



Ref. No.: F69.V1/REG/0010-19

Date: 02.01.2019

DEPARTMENT OF CHEMISTRY NOTICE INVITING E-TENDER

Online E-Tender is invited, by the Registrar, Cooch Behar Panchanan Barma University, for Department of Chemistry, Cooch Behar Panchanan Barma University for supplying different instruments, by the eligible vendors. Interested vendors may follow the instructions as given below for submission of their tenders under online mode:

1. Technical Specification for QTOF High Resolution Mass Spectrometer with Accessories -1Nos.

A bench top high resolution LC-MS/MS mass spectrometer with quadrupole-time-of-flight (Q-TOF) configuration for mass spectral analysis of synthetic and natural molecules having all possible functional group.

1. Ionization Source:	<ul style="list-style-type: none">• Combined / dedicated ESI and APCI ionization source should be provided, with a facility of interchanging easily by the user, and auto-detection of installed source by the instrument and software.• The ionization must be done both in a positive & negative modes.• Flow rates from 1-1000 $\mu\text{L}/\text{min}$ or better.• Direct sample introduction must be possible through integrated fluidics or via external syringe pump.
2. Source cleaning:	<ul style="list-style-type: none">• An isolation valve/suitable device must be available to allow the source elements to be removed and cleaned without breaking instrument vacuum, maximizing instrument uptime. The routine maintenance should be tool free and user friendly.
3. Ion Optics:	<ul style="list-style-type: none">• Suitable ion optics must be available which should maximise sensitivity whilst maintaining system robustness. Neutral molecules and gas load must be actively exhausted while the ion beam is actively extracted into a parallel off axis device for enhanced transmission and to enable focussing into the analyser.
4. Desolvation Temperature:	<ul style="list-style-type: none">• The desolvation temperature must be more than or equal to 500°C
5. Mass Analyzer:	<ul style="list-style-type: none">• Instrument should have Physical Quadrupole for isolation followed by collision cell and Time of Flight (Q-TOF) for high resolution mass data.• Mass Range: 50 to 30000 m/z• Mass resolution must be more than 40000 FWHM or better (<i>Proof of Statement must be provided</i>)• Data acquisition rate must be 30 Spectra per second or better in both MS and MS/MS mode.• Mass Accuracy of the system should be ≤ 1 ppm (with internal calibration) and ≤ 2 ppm (with external calibration) for both MS & MS/MS modes on 10 consecutive repeat measurements on column analysis.

	<ul style="list-style-type: none"> The instrument must be sensitive enough for detecting sub ppb/femtomole levels of compounds. The sensitivity achieved in MS & MS/MS modes must be stated. The signal to noise (S/N) ratios or counts per second must be specified along with the full analyses conditions. Sensitivity: Full MS mode and Full MS/MS mode \leq 10 femtogram or better on column, at S/N ratio \geq100:1. (Proof of statement must be provided) The instrument must be able to operate in MS Scanning, MS/MS product Ion Scanning, Simultaneous MS & MS/MS scanning modes. The software should be capable of data acquisitions whereby high and low collision energy data is acquired simultaneously to provide fragmentation data for all detectable molecular ions and TOF-MRM.
6. Vacuum System:- 1Nos	<ul style="list-style-type: none"> A high efficiency vacuum system with turbo molecular pumps followed by rotary mechanical pumps must be provided.
7. Software:-1Nos	<ul style="list-style-type: none"> The software should have capabilities to perform the following functions: Automated mass calibration, resolution, sensitivity check should be performed by software. Software tools for addressing Screening, Component Identification & Structural Elucidation workflows. The data processing software must incorporate an elemental composition calculator as standard. Included into the calculator must be algorithms for isotope pattern modeling that allow data interpretation of actual isotope patterns. A goodness of fit from actual to theoretical isotopes must be included. The ability to filter out incorrect elemental composition calculations through the use of intelligent spectral interpretation algorithms must be incorporated. Software should give elemental formula with mass accuracy or ppm error and isotopic fit value (Including halogen filters by matching theoretical and actual spectral pattern. The model offered by the vendor should have capability to demonstrate the above mention parameter like high resolution, high mass accuracy in one single run.
8. Computer & Workstation: 1Nos	<p>A Workstation should be provided for controlling the mass spectrometer with data acquisition & for data processing and analysis with following specification:</p> <ul style="list-style-type: none"> Memory: 64 GB Hard disk: 8 TB or better CPU: Dual-Processor E5-2637 v3 Processor (3,5GHz 4c); Operating system: Windows 7 Professional 64 - bit or better. 27 inch LCD monitor. 1 Laser jet printer. All hardware and software including drivers, monitor, device interfaces cards/network must be preinstalled and preconfigured on the computer provided.
9. Nitrogen Generator:-1Nos	<ul style="list-style-type: none"> Gas Generators capable of supplying all necessary gases with the required purity, pressure and flow rate, as required for the LC-MS/MS instrument should be provided. It should be complete with all necessary accessories. Highly reputed international brand of Nitrogen generator with inbuilt compressor with low noise should provided.
10. UPS: 1Nos	<ul style="list-style-type: none"> A suitable online UPS of 10 KVA capacity with at least 60 mins back up for the

	complete system should be provided.
11. Warranty:	<ul style="list-style-type: none"> • Three years comprehensive warranty from the installation.
12. Others:	<ul style="list-style-type: none"> • The other gases along with regulators should also be supplied along with the system • The system Qualification must be quoted • Training and Installation: Installation must be done at user's site with no extra costs involved. A one week (at least) general entry-level training-cum-workshop and advanced-level training-cum-workshop must be arranged at the user's site by the vendor on experimental and data analysis part, with no extra cost involved. • The supplier should have at least 10 successful installations of the quoted model across India. • Satisfactory performance certificate taken from government organization along with technical bid shall be submitted. • Proof of Performance documents must be provided with the Compliance sheet. • Standards/reagents and solvent required for successful installation must be supplied. • All provided brochures or technical data sheet should be available in supplier's public website.

2. Specification for Analytical cum Semi-preparative HPLC System - 1Nos.

HPLC Pump - 2 No.'s

- 2 Nos. of modular HPLC pumps with dual reciprocating pistons and non circular gear driven pump should be provided to work in Isocratic, Binary Gradient and semi preparative mode. The pumps should be able to work on fully analytical & semi-preparative mode separately.
- Programmable flow range: 0.0001 to more than 10.000 ml/min with 0.01 ml/min increment or better for analytical cum Semi-Preparative application.
- Flow Precision: 0.1% RSD or better.
- Maximum Pressure: 40 MPa throughout entire Flow rate.
- Flow accuracy : + 1% or better
- Should have the capability to operate in at least 7 or more various gradient curve mode including Liner, Step, concave, convex, exponential etc.
- Built-in Leakage Sensor, Auto purge functions should be available.

Manual Injector - 1Nos.

- The injector having dual injectors facility for Analytical & Semi Preparative modes separately
- Analytical mode should come with 20 µl & 500 µl loops & semi preparative mode should come with 2 ml loop

Photo Diode Array Detector - 1Nos.

