Subject: Invitation of ONLINE 2 fold bids for the Procurement of Thermo Gravimetric & Differantial thermal analysis (TG-DTA).

Dear Bidders,

Only the online bids in the prescribed formats of Annexure 1 and Annexure 2 are invited for the aforesaid procurement as per the details attached as Enclosure-I of the item(s).

S. No. | Name of Item(s)                                                                 | Max. Quantity Required | Minimum Specifications |
------|--------------------------------------------------------------------------------|------------------------|------------------------|
1     | Thermo Gravimetric & Differantial thermal analysis (TG-DTA)                         | 01                     | Enclosere-1            |

**IMPORTANT:**
- All details regarding the subject tender are available on websites [www.bcas.du.ac.in](http://www.bcas.du.ac.in) and [https://eprocure.gov.in/eprocure/app](https://eprocure.gov.in/eprocure/app). Any change/ modification in the Tender Enquiry/ Tender Document will be intimated through above websites only. Bidders are therefore, requested to visit the websites regularly to keep themselves updated.
- Bids shall be submitted online only at CPPP website: [http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app)
- Manual bids shall not be accepted.
- For submission of E-Bids, bidders are required to get themselves registered with [http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app)
- Bidder is advised to follow the instructions provided in the ‘Instructions to the Contractors/Bidder’ for the e-submission of the bids online through the Central Public Procurement Portal for e Procurement at [https://eprocure.gov.in/eprocure/app](https://eprocure.gov.in/eprocure/app)
- Bid documents may be scanned with minimum 100dpi with black and white option in pdf format.

It is required that the following instructions should be carefully followed including detailed terms and conditions attached overleaf as Annexure ‘A’, while submitting your offer; otherwise your offer may not be considered.

1. All the communication with the college should be addressed only to “Principal, Bhaskaracharya College of Applied Sciences, Sector 2, Phase I, Dwarka, New Delhi-110 075.” (hereinafter called the Principal)
2. Online Quotations will be two fold (a) one technical bid consisting of all technical details and supporting documents (b) another financial bid containing items wise price for the items mentioned in the technical bid. Bidders will not be permitted to alter or modify their bids after expiry of the deadline for receipt of bids.
3. Financial bids of only those bidders will be opened and considered who qualify in their technical bid.
4. Corrigendum, if any, will be published only on the above websites only.

Yours Sincerely,

Principal
Request For Quotation (RFQ)/Limited Tender for Bhaskaracharya College of Applied Sciences, Dwarka

Specifications Thermo Gravimetric & Differential thermal analysis (TG-DTA)

- TGA/DTA should have Controlled Rate Thermal Analysis Mode that consists of operations such as Constant heating rate, Dynamic heating rate and step wise isothermal.

- Balance should be Ultra Micro Balance with thermally sealed and having Calibration facility. Weight change measurements should not be dependent on sample positioning.

- Both Furnace and Balance should be in horizontal Position, having motorized opening and closing for easy handling.

- Temperature range - Room Temperature to 1500°C with a facility of without range switching

- Weighing Capacity: upto 0.5 gram, Sensitivity: 0.2 μg or better, Weighing Precision: ± 0.01% or better

- Resolution should be 0.2μg above the noise level for the entire range from RT to 1500°C

- DTA measurement range: +/- 800 to +/- 1000 μV with RMS Noise: 0.03 -0.05 μV and RMS Sensitivity: 0.06-0.08 μV

- DTA/TGA Apparatus should have a facility to find calculated DSC for Endothermic and exothermic phenomenon, Melting & crystalline behaviour, Melting & crystalline behaviour, Dehydration, Glass Transition etc.

- Temp accuracy: +/-0.1°C and Temp reproducibility: +/-0.15°C

- Heating rate: 0.01ºC to 100 ºC/min

- Cooling of Furnace through forced Air from 1000°C to room temperature within less than 15 minutes

- Purge gas facility should be available through Flow Meter with necessary flow rate of 0 - 1000 ml/min.

- Software should be Windows-based Thermal Analysis software for data collection and treatments. Multitasking and multimodules software exploitation license under Windows for data acquisition and storage, Drawing and printing of the TG –DTG and DTA curves according to time or temperature, calculation and printing of derivatives curves, mass variation calculation, regression calculation, data storage, baseline correction, DTA peak integration, multi task software under windows. Should have capability of converting collected data into ASCII after finishing the test for exportation.

- Alumina and Platinum pan should be supplied at least each of 5-Nos. Alumunium pans should be supplied minimum 800-Nos.

- All accessories available for the ,model must be specified and mentioned with the quote. Spares and consumables should be provided for 2-3 years for trouble free operation.

- Printed materials : All specifications should be supported by the printed materials like technical catalogue or should be authenticated by the manufacturers.

- PC and Printer : Branded i5 computer with 5 GB RAM and 500 GB hard disc.

- Possibility of Interfacing: With GC Mass Spectrometer or FTIR.

- Warranty : 2 years warranty must be compulsory and beyond that 3 years warenty must be quoted seperately.

Other Terms and Conditions

(I) (a.)Quotation should be directly from Original manufacturer or authorized sales agent.
(b) Relevant agency certificates, validity of agency certificate from Foreign Principals (in case of foreign manufacturer)

(c) proprietary certificate (if any, for any component or instrument quoted) must be submitted along with quotation.

(II) (a) Prices should be CIF Delhi inclusive of all taxes, delivery charges, installation and training charges; BCAS Delhi is exempt from central excise and custom duty

(b) Installation, commissioning of & training on the equipment be mentioned clearly.

- o Fright charges will be the responsibility of the college.