



**DEPARTMENT OF BIOTECHNOLOGY
ASSAM UNIVERSITY, SILCHAR, ASSAM**

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

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www.aus.ac.in

NOTICE INVITING TENDERS

Assam University (A Central University), Silchar, Assam invites **SEALED BIDS** in two bid system (technical and financial) from reputed manufacturers/authorized distributors/authorized firms with sound technical capabilities for supply, installation and commissioning of the following items to be procured under SERB, DST Project in the Department of Biotechnology, Assam University, Silchar, Assam.

Serial No.	Description and specification of the item	Quantity required	Last date of submission of sealed tender
1.	Refrigerated Centrifuge: System should have following specifications: <ul style="list-style-type: none">• Centrifuge should be 24-places Microcentrifuge with Maximum Speed of between 21,000 to 21300xg /14500-15000 rpm, with a brushless motor• Centrifuge must be supplied with 18X1.5/ 2.0 ml Rotor• Instrument should have a maximum rotor capacity of 24 x 1.5/2mL tubes• Temperature range should be of -10°C to 40°C• Rotor should be certified aerosol tight for safe centrifugation of hazardous samples• Should have separate short spin button for quick centrifugation• Should have SOFT brake to protect sensitive samples• Should have Soft touch one finger lid closure for ergonomic operation• Fast temp function for quick pre-cooling of centrifuge• System should be of guaranteed temp of 4° at maximum rotational speed• ECO Power shut-off option• Timer should be of 30 s to 9.59 hr with continuous	One	

	<p>run function</p> <ul style="list-style-type: none"> Noise level should not be greater than 55 dBA Rotor should be supplied for 1.5/2.0 ml 15,000 rpm. Rotor should be supplied for 4 X PCR strip with speed of 15000 RPM. System should be supplied 3 KVA voltage stabilizer 		
2.	<p>Gel Documentation: System should have following specifications:</p> <ul style="list-style-type: none"> Gel documentation system with in-built touch screen computer Should have motorized zoom lens Dark room with full slide out UV transilluminator on pull-out rails for comfortable work UV safety shutoff with widely accessible door to handle gels while placing or moving gels on transilluminator table Transilluminator should have super-bright technology so as to have publication quality gel image with no visible UV tube background noise Scientific grade, zero defect CX5 camera with native image resolution of at least 2600 (H) x 1950 (V) yielding image resolution of 5 megapixels System should be capable of producing 16-bit – 65,536 grey levels USB 3.0 interface for faster image transfer Field of imaging must be at least 26 x 21 cms System should have 4-position filter wheel with F-590 emission filter for ethidium bromide, SYBR Green, SYBR Gold, etc. System should have analysis software for image enhancement, image analysis includes molecular weight calculation, band quantification, distance calculation. The system should be supplied with a compatible computer. The system should be supplied with Horizontal Gel electrophoresis system with appropriate power pack. 	One	
3.	<p>-20° C Freezer (Vertical): System should have following specifications:</p> <ul style="list-style-type: none"> Quick freezing function Puff installation Extremely low power consumption -A+ High temperature visual alarm Sealed drawers - prevent frost loss from open door Right hand hinged reversible door 	One	

