COMSATS Institute of Information Technology Lahore Campus, Defence Road, Off Raiwind Road, Lahore



Tender # CIIT-TN-13-15-556

## <u>TERMS AND CONDITIONS</u> [All pages (BoQs & Terms & Conditions) are mandatory to be signed /stamped, Rates should be quoted on our prescribed format, failing which the bid may be rejected]

- 1. The contract will be executed and handed over in satisfactory conditions up to the entire satisfaction of COMSATS Institute of Information Technology, Lahore Campus.
- 2. Terms & Conditions and BoQs should be attached with Technical and Financial bids, otherwise your tender/bid(s) may be rejected.
- Documents along with Pay Order / Demand Draft amounting <u>Rs. 1,000/-</u> as a tender documents fee (Non-Refundable) in favor of COMSATS Institute of Information Technology, Lahore to the address given below. No bid will be accepted without tender documents' fee
- 4. Part / Advance payments is not allowed.
- 5. The exact completion/delivery time from the date of the purchase / work order will be <u>120</u> <u>days</u>. The handing over / completion time for this contract is of critical importance.
- 6. The bid proposal should be inclusive of all freight and packaging charges and will be delivered at Lahore Airport.
- 7. L/C will be opened by COMSATS Institute of Information Technology Lahore Campus.
- 8. Custom clearance will be cleared by COMSATS Lahore Campus.
- 9. Any addition, deletion or modification of any clause of the procurement terms & conditions of CIIT by any vendor will not be acceptable and may lead to rejection of the bid.
- **10.** COMSATS Institute of Information Technology, Lahore Campus, will follow the PPRA rule of single stage two envelope procedure:
  - i. The bid shall comprise a single package containing <u>two separate envelopes</u>. Each envelope shall contain separately the <u>financial proposal</u> and the <u>technical proposal</u>;
  - ii. The envelopes shall be marked as <u>"FINANCIAL PROPOSAL"</u> and <u>"TECHNICAL PROPOSAL"</u> in bold and legible letters to avoid confusion;
  - iii. Initially, only the envelope marked <u>"TECHNICAL PROPOSAL"</u> shall be opened;
  - iv. The envelope marked as <u>"FINANCIAL PROPOSAL"</u> shall be retained in the custody of the procuring agency without being opened;
  - v. The procuring agency shall evaluate the technical proposal in a manner prescribed in advance, without reference to the price and reject any proposal which does not conform to the specified requirements;

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- vi. During the technical evaluation no **amendments** in the technical proposal shall be permitted;
- vii. The financial proposals of bids shall be opened publicly at a time, date and venue announced and communicated to the bidders in advance;
- viii. After the evaluation and approval of the technical proposal the procuring agency, shall at a time within the bid validity period, publicly open the financial proposals of the technically accepted bids only. The financial proposal of bids found technically nonresponsive shall be returned un-opened to the respective bidders;
   ix. and
  - x. The bid found to be the lowest evaluated bid shall be accepted.
- 11. Bidders who do not qualify cannot challenge the finding of the evaluation.
- 12. The bids should be submitted in a sealed envelope up to <u>15-07-2015</u> on or before <u>1100</u> <u>hrs</u> and will be opened on the same date <u>at 1130 hrs</u> in the presence of available bidders.
- 13. The envelope should be marked as under.

Manager Purchase COMSATS Institute of Information Technology, Lahore Campus. Defence Road, Off Raiwind Road, Lahore. Tel: 042-111-001-007, Ext: 875

- 14. The envelope shall also bear the word "CONFIDENTIAL" and following identification quotation of <u>"Raman Spectroscopy & Material Printer for Physics Department".</u>
- 15. The bid form (Annex-I) must be duly filled in, stamped and signed by the authorized representative of the bidder.
- 16. If the vendor fails to deliver the goods / services to CIIT-Lahore in time then the penalty will be charged as under:
  - **a.** 1% per day of the invoice price for 5 working days.
  - **b.** 2% per day of the invoice price for further 5 working days.
  - **c.** If the vendor fails to deliver the goods / services during the extended period then the purchase / work order will be cancelled, earnest money and payment will be forfeited.
- 17. If the delivered goods / services are not according to the required quality standards / specifications, the same shall be liable to be rejected after inspection. The vendor would be required to supply as per requirements mentioned in our BoQs, otherwise the purchase / work order will be cancelled after due date with confiscation of earnest money.
- 18. All prices should be quoted in <u>C&F with all freight charges at Lahore Airport.</u>
- 19. All prices should be valid for at least <u>120 days.</u> Withdrawal or any modification of the original offer within the validity period shall entitle CIIT to forfeit the earnest money in favor of the CIIT and / or put a ban on such vendor participation in CIIT tenders / works.
- 20. It is the sole responsibility of the agent / supplier / manufacturer to comply with the applicable laws, be national or international.
- 21. In case of any dispute, decision of the Director CIIT-Lahore, will be final and binding upon the parties.