- Wavelength range : 190-800 nm or better
- Wavelength repeatability : ± 0.1 nm

- Wavelength Accuracy: ± 1 nm or better
- No of Diode elements: 512 or higher
- Spectral Resolution/Optical Band pass: 1.2nm per photodiode with a total of 512 photodiodes, digital and optical (3D mode)
- Date Acquisition : Up to 80 Hz
- Light Source: Deuterium lamp; Lamp should be guaranteed for 2000 hrs of operation without drop in the energy level with appropriate backup from software and hardware.
- Operating mode : Both 2D and 3D
- Sensitivity Setting Range: 0.0001 – 2.0000 AUFS.
- Linearity: 2.0 (ASTM Method)

Software - 1No.

- User friendly chromatographic software compatible with all mentioned detector
- Must be able to control the instrument fully
- Measurement of retention times & component identification.
- The quoted software should have the capability of programming at least 7 or more different gradient curves.
- Automatic peak detection, peak area measurement and baseline correction facilities.

Columns & Accessories

- Analytical C18 Column with suitable Guard column (250 x 4.6 mm x 5 μ): 1No.
- Semi preparative C18 (250 x 10 mm x 5 μ): 1 No.
- C8 analytical column with suitable Guard column (250x 4.6 mm, 5 μ m): One No

Reservoir Tray: - 1No

- Should be supplied with the system

Installation & Technical support:

- **Free onsite** installation and commissioning of HPLC system **and rigorous training on Instrument & Applications** at the time of installation to our scholars/ faculty **at free of cost** will be essential.

Essential Accessories:

- Latest branded PC and Printer for loading the HPLC software of above mentioned specification.
- Suitable 2 KVA on line UPS with 30 minutes backup for run the quoted HPLC system should be quoted.
- Sample and solvent filtration kit with vacuum pump should be quoted

Warranty:

- Three years comprehensive warranty from the installation should be provided.

Other:

- All technical data sheet should be available on vendor's public website.
- All the quoted components should have proper part number.
- Supplier should have service station at West Bengal for instant service.
- Supplier should have 10 years experience in supplying and installation of HPLC.
- Supplier should have atleast 10 successful installation of the quoted model in West Bengal.

3. Luminescence Spectrometer - 1Nos.

Specifications

1. The luminescence spectrometer should be a bench top set-up capable of acquiring steady-state fluorescence and phosphorescence measurements; with spectral acquisition in the near infrared (NIR) spectral range, temperature controller, polarizer and solid state sample holder.
2. **Excitation Source.** Xenon lamp source (steady-state) with power 150 W or better (ozone free), with required power supply and cooling arrangement (as required, air cooling is preferable, if otherwise that arrangement has to be taken care of by the vendor). The module should be equipped with appropriate focusing optics.
3. **Monochromators.** The spectrometer should be equipped with the monochromators with the specifications mentioned below.
 - (a) **Excitation Monochromator.** Czerny-Turner configuration with 1200 g/mm gratings, excitation range: 220-900 nm, blazed at an UV wavelength.
 - (b) **Emission Monochromator.** Double Czerny-Turner configuration with 1200 g/mm gratings, emission range: 240-930 nm, blazed at a visible wavelength.The bandpass should be continuously adjustable with computer controlled option. Wavelength accuracy should be +/- 0.5 nm or better.
4. **Sample Chamber.** Standard sample chamber having capability to acquire luminescence spectra in standard 1 cm x 1 cm quartz cuvette and in L format.
5. **Detectors.** Photomultiplier should work in the wavelength range of 240-850 nm (minimum requirement). The detector should work in photon counting mode. The cooling arrangement should be provided by the vendor if required.

The spectrometer should have photodiode as reference detector to monitor lamp intensity stability and for the automatic correction for the lamp intensity in the excitation spectra.
6. **Signal to Noise Ratio.** ~6000:1 or better, based on water Raman spectrum with a 350 nm excitation and 5 nm/5 nm excitation and emission slits respectively, one second integration time.
7. **Software, Hardware and Electronics.** The spectrometer should be equipped for proper data acquisition and relevant analysis of the data in Windows based operating system, with photon counting electronics.
8. **Phosphorescence.** The spectrometer should have dual lamp housing with continuous wave xenon lamp and pulsed xenon lamp, which should allow collection of phosphorescence spectra and phosphorescence lifetime. The lamp change option should be computer controlled.
9. **Near Infrared Spectral Region.** The spectrometer should have provision for steady-state spectral acquisition in the near infrared (NIR) spectral range at least covering to 1550 nm. All relevant optics, monochromator and detector should be included.

10. **Temperature Controller.** The spectrometer should be capable of acquiring spectra with Peltier controlled temperature controller in the range of at least from 0 to 80 degrees Celsius. Relevant sample chamber should be included.
11. **Polarizer.** The spectrometer should be equipped with excitation and emission polarizers and should be computer controlled.
12. **Solid State Sample Holder.** A sample holder for acquiring spectra with solid samples needs to be included.
13. **Filter Set.** A standard filter set with long pass filters covering the ultraviolet-visible spectral range need to be included. The wavelengths should be evenly distributed in the spectral range, with at least six filters available in the filter set. The dimension of the filters should match placement in the spectrometer. For emission spectral acquisition in the NIR spectral range, a devoted long pass filter should be included to block the excitation light.
14. **Other Items.** Any other required item like computer, UPS, instrument installation and training should be clearly mentioned.

Terms and Conditions

1. Only experienced suppliers (sole manufacturers or authorized distributors) should submit quotation. The submitted quotation should accompany valid documentary evidence that relates to the experience of the company in related field.
2. Please attach all technical details of the instrument and provide a list of similar installations done in India, with ≥ 10 installations in India and feedback from users with their contact numbers.
3. The quotation should be clearly written and the specifications of the quoted item should be properly mentioned, which should follow the points mentioned under specifications of the requested item. Compliance certificate for the specified items should be provided.
4. If any item is proprietary in nature, the company should clearly specify that and provide supporting valid documentary evidence.
5. If the quotation is being submitted on behalf of a principal company, a valid authorization certificate of dealership (for the ongoing financial year 2018-2019) should be submitted. The dealer should also provide a certificate stating the permission to quote the product under consideration to the Cooch Behar Panchanan Barma University. Any photocopies submitted in this regard should be self attested with company stamp.
6. The company should provide valid documents related to the permanent account number, GST and trade license (for the ongoing financial year 2018-2019), with self attested photocopies and company stamp in the documents, wherever applicable.
7. Price should be mentioned in Indian currency as well as in international currency (wherever applicable) and include all other charges (carriage, insurance etc.) until it reaches the destination, including taxes. Installation and training charges (if any) should be included within the quoted price.
8. The space, power, environment (temperature, humidity etc.) requirements for proper operation of the instrument should be clearly stated.
9. An appropriate branded computer (Dell/HP) with all required specifications (minimum hard drive storage capacity of 500 GB) should be provided by the company that should be connected with the instrument and will be capable of proper data collection and relevant data analysis.
10. In case the UPS is not provided by the company, the required specifications of the same should be clearly mentioned. Any other required accessory that is not provided by the company should be clearly mentioned.
11. Delivery and installation time frames should be properly mentioned in the quote. The instrument should be delivered within sixty days from the date of placing the order.
12. The product under interest will be used for educational purposes. Any educational discount should be included and clearly mentioned in the quotation.
13. Quotes should be valid for at least three months.
14. Standard warranty details should be clearly explained. Minimum warranty period should be one year.
15. Complete set of operation manual of the instrument should be provided.

