### TATA INSTITUTE OF FUNDAMENTAL RESEARCH

Plot No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District. Hyderabad - 500 107, Telangana, India.

Telephone: +91-40-2020 3020 Email: <a href="mailto:purchasegroup@tifrh.res.in">purchasegroup@tifrh.res.in</a>

Website: www.tifrh.res.in Date: 13-01-2021

Notice Inviting Tender cum Tender Document (Three 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.	TIFR/PD/IC20-08/20008
Published on	14-01-2021
	For Indian Supplier - Rs. 500/-
Tender Fees	For Foreign Supplier-USD 100
Estimated Cost (Estimated cost upto TIFR, Hyderabad inclusive of all applicable charges)	Rs. 58,00,000/-
Pre-Bid Meeting	19-01-2021 at 11.00 AM
Last Date for Submission of Bid	03-02-2021 upto 13.00 Hrs.
Date of Opening Bids(Part A)	03-02-2021 at 15.00 Hrs.

<u>Pre-Qualification (PART A), Technical Bid (Part B) and Financial Bid (Part C)</u> to be submitted within the due date and time in separate envelopes and marked on top as Part A, Part B and Part C. These three 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

### Pre-Qualification Criteria for GPU based High Performance Computing Cluster for TIFR Hyderabad

### PART - A

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

The bidder should mandatorily submit the following documents in separate envelopes mentioned as PART "A", PART "B" and PART "C".

PART "A" (Pre-Qualification) consists of Certificate for Local Content as per the Annexure – F given in the tender document and Self-Declaration Content as per the Annexure - G given in the tender document, Tender Fee and Bid Security / EMD. PART "B" (Technical Bid) consisting of Technical Bid with Commercial Terms and PART "C" (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", PART "B" or PART "C".

The bidders who are qualifying in PART "A" (Pre-Qualification) then those bidders PART "B" (Technical Bid) will only be opened and those bidders who are qualifying in PART "A" (Pre-Qualification Criteria) and PART "B" (Technical Bid) their PART "C" (Financial Bid) will be opened.

All PART "A" (Pre-Qualification), PART "B" (Technical Bid) and PART "C" (Financial Bid) further to be kept in a Sealed Master Envelope duly superscribed with the tender enquiry number and the due date in bold letters addressed to Administrative Officer, Tata Institute of Fundamental Research, Plot No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District. Hyderabad-500 107, Telangana, India.

### PART - B

### **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.	The bidder/OEM 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.	•	
	<ul> <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>		
	Note: All the mentioned peak value should be CPU only sustained peak performance ratings, which should be a cluster with more than four nodes with any interconnect with minimum 2 GPUs in a node. Single node with multiple GPUs or CPU based servers will not be considered.		
	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.		
	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.		
2.	The Bidder/OEM should have minimum one installation listed in India's top 500 supercomputer list maintained by CDAC, India and they should have experience in building HPC Clusters in the global (Including India) 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 Bidder/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) from the motherboard	
	manufacturer is mandatory for bidders and the same	
	should be attached along with technical bid. The MAF	
	should confirm 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 in	
	Hyderabad. The OEM/Vendor should have service	
	engineers stationed at Hyderabad in the relevant field	
	of quoted item. The details of the same should be	
	furnished along with the technical bid.	
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 Bidder and OEM should not be blacklisted in the	
	past 10 years from any central/State or UT	
	government bodies. Please attach a copy of the self-	
	declaration of the same from the OEM and Bidder.	
9.	The OEM/Bidder should have valid BIS and ISO	
	certification. Please attach a copy of the certificate.	
10.	OEM should have fully or partly	
	manufacturing/assembly facility in India to meet	
	Government class 1 or Class 2 category standard.	
11.	The Bidders and OEM shall be required to provide a	
	certificate from the statutory auditor or cost auditor	
	of the company (in case of companies) or from a	
	practicing cost accountant or practicing chartered	
	accountant (in respect of suppliers other than	
	companies} giving the percentage of local content for	
	tompamos, giving the percentage of focus content for	1

