Savitribai Phule

UNIVERSITY OF PUNE

परिशिष्ट 'क'

DEPARTMENT OF CHEMISTRY

Ref. No.

Enquiry /Quot/Chem/Store/14-15/ 95 /27.08.2014

Quotations	are	invited	for	the	supply	of	following	goods/carrying	out	the	work,	so	as	to	reach
this office on or	befo	ore					(Sabata Same								

	To.	DUE I	DATE		
	To, Web Publishing	20.09.20	014		
Sr. No.	Description of Material/Item/Work	Approximate Quantity	Rate Per unit	Amount (Rs.)	Remarks

1 DYNAMIC LIGHT SCATTERING (SPECIFICATION AS PER ATTACHED)

Note: 1) Quotation validity atleast 90 days from due date.

2) Payment after satisfactory delivery.

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Pune - 411 007.

3) Please send your quotation along with authorized dealers/manufacturer certificate.

1.	Octroi Exemption Certificate will be issue for the goods supplied from the places outside Pune Municipal Corporation Limits.
2.	Excise duty/Exemption Certificate/Sale Tax form will be issued if applicable.
3.	Please mention - STR NoCST No
4.	Please give the quotation on letterhead as mentioned above without any changes and additions.
	Note: For other terms and conditions see overleaf.
	Chemistry Department, University of Pune, Pune-411007 Department of Chemistry Eavitribal Phylo Pune Signature: Signature: Supplier) Pune-7. Pune-7. Pune-7.

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TERMS AND CONDITIONS

- 1. Mention quotation No. on the envelope.
- 2. Quote rate per unit and date of validity. Date of Validity should be minimum of 45 days from the last date validity of submitting the quotation.
- 3. Submit sample/Catalogue of the material with quotation if necessary.
- 4. Quotation must be sent alongwith the covering letter on your letterhead quoting your VAT Registration number and as per description given without making any changes/addition.
- 5. Conditional quotation will not be accepted.
- 6. Delivery within days from the date of order at the Chemistry Department of the University of Pune.
- 7. Work to be completed within days from the date of order of the University of Pune.
- 8. Quotation will be rejected in case of even a single correction or overwriting. Only clear and uncorrected quotation will be accepted.
- 9. Payment as per actual measurements wherever applicable.
- 10. Payment will be made by cross cheque only and after satisfactory delivery & installation.
- 11. Income tax will be deducted as per prevailing rule.
- 12. Water charges 2% will be recovered, if used.
- 13. In case of works and service contracts Security Deposit will have to be deposited by the contractor in following manner:
 - (a) 2.5% before commencing the work.
 - (b) 2.5% will be deduced from the R. A. Bill.
- 14. Electricity charges will be recovered as per rules if used
- 15. The University of Pune will issue Octori Exemption Certificate if applicable.
- 16. Excise duty exemption Certificate/Sales Tax form will be issued, if applicable.
- 17. Rates quoted should be Inclusive of all taxes with Tax details e.g. Excise duty, Custom duty, VAT, Packing forwarding etc., TOT@ % S.C. & ST @ % @ % @ %
- 18. The above terms and conditions are acceptable.

Signature of the Supplier/Contractor.

(With Stamp)

P.U.P.—1000-5-2012 (162) [PC-1]



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Specification (including the list for spares & optional items) PARTICLE SIZE AND ZETA POTENTIAL ANALYSER

Requirement for Analysis of polymer/protein, nanoparticle in suspensions and emulsions for zeta potential, particle size and distribution in the nano range.

1. Particle size and molecular size

Measurement range: 0.3nm – 5.0 μm (hydro diameter) or better

 Measurement principle: Photon correlation Spectroscopy (Dynamic Light Scattering)

• Minimum sample volume: 30µL

• Accuracy: Better than +/-2%

• Precision / Repeatability: Better than +/-2%

2. Zeta potential (and optional Protein Mobility)

Measurement range: 4nm – 100 μm (hydro diameter)

• Measurement principle: Electrophoretic Light Scattering

• Minimum sample volume: 250μL

• Zeta potential Range + 200 mV or better

3. Molecular weight

Measurement range: 1 x 10³Da to 2 x 10⁷ Da

• Measurement principle: Static Light Scattering and Debye plotting

• Minimum sample volume: 50μL

• Accuracy: ±10%

4. General:

• Temperature control range: $1^{\circ}\text{C} - 90^{\circ}\text{C} \pm 0.1$

• Light source: He-Ne laser (633nm) Or Solid State laser (532 nm) power up to 50mW

 Detection system: Back light scattering detector, should detect size and zeta potential simultaneously

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- Detector: APD (Avalanche photo detector) or high sensitive dual photo multiplier tube
- 5. Software: The following features of software are essential and should be available.
- The user should be able to measure the sample with manually defined parameters like laser attenuation, measurement position or by defining a 'Standard Operating Procedure (SOP)
- The software should allow plotting any one measured parameter from selected records Vs a second parameter and Over plots of up to 20 size or zeta potential distributions.
- Results should be exported to word processing packages or spreadsheets using a template or cut and paste.
- The software should have the ability to edit sample data parameters to allow recalculation of measurement data.

6. COMPUTER

 Compatible Computer of reputed brand with Latest Configuration + LCD + Laser printer should be quoted separately

7. DOCUMENTATION

 The documentation should be provided in Hardcopy or Softcopy. Two sets of Software Manuals to be provided. Complete circuit diagram and operation & maintenance manual for the basic particle size and zeta size analyzer for all the attachments.

8. INSTALLATION & COMMISSIONING

 The instrument should be installed, tested and commissioned by representative of manufacturer at site. The parameters to be matched for acceptance are determination of particle size and zeta potential of known standards.

9. TRAINING

The supplier should provide the training for Operation, Software, and Maintenance
at the site of installation. Application training on various applications form a
qualified application specialist should be provided. Application specialist should be
capable of explaining each and every aspect of analysis software using real samples.

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The training should be provided in the sessions required by the user during the warranty.

10. WARRANTY

• The vendor should give warranty for the three years after successful installation/commissioning.

Optional

• Two years on site service support (labor only) required to be quoted separately after warranty.

11. OTHER SPECIFICATIONS / REQUIREMENTS

- The complete system should operate at standard 230 V, 50 Hz power supply
- 12. Optional (Mandatory to Quote seprately)
- SPARE PARTS
- Normal and Disposable Cuvettes.
- Universal Dip Cell
- Quartz cuvette
- 13. Optional Accessories (Mandatory to Quote separately)

 Compatible Accessories should be quoted along with their specification
- Autotitrator
- Microrehology
- Viscometer

14. Vender should provide ware house to ware house insurance for the goods.

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