	<ul style="list-style-type: none"> • Environment friendly CFC free refrigerant • EFS Series tropicalized at 43°C • Heavy duty condenser suitable for Indian conditions • High hold over time - upto 16 hrs • Power consumption 0.78 units / 24 hrs • Cap : 345 Ltrs, • Temp Range : -16°C ~ -25°C • Wheels : 2 Rear wheels • Body Insulation – 80 mm • Storage Type : 2+5 Pull Out Drawers • Fitted with Optional fittings: Lock & Digital Temperature Display 		
4.	<p>Water Bath (Digital): System should have following specifications:</p> <ul style="list-style-type: none"> • Double walled bath with inner chamber made of stainless steel of 304 grade sheet and outer wall are made of mild steel duly painted. • The gap between outer and inner walls should be filled with special grade glass wool insulation. • The concentric rings could be removed to accommodate containers of various sizes. • Microprocessor based PID controller with an accuracy of $\pm 0.5^{\circ}\text{C}$. • Temperature range from ambient to $100^{\circ}\text{C} \pm 2^{\circ}\text{C}$. • Supplied complete with two indicator lamps, concentric rings, ON/OFF Switch, cord & plug. • Suitable to operate on 220/230 volts single phase, 50 Hz. AC supply. • Digital temperature Controlled • Approx. Size: 300 x 255 x 175mm (4 Racks) , Capacity-18 Liters • Provided with immersion heater for heating 	One	
5.	<p>Electrophoresis with power supplies (Agarose): System should have following specifications:</p> <ul style="list-style-type: none"> • Principal Material : Acrylic • Inner tank dimension : 215 x 141 x 55 mm • No. of trays : <ul style="list-style-type: none"> • 130 x 130 mm - 1 No. • 130 x 65 mm - 2 Nos. • 65 x 60 mm - 4 Nos. • No. of combs : <ul style="list-style-type: none"> • 13 Well Analytical Acrylic Comb 1.5 mm thick x 1 No. • 8 Well Analytical Acrylic Comb 1.5 mm thick x 4 	One	

	<p>Nos.</p> <ul style="list-style-type: none"> • 3 Well Preparative Acrylic Comb 3 mm thick x 1 No. • With Electrophoresis Power Supply: Digital PS 100; 0-300 V; 0-100mA (4 output) 		
6.	<p>pH Meter: System should have following specifications:</p> <ul style="list-style-type: none"> • pH range : 0-14 or continuous • MV range : 0-1999 with auto polarity • Accuracy pH : 0.5pH +/- 1 Digit. • MV : 1 mV +/- 1 digit • Should be supplied with probe 	One	
7.	<p>Electronic Precision Balance: System should have following specifications:</p> <ul style="list-style-type: none"> • Capacity : 220g • Minimum Display: 0.001g 	One	
8.	<p>Portable Autoclave: System should have following specifications:</p> <ul style="list-style-type: none"> • Electrically heated complete with stand single walled with stainless steel body along with essential parts like Pressure gauge, safety etc. • Outer, inner & lid should be made of stainless steel. • The chamber should be absolutely leak proof. • It should be provided with safety valve, pressure gauge, steam release valve, and vacuum release valve. • Capacity: 38 Ltrs. approx. • Size: (350 x 450 mm) 14'' x 16'' • Additional 1 No. heating coil should be provided as spare part. 	One	

Important date and Time:

- (i) Last date and time of receipt of Tender: 7th September, 2017 (5:00 P.M.)
- (ii) Due date & time of opening Tender: 8th September, 2017 (12:05 P.M.)
- (iii) Venue of Bid opening: Department of Biotechnology, Assam University Silchar, Assam

Terms and conditions

1. The tenders complete in all respects should be addressed to **Dr. Ravi Rajwanshi, PI, SERB, DST, Department of Biotechnology, Assam University, Silchar-788011, Assam.**
2. The tenderers for equipments must submit the bid(s) in two-bid system (Technical and Financial).

3. 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 SERB/DST /Biotechnology-2017/RR**”
4. 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.
5. The rate should be exclusive of taxes and applicable tax should be clearly indicated.
6. The rates should be quoted along with supporting documents of specifications, technical features, list of users and authorized dealership documents (if applicable).
7. Details of availability of after sales support will have to be furnished.
8. **The university is exempted from paying Customs and Excise duty.**
9. Proprietary items should be quoted with sole Manufacturer/Dealership certificate. Without dealership or manufacturer’s certificate no bids will be accepted.
10. 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 may be submitted as per rules covering warranty period.**
11. Items of foreign origin should have insurance up to installation site.
12. Items/ equipment should be delivered in good condition and installed at Assam University, Silchar.
13. If any item/equipment delivered in damaged condition, the equipment should be replaced with new one immediately.
14. In case of equipment of foreign origin, the Indian agent should submit one undertaking in nonjudicial 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 university reserves the right to accept or reject any or all the bids after recording proper justification for the same.**

Date: 18-08-2017

Sd/-
Dr. Ravi Rajwanshi
PI, SERB, DST Project
Department of Biotechnology
Assam University,
Silchar – 788 011, Assam, India

Copy to:

1. Copy to Secretary to VC, Assam University, Silchar, Assam for VC’s kind information.
2. The Head, Department of Biotechnology, Assam University, Silchar, Assam
3. The Registrar, Assam University, Silchar, Assam
4. The Finance Officer, Assam University, Silchar, Assam
6. Director, Computer Center with request to upload the tender/ notification.
7. File for record.

