

# TATA INSTITUTE OF FUNDAMENTAL RESEARCH

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Hyderabad - 500 107, Telangana, India.

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Date: 11-03-2020

## Notice Inviting Tender cum Tender Document (Two Part Public Tender) for the following items:

### Supply, Installation and Commissioning of GPU based High Performance Computing Cluster for TIFR Hyderabad.

As per our technical specifications: Qty. - 1 No.

Public Tender No.	<b>TFR/PD/IC19-28/19028</b>
Published on	<b>12-03-2020</b>
Tender Fees	For Indian Supplier - Rs. 500/- For Foreign Supplier-USD 100
EMD	For Indian Supplier - Rs. 1,16,000/- For Foreign Supplier - USD 1620
Estimated Cost (Estimated cost upto TIFR, Hyderabad inclusive of all applicable charges)	<b>Rs. 58 Lakhs</b>
Pre-Bid Meeting	<b>17-03-2020 at 11.00 AM</b>
Last Date for Submission of Bid	<b>06-04-2020 upto 13.00 Hrs.</b>
Date of Opening Bids(Part A)	<b>06-04-2020 at 16.00 Hrs.</b>

**Both Technical Bid (Part A) and Financial Bid (Part B)** to be submitted within the due date and time in separate envelopes and marked on top as Part A and Part B. These two sealed envelopes should be further put in one Master Envelope super scribed with the Tender No., Due Date in Bold Letters.

Please see attached sheet for conditions of tender.

Note: All future corrigendum/addendum will be published in TIFR Hyderabad website only. All prospective bidders are requested to visit our website regularly for any such updates/Corrigendum/Addendum.

**ADMINISTRATIVE OFFICER  
(PURCHASE SECTION)  
TIFR, HYDERABAD**

## SCOPE OF SUPPLY

### Annexure - A

#### Technical Specifications for Supply, Installation and Commissioning of GPU based High Performance Computing Cluster.

#### Technical pre-qualification for the bidders

Mandatory requirements for a bidder to qualify as a participant in this tender:

s.no	Technical pre-qualification criteria	Compliance Yes/No	Remarks
1.	<p>The bidder should have executed at least three projects using architecture and technologies similar to those being proposed in their quotation against this tender. In addition, the following condition should also be satisfied.</p> <ul style="list-style-type: none"><li>● At least one installation of minimum 20 TF (Tera Flops) or</li><li>● At least two installations of 15 TF or</li><li>● At least three installations of 10 TF</li></ul> <p>Note: All the mentioned peak value should be CPU only sustained peak performance ratings, which should be a cluster (more than one node with a interconnect). GPU Servers and Single servers will not be considered.</p> <p>Purchase order copies of the same must be submitted with the technical bid. The OEM or partner should have successfully executed projects at Government/ Public/ Private Research organizations /institutions performing scientific computation using High Performance Computing Clusters across the country within the last five years.</p> <p>Purchase order with final commissioning report with the mention of compute capacity and architecture details duly signed by customer should be submitted with the technical bid.</p>		

2.	The Bidder should have the experience in building HPC Clusters in the global HPC Market since last 3 years with a logistics facility for the bidding OEM in India for easy access and availability of spares and to ensure the proper back-end support for smooth execution and post-sale support operations. Documentary proofs should be attached.		
3.	All warranty and support must be serviced directly by the OEM or should be from an authorized System Integrator Partner who is authorize to Support the product quoted. TIFR-H requires that there be a Single Point Of Contact (SPOC) from OEM/Vendor who is responsible for all issues between TIFR-H and the OEM.		
4.	Bidder should be either an Original Equipment Manufacturer (OEM) or should be authorized System Integrator Partner having back to back Support Agreement with the OEM. Manufacturer's Authorization Form (MAF) for participating in this tender is mandatory for bidders and should be attached along with technical bid. The Bidder participating in the tender process should give the MAF confirming the bidder's authorization to participate in the tender with tender number and details.		
5.	Hardware and software warranty support requests to be handled and serviced directly by OEM/Bidder. OEM/Bidder should have required critical spares at local service center.		
6.	OEM/Bidder should have a local service center within the radius of 1000 Km from Hyderabad. The OEM/Vendor should have service engineers stationed at Hyderabad in the relevant field of quoted item.		
7.	The OEM/Bidder must have an India based support infrastructure by maintaining a local spares depot in the country. This is to ensure immediate delivery of spare parts from OEM to its channel partner/system integrator.		
8.	The OEM/Bidder should have valid ISO certification. Please attach a copy of the		