16. The purchasing authority reserves the provision of minor modifications in the specifications, only if it feels as an absolute necessity.
17. The university reserves the right to accept or reject any or all the submitted quotations without assigning any reason whatsoever.

4. Time Correlated Single Photon Counting (TCSPC) Set up for Luminescence Lifetime Measurements - 1Nos.

1. Separate TCSPC set up, should not be directly connected with the Steady State Photoluminescence Spectrometer.
2. Excitation Source : Appropriate light emitting diode and diode laser based excitation sources covering the UV and VIS spectral range.
Excitation Wavelengths : (i) 280 nm , (ii) 320 nm from LED Source and
(i) 405 nm, (ii) 510 nm & (iii) 635 nm from Diode Source.
Controller needs to be included, repetition rates of the excitation source should be mentioned.
3. Optical Set up : Excitation polariser, emission polariser, Sample Chamber, Monochromator on the emission path should be included.
4. Detection Set up : Micro Channel Plate Photomultiplier Tube (MCP PMT) is required, any required cooling arrangement needs to be included.
5. Detection Window : UV-VIS spectral range, at least covering 300-800 nm.
6. Standard filter set should be included.
7. Appropriate software, hardware and electronics needs to be included.
8. Temperature Controller : At least ~ -10 to ~ +80 degree Celsius.
9. FAST Software for data analysis, in addition to the data acquisition and analysis software that comes with the instrument.
10. Any other required item like computer, UPS, instrument installation and training should be clearly mentioned.

5. Technical specifications for microwave reactor for small scale synthesis from mg to gram. - 1Nos.

Microwave assisted focused monomode organic synthesis system should be able to handle the synthetic reactions involving routine Organic, Organometallic, Nano materials synthesis, fluorination, caustic solutions, catalysts using palladium, non-polar solvents like toluene, hexane etc.

- Power Output : Microwave power of minimum 500 W or higher
- Microwave Power field density : 6000 Watts/liter or more
- Maximum Pressure & Temperature: 20 bar and 250°C or greater for 10 mL as well as 30 mL reaction vessels for scale up reactions without re-optimization of parameters.
- System must be able to effectively heat polar as well as non-polar solvents like Toluene, Dioxane etc. to elevated temperature without heating aids.
- Temperature Measurement: IR measurement as standard facility with multi point calibration for accurate temperature measurement of reactions.
- Integrated Pressure Sensor to measure, display as well as document reaction pressure.
- Should have inbuilt magnetic stirrer device with variable speed from 0 rpm upto at least 1000 rpm or more to ensure uniform temperature in the reaction.
- Self-tuning cavity for optimum heating efficiency with all vessel types.
- Should be supplied with Glass Vials of 10 ml and 30 ml capacity with sustainable material of construction and allow for multiple reaction runs to be conducted in the same vial.
- Must be supplied with a vessel made of material of at least 10ml capacity to allow for carrying out reactions involving metallic particles, in-situ fluorination, caustic solutions of high alkaline pH such as

NaOH at elevated temperatures and reactions using other aggressive reactants to avoid breakage of glass vessels during operation and it must have unlimited reusability for reduced cost of operation.

- Sealing of reaction vessels should be easy and without use of any tools.
- Heating Performance benchmarks with glass vessels and without any heating aids :
System should have ability to heat 20 mL Ethanol to 200 °C in around 2 min
System should have ability to heat 5 mL Toluene to 200 °C in around 5 min
- Large inbuilt Touchscreen display with capability for online graphical display of reaction parameters like pressure, power and temperature and review of previous reaction runs.
- Direct printout to PDF files or export of data to excel via USB ports.
- Suitable air compressor for operation of the instrument and cooling of reaction vials after a reaction is over should also be quoted.
- Consumables: Stir Bars for both 10 mL as well as 30 mL vessels, Caps, Silicone Septum must be quoted in the main offer along with the instrument for trouble free operation.
- Optional Fiber optic Ruby Thermometer with ability to measure internal reaction temperature simultaneously along with IR sensor and simultaneous display of both, IR and Ruby temperature on screen should be quoted separately.
- The system must be upgradable with an autosampler with minimum 24 reaction vessels handling (10 mL and 30 mL) for unattended operation.
- The system must be upgradable with an integrated camera for monitoring the reactions with display on the screen of the instrument.

6. Magnetic Stirrer with hot plate with digital speed indicator - 10 No's

- Stirring capacity 1 lit
- Heating capacity 150 watt or above
- PMDC motor for higher torque even at low speeds
- Better speed regulation even with small volume and low speeds
- Accurate stepless speed control maintains excellent speed stability.
- Digital Speed Indicator for displaying of stirring speed
- Totally enclosed unit
Designed for use even in corrosive atmosphere

7. Benchtop lyophiliser (-110C trap temperature) - 1Nos.

Compact SILENT type model preferably chamber outer dimension within 50x50x50cm which may be placed on table inside the lab without disturbing lab environment.

- Operated on 220Volt/50 Hz power supply.
- Surface condenser temperature -110C or lower to trap both of water and organic solvents and for faster drying process.
- Condenser material Stainless Steel preferably AISI316 grade
- Must be with seamless surface condenser with external cooling coil. Cooling coil exposed in condenser chamber will not be entertained to prevent mechanical damage and difficult defrosting.

- Simple microprocessor controlled with temp led display without any complicated programming/display
- Condenser capacity minimum 2.5Kg per day or better.
- Condenser minimum dia 160mm or higher.
- PTFE quoted condenser facility.
- Start delay for the compressors safety.
- Any other additional facilities for easy freeze-drying are preferable.
- Provision for connecting vacuum concentrator for future up gradation.
- Compact two stage high vacuum pump preferably not more than 12"x8"x6" with sound as less as possible 44dBA to keep the laboratory environment disturbance free.
- Ultimate partial vacuum 0.0004 mbar
- The pump should be vacuum tight without the need of external anti-suck back valve to prevent backflow of vacuum oil.
- High flow rate at high vacuum for faster drying preferably >1cu.m/hr at 0.01mbar
- Pump must be compact high performance, weight preferably less than 12kg for table top quiet operation.
- Manifold arrangement for freeze drying in flask and petri dish etc. should be quoted along with the system.

Prefreezing facility should be there to complete the unit.

- Flask drying manifold of stainless steel
- Five Liter vacuum oil
- Four nos. stainless steel adapters
- Atleast 2 numbers wide mouth flask with tray.
- 4nos. RB flasks

Two nos bent neck glass adapters

- Two years AMC after warranty
- Freeze dryer system should be completed with all required vacuum tubing, flanges, connectors, adapters etc.
- Any other required items, if any, for smooth and safe operation of the system has to be mentioned and price to be quoted.
- The bidder should have complete knowledge of freeze drying process, installation, demonstration, application etc.

The above model should be from standard product range with full details in public domain. Govt users information needs to be submitted.

