



Tender Document

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(A Central University)
Sagar-470003, M.P., India

SCHEDULE OF TERMS & CONDITIONS

No. DHSGU/PURCHASE/DORD/2012-13/01

Date: 02.02.2013

Subject: Supply of sophisticated equipments as per the technical details and specifications as given below:-

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Schedule of Requirements

Sealed bids are invited in a '**Two-Bid-System**' (Techno Commercial Un-Priced & Priced Bids) for supply of sophisticated equipments to the University as per the technical details and specifications given below:

A. List of Equipments:

S.No.	Name of Equipment	
1	Flow Cytometer/Cell Sorter Flow Cytometer	
2	High Performance Liquid Chromatography (HPLC)	
3	Confocal Laser Scanning Microscope	
4	Gas Chromatograph Mass Spectrometer (GC-TOF)	
5	PCS based particle size analysis	
6	Superconducting Quantum Induction Design (SQUID)	
7	BET Surface Area Analyser	
8	Fluorescence Spectrophotometer-Lifetime	
9	Spectroscopic Ellipsometer	
10	Electrochemical Work Station	
11	Dielectric Impedance Spectrometer	

B. Specifications & Allied Technical Details:

S.No.	Name of Equipment with specifications	Qty.
1	<p>Flow Cytometer/Cell Sorter Flow Cytometer: With four lasers i.e. 488 nm; 633 nm; 561 nm and 375nm; upgradable to six lasers, tunable for measurement of 15 parameters with upgradation to 20 or more florescent parameters; fixed optical assembly of laser; able to analyse cells at a rate minimum 70,000 cells/sec. or more; able to sort cells at a rate of up to 70,000 cells/sec. or more with a mini. purity of 98% regardless of the number of lasers or fluorescence parameters being used; Data Resolution of 4.5 decades or more is desired with high digital signal processing ability; fully programmable, software-controlled sample input station with provision to accommodate various tube formats with capacity of 0.5 ml, 1.5 ml, 5ml, 15 ml & 50 ml tubes respectively; automatic agitation & automatic back flush; have both 2-way & 4-way sorting capability; Multi-well sorting ability with flexibility to sort cells into 24 to 1000 well configurations & provision of single cell deposition on to slides or into wells; with multiple size nozzles for smooth analysis & sorting of different cell types; their removal and insertion should be without realigning the optics or fluidics of the instruments; able to perform at pressure ranging 5 to 90 PSI with proven capability of sorting various cells/cell lines like stem cells, T & B cell, somatic cells, fluorescent proteins & cancer cells etc. ; sample protection during sort interruption; able to alert the operator if sorting shuts down via either page, e-mail or through audible alarm; Colour compensation of all possible spectral overlaps with feature of the auto compensation.</p>	1
	Essential Accessories & Software	
	1. Computer-controlled sample input Station	
	2. Multiple nozzles	
	3. Window based acquisition & analysis software platform	
	4. Windows based acquisition & analysis software platform for on & offline use, import & export all standard FCS formats. Histograms, dot plots, & statistics easily imported into other applications, such as Microsoft Word, Excel & power point. Offline analysis at multiple sites. Provision for Autoclave-able sheath & waste tanks & replaceable sterile sample tubing is desired. The system software should be capable of establishing baseline settings of system performance.	W

<p>2</p>	<p>High-Performance Liquid Chromatography (HPLC)- Mass Spectrometer: Autosampler, Column oven & detectors with following mini. specifications: Pump : Flow rate range: 1-10,000 µL/min; Flow rate accuracy: ± 0.1% at 1mL/min. With Precision of <0.1% RSD; Gradient delay vol. 690 µL with 4channel built in solvent degassing; Sample capacity of more than 100 vials with Injection vol. of 1-100uL, precision of 0.3% RSD at 5uL & accuracy: ± 0.5% at 50. Auto Sampler: Capacity: 96 samples; Injections: 1- 99 injections/sample; Injection Vol. Range: 0.1 - 100µl, in 0.1 µl increments Sample Delivery Precision: < 0.3% RSD; Temp. Control: 4 to 40°C, programmable in 1°C increments; Carryover: < 0.005%. Column Management: Column Temp. Control: 5°C above ambient to 90°C, 0.1°C increment. Photodiode Array Detector: Wavelength Range: 190 to 800 nm; Wavelength Accuracy: ± 1 nm; Cell Vol.: 500 nl.</p> <p>Quadrupole Time of Flight Mass Detector: Interface: Proven atmosphere to vacuum interface without direct heating of analytes to maintain their structural integrity like thermally labile molecules; Capable to handle large batches of complex samples over a long period of time without performance degradation; & preferably the interface between atmospheres to vacuum should be free from any capillary/heated capillary interface. Source: ESI & APCI source capable to handle flow rate from 10 µ l/min to 2 ml/min without splitting; combination/dual source should be quoted to perform ESI & APCI in single run; & Atmospheric pressure Solid Probe. Sensitivity: In ESI+ mode 20 pg of reference standard; able to produce min. S/N ratio of 1000:1 or more than 1500 counts per sec. Resolution: More than 40,000 FWHM in MS alone without LC. Mass range (AMU): TOF Mass Range: not less than 50-20,000 m/z & quadrupole mass range better than 4000m/z. Mass Accuracy: less than 1 ppm with internal & external calibration both in MS & MS/MS mode.</p> <p>Collision Cell: Specially designed to automatically switch from low to high energy. Vacuum System: A fully protected air cooled vacuum system with mini. maintenance & utility requirements. Vacuum read backs & automated vent system in case of power failure. Operating Modes: Full Scan MS, Data directed analysis, Automated switching of low to high energy CID for MS & MS/MS acquisition. Software: Windows Based software with multitasking type to acquire & process data simultaneously & must be capable of performing the following functions & should be upgradable; Able to control MS, acquire, store process & reproduce data by same computer. Able to control LC; PDA detector, auto sampler & other devices from same software. Auto tune & auto calibration; Quantitation software for batch process; Metabolite ID Software.</p>	<p>1</p>
	<p>Essential Accessories & Software</p>	
	<p>1. Nitrogen generator with compressor, gas cylinder with regulator & 10KVA on line-UPS with 1Hr battery back up.</p> <p>ELSD Detector</p> <p>Nebulizer : Front mounted Snap Design Temp. Control : Thermally controlled Heater & Cooler 0 to 100°C</p> <p>Optics : Should be Heated Optics Bench Light Source : Tungsten Halogen Polychromatic, Front mounted, Pre Aligned, User Installable.</p> <p>Lamp Calibration : PMT Calibration. Detector : Photo Multiplier Tube Range : 0.1 to 2000 Light Scattering units full scale</p> <p>Analog Data Output : -0.1V to 2 VDC Fully attenuated signal Range</p> <p>Gas : N₂ , to be supplied, at least 65psi</p>	
	<p>2. Fluorescence Detector</p> <p>Wavelength Range : 200 to 890 nm (Excitation) : 210 to 900 nm (Emission)</p> <p>B& Width : 20 nm Wavelength Accuracy : ± 3 nm Wavelength Repeatability : ± 0.25 nm Sensitivity : S/N>1000 Cell Volume : 2 µl Light Source : Hg / Xe Arc Lamp Pressure Limit : 500 psi</p>	

