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CSIR-INDIAN INSTITUTE OF CHEMICAL BIOLOGY
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संख्या/ Enquiry No.: GEM/2025/B/6670574 **दिनांक/Date: 08.10.25**

शुद्धिपत्र सूचना
Corrigendum Notice

एतद्द्वारा सूचित किया जाता है कि **HPC server with GPU** की आपूर्ति, स्थापना, परीक्षण और कमीशनिंग हेतु निविदा, निविदा आईडी **GEM/2025/B/6670574** के अनुसार, जीईएम पोर्टल पर प्रकाशित कर दी गई है। इस संबंध में, निविदा दस्तावेज़ का संशोधित तकनीकी विनिर्देश सूचना एवं डाउनलोड हेतु संलग्न है (अनुलग्नक 'ए')। इसकी एक प्रति सीएसआईआर-आईआईसीबी की वेबसाइट पर भी अपलोड कर दी गई है।

It is hereby informed that the tender for supply, installation testing and commissioning of **HPC Server with GPU** has been published in GeM Portal vide bid No. **GEM/2025/B/6670574**. In this regard a revised Technical Specification of the bid Document is enclosed herewith (Annexure A) for information and downloading. The copy of the same has also been uploaded in CSIR-IICB website.

सभी संभावित बोलीदाताओं से अनुरोध है कि कृपया दिनांक 08.10.25 का शुद्धिपत्र नोटिस देखें और तदनुसार अपनी बिड/प्रस्ताव/कोटेशन प्रस्तुत करें।
All the prospective bidders are hereby requested to kindly see the corrigendum notice dated 08.10.25 and submit their bid/ offer/ quotation accordingly.

उक्त निविदा अधिसूचना के अन्य सभी नियम एवं शर्तें अपरिवर्तित रहेंगी।
All other terms and conditions of the said tender notification will remain unchanged.

8/10/25

भंडार एवं क्रय नियंत्रक
Controller of Stores and Purchase
सीएसआईआर-आईआईसीबी की ओर से
For and on behalf of CSIR-IICB

Annexure A

Specification of "HPC Server with GPU of a given specification"

1. Master Node	**Qty-1 No**
Chassis	2 U or more Rack Mountable
Processor(s)	• Dual processor • Cores ≥ 32; threads ≥ 64; Cache (L3) ≥ 60 MB, Frequency 2.1 GHz to ≥ 3.7 GHz equivalent or better • Make: Intel / AMD or any other reputed brand
RAM	• RAM capacity ≥ 256 GB (preferably 8x32 GB) or better • Memory type: {4800 MHz, DDR5, ECC RDIMM/DIMM} equivalent or higher • With expansion capacity of up to a total 4TB or more
SSD	2 x 1.92 TB or equivalent or higher SSD SATA Read Intensive 6Gbps in Hot- plug Configured As RAID1
HDD	• 12 x 6 TB or 18 x 4 TB equivalent or better SATA Ent HDD ≥ 7.2K RPM Configured as Raid 5 equivalent or better • Expansion capabilities of up to 12 disks or more (Total expansion capacity should be mentioned)
Raid Controller	Hardware Raid Controller should support Raid 0,1,5,6,50,60 Must support mix-and-match SAS, SATA, and NVMe drives to the same controller Speed of RAID 6-12 Gbps equivalent or better
Networking features	• Dual Port 10/25GbE Ethernet or equivalent/better • 1Gb dual port Ethernet controller or equivalent/better
Management	On-board IPMI 2.0 with dedicated LAN and KVM over LAN support
Graphics	Graphics using on onboard graphics controller
Expansion Slot(s)	4 PCI-E 5.0 x16 Slots OR up to 8 PCI-E 5.0 x8 Slots
Power Supply	1600W hot plug Redundant Power Supplies Titanium Level
Monitor	Size 60-65 cm or bigger, Non Touch, Flat, high resolution, Height Adjustable, Input & output ports: HDMI / Display Port / USB, Other necessary ports
Input	Mouse -Wired, Optical 3-button Scroll (Black coloured) Keyboard - Wired, Standard (Black, English Language)
Warranty	5 Years on Site
2. CPU Node	**Qty-2 No**
Chassis	2 U Rack Mountable
	• Dual processor

Processor(s)	• Cores ≥ 32; threads ≥ 64; Cache (L3) ≥ 60 MB, Frequency 2.1 GHz to ≥ 3.7 GHz equivalent or better • Make: Intel / AMD or any other reputed brand
RAM	• RAM capacity ≥ 256 GB (preferably 8x32 GB) or better • Memory type: {4800 MHz, DDR5, ECC RDIMM/DIMM} equivalent or higher • With expansion capacity of up to a total 4TB or more
SSD	2 x 0.96 TB or equivalent or higher SSD Read Intensive 6Gbps in Hot- plug Configured As RAID1
Raid Controller	Hardware Raid Controller should support Raid 0,1,5,6,50,60 Must support mix-and-match SAS, SATA, and NVMe drives to the same controller Speed of RAID 6-12 Gbps equivalent or better
Networking features	• Dual Port 10/25GbE Ethernet or equivalent/better • 1Gb dual port Ethernet controller or equivalent/better
Management	On-board IPMI 2.0 with dedicated LAN and KVM over LAN support
Graphics	Graphics using on board graphics controller
Expansion Slot(s)	4 PCI-E 5.0 x16 Slots OR up to 8 PCI-E 5.0 x8 Slots
Power Supply	1600W hot plug Redundant Power Supplies Titanium Level
Warranty	**5 Years on Site**
3. GPU Node	**Qty-2 No**
Chassis	2 U Rack Mountable
Processor(s)	• Dual processor • Cores ≥ 32; threads ≥ 64; Cache (L3) ≥ 60 MB, Frequency 2.1 GHz to ≥ 3.7 GHz equivalent or better • Make: Intel / AMD or any other reputed brand
RAM	• RAM capacity ≥ 256 GB (preferably 8x32 GB) or better • Memory type: {4800 MHz, DDR5, ECC RDIMM/DIMM} equivalent or higher • With expansion capacity of up to a total 4 TB or more
SSD	2 x 0.96 TB /equivalent or higher SSD Read Intensive 6 Gbps in Hot- plug Configured As RAID1
Raid Controller	• Hardware Raid Controller should support Raid 0,1,5,6,50,60 • Must support mix-and-match SAS, SATA, and NVMe drives to the same controller • Speed of RAID 6-12 Gbps equivalent or better
Networking features	• Dual Port 10/25GbE Ethernet or equivalent/better • 1Gb dual port Ethernet controller or equivalent/better
GPU	• Total Pipelines / CUDA cores / **ROCm (Radeon Open Compute)** ≥ 18000 • GPU memory: ~ 48 GB equivalent or better • Memory type: GDDR6 (preferably with error correcting code (ECC)) • Interface: PCIe 4.0 x16 or higher • Any equivalent or better GPU is also acceptable
Management	On-board IPMI 2.0 with dedicated LAN and KVM over LAN support