	certificate.		
9.	The complete proposed solution must have all encompassing comprehensive onsite advance replacement warranty of 5 years duration which includes hardware, software, firmware, software updates, etc., If the hardware replacement process takes more than two days, the bidder/OEM should provide a standby hardware till the replacement is made.		
10.	Products offered should have official OEM support (No EOL for three years) for the next three years from the date of acceptance of installation.		
11.	The entire HPCC solution proposed by the bidder/OEM should be offered with lowest power consumption for the given specification in the tender.		
12.	All quotations submitted must follow the prescribed format for technical compliance as in the document below. Failure to do will result in the quotation being summarily rejected. Soft copy of the technical bid document in excel format should also be submitted. Soft Copy should be provided in a read only format with CD/DVD.		
13.	One bidder can propose only one technical solution and the price bid for the same should be submitted. Quoting multiple technical solutions with multiple price bids will result in the quotation being summarily rejected.		

### **Technical Qualifying Criteria:**

The Bidders can use any single precision NVIDIA GPUs (Preferably RTX Nvidia GeForce 2080 Ti or better) to achieve a minimum 130 ns/day on the user given gromacs code on a single node using single GPU. There is no restriction on the use of ECC, NV-Link, NVML, to achieve the required results. Bidders should run minimum four concurrent simulations using four independent GPUs on the proposed single node with the given benchmark. The benchmarking code and running instructions will be available in the following link. (<https://cc.tifrh.res.in/webdata/documents/events/benchmarks/gmxbm.zip>).

These results have to be submitted along with the technical bid. The bidders have to reproduce the same results with eight concurrent simulation runs having eight GPUs

on the same node as a part of the commissioning acceptance test. During the acceptance test, the maximum allowable deviation from the mentioned results should be less than 2% only. Bidders should run these codes on the machines and architecture, which they are proposing or similar to which they are proposing. Bidders should provide access for the user for verification, where they have ran the benchmark codes for the technical bids, if necessary. Along with the technical bids, benchmark results should be provided in CD/DVDs only. Hard copies or pen drives are not allowed.

## Scope of Work

### Annexure - B

#### Scope of work includes the following:

Supply, Installation and Commissioning of a High Performance Computing Cluster (HPCC) as per the specifications below:

#### Technical Specifications

Specifications of the High Performance Computing cluster					
<b>Mandatory Clause</b>					
a) All warranty and support must be serviced directly by the OEM or should be from an authorized System Integrator Partner who is authorized to Support the product quoted. TIFR-H requires that there be a Single Point of Contact (SPOC) from OEM/Bidder who is responsible for all issues between TIFR-H and the OEM.					
b) All the hardware and software deployment will be in vendor's scope of work and vendors need to install open source software required by the end user at the time of deployment.					
c) The Compute nodes should be in denser rack form factor designed for cluster solution.					
d) The entire computer nodes must be factory integrated, tested, validated and certified in the bidder/OEM site. No on-site or local assembling of the system at TIFR-H site is allowed. Only rack-mounting, OS and application installation is allowed on-site.					
<b>Mandatory items</b>					
<b>Computer Hardware</b>			<b>Make/Model/Remark to be filled by the Vendor</b>		
S.No	Description	Qty	Make & Model	Compliance Yes/No	Remarks
1	Master + Storage Node	1			
Master node should have minimum 16 Intel Xeon Cascade/AMD EPYC Rome CPU Cores with minimum clock speed of 2.1 GHz or better with sustained real time peak of 0.64 Teraflops (TF) or better having minimum 12 GB DDR4 ECC RAM per core or better in a fully balanced configuration. Along with CPUs, the node should have the following configurations or better					
	CPU Details				

	RAM Details				
	2 x 960 GB Enterprise SATA SSD configured in RAID 1				
	12 x 10 TB 7.2K RPM Enterprise SATA Hard drive configured in RAID 6 with one hot spare.				
	1 x 2GB RAID Card supporting RAID Levels 0,1,5,6 and 10.				
	2 x 1 G Ethernet Ports				
	1 x IPMI 2.0 or equivalent with KVM and media over LAN features				
	Form factor - 2U or better full width server form factor with sliding rack mount kit and peripherals				
	80 Plus platinum or better redundant power supply with IEC C13 to IEC C14 cables				
<b>2</b>	<b>Compute Nodes</b>	<b>3</b>			

