

PUNJABI UNIVERSITY PATIALA.

Short Term E-Tender Notice

E-Tender is invited by the undersigned from the Manufacturers/Suppliers/ Dealers (Registered Firms) etc for the Purchase of LC-MS fulfilling the eligibility criteria mentioned herein which shall be uploaded & received on www.tenderwizard.com/PUNJAB

1. Last date and Time for receipt of Tender online : Date 23-02-2020 16:00
2. Time and date of opening Technical bid : Date 25-02-2020 15:00
3. Time and date of opening Financial bid : Date 27-02-2020 15:00

Sr.No	Name of work	Earnest Money	Tender Fees	Bid processing fee.	Time Period
1.	Supply of LC-MS	3,50,000/-	2000/-	2360/-	23-02-2020

Aspiring Tenderer who has not obtained the User ID and password for participating in e-tendering may obtain the same by registering in the e-procurement portal www.tenderwizard.com/PUNJAB. The Tenderers once registered can participate in any of the department tenders. For any clarification contact 9257209340, 0172-5035985, 8146699866 or E-mail : etenderhelpdeskp@gmail.com, pavitar.s@tenderwizard.com

All other details can be seen in the bidding document.

Terms and conditions:

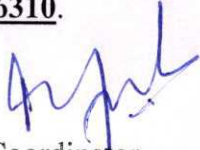
1. Earnest Money and Tender form fees separately of required value shall be submitted in shape of DD of any Nationalised Bank payable in favour of The **Registrar**, Punjabi University Patiala. Tender fee, Earnest money must be reach on or before date 23-02-2020 till 04:00 PM or through online mode in the office of the Internal Quality Assurance Cell (IQAC). Tender will open in the Office of Director University Computer Centre.
2. Tender Processing fee should be paid through e- payment (Internet Payment Gateway Direct (Debit or Net banking)
3. Bid Security and Tender Processing fees should be deposited before opening the tender.
4. The Tender documents shall be uploaded online in 2 folders.
 - (i) **Folder-A:** Shall contain pre qualification documents such as Registration, GST No., PAN No. Turn Over, Income Tax Return and Black list Self certificate etc uploaded on website.
 - (ii) **Folder-B:** shall contain technical bid and financial bid on the prescribed form online website.
5. In case earnest money of the required value is not deposited, the bids will not be considered and rejected straightaway.
6. The folder-B shall be opened only of those suppliers/Tenderers whose earnest money is found to be in order.
7. Corrigendum /Addendum/Corrections, if any will be published in the web site only. Firm shall to continue to check the website. www.tenderwizard.com/PUNJAB.

PRE-QUALIFICATION REQUIREMENTS:-

1. Manufacturers/Suppliers/ Dealers (Registered Firms) for Supply of LC-MS.
2. The Supplier/Firm shall submit a copy of PAN No., GST No. etc.
3. The Supplier/firms shall submit copies of income tax return and Turn Over for the last 2 years.
4. The Supplier/firms shall also submit Self certification that they have not been debarred/blacklisted by any Govt./ Semi Govt. Organization or any Corporation at any stage.