8. Planetary Ball Mill - 1Nos.

Features:

- Powerful and quick grinding down to nano range
- Perfect stability on lab bench
- Innovative counter weight and imbalance sensor for unsupervised operation
- Comfortable parameter setting via display and ergonomic 1-button operation
- Automatic grinding chamber ventilation
- 10 SOPs can be stored
- Programmable starting time
- Power failure backup ensures storage of remaining grinding time
- Reproducible results due to energy and speed control
- Suitable for long-term trials and continuous use
- 2 different grinding modes (dry and wet)
- Optional pressure and temperature measuring system
- Measurement of energy input
- Wide range of materials for contamination free grinding
- Safety Slider for safe operation

Technical Specification: Field of application	plastics, construction materials, engineering / electronics, environment / recycling, geology / metallurgy, glass / ceramics
Feed material	soft, hard, brittle, fibrous, cellulose, - dry or wet
Size reduction principle	impact, friction
Material feed size	< 10 mm
Final fineness	< 1 μm , for colloidal grinding <0.1 μm
Batch size / feed quantity	max. 1 x 220 ml, max. 2 x 20 ml with stacked grinding jars
No. of grinding stations	1
Speed ratio	1 : -2
Sun wheel speed	100 - 650 min ⁻¹
Effective sun wheel diameter	141 mm
G-force	33.3 g
Type of grinding jars	Tungsten Carbide, safety closure devices
Material of grinding tools	Tungsten Carbide
Grinding jar size	3 mm, 250 ml
Setting of grinding time	digital, 00:00:01 to 99:59:59
Interval operation	yes, with direction reversal
Interval time	00:00:01 to 99:59:59
Pause time	00:00:01 to 99:59:59
Measurement of input energy	yes

possible

Drive	3-phase asynchronous motor with frequency converter
Power connection	1-phase, 220-230 V, 50/60 Hz
Documentation	Operation & Application Video
	CE Certified

Salient Features:

Should have the following Salient features:

- Additional Safety Lock.
- Use counter weight and imbalance sensor to maintain perfect stability on lab bench for unsupervised operation.
- Gentle grinding in centrifugal mode.
- Power failure backup that ensures storage of remaining grinding time.
- Electricity saving mode.
- Contamination free grinding.
- Cooling fan or ventilation in grinding chamber for long time operations.

9. Raman Spectrometer - 1Nos.

- For 785nm excitation, the system must have a laser with CleanLaze technology for Narrow Laser for stabilized accurate Raman spectra. Laser Power should be >300 mW
- The system must have spectral range coverage from 65cm⁻¹ to 2700 cm⁻¹ with 3.5 cm⁻¹ spectral
- The system must have a High Quantum Efficiency 2048 pixels CCD array detector TE-cooled.
- The system must have fiber optic probe with trigger for external use for easy operation.
- The Raman device has a built-in switching mechanism to permit system control and operation by an external PC for other data acquisition as well as data processing and model building operations.
- Software operable on the external PC should have following features:
 - a) offers peak analysis options: center wavelength, peak height, peak area, FWHM calculations, and real-time peak monitoring
 - b) must provide basic spectral math: addition, subtraction, multiplication, and division
 - c) saves the unprocessed sample and background spectra in pixels, as well the processed spectrum with both X and Y axes calibrated
 - d) includes derivative algorithms: point difference, Savitzky-Golay, and differential

- e) includes smoothing algorithms: FFT, Savitzky-Golay, and boxcar
- f) features manual and automatic baseline correction g. offers spectral file formats: txt, spc& csv h. exports spectral files to Excel

Optional –

1. System should be upgradeable to add another Raman spectrometer Laser of 532nm in future The system must have a research grade microscope with 10X, 20X, 50X objectives.

10. Stability & Size measurement Instrument - 1Nos.

Single Proven system with highly accurate and repeatable Nano Particle Size, Zeta Potential (Aqueous, Non Aqueous) , Molecular Weight system at variable temperature (0°C -90°C with 0.1 deg.c accuracy) with inbuilt Peltier temperature controller and with future upgradation facility of Micro-Rheology, Surface Zeta potential & Auto Titration.	
Zeta potential measurement range	Preferable more than +/-400mV
Principals	Preferably by High & Low frequency micro electrophoresis, Laser Doppler velocimetry with Phase Analysis light Scattering. .
Size Range suitable for Zeta Potential measurement	Min: 5nm, Max: 90 micron
Maximum Sample Concentration for Zeta Potential measurement	Preferably more than 35% w/v
Maximum sample conductivity for Zeta Potential measurement	Preferably more than 180mS/cm
Minimum sample volume for Zeta Potential measurement	20 µl
Live measurement window	Live measurement windows for display of Frequency, Voltage and Current, and Zeta potential vs Current
Necessary cuvettes for Zeta Potential measurement	Should provide Cuvettes for use in Aqueous Gold Plated Folded Capillary cells(10Nos) Should provide kit for non-aqueous zeta potential measurement
Particle size analysis	At High and Low concentrations for any dispersions / emulsions / colloids / submicron suspensions
Principals	Dynamic Light scattering technology with True Non Invasive Back Scattering detection technique.
Minimum Particle size range	Should be less than 0.40 nm(with sufficient documentary proof in terms of Analysis report and published journal-Otherwise bid will be liable for cancellation) Vendor have to demonstrate the same, if needed.
Maximum Particle size range	Should be 9.0 µm or more(with sufficient documentary proof in terms of Analysis report and published journal-Otherwise bid will be liable for cancellation) Vendor have to demonstrate the same, if needed.

Minimum sample required for size measurement	Preferably Less than 14µl.
Long term trend analysis(Time Trend & Temperature Trend)	Should have a facility to measure long term trend analysis so that kinetics of growth as function of time/temperature, molecular size of clusters/large molecules can be determined
Automatic and Manual measurement	Instrument should have automatic and manual measurement facility. Manual measurement must have facility of fixing measurement position with the cuvette and attenuator.
Sample Concentration	Minimum sample concentration around 0.1 mg/mL (of 15 to 20 kDa protein) & Max. sample concentration around 40% w/v
Necessary cuvettes for Size measurement	Should provide Cuvettes for use in Aqueous & Non-Aqueous Medium -12mm o.d. Square re usable Polystyrene 100 Cuvettes with 100 stoppers, 1.5 ml volume -12mm o.d Glass Cuvette – 1 no - Low-volume quartz batch cuvette (12µl volume) for size measurement- 1 no
Molecular weight determination	Should have facility to measure MW Range of molecular weight – around 500Da to 2×10^6 Da or better.
Laser	Should be Class 1 type, low power (less than 5 mw, He-Ne Laser) .No High Power Laser is acceptable.
Air Purging	The instrument should have Dry Air purging facility to avoid condensation.
Optics	Fixed Optics with automatic alignment prior to measurement
Sensitivity(Toluene Count)	The instrument should be very sensitive, i.e. Toluene count should be more than 140kcps.....also the photon count should be mentioned in the analysis report.
Correlator	Should have more than 3900 channels
Auto initialization	Automatic
Detector	Should be Avalanche Photo Diode Detector
Measurement time	should be less than 10Sec
Standard	Ready to use Zeta potential Standard- 1syringe
Software	Software should be suitable for running the equipment, data acquisition, data analysis, data transfer, graphical presentation etc. Vendor should also mention the key feature of the software. <ul style="list-style-type: none"> • Should be compatible with Windows OS. • Should have facility to create Standard Operating Procedure (SOPs) for better result quality & easy handling. • Should have facility of Custom Report