Each compute nodes should have minimum 40 or better Intel Xeon Cascade lake/AMD EPYC Rome CPU cores with a minimum clock speed of 2.5 GHz having a real time sustained peak of 2.02 TF or better having minimum 2 GB DDR4 ECC RAM per CPU core or better in a fully balanced configuration. The nodes should have the capability to accommodate minimum 10 Double width active GPUs. Along with the CPUs, the node should have the following configurations or better

	CPU Details				
	RAM Details				
	1 x 120 GB Enterprise SATA SSD for operating System				
	8 x Nvidia GeForce 11 GB				

	<p>RTX 2080 Ti or better. Provision for adding two more similar GPUs should be there.</p> <p>Note: Quote only with blower model active GPUs with following dimensions or better</p> <p>Card Dimensions 1.58" × 10.59" × 4.41", Dual-Slot.</p> <p>Box Dimensions 8.35" x 14.68" x 3.7"</p> <p>Please attach necessary datasheet</p>				
	2 x 1 G Ethernet Ports				
	1 x IPMI 2.0 or equivalent with KVM and media over LAN features				
	Form factor - 2U or better with half width servers in a chassis with sliding rack mount kit and peripherals				
	80 Plus platinum or better redundant power supply with IEC C13 to IEC C14 cables				
<b>3</b>	<b>Networking/Interconnect - 24 Ports fully non blocking 1 G Copper Ethernet Switch with required Ethernet cables for computer and management connectivity</b>	<b>2</b>			
<b>4</b>	<b>Fully Automated System Provisioning</b>	<b>1</b>			
	Operating System - CentOS/Debian latest stable				

	version				
	Clustering Tool kit - Preferably TrinityX or XCAT open source				
	Scheduler - SLURM (partitions needs to be configured according to user requirements)				
	Monitoring/Admin tools - Ganglia, Nagios, Gold accounting, PDSH, PDCP, automated emails, usage report generations, etc.,				
<b>5</b>	<b>Software</b> - Open Source HPC software required by the end user should be installed. Software support should be provided till the end of warranty period				
	<b>Benchmarking</b> - The supplier should run the user provided codes mentioned on technical qualifying criteria and provide the results of the same.				
<b>6</b> 6.1	<b>Warranty and Support</b> - Five years onsite comprehensive advance Hardware replacement warranty and software support	<b>5 years</b>			

	If TIFR-H requests for OS/software upgrade due to their functionality requirements, the bidder/OEM should reinstall/Upgrade the OS and clustering tools and benchmark the cluster and re-commission the HPCC at any point				
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	of time during the warranty period at no cost to purchaser.				
	Training for general system administration with documentation including tasks such as user/node management, installation/upgrade, queuing system management and file system management.				
	One L3 level trained personnel should be available to help either remotely (8.00 AM to 5.00 PM, 6 Days a week) or NBD onsite for technical support for administration/maintenance (both software and hardware levels) of HPC.				
	OEM/Vendor should not change the support engineers assigned to this any tickets before the ticket completion without TIFR-H IT in-charge knowledge.				
	Vendor/OEM engineer should visit TIFR-H every 120 days and carry out proper hardware & software health check of HPC cluster and submit report of the same to the IT in-charge.				
	Vendor will be responsible to protect user data during any maintenance in the warranty period.				
	The OEM/Bidder should have automated ticketing system with a dedicated helpdesk email account which is regularly monitored and it should be available to TIFR-H users.				
	An escalation matrix for issues not resolved by the support personnel, with an expected time line, should be clearly mentioned.				
	The person should have enough experience to handle cluster				

	hardware and software troubleshooting to resolve the problems faced by the users. This should include fine tuning of the scheduler's various capabilities.				
	The person should be able to produce required status report of the cluster when asked using the software installed in the cluster to manage it.				
	Faulty parts should be replaced by NBD (Next Business Day).				
6.2	<b>Documentation</b>				
	<ul style="list-style-type: none"> <li>• Step by step installation guide for node configuration from scratch.</li> <li>• When handing over the cluster the vendor should provide the full design of the cluster installation including the electric connections, network connections, user manual clearly explaining how to use the cluster.</li> </ul>				
6.3	<b>Terms and conditions:</b>				
	Any item not specifically mentioned in the specification but is required for successful implementation of the HPC solution (in the opinion of the vendor) must be brought to our notice and quoted accordingly.				
	The entire solution should fit in a 19" standard IT Rack.				
	At the time of installation, if it is found that some additional hardware or software items are required to meet the operational requirements of the configuration, but not included in the vendor's original list of deliverables, the vendor shall supply such items to ensure the completeness of the				