<p>3</p>	<p>Confocal Laser Scanning Microscope: Inverted microscope (Fully Motorized): Bright field, Fluorescence & DIC illumination with accessories for confocal scan head attachment; Motorized beam path selection for visual & confocal imaging; Motorized Z focus drive with encoder with mini. stable resolution of 30nm or better; Online display screen on microscope body for the motorized functions; position or higher motorized FL filter wheel, 6 position motorized DIC nosepiece; XY stage for the movement of specimen; 12v/100w halogen illumination for transmitted light; High resolution plan apochromat objectives 4x, 10x, 20x, 40x, 60x/63xoil & 100x oil immersion; 120w/130w metal halide or mercury lamp with 2000 hours of lamp life for fluorescence observation with automatic shutter having DC (direct current) for constant & non-fluctuating light; capable of conducting long time live cell imaging applications without focus drift through hardware based continuous focus correction System; Onstage CO2 incubator for live cell imaging, which can hold petriplate & multiwall plate etc.; DIC attachment motorized for 10x to 100x objectives with analyzer & polarizer attachment, sliders & modules for the respective objectives; suitable anti-vibration table to be provided along with system; high resolution cooled monochrome camera with 1.45 million net effective pixel resolution with cooling of 10° below ambient. Confocal scan head & detection system: High transmission efficiency optics for confocal; Scan head with dual imaging capability with conventional fluorescence imaging (filter/prism based) & real time Confocal imaging. Both scanners possess point scanning method; Scan head with mini. 4PMT in standard detectors & preferably with 4 channel simultaneous image acquisition; equipped with spectral detector having multiple gratings options. Technology be latest & fast & capable to avoid any photobleaching or phototoxicity of the sample; Computer controlled continuously variable single pinhole system to cover more area for higher brightness & without affecting sectioning performance; High speed two independent Galvano scanner with the speed of 25-30 frames/second at 512x512 resolution preferably with simultaneous hybrid mode for photo activation studies. Flexible & should have different speed options useful for applications like high speed calcium flux signal capturing; efficient dichroic mirror with low angle incidence or acoustic optical beam splitter (AOBS) for better transmission efficiency; Maxi. scan resolution of up to 4Kx4K with a scan field of 18mm or higher; Scan zoom of 1-40X or more continuous variable. Multi step scanning zoom preferred; Transmitted light detector for capturing bright field & DIC images Lasers: Visible laser module with laser lines of Multiline Ar laser with 457/477/488/514nm; DPSS laser 561nm; Blue Diode 405nm; He-Ne 640nm; All the visible laser lines controlled through AOTF for laser attenuation & switching in synchronisation with scanner.</p>	<p>1</p>
<p>Essential Accessories & Software</p>		
	<p>Confocal Software: Basic image acquisition, complete microscope control, Scan head control & Laser control; Saving of all instrument parameters along with image for repeatable/reproducible imaging; Frame/line/lambda capturing, Z-Stack, Time series imaging capabilities; ROI bleach for FRAP experiments; FRET Imaging; Co-localization analysis & volume rendering; Real time ratio-display; 2 D & 3D image deconvolution; Diverse measurement & statistical processing; Offline image analysis software, installed in off line computer</p>	

