

**DEPARTMENT OF CERAMIC ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY
(BANARAS HINDU UNIVERSITY)**

ENQUIRY

Ref: IIT (BHU)/CER/2015-16/ENQ/

/QTN/

Due Date: 23/01/2016

(Last date of quotation receiving)

Date: 06/01/2016

(Date of Tender enquiry)

To

Dear Sir,

Please submit your lowest quotation for supplying the under mentioned items. Quotation in duplicate must reach us before the date marked above and should contain the following information:

1. Full specification and make of the item offered and its rate F.O.R. Varanasi/CIF New Delhi.
2. Sales tax at concessional rate as applicable to educational institution.
3. Your sales tax registration number and TAN number.
4. Conditions of supply and terms of payment.
5. If you are a manufacture of the item or if you have proprietary right over it, please mention it in the quotation and provide a certificate.
6. Please mention your agency commission in Indian Rs., if applicable (in case of imported items).
7. Please give undertaking as per annexure-I-B

Quotation must be sent in a **sealed envelope** with word “**QUOTATION**”, our reference number, and due date as given above, clearly marked over it.

Sl. No.	ITEM	Approx. Qty.
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1. Specifications for Spectrometer (Spectrograph and PMT) Equivalent to iHR320 Imaging Speed.

A high performance computer controlled scanning spectrograph, photomultiplier tube and recording unit for recording fluorescence spectra of the samples. System should be complete in all respect to record & display the spectra and strictly follow the specifications given below:

A) Scanning spectrograph

- (i) A Czerny-Turner design based imaging spectrograph having Focal length: **not less than 300 mm**.
- (ii) Entrance and exit ports: Spectrograph should have at least one (01) entrance port and two (02) exit ports.
- (iii) Grating turret: should accommodate three (03) gratings.
- (iv) Gratings: Two gratings; one blazed at 500 nm and another at 800 nm.
- (v) Resolution of spectrograph: Better than 0.12 nm for 10 μ m slit with 1200 g/mm grating.
- (vi) Step size: better than 0.015 nm
- (vii) Micrometer controlled manual adjustable slit assembly for entrance and exit ports.
- (viii) Manual/automatic order sorting filter wheel assembly (without filter).
- (ix) Computer Interface: USB interface OR RS232.

B) Photomultiplier Tube (PMT): Should be attached with one exit port of the spectrograph. Performance equivalent of better than R 928 type PMT.

- (i) Suitable high voltage power supply unit for PMT
- (ii) Type: Multialkali type, Detection range: 185-900nm.
- (iii) Cathode radiant sensitivity @ peak wavelength 400 nm: as good as 74 mA/w typ.
- (iv) Anode dark current @ +25 $^{\circ}$ C ambient: 50nA, Max.
- (v) Luminous responsively: as good as 250 microAmp/Lm
- (vi) Dynode gain: as good as 1×10^7
- (vii) Window material: UV glass or fused Silica

C) Data Acquisition unit The spectrograph and PMT unit should be supplied with at least 16 bit resolution analogue to digital converter unit (ADC) for scanning the spectra.

D) **Software:** A software for controlling spectrograph and motorized accessories (if any) with data acquisition and processing. User can be able to set scan parameters including start and end wavelengths. Scan step. Integration time, signal averaging. Data can be saved to ASCII file.

E) **Warranty:** At least 01 year from the date of installation of the Unit.

Optional: Following Items should be quoted as optional/upgradable items:

1. Photon counting module for measuring low light levels.
2. Sample chamber for measuring fluorescence of solid samples.

System Up gradation: Above Spectrophotometer would be upgraded with a spectrograph compatible CCD (charge coupled device) at the second exit port of Spectrograph. So, vendor has to assure that he is able to supply the instrument compatible CCD in future.

2. **Speciation of Laser Diode:**

power tunable diode laser with compatible power supply should have following specifications:

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|--|--|
| 1. Emission wavelength | 975±5 nm |
| 2. Output power: | Maximum power 3.0 Watts |
| 3. Tunability | Power tunable |
| 4. Operating mode | Continuous Wave (CW) and in pulsed mode with repetition rate < 1 KHz |
| 5. Power stability (rms. over 4 hours) | Less than 3.0% |
| 6. M2 factor | Less than 20 |
| 7. Beam divergence | Less than 3.0 mrad |
| 8. Pointing stability | Less than 0.05 mrad |
| 9. Power supply | 200-260 V AC |
| 10. Warrantee | At least 01 (one) year |

N.B.: Other terms & conditions pertaining to item mentioned above, shall be mentioned below:

The Sealed quotation will be opened on 25/01/2016 at 3:30 PM in the office of The Head, Department of Ceramic Engg., IIT(BHU) (this is mandatory in case of e-publishing).