	<p>Generation for different application.</p> <ul style="list-style-type: none"> • Should have built-in library for RI with facility to insert RI for new sample. • Should have built-in library for different solvent for selecting appropriate viscosity with facility to insert viscosity for new sample. • Data representation should have facility to display Intensity wise / Volume wise / Number wise Particle Size Distribution and Statistics. • Should have facility to “see the correlogram”, “over plot the results for direct comparison”, “Temperature based trend analysis facility”, “Time based trend analysis facility”, “Crystal screening facility”, “measure 2nd Viral Co-efficient”, “Polymer Characterization facility”, “measure/display of Zeta Potential, Electrophoretic Mobility, Conductivity, Temp, Formulation Stability”
Future Upgradation Option (should be mentioned in	<p>The Instruments should have a prohibition of the following features(Future Up-gradation facility at site)</p> <ol style="list-style-type: none"> 1.Microrheology 2.Surface Zeta Potential 3.Auto Titration facility
Support	<ul style="list-style-type: none"> -Remote access of the instrument -Readily available complete service spare kit optical alignment on the fault identification and rectification
Installation/Demonstration/Application Training at site	It should be free of cost by the supplier.
Warranty	1 years from the date of Installation
User list	<p>The supplier should submit complete user list highlighting the last 3 years (requested to highlight last three years user details(minimum 10)- in Eastern India).</p> <p>Vendors should have atleast 15 Installation base in West Bengal & atleast 30 installation base in Eastern India.</p> <p>Vendor should provide 5 nos performance certificate to the quoted model.</p>
Technical Expertise	Vendor should have at least 10 years of experience in handling same equipment.
Service Downtime	24 Hrs

Nearest Full Fledged Local Service Centre	Vendor should have full fledged service facility in Kolkata or around.
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11. FTIR - 1Nos.

Parameters Specifications: Fully Computer controlled FTIR

1. Spectral range should be **6000- 500 cm-1** or better
2. Spectral resolution: 2cm-1 or better, Wave number precision: Repeatability <0.0005 cm-1 @ 2,000 cm-1, Wave number accuracy: <0.05 cm-1 @ 2,000 cm-1
3. Signal to noise ratio should be better than **55000:1** for 1 minute peak to peak or better
4. Detector should be room temperature **DTGS/DLATGS** or better
5. Optical design should have **gold coated mirrors permanently aligned interferometer** and optics with capability to withstand **high humidity having ZnSe beam splitter and ZnSe windows**.
6. Accessory recognition should have continuous monitoring of spectrophotometer components like source, laser, detector, interferometer, sampling modules must be automatically identified and spectral test routines must automatically start to verify accessory performance
7. Accessory Universal ZnSe ATR for analysis of solid, liquid, paste, powder and gel Samples
8. Software specifications: Software for data measurement, manipulation and evaluation with a step by step assistance. Should include possibility to create user own libraries.
9. Applications: Should be able to test solid, liquid, paste, powder and gel samples without sample preparation.
10. Instrument must have one year warranty. **Special 10 years warranty for Laser and Interferometer and 05 years warranty for source** should be offered.
System should not require inert gas purging.
11. Other Optional Accessories to be offered : All necessary sample preparation accessories are to be offered under separate head for Transmission unit such as 15 Ton Hydraulic Press, Agate Mortar Pestle, KBr Die set, Liquid demountable cell with KBr windows, IR grade KBr Powder etc.
All necessary installation pre-requisites are to be offered under separate head to make the system functional.
The equipment has to be provided with a computer system (i3 or better processor) of standard configuration along with B/W laser printer

Supplier should arrange the clearance and delivery of the instrument from CIP Port of destination to the institute lab, however all relevant documentation DSIR certificate, Way Bill etc would be provided by the institute as desired.

12. Force Tensiometer - 1Nos.

Description:

Force Tensiometer for fully automatic measurements of interfacial and surface tension, resolution 0.01 mN/m, 0.1 µm distance resolution.

- USB interface for PC-control and additional interface.

Product group specifications:

Resolution: $\geq 10 \mu\text{g}$
Precision: $\geq 30 \mu\text{g}$
Measurement rate: $\geq 50 \text{ Hz}$
Adjustment: fully automated
Locking mechanism: automatic

Sample stage

Travel distance: $> 100 \text{ mm}$
Resolution: $\geq 0.1 \mu\text{m}$
Travel speed: 0.09 to 500 mm/min
Type of motor: brushless DC servo motor
Optical height sensor: should be there
Simple platform: should be there
Thermostated jacket: 50 mm to 100 mm
Inverse CMC: cone-shaped vessel
Integrated sample stage: should be there

Software

LabDesk for surface tension (SFT)/interfacial tension (IFT), contact angle, critical micelle concentration(CMC), liquid density, solid density, sedimentation/penetration

13. Incubator shaker - 1Nos.

Bench Top Orbital shaking platform

- Stainless-steel chamber and platform easy to clean
- Transparent plastic door
- Microprocessor controller with large LCD screen for temperature and shaking speed with timing function
- Self-check function easy to identify problems
- Smooth start and stop system prevents liquid spillage
- Auto-controller of fan speed to prevent damage to the samples
- Safety door switch, auto pause operation when it is opened

shaking Speed Range	20-300rpm
Amplitude	20mm
Temperature Range	$450^{\circ}\text{c} \pm 0.5^{\circ}\text{c}$
Display Resolution	0.1°C
Timer Range	1hour 99h:59m
Platform Size (mm)	450 x 450
Maximum Shaking Capacity (No. of flasks x Volume)*	4x2000ml, 8x1000ml, 11x500ml, 12x250ml, 28x100ml, 42x50ml

14. UV-VIS Spectrophotometer (Double Beam) - 1Nos.

Specifications PC based software controlled Double Beam Uv-Vis spectrophotometer along with Integrated Sphere-

1. Wavelength Range : Should be 190nm to 900nm with **PMT detector**
2. Working Mode : Fully PC controlled with window based application software
3. Cell Changer : 8 Cell Auto changer to should be included in offer

4. Spectral Band Width: Variable Continuous changeable slit from 0.1 - 5 nm or better
5. Photometric Mode: Transmittance, Absorbance, Energy Concentration, All Using Software
6. Wavelength Accuracy $\pm 0.1\text{nm}$ at 656.1nm
7. Monochromator : Double beam hollow graphic gratings
8. Resolution: 0.1 nm
9. Wavelength Display: Should be 0.01nm with a Wavelength Accuracy of $\pm 0.1 \text{ nm}$ @656.1nm D2 and Wavelength Repeatability: 0.1nm
10. Stray Light: Should be $\leq 0.01\% \text{ T}$ (220nm NaI, 340nm NaNo₂) or better
11. Photometric Range: Should be -4~4Abs
12. Photometric Accuracy: $\pm 0.002 \text{ Abs}$ (0.5)
13. Photometric Noise $<0.00005\text{A}$ at 500nm (RMS) slit 1nm.
14. To be supplied 01 pair 10mm Quartz Cell
15. Light Source Tungsten Halogen and Deuterium arc lamps
16. PC interface: USB/RS 232
17. Integrating Sphere for Solid Powder samples.
18. Software: Spectral Analysis, Quantitative Analysis, Kinetic Analysis & Photometric Analysis, for complete spectrophotometer control, Data storage, Spectral overlay in 3D Display mode, create customized report templates, Built in User group creation, log history and Password protection.

2 KVA Servo Voltage Stabilizer with surge suppressor for the instrument

Branded Computer System with licensed software and Laser jet B/W Printer and 600 VA UPS for PC to be offered.

