## Amity School of Applied Sciences (ASAS) AMITY UNIVERSITY RAJASTHAN

# Annexure – I: Technical Specification of LN<sub>2</sub> Cryostat with Temperature Controller and Vacuum Pump

S. No	Item	Specifications		
1	Liquid Nitrogen (LN2) Cryostat	<ul> <li>Should have Temperature range: ~77 K - 500 K</li> <li>Should have Typical LN2 hold time: 8 hours at 77 K</li> <li>Should have Typical Stability: +/- 50mK</li> <li>(Specifications assume no radiational or experimental heat load)</li> <li>This system should include: <ul> <li>0.4 liter nitrogen reservoir with built-in charcoal getter</li> <li>Funnel for filling reservoir</li> <li>Refill displacer assembly attached using an NW-16 flange (to permit refill without affecting temperature control)</li> <li>3.0" O.D. sample area with 1.25" diameter sample mount,</li> <li>50 ohm control heater, and one (1) standard curve silicon diode temperature sensor</li> <li>Outer shroud with 3.25" square window block and four (4) 1.63" diameter clear view fused Quartz windows</li> <li>Instrumentation skirt with one (1) 10-pin electrical feedthrough for heater and sensor wires,</li> <li>Four (4) double BNC feedthroughs (jack-to-solder), with mini coax wired to resistivity holder</li> <li>one (1) 10-pin electrical feedthrough with 4 Ph-Br wired to resistivity holder</li> <li>An evacuation valve, and a safety pressure relief valve</li> <li>Gold plated (over Ni) OFHC standard 8-pin resistivity sample holder installed</li> </ul> </li> </ul>		
2	Temperature Controller	<ul> <li>This system should have:</li> <li>Two independent diode / resistor input channels;</li> <li>Two independent heater output loops (1st loop 25 W max banana plug output, 2nd loop 2 W max detachable terminal block)</li> <li>Autotuning PID, audible and visual alarms, and relays;</li> <li>GPIB (IEEE-488) parallel computer interfaces;</li> <li>Cable to connect to cryostat.</li> <li>Power Requirement: 220, 50Hz</li> </ul>		
3	Vacuum Pump	<ul> <li>This system should have:</li> <li>7 CFM / 5.7 CFM (60 / 50Hz) two stage rotary vane vacuum pump;</li> <li>5' flexible stainless steel pumping line with NW-25 flanges;</li> <li>Isolation valve, vent valve, and compound pressure / vacuum gauge.</li> </ul>		

### Annexure –II : Technical Specifications of LCR Meter

S. No	Item	Specifications
1	LCR Meter	<ul> <li>LCR Meter should have:</li> <li>Z , L, C, R testing</li> <li>Testing source frequency: DC, or 4 Hz to 8 MHz</li> <li>Measuring time: 1 ms</li> <li>Accuracy guaranteed range from 1m</li> <li>Continous testing under varying conditions</li> <li>Accessories should be included:</li> <li>Power cord ×1, Instruction manual ×1,</li> <li>LCR application disc Communications user manual) ×1</li> <li>Test probe L2000 x 1 nos</li> </ul>

#### **Required Services:-**

- 1. Bidder is liable to install all equipment at Amity School of Applied Sciences (ASAS) Amity University Rajasthan, Jaipur Campus.
- 2. Three Years on-site services for the equipment.

#### Performa for submitting technical Bid

Name of the Bidder		
Postal Address		
Telephone/Mobile No.		
E-mail		
Fax No.		
Authorized representative's name,		
Address		
phone number		
Turn over during last three years :	:	
i. Financial Year		
ii. Financial Year		
iii. Financial Year		
Pan Number	:	
Tan Number	:	
C.S.T. Number	:	
Sales Tax Number	:	
Service Tax Number	:	
GSTIN	:	
ISO certified No.		
DGSD registered No.		
Whether the bidder has been black	:	
listed by any Government		
Organization.		

#### Declaration

I

hereby certify that information

given above is true to the best of my knowledge, and, in any case/time, it is found to be incorrect, I will be debarred by the University.

Dated:

- 1. All the items in the tender document are independent and will considered separately. A bidder may quote for one or all the items. Detailed specifications, catalogue/ literature of all the items quoted should be supplied with the technical bid.
- 2. All items should be with onsite comprehensive warranty for minimum period of three years.
- 3. The financial bid should contain the prices of the offered solutions along with the commercial terms and conditions. Please mention the unit price separately for each product
- 4. Goods found not to be as per specification will be required to be replaced at the cost of the bidder.
- 5. The supply and installation of all equipment should be completed within 60 days from the date of the confirmed purchase order. If delivery does not happen within 60 days; university reserves the right to cancel the purchase order
- 6. No payment will be made in advance for any suppliers under this tender. The valid documents of registration of firm, Authorization, Sales Tax, VAT/Service Tax, Registration No. & details of Income Tax registration (PAN) should be submitted along with the technical bid.
- 7. The University reserves the right to verify/seek confirmation of all original documentary evidence submitted by the vendors in support of the tenders, specifications for eligibility criteria. In case any information furnished by vendor is found false/incorrect, the tender will be rejected.
- 8. If the specification will not be found as given specification consignment may be refused at the discretion of the University.
- 9. For the delayed supplies, liquidated damages @ 0.5% on entire cost of the order will be levied to the maximum of 10%. Incomplete or defective supply shall be viewed seriously
- 10. The unit rates should be quoted inclusive of all the taxes, duties, levies, freight, insurance, loading and unloading charges etc.
- 11. Rates should be quoted F.O.R. destination at the unit of the University as mentioned in the supply order.
- 12. Payment shall be made to agency within 30 days from the date of successful installation of all equipment and subject to submission of proper invoice along with warranty and installation certificate duly signed by supplier and concerned official of the university. Payment will be released through online bank transfer/cheque.
- 13. Income Tax and other statutory deductions will be made as per rules.
- 14. The quantities included in the tender can be increased and decreased at the discretion of the University.
- 15. Rates approved will remain valid for six months, except due to change in the rate of statutory taxes, duties and other Government levies.

- 16. Along with tender document list of major clients with value of orders and actual date of completion may also be submitted. Certificate/documents showing the satisfactory performance of the orders and after sale service status.
- 17. The bidder should give full details of being the manufacture or sole distributor of the items with documentary evidence/authorization letter. The bidders should have at least five years experience in the field. Annual turnover for the preceding financial year should not be less then Rs 10 crore.
- 18. The firms/companies black listed at any stage need not to apply.
- 19. The lowest rate will not be claimed as claim of taking the order.
- 20. The Purchase Committee of Amity University Rajasthan, Jaipur reserves the right to A) reject or accept any tender without mentioning any reason. B) alter/modify any or all conditions of this tender document.
- 21. Each bidder should clearly specify that the bidder agrees to abide by the conditions of this tender document on their printed letter head indicating thereon Sales Tax Registration, Fax Email, and Telephone No. etc.
- 22. All pages of the tender document are to be signed and stamped by the bidder.
- 23. All disputes are subject to jurisdiction of Jaipur.

Certified that I/We agree to the contents of terms and conditions of the tender.

Signature & Seal of the Bidder