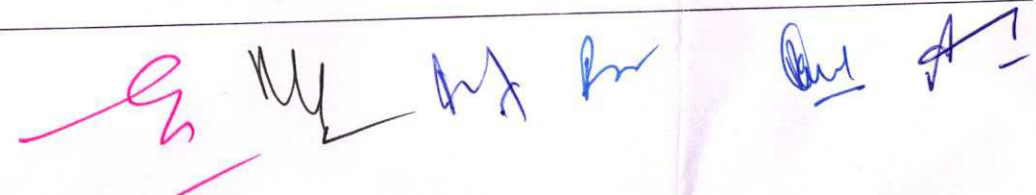
Other Terms and Conditions:-

1. University Reserves the right to make inspection of the material received from the tenderers/ suppliers.
2. Prices should be inclusive of all taxes and levies in INR, FOR Punjabi University Patiala.
3. All items to be supplied must be branded and shall be amply supported onsite directly by OEM. All RMA, shall be in name of Punjabi University, Patiala.
4. The Equipment is to be made available/ installed within two weeks from date of placing confirmed Purchase Order along with all the bills.
5. If there is holiday on the receipt/opening day of the tender, the tender shall be received / opened on the next working day at the same time in the office of the Internal Quality Assurance Cell (IQAC) at Punjabi University Patiala.
6. The Coordinator, DST-PURSE Scheme reserves the right to reject the tender without assigning any reason before/after opening of the tenders and the tenderers shall have no right or any claim what so ever for the same on this account.
7. The order for quantity of different items can be increased or decreased or not to be purchase at all. The Suppliers/ Tenderers shall have no right or any claim what so ever for the same on this account.
8. The rate quoted by the Supplier/Tenderer shall be inclusive of i.e. GST, all the taxes or other taxes levied by Central Govt. or State Govt. Authority including their variations as notified by the Concerned Authority from time to time and also of all the new taxes and levies that may be imposed.
9. The Supplier/ Tenderer shall comply with the proper by- Laws and legal order of the local body or authority under the jurisdiction of which the supply is executed and pay all fees and charges for which he may be liable. Nothing extra shall be payable by the University on this account.
10. The quoted rates shall be valid for full time limit.
11. Firm will supply the material on quoted Rates which include F.O.R., Loading, Unloading, stacking and inclusive of all taxes. Nothing Extra should be paid except GST.
12. An agreement will have to be signed with the Coordinator, DST-PURSE Scheme, Punjabi University Patiala within 2 weeks after the execution of complete order.
13. In case of failure of supply of material as per ordered specification, the University reserve the right to reject the supply order imposition of penalty for it security deposited by firm/supplier.
14. In case of any dispute, the jurisdiction will be Patiala (Punjab) only.
15. In case of any clarification regarding tender contact Phone No. 0175-3046310.


Coordinator,
DST-PURSE Scheme,
Punjabi University,
Patiala.

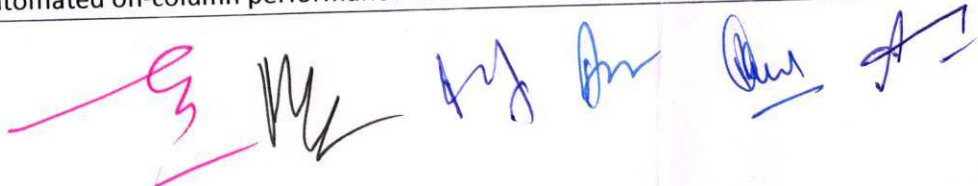
Descript ions/ specifications of tender enquiry	
Sl. No	Name of machine / equipment /item: High-resolution Mass spectrometry workstation (LCMS /MS) for small molecules& Large molecule studies with a Quadrupole time of flight/High resolution mass spectrometer workstation for exact mass and true isotopic measurements with the following capabilities and features. Vendors will have to make arrangements for all the other accessories like UPS , etc. essential for the successful operation of the equipment. Installation certificate will be issued only after satisfactory working of the instrument (Demo of all the modules) & onsite training at Panjabi University, Patiala, Staff and Students. The instrument will consist of Ion source API (ESI /APCI), mass analyzers (Quadruple and TOF/High Resolution mass analyzer) and data analyzing system.
1	<p>Ionization Source</p> <p>The instrument must be equipped with combined/Dedicated source having ESI and APCI source for analysis of polar and non polar compounds should also be quoted</p> <p>System should have the capability of easy switching between ESI and APCI without breaking the vacuum.</p> <p>ESI and APCI Source should be capable of handling flow rates up to 2 ml/min or better without splitting.</p> <p>Desolvation Temperature should be 550°C or higher</p> <p>Sample introduction by UHPLC with mechanism to clean the sample, remove the neutrals and contaminants.</p> <p>The system should have isolation valve to allow source and sampling capillary maintenance without venting the system.</p> <p>A combined source which can ionize with range of compounds, typically covering ESI, APCI and APPI ionization mode, should be quoted as optional.</p>
2	<p>Mass Analyzer:</p> <p>Mass Analyzer should be equipped with quadrupole analyzer and collision cell followed by equivalent high resolution mass analyzer/Time of flight mass analyser or Quadrupole Orbitrap system with the below mentioned capabilities:</p>
3	<p>High Mass Quadrupole Mass Filter:</p> <p>System must have quadrupole mass filter equipped with stable design and RF-generator as well as High resolution mass capability.</p>
4	<p>High-transmission CID collision cell:</p> <p>CID collision cell should be fast and efficient enabling information-rich fragmentation.</p>