	supporting their claim as class -I local suppliers/class - II local suppliers. The vendors should also give details location (s) at which the local value addition is	
	made.	
12.	The complete proposed solution must have all encompassing comprehensive onsite advance replacement warranty as mentioned in the specifications, 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.	
13.		
15.	Products offered should have official OEM support for the next three years from the date of acceptance of installation.	
14.	The entire HPCC solution proposed by the bidder/OEM should be offered with lowest power consumption for the given specification in the tender.	
15.	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.	
16.	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 Bidder/OEM should have experience in installing and maintaining GPU based HPC clusters installed with GPU version of Gromacs. The bidder/OEM should provide minimum two letters for satisfactory installation and working of the same from their end users, where they have installed previously.

### 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 Mandatory Clause

- 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 opensource software required by the end user at the time of deployment.
- c) 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.

### **Mandatory items**

Computer Hardware			Make/I	Model/Remark ( by the Vendo	
S.No	Description	Qty	Make & Model	Compliance Yes/No	Remarks
1	Master + Storage Node	1			

Master node should have minimum 16 Intel/AMD CPU Cores having AVX 256 or better with minimum clock speed of 2.1 GHz 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 16 TB 7.2K RPM Enterprise SATA Hard drive configured in RAID 6 with one hot spare.		
1 x 2GB RAID Card supporting		

2	<b>Compute Nodes</b>	8	_	
	80 Plus platinum or better redundant power supply with IEC C13 to IEC C14 cables			
	IPMI 2.0, shared Supports KVM over LAN support			
	Form factor - 2U or better full width server form factor with sliding rack mount kit and peripherals			
	2 x 1 G Ethernet Ports			
	RAID Levels 0,1,5,6 and 10 with flash backed cache.			

Each compute nodes should have minimum 32 or better Intel /AMD CPU cores having AVX 256 or better with a minimum clock speed of 2.9 GHz having minimum 3 GB DDR4 ECC RAM/Core or better in a balanced configuration. The nodes should have the capability to accommodate minimum two active GPUs. Along with the CPUs, the node should have the following configurations or better

	ing configurations of better		T	
	CPU Details			
	RAM Details			
	1 x 120 GB Enterprise SATA SSD or M.2 SSD for operating System			
	2 x Nvidia GeForce 10 GB RTX 3080.			
	2 x 1 G Ethernet Ports			
	IPMI 2.0, shared Supports KVM over LAN support			
	Form factor - 4U or better			
	80 Plus platinum or better redundant power supply with IEC C13 to IEC C14 cables			
3	Networking/Interconnect - 24 Ports fully non-blocking 1 G Copper Ethernet Switch with required Ethernet cables for computer and management connectivity	2		
4	Fully Automated System Provisioning	1		
	Operating System -			

CentOS/Debian latest stable version						
Clustering Tool kit - 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>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.						
Warranty and Support - Five years for item no 1,3 and 3 years for item no 2 with onsite comprehensive advance Hardware replacement warranty and software support						
upgrade due to their function requirements, the bidder/OEM sh reinstall/Upgrade the OS and cluster tools and benchmark the cluster and commission the HPCC at any point time during the warranty period a cost to purchaser.  Training for general system administration with documentatincluding tasks such as user/management, installation/upgradeuing system management and system management.  One L3 level trained personnel should available to help either remotely (AM to 5.00 PM, 6 Days a week) or	nality nould being dirent of at no stem ation node rade, file ld be (8.00 NBD					
	Clustering Tool kit - 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.,  Software - Open Source HPC software required by the end user should be installed. Software support should be provided till the end of warranty period  Benchmarking - The supplier should run the user provided codes mentioned on technical qualifying criteria and provide the results of the same.  Warranty and Support - Five years for item no 1,3 and 3 years for item no 2 with onsite comprehensive advance Hardware replacement warranty and software support  If TIFR-H requests for OS/soft upgrade due to their function requirements, the bidder/OEM shreinstall/Upgrade the OS and clusted tools and benchmark the cluster and commission the HPCC at any point time during the warranty period accost to purchaser.  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	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	Documentation		
	<ul> <li>Step by step installation guide for</li> </ul>		
	node configuration from scratch.		
	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.		<u> </u>
6.3	Terms and conditions:		
	Any item not specifically mentioned in		
	the specification but is required for		
	successful implementation of the HPC		
	solution (in the opinion of the vendor)		