4	<p>Gas Chromatograph-Mass Spectrometer (GC-TOF): Control both screen touch & hard keys. Column Oven: Temp. range: Ambient +4 °C to 450 °C; -100 °C to 450 °C with liquid N₂; -60 °C to 450 °C with liquid CO₂; Temp.-programmed ramps: 24 ramps with 25 isothermal holds; Max. Temp. ramp rate: 120 °C/min for all voltages; Cool-down rate: 400 °C to 50 °C in approx 4.5 min.</p> <p>Split/Splitless Injector (S/SL): Max. Temp.: 450 °C isothermal.</p> <p>Programmable Temp. Vaporizing Injector (PTV): Temp. range: -100 °C to 450 °C with liquid N₂; -60 °C to 450 °C with liquid CO₂; Maxi. Temp. ramp rate: 200 °C/min; Temp. ramps: 24. Injector EFC; Pressure: 0.1 % Full Scale; Flow: 0.5 % Full Scale & 3% Measured Value; Resolution: 0.1 psi or 0.1 mL/min.</p> <p>Optional GC features: Injectors: Up to three (one required); 1177 Split/Splitless or 1079 PTV; Detectors: Up to three detectors including theFID, ECD, PFPD, TSD (NPD) & TCD; maxi. of two PFPDs; Chromato Probe device: For solids, large volume liquids or slurries; requires a 1079 PTV Injector; Quick Switch Valve: Automated switching between different columns; Valves: Custom plumbed valves for a wide range of applications Foreline Pump; Dual stage, rotary vane. Voltage: 101, 120, 230 V; same as GC voltage.</p> <p>Bench top Time of flight Mass Spectrometer & Direct Insertion Probe Quadropole Mass range 3000 amu; & TOF mass range 20000 m/z. Mass resolution mini. 17500 with fast LC. have electron ionization (ESI), chemical ionization (PCCI); Direct insertion probe(DIP) for analysis of samples directly; coupling of CEMS & LCMR by particles; filament current & electron energy variable; Ion source temperatures variable & have independent control; have acquisition rate up to 20 spectra/sec; The Mass Accuracy < 5ppm throughout the mass range. Internal calibration 1-2 ppm, external calibration 5 ppm.</p> <p>Installation checkout Sensitivity : EI full scan for Hexacholrobenzene: 1 pg (S/N 100:1) peak to peak PCI full scan for Benzophenone: 100 pg (S/N 150:1) peak to peak</p>	1
Essential Accessories & Software		
1. Air cooled turbomolecular pumps.		
2. Source Isolation Valve to allow change of ionisation mode (EI/CI) without breaking Instrument vacuum. A probe vacuum lock to allow direct insertion probe to be inserted without breaking Instrument		
3. Software: Data acquisition, data processing, qualitative & quantitative analysis for complete equipment with its peripherals & inbuilt empirical formula calculation software & should automatically provide less number of possible hits.		
5	<p>PCS BASED PARTICLE SIZE ANALYSIS: Photon correlation spectroscopy-electrophoretic light scattering based analyser, measuring particle size range: mini.0.6 nm-7 µm & for zeta potential 4-100 nm. Conductivity range up to 200 mS/cm.</p> <p>Sample Volume: (min) 60 µl & 2ml for zeta potential. Scattering angles(s) 15°.130°.165° or more. Laser power not greater than 5mW with wavelength of 632 nm. Detector: AVALANCHE photodiode detector. Temp. range 2°C ±120°.</p>	1
Essential Accessories		
1. Autotitrator with three titrant, vol. 50 ml; sample vol. 30ml; Titrant dispense volume Min. 0.1 µl; circulation flow rate 10-40 ml/min; pH range 1-13.		
2. Software & computer suitable for instrument operation.		
3. Optional : Other accessories for advance studies.		
6	<p>Superconducting Quantum Induction Design (SQUID); Telsa High Uniformity Magnet: with C050A MPMS Ever Cool Dewar, (New Systems only); RSO option; RSO AIRLOCK Assembly; Continuous Low Temp. Control; UPS; Telsa Ac Measurement; M1pace Oven; External Devise Option; C111 Manual Insertion Utility Probe; G EMS-3 Environmental magnetic Shield; H M12 7A 7 Telsa Unit Ultra Low Field (EMS Shield Required).</p>	1
Essential Accessories		
1. He-leak detector.		

7	<p>BET Surface Area Analyzer: A high sensitive thermal conductivity detector. Onscreen Adsorption, desorption curves.</p> <p>Surface Area range: 0.1 m²/gm to 1500 m²/gm -Normal. Extendable up to 2500 m²/gm; Accuracy- Typically better than ± 1.5%; Reproducibility- Typically better than 3%; Sample Holder- Typical Sample holder capacity 7 ml Bigger sizes are available; Dimensions- 45 cm (L) 25cm (B) x 35 cm (H); Weight- 10 Kg.; Electrical- 230 V AC, 50 HZ; Regeneration System- Temp. Range: Ambient to 300°C; Accuracy: ≤ 1.5% of Set Point; Operating temp. - 15°C to 40°C (non condensing). Vacuum system : 4 x 10⁻² Pa (3 x 10⁻⁴ Torr).</p> <p>Features: Wide Range of Surface Area Measurement. Easy to use with direct display of Surface Area after completion of analysis. High Speed Analysis - within 10-15 minutes. Meets USP-24, EP/BP, ASTM D- 3037, ISO S4652, IS 877 & 2752 standards. High Accuracy & Reproducibility. Built in micro-controller permits to use the instrument in manual mode. Utilizes a modified BET equation for Single Point Surface Area determination. Ultra stable detector eliminates drift & need for constant readjustment. Separate regenerating system for sample preparation, which degas three samples at a time. Total pore vol. & multi point Surface Area determination with additional gas mixtures. Surface area range selection for Low to High Surface Area.</p>	1
Essential Accessories		
1. BET Surface area Analyses with 5 samples can, run 1 by 1 are required.		
2. Helium, Argon, Nitrogen & Oxygen (1 each).		
3. Liquid Nitrogen (1).		
4. Sample Tubes (20).		
8	<p>Fluorescence Spectrophotometer-Lifetime: Steady state Fluorescence-cum-Picosecond lifetime spectrophotometer should be complete with laser, sample compartment, PMT detectors, interface.</p> <p>Steady state Fluorescence: Monochromators (Excitation & emission); Single concave holographic grating; Wavelength range: from 200 to 1200 nm (dependent on selected grating); Wavelength accuracy: ±0.2 nm; Wavelength reproducibility: ±0.25 nm; Slew rate: 160 nm/s; Signal to noise ratio 5000: 1.</p> <p>Lifetime: Automated 4 cuvette holder for IRF measurements & low Temp. multi-sample measurements without exposing the samples to the air. Speed – complex decays are acquired in less than one minute in FD & in a few seconds in TD; Measurements: Single- & multi-exponential intensity decays; Anisotropy decays (rotational correlation times); Time-resolved spectra for measurements of samples up to 70ps possible; Frequency responses of multi-exponential decay times; Phase- & modulation-resolved kinetics Phase- & modulation-resolved spectra; Millisecond lifetime kinetics; Time-resolved protein fluorescence; Time-resolved energy transfer.</p> <p>Light Sources: TD; Laser diodes (375, 405, 436, 473, 635, 655, 690, 785, 860 nm); Pulsed LEDs (280, 300); Ti: Sapphire; White & other pulsed lasers; Parallel beam design for most precise polarization measurements , Polarizers UV-grade.</p> <p>Detectors: Selected side-on photomultiplier tubes (PMTs); Multi-Channel Plate Detectors (MCPs).</p>	1
Essential Accessories		
1. Double grating; Reference PMT for lamp intensity monitoring; Emission PMT set for 250-850nm; Instrument Features; Compact & portable.		
2. Light source: TD laser diodes (375-800 nm) pulse LEDs (280, 300).		
3. TI Sapphire; While & other pulsed laser, polarizers UV-grade.		
4. PMT, MCP.		