- 22. The CIIT-Lahore reserves the right to modify equipment quantities at any time before the award of work.
- 23. The bidder is required to furnish in form of Bank deposit /C.D.R / Pay order equivalent to 2% of the total Bid price as Earnest Money crossed in favor of "COMSATS Institute of Information Technology, Lahore Campus". Any bid not accompanied by Earnest Money shall be rejected without any right of appeal.
- 24. Warranty will be on the part of supplier, which is <u>One Year Warranty</u> after the completion of supply /work.
- 25. The successful bidder will have to submit the <u>05% of the total amount of Purchase</u> <u>Order in the form of Bank Guarantee / CDR as a Security/Retention Money</u> in the favor of COMSATS Institute of Information Technology, Lahore Campus. The Warranty duration will be started after the installation/Satisfactory certificate date of Equipment which is <u>One Year</u>,
- 26. COMSATS Institute of Information Technology, Lahore Campus, reserves the rights to accept or reject any or all bids without assigning any reason whatsoever.
  - No offer of a supplier/firm will be considered if: -
  - i. Received without earnest money
  - ii. Received later than the date and time fixed for tender submission
  - iii. The tender is unsigned/ unstamped
  - iv. The offer is ambiguous
  - v. The offer is conditional
  - vi. The offer is from a firm, which is black listed, by any Govt. Office.
  - vii. The offer is received by telephone/telex/fax.
  - viii. Any unsigned / ambiguous erasing, cutting / overwriting etc. is made.
- 27. The tendered should furnish a certificate as worded below in token of acceptance of all the terms and conditions of the tender. Otherwise the tender will not be considered under any circumstances.
- 28. I/We
  - Company / Vendor Name:.....
  - Postal Address:
  - Tel/.Mobile:.....Email:....
  - NTN#:......GST#:.....

the undersigned certify that the terms and conditions as contained in the documents vise,

" Terms and Conditions for Tender Notice of COMSATS Institute of Information Technology, Lahore are accepted and that in the event of selection of my/our rate the agreement in the prescribed form will be entered into.

## BoQs of Raman Spectroscopy & Material Printer for Physics Department, CllT-Lahore

Sr .#	Item Name	Specification	Have you provided/fa cilitated this in your offer?			Rates to be quoted in C&F Lahore with all freight charges			
			Yes	No	Qty	Quoted Model/ Make	Quoted Curren cy	Unit Price(C& F Lahore Airport)	Total Price (C&F Lahore Airport)
		General Requirement							
1	RAMAN Spectroscopy	A sample-scanning RAMAN with Photoluminescence system to know about the structural and optical information about the sample with the help of lasers of multiple wavelengths and a sensitive photodetector or equivalent. The system must provide the opportunity to do low/high temperature measurements. (Make/origin: USA, UK, Europe, Japan). Required Laser Features			<u>01</u>				
		Laserexcitationsourcecombinermoduleupto4-5laserwavelengthsavailable(785 nm CW Diode Laser,325 nmHe-Cd Laser, 514 nm, 457 nm,390 nm),Manualandcontrolledlaser shutter,Adjustablelaser powers over a wide range (1-100mW)with a FWHM Spectral Width<0.001nm,				<u>)1</u>			
		<ul> <li>system to adjust a laser power on sample for wavelength range UV-IR.</li> <li>4. Laser beam &amp; sample monitoring Vision CCD</li> <li>5. Heating and cooling stage for the sample from cryogenic temperatures (4K) to Room Temperatures.</li> <li>6. Beam Delivery Box included.</li> </ul>							

