

## INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE

2A & B, RAJA S.C.MULLICK ROAD  
JADAVPUR, KOLKATA -700032

TENDER NOTICE NO.:TP/AD-AS/CLUSTER/2013/47 dated 03.12.2013

Indian Association for the Cultivation of Science invites **Tenders** for **one Compute Cluster** and **one High Memory Server**. The bids are to be submitted in Two-Bid pattern i.e. Technical Bid and Price Bid in two separate sealed covers distinctly marked accordingly and both to be put inside another envelope, which should be sealed and superscribed with tender reference no., due date and time of opening. Two bids, i.e. Technical Bid and Price Bid, should be identical in all respect except that the Technical Bid should have blank space at the places where prices have been stated in the Price Bid.

Complete tender should reach the **Office of the Department of Theoretical Physics, Indian Association for the Cultivation of Science, 2A &2B, Raja S. C. Mullick Road, Jadavpur, Kolkata-700032, India** on or before scheduled date & time specified below.

<b>Tender Notice No.</b>	TP/AD-AS/CLUSTER/2013/47 Dated 03.12.2013
<b>Last date and time of submitting tender</b>	December 26, 2013 at 12:00 noon
<b>Pre-bid meeting to discuss technical specifications</b>	December 12, 2013 at 3:00 p.m.
<b>Date and time of opening tender</b>	December 26, 2013 at 3:00 p.m.
<b>Place of opening tender</b>	A.K. Raychaudhuri Hall, 1 <sup>st</sup> Floor, Centenary Building, I.A.C.S., Kolkata
<b>Contact</b>	Email: <a href="mailto:tpad5@iacs.res.in">tpad5@iacs.res.in</a> and <a href="mailto:tpars@iacs.res.in">tpars@iacs.res.in</a> , Tel: +91-33- 2473 4971 (extns: 1757 and 1283, respectively)

The technical bids will be opened first to evaluate technical specifications of the equipment and thereafter the price bids of only the technically qualified companies will be opened. The bidders may submit bids duly signed in their own letterheads.

**Technical Bid Evaluation:** The Technical Bids will be evaluated on December 27, 2013 at 3:00 pm at A.K. Raychaudhuri Hall, 1<sup>st</sup> Floor, Centenary Building, I.A.C.S., Kolkata in the presence of the representatives of intending bidders who will be able to clarify technical aspects of their bids, if any, required by the Technical Evaluation Team.

**Opening of price-bid:** The Price Bids of the bidders qualifying the technical bid will only be opened, the date of which will be intimated to the short-listed bidders at their email addresses. The rest of the bids will be rejected.

Please note that IACS will not provide any accommodation or expenses to any of the bidders for attending opening of technical bid.

## **1. TECHNICAL SPECIFICATIONS:**

Detailed Technical Specifications acceptable for the ‘**Compute Cluster**’ and ‘**High Memory Server**’ are as follows:

### **Technical specification of the Compute Cluster (1 master node + 4 compute nodes):**

**(A) Description: Computer cluster with four nodes in a 2U rack mount form factor (128 cores)**

**Technical Specification of each node is given below :**

**Processor:** 2xAMD Opteron processor Abu Dhabi 16C 6376 2.3G (Total 32 cores)

**RAM:** 64GB DDR3 1600 MHz ECC RAM

**Drives:** 500GB, 7200 RPM, SATA

**Infiniband:** QDR Infiniband (40 Gbps)

**Expansion slots:** At least one slot free for future upgradability

**Others:** Redundant power supply.

**(B) Description: Master node for above mentioned Compute cluster**

**Processor:** 1xAMD Opteron processor Abu Dhabi 8C 6320 2.3G (Total 8 cores).  
Motherboard should have 2G34 Opteron sockets.

**RAM:** 16GB DDR3 1600 MHz ECC RAM

**Raid :**Hardware RAID controller

**Drives:**4x1 TB, SAS

**Infiniband:** QDR Infiniband (40 Gbps)

**Expansion slots:** At least two slot free for future upgradability

**Others:** Redundant power supply, 1U form factor (rack mount)

**Technical specification of the High Memory Server:**

**(C) Description: High Memory Computer Server**

**Processor:** 4xAMD Opteron Abu Dhabi 16C 6376 2.3G 16M 6400MT (Total 64 cores)

**RAM:** 512GB DDR3 ECC Reg 1600 MHz

**Raid:** Capable of RAID

**Drives :**At least 1TB SATA 7.2 K RPM

**Expansion Slot :**At least 2xPCI-e Gen 2.0x16 slot, 1xPCI-e Gen 2.0x8 slot

**Others :**Management LAN, DVD Drive

**Chassis:** 2U or 4U Rack Mount with Redundant Power Supplies.

**Service facility:** Trained technicians should install the instrument and ensure it is operating correctly and within specifications. Supplier should mention their details of service setup that are responsible for after sales support.

## **2. PRICE BID:**

The financial bid indicating (item-wise) price for the item(s) mentioned in the technical bid should be kept in a separate sealed envelope duly superscribed as "PRICE BID" on the outer cover of the envelope as already detailed above. The price bids of only technically qualified bidders will be opened and they will be intimated the date and time of opening of price bids at their email id-(s). Rest of the bids will stand rejected.