15. Density meter with speed of sound, viscosity, and refractive index - 1Nos.

Specifications for Integrated Density & Sound Velocity meter & Microviscometer

Density and Sound Velocity Meter and Microviscometer

1. The Density and Sound Velocity Meter should have an minimum or better accuracy of 0.000005g/cm³ using the Oscillating U-tube method with integrated reference oscillator with measuring range of 0 - 3g/ cm³ and sound velocity measurement up to accuracy of 0.5m/s with measuring range of 1000-2000m/s or better.
2. The Density and Sound Velocity meter should have Temperature accuracy of $\pm 0.01 \text{ }^\circ\text{C}$ with measuring range of 0-65°C or better. Instrument should have single point adjustment for whole range of temperature
3. The Density and Sound Velocity meter should have Integrated System for the automatic detection of Filling error and bubbles in the whole U-tube.
4. The Density and Sound velocity meter should have a real time checking of the U-tube filling process with Permanent on-screen display of U-Tube with a fixed Camera and automatic storage of images
5. The Density and Sound Velocity meter should have Automatic full-range viscosity correction for accurate and precise true density results.
7. The Density and Sound Velocity meter should have Automatic determination of ambient air pressure for exact air density adjustments. The Density and Sound Velocity meter should be Upgradable to semi-automatic and fully automatic filling units.

9. The density and Sound Velocity meter should be Fully compliant to requirements
10. The Density & Sound velocity meter should have an integrated Microviscometer module based on the Rolling Ball principle.
11. **The Microviscometer should have maximum three glass Capillaries to cover the viscosity range of 0.3 to 10000mPa.s**
12. The Microviscometer should be able to measure Intrinsic Viscosity, Inherent Viscosity, Reduced Viscosity, Dynamic Viscosity, Kinematic Viscosity & Relative Viscosity. The Micro viscometer should have Temperature control employing a built-in thermostat with temperature
13. The Microviscometer's Temperature should be from 0 °C and high
14. The Instrument should have a built-in memory for data storage, The Instrument should be connectable to a Standard USB Keyboard & Mouse.
15. System should be supplied with Digital Refractometer with following specification.
16. Supplied Refractometer should have four decimal accuracy and four decimal resolutions or Better

FOR ANY CLARIFICATION REGARDING TENDER PLEASE CONTACT WITH COOCH BEHAR PANCHANAN BARMA UNIVERSITY (TEL. NO: +91 3582 230218) E-MAIL ID – INFO@CBPBU.AC.IN

[TENDER FEE: RS.2000/- (RUPEES TWO THOUSAND ONLY), NAME OF THE A/C: COOCH BEHAR PANCHANAN BARMA UNIVERSITY, SAVINGS ACCOUNT NUMBER: 32741316141, IFSC CODE: SBIN0000058]

1. General Instructions:

In the event of e-tendering, intending bidder may download the tender documents from the website: <http://wbtenders.gov.in> directly with the help of Digital Signature Certificate (DSC) or from the Cooch Behar PanchananBarma University website www.cbpbu.ac.in.

2. Submission of bids:

Both Technical Bid and Financial Bid are to be submitted concurrently duly digitally signed by the Company personnel who is in the pay roll of the Company (having Authorization from the Company management) in the website [http:// wbtenders.gov.in](http://wbtenders.gov.in). All papers must be submitted in English language.

3. Time Schedules for the e-tender:

The Time Schedule for obtaining the Bid Documents, Pre-Bid meetings, the submission of bids and other documents etc. will be as per the list provided in Clause No. 10 given below.

4. Eligibility for Quoting:

Manufacturers or Dealers/Distributors/Agents duly authorised by the manufacturers who are able to supply the assured quantities as per requirement & have requisite Annual Average Turnover, as per clause no. 5, are only eligible for quoting. Manufacturers not having the capability to supply the required quantity solely need not apply. Failure of submission of declaration of full supply will lead to cancellation of tender.

Further, vendors who were declared black listed and/or insolvent by any Govt. Concern/any Institutions in the Country for particular item or items are not eligible to participate in the current tender for that item or items.

5. Annual Turnover Requirements:

Vender having average annual Turn Over for last three financial years is more than Rs.30 lakh in India or equivalent foreign currency in the respective foreign country for the year 2015-16, 2016-17 & 2017-18 are eligible to participate in the Tender.

6. Submission of Tenders

6.1 General process of submission

Tenders are to be submitted online through the website stated in Clause 1. All the documents uploaded by the Tender Inviting Authority form an integral part of the contract. Tenderers are required to upload all the tender documents along with the other documents, as asked for in the tender, through the above website within the stipulated date and time as given in the Tender. Tenders are to be submitted in two folders at a time, one is Technical Bid and the other is Financial Bid. The tenderer shall carefully go through the documents and prepare the required documents and upload the scanned documents of originals in Portable Document Format (PDF) to the portal in the designated locations/folders of Technical Bid. He needs to fill up the BOQ in the designated cell and upload the same in designated location of Financial Bid. The documents uploaded are virus scanned and digitally signed using the Digital Signature Certificate (DSC). Tenderers should specially take note of all the addendum/corrigendum related to the tender till the bid submission ends. Tenderers should in general upload the latest documents as part of the tender, however, in case of failure in uploading such documents, it will be deemed that they (tenderers) have taken note of such latest documents including addendum/corrigendum, if published till the bid submission ends.

6.2 Technical Bid

The Technical Bid should contain scanned copies and/or declarations in the following standardised formats in two covers (folders):

I. Technical File (Statutory Cover) containing:

1. **Notice Inviting Tender (NIT)** – The NIT as published is to be downloaded and then uploaded the same digitally signed (*to be submitted in “NIT” folder*).
2. **Annexure** –
 - a) Basic Information (Vide Annexure I) (*to be submitted in “Annexure” folder*)
 - b) Application for Tender - (Vide Annexure II) (*to be submitted in “Annexure” folder*)
 - c) Authorization letter - (Vide Annexure III) (*to be submitted in “Annexure” folder*)
 - d) Affidavit Proforma - (Vide Annexure IV) (*to be submitted in “Annexure” folder*)
3. Technical details of the Items Quoted (Bidders must submit Technical specification along with Catalogue of the item quoted in **“Technical Details”** Folders.
4. Bidder must submit Audited Balance Sheet and Profit and loss Account for last 3 (three) financial year namely 2014-15, 2015-16 & 2016-17 in **“Accounts”** folder.

Note: Tenders will be summarily rejected if any item in the statutory cover is missing.

