

# Department of Life science and Bioinformatics ASSAM UNIVERSITY, SILCHAR

(A Central University constituted under the Act of Parliament of India in 1994)

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# INVITATION FOR TENDER

# Reference No. DBT/BT/16141/NER/TW/Equipment/01 dated 27.02.2017

Assam University, Silchar, a central university invites sealed Tender from reputed manufacturers / authorized distributors / authorized firms with sound technical capabilities for supply, installation and commissioning of the following items to be procured under DBT-NER Twinning project in the Department of Life science and Bioinformatics, Assam University, Silchar. The quotations will be opened at 1.00 pm on 21<sup>st</sup> March 2017. Detailed technical specifications including make/model/accessories and price including taxes should be quoted against each item separately. All terms and conditions will be as per Assam University, Silchar rules, regulations and decisions.

Sl. No.	Particulars of the equipment with minimum specifications		
1	Specifications for 10KVA Online UPS		
	■ Rating: 10KVA/10000VA		
	■ DC Volt: 192V		
	■ Input Phase: Three		
	■ Input Voltage: 300V-475V		
	■ Input Power Factor: 0.99		
	■ Input Frequency: 45Hz – 55Hz		
	<ul> <li>Output Phase: Single</li> </ul>		
	■ Output Voltage: 220/230/240 ±1%		
	<ul> <li>Full Load Current: Rated at 0.9 p.f.</li> </ul>		
	■ Nominal Frequency: 50Hz±0.05 Hz		
	<ul> <li>Output Power Factor: 0.9</li> </ul>		
	<ul> <li>Over Load Capacity: 125% for 10 minutes &amp; 150% for 1 Minute</li> </ul>		
	■ Static Voltage Regulation: ±6% for 50% step load change		
	■ Dynamic Voltage Regulation: ±1% of Nominal for all variations change		
	<ul> <li>Waveform: Sinusoidal</li> </ul>		
	■ Total Harmonic Distortion: <3%		
	<ul><li>Inverter Efficiency: &gt;93% on full load</li></ul>		
	• Crest Factor: 3:1		
	<ul> <li>Isolation Transformer: Galvanic Isolation Transformer at input</li> </ul>		

- PROTECTION:
- Charger: Input circuit breaker, charger over voltage Charger over current limit.
- Battery: Battery low cut off/Current limit, HRC Fuse in battery path, battery over charger trip.
- Inverter: Output over voltage/ Over load trip Current limit, short circuit.
- DISPLAY:
- Indications: Mains ON, UPS ON, UPS Trip, UP OV/UV, Battery Low trip.
- Display: LCD Display for checking Input & Output Parameters
- Metering (Optional): Output Voltmeter, Output Ammeter
- BATTERY: Sealed Maintenance Free Battery, VAH required: 12480 for 2 hrs backup (MAKE: AMARON, QUANTA).
- ENVIRONMENT:
- Operating temperature Range: 0 deg C to 55 deg C
- Storage Temperature Range: -20 deg C to 60 deg C
- Relative Humidity: 95% non-condensing
- Max. operating altitude without derating: 3000 meters
- Acoustic Noise: <55db</li>
- Certification: ISO 9001, ISO 14001, ISO 18001, CE Certification & BIS Certification
- Other: Local Service Center, Pass work certificates (Govt),

### 2 Specifications of Flash Chromatography system

- Compact Bench top size with Instrument Dimensions: 41.91cm H x 54.6cm W x 45.72cm D with an in-built computer and hence doesn't need an external computer or Laptop.
- Automated solvent line priming
- Auto recognition of cartridges and trays
- Single click run gradient adjustment and hold
- Negative Peak signals for UV. The chromatograms should display negative signal for UV during runs and in the past run reports.
- Fraction collection triggering based on slope and/or threshold
- User control of the fraction collection tray with manual advance
- Automated software allows fast switching from normal phase to reversed phase
- Color-coded user guidance, status prompts and alerts
- System Safeguards: Auto run extension on peak detection
- Automatic flow reduction and pressure monitoring cut off
- Automatic Flow Stop if collection tray is unavailable
- Upward solvent flow through cartridge for better purging of air during equilibration
- Use same solvents in multiple reservoirs with rapid auto line switching for