**PRICE:** Price to be quoted on CIF to Kolkata Airport. **Price of the equipment to be quoted in US\$.**

## **BID SECURITY:**

1. **EMD to be paid by the Indian Agent in INR.** An Account Payee Demand Draft of Rs.36,000/- (Rupees thirty six thousand only) drawn in favour of "Indian Association for the Cultivation of Science" is to be furnished along with Technical Bid as Bid Security money (or EMD). Bidders registered with the Central Purchase Organizations, National Small Industries Corporation etc. may be exempted from paying EMD subject to their submission of a copy of valid registration certificate with their Technical Bids, failing which their bids will be rejected.
2. The Demand Draft for the Bid-Security money should have at least 45 (forty five) days validity period after the opening of the Bids.
3. In case of non-award of the work, the Bid Security money would be returned to the bidders.

## **PERFORMANCE SECURITY:**

1. An Account Payee Demand of an amount of 10% of the order value in the name of "**Indian Association for the Cultivation of Science**" is to be furnished by the successful bidder to be awarded the contract, as Performance Security money.
2. Performance Security should remain valid for a period of 60 (sixty) days beyond the date of completion of all contractual obligations of the supplier including warranty obligations.
3. Bid Security would be refunded to the successful bidders on receipt of Performance Security.

#### **GENERAL INSTRUCTIONS:**

1. **Vendor Eligibility:** The bids must be submitted by OEMs or OEM supported single vendors only with original authorization certificates from the OEMs. Vendors should have proven experience in setting up a High Performance Computing Centre (HPCC) of minimum 50 TFLOPS in the last three years in India and a minimum of 3 installation of at least 1 TFLOPS in Kolkata Region. A brief proof for such experience (copies of orders/installation certificate) should be included in the technical bid. All the three materials namely the Master, Slave nodes and SMP (A, B and C in the Technical specifications) have to be quoted by a single vendor. Part Quotation by a vendor is not admissible as future warranty and maintenance are difficult in the cases of fragment purchases. The OEM/OEM supported vendor should have their own service centre in Kolkata with technical knowhow to troubleshoot HPCC requirements. Subleasing of service/technical support by OEMs or OEM supported vendors is not admissible. The response time should not be more than 24 hours/next working day.
2. **Submitting Tender:** The Tender must contain materials related to this specifications and should not contain materials that can overtly or covertly try to canvass for the vendor. The vendors are allowed to deviate from the specifications given below only when such deviations are demonstrated to be technically superior. Additional features in the quoted items which are better than those in the indent may be highlighted. The technical bid should not have any mention of pricing. The commercial bid should have the pricing for each option separately. Prices should be inclusive all charges (taxes/duties as applicable, shipping charges, delivery at site, installation etc.) with clearly indicated breakups. Fax, e-mail Tender will not be accepted. Duplicate Bid document must be submitted in Separate closed cover.
3. **Installation and Commissioning:** Free of cost at IACS, Kolkata. The vendors are required to give an estimate of the time required for installation, fine-tuning of the cluster and hand-holding/training of the principal users in the technical bid. The vendor shall be responsible for setting up of High Performance Linux Cluster using Enterprise Linux OS or equivalent (to be provided by vendor).
4. **Compliance List:** The vendor must submit a table indicating the compliance of the features of the model of the components being quoted with those given in the indent. In case of non-compliance against a particular item, the vendor should justify that.

5. **Post-sales service:** The vendor must submit the names of the service engineers employed by them who are competent to serve the HPCC installation along with their contact details in India.
6. **Tender updates:** Prospective bidders may please refer to our website <http://www.iacs.res.in>, occasionally for any update on the tender which may appear from time to time either in respect of pre-bid meeting or otherwise.
7. Incomplete & conditional tenders and tenders received after the due date will be summarily rejected without assigning any reasons thereof. **“Compute Cluster and High Memory Server”** should clearly be written on the envelope.
8. At any time prior to the bid due date, IACS may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder during pre-bid meeting, modify the bidding documents. The amendment(s) will be notified on the Institute website. Prospective bidders are advised to occasionally visit the website ([www.iacs.res.in/tender](http://www.iacs.res.in/tender)) for any amendment.
9. **Payment:** 100% against delivery and successful installation subject to submission of performance guarantee.
10. **Warranty:** Minimum 3 years.
11. **Installation/Demonstration/Application Training at site:** Free of cost by the supplier.
12. **Service facility:** Supplier should mention their details of service setup and Manpower in Kolkata who are responsible for after sales support. Response time should be within 24 hours.
13. **Validity of tender:** Tender submitted shall remain valid at least for three months from the date of opening of the tender. Validity beyond three months from the date of opening of the tender shall be by mutual consent.
14. The tender should accompany a compliance chart.
15. The rate should be inclusive of all taxes, transportation etc. Nothing extra will be paid in addition to the quoted rate.
16. The model number, make, and a printed literature of the product shall be submitted positively.
17. Proposed delivery schedule should be mentioned clearly.
18. Manufacturers/exclusive distributors/vendors should have history of supplying similar type of instruments to this or other Scientific Organization(s).

19. Authorized Dealership Certificate is a must in case of principal manufacturing company is not quoting directly.
20. Guarantee certificate, users manuals etc. are to be handed over to the user after successful commissioning of the system.
21. In the event of date being declared a closed holiday for purchaser's office, the due date for submission of bids and opening of technical bids will be the following working day at the appointed time.
22. In case of any dispute, the decision of the Institute authority shall be final and binding on the bidders.
23. For any clarification regarding technical specifications etc. please send your queries to both "Dr. Arnab Das" at [tpad5@iacs.res.in](mailto:tpad5@iacs.res.in) and "Dr. Arnab Sen" at [tpars@iacs.res.in](mailto:tpars@iacs.res.in).
24. The Institute reserves the right to reject any or all of the tenders received without assigning any reason thereof.

**Registrar**