

Institute of Physics

(An Autonomous Research Institute of Department of Atomic Energy, Govt. of India)

P.O: Sainik School, Bhubaneswar - 751005

INDIA

Last date of submission of tender: 24.12.2024 at 6.00 P.M.

IOP invites prospective bidders to submit their bids through e-tender UNDER SINGLE STAGE TWO BID SYSTEM IN E_TENDER PORTAL <https://eprocure.gov.in/eprocure/app> for the subject work as detailed below.

1. High Performance Computing (HPC) Cluster Support at Institute of Physics, Bhubaneswar

The bidders shall have to participate in online bidding only.

The Institute reserves the right to accept or reject any or all quotations either in full or in part without assigning any reasons thereof.

REGISTRAR
INSTITUTE OF PHYSICS
Bhubaneswar
Handwritten signature

INSTITUTE OF PHYSICS, BHUBANESWAR

Instruction for Online Bid Submission

The details of tender notification can be downloaded from <https://eprocure.gov.in/eprocure/app> or Tender Free View Link from www.iopb.res.in/tenders/

1. Vendors should obtain the USER ID and PASSWORD from **CPP Portal** by clicking on "<https://eprocure.gov.in/eprocure/app>" link in the homepage.
2. For further details on e-Tender participation, please contact Help desk as mentioned below:-

Telephone: 0120-4200 462/ 0120-4001 002/ 0120-4001 005/ 0120-6277 787

Email: support-eproc(at)nic(dot)in.

3. Tenders should be submitted only through **CPP portal** and obtain the Tender Acknowledgement copy as a proof of successful submission.
4. Tender documents for viewing only are also available in Institute of Physics web-site address: **HYPERLINK-**
<http://www.iopb.res.in/tenders/>
5. All corrigendum and addendum will be published on IOP,BBSR website and CPP Portal.
6. IOP,BBSR is publishing all its public and limited tender on IOP,BBSR website.
7. *For any query regarding tender terms & conditions please send email to purchase@iopb.res.in*

SD/-

REGISTRAR

INSTRUCTIONS FOR ONLINE BID SUBMISSION

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at:

<https://eprocure.gov.in/eprocure/app>.

REGISTRATION

Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link "Online bidder Enrollment" on the CPP Portal which is free of charge. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead for misuse. Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

SEARCHING FOR TENDER DOCUMENTS

There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / email in case there is any corrigendum issued to the tender document. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS

Bidder should take into account any corrigendum published on the tender document before submitting their bids. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid: Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

General Terms & Conditions for High Performance Computing (HPC) Cluster Support at Institute of Physics, Bhubaneswar,

1. The tender should be sent in Two-Bid Format:

- (a) Technical Bid
- (b) Price Bid

The “Technical Bid” and “Price Bid” should be uploaded to the relevant sections in the e-Tenders portal. Any document related to the tender must be addressed to Director, Institute of Physics, Bhubaneswar mentioning “Quotation/Document for NIT No.NIT/IOP/96/2024-25 “High Performance Computing (HPC) Cluster Support at Institute of Physics, Bhubaneswar” on it.

2. The Technical Bid should contain:

- (a) Copy of PAN card, TIN/VAT clearance certificate, Service Tax Registration Certificate etc.
- (b) Compliance to Terms and Scope of Contract as per tender document
- (c) Any other tender specific documents

3. The Price Bid (as per tender bid) should contain:

- (a) Annual rate
- (b) Taxes applicable

4. Last date and time for submission of the tender: 24.12.2024

5. All rates quoted should be valid until 90 days

6. Value of Tender (for one year): Rs.2,54,237/- excluding GST. GST will be paid as per applicable rate.

7. Tender Processing fee: As applicable

8. Technical bid should contain Earnest Money Deposit (EMD) of Rs. 6,000/- (Six Thousand only) in any one of the following forms:

(i) DD from any Nationalized Bank, drawn in favor of “Director, Institute of Physics”, payable at Bhubaneswar.

(ii) Term Deposit (for minimum 6 months from the tender closing date) in a nationalized bank duly pledged in favor of “Director, Institute of Physics, Bhubaneswar”.

(iii) Bank Guarantee from any nationalized bank valid for a period of minimum six months from the tender closing date.

Bids not accompanied with EMD will be rejected. EMD of unsuccessful bidders will be returned within six months of closing of tender. Any exemption of EMD will be as per rule.

9. Performance Bank Guarantee (PBG): The awardee firm need to submit Performance Bank Guarantee (PBG) amounting to 10% of contract value for the period of full tenure and 1 month claim lodgement period. The penalty will be charged over PBG in case of any delay in completion of task/ issues. The firm/bidder should have strong technical backup support as the Computer Committee reserves the right to decide the amount of penalty in case the awardee fails to resolve any issue relating to the job.