<p>9</p>	<p>Spectroscopic Ellipsometer: Spectroscopic Ellipsometer for transparent multilayer thin film thickness and n & k measurements with the following specifications. Spectral range of operation: About 370 to 1000 nm upgradable to 190nm & 3500nm(NIR). Angle of incidence (Goniometer): Variable, from $\leq 45^\circ$ to 90°, automatic (computer -controlled) operation. Step size, repeatability & accuracy: $\leq 0.01^\circ$. Detector system: CCD detector to measure all wavelengths simultaneously & FAST. Optical design; Continuously Rotating Compensator Ellipsometer (RCE) combined with CCD array detector. Spectral resolution: Wavelength step ≤ 1.6 nm (resolution at all wavelengths). Precision: Film thickness (δd) $\leq \pm 0.002$ nm. Sample stage features: X-Y translation up to 300 x 300 mm. Z (vertical) adjustment, rotation & tilt adjustment. 40X 40mm Micropositioner to move the sample precisely with m resolution. Spectral facility: Photometry Absorption, reflectance & Transmittance. Glass substrate: Auto retarder or Auto compensator to be included for the glass & other transparent sub-startes. Measurable film parameters/ operations: Refractive index, extinction coefficient & thickness (few nm to at least 10 m) of thin films, transparent or absorbing, over wavelength range of operation (i.e. including dispersion), Graded composition of graded index film with depth. Anisotropy, birefringence, Mueller Matrix elements. Hardware & software: with provision for Muller Matrix elements since some of our layers are anisotropic in nature. Multilayer programs should be included. Calibration Standard sample-Calibration standards of various thickness at least 4 standard wafers should be provided in the range of 10A to 10000A.</p>	<p>1</p>
	<p>Essential Accessories & Software</p>	
	<p>1. Optional ≤ 150 m spot size, to examine small features on film & other applications. Automated XY stage 150 X 150mm. Variable Temp. provision with Temp. range: 70 to 600C. NIR up to 1700nm.</p>	
	<p>2. Software: Comprehensive ellipsometric data acquisition & analysis package for accurate & reliable thin film (single layer/multilayer) characterization of optical constants, mechanical features like surface roughness, porosity & void fraction, modeling to determine fractional composition of constituents in mixed composition films, etc. Up-gradation of software for 2 years. Extra hardware lock to work in different computer for analysis. CCD Camera, 4-Quadrant Silicon detector for accurate sample alignment. Low volume Liquid sample holder for biological samples ~ 0.5ml capacity.</p>	
	<p>3. Spare parts for a trouble free operation with spare optical fiber, replacement bulb etc.</p>	

