TENDER ENQUIRY FORM

Viava-Bharati

Santiniketan

Enquiry No. - UGC/ABN/Physics/2017-18/Heater Last date of Submission: 4 pm, 30/01/2018

Date of Opening: After 4 pm, 30/01/2018

Dear Sirs,

We intend to purchase <u>15 watt resistive cartridge heater</u>, <u>10 k thermistor</u>, <u>heater controller</u>, <u>complete periscope assembly and broadband dielectric mirrors (750 – 1100 nm</u>) as per specification given below from the Manufacturer or their authorized dealers/distributors/vendors and invite quotations in accordance with the terms and conditions detailed in the attached sheet. Kindly send your offer with precise and complete terms within the time mentioned above.

Yours faithfully,

Dr. Amitava Bandyopadhyay Assistant Professor Department o Physics Siksha-Bhavana, Visva-Bharati Santiniketan – 731 235, West Bengal

Item No.	Description of item	Unit	Quantity
1.	15 Watt resistive cartridge heater	2	2
2.	10 K thermistor	2	2
3.	Heater controller	1	1
4.	Complete periscope assembly (Metric)	1	1
5.	1 inch broadband dielectric mirror 750-1100nm	2	2

Date: 16/01/2018

Specifications:-

1. 15 watt resistive cartridge heater:

- (i) Rated heater power should be around 15 watt @ 24 Volt \pm 20%.
- (ii) Diameter: 0.122 inch nominal \pm 0.002 inch (3.1 mm).
- (iii) Length: 0.5'' nominal $\pm 0.015''$ (12.7mm).
- (iv) Heater Resistance: ~ $38.4\Omega \pm 10\%$
- (v) Lead Length: 2.5" Typical (63.5mm)
- (i) Maximum Block Temperature that may be used: 315°C (when installed in a 0.125" diameter bore in a metal block).

2. 10 K thermistor:

- (i) Resistance at 25° C: 10 k Ω
- (ii) Temperature accuracy: $\pm 1^{\circ}$ C at 25°C.
- (iii) Dissipation constant: 1.4 mW/°C.
- (iv) Time constant in air: ~ 15 sec.
- (v) Operating range: Typically -50°C to 150°C.

3. Heater controller:

- (i) Must support heating from 20°C to 200°C.
- (ii) Display temperature in ^oC, ^oF and K (Kelvin).
- (iii) PID loop should be adjustable.
- (iv) Set point resolution: Typically $\pm 0.1^{\circ}$ C.
- (v) Temperature stability (24 hours): Typically $\pm 0.1^{\circ}$ C.
- (vi) Input voltage: 220V AC, 50 Hz.
- (vii) Output power: ~ 18 watt DC.
- (viii) Must be compatible with item No. 1 and 2.

4. Complete periscope assembly (metric):

- (i) Compatibility with 1 inch mirror is essential.
- (ii) Minimum optic thickness: 3.3 mm.
- (iii) Continuous rotation: 360° with $\pm 4^{\circ}$ tip and tilt.
- (iv) Minimum beam height: 46 mm.
- (v) Maximum beam height: 114 mm.

(vi) Must include 150 mm post and clamping fork.

5. 1 inch broadband dielectric mirror 750 – 1100 nm:

- (i) Meant for use with item No. 4.
- (ii) Material used: Fused silica
- (iii) Surface flatness: $\lambda/10$
- (iv) Surface quality: 5 10 scratch dig.
- (v) Back surface: Fine ground.
- (vi) Diameter: 1 inch
- (vii) Clear aperture: > 85% of diameter.
- (viii) Parallelism: ≤ 3 arcmin.
- (ix) Thickness: Typically ~ 6 mm.
- (x) Wavelength region of operation: 750 nm to 1100 nm.

TERMS & CONDITIONS FOR SUBMISSION QUOTATION FOR SUPPLY OF STORES

- (a) Rate: The rate quoted must be exclusive of Excise Duty, Packing & Forwarding charges, Sales Tax, Freight charges and Insurance charges. All the charges like Excise Duty, Sales Tax, Freight, Insurance, Handling charges etc. as applicable must be shown separately. The stores are required to be dispatched by passenger train F. O. R. Bolpur or by Road Transport or delivered at this University under the Suppliers' own arrangement, free of additional charges. The risk of damage or loss in transit if any will be that of the suppliers. Manufacturer's price list, Technical leaflet, samples, catalogue, whenever applicable, should invariably be submitted.
- (i) **Excise Duty:** It may please be noted that the University is exempted from the payment of excise duty for scientific instruments/equipments for which necessary certificate shall be provided by the University, on request.
- (ii) Sales Tax/ Vat: Extra as applicable.
- (iii) **Way Bill:** This is issued against Consignment Note in and a copy of invoice. University does not issue any C or D form.
- (iv) EMD: None.
- (a) Consignee: All stores are to be consigned in the name of Principal Investigator Dr. Amitava Bandyopadhyay, Department of Physics, Siksha-Bhavana, Visva-Bharati, Santiniketan, West Bengal, PIN: 731235.