5	Orthogonal time of flight Mass Analyzer/Equivalent High resolution mass analyzer:	TOF analyzer/Equivalent High resolution mass analyzer with orthogonal mounted ion source and ion reflectron with increased mass resolution & accuracy. It should have positive and negative ion modes.
6	Sensitivity:	For full scan MS sensitivity for 1pg on column injection of reserpine should produce signal to noise ratio 300:1 or higher.
7	TO F/Orbitrap Mass Analyzer:	<p>The TOF/ mass range should be 100 – 40,000 m/z or better and Orbitrap mass range should be 6000 m/z</p> <p>Mass accuracy in MS or MS/MS mode should be <3 ppm or better for external calibration and/or <1 ppm or better for internal calibration.</p> <p>The Quad Mass Range- upto 2000 m/z or better</p> <p>For QToF, Spectral acquisition rate should be 30 spectra/sec in MS/MS mode. For Orbitrap, 18 Hz or better.</p> <p>For QTOF, the resolution should be up to 35000 FWHM or better at m/z approx. 1000.</p> <p>For Orbitrap, 2,40,000 FWHM or better at M/z 200 .</p> <p>Linear dynamic range of at least four orders of magnitude</p>
8	Analysis:	<p>The workstation should be capable of doing quantitative acquisitions with a linear dynamic range of at least four orders of magnitude.</p> <p>Fast pressure liquid chromatography and MS quoted should be manufactured by the same vendor for efficient performance and compatibility.</p> <p>Libraries: Libraries for natural Products, Pesticidies and toxicology library should be available and quoted as optional</p>
9	Computer Software and Hardware	<p>The workstation should be supplied with:</p> <p>Suitable computer workstations and all interfacing hardware and software for instrument control, data acquisition, data storage and data processing. The computer system should be one branded desktop computer processor intel core i7 @ 3.4 GHz Ram 16 GB, Memory 2 TB, Screen 23 Inch or more, DVD write drive, key board and mouse or PC minute and toner capacity 1200 Pages or more. Vendor may also quote all-in-one computer with same configuration, or better.</p>



Special Requirements

Licence version of Windows Professional OS and MS-Office professional and driver with original CD.
Software driven Integrated sample/calibrant delivery system + programmable divert valve, Automated mass calibration and monitoring of the instrument operation status should be standard
Software suite(s) for data acquisition and control of Mass spectrometry.
The MS control software must have the ability to control both the MS and specified Liquid Chromatography devices.
For future proofing, the quoted system must be compatible with Proteomics and Metabolomics application.
IQ/OQ/PQ of the complete system must be quoted as standard.
The full capabilities of the system need to be demonstrated to the complete satisfaction and specify the pre-installation requirement.
Company should have dedicated application specialist with a proven track record to provide onsite training.
Columns: C18-2, HSS T3- 1, C8-1. Air Conditioners: 1.5 T (2 Nos) Instrument Table: 6 X 4 Feet (1 Nos)
As the instrument is expensive and multi-user equipment, One year standard warranty followed by 4 years optional warranty and AMC should be quoted. A certificate will be required from the original equipment manufacturer that technical support along with all spares will be provided or made available for at least 10 years after the expiry of one year standard warranty period.
Multitasking suite of analytical applications and instrument management software operating in Microsoft Windows environment, featuring graphical user interface with multiple windows includes:
a) Mass Spectrometer Control Software
b) Spectrum Review and Processing
c) Chromatogram Review and Processing
LC-MS system Check-automated on-column performance test