	configuration at no extra cost.				
	TIFR-H reserves the right to increase or decrease the quantity of the items.				
	<b>In case of future expansion/upgrade of the the quoted clusters, the Bidders should cooperate and provide support to TIFR-H. The expansion or upgrade of the cluster like adding additional nodes, GPUs to the existing setup supplied by the bidder.</b>				
	Delivery period should be within 8 weeks from the date of purchase order. Once delivered to onsite, the installation, commissioning and acceptance testing period will be within 2 weeks from the date of delivery of equipment.				
	The vendor immediately after the award of the work shall prepare a detailed plan of installation as proposed to be followed by placement of the equipment, etc.				
	All vendors participating in this tender must visit the TIFR-H site for a complete site survey and also meet with the TIFR-H IT team in the pre-bid meeting for detailed discussions and clarifications, if any.				
	The installation should be done by trained engineers for HPCC stack followed by comprehensive user training.				
	Installation and integration of all supplied hardware and software shall be done by the vendor. The vendor shall install and configure all required hardware and software suites, including but not limited to racking and stacking, Cluster networking, Configuring all				

	nodes, Execution and submission of jobs, Installation of compilers (with flags for optimization) and applications, Configuration of environment variables and license utility configuration.				
	Entire installation should be done at the proposed site only. Remote control of network will not be given till the commissioning of the HPCC.				
	Give all model numbers of master nodes, compute nodes, hybrid nodes, storage nodes, Network switch model, Accelerator card details (if any), maximum number of port in IB/OPA switch (if any) and how many ports populated. The OEM part code of all the equipment / devices proposed should be provided with the technical bid.				
	Provide case logging procedure for both hardware and software failure.				
	OEM/Bidder is responsible for all performance benchmarks and the quote should contain an undertaking certifying the same from the OEM/Bidder.				
	As a part of the acceptance test, the TIFR-H team will check all the software mentioned above, for at least 3 days. TIFR-H teams will cross-check benchmarking and all other tests based on our input files in the fully offered solution. Apart from this, the bidder has to run and submit Linpack, Lapack, Scalapack benchmark results to the TIFR-H team.				
	All LAN cabling should be done on-site as per the length required using CAT6. All cabling should be				

	done to provide efficient air circulation and should not block any air circulation behind the servers.				
	Please specify the heat dissipation (in BTU) and max power consumption of each component when configured with the above configuration. The bidder has to visit the installation site and provide the plan, cluster rack arrangement and cooling requirements for hosting the HPCC in the given place.				
	All the required CAT6 Patch cables should be branded (ISO/IEC 11801) and it should be molded cables. It should withstand the heat produced at the back of servers.				
	Supplier should have direct system integration (SI) with the OEM whose product the vendor is quoting for. The bidder should have a back-to-back agreement with the OEM to supply and support the OEM's product and solution in India.				
	Itemized price list of each hardware item, software bundle and service and warranty to be given separately and clearly.				
	TIFR-H requires that there be a Single Point of Contact (SPoC) directly from OEM who is responsible for all issues between TIFR-H and the OEM/partner who executes this project.				
	<b>Service Level Agreement:</b> SLA of 98% of uptime within 24 hours reporting onsite, failing which penalty will be applicable based on deviation. The bidder has to ensure that the				

	<p>solution proposed delivers an uptime of 98% of the entire system on a yearly basis and minimum of 92% on a monthly basis. Every percentage of uptime below 98% on a yearly basis will incur 0.1% of the total cost of this tender. In the event of failure of any of the subsystems or components of the proposed solution, the bidder has to ensure that the defects are rectified within two full working days. All these conditions need to be satisfied. Any delay in servicing node(s) beyond 3 days will incur a penalty of 0.2% of the total cost of this tender per day of delay. Any delay in storage or any of its subsystems not working beyond 24 hours will incur a penalty of 0.2% of the total cost of this tender for every completed 24 hours.</p>				
	<p>Bidder should install and accommodate the entire solution in a provided 42U rack with built-in cooling.</p>				
	<p>Entire solution to be implemented in 10 weeks time line. Delay in delivery will have penalty. TIFR-H reserves the right to cancel the order if it is not deployed even after that.</p>				
	<p>Delay due to TIFR-H will not be considered for computing penalty.</p>				

