

INTER-UNIVERSITY ACCELERATOR CENTRE
(An Autonomous Centre of UGC)
Aruna Asaf Ali Marg, New Delhi-110 067

NOTICE INVITING E-TENDER

TENDER NO: IUAC/NIT/43/SMO/2018-19

Dated: 05/03/2019

Instructions for Online Bid Submission:

Inter-University Accelerator Centre (IUAC), invites online bids through e-Procurement Portal under two bid system, viz., Technical and Financial bids, from eligible and experienced parties for the work/supply of **"Replacement of 33 TR capacity Air-Cooled Scroll Chiller at IUAC"**.

Tender Documents may be downloaded from Central Public Procurement Portal <http://eprocure.gov.in/eprocure/app> and www.iuac.res.in

Aspiring Bidders who have not enrolled/registered in e-Procurement Portal should enroll/ register before participating through the website <http://eprocure.gov.in/eprocure/app>.

Bids shall be submitted online only at CPPP website: <http://eprocure.gov.in/eprocure/app>. Tenderers/Contractors 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 document.

IUAC reserves the right to accept / reject any/all tenders in part/full without assigning any reasons thereof.

Bidder has to select the payment option as "offline" to pay the tender fee/EMD as applicable. The Earnest Money Deposit shall be in the form of demand draft issued in favour of "Inter-University Accelerator Centre, New Delhi" and it should be deposited in IUAC before the bid opening. Bidders registered with MSME/NSIC are exempted from payments of EMD & tender fee. Copy of valid registration certificate should be uploaded.

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

Any Corrigendum/Amendments in respect of above tender shall be issued on IUAC website www.iuac.res.in and website <https://eprocure.gov.in> only. Bidders should take into account any corrigendum published on the tender document before submitting their bids.

E-TENDER DOCUMENT

Name of Work	Replacement of 33 TR capacity Air-Cooled Scroll Chiller at IUAC".
Tender No.	IUAC/NIT/43/SMO/2018-19
Tender Value/Estimate	Rs. 9,50,000/- (Rupees Nine lacs fifty thousand)
Earnest Money Deposit	Rs 19,000 /-(Rupees Nineteen thousand only) in the form of D.D.
Tender fee	Rs. 500/- (Rupees five hundred only)
Bid Submission End Date	28/03/2019 at 3.00 p.m.
Technical Bid Opening Date	29/03/2019 at 3.30 p.m.
Price Bid Opening Date	To be intimated later.
Contact Person	M. B. Joseph, Administrative Officer (S&P) e-mail: joseph@iuac.res.in Phone: 011-24126018 & 24126022

GENERAL CONDITIONS OF TENDER:

- 1. Submission of Tender:** Tenders should be uploaded on CPP portal in two parts separately i.e. "Technical bid" (Part-A) and "Price bid" (Part-B). No other mode of submission will be accepted.

- 2. Technical Bid (Part-A) :** In this bid, the bidder shall upload the scan copies of the following documents required for technical qualification:
 - a. Covering letter on Company's Letter Head
 - b. Biodata of company (Company profile, organizational setup, credentials, list of plant, machinery & tools in his possession).
 - c. Copies of PAN no., GST Reg. no.
 - d. Copies of work orders and completion certificates of similar type of "Supply, Installation, Testing & Commissioning of Scroll/Screw/Centrifugal chillers" executed successfully during the last 7 yrs. in Govt., Public sector, Autonomous body or reputed Public Ltd. Company, with at least one work of value not less than Rs. 7.60 lakh or two similar works, each of value not less than Rs. 4.75 lakh or three similar works, each of value not less than Rs. 3.80 lakh.
 - e. Entire NIT (except Price bid) duly signed & stamped by the bidder as acceptance of all terms & condition of tender.