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must be by quoted accord	rought to our notice and rdingly.			
	solution should fit in a 19"			
standard IT				
At the time	of installation, if it is found			
that some	additional hardware or			
software ite	ms are required to meet the			
operational	requirements of the			
_	n, but not included in the			
	ginal list of deliverables, the			
	supply such items to ensure			
	eness of the configuration at			
no extra cost	_			
<del> </del>	rves the right to increase or			
	quantity of the items.			
	future expansion/upgrade			
	uoted clusters, the Bidders			
_	ooperate and provide			
	TIFR-H. The expansion or			
	the cluster like adding			
	nodes, GPUs to the existing			
	ied by the bidder.			
	eriod should be within 8			
	the date of purchase order.			
	ed to onsite, the installation			
	ing and acceptance testing			
	be within 2 weeks from the			
	ery of equipment.			
	immediately after the award			
	shall prepare a detailed plan			
	ion as proposed to be			
	placement of the equipment,			
etc.	1 1			
<del> </del>	participating in this tender			
	e TIFR-H site for a complete			
	and also meet with the TIFR-			
	in the pre-bid meeting for			
	cussions and clarifications, if			
any.				
	ation should be done by			
	gineers for HPCC stack			
	by comprehensive user			
training.				
Installation	and integration of all			
supplied har	dware and software shall be			
done by the	e vendor. The vendor shall			
install and	configure all required			
hardware ar	nd software suites, including			
but not limi	ted to racking and stacking,			
Cluster ne	tworking, Configuring all			
I had a Dage	ition and submission of jobs,			
but not limi Cluster ne	ted to racking and stacking, tworking, Configuring all			

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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,		
,		
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.		
Service Level Agreement: 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		
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.		
Bidder should install and accommodate		
the entire solution in a provided 42U		
rack with built-in cooling.		
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.		
Delay due to TIFR-H will not be		
considered for computing penalty.		

#### 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.
- A. The bidder should ensure the following:

Bid Security / EMD (Earnest Money Deposit): The bidder should provide the bid security declaration in the letterhead duly signed and stamped accepting the statement as follows:

"If the bidder withdraw (or) modify the bids during the validity etc., the bidders will be suspended in participating the tenders further period, decision of TIFR Hyderabad shall be final and binding on the bidder".

This will be applicable as per the procedure / rule amended from time to time. The bidder should submit the above mentioned Bid Security Declaration along with the Pre-Qualification (Part A) instead of EMD (Earnest Money Deposit).

- B. Tender fee should be submitted along with Pre-Qualification (Part A).
- C. Attachment of Annexure B (Audited Annual Turnover Certified by CA).
- D. Attachment of Annexure C (Supplier order details with copy document) along with the bid as per tender terms & conditions.
- E. The bidder should submit the Certificate for Local Content as per the Annexure F duly signed and stamped on the letterhead along with the tender along with Pre-Qualification Criteria Part A.
- F. The bidder should submit the Self Declaration Format as per the Annexure G duly signed and stamped on the letterhead along with the tender along with Pre-Qualification Criteria Part A.

#### NOTE 2:

- Pre-bid meeting will be conducted through online.
- Bidders / Vendors are requested to visit TIFR Hyderabad website for details / update.
- The bidders / vendors are strictly restricted to enter TIFR Hyderabad campus due to the current COVID 19 Pandemic Situation. The Technical Bids of the same will be opened by the TIFR Hyderabad officials. The tender details will be informed / communicated to the respective bidders through online meeting (or) email.