7. Manual shutter to block the laser shot.	
Required Optical Features	
1. Objective lens with >50x objective	
lens /N.A. 0.55, W.D. 13mm FL : 4mm	
for 400~1,100nm. 100x LMPlan-IR objective/N.A. 0.8,	
W.D. 1.2mm For 400-1,300nm	
2. For PL, must include the optics to do	
the polarization filtration of the input       and output light.	
3. Multiple band pass filters for	
individual excitation sources.	
4. Included suitable optics (Long pass edge filter, objective & high	
performance mirror etc.) and mount	
for focusing light onto the sample.	
5. Long pass edge filter set	
Pass wavelength range : 323 - 733 nm at 325 nm laser AND 791 - 1,770 nm at	
785 nm laser	
6. Confocal measurements with 2.0 μm	
depth resolution (using a x100objective); reflected light	
illumination with white light LED in	
Koehler configuration; x5, x20 and	
x100 objectives; binocular head with eyepieces and a color video camera (at	
least 5M pixels); a class 3b microscope	
enclosure; simultaneous viewing of	
laser spot and white light image.	
7. A precision motorized XYZ stage: automated stage encoder feedback	
controlled with XY displacement at	
least 110 x 76 mm; XYZ mapping sample stage with joystick and	
software control; allowing scatter, line	
and area mapping plus confocal depth	
profiling (XY step size minimum 100 nm, Z step size minimum 20 nm)	
8. Raman shift resolution : <8.5cm-1	
/pixel@325 nm 1200gr/mm <1.6cm-1	
@785 nm 1200gr/mm	
Required Spectrometer Features	
1. Focal length : 500 mm	
2. Wavelength Range : 200~2,000 nm 3. Resolution : 0.05 nm @ 435.8 nm	
4. Accuracy: +/- 0.1 nm, Repeatability:	
+/- 0.04 nm	
5. Raman shift range : 10 cm-1 ~ 4,000 cm-1	
6. Raman shift resolution : <1.0 cm-1	
7. Computer controlled Motorized slit	
& Grating module 8. A fixed diverter mirror assembly for	
entrance side port	
9. A micrometer controlled adjustable	
slit assembly for entrance and exit ports with 10um to 5mm(10	
micrometer increment/decrement unit)	
10. Apertures size adjustable	
Required Detector Features	

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1. Back illuminated, Deep Depletion			
CCD with fringe suppression			
2. Active Pixels: 2000 x256			
3. Image Area: 26.6 x 6.6 mm with fill			
factor			
5. PC Interface: USB 2.0			
6. Peak QE: 35% @ 340 nm, room			
temp, 95% @ 800 nm,			
7. TE cooling : down to -70 °C			
8. Dark current(typical) : 0.025 e-			
9/pixel/sec@max cooling. Wavelength			
range : 200- 1000 nm			
9. CCD deep depletion NIR enhanced			
UV extended (1024 x 256 pixels of 26 x			
26 microns).			
<b>Required Software Features</b>			
1. Easy parameter selection			
2. Select monochromator, serial port,			
turret, grating & current wavelength			
information, wavelength range,			
number of point/resolution, integrating			
time, accumulation			
3. Automation control (Beam path,			
laser, detector, optics)			
4. An intelligent background removal			
from single and multiple spectra;			
intelligent cosmic ray removal; >50M			
data point image files			
5. A Raman database for inorganic			
compounds; Raman database for			
organic compounds.			
Must Include			
1. Optical table with table size : 3000 x			
1500 x300(mm) T (800mm H)			
2. Flatness of top plate : +/-0.1 mm			
over 600 mm square			
3. Hole pattern : M6X25 mm pitch			
4. Vibration isolation : air spring			
isolations, Vertical : 1.2 ~ 1.5 Hz,			
Horizontal : 1.5 ~ 1.7Hz			
5. Levelling : Auto levelling by 3			
automatic levelling valves			
6. Levelling repeatability : +/-0.1 mm			
7. Load capacity : 400 kg ~ 2,000 kg			
8. Air supply : 3~5kg/cm2 compressed			
air or nitrogen			
9. Pneumatic vibration isolated optical			
table needed to measure Under 0.5 um			
step resolution			
	-		
Low/high Temperature applications			
1. 4K or 10K He Cryostat system			
2. Nitrogen pour fill cryostat set (77-			
350K)			
,			
3. High temperature range up to			
1100K			
		1	