2. **Price Bid (Part-B):** In this bid, the bidder is required to quote his item rates in the BOQ format in accordance with the scope of work, terms & conditions & technical specifications enclosed. The rates/price quoted by contractor should be inclusive of all material cost, labour, services, plant/machinery/tools & tackles required for work, freight, Insurance (except for GST, which should be quoted separately) transport/cartage of materials upto IUAC site and all other expenses not specifically mentioned but reasonably implied. Nothing over and above these rates shall be payable to contractor. Further, nothing extra in rates will be considered for any variations in tender quantities or due to any site difficulties. It is mandatory for bidder to quote all items rate as asked for in the BOQ/ PRICE schedule. Failure in not filling some item rates will lead to rejection of tender. The bidders should quote unconditional rates.

4. **Earnest Money:** An earnest money deposit (EMD) of Rs 19,000 /= (Rupees nineteen thousand only) has to be submitted before opening of the technical bid (Part-A). The EMD shall be only in the form of Bank Draft /Banker's cheque in favour of " Inter-University Accelerator Centre ", payable at New Delhi. No Cheque/Cash shall be accepted as EMD. The refund of EMD to the technically disqualified & lowest 4th bidders onwards shall be made within 15 days from the date of opening of price bid. The refund of EMD of the 2nd & 3rd lowest bidders shall be made after award of work and site mobilization by the successful bidder. The EMD of the successful lowest bidder (L1) shall be adjusted against Security deposit.

5. **Validity of Tender:** Tender shall be valid for our acceptance without any change in rates and NIT conditions for a period of 90 days from the date of opening of Technical bid.

6. **Escalation:** No escalation over and above items rates quoted by the bidder shall be paid during the execution of contract.

7. **Completion time:** The time shall be the essence of this contract and entire work as titled above is to be completed in all respects within a period of ten (10) weeks from the date of issue of LOI / Purchase order by the Centre. Any delay in completing the work for reasons attributable to the Contractor is liable for liquidated damages as per clause 14 of NIT. Under the force-majeure conditions or delay due to reasons beyond control of the contractor, IUAC may grant suitable time extension without penalty for which the contractor has to request along with the justification / reasons well in advance to IUAC for approval without any prejudice to price escalation. No time extension request shall be considered after the expiry of completion period/contract. The decision of the Director, IUAC regarding time extension will be final and binding on the contractor.

8. **Deviations:** No deviation from the stipulated terms and conditions will be allowed. Tender will be unconditional.

9. **Site Conditions:** Contractor shall acquaint himself fully with the site conditions and the working environment of IUAC before quoting his rates. No compensation on account of any site difficulties will be entertained, at a later date, after award of the work.

10. **Correspondence:** All the correspondence in respect of tender/award of work shall be made to A.O.(S&P), IUAC, Aruna Asaf Ali Marg, New Delhi-110067.

11. Terms of Payment:

- a) 60% Payment will be released after supply of the material and acceptance by IUAC.
- b) 30% Payment will be released after satisfactory completion of installation, successful testing, commissioning & acceptance of the system by IUAC.
- c) Balance 10% will be held towards performance guarantee for three years from the date of satisfactory commissioning & handing over the system to IUAC. However, if bidder wishes the same may be released after completion & acceptance of work and submission of bank guarantee of equivalent amount valid for three years for which documentation cost of BG will be to bidder's account

12. Labour Laws: The contractor will abide by all the rules and regulations related to labour laws, accident, workmen compensation act, workmen insurance etc. This will be the sole responsibility of the contractor. IUAC will not be a party at any stage in any of the disputes relating to the above. In case, IUAC has to bear any expenditure due to non-conformance of the above provisions by the contractor, the same will be recovered from contractor's bills.

13. Rules governing the Contractor's employees working in the IUAC Premises:

The contractor's employees working inside the IUAC campus will abide by the Centre's rules & regulations for works inside the campus. Any damage to the IUAC property due to mishandling, carelessness on the contractor's or his workmen's part will be recoverable from the contractor's bills.