PROFORMA FOR SUBMISSION OF TECHNICAL BID (TB)

From

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To,
Dr. Ravi Rajwanshi
PI, SERB, DST Project
Department of Biotechnology
Assam University, Silchar – 788 011,
Assam, 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.

1. Refrigerated Centrifuge

Serial no.	Technical Specification	Details to be filled by offerer
1.	• RPM:	
2.	• RCF:	
3.	• Brushless motor: (Y/N)	
4.	• 18X1.5/ 2.0 ml Rotor: (Y/N)	
5.	• Maximum rotor capacity of 24 x 1.5/2mL tubes: (Y/N)	
6.	• Wide temperature range:	
7.	• Certified aerosol tight rotor: (Y/N)	
8.	• Separate short spin button: (Y/N)	
9.	• SOFT brake to protect sensitive samples: (Y/N)	

10.	<ul style="list-style-type: none"> Soft touch one finger lid closure: (Y/N) 	
11.	<ul style="list-style-type: none"> Fast temp function for quick pre-cooling of centrifuge: (Y/N) 	
12.	<ul style="list-style-type: none"> Guaranteed temperature of 4°C at maximum rotational speed: (Y/N) 	
13.	<ul style="list-style-type: none"> ECO Power shut-off option: (Y/N) 	
14.	<ul style="list-style-type: none"> Timer of 30 s to 9.59 hr with continuous run function: (Y/N) 	
15.	<ul style="list-style-type: none"> Noise level: 	
16.	<ul style="list-style-type: none"> Rotor for 1.5/2.0 ml with speed of 15,000 rpm: (Y/N) 	
17.	<ul style="list-style-type: none"> Rotor for 4 X PCR strip with speed of 15000 rpm: (Y/N) 	
18.	<ul style="list-style-type: none"> System supplied with 3 KVA voltage stabilizer (Y/N) 	

2. Gel Documentation

Serial no.	Technical Specification	Details to be filled by offerer
1.	<ul style="list-style-type: none"> Gel documentation system with in-built touch screen computer: (Y/N) 	
2.	<ul style="list-style-type: none"> Motorized zoom lens: (Y/N) 	
3.	<ul style="list-style-type: none"> Dark room with full slide out UV transilluminator on pull-out rails: (Y/N) 	
4.	<ul style="list-style-type: none"> UV safety shutoff: (Y/N) 	
5.	<ul style="list-style-type: none"> Widely accessible door to handle gels while placing or moving gels on transilluminator table: (Y/N) 	
6.	<ul style="list-style-type: none"> Transilluminator with super-bright technology: (Y/N) 	
7.	<ul style="list-style-type: none"> Visible UV tube background noise: (Y/N) 	
8.	<ul style="list-style-type: none"> CX5 camera with native image resolution of 2600 (H) x 1950 (V): (Y/N) 	
9.	<ul style="list-style-type: none"> Image resolution of 5 megapixels: (Y/N) 	
10.	<ul style="list-style-type: none"> System capable of producing 16-bit – 65,536 grey levels: (Y/N) 	
11.	<ul style="list-style-type: none"> USB 3.0 interface for image transfer: (Y/N) 	
12.	<ul style="list-style-type: none"> Field of imaging with 26 x 21 cms: (Y/N) 	
13.	<ul style="list-style-type: none"> System have 4-position filter wheel with F-590 emission filter for ethidium bromide, SYBR 	