- extended capacity
- Air purging of used cartridges to help ensure safe disposal
- Vapour sensors for leak detection
- Solvent Options: Four independent solvent channels offering use of up to four solvents at any time during a run. Controlled by the software.
- Software selectable UV detector sensitivity
- High pressure (200 psi) precision HPLC pumping
- Solvent and waste safety sensors
- 12" Windows® based graphical LCD display with touch screen and full onscreen QWERTY keyboard
- Data Entry: Touchscreen or USB connection to mouse/keyboard
- Software: advanced detection technology with advanced signal processing to recognize peaks and collect previously undetected compounds
- Optional Navigator Software Feature to convert TLC Rf data to Flash method and HPLC Method data to Flash methods.
- Solvent Delivery System: High pressure pumps (HPLC); Four independent channels with up to four solvents in a single run.
- Auto-switches lines when solvent levels run low.
- Normal phase and reversed phase solvent compatible
- Flow Rate: 4–200mL/min +/- 3%; auto flow reduction at high pressure
- Maximum Pressure: 200 psig
- Gradients: Linear, step, isocratic. Four solvent binary. On-screen mid-run gradient adjustment, isocratic hold, pause
- Sample Injection: Liquid or solid sample modes, solid injection: up to 75 g ;Liquid injection up to 300gm. The system have the facility to use Inject (Liquid) / sample loading prep packed as well as empty screw type cartridges. Sample Loader Plunger: Three sizes, fitting into 15 mL, 75 mL and 150 mL solid loaders.
- Detector Sensitivity: Selectable sensitivity control high or low, based on concentration of target compound
- UV/VIS Wavelength Range:  $\geq$ 200-850 nm (200-500 nm default with the system) and extension to 850nm optional
- Accommodates Cartridge Sizes: ≥4 g-300 g luer type; up to 1500 g with adapter
- Triggers: Combination of up to 3 UV/VIS signals with slope and/or threshold detection.
- Fraction Collection Trays: Holds two 5"x12" trays; Auto-tray recognition
- Power Options: 120/240 V, 50/60 Hz, 10 A
- Certifications: CE, TÜV®, ISO® 9001

#### **TERMS and CONDITIONS:**

- 1. The tenders complete in all respects should be addressed Dr. Anupam Das Talukdar, Principal Investigator, Department of Life science and Bioinformatics, Assam University, Silchar-788011, India.
- 2. The tenders for equipments must be submitted in two-bid system (Technical and Financial). The tenders shall be submitted item-wise in two separate sealed covers clearly mentioning on the envelope the details of items for which bid is submitted. The format for the same is encloses in the Annexure. ONLY TECHNICALLY accepted competitive bids will be considered for placing Purchase Order. Last date and time for receipt of Tenders: 20/03/2017 during the office hours up-to 4.00 pm. Date of opening Tenders: 21/03/2016 at 1.00 pm. 3. The technical bids should include all the specification for each part complete with part numbers of main equipments and accessories. The technical details should be supported by original brochure/documents for each component.
- 4. Tenders by e-mail, Fax, Telex, Telegram will not be accepted. Tenders must be submitted in sealed envelope only clearly indicating "TENDER FOR ITEMS FOR DBT/BT/16141/NER/TW/Equipment/01" addressed to undersigned. The university shall not be responsible for any delay in receiving tenders.
- 5. In case of any modification in specifications / terms and conditions / any clarification to the bid document, it will be hosted in the university website only and the bidders are requested to log to our website from time to time and no separate corrigendum will be issued in this regard.
- 6. The rate should be exclusive of taxes and applicable tax should be clearly indicated. The rates should be quoted along with supporting documents of specifications, technical features, list of users and authorized dealership documents (if applicable).
- 7. A certificate from vendors mentioning the place of manufacturing of the all the components of the equipment along with a certificate that the equipment supplied is new without any defect must be supplied to qualify for Technical bid.
- 8. AFTER SALES SERVICE: Details of availability of after sales support will have to be furnished. The offer shall clearly state full details of the service after sales facility available for the equipment. The details shall include & qualification of service personal stationed at the service centre, response time in case emergency, availability of spares, etc. The offer shall also give the amount and other terms & conditions for annual service contract of the equipments after the expiry of the guarantee/warrantee period.
- 9. The university is exempted from paying Customs and Excise duty.
- 10. Proprietary items should be quoted with sole Manufacturer/Dealership certificate. Without dealership or manufacturer's certificate no bids will be accepted.
- 11. No advance payment will be made. However, if items are of foreign origin, advance payment can only be made in the form of vide LOC/FDD/Wire Transfer. **Performance Bank Guarantee must be submitted as per rules covering warranty period.**
- 12. Items of foreign origin should have insurance up to installation site.
- 13. If any item/equipment delivered in damaged condition, the equipment should be replaced with new one immediately.
- 14. Items of foreign origin should have insurance up to installation site. In case of equipment of foreign origin, the Indian dealer/agent should submit one undertaking on non-judicial stamp paper, stating that if any equipment delivered in damaged condition they will be liable to replace the same with a new one (applicable only when order is placed).
- 15. The invitation for bid is open to all OEM (original equipment manufacturer) or their authorized

dealers. The principal company may authorize their dealer to participate in the quotation and authorization letter must be attached with the quotation document.