Graphics	Graphics using on onboard graphics controller
Expansion Slot(s)	4 PCI-E 5.0 x16 Slots OR up to 8 PCI-E 5.0 x8 Slots
Power Supply	1600W hot plug Redundant Power Supplies Titanium Level
Warranty	5 Years on Site

Operating System	• Ubuntu 22.04 LTS (or latest) or • CentOS 7.9 (or latest) or • Red Hat Enterprise Linux 8.6 (or latest) • The OS should be 64-bit
Job Scheduler	Slurm or OpenPBS or SGE

Certifications for the system

Certifications/Compliance (OS)	Windows, Red Hat Linux, SUSE Linux, Ubuntu
Certification/Compliance (Virtualization/Cloud Platform)	VMware, HyperV, Red Hat Virtualisation, Kubernetes, OpenStack

Features for the system

Management Features-1	• Remoter power On/ Shutdown of server, • Remote Management of Server over LAN & WAN with SSL encryption through gigabit management port, • Should have virtual Media support with all required licenses, • Server Health Logging, • Out of Band Management
Management Features-2	Platform inventory and health status
Security Features-1	• Secure Boot (Firmware and Bios Level Security), • Provision to lock the system on breach, • Hardware root of trust/Dual Root of Trust, • Server should provide policy-based security, • Server should provide server intrusion detection, • "Malicious Code Free design" (to be certified by OEM)
Security Features-2	Network Card secure firmware boot
For each server, scalability to be achieved within the box & without adding nodes	Yes
For each server - Support for high	Yes

availability clustering and virtualisation	

Generic (each node)

Redundant Power Supply	Yes
Hot Swappable (Redundant Power Supply)	Yes
Power Supply Efficiency	Titanium or equivalent
Redundant Fan	Yes
Server Main Supply	230 +/- 10% Vac

ITEM	Accessories	
Rack	≥ 32 U Rack with Standard Accessories	1 No
KVM Switch	16 Port USB KVM Switch with cables	1 No
Ethernet Switch	24 Port 10G Ethernet Switch	1 No
Management Switch	1G 24 port L2 Switch	2 No
Online UPS	10 KVA Online sinewave UPS of a reputed brand with a minimum 60 minutes' backup with an appropriate set of batteries, Noise level ≤ 50 dB, RoHS compliant, BIS/CE or IEC/EN 62040-3:2011 certification, Ingress protection of IP20 or better	1 No
Warranty	5 Years on Site on Servers, Switch(s), UPS and Rack Battery warranty - minimum of 2 years	

Installation	The vendor/OEM should be able to install and demonstrate the efficient working of the systems by running suitable benchmarking tests of performance and stability.
Vendor reliability requirement	The bidder/OEM must have demonstrated experience in setting up HPC clusters (comprising either CPU or both CPU and GPU nodes) with a minimum performance of a total of 100 TFLOPS in the last three years at government institutions or organisations in India, preferably in CSIR/IITs/IISc/NITs or other national labs. Supporting documents such

	as purchase order(s) or installation certificates must be included in the technical bid to support the claim.
Service requirements	The vendor should repair any software and hardware malfunctions during the warranty period within 48 hours of reporting.
Other requirements:	i. The above-mentioned specifications/configurations are the minimum requirements. However, higher or better specifications/configurations will be preferred. ii. Any other accessory or part that may be necessary for the proper working of the system should be clearly mentioned with the price bid of the vendor. iii. Clear information should be provided about the systems memory, storage, and graphics cards' futuristic expansion capabilities (if it is expandable). iv. The complete system except accessories should be from a single brand/OEM to ensure the best compatibility with the supplied system. All Major parts of the system, viz. Keyboard, Mouse, Motherboard and CPU Cabinet) should be from the same OEM. All Major parts of the system should be factory fitted by a single OEM, which should be verifiable by the OEM's name/logo embossed on all the major components. A mere sticker on the components (without embossing as mentioned above) may not be acceptable. v. Firm/Vendor must provide OEM Manufacturer Authorisation Form (MAF) for the System. vi. The complete system and all the accessories should have the details (with specifications) available on the OEM(s) of the website for reference and verification. vii. The OEM(s) should have the facility to download updates, device drivers, firmware, etc. on their website. viii. All major components should be of either of the manufacturing years 2024-2025 or the latest available in the market.