10	<p>Electrochemical Work Station: Instrument should be capable to use multipurpose applications of various departments including voltammetry, electrochemical bio sensors, corrosion, AC impedance.</p> <p>Techniques Required; Cyclic; Linear Sweep Voltammetry & Staricase Voltammetry; Tafel Plot potentiodynamic deactivation, pitting corrosion, corrosion rate, linear Polarisation, Corrosion current etc.; Chrono Amperometry; Chrono Coulometry; Differential Pulse, Normal Pulse, Differential Normal pulse, Square Wave, AC & Second Harmonic AC Voltammetry; Amperometric i-t Curve; Differential Pulse Ampero-metry; Double Differential Pulse Amperometry; Triple Pulse Ampero-metry; Integrated Pulse Amperometry Detection; Bulk Electrolysis with Coulometry; Hydrodynamic Modulation Voltammetry; Sweep-Step Functions; Multi-Potential Steps; AC Impedance; Impedance-Time; Impedance Potential; Chronopotentiometry; Chro-nopotentiometry with Current Ramp; Multi-Current Steps; Potentio-metric Stripping Analysis; Open Circuit Potential-Time; Galvanostat; RDE control (0-10V output); Full version of CV simulator; Impedance Simulator; IR Compensation External Potential Input.</p>	1
Essential Accessories		
1. Electrochemical Cells, Temp. regulated cells, Large volume cells 50ml, 3no.s, (1 each).		
2. Platinum working electrodes, GC working Electrodes, Au working electrodes. Ag/AgCl reference electrodes (1 each).		
3. Ag/AgCl non aqueous reference electrodes, SCE colomel electrodes, Hg/Hgs0A electrodes.		
4. Cell stand with required electrode holding arrangement.		
5. Electrode Polishing Kit.		
11	<p>Dielectric Impedance Spectrometer: High performance Dielectric Spectrometer analyzer including active Sample cell with gold plated electrodes & shielding unit. Supplied with Liq N2 dewar & heating arrangement with automatic Temp. control s/w to do the automated frequency sweeps at different pre set temperatures. System should be suitable for conducting materials for material science sample in the form of pellets, dielectric materials line bio samples, ceramics, polymer, suitable sample holder for powders & liquids. Software should be exhaustive with 3D display, different type of plots & fitting.</p> <p>Frequency Range: 3 μHz-20MHz; Measuring voltage range: 0-3 Vrms/70 mA; Dc-Bias. Voltage: + 40V/70 mA; Impédance Range: 0.01 Ohm-100Tohm;</p> <p>Capacitance Range: 0.01pF-1 F; Temp. Range -160°C to 400°C; Capacity Range: 1fF. 10F; Electronic loss factor tan delta resolution 30u-10k; Tan Delta resolution: 10e-5; Higher harmonic measurement should be up to 40MHz;</p> <p>Calibration: User calibration for low, short, open internal self laboratories, where the instrument is installed.</p>	1
Essential Accessories		
1. High Voltage booster & High pressure setup (1).		
2. Option: High vol. booster up to +/- 2000V; High pressure up to 3000 bar.		
3. Liquid Nitrogen System (1) & Additional Sample Cell (1)..		

I. Terms, Conditions and General Information:

1. Last date and time of receipt of Tenders: **Thursday, 07.03.2013 (3.00 p.m.)**
2. Date & Time of opening of Tender: **Thursday, 14.03.2013 (1.00 p.m.)**
3. **Tender Document Fee: Rs. 2500/- and Processing Fee: Rs 5000/- (Non refundable) Earnest Money Deposit: 2% of the price quoted** by the bidder for each equipment in favour of Registrar, Dr. Hari Singh Gour University, Sagar (M.P.)
4. **Purchase of Tender Document:** Tender document may be downloaded from the University website **www.dhsgsu.ac.in** or can be purchased on or before **28.02.2013 (3.00pm)** from the Office of Dean, Research & Development, Admn. Building, Dr. H S Gour University, Sagar on payment of fee as specified above. Tender document downloaded from the website should be accompanied with the tender document fee, in the form of Demand Draft, failing which bid will be rejected.
5. 'Two-Bid-Systems' have to be strictly followed. (One for Technical Bid and another for Commercial Bid *in separate covers*).
6. The University shall not be responsible for any delay/loss or non-receipt of tenders by post / courier service.
7. No unsolicited correspondence shall be entertained after submission of the offer.
8. **Bidder must sign and stamp all the pages of tender document and supporting documents towards acceptance of the terms and conditions of the tender.**
9. Tender Document Fee, Processing Fee and EMD, as specified, be remitted **separately for each equipment**, failing which bid will be rejected.
10. Tender Document Fee and Processing Fee must be enclosed with the Technical Bid and **EMD with the Commercial Bid**. Bids without EMD will summarily be rejected
11. **Quoting merely the lowest price does not confirm any right to any bidder for award of supply order. The University's Purchase Committee, reserves the right to select the equipment from any bid, ever after opening the financial bid, under the grounds of specification compliance, technologically advanced quality, proven performance track record, brand reputation, service backup support, additional warranty, offer of additional/special features, compatibility with existing system, training, etc.**
12. Tender is not transferable.
13. Tenders received through Fax/e-mail will **not** be accepted.
14. Separate Bids for each equipment, complete in all respects superscribing the envelope '**Tender for**' **Item No.....** must reach the **Dean, Research & Development, Dr. Harisingh Gour University, Sagar-470003(M.P.)** on or before **07.03.2013 (3.00pm)**. Bids received late shall not be entertained.
15. **Price Schedule:** Price should include the Delivery, installation, commissioning, training charges (if any), etc. at the University. The prices quoted shall remain final until equipment is supplied to the University.
16. **Quoting the Core price & Tax, Duties, Discount etc.;** Taxes / duties /discounts, if applicable, are to be explicitly and separately shown in the bid.
17. **Eligibility:** The OEM or their authorized dealer must have requisite domain expertise with regard to supply, installation and post-sale service of the equipment. The OEM or their authorized dealer should have been in existence for at least six years as on the date of this tender and must have executed at least three orders for this kind of equipment during the last three years.