(Principal Investigator)

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INDIAN INSTITUTE OF TECHNOLOGY (BHU) VARANASI

TO BE RETURNED

Following proforma should be filled in and duly signed by the firm and sent alongwith the quotation. (Please refer to the detailed instructions/notes before filling this proforma).

1. Validity of the offer :
2. Approximate Delivery Period :
3. (a) Whether rates have been quoted F.O.R. site and covers packing forwarding and insurance charges. : YES / NO
(b) If not, please mention the same :

4. (a) Whether the prices are inclusive of Sales Tax and other taxes. : YES / NO
(b) If not, kindly specify the amount / rate :

5. If the Sales Tax is charged extra, declaration for charging Sales Tax correctly attached. : YES / NO

6. (a) Whether supply will be made directly or through any Local / Regional / Authorized Dealer / Stockist : Directly/Stockist/Authorized Dealer
(b) If through a Stockist / Dealer: -
 - (i) Name and full address of the Party :
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 - (ii) Whether the order to be placed with the : Principal / Stockist / Dealer
 - (iii) Who will raise the bill : Principal / Stockist / Dealer
 - (iv) Cheques will be drawn in favour of : Principal / Stockist / Dealer
 - (v) Whether any Delivery, Packing and Forwarding : YES / NO

Charges will be payable to local Stockist/Dealer: (Please specify the amount/percentage etc, if any)

7. Our terms of payment (Please indicate your preference by a (✓) mark). Please note that no other payment terms are likely to be accepted.

(a) For Local Firms or if the bills are raised by the Local Dealers.

- (i) 100% Payment on bill basis :

OR

- (ii) 100% payment against Proforma Invoice after receipt of materials in good condition, installation and satisfactory report.

(Only under exceptional cases)

(b) If the bills are raised by outstation Firms

- (i) 100% Payment on bill basis :
- OR**
- (ii) 100% payment against Proforma Invoice after receipt of materials in good condition, installation and satisfactory report :
- OR**
- (iii) D.G.S. & D. Terms of Payment for D.G.S. & D Rate Contract items :
- OR**
- (iv) 75% against Proforma Invoice (at site) or documents through Bank and 25% after receipt of materials in good condition, installation and satisfactory report. :
- OR**
- (v) 90% payment against Proforma Invoice (at site) or documents through bank and 10% after receipt of materials in good condition, installation and satisfactory report (Only under special Circumstances). :

- 8.** Whether any Excise Duty is payable on the items. : YES / NO
If yes, indicate the amount / percentage. :%
- 9.** Whether any installation charges are payable extra. : YES / NO
If yes, amount to be specified. :
- 10.** Whether any discount for educational institution offered on the printed price list of the manufacturer. : YES / NO
Please mention the amount / percentage. :
- 11.** Whether the product is on DGS &D/D.I. Rate contract. : YES / NO
If yes, please enclose a photocopy of the same. :
- 12.** Whether the product bears I.S.I. Mark. : YES / NO
If yes, please mention the I.S.I. License no. :
- 13.** (a) Whether the firm is Sales Tax payer. : YES / NO
If yes, please mention the Sales Tax Numbers. :
- (b) Whether the Local Dealer(s) is / are Sales Tax payer(s) : YES / NO
If yes, please mention the Sales Tax numbers of each :
- 14.** Whether printed / authenticated price list of the Firm's Products and Catalogue etc. enclosed. : YES / NO

Signature of the Authorised Official with Seal

UNDERTAKING

WE HEREBY UNDERTAKE THE FOLLOWING:

1. We will not sell the product (s) to other institutions, bodies and also in the market on the rates less than those quoted by us to the Institute.
2. The goods on which Sales Tax has been charged are not exempted for payment of Sales Tax under C.S.T. Act or U.P.S.T. Act or the rules made there under and the amount mentioned on account of Sales Tax on goods is not more than what is payable under the provisions of the relevant Act or Rules made there under.
3. The rate of Excise Duty mentioned in the quotation is in accordance with the provisions of the rules and the same is payable to the Excise Authorities in respect of the stores.
4. The goods / Stores / articles offered shall be of the best quality and workmanship and their supply will be strictly in accordance with the technical specifications and particulars as detailed in the quotation.
5. The information furnished by us in the quotation is true and correct to the best of our knowledge and belief.
6. We have read and understood the rules, regulations, terms and conditions and agree to abide by them.

***Authorised Signatory
(Seal)***