**NOTE:**

1. **The bidder should attach the point by point technical specification provided in the tender in a tabulation format and fill the technical compliance (with additional remarks if any) along with the bid.**
2. **The bidder should ensure the following:**
  - A. **Earnest Money Deposit (EMD), tender fee submission.**
  - B. **Attachment of Annexure - C (Audited Annual Turnover Certified by CA).**
  - C. **Attachment of Annexure - D (Supplier order details with copy document) along with the bid as per tender terms & conditions.**

**Audited Annual Turnover  
Annexure - C**

<b>S.No.</b>	<b>Financial/ Accounting Year</b>	<b>Profit (Rs.)</b>	<b>Loss (Rs.)</b>	<b>Annual Turnover (in INR)</b>
1.				
2.				
3.				

**Authorized Signatory with Seal**

**Note:**

**This Audited Annual Turnover (Annexure - C) for the last 3 years should be certified by Chartered Accountant (CA) as per the format given above duly signed and stamped by the CA on their letterhead.**

**Supply Order details of GPU based High Performance Computing Cluster to Other Firms.**

**Annexure - D**

<b>S.No.</b>	<b>Name of the company with full address</b>	<b>Name of the Project</b>	<b>Purchase Order No. &amp; Date</b>	<b>Brief Item Description with Model No.</b>	<b>Item Value in Currency</b>
<b>Signature</b>					
<b>Name</b>					
<b>Designation</b>					
<b>Name of the Company</b>					
<b>Date</b>					
<b>Seal of the Company</b>					

**NOTE: Please attach the copy documents / purchase order copy for the above mentioned details.**

# **TATA INSTITUTE OF FUNDAMENTAL RESEARCH Centre for Interdisciplinary Sciences**

**Plot No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District.**

**Hyderabad - 500 107, Telangana, India.**

## **(PURCHASE SECTION)**

1. **PART “A” (Technical Bid) consisting of Technical Bid with Commercial Terms and PART “B” (Financial Bid) consisting of only Price** shall be submitted in **separate** sealed envelopes duly superscribed with the tender enquiry number, and the due date in bold letters, addressed to the Administrative Officer, Tata Institute of Fundamental Research, Plot No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District. Hyderabad-500 107, Telangana, India. The envelopes should be clearly marked on top as either PART “A” or PART “B”.

The two sealed covers should be further put in a master cover superscribed with the Tender Enquiry No., Due Date in bold letters, addressed to the Purchase Officer, Tata Institute of Fundamental Research, Plot No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District. Hyderabad-500 107, Telangana, India. The sealed master envelop has to be delivered by hand/courier at the security Gate Office of TIFR-TCIS on or before 13.00 hrs. on the due date specified. The technical bid will be opened in the presence of attending tenderers at 16.00 hrs. on the due date at Purchase Section, TIFR-TCIS, Hyderabad. Tenders submitted after 13.00 hrs. on due date will not be considered.

2. **In case the PART “A” and Part “B” bids are not sealed in separate envelopes the tender will be rejected.**
3. The technical bid should not contain any indication of the price. The bidder should take special care not to mention anything related to pricing and costing aspect of whatsoever nature. The technical bid should include/contain only technical specifications, technical literature, drawing, quantity, manufacturing and delivery schedule, mode and terms of payment, mode of dispatch, the quantum and percentage of statutory levies payable by the purchaser as extra and all related commercial terms and conditions for the supply and for the services like erection and commissioning to be rendered by the tenderer. The details of the validity of the tender should also be indicated along with the commercial details.
4. After scrutiny of Technical Bids, Financial bids of only those bidders who are shortlisted on technical basis will be opened at on later date. The opening date, time and venue will be intimated to the technically successful bidder.
5. **All the bidders/contractors should provide Company Authorization Letter duly signed and stamped by Competent Authority to participate in the tender related meetings at TIFR Hyderabad.**

## **6. Tender Document Fee:**

- a. For Indian Supplier: Tender fee for Rs. 500/- (Non-refundable) in the form of D.D. in favour of "TIFR Centre for Interdisciplinary Sciences", payable at Hyderabad to be enclosed with the Technical Bid (Part - A).
- b. For Foreign Supplier: Tender fee of USD 100 (Non-refundable) in the form of advance cheque in favour of "TIFR Centre for Interdisciplinary Sciences", payable at Hyderabad to be enclosed with the Technical Bid (Part A).