14. Liquidated damages: In case the work is delayed beyond the specified completion period for reasons attributable to the contractor, deductions on account of Liquidated damages @1% of the contract value per week will be deducted subject to a maximum of 10 % of the contract value. However, during the delayed period, IUAC also reserves the right to get balance portion of work done by any other contractor at the risk and cost of the existing contractor and amount to that effect along with 10% overhead charges will be deductible from his bills/dues.

15. Defect Liability period: Warranty and defect liability period shall be three years from the date of completion of work. Any defect arising in this period will be rectified by him at his own cost. Failure to do so shall lead to forfeiture of security deposit.

16. Contractor should depute a technically qualified supervisor dedicated for this work, who will monitor and coordinate work from contractor's side and interact with the IUAC Engineers, responsible for supervision of work, on regular basis.

17. Contractor will take due permission for entry of all his workmen in IUAC. No unauthorized person will be allowed to work inside IUAC campus.

19. During execution of work, the contractor should follow all standard norms of safety measures/precautions as per relevant IS codes and CPWD specifications to avoid accidents/damages to man, machines and buildings, at his own cost. Contractor will have his own arrangement to escort the labour to the nearest hospital for treatment in case any injury

happens to any worker during execution of work.

20. Manpower deployed by the contractor at site for carrying out contract work is strictly prohibited being associated with any other works on the campus.
21. No material belonging to the contractor whether consumable or non-consumable should be brought inside the IUAC campus without proper entry at the Main Gate nor any material should be taken out without proper gate pass issued by the authorized representatives of the Centre.
22. IUAC will provide free water and electricity during execution of work at one point. The contractor has to make his own arrangements for supplying power and water from that point onwards as per his requirements.
23. Tender once submitted will remain with the Centre and will not be returned to the bidders.
24. **Termination of Contract:-** The Director, IUAC reserve the right to terminate the contract on account of poor workmanship, failure to mobilize site within 15 days, non-compliance of specifications for the works, abnormal delay in progress of work, violation of any contract provisions by the contractor. In such cases the contractor is liable to pay Liquidated damages @ 10% of tendered value besides forfeiture of EMD.
25. **Any dispute arising out of this contract will be subjected to jurisdiction of New Delhi/Delhi.**
26. Tenders not complying with any of the provisions stated in this tender document are liable to be rejected. **Director, IUAC also reserves the right to accept or reject any or all the tenders without assigning any reason and does not bind him to accept the lowest tender.**

Accepted
(Signature of bidder)

Note: - Entire NIT (except price bid) is to be uploaded with 'Technical bid (Part-A)' duly signed & stamped by the bidder

TECHNICAL SPECIFICATIONS, SCOPE OF WORK & SPECIAL CONDITIONS

The scope of work covers the following:

1. Replacement of one of the existing 33 TR capacity Air-Cooled Scroll Chillers by New one, which includes Supply, Installation, Testing and Commissioning of similar type & capacity Air-Cooled Scroll Chiller for HPC Rack Cooling system.
2. Dismantling of one (1) no. of existing Scroll Chiller including water, electrical connections and shifting of the same to IUAC junkyard or designated location with-in IUAC campus.
3. New Chiller has to be connected onto the existing Supply/Return chilled water headers by suitable reducers/fittings, thermal insulation etc., as required.
4. Existing electrical power cable should be connected to the new chiller with proper thimbling, GI earth wire connections etc.,
5. Six Nos. of PCC blocks of size 265mmx265mmx300mm (LxWxH) were provided for existing chiller (which is proposed to be replaced) foundation. The center distance between PCC blocks is 1100 mm in width and 1370 mm in length. If the new Chiller footprint is not matching with these foundation PCC blocks, new foundation has to be made and the same should be quoted separately as in item#1.02 of BOQ.
6. Modification of SS chilled water pipeline to suit chilled water piping connections of the new scroll type water chilling unit including insulation complete as required. It should also include necessary SS fittings and welding by TIG process.
7. The works are only indicative and all the activities needed for completion of the works have to be accounted for by the bidder at the time of quoting. Bidder should take into account all the implicit items not specified here-in, but are essential for completion of the work. The costs of such items should be in-built in the costing of the item rates.