### Audited Annual Turnover Annexure - B

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

### **Authorized Signatory with Seal**

### Note:

This Audited Annual Turnover (Annexure – B) 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 for TIFR Hyderabad.

### Annexure - C

	Name of the	Name	Purchase	Brief Item	Item
S.No.	company with full address	of the Project	Order No. & Date	Description with Model No.	Value in Currency
Signat	ure				
Name					
Design	nation				
Name	of the Company				
Date					
Seal of	f the Company				

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" (Pre-Qualification) consists of Certificate for Local Content as per the Annexure - F given in the tender document and Self-Declaration Content as per the Annexure - G given in the tender document, Tender Fee and Bid Security / EMD. PART "B" (Technical Bid) consisting of Technical Bid with Commercial Terms and PART "C" (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", PART "B" or PART "C".

The three 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 Pre-Qualification (Part – A) will be opened at 15.00 hrs. on the due date at Purchase Section, TIFR, Hyderabad. Tenders submitted after 13.00 hrs. on due date will not be considered.

2. In case the PART "A", PART "B" and Part "C" bids are not sealed in separate envelopes the tender will be rejected.

All PART "A" (Pre-Qualification), PART "B" (Technical Bid) and PART "C" (Financial Bid) further to be kept in a Sealed Master Envelope duly superscribed with the tender enquiry number and the due date in bold letters addressed to Administrative Officer, Tata Institute of Fundamental Research, Plot No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District. Hyderabad-500 107, Telangana, India.

- 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 Pre-Qualification Criteria, Technical Bids, Financial bids of only those bidders who are shortlisted in Pre-Qualification Criteria and 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 Pre-Qualification (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 Pre-Qualification (Part A).

### 7. Bid Security / EMD (Earnest Money Deposit):

Bid Security / EMD (Earnest Money Deposit): The bidder should provide the bid security declaration in the letterhead duly signed and stamped accepting the statement as follows: "If the bidder withdraw (or) modify the bids during the validity etc., the bidders will be suspended in participating the tenders further period, decision of TIFR Hyderabad shall be final and binding on the bidder".

This will be applicable as per the procedure / rule amended from time to time. The bidder should submit the above mentioned Bid Security Declaration along with the Pre-Qualification (Part A) instead of EMD (Earnest Money Deposit).

- 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 (purchasegroup@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 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-Hyderabad.

### Price must be quoted in the Price Bid Format attached herewith as "Part -C" (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 bidder should deposit @ 3% of Purchase Order value as Performance Security. The Performance Security should 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 @ 3% should be valid for a period of 60 days beyond the date of completion of all contractual obligations of the supplier including warranty period. In case Performance Security @ 3% is not provided, then 97% 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: 100% Letter of Credit will be opened and 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 Security" for an amount equivalent to 3% of the Purchase Order Value.

20. Payment term for Total / Full INR bids: 80% payment shall be released after receipt of complete material as per purchase order in a single lot and acceptance of the same at TIFR Hyderabad and balance 20% payment shall be released after installation, commissioning and acceptance of the equipment at TIFR Hyderabad Campus and on submission of BG @ 3% of the Purchase Order Value.

Partial shipment for foreign bids / Partial delivery of material for full INR bids will not be accepted by TIFR Hyderabad.

- 21. **PAYMENT TERMS FOR INDIGENOUS ITEMS**: 100% payment shall be released after receipt, installation, commissioning and acceptance of the equipment at TIFR Hyderabad.
- 22. **Pre Inspection Report:** The successful bidder should submit the Pre Inspection Report to TIFR Hyderabad before dispatch of the material (if required).
- 23. The suppliers / bidders whose firms are registered with SSI / MSME / NSIC and having a valid certificate are exempted from paying Tender Fee and EMD (Earnest Money Deposit) should be submitted along with Pre-Qualification (Part A).
- 24. 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.
- 25. For Import cases: No Agency commission will be paid as per Govt. of India rules.
- 26. All bank charges outside India to supplier's account only.
- 27. 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 14th Nov, 2017. The offer should be submitted after fully considering the above notification.

