



Indian Institute of Technology Kanpur

Department of Physics

Tender Ref. No.IITK/PHY/2023-24/SoM/05

Date: October 5, 2023

Bid Opening Date: 06/10/2023

Bid Submission Closing Date: 16/10/2023

Sealed quotations (**technical and financial separately**) from prospective vendors are invited by the Department of Physics, IIT Kanpur for “**2D-Layer Aligner**” with the following technical specification. All the quotations and tender related documents should be sent by speed post/Courier to inviting officer’s address (mentioned below).

We are looking for **2D-Layer Aligner** (Quantity:01)

TECHNICAL SPECIFICATION FOR 2D-LAYER ALIGNER

Sl.no	Parameters	Specification	Vendor's Compliance /non-compliance
1	Application	2D-vdW layered materials dry transfer	
2	Stages (XYZ & XYθ)	<ol style="list-style-type: none"> 1) Movement range at least 12 mm in X and Y direction 2) Movement in X, Y, Z direction, high precision micrometer movement with resolution of 2-3 microns 3) Crossed Roller bearings 4) Minimum angular and linear deviations with high precision screw threads - Stamp XYZ linear motion with at least 80TPI screws 5) Slide holder arrangement for samples 6) Backlash free linear motion of stage with less than 100 micro-rad deviation. 7) XY theta stage Coarse adjustment rotation of 360 degree and fine adjustment rotation stage of ± 5 Deg with positioning accuracies/Sensitivity of at least 16 arc sec. 8) Stable and Rigid construction with Vibration Isolation 	
3	Microscope and Camera	<ol style="list-style-type: none"> 1) C-mount digital microscope with full HD resolution and compatible with HDMI output 2) Large optical sensor of size at least 0.5 inch 3) 2K camera 4) High frame rate: 60fps at full resolution 	

		5) Working distance of 9 mm or more 6) 0.6X to 5X zoom magnification for high resolution and high contrast image 7) Minimum vibration arrangements at device end during microscope motion 8) Epi-illumination module 9) Objective lens with large field of view 10) 20X objective lens, infinity corrected achromatic lens. 11) For live monitoring of Sample Display Screen will be provided.	
4	Sample Stage heater and temperature controller	1) Oxygen free highly conducting copper vacuum chuck 2) Temperature control from room temperature to 100 deg C using PID controller with 0.1 deg C increment. 3) Uniform temperate control over the entire sample stage	
5	Mounting	1) Thick Aluminum honeycomb 2) Vibration damping inserts	

Minimum Eligibility Criteria:

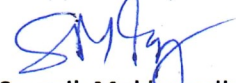
- 1) Bidder should submit printed technical literature / brochure of the offered model, which should be complied with the specification as mentioned above otherwise the bid will be disqualified.
- 2) The original equipment manufacturer (OEM) should successfully installed and commissioned similar or higher rating Systems to any Govt. / Defence / Research Institutions. Copy of PO / Installation report / Performance certificates should be submitted towards evidence.
- 3) OEM should have local service engineer within India.

General Terms & Condition.

1. All vendors are requested to submit “**technical and financial bids**” together in separately sealed envelopes.
2. Evaluation will be done on the basis of technical specifications given in tender document.
3. Financial bid will be open for those only who qualify all the technical specification as per our tender notice.
4. Quotation must be valid for 60 days.
5. Payments terms: 100% after delivery & successfully installation.
6. Warranty should be clearly mentioned, the Warranty must start from the date of installation at IITK.
7. Only OEM or its authorized agents should quote, Quotation should carry proper certifications like proprietary certificate/ authorization certificate from manufacturer, etc.
8. Vendor must be able to perform factory acceptance testing of the product and demonstrate all the features prior to the dispatch.

9. The technical and price bid should indicate the model and part numbers of items quoted.
10. Bidders must submit a minimum of 1 satisfactory certificate from previous users.
11. Delivery time 8 weeks from the date of receipt of purchase order.
12. As per the new GST rule, Institute is not able to provide GST exemption certificate. GST must be levied as per the applicable rate.
13. At any time prior to the deadline for submission of bid, the institute may, for any reason, at its own initiative, modify the bid document by amendments. Such amendments shall be uploaded on the website through corrigendum and shall form an integral part of bid document. The relevant clauses of the bid document shall be treated as amended accordingly. It shall be the sole responsibility of the prospective bidders to check the website from time to time for any amendment in the tender document. In case of failure to get the amendments, if any, the Institute shall not be responsible for it.
14. The Penalty @1% per week or part thereof subject to max 10% of the delivery price will be deducted from the balance payment, if supply is not completed within aforesaid delivery period.
15. The indenter reserves the right to withhold placement of final order. The right to reject all or any of the quotations and to split up the requirements or relax any or all the above conditions without assigning any reason is reserved.

Approved by



Dr. Soumik Mukhopadhyay
(PI/Indenter)

Professor, Department of Physics
IIT Kanpur, Kanpur – 208016