		Mapping functions •• Low scan speed with high resolution 30x30 um area about 3 minutes At 1 um step resolution Minimum exposure time(available 0.1 um step.) •• High scan speed with low resolution 2"wafers within 8-9 minutes at 1mm Step@ Minimum Exposure time Automation: Auto align and optimization of input laser power; auto switch and auto align of lasers; self- validation using built-in internal Si reference sample; built-in self calibration and intensity correction using neon and white light sources. Imported UPS and stabilizer compatible with the equipment load.				
2	Dimatix Material Printer DMP-2831 or equivalent	General Requirement, System Description1: Flat substrate, xyz stage, inkjet deposition system 2: Low cost, user-fillable piezo-based inkjet print cartridges 3:Built-in drop jetting observation system 4:Fiducial camera for substrate alignment and measurement 5:Variable jetting resolution and pattern creation PC-controlled with Graphical User Interface (GUI) application software 6:Capable of jetting a wide range of fluids Heated vacuum platen 7:Cartridge cleaning station 8:Includes PC, monitor, and software1:Substrate < 0.5 mm thickness: 210 mm x 315 mm (8.27 in x 12.4 in) - Substrate 0.5 - 25 mm thickness: 210 mm x 260 mm (8.27 in x 10.2 in) 2: Repeatability: $\pm 25 \mu\text{m} (\pm 0.001 \text{ in})$ 3: Substrate holder - Vacuum platen - Temperature adjustable; ambient to $60^{\circ}$ C 4: System Footprint: 673 mm x 584 mm x 419 mm (26 in x 23 in x 16 in) 5: Weight approximately 43 kg (95 lbs) 6: Power 100-120/200-240 VAC 50/60 Hz 375 W maximum 7: Operating range 15-40^{\circ} C at 5-80% RH non-condensing 8: Altitude up to 2000 m 9: Safety and EMC compliance - Safety: NRTL Certified to EN 61010-1, UL 61010-1, CSA 22.2 No. 61010-1 - EMC: EN61326-1 Class A, FCC Part 15 Class A.		01		

Fiducial Camera			
<ol> <li>Fiducial Camera Allows substrate alignment using reference marks</li> <li>Allows positioning a print origin or reference point to match substrate placement</li> <li>Provides measurement of features and locations</li> <li>Provides inspection and image capture of printed pattern or drops 5: Provides cartridge alignment when using multiple cartridges 6:Allows matching drop placement to previously patterned substrate.</li> </ol>			
Cartridge 1 Type: Piezo-driven jetting device with integrated reservoir and heater 2: Usable Ink Capacity: Up to 1.5 ml (user-fillable) 3: Materials Compatibility: Many water-based, solvent, acidic or basic fluids 4:Number of Nozzles: 16 nozzles, 254 µm spacing, single row 5:Drop Volume: 1 (DMC-11601) and 10 (DMC-11610) picoliter nominal.			
Control PC and Application Software			
1: Pre-loaded patterned templates Print cartridge with one-time 2:Pattern preview user-fillable reservoir 3: Editors: Pattern, piezo drive waveform, Cleaning station nozzle blotting pad cleaning cycle, substrate setting Drop watcher fluid absorbing pad 4:Bitmap (1 bit) files accepted 5:DXF, Gerber, GDSII and OASIS file conversion to Bitmap			
Replaceable Items			
<ol> <li>Print cartridge with one-time Pattern preview user-fillable reservoir Editors: Pattern, piezo drive waveform,</li> <li>Cleaning station nozzle blotting pad cleaning cycle, substrate setting</li> <li>Drop watcher fluid absorbing</li> </ol>			
pad6. Peak			

Note:

- Prices should be quoted inclusive of all freight charges at Lahore Airport.
- Kindly tick/mark the Yes/No Column on our prescribed BoQs, do not use your own letter head. Otherwise your bid/tender will be rejected.

- In Addition to filling of the attached BoQs, supporting literature of the quoted model must be attached for verification & technical evaluation of the required specification by the technical committee. In case of any clash is found between the quoted
- Terms & Conditions and BoQs should be attached with Technical and Financial bids, otherwise your tender/bid(s) may be rejected.

COMSATS Institute of Information Technology, Lahore TENDER ISSUANCE Date:-----