		Auto-calibration/tuning, accurate mass measurements, elemental composition determination(Atomic formula generation by matching true isotopic pattern with parent and fragment ions), MS/MS experiments and qualification.
		Automatic library searching against free and commercially available libraries.
		Automatic library searching against user defined libraries.
		Semiquantitative reporting of deconvoluted component concentration.
		NIST Library to be quoted for identification
		Software for empirical formula calculations.
10	Component Identification Software(to be quoted as Optional)	Software should be integrated with Chemspider database and it should allow chemspider search and data reporting within a single window..
		The software should have workflow for performing both semi targeted(using internal library) and Non targeted(using External library such Chemspider) data processing in a single run without the requirement of reprocessing the data.
		Software to automatically process complex chromatographic datasets composed of many components which may be incompletely separated from one another.
		The software should have at least 10 pre-set workflow templates and minimum 2 report templates, which makes data mining and reporting an easy process to save a lot of time by not reediting the parameters
	Proteomics and Metabolomics Software(To be quoted as Optional)	The quoted model must be compatible with Proteomics and Metabolomics applications. Complete software package for High end Proteomics and Metabolomics should be quoted as optional. A high end processing workstation with Xeon Processor must also be quoted as optional.
11	UHPLC/UPLC System	Quaternary gradient pump equipped with: vacuum degasser, autosampler, column oven, columns should be quoted. The complete HPLC and MS system should be controlled by single software. All components should be UPLC based and same series only and no HPLC based component should be quoted.
		The complete HPLC and MS system should be controlled by single software. All component should be UPLC based only and no HPLC based component should be quoted
12	Solvent Delivery system	Fast pressure liquid chromatography system should have high performance Quaternary pump with on-line vacuum degasser

		Operating Pressure: Pump should be able to handling the pressure of 15000 prior better upto 1.0 mL/min with flow rate range of 0.001- 2.000 mL/min with 0.001 ml/min increment
		Flow Rate precision: 0.075% psi
		Composition precision: <0.2% RSD or 0.02 min SD. whatever is greater.
		Composition accuracy: ±0.5 % absolute.
13	Autosampler	Sample handling capacity:90 nos. or above of 1 ml/1.5ml/2ml sample vial.
		Safety features like leak sensor and automatic rack and vial recognition
		Sample injection volume: 0.1 µl to 50 µl
		Carry over: 0.002% or better
14	Column Heater	Column temperature range should be ambient/room temperature/ 90 °C or better
15	PDA Detector	PDA 190-700 nm with accuracy 1 nm or better.
16	Pre Requisite for Running the Workstation	The equipment must be supplied with branded Imported Gas generators suitable for supply of all the gases required by all of the Workstation's components. Any cylinders, regulators, moisture/hydrocarbon traps required in addition must be quoted separately.
		Appropriate 10 KVA online UPS cum stabilizer with at least 1 hour backup.
		Laser Jet Printer should also be quoted with the system.
		A suitable N2 Peak gas generator with built-in compressor capable of providing all the gases at the required purity, pressure and flow rate for the Mass Spectrometer must be quoted. The compressor should be noise-free
		Pre requisite for the Mass Spectrometer: any other gas cylinder (if any mention) as local Items for the working of the system and UPS should be quoted.
		HR-MS instrument is an expensive and advanced equipment; hence it is mandatory that the facility must be multiple-user specific. Also, it is important that the equipment is stable and run for a long time without much trouble.

(Ashok Kumar)