Technical Specifications:

1. The chiller should be minimum of 33 TR, 396000 BTU/Hr. cooling capacity complete with gas charging. It shall consist of multiple (3 or more) compressors of hermetically sealed scroll type, Air cooled condenser coils, chiller, Refrigerant Piping, condenser fans, Valves, automatic control panel with indicating lights, motor starter and all necessary accessories.
2. The unit will have tandem circuit to improve the energy efficiency at part load operation. The chiller shall be tropicalized to operate at max. **52 Deg. C** ambient temp. Chiller shall be fitted with Microprocessor based control panel with digital display of temperatures, built in time delays, auto distribution of load, protection mechanism, self-diagnostics and auto restart etc., It shall be using Ozone friendly refrigerant gas of either R-134a / R-407c. It should operate on 3 ph, 415+/-10% Volts, 50 Hz.
3. The entering evaporator / cooler water temperature should be 54 Deg. F. and leaving water 44 Deg. F. The evaporator water flow rate should be 88 USGPM or 330 lpm.

4. **Testing:** The testing of Scroll Chiller shall be done as per the relevant Indian / American standards. Vendor has to demonstrate the performance of the unit as per the manufacturers design conditions
5. The contractor shall give the capacity and performance test of the Scroll Chiller for it's rated parameters like COP/EER, Amp. Drawn etc., after installation, testing & commissioning at site.
6. Manufacturer's test reports and manuals should be submitted for the Chiller.
7. The contractor will give a performance guarantee for three years for satisfactory performance of the unit after successful installation & commissioning of the system. Any part or thereof found defective during guarantee period, the same should be replaced / repaired free of cost to IUAC.
8. Bidder should furnish technical specifications, catalogues/brochures, details of make and model no. of the unit to be supplied by them etc., along with their offer.
9. **Codes and Standards:** All the design/material / workman ship / fabrication shall conform to the latest editions of relevant Indian / American Standard Codes. In particular the equipment shall confirm to the following:
 - a) ANSI B9.1 Safety code for Mechanical Refrigeration
 - b) IS : 659 Safety code for air Conditioning.
 - c) IS : 660 Safety code for Mechanical Refrigeration.
 - d) ASHRAE Standard 33- Methods for testing for rating forced circulation in cooling & heating coils.
 - e) ARI 410 Standard for forced circulation air cooling & air heating coils.

List of Approved Makes:

Air-Cooled Scroll Chiller	: Blue Star/Trane/Daikin/Jhonson Controls-York
Power Cables	: CCI/Gloster/Kalinga/Havells/Incab/Universal
Control Cables	: Universal/Finolex/Incab/National cables
Thimbles/Lugs	: Dowell
Vibration Pads	: Resistoflex

LIST OF ITEMS

S.No.	Description	Qty
1	Supply, Installation, Testing and Commissioning of 33 TR, 396000 BTU/Hr. cooling capacity Air-Cooled Scroll Chiller including connecting onto the existing supply/return chilled water headers, electrical connections, thermal insulation etc.,	1 No
2	P/F of 6 nos. of PCC foundation blocks of existing size including vibration isolation pads of size 150 mm x 150 mm x 12 mm (2x6 nos. ribbed neoprene rubber pads with GI sheet in between), if required.	1 No
3	Dismantling of 1 No. of 33 TR Scroll Chiller, PCC blocks (if needed) and shifting of the same to IUAC junkyard or designated location with-in IUAC campus.	1 Job
4	Modification of SS chilled water pipeline to suit chilled water piping connections of the new chilling unit including insulation complete as required.	1 Lot

(Price bid to be filled online separately)