II. My Document (Non-Statutory Cover) containing as follows:

Sl.No.	Category	Sub-Category	Sub-Category Description
1	Certificates	Certificates	PAN Card of the Bidder
			VAT/ CST /GST Registration Certificate
			Exemption Certificate for paying EMD for the current financial year (if any)
2	Company Details	Company Details 1	Trade Licence/Enlistment Certificate
			Registration with Registrar of Companies
			Memorandum of Articles for Limited Companies.
3	Credential	Credential 1	a) Copy of the purchase order for supplying Similar nature of items at least for last 2 years in an Institute of Higher Learning b) Brief User List preferably for users in West Bengal in an Institute of Higher Learning
4	Financial Information	Payment Certificate 1	Income Tax Returns submitted for the Assessment year 2015-16
			Income Tax Returns submitted for the Assessment year 2016-17
			Income Tax Returns submitted for the Assessment year 2017-18
		Payment Certificate 2	VAT/CST/GST Returns (of the last quarter) for the year 2015-16
			VAT/CST/GST Returns (of the last quarter) for the year 2016-17

6.3 Financial Bid

The Financial Bid should contain the following document in one cover (folder):

Bill of Quantities (BOQ): The tenderer is to fill-up the designated cell as marked by the University in the BOQ under online mode through computer for preparing their quotation and thereafter tenderer will have to upload the same after digitally signed as submission of their quotation (Only downloaded copies of the BOQ as available in the web portal are to be uploaded without changing the name of the BOQ file after virus scanned and digitally signed by the tenderer)

7. The tenderers are not required to submit hard copies of Technical File (Statutory) or My documents (Non-Statutory). Submission of hard copy of Financial Bid is strictly prohibited and only be submitted through on line through NIC portal.

8. Evaluation of the tenders

During the tender evaluation process, the “Technical Bid” will be opened first. Those Bidders who have qualified in respect of the essential & other requirements in “Technical Bid” will be identified and their financial bid will be opened. The financial bid of those Tenderer failing to meet the technical & other requirements laid down in the tender will not be opened and be rejected. The Tenderer offering the item found suitable and as per the tender specifications will only be selected. Final selection of the lowest bidder in respect of Financial Bid is subject to further verification. The Financial Bids of only those tenderers who have been considered as Technically Qualified will be opened. If found suitable in the context of above pre-qualification etc, the Tenderer quoting the lowest rate will be considered as successful.

9. TERMS & CONDITIONS REGARDING PURCHASE POLICY OF TENDERING AUTHORITY:

9.1 Bid Information:

- a) **Partial Quotation within the same item serial number as mentioned in BOQ and also in this NIT will not be accepted and tender will be liable for cancellation.**
- b) All duties, taxes and other levies payable by the contractor under the contract shall be included in the total price but should be indicated separately in the price bid.
- c) The rate quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- d) Currency will be made either in INR or from any of the foreign currencies like USD, GBP, EURO and JPY.

- 9.2 **Evaluation of Quotation:** The Purchaser will evaluate and compare the quotations determined to be substantially responsive stage wise. Firstly, Technical Bid will be evaluated based on and thereafter Price Bid for technically qualified bidders will be evaluated for selection of vender.

- 9.3 **Award of Contract:** **The contract shall be made item wise as per Item Serial number of the List of Items as shown in Clause 15.** The purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive both technically and commercially. Purchaser reserves the right to reject any or all the tender, wholly or partly, without assigning any reason thereof and shall not be bound to accept the lowest bid.

- 9.4 **Warranty:** The vendor shall be fully responsible for the comprehensive onsite warranty (3/3/3-part/labour/onsite) in all respect of the equipment's, accessories etc. including spares and services for a

period of three years from the date of installation. Warranty will be effective from the date of joint installation Report.

- 9.5 **Adequate support service facility:** The bidder/manufacturee should have adequate service support centre in Kolkata/Siliguri/Cooch Behar for any emergency breakdown/fault offering facility within 48 hours and should be agreeable to provide AMC facility after the warranty period.
- 9.6 **Training Facility:** User training regarding the operation of the equipment's shall be arranged by the supplier/vendor at no extra cost.
- 9.7 **Manufacturer's Authorisation:** Document in support of Manufacturer/Dealer and Service Provider has to be submitted along with the tender paper. If the bidder is not the manufacturer, proper manufacturer's authorization and warranty from manufacturer is required.
- 9.8 **Credentials:** Documents of previous experience of the job, at least 2 years, must be submitted along with the tender.
- 9.9 **DSIR Certification:** The Cooch Behar Panchanan Barma University will provide the necessary certificate at the time of purchase.
- 9.10 **Make & Model:** Bidder must mention Make and Model in the Information Sheet as given vide Annexure-I and must send the product details/catalogue/brochure in the "**Technical Details**" folder.
- 9.11 **Time Schedule:** The supply and installation work must be completed within 15 days from the date of receipt of the purchase order.
- 9.12 **Validity of offer:** A bidder should spell out in the tender that it shall remain valid for a minimum period of three months from the date of opening of the tender and during this period, the bidder shall not be entitled to revoke or cancel its offer.
- 9.13 **Place of delivery:** Department of Chemistry, Cooch Behar PanchananBarma University, Cooch Behar -736101.
- 9.14 **Payment Schedule:** 100% of the bill value will be paid after satisfactory installation of the equipments.
- 9.15 Performance Security: Successful bidder should deposit Performance Security money equivalent to the 10% of the order value in the form of DD/Bank Guarantee immediately before issuing purchase order from the University. Such security will be refunded after completion of the warranty period in normal case without any accrued interest. University may forfeit the Security Money in the event of the following circumstances:**
- i) Selected bidder withdraws the bid before expiry of its validity but after receipt of the Purchase Order.
 - ii) Selected bidder does not accept the order after issuing the same or fails to enter into a contract within validity period of offer.
 - iii) Selected bidder fails to supply the items within the scheduled time as specified in the Purchase Order
 - iv) If before expiry of the warranty period, the supplied items break down or do not function satisfactorily due to the cause related with the item itself or for its installation and not for any reason caused by the University Authority and the supplier denies to take the responsibility to make the supplied items in order.
 - v) In case of any false submission /statement by the bidder.
 - vi) In case of any refusal to abide by terms and conditions or refusal to enter into a written agreement as per prefixed terms and conditions.
- 9.16 **Quantity Changeability:** Quantity as stated in the tender document may subject to change at the time of issuing purchase order due to the fund crunch or for other valid reasons.

- 9.17 **Requisite Documents to be submitted:** Bidder must have adequate documents relating to Trade License and updated returns for Income Tax, VAT, GST Audited Statement of Accounts and other documents as sought for under Clause 6.2.II of this tender.
- 9.18 **Turnover Criterion:** Bidder must have average annual turnover of more than Rs.30 lakh in three financial year ending 2016-17.
- 9.19 **Disposal of Disputes:** In case of any dispute, the University's decision will be treated as the final and conclusive. All legal actions are subject to Kolkata/ Cooch Behar jurisdiction only.
- 9.20 **Conversion of FC Rate:** Generally, the West Bengal Government Portal is equipped enough for conversion of Foreign Currency (FC) rate into INR. In case of any problem arising out of the West Bengal Government Portal for e-tender regarding the conversion rate against foreign currencies quoted by the bidders in the BOQ, the conversion rate as existing in the official website of the Reserve Bank of India (RBI) as on the date of opening the Financial Bid will be considered for Financial Bid Evaluation.
- Discretion of the University:**
- 9.21 University may take decision about non-purchase of the said equipment even after selection of vendor due to its fund constraints.
- 9.22 University may seek documents from the bidder in addition to the scanned documents sent by them at the time of uploading technical bid for verification and evaluation of tender.
- 9.23 University reserves the right to relax any clause as stated hereinabove for selection of responsive vendor.