10. As a part of technical evaluation, the Committee will interact with the HPC specific L2/L3 level support/expert and based on the performance the firm will be technically qualified for further consideration. The firms/bidders are requested to go through the technical skill sets (scope of work) required as per the tender document. The interaction

meeting will be tentatively held within 4-5 days of tender due date, firms/bidders are requested to be prepared for meeting and physical presence (prevailing as per guideline & situation).

11. The authority of the Institute reserves the right to accept or reject any or all quotations either in full or in part without assigning any reasons thereof.

FINANCIAL TERMS:

1. Price bid of only the technically qualified bids will be opened for commercial consideration.
2. One price bid option may be quoted.

OVERVIEW

High Performance Computing (HPC) Facility at Institute is a hybrid environment which consists Sixty (60) Compute Nodes consists CPU only , NVIDIA Tesla K80 cards and Intel Xeon Phi 7120P nodes, two (2) Master Nodes, Four (4) I/O nodes (OSS & MDS) and 50 TB of object storage, QDR (40 Gbps) Infiniband interconnect and 1 Gbps Local Area Network. The infrastructure is of two (2) precision AC (each 10 TON) and uninterrupted supply through three (3) 40KVA & one (1) 60 KVA UPS to facilitate the system.

TECHNICAL BID

High Performance Computing Facility

Sr. No.	Description	Compliance
01.	Serial No of Quotation and Date	
02.	Name of the Firm	
03.	Address of the Firm	
	Telephone No.	
	Fax No.	
	E-mail:	
04.	PAN No.	
05.	Service Tax Registration No.	
06.	Scope of work:	
	Installation, configuration/re-configuration & troubleshooting of operating system (current installation is on CentOS Linux 7.X), storage system, cluster software & various software's in cluster environment. (Firm should deploy the engineer while re-configuration of system as and when required).	
	Installation & configuration/re-configuration of modules related to GPU, Co-processor.	
	Installation, Optimization, debugging, Compilation & porting of various software required by user community.	
	Installation and troubleshooting of application/programs & sound knowledge of Message passing Interface (MPI), Parallel file system (storage), parallel programming.	
	Installation, policy implementation & trouble shooting of Job Scheduling software, queue configuration, fair share, infiniband related issues.	
	Day to day System Administration, Monitoring, operational activities & User level support.	
	Knowledge of shell/perl/python scripting.	
	List of Software (not comprehensive): Quantum Espresso, Transsiesta, Wannier90 v3.0.0, PYXAID, SUMO, ABINIT 9.4.2, Boltztrap, PHONOPY, PHONO3PY, Gollum, ROOT, FastJet, Madminer, nvidia toolkit, lammmps, TensorFlow GNU Plot, Mathematica, Matlab, Comsol	
09.	Terms and conditions of service	
	[A] Period of contract: One Year	

	<u>The contract may be continued/extended with the same Terms & Conditions and price for another one year on satisfactory performance.</u>	
	[B] Remote support from the L2/L3 level and experts for the mentioned scope of work.	
	[C] Institute of Physics will provide access to computer systems as per requirement and will provide super user passwords, when needed. Firm will not misuse the super user privilege and will not reveal the password or transfer data to unauthorized persons/agencies.	
	[D] The Firm will make every effort to resolve the problems at the earliest using best expertise available.	
	[E] The programmes developed under this contract will be property of Institute of Physics and Firm will not have any claim on these programmes.	
	[F] Institute reserves the right to terminate the contract giving one month notice to the firm. If the performance of the firm is not satisfactory, Institute of physics may terminate the contract by serving one month notice to the firm. Under such circumstances, the firm will be paid only for the actual period of service rendered on pro rata basis.	
	[K] The Firm will not be liable for failure to perform its obligations under this contract if such failures result from any force major act of God, fire, storm, earthquake, explosions, strike etc.	
	[L] The Committee will interact with the HPC specific L2/L3 level support/expert and based on the performance the firm will be technically qualified for further consideration. The firms/bidders are requested to go through the technical skill sets (scope of work) required as per the tender document. The interaction meeting will be tentatively held within 4-5 days of tender due date, firms/bidders are requested to be prepared for meeting and physical presence (prevailing as per guideline & situation).	
10.	Terms and conditions of payment: Payment will be made annually/half-yearly/ quarterly after expiry of the term upon satisfactory performance. Advance payment for the term can be made only upon receipt of bank guarantee for the amount from any nationalized bank (Acceptable/ Not acceptable)	
11.	Name, telephone and e-mail of two technical (L2/L3 level) persons to be contacted for HPC Facility. (Bidder should have demonstrated expertise in handling/troubling shooting HPC support, installation, debugging, profiling, Linux/Unix based environment, Database).	Name: Mobile No: Email: Qualification/Expertise in Linux Environment : Name: Mobile No: Email: Qualification/Expertise in Linux Environment :
12.	Escalation level for service: Level – I	Name: Address:

		Telephone E-mail:
	Level – II	Name: Address: Telephone E-mail:
13.	Bidder should have executed at least two (2) HPC installation/support operation in last three year out of which 1 (one) must be in Government/Autonomous/PSUs with demonstrated experience in services listed in clause 06. (Submit the proof in support of above mentioned activities).	Name: Address: Telephone E-mail: Name: Address: Telephone E-mail: Name: Address: Telephone E-mail:
14.	Brief profile of your firm and list of engineers available at office (degree and experience) in HPC support	
15.	List of organization to which firm is currently providing HPC/cluster support.	
16.	Firm should prepare and submit comprehensive document of installation and setup & ready for any transfer of technology. (Firm should deploy the engineer for atleast two weeks for any technology transfer and hand shaking without any financial implication).	
18.	The engineer should visit the site at least once in a quarter and submit the system maintenance/health report.	
17.	Firms are requested/advised to visit the Institute to have an overview of the current system and installation.	

Financial Bid

Sr. No.	Description	
01.	Serial No of Quotation and Date	
02.	Name of the Firm	
03.	Address of the Firm	
04.	Basic rate (exclusive of tax) for High Performance Computing (HPC) Cluster Support for one year	
05.	Taxes	
06.	Total (Basic Rate + Taxes)	

Bid Security Declaration

(In Company's letter head)

Invitation to Bid/Request for Expression of Interest No. [Insert reference no.]

To

Institute of Physics,
PO-Sainik School,
Bhubaneswar-751005

I/We understand that, according to your NIT conditions, bids must be supported by Bid Security. In lieu of the Bid Security, we submit the following undertaking:-

“I/We declare that we will be suspended/ disqualified for tendering with the entity for a period of 1 (One) year from the date of receipt of notice from you, if we withdraw or modify our bid during the validity period **OR** fail to sign the Contract **OR** fail to submit Performance Security (if applicable) before the defined deadline **OR** fail to execute contractual obligation within the stipulated time.”

Date:-

Signature of the Bidder

Place:-

(with Company seal)

DECLARATION BY THE VENDOR

It is hereby declared that I/We the undersigned, have read and examined all the terms and conditions etc. of the tender document for which I/We have signed and submitted the tender under proper lawful Power of Attorney. It is also certified that all the terms and conditions of the tender document are fully acceptable to me/us and I/We will abide by the conditions from serial no. 1 to 21 and we have not given any printed conditions beyond the scope of this tender. This is also certified that I/We/Our principal manufacturing firm has no objection in signing the purchase contract if the opportunity for the supply of the items against this tender is given to me/us.

Date:

Signature:

Address:

Name:

Designation:

On behalf of:

(Company Seal)

The **Online Bids** in all aspects must be completely uploaded & filled online in **Two Envelopes**

as explained below:-

General Information –Self Attested		
Envelope -1 (Following documents to be provided mandatorily as Single PDF File)		
Sl. No.	Basic Information	To be provided in (.pdf) Format only
1	Name of the Company	.PDF
2	Full address of company along with Telephone no. Fax no. E-mail address :	.PDF
3	Local address of company for communication, if any	.PDF
4	Annual turn-over in last 3 financial years in Rs. Lakh. (i) Year 2021-22 (ii) Year 2022-2023 (iii) Year 2023-2024 Please attach balance sheet	.PDF
5	Work order copy of “Tendered Item(s)” or equivalent to our tendered item(s) of last 3 financial years in State Government or Govt. of India Department(s) /Reputed Organization(s) (in Nos. and Value) (Please attach list of clients) (i) Year 2021-22 (ii) Year 2022-2023 (iii) Year 2023-2024 <i>Please attach copy of work order/ Completion Certificate</i>	.PDF
6	GST Registration no. with Place PAN Card Details	.PDF
7	Income Tax Registration no. with place	.PDF
8	Photocopy of EMD	.PDF
9	Name and address on whom work order will be placed	.PDF

10	Bank details (IFSC CODE)	.PDF
14	If you are claiming exemption certificate under SSI/MSME/DAE/NSIC, Please attach self attested copy of certificate which should be valid during the tender process. Parties registered with MSME/NSIC/DAE/SSI should have valid certificate for the items being tendered.	.PDF
16	Vendor Declaration (In Company's Letter Head with Signature, Seal & Stamp)	.PDF
19	Technical Compliance Sheet of IOP	.PDF
20	Technical Bid with Quotation Number and Date (In Company's Letter Head)	.PDF
Envelope -2 (Price Bid should be submitted in given BOQ_XXX.xls format)		
1	Financial/Price bid (BOQ)	.XLS