18. **Warranty:** Equipment covered under this tender, when purchased and installed, shall be warranted for the quality, workmanship, trouble free operation and performance for a period of at least **36 (Three years) months from the date of putting the system into operation at the University**, or at least 42 months from the date of receipt of the last lot of the consignment in India. If any item warranty fails, the same shall be replaced free of cost including all the applicable charges including shipping cost both ways. (A signed Bidder's Warranty as per **ANNEXURE-IV** has to be submitted along with the Bid Document). However, it shall be obligatory on the part of the OEM/Bidder to extend the support for atleast next five years after the warranty period.
19. The information pertaining to infra-structural, power and any other requirement for satisfactory installation and commissioning of the whole system must be provided by the bidder, at least 120 days in advance of the installation to be commenced if purchase order is issued. All drawings for electrical connections, electrical safety items piping work etc. must be provided in detail.
20. Complete technical specifications and literature, including process flow, to be included with the quotation. Manufacturers of various major parts/equipment must be mentioned explicitly.
21. A clear statement regarding availability of after-sales service and availability of spare parts for next 5 to 10 years should be included.
22. A recent customer list (within last five years) with contact details including email address is to be submitted with technical bid.
23. If the bidder is an authorized representative in India, they are required to inform their technical ability to take care of the problems in the system, if developed later within the warranty and outside the warranty period. **The responsibility of the Indian agent must be clearly specified.**
24. Bidder from abroad shall obtain, if required, export permission from the appropriate authorities in his country or the country of origin for items to be shipped to India in case of items to be imported. The University shall provide necessary information if required for this purpose.
25. Equipment must operate at 230V/50 Hz single phase and / or equivalent three phase electrical power.
26. The validity of the quotation should be at least 180 days from the closing date of bid.
27. If an order is placed with the firm, the purchase shall be governed by an agreement as per the University rules in force at the time.
28. To safe guard the interests of the University, additional terms & conditions will be incorporated in the purchase order, if needed.
29. **Dispute:** In case of any dispute in respect of the tender, all legal matters shall be instituted within the jurisdiction of the place where the purchaser ordinarily resides.
30. **Power to reject the offer:** The University reserves the right to accept /reject any offer in full or in part or accept any offer other than the lowest offer at any stage without assigning any reason thereof. Any offer containing incorrect and incomplete information shall be liable for rejection.
31. **Liquidated damages:** Timely supply of the ordered items, installation, commissioning (wherever is applicable) and training etc. is the essence of the contract. In case of failure to supply within the time specified in the Purchase order, a penalty/LD of 0.5% of the total value per week or a part thereof shall be levied subject to a max. of 7.5% in respect of items which are not supplied. The decision of the University shall be final in this regard.
32. **Training:** Training shall be provided by the supplying companies on the specimen and operation of the equipments for a minimum period of two weeks from the date of installation with an expert team.

33. **Deadline:** Bids received after the deadline will be rejected or returned unopened. However, the university may extend deadline by amending the Tender Document, duly notified on the University website.
34. **Clarification:** For any clarification with respect to technical specifications, please contact the Dean, Research & Development.

III. Specific Condition for Imported equipments:

1. The bid must contain genuine **tender specific Authorization Certificate from the OEM** failing which bid will be rejected, inter alia stating that all needed support shall be provided by the OEM/their authorized partner for the period specified in the tender.
2. **Payment of EMD:** Tender must be accompanied with EMD (**Two per cent** by way of Demand Draft) **in sealed envelope** in favour of Registrar, Dr. Harisingh Gour University, Sagar, 470003 payable at **Sagar** separately. EMD shall be returned after placing the order on the successful bidder. No interest shall be payable.
3. **Payments Terms:** On receipt of acceptance letter and proforma invoice from supplier, a Letter of Credit of 100% value of PO shall be opened on a nationalized bank. However, 90% payment shall be made after shipment and balance 10% on installation and submission of Performance Bank Guarantee issued from a nationalized bank valid for 1 (One) year from the date of installation or 15 months whichever is later. No interest shall be payable on PBG. Bank charges in India shall be borne by the University and outside India shall be borne by the Supplier.
4. The offer must be in English. The rates should be indicated both in figures and words against item specified in the given table. The price be quoted in **Indian Rupees** also (in case it is in US Dollars/major foreign currency, taking the exchange rate on the date of bidding).
5. The total cost should be quoted for FCA as well as CIP Indian airport – Dr H. S. Gaur University, Sagar.
6. However, the price quoted under FOB should also include the following cost if they are required during the initial stage:
 - a. Local freight/insurance to the University laboratory, at Sagar;
 - b. Installation cost, if any; and
 - c. Cost of consumables which are required for the equipment for initial operation up to a reasonable time.
7. The fee of local agent should be paid by the bidder in INR.
8. The bidder from within India shall obtain the requisite approval for Imports etc., if required.

IV. Specific Condition for Indigenous Equipments:

1. **Price Schedule:** The **FOR** price quotes on Indian Rupees should also include the expected installation cost in the University and also cost of consumables which are required for the main equipment for initial operation up to a reasonable period.
2. **Time Limit for supply:** The Successful bidder should supply the item within one month after receipt of the purchase order.
3. **Payments terms:** Out of total contract/purchase price, 90% amount will be paid on satisfactory installations and balance 10% shall be retained as Security Deposit, towards satisfactory performance of the equipment, and shall be released on furnishing the performance Bank Guarantee(format enclosed in ANNEXURE -III) (obtained from any Nationalized Bank in India) valid for the Warranty period.

V. Specific Conditions for supply of software: (Single Vendor/Multiple Software Distributor)

1. The Bidder(s) must be authorized business partners of Global/National service providers of the respective Software Packages.
2. The Bidder(s) must enclose authorization letter from the respective global/ national service providers of the above said Software particularly mentioning an undertaking that in case of default by the Bidder, they (Global Service Provider) shall take over all the responsibilities of the Bidder.
3. The Bidder(s) should not be involved in any Bankruptcy filing for protection from it.
4. The necessary service support should be provided by Bidder(s) during the agreement period.

-Sd-
(Prof. N. K. Jain)
Dean, Research & Development

Note: This is a computer generated document and does not require signature.

