

Government of India  
Bhabha Atomic Research Centre  
**Ion Accelerator Development Division**

Ref No: BARC/ IADD /LEHIPA/AMC/2023/76979

January 06, 2023.

**TENDER NOTICE**

Sealed quotations are invited on behalf of The President of India by Head, Ion Accelerator Development Division, BARC, Trombay, Mumbai- 400 085 from experienced working professional contractors for award of annual maintenance contract of Particle Ion accelerator systems and related sub-systems of Low Energy High Intensity Proton Accelerator (LEHIPA) facility in Common Facility Building (CFB) for one year and extendable further periods on mutual consent on the same terms and conditions.

Due date & time for submission of Tender documents	:	27/1/2023 at 17:00 hrs
Earnest Money Deposit	:	Rs.38,000/- per tender by Demand Draft in favor of <b>Pay &amp; Accounts Officer, BARC</b> payable at SBI, BARC Branch, Trombay, Mumbai-400 085.

• **The scope of work:**

1. Preparation of vacuum systems/joints for beam transport assembly, which includes the systematic cleaning of individual components, preparation of different size vacuum gaskets, arranging nut bolts and support structures & assembly of various accelerator Sub-system, ECR Ion source etc.
2. Electrical power cabling for various accelerator equipments, Maintenance service of electrically powered components such as Bending magnet, Steerer, Solenoid, Gate valve, RFQ, Rotary Pumps, Turbo Molecular Pumps, Sputter Ion pumps, Chiller and their controllers.
3. Regular cleaning, lubrication, inspection and maintenance of accelerator systems and related sub-systems.
4. Disposal of waste material from plant, cleaning of spare parts, replacement of defective fittings/ components etc

• **Contract requirements:**

In LEHIPA, there are different mechanical as well as electrical sub systems like electrically operated pumps, compressors, 50 keV ECR Proton Source, Low Energy Beam Transport Line and 3 MeV Radio Frequency Quadrupole. 1.1 MW Klystron with a 100 kV, 25 A Regulated High Voltage Systems (RHVPS) powers this RF accelerator. The Accelerator system and related subsystems contains a number of mechanical structures, vacuum pumps, chilled water circulators, air compressors etc. All these equipments need frequent maintenance, cleaning and servicing, In

view of jobs which have to be carried out, it is desired from the contractor to put sufficient man power with adequate qualifications as given below

1. Fitter (02 No.) 2. Electrician (01No.) 3. Semi skilled labor (03 Nos.)

• **Work Contract Schedule:**

- f) The 6 member team consisting two fitters, one electrician and three semi skilled labors has to attend LEHIPA site at CFB Building on daily basis as per the schedule made by Engineer- In charge (EIC).
- g) The team should attend the break down complaints over and above routine cleaning / maintenance & upkeep of these systems as and when called for & as directed by EIC.
- h) All consumables and spare parts will be supplied by department.
- i) The EIC will prepare monthly schedule covering all the items to be maintained by the contractor. The schedule will be initialed by the EIC or his nominee after each completed activity on regular basis.

**Terms and conditions:**

1. All works shall be carried out at site.
2. Necessary equipments/tools, safety helmets will be provided IADD, BARC.
3. Personal protective gears such as safety shoes, socks shall be provided by Contractor.
4. All safety precautions must be taken while working on site. Any loss or damage to the property/ machine/ Accelerator systems and sub-systems will be recovered from the Contractor.
5. Contractor should arrange for the Police Verification Certificate (PVC) for man power deputed on site. No person without PVC will be allowed to enter inside BARC.
6. Necessary safety precautions must be taken while working on site. BARC shall not be held responsible for any injury or accident taking place on site.
7. Personnel working at site should carry out cleaning of site and its surrounding regularly and maintain safe and hygienic working environment.
8. Visit of the Contractor or his representative to CFB/BARC prior submitting the quotation is must, prospective bidder or his representative may contact over phone to Shri. Pravin Parate, ACS Section, IADD, BARC Mumbai- 400 085, Phone No. 022-25596682, emails: [prparate@barc.gov.in](mailto:prparate@barc.gov.in) in order to understand the work and site conditions with prior intimation of at least 3 days in advance, The visit will be approved only after verification of credentials of the visitors. The visit may be carried out on January 17 to January 18, 2023 between 10.00 am to 3.00 pm.
9. The visitor must have original identity proof and valid PVC for site visit.
10. Bids received from any party without site visit to CFB/BARC will be summarily rejected.

