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IIT Indore

NIT No.: IITI(MM)/ME/1/1A/99(PRJ)/SK/2025-26

Date - 11/12/2025

PREBID REPORT

The online meeting for Pre-bid discussion and presentation was held via Google Meet on Dec 02, 2025 @ 03:00 P.M. at IIT Indore for Procurement of **X-Ray Diffractometer (XRD) System, Qty-01** through **CPP Portal, Tender ID-2025_IITI_886911_1.**

The report of the meeting is as below:-

Sl. No.	Reference of Clause No. of the Tender Document	Query / Clarification / Deviation Sought	Clarification / Response from IIT Indore
1	Scope of Use of XRD	**Changes Required:-** Functionality like GIXRD, XRR , Pair Disti-ibution Function (PDF) and In-Operando Battery Research Applications Require higher power 1kW not sufficient power	The technical specification already states that the X-ray generator must have a minimum continuous rated output of 1 kW or higher. The minimum requirement is adequate for the intended applications, and higher power models remain welcome as long as other specifications are met. Therefore, OEMs are free to offer generators higher power ratings (e.g., 2.2 kW or above) based on their design philosophy. Any model providing equal or better performance than the minimum requirement is acceptable. **Specifications are retained.**
2	Chapter-7, Technical Specification bid, Point-1	**X Ray generator:** **Changes Required- Power** output: continuous rated output: 2.2kW (50kv, 50mA) or better Functionality like GIXRD, XRR , Pair Disti-ibution Function (PDF) and In-Operando Battery Research Applications Require high power 1kW not sufficient power due topoor crystallinity of thin film samples, higher power give better flux higher intensity better peak shape. Essential for above applications.	
3	Chapter-7, Technical Specification bid, Point-2	**X-ray Tube:- Changes Required-** Copper, long fine focus, ceramic insulation, * 3.0 kW.	The tender specifies a minimum tube rating of ≥2.0 kW, which is suitable for the required applications. OEMs offering a 3 kW tube may do so, provided all other technical requirements are satisfied. **Specifications are retained.**
4	Chapter-7, Technical	**Goniometer:** **Changes required :** Add Goniometer radius 150 mm or better Higher	The specification will be enhanced with addition of following line for

	Specification bid, Point-3	goniometer radius ensures better resolution.	clarity: **"Goniometer radius of 150 mm or better."**
5	Chapter-7, Technical Specification bid, Point-4	**Detector :Changes required :** Mode of working/data collection: 0D, ID and 2D. real time 2D without pseudo 2D (rotation of strip by 90deg) Window Size: 9 mm x 14 min or better or larger.	The specifications mention minimum functional requirements, and OEMs may propose equivalent or superior technologies. Detector window size corresponds to the active sensing area, where a larger area generally enhances X-ray collection efficiency, signal-to-noise ratio, and angular coverage. Minor differences in geometry (square vs rectangular) are acceptable as long as the total active area meets or exceeds the stated minimum area (≥ 256 mm^2). **Specifications are retained.**
6	Chapter-7, Technical Specification bid, Point-5	**Optics Changes required :** Add Multilayer multigraded parabolic mirror must be required for GIXRD, XRR applications of thin films. Without it the equipment will be useful for powder XRD only.	The intent is to ensure complete functional capability for GIXRD and XRR. **We are adding following clarification:** **"OEMs shall provide all required optics/components necessary to enable GIXRD and XRR as specified. OEMs must supply documentation or brochures demonstrating compatibility of their optical configuration with GIXRD and XRR measurements."**
7	Chapter-7, Technical Specification bid, Point-9	**Grazing Incidence Diffraction (GID): Changes required :** Necessary sample stage with Z-movement (-8 to 2 mm) for GID application. Since sample size can vary large Z movement required.	The minimum required Z-movement is −3 mm to +3 mm, which is generally adequate. However, we will be okay with the stages that may have small deviations (± 2mm) from the specifications as long as the net Δz (i.e. total z range) is minimum 6 mm or higher. **The specification will now be updated to "Recommended Z-stage movement: −3 mm to +3 mm or better. Stages with small**
8	Chapter-7, Technical Specification bid, Point-10	**X-Ray Reflectometry (XRR) Measurement Changes required :** Necessary sample stage with Z-movement (-8 to 2 mm) for GID application. Since sample size can vary large Z movement required.	

सहायक कुलसचिव
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Assistant Registrar
(Materials Management Section)

			deviations (±2 mm) from this range will be acceptable provided the total usable Z-travel (ΔZ) is at least 6 mm."

Note:-

a) The date of submission of online bids is extended up to 23/12/2025 @ 15:00 Hrs.

b) The date of opening of bids is extended up to 24/12/2025 @ 15:00 Hrs.

c) All prospective/willing bidders are requested to take note of this report as part of the tender document. All other parts of the tender including the terms and conditions will remain unchanged.

11/12/25

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