## **7. Earnest Money Deposit (EMD):**

- a. For Indian Supplier: Earnest Money Deposit (EMD) for Rs. 1,16,000/-in the form of D.D. in favour of "TIFR Centre for Interdisciplinary Sciences", payable at Hyderabad to be enclosed along with the technical Bid (Part - A).
- b. For Foreign Supplier: Earnest Money (EMD) for USD 1620 in the form of advance cheque in favour of "TIFR Centre for Interdisciplinary Sciences", payable at Hyderabad to be enclosed with the Technical Bid (Part - A).

EMD shall be interest free and it will be refunded to the unsuccessful bidder without any interest. EMD will be forfeited if the bidder withdraws or amend impairs or derogates from the tender in any respect.

## **8. Bidders who have not accepted the job/order awarded to them or withdrawn from the tender process OR whose EMD/Security deposit has been forfeited in the past, their bids will not be considered and treated as ineligible / disqualified.**

9. After downloading the documents please inform your company details such as name, address, telephone nos., contact person and email address etc. by email to us ([purchasergroup@tifrh.res.in](mailto:purchasergroup@tifrh.res.in) , [jrathna@tifrh.res.in](mailto:jrathna@tifrh.res.in)) to enable us to inform prospective bidder for any corrigendum/changes if any; in the Tender document before due date.
10. Quotations must be valid for a period of 180 days from the due date.
11. Tenders containing correction, overwriting will not be considered. Late or delayed/Unsolicited quotations/offers shall not be considered at all. These will be returned to the firms as it is. Post tender revisions/corrections shall also not be considered.
12. Tenderer should sign on all the pages of the technical bid and the price bid.

13. The price quoted for Import item must be on following basis:
  - a. Ex-Work/factory duly packed airworthy/seaworthy and of international standard
  - b. FOB/FCA
  - c. CIF Hyderabad, Airport Port (all-inclusive i.e. Cost of Goods, Packing, Insurance, Inland transportation, freight etc.)

For local item /supply, offer should be on FOR basis (i.e. total landed cost for delivery at TIFR-TCIS, Hyderabad).

The dimension of the item (viz. H, W, L, weight etc.) shall be specifically stated and also mention whether the mode of shipping the item is Airworthiness / Seaworthiness or both. Accordingly the mode of shipment will be decided by TIFR-TCIS.

**Price must be quoted in the Price Bid Format attached herewith as “Part -B” (Financial Bid).**

14. If equipment offered is to be imported, arrangements for import will be made by us.
15. Tenders who do not comply with any of the condition are liable to be rejected.
16. The Institute shall be under no obligation to accept the lowest or any other tender received in response to this tender notice and shall be entitled to reject any tender without assigning any reason whatsoever.
17. TIFR reserves the right to place the order for part/reduced quantity than what is specified in the tender.
18. **Performance Security:** The Successful bidders should deposit @ 10% of Purchase Order value as Performance Security against issue of order/contract to be submitted within 15 days against issue of order/contract. The performance security shall be in the form of Demand Draft in favour of “TIFR Centre for Interdisciplinary Sciences, Hyderabad” payable at Hyderabad (or) Bank Guarantee from State Bank of India & Associates (or) any one of the Nationalized Banks.

The Performance Security will be returned back to the successful supplier on receipt of the Performance Bank Guarantee (or) The 10% Performance Security Deposit may be extended as Performance Bank Guarantee valid for 60 days beyond the date of completion of all contractual obligations of the supplier including warranty period. Vendor should clearly mention their acceptance to this effect in their quote.

**Performance Bank Guarantee:** Performance Bank Guarantee for 10% of the value of supply should be provided and it should be valid for 60 days beyond the date of completion of all contractual obligations of the supplier including warranty period. Performance Bank Guarantee should be from Nationalised Bank. In case Performance Bank Guarantee is not provided, 90% payment only would be released and balance after 60 days beyond the date of completion of all contractual obligations of the supplier including warranty period. Vendor should clearly mention their acceptance to this effect in their quote.

