



CENTRE FOR NANO AND SOFT MATTER SCIENCES

Prof. U.R. Rao Road, Jalahalli, BENGALURU 560 013.

Autonomous Institution under the Dept. of Science & Technology, Govt. of India

REQUEST FOR TENDER

CeNS/2019-20/Tender 01

Date : 25.02.2020

The Centre invites Tender for the following item.

SL No	Description of Item	Qty
1)	Dispersion Analyser (Technical specifications attached)	1 No.

NOTE:

- The sealed tender should be addressed to the **Administration and Finance Officer, Centre for Nano and Soft Matter Sciences**, PB No: 1329, Prof. U.R Rao Road, Jalahalli, Bangalore-560013 before 10 March 2020
- Discount if any should be clearly mentioned.
- Delivery schedule, warranty details must be clearly indicated.
- Taxes & duties should be separately shown.
- Earnest Money Deposit of Rs.1,50,000/- is to be remitted through SBI Collect facility online and proof of remittance should be submitted along with the quotation.

Procedure for paying through SBI Collect :-

SBI Collect-Karnataka-Govt. Department-Centre for Nano and Soft Matter Sciences-MISC Fee-Tender Application Fee (Purpose).

The EMD will be refunded to unsuccessful bidders without any interest thereon. Overseas bidders may remit an equivalent EMD to the Centre's Bank A/C No.10838600274, Bank Name : State Bank of India, Jalahalli branch, IFSC Code : SBIN00963 SWIFT Code: SBININBB177.

- The quoted price should be valid for a minimum period of **3 months** from the date of quotation.
- Terms of payment:** The payment in INR shall be made through NEFT/RTGS after delivery and successful installation of the item
- Complete details such as the bank account number/IFSC/SWIFT/Bank Address, etc. should be provided along with the price bid.

- (i) **Warranty and replacement:** The Supplier shall ensure that the Items/Equipment supplied shall comply fully with the specifications laid down, for material workmanship and performance. The Warranty period should be specifically mentioned.
- (j) The Centre reserves the right to accept or reject any quotation or part thereof without assigning any reasons.
- (k) GST if applicable should be at concessional rates as applicable under provisions of OM No. 45/2017 relating to Scientific Research Institutes. Necessary Certificate will be issued at the time of placing order.
- (l) **Interested firms outside India** may submit tender bids directly to the address mentioned at point “A”
- The terms at point “E” above shall not apply
 - The payment terms will be through Letter of Credit.

Yours sincerely

Sd/-

Administration and Finance Officer

Tender specifications for Dispersion Analyser

The instrument should be capable of determination of Particle characterization, particle size distribution, particle-particle interactions, hydrodynamic density and magnetic susceptibility.

Fast stability ranking and shelf-life determinations of dispersions in original concentration.

Direct, fast and objective characterization of any demixing phenomena

Particle Size Measurement : Velocity Distribution $Q_v(v)$, $q_v(v)$

+ Direct measurement no calibration / no material properties

+ Always available - fast information for quality control

+ Qualitative information about particle size and polydispersity

Functions:

Accelerated phase separation through accelerated gravity by 6–2300 times .

Particle size distribution: 20 nm to 100 μm

Consolidation measurements: up to 12 samples , simultaneously

Observation time: 1 s to 99 h

Conformity: ISO/TR 13097; ISO 13318-2; CFR 21 Part 11

Samples Volume: 0.05 ml to 2.0 ml & 10 ml

Concentration: concentrated dispersions and sediments

Density: up to 22 g/cm³, 0.00015 Vol% – 90 Vol%

Viscosity: 0.8–108 mPas

Particle size: 10 nm to 1000 μm

Light source: NDIR multi-wavelength, simple selection of blue or NIR light source during SOP creation

Temperature control: 4 °C to 60 °C, +/- 1K

Cells: different material and optical path

Dimensions (WxHxD): 37 x 27 x 60 cm

Weight: 40 kg

Power supply: 230 V; 50/60Hz

Consumables / sample cells: Synthetic rectangular cells, PA=polyamide, 2 mm optical path, with stopper 500 nos

Synthetic rectangular cells (PA=polyamide), 10 mm optical path, (c), with stopper Cannula for Lur Lock syringe, d=2.0 mm, L=80mm, sharp, 500 nos

Syringe (disposable) 1 ml, Lur Lock,

Quartz Glass Sample cells with stopper ,- 2 mm optical path, 500 No's

Quartz Glass Sample cells with stopper ,- 10 mm optical path, 500 No's

Quartz Synthetic Sample cells with stopper -10 mm optical path : 500 No's

Software - Your window to dispersion analysis, A laptop/computer to support the software to operate. - included.

+ Windows 7 -10 based with Ribbon User interface

+ Plug and play, pack and go

+ Simultaneous instability index for up to 12 samples in real-time

+ Individual user customization

+ Full SOP concept (creation, capture, data analysis)

+ 10 different tools to analyse the stability and behaviour of even the most complicated dispersion:

. Time lapse measurement replay

. Dispersion fingerprint

. Automatic Instability index calculation

. Clarification process identification

. First Derivative of Clarification

. Phase separation

. Sedimentation and creaming velocities

. Particle size distribution

. Sedimentation/Creaming Velocity distribution

Analysis Template

Windows Explorer based data management

Comprehensive database security and full audit log

Complies with 21 CFR Part 11 and GLP.

Comprehensive Warranty for 3 years