

Dr.C. K. Subbaraya
Registrar



ADICHUNCHANAGIRI
UNIVERSITY
(Estd. under Karnataka Act No. 18 of 2013)
B.G. Nagara - 571448

ACU/AUTY/CRI/CMPAT/Major Eq./464/2020-21

Date: 21.09.2020

EXTENSION OF TENDER NOTICE

Ref: ACU/AUTY/R&D/Major Eq/CMPAT/369/2020-21, Date: 26.08.2020

With reference to the above and in continuation of the aforementioned tender notification, the last date for the submission of quotations from the competitive firms for the supply of equipment/Instrument (02 No's) for **Adichunchanagiri University Centre for Research and Innovation & CMPAT** are hereby extended till 28.09.2020 up to 5:00 PM. The rest of the terms and conditions shall remain intact.

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RE-TENDER NOTIFICATION

Adichunchanagiri University is inviting Closed tenders for the supply of following equipment for the ACU-CRI and CMPAT, Adichunchanagiri University from the competitive firms.

| | | |
|---|---|---|
| 1 | Name of the work | Supply of equipment for Adichunchanagiri University -CRI. |
| 2 | Tender documents available for download | 26-08-2020 to 21-09-2020 up to 5:00 PM |

| Sl. No | Requirements for Adichunchanagiri University Center for Research and Innovation and CMPAT | Quantity (in No's) |
|------------------------|---|-----------------------|
| Major Equipment | | |
| 1. | DIGITAL DENSITY METER | 1 |
| 2. | AUTOMATIC SURFACE / INTERFACIAL TENSIOMETER | 1 |

Note:

The sealed quotation for each equipment must be submitted in two individually sealed parts, one each for the technical documentation and financial quote in separate envelopes, duly sealed and superscribed with Tender Notice Number, Due Date and Time as per the details provided in this document.

All quotes must be submitted latest by September 21st 2020 to

The Registrar,
Adichunchanagiri University,
B G Nagara, Nagamangala Taluk,
Mandya District, Karnataka- 571448



EQUIPMENT'S

1. EQUIPMENT NAME: DIGITAL DENSITY METER

| Technical specification | |
|---|-------------------------------------|
| Digital Density Meter for determination of Density of liquid and gases by pulsed excitation method based on the oscillating U-tube technology. | |
| Instrument should be compliant to ASTM D4052 and D5002 | |
| Performance Specifications: | |
| Density Accuracy | : $1 \times 10^{-4} \text{ g/cm}^3$ |
| Temperature Range | : 15 to 60 degree C |
| Temperature accuracy | : 0.05 degree C |
| Resolution | : 0.00001 g/cm^3 |
| Reproducibility | : 0.00007 g/cm^3 |
| Repeatability | : 0.00005 g/cm^3 |
| Essential Features: | |
| <ul style="list-style-type: none">• Instrument should be able to automatically correct influence of sample viscosity on density.• Instrument should be able to measure and display Density with/without viscosity correction, Specific gravity with/without viscosity correction, Apparent Density (Steel or Brass), Apparent Specific Gravity.• Instrument to be able to automatically detect filling errors or gas bubbles in the filled in sample. It should alert the operator of potential measurement deviations and document the incident. The operator should not manually check for bubble.• The instrument should display live image of the complete U-Tube Oscillator and the entire filled in sample, in one picture, up to the bow of U-Tube.• The image of the U-Tube up to the bow, for every measurement, should be stored in the memory for later review and verification.• Instrument should have integrated standardized API temperature functions for density & API at temperature 29.5, 20, 15 and 15.56 °C• Instrument should be able to measure samples of viscosities up to 35000 mPa.s• Instrument should have built-in memory for storing 5000 measuring results (incl. times, temp, sample name, camera images and potential filling warnings)• Instrument should be able to export data to USB device (pdf or csv files), Printer (Serial, USB, Ethernet) and over local network.• Instrument should have 3 # USB, RS-232 and Ethernet interfaces.• Instrument should have graphical, bright coloured 7" TFT WVGA display with touch screen (800 x 480 px) PCAP touchscreen with customizable dashboard layout.• Instrument should have – Password protection for individual users with configurable password rules, Customizable user levels with individual access | |



rights, Audit trail, Electronic signature for measurement and check results.

- Instrument should have compliance to European and US Pharmacopoeia and FDA 21 CFR Part 11.
- Instrument should be able to configure 400 freely customizable products (8 preinstalled products for standard applications)
- Instrument should have integrated temperature and humidity sensor for intelligent condition monitoring.

Note: The quoted price should include charges for packaging and shipping to B G Nagara as well as warranty for 3 years. Basic consumables for the use of the machine should be included in the quote. Evidence of prior installation of the model quoted (or equivalent models) in other institutions and organizations of repute in India is highly desired and should be furnished along with the quote.

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2. EQUIPMENT NAME: AUTOMATIC SURFACE / INTERFACIAL TENSIO METER

SPECIFICATION

| | |
|--|--|
| Measurement of surface & interfacial Tension of liquids by du nouy's principal for upward.and Wilhelmy Plate for downward movement. As per IS: 6104/1972 & ASTM-D-971, 1590 & 1331 for oils, detergents, Dyes, Cosmetics, Insecticides, Imulsifiers, Pharmaceuticals, Biological Fluids etc. | |
| Display | : LCD |
| User Interface | : Colour Touch Screen |
| Unit of measurement | : Dynes/cm or mN/m |
| Range | : 0 - 999.99 dynes |
| Display Resolution | : 0.01dynes |
| Accuracy | : ± 0.2 Dynes/cm. |
| Table Speed | : 0.1mm/Sec to 10mm/Sec |
| Stroke Length | : 80mm |
| Sample Volume | : 40ml. |
| Power | : 230VAC |
| Measurement Principle | : Force |
| Operating Principle | : Du-Nuoy Ring & Wilhelmy Plate |
| Sample Temperature | : 0 - 80°C by an external circulator. Circulation jacket provided |
| Sample Temperature Measurement | : By RTD Sensor |
| <ul style="list-style-type: none">• LAN Enabled hence does not require a dedicated PC• Inbuilt 2GB Memory to store data• Pc interface Software for data logging and operation• Density Measurement provision using glass sinker• LED illumination• Acrylic windshield to prevent air draft• Supplied with 1 no. 6cm ring and 1 no. sample dish | |

Note: The quoted price should include charges for packaging and shipping to B G Nagara as well as warranty for 3 years. Evidence of prior installation of the model quoted (or equivalent models) in other institutions and organizations of repute in India is highly desired and should be furnished along with the quote.

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