The Tender Document Contains:

1. Schedule of Requirement;
2. Specifications & Allied technical Details
3. General Information;
4. Common Conditions Import or Indigenous items
5. Specific Condition for Imported equipments;
6. Specific Condition for Indigenous Equipments
7. Specific Conditions for the supply of software;
8. Tender Form (Techno Commercial Unpriced Bid)

ANNEXURE-I

9. Tender Form (Priced Bid) **ANNEXURE-II**;
10. Format of the Bank Guarantee (BG) Form.
11. Bank Guarantee **ANNEXURE-III**;
12. Bidders Guarantee **ANNEXURE-IV**

TENDER FORM
(Techno Commercial Unpriced Bid)
(On the letter head of the firm submitting the bid)
Tender No.....

To,
Dr. Harisingh Gour Vishwavidyalaya,
Sagar, 470003, MP

Dear Sir,

1. I/We hereby offer to supply the _____ (name of equipment) as per specifications given in this tender. I/we shall be bound by a communication of acceptance issued by you.
2. I/We have understood the Instruction to bidders and Conditions of Contract in the form as enclosed with the invitation to the tender and have thoroughly examined the specifications quoted in the Schedule hereto and am/are fully aware of the nature of the goods required and my/our offer is to supply the goods strictly in accordance with the specifications and requirements.
3. A crossed Demand Draft in favour of Registrar, Dr. Harisingh Gour Vishwavidyalaya, Sagar (M.P.), payable at Sagar for Rs..... (Rupees..... only) as Earnest Money is enclosed. The Draft is drawn onBank payable at Sagar.
4. The following have been added to form part of this tender.
 - (a) Schedule of requirements, quoting the make only duly signed and stamped.(without indicating price)
 - (b) Income Tax clearance certificate.
 - (c) Copy of last audited balance sheet.
 - (d) Copy of Valid Central/State sales tax registration certificate.
 - (e) Copies of relevant major purchase orders executed during last two years for Govt. Depts., PSUs & Central Autonomous bodies.
 - (f) Proof of manufacturing Unit, dealership certificate/general order suppliers.
 - (g) Statement of deviations from financial terms & conditions, if any.
 - (h) Any other enclosure. (Please give details)

We undertake to execute all orders which have been placed to meet emergent requirements on priority basis.

Certified that the bidder is:

A sole proprietorship firm and the person signing the bid document is the sole proprietor/
constituted attorney of the sole proprietor,

Or

A partnership firm, and the person signing the bid document is a partner of the firm and he has authority to refer to arbitration disputes concerning the business of the partnership by virtue of the partnership agreement/by virtue of general power of attorney.

Or

A company and the person signing the document is the constituted attorney.

(NOTE: Delete whatever is not applicable. All corrections/deletions should invariable be duly attested by the person authorized to sign the bid document).

We do hereby undertake, that, until a formal notification of award, this bid, together with your written acceptance thereof shall constitute a binding contract between us.

Yours faithfully,

(Signature of bidder)

Dated this day of _____

Address:.....

.....

.....

Telephone:_____

FAX_____

E-mail_____

Company Seal

Tender Form
(Priced Bid)

(On the letter head of the firm submitting the bid document)

To

Dr. Hari Singh Gour Vishwavidyalaya,
Sagar, 470003, MP

Ref: Tender No Dated-----

Sir,

1. Having examined the bidding document and having submitted the techno commercial unpriced bid for the same, we, the undersigned, hereby submit the priced bid for supply of goods and services as per the requirements and in conformity with the said bidding document.
2. We hereby offer to supply the Goods/Services at the prices and rates mentioned in the enclosed schedule of requirement.
3. We do hereby undertake, that, in the event of acceptance of our bid, the supply of Goods/Services shall be made as stipulated in the schedule of requirement and that we shall perform all the incidental services.
4. The prices quoted are inclusive of all charges net F.O.R University. We enclose herewith the complete Financial Bid as required by you. This includes:
5. Price Schedule as per requirement of the tender.
6. Statement of deviations from financial terms and conditions.
7. We agree to abide by our offer for a period of 90 days from the date fixed for opening of the bid documents and that we shall remain bound by a communication of acceptance within that time.
8. We have carefully read and understood the terms and conditions of the bid document and we do hereby undertake to supply as per these terms and conditions. The Financial Deviations are only those mentioned in the statement of deviations from financial terms and conditions.
9. Certified that the bidder is:

A sole proprietorship firm and the person signing the bid document is the sole proprietor/ constituted attorney of sole proprietor,

Or

A partnership firm, and the person signing the bid document is a partner of the firm and he has authority to refer to arbitration disputes concerning the business of the partnership by virtue of the partnership agreement/ by virtue of general power of attorney,

Or

A company and the person signing the bid document is the constituted attorney.

(NOTE: Delete whatever is not applicable. All corrections/deletions should invariably be duly attested by the person authorised to sign the bid document.)

10. We do hereby undertake, that, until a formal notification of award, this bid, together with your written acceptance thereof, shall constitute a binding contract between us.

Dated this day of _____

Signature of Bidder
Details of enclosures
Full Address:
Telephone No.
Fax No. E-mail:
Company Seal

Format of the Bank Guarantee (BG) Form

1. This Performance Bank Guarantee (PBG) should be furnished from a Nationalized Bank.
2. The PBG should be furnished on the stamp paper of Rs. 100/-
3. The stamp-paper would be purchased in the name of the bank Executing the Guarantee.
4. In case of foreign bidder the PBG shall be furnished by an international reputed bank acceptable to the PURCHASER countersigned by any Nationalized Bank.