- 16. Copies of valid Central/State sales tax registration certificate, Income tax clearance certificate, proof of manufacturing unit/dealership & general order suppliers and copies of two major supply orders executed during the preceding two years for Govt. depts. /PSUs and Central Autonomous bodies have to be submitted.
- 17. The equipment will have to be installed by the supplier /Agent in the Department of life-science & bioinformatics within 4 weeks, from the receipt of equipment, free of charges.
- 18. Price quoted for the material/equipment shall be firm and valid for 60 days from the date of opening.
- 19. Tenders not conforming to the terms and conditions and procedure so outlined or Tender incomplete in any respect is liable to be summarily rejected. The university reserves the right to accept or reject any or all the bids without assigning any reason whatsoever.
- 20. Special discount/rebate: Special discount/rebate admissible to Educational Institution/Central University may be specifically indicated in the quotation.
- 21. If there be any dispute, it will be referred to an arbitrator to be appointed by the University for his decision and award. The award or decision of the arbitrator shall be final and binding on both parties.

Those bidders, who accept the above terms and conditions, may submit their tenders in the prescribed format along with all relevant documents/brochures to the undersigned. The tender must also submit a certificate in their official letter head duly signed and sealed starting that all above terms and conditions are acceptable to them.

Sd/-Dr. Anupam Das Talukdar Principal Investigator, DBT-NER Twinning Project Department of Life science and Bioinformatics Assam University, Silchar-788011, India

#### Copy to:

- 1. Copy to Secretary to VC, AUS for VC's kind information
- 2. The Registrar, AUS
- 3. The Finance Officer, AUS
- 4. Internal Audit Officer, AUS
- 5. Director, Computer Centre, AUS for uploading in the university website (www.aus.ac.in)
- 6. File for record

# PROFORMA FOR SUBMISSION OF TECHNICAL BID (TB)

From
То,
Dr. Anupam Das Talukdar
Principal Investigator, DBT-NER Twinning Project
Department of Life science and Bioinformatics
Assam University, Silchar-788011, India
With reference to your advertisement dated published in the Newspapers and posted at
Assam University Website, I / We hereby submit the Technical bid for the
required by you. I / We confirm that I / We are the owners /authorized person to offer you the item as per
the desired specifications.
Fill the appropriate table as applicable for the items separately

# 1. 10KVA Online UPS

S.NO	TECHNICAL SPECIFICATION	DETAILS TO BE FILLED BY BIDDER
1	Power supply	
2	Protection	
3	Display	
4	Battery	
5	Environment of working	
6	Others	

# 2. Flash Chromatography

S.NO	TECHNICAL SPECIFICATION	DETAILS TO BE FILLED BY BIDDER
1	Flow Rate range	
2	Flow rate accuracy	
3	Reproducibility	
4	UV/VIS Wavelength Range	
5	Maximum Pressure	
6	Gradients	
7	Solvent and waste safety sensors	
8	Dimensions $(W \times H \times D)$	
9	Weight	
10	Peak detection	
11	Other	

	in a separate sealed cover super scribing - "TECHNICAL BID FOR for ref No DBT/BT/16141/NER/TW/Equipment/01)
	OFFICE SEAL
Date:	(Signature of the Offerer)

## PROFORMA FOR SUBMISSION OF FINANCIAL BID (FB)

From
To,
Dr. Anupam Das Talukdar
Principal Investigator, DBT-NER Twinning Project
Department of Life science and Bioinformatics,
Assam University, Silchar-788011, India.

Having read and understood the Technical bid, I am / We are furnishing the desired information and submitting our Technical Bid duly signed by our Authorized person. Now we hereby submit (in separate sealed cover) our Financial Bid for the purchase of equipments.

## Please fill up for the items mentioned separately, whichever is applicable:

S.NO	SPECIFICATION ITEMS	DETAILS TO BE FILLED BY BIDDER
1		Price in /\$/Other currency
	Name of the equipment with model no. etc	whichever is applicable
		(Please mention separately the
		price of the items, accessories,
		insurance, etc. under separate
		heads)
2	Applicable taxes	To be included
3	CIF of FOR Silchar	To be included
4	Special Offer/ Discount	To be included
5	Grand Total	Price in INR/\$/Other currency
		whichever is applicable
6	Terms and condition	As applicable
7	Warranty and after sales service	As applicable
8	Banking Details (For foreign	To be included
	items)	

8	Banking Details (For fo items)	oreign	To be included
Date:			(Signature of the Offerer) OFFICE SEAL
		-	er super scribing - "FINANCIAL BID FOR /NER/TW/Equipment/01)