

Addendum 03

Date: 08/11/2019

This is with reference to the Pre-Bid Meeting held on 24/10/2019 at 3.00 p.m. in the Board Room, NITK Surathkal for “**Nanoindenter with attached SPM**” (Notification No: NITK/CRF/Nanoind/04 Dated: 28/08/2019). The prospective bidders may kindly note the following corrections in the tender document:

Sl. No	Original Terms and Conditions/Specifications	Revised Terms and Conditions/Specifications
1.	Page:30/Annexure H/introduction	
	System should have a mechanical referencing system on the indentation module for taking a constant reference from the sample surface for true raw data without any background or drift correction.	Removed
	The system should consist of essential parts needed to do nanoindentation, nanotribology and Wear, Dynamic Mechanical Analysis and Depth Profiling and High Load indentation and scratch	The system should consist of essential parts needed to do nanoindentation, Dynamic Mechanical Analysis and Depth Profiling and High Load indentation and scratch
2.	Page:30/Annexure H/Point No 2	
	Load Actuator : Piezoelectric	Load Actuator : Specify the type
	Depth Sensor : Capacitive Sensor	Depth Sensor : Specify the type
	Minimum Contact Force : $\leq 1\mu\text{N}$	Minimum Contact/scanning Force : $\leq 100\text{nN}$
	Load Resolution : $<3\text{ nN}$	Load Resolution : $<20\text{ nN}$
	Load Rate : 50mN/s or better	Load Rate : 15mN/s or better
	Sinus Mode (DMA) : Yes (Sinus frequency 40 Hz or higher)	Sinus Mode (DMA) : Removed
3.	Page:31/Annexure H/Point No 4	
	XY Travel : at least 150mm x 100mm	XY Travel : at least 50mm x 50mm
	Repositioning accuracy better than 1 micron in XY direction	It is removed
4.	Page:31/Annexure H/Point No 5	
	Turret with minimum 4 slots for objectives on the optical microscope. Objectives should be Infinity corrected Pan APO with 5X, 20X, 50X and 100X.	Infinity corrected objectives: 5X, 20X, 50X and 100X.
5.	Page:32/Annexure H/Point No 6	
	3D Imaging of Nano Indentation without removing the sample from the platform using dedicated Atomic Force Microscope (AFM).	3D Imaging of Nano Indentation using dedicated Atomic Force Microscope (AFM).
	Drive resolution Z: 0.34 nm	Drive resolution Z: 0.4 nm or better
	Drive resolution XY: 0.7 nm	Drive resolution XY: 2 nm or better
	Tip Positioning Accuracy: +/-10nm	Tip Positioning Accuracy: +/-20nm
6.	Page:32/Annexure H/Point No 7	
	Scratch testing for Curved samples up to 3 mm curvature	Removed

	Page:32/Annexure H/Point No 8	
7.	Ability to determine all parameters specified in ISO 14577 and ASTM E2546	Ability to determine all parameters specified in ISO 14577 or ASTM E2546
	Ability to export data (including load, displacement and time) in known file formats (e.g. ASCII format, text format) for analysis by third party software (e.g., MATLAB)	Ability to export data (including load, displacement and time) in known file formats (e.g. ASCII format, text format).
	Synchronized Panorama mode imaging	Removed
	Page:32 and 33/Annexure H/Point No 9	
8.	The Auxiliary Supplies to be provided: Filters and Air dehumidifier.	The Auxiliary Supplies to be provided, if required: Filters and Air dehumidifier.
	Air Compressor-5 bar (Noise free)	Air Compressor-5 bar (Noise free), to be provided if required
	Warranty period of three years. Quote for AMC for 2 years after warranty period.	Warranty period is for three years. Quote for AMC for 2 years after warranty period. In the event of break down, the break down period should not exceed 4 days or 96 hours, else warranty will be extended after formal complaint. Financial comparisons will be done only after considering price for warranty period and two years AMC cost.
9.	Factory Acceptance Test (FAT) by NITK, Surathkal at Original Equipment Manufacturer site:1 to 2 NITK personnel will be deputed for Pre-Dispatch Inspection/Factory Acceptance Test for minimum 3 working days at OEM site before the shipment of instrument to NITK, Surathkal. All the expenditure pertaining to transport and stay for NITK personnel will be on Vendors account. All reasonable facilities and assistance must be furnished to the inspectors at no charge to the purchaser	Specifications to be proved at installation site.
10	Page:33/Annexure H/Optional Items	All the optional items are removed

The last date for bid submission, in view of the Addendum is now extended.

Please note that the bidders are only allowed to submit their bids online only (i.e. at <https://mhrd.euniwizarde.com/>)

Last date for request tender document : 06/12/2019, before 3.00 p. m.
Last date for Bid submission : 06/12/2019, before 4.00 p. m.
Bid opening date(tentative) : 09/12/2019 @ 3.00 p.m.

Sd/-
Buyer
(Dr. Ramesh M R)

Sd/-
Chairman
Central Research Facility
NITK, Surathkal