	Green, SYBR Gold, etc.: (Y/N)	
14.	<ul style="list-style-type: none"> System have analysis software for image enhancement, image analysis including molecular weight calculation, band quantification, distance calculation: (Y/N) 	
15.	<ul style="list-style-type: none"> The system supplied with a compatible computer: (Y/N) 	
16.	<ul style="list-style-type: none"> The system supplied with Horizontal Gel electrophoresis system with appropriate power pack: (Y/N) 	

3. -20° C Freezer (Vertical)

Serial no.	Technical Specification	Details to be filled by offerer
1.	<ul style="list-style-type: none"> Capacity: 	
2.	<ul style="list-style-type: none"> Quick freezing function: (Y/N) 	
3.	<ul style="list-style-type: none"> Puff installation: (Y/N) 	
4.	<ul style="list-style-type: none"> Low power consumption -A+ category: (Y/N) 	
5.	<ul style="list-style-type: none"> High temperature visual alarm: (Y/N) 	
6.	<ul style="list-style-type: none"> Sealed drawers: (Y/N) 	
7.	<ul style="list-style-type: none"> Right hand hinged reversible door: (Y/N) 	
8.	<ul style="list-style-type: none"> Environment friendly CFC free refrigerant: (Y/N) 	
9.	<ul style="list-style-type: none"> EFS Series tropicalized at 43°C: (Y/N) 	
10.	<ul style="list-style-type: none"> Heavy duty condenser suitable for Indian conditions: (Y/N) 	
11.	<ul style="list-style-type: none"> High hold over time - upto 16 hrs: (Y/N) 	
12.	<ul style="list-style-type: none"> Power consumption: 	
13.	<ul style="list-style-type: none"> Temp Range: 	
14.	<ul style="list-style-type: none"> Wheels- 2 Rear wheels: (Y/N) 	
15.	<ul style="list-style-type: none"> Body Insulation of 80 mm: (Y/N) 	
16.	<ul style="list-style-type: none"> Storage Type - 2+5 Pull Out Drawers: (Y/N) 	
17.	<ul style="list-style-type: none"> Lock & Digital Temperature Display: (Y/N) 	
18.	<ul style="list-style-type: none"> System supplied with 3 KVA online UPS with 1 hour Back up (Y/N) 	

4. Water Bath (Digital)

Serial no.	Technical Specification	Details to be filled by offerer
1.	<ul style="list-style-type: none"> Digital temperature controlled: (Y/N) 	
2.	<ul style="list-style-type: none"> Capacity: 	
3.	<ul style="list-style-type: none"> Double walled water bath: (Y/N) 	
4.	<ul style="list-style-type: none"> 4 Racks: (Y/N) 	

5.	<ul style="list-style-type: none"> • Inner chamber made of stainless steel: (Y/N) 	
6.	<ul style="list-style-type: none"> • Outer wall are made of Mild steel duly powder coated: (Y/N) 	
7.	<ul style="list-style-type: none"> • The gap between outer and inner walls filled with special grade glass wool insulation: (Y/N) 	
8.	<ul style="list-style-type: none"> • The concentric rings can be removed to accommodate containers of various sizes: (Y/N) 	
9.	<ul style="list-style-type: none"> • Microprocessor based PID controller with an accuracy of $\pm 0.5^{\circ}\text{C}$: (Y/N) 	
10.	<ul style="list-style-type: none"> • Temperature range: 	
11.	<ul style="list-style-type: none"> • Two indicator lamps: (Y/N) 	
12.	<ul style="list-style-type: none"> • Concentric rings: (Y/N) 	
13.	<ul style="list-style-type: none"> • ON/OFF Switch: (Y/N) 	
14.	<ul style="list-style-type: none"> • Cord & plug: (Y/N) 	
15.	<ul style="list-style-type: none"> • Power and Voltage requirement: 	
16.	<ul style="list-style-type: none"> • Immersion heater for heating: (Y/N) 	

