (i) Certificate of Registration / Trade License.
 - (ii) Enlistment form (R1), complete in all respect.
 - (iii) Attested copy of PAN card, GST registration papers.
 - (iv) Banker's Solvency Certificate.
 - (v) Audited statement of accounts and IT returns for the last three years.
 - (vi) Authorized Distributors/Vendors must submit appropriate authorization certificate and letter from their OEMs, for participation in the said tender.
 - (vii) 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.
 - (viii) 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.
 - (ix) Copy of product literature, for which the prices have been quoted.
 - (x) 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.
 - (xi) Signed copy of the tender document, with company seal, agreeing to the terms & conditions and declaration.
- (22) **All tenders are to** be handed over in the office of the Chairman, Central Research Facility, IIT Kharagpur, 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.
- (23) **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 Officer/Managing Director of the Company to sign such documents.
- (24) **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.**
- (25) 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.
- (26) **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:

**The Chairman, Central Research Facility, Life Science Division,
Indian Institute of Technology, Kharagpur-721 302, India
[Ph. : 03222-282481, 283292; Fax : 03222-282700, 255303]**

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.

Chairman, Central Research Facility
for Director, IIT Kharagpur