

**INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE**

**2 A & B RAJA S. C. MULLICK ROAD**

**JADAVPUR, KOLKATA – 700032**

**Invitation for Tender for Supply of a High Performance Computing Cluster**

(Tender Notice No. **IACS/SCS/BJ/Project/58, dt 27.05.2021** )

Indian Association for the Cultivation of Science invites Sealed Tenders for purchase of a '**High Performance Computing Cluster (HPCC)** to be procured from the DST – SERB Project (File No. **CRG/2020/000756**).

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. Interested venders may please send their Bids to:

Dr. Biman Jana

School of Chemical Sciences

Indian Association for the Cultivation of Science

2A & 2B Raja S. C. Mullick Road,

Jadavpur, Kolkata 700032

<b>Tender Notice No.</b>	<b>IACS/SCS/BJ/Project/58, Dt 27.05.2021</b>
<b>Last date and time of submitting tender</b>	July 01, 2021 at 3:00 p.m.
<b>Pre-bid meeting to discuss technical specifications</b>	June 17, 2021 at 3:00 p.m.
<b>Date and time of opening tender</b>	July 02, 2021 at 3:00 p.m.
<b>Place of opening tender</b>	I.A.C.S., Kolkata
<b>Contact</b>	Email: <a href="mailto:pcbj@iacs.res.in">pcbj@iacs.res.in</a>

**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.**

**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 '**High Performance Computing Cluster Tender**' are as follows:

<b>GPU-nodes (requirement: minimum 5units)</b>	
<b>Features</b>	<b>Specifications</b>
Processor(s)	2 x intel® Xeon® Processor CLX 4216 2P 16C/32T 2.1G 22M 9.6GT 100W 3647 L1 Or 2 x AMD EPYC Rome 7282 DP/UP 16C/32T 2.8G 64M 120W 4094 Or Intel Xeon / AMD EPYC series processor with higher specifications
Chipset	Intel® C621 chipset Or System on Chip (SoC)
GPU(s)	2 x NVIDIA RTX3080 or higher specifications
Memory (RAM)	Minimum 64 GB DDR4-2400 ECC RDIMM Up to 1.5TB ECC 3DS LRDIMM, 12 DIMM slots or higher specifications
Storage (HDD(s))	Minimum: 2 TB (2 x 1 TB or 1 x 2 TB), 7200 RPM, Enterprise SATA HDD Seagate
Network Interface Card	Dual 1G LAN ports and 1 RJ45 Dedicated IPMI LAN port.
Interconnect	N/A
Exp Slots	4 PCI-E 3.0 x16 (FHFL) slots, 2 PCI-E 3.0 x16 (LP) slots Or higher specifications
Management	IPMI 2.0 with dedicated LAN and KVM over LAN support Or 1 x 1Gbps base-T dedicated management port
Ports	Minimum: 2 USB, 2 Network, 1 Management, 1 x VGA or equivalent
Chassis	Maximum: 4U rack-mountable with sliding rails
Power Supply	1200W Redundant Power Supplies Titanium Level (96%) or higher specification
OS	CentOS or Ubuntu Linux OS
Warranty	3 Years On-site

## **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. 1,00,000/-** (Rupees One Lakh only) drawn in favor 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 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 Draft/Bank Guarantee of **Rs. 1,75,000** (Rupees One Lakh Seventy Five 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.

## **TERMS OF PAYMENT**

Payment will be made through irrevocable Letter of Credit in two instalments. 90% of the money will be released on delivery. Remaining 10% will be released after successful installation of the instrument.

## **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 minimum of 1 HPC cluster with NVIDIA GPUs with 1 TFLOPS or higher in the last three years in India. OEMs should have proven experience in setting up a HPCC of minimum 25 TFLOPS in the last three years in India and a minimum of 3 installations of at least 1 TFLOPS in the Kolkata Region. A brief proof for such experience (copies of orders/installation certificate) should be included in the technical bid. 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 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 break- ups. Fax, e-mail Tender will not be accepted. Pricing should be in **CIF Kolkata**. Price validity should be atleast 160 days from the date of opening the price bid.

**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). It will be highly desirable if the vendor has proven capability to install some commonly used programs like Gromacs, AMBER, CHAARM, 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.

### **Important information**

1. Incomplete tenders will be summarily rejected.
2. In case of any dispute, the decision of the Institute authority shall be final and binding on the bidders.
3. In case of any litigation the matter will be dealt within the jurisdiction of the High Court of Kolkata only
4. For any query pertaining to this bid document correspondence may be addressed to Dr. Biman Jana through email: [pcbj@iacs.res.in](mailto:pcbj@iacs.res.in)
5. I.A.C.S., Kolkata reserves the right to accept or reject any or all the bids in part or in full without assigning any reason / drop any item or part thereof at any time before placing the Purchase Order.

**Registrar**