(b) **Disposal of Dispatch Documents:** The Railway Receipt/PWB/Consignment Note along with the relevant bill and three priced challan each in triplicate, should be dispatched to <u>Dr. Amitava Bandyopadhyay, Dept. of Physics</u>, <u>Siksha Bhavana, Visva-Bharati</u> immediately on completion of dispatch. If these documents do not reach the <u>principal investigator Dr. Amitava Bandyopadhyay</u>, <u>Dept. of Physics</u>, <u>Siksha Bhavana</u>, <u>Visva-Bharati</u> immediately on <u>completion of Physics</u>, <u>Siksha Bhavana</u>, <u>Visva-Bharati</u> in time all wharfage/demurrage incurred, if any, will be recoverable from the suppliers.</u>

- 3. Delivery Period: The stores are required to be delivered/dispatched within the delivery period mentioned in the order. All offers of delivery should be made ex-stock, and a clear note should be inserted in case ex-stock delivery is not possible. No mobilization advance is payable against the Purchase Order. University does not bind itself to accept any ordered material after expiry of delivery period if the same has not been extended on the written request of the supplier before the delivery after expiry of the delivery date.
- 4. **Quality & Specification of Stores:** The stores offered should be of the best quality available, unless otherwise specified, confirming strictly to the National/International specification. The Institute reserves the right to reject such stores if found unacceptable on these grounds. The guarantee and warranty offered be specifically mentioned.
- 5. Liquidated Damages: If a firm accepts an order and fails to execute the same, in full or part, as per the terms and conditions stipulated therein, it will be open to this Institute to recover liquidated damages from the firm at the rate of 1% of the value of the undelivered stores per month or part thereof, subject to a maximum of 5% of the value of the undelivered stores. It will also be open to this Institute alternatively, to arrange procurement of the required stores from any other source at the risk and expense of the firm which accepted and then failed to execute order according to stipulation agreed upon.
- 6. Submission of Quotation: All quotations must be forwarded in sealed cover addressed to the sender of this Enquiry so as to reach within the specified period. The reference to the Enquiry No. and the last date of submission must clearly be superscribed on the sealed envelope. If no counter offer is made in the quotation, it will be taken for granted the offer is strictly in accordance with the specification and terms and conditions laid down in the tender notice.
- 7. **Opening of the Quotation:** Every quotation will be opened at the concerned Department/Centre/School/Section of this Institute at the time and on the date indicated on the tender form. Unless otherwise specified, quotation will not be opened in Public and in presence of representative of bidders.
- 8. **Period of Validity:** A quotation shall remain valid for acceptance at least for a period of 90 days from the date of opening.
- 9. Income Tax Clearance: Current Income Tax and Sales Tax clearance certificates or returns must be submitted to the <u>principal investigator</u> Dr. Amitava Bandyopadhyay, Dept. of Physics, Siksha Bhavana, Visva-Bharati as per existing guidelines in vogue, before submission of final bill for payment, if not supplied earlier. Submission of PAN and Photocopy of the PAN card is must.
- 10. Payment: Payment will be made after successful supply by a crossed a/c payee cheque on the S.B.I. Santiniketan, normally within 30 days from the date of receipt of bill or of the stores in good order and condition, whichever is later. Payments will however be made electronically by e-transfer, for which the supplier must provide their bank account number, bank address/branch details/branch code and IFSC code. Payment is made only on receipt of supply of all ordered materials. No short supply is acceptable unless specifically approved and agreed upon by the competent authority of the university in writing in advance.
- 11. **Rejection of Offer:** The University reserves the right to ignore or reject any offer including the lowest without assigning any reason. The University does not bind itself to accept the lowest offer.
- 12. **Dispute:** In case of dispute, the matter shall be settled mutually, failing which the decision of the Vice-Chancellor, Visva-Bharati shall be final and binding on the bidders.