19. **PAYMENT TERMS:** 80% payment shall be made through irrevocable L/C on presentation and receipt of complete, clear shipping documents, against confirmation from TIFR, Hyderabad and balance 20% of the amount shall be released after successful installation, commissioning and acceptance of the equipment certified by purchaser and on submission of "Performance Bank Guarantee (PBG)" for an amount equivalent to 10% of the Purchase Order Value. The PBG shall be valid for a period of 60 days beyond the date of warranty period. The PBG should be from State Bank of India & Associates (or) any one of the Nationalized Banks.
20. **PAYMENT TERMS FOR INDIGENOUS ITEMS:** 100% payment shall be released after receipt, installation, commissioning and acceptance of the equipment.
21. **Pre Inspection Report:** The successful bidder should submit the Pre Inspection Report to TIFR Hyderabad before dispatch of the material (if required).
22. Repair / replacement if required any during the warranty period, necessary customs clearance charges / customs duty charges, freight charges for sending back the repair material to supplier and import freight charges of replacement should be borne by the supplier.
23. For Import cases: No Agency commission will be paid as per Govt. of India rules.
24. All bank charges outside India to supplier's account only.
25. TIFR is exempted from paying of Custom Duty under the notification No.51/96 dated 23.07.1996, Excise Duty under the notification No.10/97 dated 01.03.1997, for all procurements/supply meant exclusively for Educational, scientific and research purpose. Whenever the exemption certificate not honored by the authorities, the applicable duty will have to be paid. Hence Excise & Custom duties, if any, should be shown separately.

TIFR is a public funded research institute and is entitled to concessional rate of GST @ 5% for certain items supplied for research purpose vide notification no. 45/2017 (CGST) and 45/2017 (IGST) dated 14<sup>th</sup> Nov, 2017. The offer should be submitted after fully considering the above notification.

26. **TAXES:** TIFR does not have any exemption/concession on payment of Sales Tax and we are not authorized to issue any Sales Tax Form 'C' & 'D'.

Deduction of Indian Income Tax Deduction at Source: The Deduction of Indian Income Tax Deduction at source (TDS) will be deducted as per IT Act. The taxes at the time of actual utilization of service etc. will be deducted if applicable any.

GST rule will be applicable with effect from 01.07.2017. The applicable TDS /other charges if any as per GST rule will be deducted as per new GST regime.

TIFR-Hyderabad GST NO: 36AAATT3951F2ZG.

27. Bidders, please provide the PAN No., Bank Details, email ID, Contact person details, GST No etc.
- 28. The Supplier shall arrange to ship the ordered materials within the mutually agreed delivery period mentioned in the order unless extended with/without penalty. Please mention the Delivery Period Clearly in the Bid, however effort to be taken to deliver the materials at the earliest.**
- In case of delay in supply on part of the supplier, a penalty @0.5% per week of order value will be charged for delayed period subject to a maximum of 10% order value.
  - If the delay in the shipment of the ordered materials attributable to the supplier exceeds agreed time period from the date of original agreed upon date of shipment and extended with/without penalty, the TIFR-TCIS, Hyderabad shall have the right to cancel the contract / purchase order and recover the liquidated damages from other dues of the party or by legal means. It will also affect the other/future business dealings with such suppliers.
  - The same rate of penalty shall be applicable for late installation of the equipment/instrument also.
29. **COMMENCEMENT OF WARRANTY PERIOD:** The warranty period of an item shall commence from the date of receipt of the item in good working condition and satisfactory installation/commissioning/demonstration at the project site.
30. **ANNUAL MAINTENANCE CHARGES:** The bidder must mention in the quotation, the rate/amount of annual maintenance charges, if we opt for maintenance contract after expiry of the warranty period.
31. Specifications are basic essence of the product. It must be ensured that the offers must be strictly as per our specifications. At the same time it must be kept in mind that merely copying our specifications in the quotation shall not make the parties eligible for consideration of the quotation. A quotation has to be supported with the printed technical leaflet/literature of the quoted model of the item by the quoting party/manufacturer.
32. **OBSERVANCE OF LOCAL LAWS:** Wherever applicable (particularly for Local vendors), the vendor / contractor shall comply with all law, statutory rules & regulations etc. The vendor/ contractor shall obtain all necessary permits / approval from the local Governing Body, Police, and other concerned Authorities as may be required under law. The vendor /contractor shall pay all types of taxes, fees, license charges, deposits, duties, tolls, royalty or other charges that may be leviable account of any of the operations connected with the execution of this work/ contract.
33. In case of any interpretational issues arises in this tender, the interpretation/decision of TIFR Hyderabad shall be final and binding on the bidder.