28. **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.

- 29. The bid should be submitted against the tender directly by Indian Bidders (or) Bidders through an authorized representative in India/Class I Local Supplier/Class II Local Supplier, through partnerships, cooperation with local companies/with Indian suppliers, as per applicable Notification/Rule as amended from time to time.".
- 30. Company/Supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content as per applicable Notification/Rule amended from time to time (if required).
- 31. The invitation is reserved only for Class "1" and Class "2" Local Suppliers as prescribed in "Public Procurement (Preference to Make in India) order 2017 of GOI, Dept of DIPP" (OM No. P-45021/2/2017-PP(BE-II) dated 04th June, 2020.
- 32. For the above purpose, local supplier means a supplier or service provider whose product or service offered for procurement meets the minimum local content as prescribed in "Public Procurement (Preference to Make in India) order 2017 of GOI, Dept of DIPP" (OM No. P-45021/2/2017-PP(BE-II) dated 04th June, 2020. Necessary certification for local content must be submitted by the prospective bidders strictly as per the Annexure-F attached with the tender document.
- 33. Local content means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the items procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.
- 34. Certificate for Local Content as per the Annexure F (attached format) is to be submitted along with the tender at Pre-Qualification Criteria at Part A.
- 35. Self-Declaration Content as per the Annexure G (attached format) is to be submitted along with the tender at Pre-Qualification Criteria at Part A.
- 36. Bidders, please provide the PAN No., Bank Details, email ID, Contact person details, GST No etc.
- 37. 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.
- 38. **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.
- 39. **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.
- 40. The bid should be submitted against the tender directly by Indian Bidders (or) Bidders through an authorized representative in India/Class I Local Supplier/Class II Local Supplier, through partnerships, cooperation with local companies/with Indian suppliers, as per applicable Notification/Rule as amended from time to time.
- 41. Company/Supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content as per applicable Notification/Rule amended from time to time, if required.
- 42. TIFR reserve right to cancel the tender without assigning the reason at any time.
- 43. 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.
- 44. The bidder from countries sharing a land border with India would be eligible to any procurement related to goods, services (consultancy and non-consultancy) (or) work only if they are registered as per the applicable notification / rule effective time to time. Bidders should provide the declaration of non-sharing of information's / details / non procurement of goods and services from such countries sharing a land border with India if required.
- 45. **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.
- 46. In case of any interpretational issues arises in this tender, the interpretation/decision of TIFR Hyderabad shall be final and binding on the bidder.
- 47. 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.

48. 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: <a href="https://www.tifrh.res.in/index.php/commercial-tenders">https://www.tifrh.res.in/index.php/commercial-tenders</a>

ADMINISTRATIVE OFFICER (PURCHASE SECTION) TIFR, HYDERABAD

# Financial Bid for Supply, Installation and Commissioning of GPU based High Performance Computing Cluster for TIFR Hyderabad (Part - C)

Anneyure - D

	<u> mincaurc</u>	<u> </u>
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.	Master + Storage Node with 5 years		1		
1.	warranty		No.		
			8		
2.	Compute Nodes with 3 years warranty		No's		
	Networking/Interconnect - 1 No of 24				
	Ports 1 G copper Ethernet Switch with		2		
3.	required cables with 5 years warranty		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

& email id of the bidder/	
Company with company's Stamp o	or Seal
Date:	
Place	

## Financial Bid for Annual Maintenance Contract (AMC) for GPU based High Performance Computing Cluster for TIFR Hyderabad.

