

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

ENQUIRY

Ref: IIT (BHU)/CER/2016-17/PSMDIS/ENQ/ 320 /QTN/

Due Date: 28/10/2016 Date: 03/10/2016
(Last date of quotation receiving) (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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Specifications for Particle size measurement with Dynamic light scattering principle:

- Measurement principle: The instruments should measure particle size in Nano range with DLS (Dynamic light scattering) principle as per ISO 13321 or ISO 22412.
- Correlator: High sensitive corrector with minimum 1024 channels or above.
- Temperature control range: 0 deg. C to 90 deg. C
- The Instrument should perform particle size zeta potential and Molecular weight measurements in a single measuring unit. The range, accuracy and principle of operation for particle size, molecular weight and zeta potential are as follows:
- Particle Size:
 - Measured range : 1nm to 4.0 microns or above
 - Measured principle : Dynamic light scattering
 - Sample Concentration Range: 0.001% wlv to cover all research oriented w/v concentrations (up to 5% w/v).
 - Minimum sample volume : 20 microliter
 - Accuracy : better than +/- 2% of NIST traceable latex standards
 - Precision/repeatability : better than +/- 2% on NIST traceable latex standards
- Molecular Weight:
 - Measured range : 10,000 Da to 2x10⁷ Da
 - Measured principle : Static light scattering using Debye plot or using Dynamic Light Scattering.
 - Minimum sample volume : 20 microlitre

1.1 General

- Power requirements: 240V, 50 HZ
- Operating environment temperature : 20-35 degree C
- Operating environment humidity – 40 to 90%
- Should be free from any vibration

1.2 Laser source

- Type: Low Power He Ne Laser
- Wavelength in nanometers: 653nm or lower

1.3 Detector/detector electronics

- Type: Avalanche Photo Diode with highest sensitivity for size measurements.

1.4 Output

- For particle size : differential/cumulative distributions; values for sizes at given percentages, fits to distribution models
- For molecular weight: mean molecular weight value.

1.5 Software

- The software should be Windows XP/Window 7 based. It should provide result such as particle size, zeta potential measurement and Molecular Weight determination.
- The software should have in built diagnostic features like Size Quality Report with the ability to provide expert advice based on the rate data that has been accumulated. The raw data should be available later for analysis & use with other software modules.

1.6 Computer

- Processor type : Intel Core i5 Processor, 4 GB RAM
- Memory size : 250 GB HD, CD-ROM or DVD + RW drive, USB port
- Operating system; Windows XP pro, Windows Vista or Windows 7 Professional (32 bit and 64 bit)
- Monitor type : Wide Screen Monitor
- Software supports for the equipment

1.7 Accessories:

Together with the instrument following parts and consumables should be supplied:

- NIST tracable special particle size standard.
- 1 pieces of 12 mm square quartz cell for particle size & Molecular Weight measurements.
- 100 nos. of 12 mm square disposable polystyrene sample cell.
- Low volume Quartz cell (min vol 20ul)– 1 piece

1.8 Optional Accessories:

Vendor to quote for the following as optional items:

- Autotitrator: Optional Autotitrator to automate the measurement of size and zeta potential as a function of pH, conductivity or additive concentration.
- Upgradeable for flow mode operation with SEC to enable connection of 1 or 2 external detectors & a remote measurement start. The optics must be fully pre-aligned with no user adjustment required.

2. Mandatory Requirement: INSTALLATION & COMMISSIONING:


The vendor should supply list of installation (minimum 10) in India of the same model quoted against this enquiry. Installation & commissioning of the test facility shall be done by the supplier at our site. Training to our R&D personnel on operation of the system to be imparted by the supplier.

3. WARRANTY:

One year comprehensive warranty from the date of installation and commissioning.

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

The Sealed quotation will be opened on 10th NOV 2016 at 03:30 PM in the office of The Head, Department of Ceramic Engg., IIT(BHU) (this is mandatory in case of e-publishing).


HEAD/विभागाध्यक्ष
Department of Ceramic Engg. (Head of the Department)
सिरामिक अभियान्त्रिकी विभाग
Indian Institute of Technology (B.H.U.)
भारतीय प्रौद्योगिकी संस्थान (काठिंडिंडि)
Varanasi-221005/वाराणसी-221005

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. :
If yes, please enclose a photocopy of the same. : YES / NO

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

TO BE RETURNED WITH QUOTATION

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)***