

INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE

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

Invitation for Tender for Supply of Cluster Computers (Tender Notice No. IACS/SPEC/AD/15/08 Dated 08.09.2015)

Indian Association for the Cultivation of Science invites Sealed Tenders for purchase of a Cluster Computers to be procured from the DAE BRNS Project.

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 **super scribed with 'High Performance Computing Cluster Tender' Tender Notice No., Due date and time of opening.** Two bids i.e. Technical Bid and Price Bid should be identical in all respects except that the Technical Bid should have blank space at the places where prices have been quoted in the Price Bid. The bidders may submit bids duly signed in their own letterheads. **In case the scheduled date of opening of tender is declared as holiday,** the tender will be opened on the next working day at 3.00 P.M. The technical bids will be opened first to evaluate the technical specifications of the equipment and the price bids of the technically qualified companies only will be opened thereafter.

Complete tender bids should reach the Office of the Department of Spectroscopy, Indian Association for the Cultivation of Science, 2A & 2B, Raja S C Mullick Road, Jadavpur, Kolkata 700032, West Bengal, India, on or before the scheduled date & time specified below :

Tender Notice No.	IACS/SPEC/AD/15/08 Dated 08.09.2015
Last Date and Time of submission of Tender	24.09.2015 at 11.00 a.m.
Pre-bid Meeting	22.09.2015 at 3.00 p.m.
Date and time of opening tender	24.09.2015 at 3.00 p.m.
Place of opening tender	C V Raman Hall, IACS, Kolkata.
Contact Details	e-mail : spad@iacs.res.in Tel. : +91-33-2473-4971 (Extension : 2105)

Continued to Page No. 2

1. **TECHNICAL BID:** □ The Technical Bid should contain technical specifications and kept in a separate envelope duly super scribed as "Technical Bid" on the outer side of the envelope as detailed above.

The Technical Specifications acceptable for the '**Computer Cluster**' are as follows:-

4 Nodes with following specifications

Processor	2 x Haswell 12C E5-2680V3 2.5G 30M 9.6GT/s QPI
Memory	64 GB DDR4- 2133 ECC RDIMM
HDD	1 x 1000GB SATA Ent SATA HDD
SSD	1 x Intel DC S3500 120GB, SATA 6Gb/s, MLC 2.5" (FOR OS)
Ethernet	Dual Port Gigabit Ethernet onboard with suitable cable(s),
Chassis	0.5U effective form factor (4 independent compute nodes share single 2U chassis and power supply)
Graphics	Integrated/On-board
Management	IPMI 2.0 compliant with dedicated port. Supports KVM over LAN and Virtual Media redirection
Ports	Minimum one PCI-E Slot free for future upgradability
P. Supply	1600W or more Redundant Power Supplies N+1 Titanium Level (96%)
OS	CentOS Enterprise Linux

Gigabit Switch with following specifications: 24 Port Gigabit Ethernet Switch with required no's of cables, 1U Rack Mountable

UPS & Power: - APC UPS 3 KVA Online. Battery Bank with 1/2 Hr backup.

Power, Heat & Cooling: - . Power consumption and heat dissipation estimate for the total cluster should be mentioned clearly.

Warranty: - Three years on-site warranty for all components.

2. PRICE BID:

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

BID SECURITY:

1. An Account Payee Demand Draft/ Pay Order for **Rs. 45,000/-** (Rupees Forty Five 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/ Pay Order for the Bid-Security money should have at least 60 (sixty) 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 Draft of **Rs. 1,50,000** (Rupees One Lakh Fifty Thousand Only) drawn in favour 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 bidder on receipt of Performance Security.

General Instructions:

(i) 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 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. Sub - leasing 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.

(ii) Submitting Tender: The Tender must contain materials related to these 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 break- ups. Fax, e-mail Tender will not be accepted. Duplicate Bid document must be submitted in Separate closed cover.

(iii) 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).

Continued to Page No. 4

It will be highly desirable if the vendor has proven capability to install some commonly used quantum chemistry programs like Gaussian, ADF, Gamess, Polyrate, NWChem, Molpro, DeMon2K, NAMD, VASP, Quantum Espresso. Parallelized installation of quantum chemistry codes like Gaussian 09 TCP Linda is highly desirable.

(iv) Training: Free training on operation, maintenance and troubleshooting of the whole HPCC Solution should be imparted to at least 2 persons for a period of two weeks at the site of installation.

(v) 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.

(vi) Post-sale 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.

(vii) 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.

(viii) Incomplete and conditional tenders and tenders received after the due date will be summarily rejected without assigning any reasons thereof. Tender Notice and tender for '**Cluster Computers**' should clearly be written on the envelope.

(ix) In case of any dispute, the decision of the Institute authority shall be final and binding on the bidders.

(x) For any clarification regarding technical specifications, etc. you may send your queries to '**Dr. Ayan Datta**' spad@iacs.res.in.

(xi) The Institute reserves the right to reject any or all of the tenders received without assigning any reason thereof.

REGISTRAR