34. It is the responsibility of the vendor to make sure that the system being proposed can be exported to India with TIFR Hyderabad as the end user. All clarificatory documentation must be submitted with the Bid.
35. TIFR TCIS reserves the right to ask for or to provide any clarification, changes after the release of this tender. Any changes or clarifications provided by TIFR-TCIS, Hyderabad may be checked at TIFR-TCIS website: <https://www.tifrh.res.in/index.php/commercial-tenders>

**ADMINISTRATIVE OFFICER  
(PURCHASE SECTION)  
TIFR, HYDERABAD**

**Financial Bid for Supply, Installation and Commissioning of GPU based High Performance Computing Cluster for TIFR Hyderabad.**

**(Part - B)**

**Annexure - E**

TIFR-H Enquiry No & Date: \_\_\_\_\_

Due date: \_\_\_\_\_

Bidder's Quotation Ref No. & Date: \_\_\_\_\_

All the Bidders should quote their offer in the following format for uniformity.

**Mandatory Items**

S.No.	Item Description as per tender	Make/Brand/Type	Qty.	Rate per unit (Currency)	Basic Cost of main item (In Currency)
A. 1.	Master + Storage Node		1 No.		
2.	Compute Nodes		3 No's		
3.	Networking/Interconnect - 1 No of 24 Ports 1 G copper Ethernet Switch with required cables		2 No's		
B.	Ex-Works cost (Duly packed Airworthy/Seaworthy of international standard)				
C.	FOB /FCA Cost (Name of Airport_____)				
D.	CIP/CIF Cost (Upto Hyderabad Airport)(all inclusive i.e. Cost of Goods, Packing, Insurance, Inland transportation, freight etc.)				

**Note:**

1. All the column should be appropriately filled and not left blank.
2. Do not include any other charges, taxes, duties etc. in the Basic Cost of the item.
3. Any accessories, optional items should be shown separately using above format.
4. Use separate sheet for detail description, specification of the item, but prices should be quoted in same format.
5. Prices quoted in Indian Currency should be on F.O.R. basis and mentioned separately using different table format showing all the applicable taxes/Duties like GST, Freight & Transportation charges and installation charges etc.
6. TIFR Hyderabad being educational & research institute, discounted price shall be offered.

**Signature of the Bidder**

Name, Address contact no \_\_\_\_\_

& email id of the bidder/ \_\_\_\_\_

Company with company's Stamp or Seal \_\_\_\_\_

**Date:** \_\_\_\_\_

**Place:** \_\_\_\_\_

**Financial Bid for Annual Maintenance Contract for GPU based High Performance Computing Cluster for TIFR Hyderabad.**

**(Part - B)**

**Annexure - F**

TIFR Hyderabad Enquiry No & Date: \_\_\_\_\_

Due date: \_\_\_\_\_

Bidder's Quotation Ref No. & Date: \_\_\_\_\_

Financial Bid (Bidders must quote their rates using this Format)

<b>Note: The bidder must mention in the quotation, the rate/amount of annual maintenance charges, if we opt for maintenance contract after expiry of the warranty period.</b>
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S.No.	AMC (for item Description as per Tender) after Warranty Period	Rate / Year In INR	Tax (%) or Amount in INR	Total Amount in INR
1.	1 <sup>st</sup> Year			
2.	2 <sup>nd</sup> Year			
3.	3 <sup>rd</sup> Year			

**Note:**

1. All the column should be appropriately filled and not left blank.
2. Do not include any other charges, taxes, duties etc. in the Basic Cost of the item.
3. Prices should be quoted in same format.
4. TIFR Hyderabad being educational & research institute, discounted price shall be offered.

**Signature of the Bidder**

Name, Address contact no \_\_\_\_\_

& email id of the bidder/ \_\_\_\_\_

Company with company's Stamp or Seal \_\_\_\_\_

**Date:** \_\_\_\_\_

**Place:** \_\_\_\_\_