5. Electrophoresis with power supplies (Agarose)

Serial no.	Technical Specification	Details to be filled by offerer
1.	<ul style="list-style-type: none"> • Principal Material: Acrylic (Y/N) 	
2.	<ul style="list-style-type: none"> • Inner tank dimension: 	
3.	<ul style="list-style-type: none"> • Trays: 130 x 130 mm - 1 No.: (Y/N) 	
4.	<ul style="list-style-type: none"> • Trays: 130 x 65 mm - 2 Nos.: (Y/N) 	
5.	<ul style="list-style-type: none"> • Trays: 65 x 60 mm - 4 Nos.: (Y/N) 	
6.	<ul style="list-style-type: none"> • 13 Well Analytical Acrylic Comb 1.5 mm thick x 1 No.: (Y/N) 	
7.	<ul style="list-style-type: none"> • 8 Well Analytical Acrylic Comb 1.5 mm thick x 4 Nos.: (Y/N) 	
8.	<ul style="list-style-type: none"> • 3 Well Preparative Acrylic Comb 3 mm thick x 1 No.: (Y/N) 	
9.	<ul style="list-style-type: none"> • Electrophoresis Power Supply - Digital PS 100; 0-300 V; 0-100mA (4 output): (Y/N) 	

6. pH Meter

Serial no.	Technical Specification	Details to be filled by offerer
1.	<ul style="list-style-type: none"> • pH range : 0-14 or continuous: (Y/N) 	
2.	<ul style="list-style-type: none"> • MV range : 0-1999 with auto polarity: (Y/N) 	
3.	<ul style="list-style-type: none"> • Accuracy pH : 0.5pH +/- 1 Digit: (Y/N) 	
4.	<ul style="list-style-type: none"> • MV : 1 mV +/- 1 digit: (Y/N) 	
5.	<ul style="list-style-type: none"> • Supplied with probe (Y/N) 	

7. Electronic Precision Balance

Serial no.	Technical Specification	Details to be filled by offerer
1.	<ul style="list-style-type: none">Capacity :	
2.	<ul style="list-style-type: none">Minimum Display:	

8. Portable Autoclave

Serial no.	Technical Specification	Details to be filled by offerer
1.	<ul style="list-style-type: none">Electrically heated: (Y/N)	
2.	<ul style="list-style-type: none">Single walled: (Y/N)	
3.	<ul style="list-style-type: none">Stainless steel body: (Y/N)	
4.	<ul style="list-style-type: none">Outer, inner & lid is made of stainless steel: (Y/N)	
5.	<ul style="list-style-type: none">Absolutely leak proof chamber: (Y/N)	
6.	<ul style="list-style-type: none">Safety valve: (Y/N)	
7.	<ul style="list-style-type: none">Pressure gauge: (Y/N)	
8.	<ul style="list-style-type: none">Steam release valve: (Y/N)	
9.	<ul style="list-style-type: none">Vacuum release valve: (Y/N)	
10.	<ul style="list-style-type: none">Capacity:	
11.	<ul style="list-style-type: none">Size:	
12.	<ul style="list-style-type: none">Additional 1 No. heating coil as spare part: (Y/N)	

Date:

(Signature of the Offerer)

OFFICE SEAL

**This format shall be sent in a separate sealed cover super scribing -
"TECHNICAL BID FOR EQUIPMENTS FOR SERB/DST/Biotechnology-2017/RR"**

PROFORMA FOR SUBMISSION OF FINANCIAL BID (FB)

From

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To,

Dr. Ravi Rajwanshi
PI, SERB, DST Project
Department of Biotechnology
Assam University, Silchar – 788 011,
Assam, 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 I/we here by submitting (in separate sealed cover) our Financial Bid for the purchase of equipments.

Serial no.	Specification of Items	Details to be filled by offerer
1.	Refrigerated Centrifuge/ Gel Documentation/ -20°C Freezer (Vertical)/ Water Bath (Digital) / Electrophoresis with power supplies (Agrose)/pH Meter/Electronic Precision Balance/ Portable Autoclave	Price in INR /\$/Other currency whichever is applicable (Please mention separately the price of the each items, accessories, insurance, etc. under separate heads)
2.	Applicable taxes	To be included
3.	For Silchar, Assam	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	To be included

Date:

(Signature of the Offerer)

OFFICE SEAL

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"FINANCIAL BID FOR EQUIPMENTS FOR SERB/DST/Biotechnology-2017/RR"**