(Part - C)

	(- 4						
Annexure – E  TIFR Hyderabad Enquiry No & Date:  Due date:  Bidder's Quotation Ref No. & Date:  Financial Bid (Bidders must quote their rates using this Format)							
mainte	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.						
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, A	Name, Address contact no						
& email	& email id of the bidder/						
Compan	Company with company's Stamp or Seal						
Date: _	Date:						
Place:							

### PART - A

### Annexure - F

### **Certificate for Local Content**

\*We [name of manufacturer] hereby confirm in respect of quoted item(s) that Local Content is equal to or more than 50% and come under 'Class-I Local Supplier' Category. As being 'Class-I Local Supplier', we are eligible for Purchase Preference under 'Make in India' Policy vide Gol Order No.P-45021/2/2017-PP (B.E.-II) dated 15.06.2017 (subsequently revised vide orders dated 28.05.2018, 29.05.2019 and 04.06.2020)

OR

\*We [name of manufacturer] hereby confirm in respect of quoted items(s) that Local Content is more than 20% but less than 50% and come under 'Class-II Local Supplier' Category.

The details of the location (s) at which the loc	cal value addition made is /are as under:
2	
3	
*Strike out whichever is not applicable	
Date:	Seal & Signature of the Bidder

### **NOTE:**

- Self-certification that the item offered meets the minimum local content (as above) giving details of the location(s) at which the local value addition is made in case the bidder wishes to avail the benefits under the make in India policy, if applicable.
- In cases of procurement for a value in excess of Rs. 10 crores, the local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content to avail the benefits under the make in India policy, if applicable.

### **Self-Declaration**

### No purchase preference

Name of the bidder & OEM	
Tender details	
Tender No	

With reference to the "Public Procurement (Preference to Make in India) order 2017 of GOI, Dept of DIPP" (OM No. P-45021/2/2017-PP(BE-II) dated 04th June, 2020 and electronics products notification from (MEITY F.No. W-43/4/2019-IPHW-MeitY) dated 07th September, 2020 section 4.12. we hereby confirm that for this case we **do not wish** to avail the Preference to Make in India as the made in India content / indigenous content as a percentage of the Basic Cost of the Product / Service is less than 20%.

Indigenous %

Imported %

Indigenous %	
Imported %	
Name of firm	
Address	
Details of technology collaboration	
agreement/ transfer of technology	
agreement, if any.	

We undertake that any False declaration on our part is a breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which we or our successors will be debarred for up to 2 years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under the law.

Signature With Seal

#### **Self-Declaration**

### Purchase reference for local content and purchase preference

Name of the bidder & OEM	
Tender details	
Tender No	

With reference to the "Public Procurement (Preference to Make in India) order 2017 of GOI, Dept of DIPP" (OM No. P-45021/2/2017-PP(BE-II) dated 04th June, 2020 and electronics products notification from (MEITY F.No. W-43/4/2019-IPHW-MeitY) dated 07th September, 2020 section 4.12. we hereby confirm that for this case we wish to avail the Preference to Make in India as made in India content / indigenous content as a percentage of the Basic Cost of the Product / Service as given below:

Indigenous % (please mention in

Indigenous % (please mention in	,	
details as per section 4.12 of MEITY		
F.No. W-43/4/2019-IPHW-MeitY)		
Imported % (please mention in details		
as per section 4.12 of MEITY F.No. W-		
43/4/2019-IPHW-MeitY)		
Classification	Class - I Supplier	Class - II Supplier
Name of Indian Partnering firm with		
document or consent letter		
Details of Location(s) of local value		
addition claimed as indigenous		

We undertake that any False declaration on our part is a breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which we or our successors will be debarred for up to 2 years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under the law.

### **Signature With Seal**

Note: The Bidders and OEM should provide a certificate (along with this declaration) from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content for supporting their claim as class -I local suppliers/class - II local suppliers. The vendors should also give details location (s) at which the local value addition is made.