BANK GUARANTEE

To
 Dr. Hari Singh Gour Vishwavidyalaya,
 Sagar, 470003, MP

1. This guarantee made this-----day of-----20_ by-----
 -----Bank having its Registered Office at-----and one of its-----
 ----- branches at----- (hereinafter referred to as
 "the Guarantor" which expression shall, unless it be repugnant to the subject,
 meaning or context thereof, be deemed to mean and include its successors and
 assigns) in favour of the Dr. Harisingh Gour Vishwavidyalaya 470003 represented by
 its Registrar, having his office at the University hereinafter referred to as the
 "University" which expression shall include his successors in office for an amount not
 exceeding Rs.------(Rupees ----- only) at
 the request of M/s.----- (more fully described hereunder)
2. Whereas the University has placed Work Order No: *PU*/----- dated for-----

 ----- with M/s.-----having
 its office at -----and hereinafter referred to as the "Contractor"
 which expression shall include their successors and assigns.
3. And whereas the Contractor has accepted and agreed to execute the work as per the
 work order as per undertaking / agreement dated -----within the time
 stipulated and in the----- manner specified therein.
4. And whereas the University has called upon the Contractor to furnish Bank Guarantee
 for the sum of Rs.------(Rupees-----only) for
 fulfillment of the said work as specified in the work order and as agreed to by the
 Contractor.
5. And whereas the Contractor has requested the Guarantor herein to furnish an
 irrevocable and unconditional Bank Guarantee in favour of the University for an
 amount of Rs.-----as guarantee towards execution of the work as agreed to by
 the contractor to the University.
6. Now, therefore, we -----Bank, the Guarantor herein, do hereby----
 ----- irrevocably and unconditionally Guarantee the payment to the University the
 sum not exceeding Rs. ----- (Rupees -----only) in
 the event of any breach, failure, neglect or inability on the part of the Contractor in
 the execution of the said work, on demand without reference of the matter to the
 Contractor and without any prior consent of the Contractor, at all times throughout
 the period of execution of the work, without demur, cavil or argument or delay.
7. The Guarantor agrees and undertakes that the decision of the University as to whether
 the contractor has committed any breach of the obligation with respect to the wok to
 be executed, and the quantum of amount therefore payable by the Contactor to the
 University in that regard, shall be final, binding and conclusive as against the
 Guarantor and the Guarantor shall make payment accordingly, on demand by the
 University.
8. The Guarantor further agrees and undertakes to pay to the University the amount
 demanded by the University irrespective of and notwithstanding any dispute raised
 by the Contractor in any suit or proceeding before any judicial forum relating to the
 Contracted work and the Guarantor's liability under this Guarantee shall be absolute
 and unequivocal.

9. This Guarantee is issued subject to the condition that the liability of this Guarantor under this guarantee is limited to the maximum of Rs----- (Rupees-----only) and the guarantee shall remain in full force up to----- and----- cannot be invoked otherwise than by a written demand or claim by the University for the payment of the said amount by the Guarantor on or before ----- or any extended date as decided by the University.
10. This University shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the contracted work or to extend time for performance of the work by the Contractor_ Any change to the contracted work shall not in any way release the Bank (Guarantor) from liability under this Guarantee and we waive notice of any such change. The University shall have full liberty to forbear or enforce any of the terms and conditions of the contracted work.
11. This Guarantee shall not be affected by any legal limitation, disability or other circumstances relating to the Contractor or the Guarantor.
12. This Guarantee shall be valid for the period up to ----- and shall extend further and Beyond ----- for such period as determined by the University.
13. The Guarantor undertakes not to revoke this guarantee except with the previous consent of the University in writing.
14. Notwithstanding anything contained herein:
- Our liability under this guarantee shall be limited to Rs. ----- (Rupees only)
 - This guarantee shall be valid up to and for such further period as determined by the University for fulfillment of the contract.
 - We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before -----or such extended period/date.
- In witness whereof, this Guarantee has been executed by ----- for an on behalf of the Bank (Guarantor) on the day, month and year first above written.

SIGNATURE AND SEAL
NAME OF THE BANK (GUARANTOR)
ADDRESS:

BIDDER'S WARRANTY

The Registrar, Dr. Hari Singh Gour Vishwavidyalaya, Sagar invited Bid Document for supply and installation of the equipment(s) namely,----- at-----
-----, Dr. Harisingh Gour University, Sagar

AND

M/s.-----

Thereinafter referred to as "The Bidder" having carefully studied all the bid documents, Specifications, etc. accompanying the tender for supply of the above mentioned Equipment and desirous to submit the bids as per the Tender Document advertised vide Notification No.:DHSGU/PURCHASE/DORD/2012-13/01 dated 02.02.2013.

DO HEREBY WARRANTY THAT:

1. The bidder is familiar with all the requirements of the bid documents.
2. The bidder has investigated the site and satisfied, he regarding the character and scope of the work and local conditions that may affect the supply or its Performance.
3. The bidder is satisfied that the supply can be performed and completed as required in the contract.
4. The bidder accepts all risk directly or indirectly connected with the performance of the contract.
5. The bidder has had no collusion with other contractors, with any of the men of the University, Sagar or with any other person in preparation of the bid.
6. The bidder has not been influenced by any statement or promise of the Officials of the University but only by the bid documents.
7. The bidder is financially solvent.
8. The bidder is experienced and competent to perform the contract to the satisfaction of the Dean, Research and Development of the University.
9. The statements submitted with the bid are true.
10. The contractor is familiar with all general and special laws, acts, ordinances, rules and regulations of the Municipal, District, State and Central Government that may affect the work, its performance or personnel employed therein.
11. All the terms & conditions of the Supply Order will bind the bidder once his quote is accepted and supply order issued.

Signature of the Bidder