11. Quotations must be typed on the printed letter head and sent by speed post/ Registered post only super scribing as "Tender No.: BARC/IADD/LEHIPA/AMC/2023/01 for Annual service contract for maintenance service

of accelerator systems and related sub-systems of Low Energy High Intensity Proton Accelerator (LEHIPA) facility in Common Facility Building, CFB, BARC" addressed to **Shri. S K Singh, Head, Accelerator Control System Section, IADD, Van-de-Graaff Building, BARC, Trombay, Mumbai- 400 085.**

12. Bidders should submit work experienced certificates/past work orders stating work experience related to items mentioned in PART-A of bid documents. It is also expected to quote only by experienced contractor having trained work force as mentioned in bid documents. Offers received without site visit and required minimum competency/experience will be summarily rejected.

13. Successful bidder has to furnish performance bank guarantee of 10% of work order cost issued by any nationalized bank, preferably State Bank of India, as per the format supplied by BARC. The Earnest Money Deposit shall be valid for a period of six months or more from the date of submission of the tender. The Earnest Money deposited along with the bid shall be returned after receiving the Performance bank guarantee (after confirmation).

14. Payment Terms: The payments will be released on Quarterly basis after satisfactory completion of maintenance activities and submission of report of completed jobs duly certified by EIC.

15. **Late/Delayed tenders will not be entertained.**

**The undersigned reserves the right to reject/accept any one or all tenders without assigning reasons.**



(S K Singh)

Head, ACSS, IADD  
For & on behalf of President of India

श्री. सुकेश सिंह/S. K. SINGH  
आयन त्वरक विकास प्रभाग/IADD  
भाभा परमाणु अनुसंधान केंद्र/BARC  
भारत सरकार/Govt. of India  
ट्रॉम्बे/Trombay मुंबई/Mumbai-400 085.

(ON FIRM'S LETTER HEAD)

Tender No: BARC/IADD/LEHIPA/AMC/2023/01.

PROFORMA FOR SUBMISSION OF QUOTATION (Part- A)

S. No.	Man power expertise in the field of Particle Ion Accelerator Systems for LEHIPA, IADD, BARC	YES/ NO
1.	Making of different Vacuum joints suitable for generation of vacuum in the order of $1 \times 10^{-9}$ Torr using Copper, Helicoflex, Aluminium wire, Neoprene gaskets etc.	
2.	Knowledge of handling of Helium Leak Detector system for vacuum leak detection.	
3.	Working knowledge of operation/maintenance of Rotary Pumps, Turbo molecular Pumps, Ion Pump for vacuum generation.	
4.	Assembly/maintenance of different Mechanical components/ structures, support structures.	
5.	Working expertise in H.V/L.V. supplies for maintenance. Electrical power cabling for various accelerator equipments, Maintenance service of electrically powered components such as electromagnets, steerers, Solenoid, vacuum gate valves, rotary vacuum pumps, Turbo Molecular Pumps, Sputter Ion pumps, Chiller and their controllers.	
6.	Maintenance, cleaning and servicing of various equipments including mechanical support structures, vacuum pumps, chilled water re-circulators, air compressors.	

(Seal)

(Sign of Proprietor)

(ON FIRMS LETTER HEAD)

Tender No: BARC/IADD/LEHIPA/AMC/2023/01.

PROFORMA FOR SUBMISSION OF QUOTATION (Part- B)

S. No.	Particulars of work	Basic Cost in Rs. (a)	GST (b)	Total Cost (a+b)
1.	Annual service contract for maintenance service of accelerator systems and related subsystems of Low Energy High Intensity Proton Accelerator (LEHIPA) facility in Common Facility Building.			

(Amount in words Rupees \_\_\_\_\_).

PAN No. :

GSTN No.:

(Seal)

(Sign of Proprietor)