10. Dates & Information:

Sl.No.	Activities	Date & Time
1	Date of uploading of N.I.T. Documents in the e-tender portal of NIC : https://wbtenders.gov.in	02.01.2019
2	Documents download (online)	03.01.2019 (from 10.00 a.m.)
3	Bid Submission Start Date(on line)	03.01.2019 (from 10.00 a.m.)
4	Bid Submission Closing Date (Online)	23.01.2019 (up to 06.00 p.m.)
5	Bid Opening Date (Online) – Technical Bid	25.01.2019 (up to 06.00 p.m.)
6	Date of uploading list for technically qualified bidder (online)	To be notified
7	Date of opening of Financial Bid	To be notified
8	Date of uploading of list of bidders along with the approved Rate	To be notified

11. Opening the financial bid as per schedule will BE NOTIFIED LATER ON.

Financial bid can be seen & accessed by the bidder through the NIC Portal on line after opening of financial bid on line. No objections raised by any Bidder in this respect will be entertained by the University. No informal tender will be entertained in the Bid further.

12. During the scrutiny, if it comes to the notice to tender inviting authority that the credential or any other paper found incorrect/ manufactured/ fabricated, that bidder would not allowed to participate in the tender and that application will be rejected outright without any prejudice.

13. The Tender Selection Committee reserves to right to cancel the N.I.T. due to unavoidable Circumstances and no claim in this respect will be entertained.

14. STEPS TO BE FOLLOWED FOR SUBMISSION OF E-TENDER

1. SEARCHING THE TENDER

- After Login on www.wbtenders.gov.in with DSC Click on Search Active Tenders
- In Keyword writes Tender Reference No. / Tender memo. No. or put Tender ID and click on submit on NIC website.

2. DOWNLOADING THE TENDER DOCUMENTS

- After searching the particular tender, you will find NIT & BOQ and other document, click on those to download and save the documents.
- Then fill the login Id and password which is written on top or your own login id and password; the same page will appear again click on NIT & BOQ to download.
- While downloading the BOQ please do not change the name of the BOQ and quote as per the exact Accounting Unit, as mentioned.

3. UPLOADING DOCUMENTS UNDER “MY DOCUMENTS” FOLDER

- First upload all the “My Documents” before starting the Bid Submission process.
- While starting the Bid submission process after the EMD payment you will find an option “Do you want to submit Other Important Documents”.
- Here click on YES to submit the MY DOCUMENTS and then tick mark the check boxes to tag those documents in that particular tender.

4. UPLOADING DOCUMENTS UNDER “STATUTORY COVER” FOLDER

- First upload Tender Document (Other than BOQ) with digital signature in **NIT Folder**.
- Thereafter, upload Scanned Copy of all Annexure in the **Annexure Folder**.

5. BOQ

- While first opening the BOQ there is an option at top of the rows. “Security warning Macros have been disabled” Click on Options.
- Select “Enable the content” then OK. This will enable you to visualize the BOQ.
- Select the Currency (INR, USD, JPY, EUR, GBP)** type from drop down list while quoting the amount against each item.
- Upload BOQ in the “BOQ Folder” under “Financial Cover” after filling up financial data in the appropriate columns

6. ITEM WISE DETAILS

- Select that item as Yes/No from drop down list which item bidder wants to quote the amount.

Annexure I

FURNISHING BASIC INFORMATION

(To be furnished in the Company's official letter pad)

1.	Name of the Bidder	
2.	Address for Communication	
3.	Contact Number(s)	
4.	E-mail ID	
5.	Trade Licence No. (Please enclose copy of Trade Licence)	
6.	PAN (Please enclose copy of PAN Card)	
7.	VAT No. (Please enclose copy of VAT)	
8.	Do you have previous experience for supplying similar nature of Items at Educational Institute of Higher Learning? (Please enclose copy of Purchase order & user list, if yes)	Yes/No (Please put tick mark)
9.	Annual Turnover as per Audited P/L ACCOUNTS & BALANCE SHEET	2014-15 :Rs..... 2015-16 :Rs..... 2016-17 :Rs..... Average Annual Turnover: Rs.....
10.	Status of the bidder (Please enclose copy authenticating your status)	Manufacturer/Dealer/Distributor/Selling Agent/Stockiest (Please put tick mark)

I hereby declare that the above information is true and correct to the best of my knowledge and belief. In case of any false/wrong/misleading information, I shall be bound to take the decision taken by the University.

Signature of the Bidder

(With Seal)

Annexure II
APPLICATION FOR TENDER

(To be furnished in the Company's official letter pad with full address and contact no, Email address etc)

To
The Registrar
Cooch Behar Panchanan Barma University
Cooch Behar-736101
West Bengal

Sub: NIT for the Supply of **different Instruments** for the purpose of Departmental requirement for Department of Chemistry

Ref: - _____N.I.T. Nodated

Sir,

Having examined the pre-qualification & other documents published in the N.I.T, I/we hereby submit all the necessary information and relevant documents for evaluation:

1. That the application is made by me/us on behalf of
.....in the capacity duly authorized to submit the offer. The authorization letter from the Company is attached in Annexure II.
2. We accept the terms and conditions as laid down in the tender document vide **Clause 9** and declare that we shall abide by it throughout the tender period including its extensions, if any.
3. We have gone through the Tender Document thoroughly and quoted the tendered items keeping in mind all sorts of information as furnished in the tender document including Corrigendum/Addendum as published from time to time.
4. We are offering rate for the following item /items with manufacturing capacity and assured supply to the Cooch Behar PanchananBarma University.

Sl. No.	Description of Items	Make	Model No.	Quantity	Offer Validity

4. In the event of being selected, I will make the supply within the stipulated period excepting the condition which is beyond our control.

Date :-

Signature of applicant including title and capacity in which application is made.

Contact no:

E-mail address

Postal Address:

Annexure III

(Authorization letter in favour of the applicant (other than Managing Director/ Proprietor/Partner) from the competent authority.)

FORMAT

(To be furnished in the Company's official letter pad with full address and contact no, Email address etc)

(TO WHOM IT MAY CONCERN)

This is to certify that Mr.(Name),
employee of this Organisation as (Official Designation) is
hereby authorised to submit tender online, Vide NIT No.....,
Dated on behalf of the Organisation.

Signature of the competent authority with Seal

.....

(Signature of the Authorised Person)

Signature of Mr.....

.....is hereby attested.

Signature of the competent authority with Seal

ANNEXURE IV

(Affidavit Proforma)
(To be furnished in Non – Judicial Stamp paper
of appropriate value duly notarized)

I, Sri/Smt.

The Managing Director/Proprietor (etc.) of the Firm.,
.....(Name of the firm)

At (address).....

do hereby solemnly affirm and declare as follows:

1. That I have not ever been convicted of any offence making myself liable to be disqualified to supply of Chemicals / Equipments/other items to any Govt. or Govt. undertaking Organization /Institution in the State of West Bengal or other State or States.
2. That no case is pending against me or against my firm in any criminal court of law to supply of Chemicals, Lab. Chemicals & Laboratory Equipments and other items to the Govt. or Govt. undertaking Organization / Institution in the State of West Bengal or other State or States (If any case is pending, state the details).
3. That, I also declare that if any information subsequently found incorrect or false will it automatically render the tender submitted by me cancelled and make me liable for penal/legal action as per law of the country.
4. That my concern has not yet been declared bankrupt by any banking or money lending agency duly licensed by RBI nor has it been considered doubtful by any Government concern so far as the solvency of the organisation is concerned.
5. That I do further affirm that the statements made by me in this tender are true to the best of my knowledge and belief and all the documents attached are genuine & correct.

Deponent(s).