

10.08.2021

To,

The Director  
DIC cell  
Kumaun University, Nainital – 263001  
Uttarakhand

**Subject:** To upload the tender notice in the University web-site

Reference: **File Name:** CRG/2019/004139 dated 21/05/ 2020.

Dear Sir,

This is to bring to you kind notice that the DST, New Delhi has sanctioned me a research project entitled "Invasion biology of *Ageratina adenophora* and solutions for restoring ecosystem processes in Kumaun Himalaya, Uttarakhand" vide **File Name:** CRG/2019/004139 dated 21/05/ 2020.

In this regard, we have to purchase equipments (Total Nitrogen/Phosphorus/Total Organic Carbon analyzer including required accessories).

Kindly upload the Tender Notice in the University Web-site as enclosed herewith.

With regards  
Faithfully Yours'

*KBargali*

10.08.2021

(Kiran Bargali)  
Principal Investigator  
DST, Project  
Department of Botany,  
D.S.B. Campus,  
Kumaun University, Nainital

Principal Investigator  
DST Project  
Department of Botany  
D.S.B. Campus  
Kumaun University, Nainital

Sh. K. K. Pande  
for n.a.

*Sanjay P.*  
10/08/2021

**DST Project, Department of Botany**  
D.S.B.CAMPUS, KUMAUN UNIVERSITY, NAINITAL, 263 002

**Dr. Kiran Bargali**  
Principal Investigator



**+91 9410579117, 9458939856**  
kiranbargali@gmail.com

## **TENDER NOTICE**

Sealed tenders under two bid system are invited for Total Nitrogen/ Phosphorus/ Total Organic Carbon Analyzer (Including required accessories) to be installed in the department of Botany, DSB Campus, Nainital, under a SERB, DST Project from sole manufacturer or their authorized distributors. The tender form with specifications, items and conditions can be downloaded from the university website [www.kunainital.ac.in](http://www.kunainital.ac.in). The duly completed form along with the application fee, a Demand Draft (DD) of Rs. 1500.00 inclusive of GST in the name of Assistant Account Officer must be attached with the form, earnest money of Rs. 75000.00 by Demand Draft (DD) will have to be deposited with the tender, drawn in favor of AAO, D.S.B. Campus, Kumaun University, Nainital, Uttarakhand, 263002. The duly completed bids should reach the office of the undersigned latest by 28 August, 2021.

Principal Investigator  
SERB, DST  
Department of Botany,  
D.S.B. Campus, Kumaun University  
Nainital

**TENDER DOCUMENT**

**SEISMIC NETWORK IN KUMAUN HIMALAYA(DST PROJECT)**

**DEPARTMENT OF BOTANY, KUMAUN UNIVERSITY, NAINITAL-263002**

(1) Manufacture's/Supplier's Name  
And full address

(2) Tender fee (non-refundable)  
(DD No. and date)  
In favour of Assistant Account Officer  
Kumaun University, Nainital

(3) Earnest money  
(DD No. and date)  
In favour of Assistant Account Officer  
Kumaun University, Nainital

(4) Signature of the Bidder/ Supplier  
Date

Note: (i) Each page of the tender document must be signed  
(ii) The documents contain nine pages marked 1-8

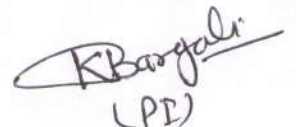
*KBargali*  
(PI)



## Tender Notice

Sealed tenders are invited for total Nitrogen/Phosphorus/Total organic carbon Analyzer (including required accessories) to be installed in Department of Botany, DSB Campus, Nainital, under a SERB, DST Project entitled "**Invasion biology of *Ageratina adenophora* and solutions for restoring ecosystem processes in Kumaun Himalaya, Uttarakhand**" under Dr. Kiran Bargali, Department of Botany, DSB Campus, Kumaun University, Nainital, from sole manufacture or their authorized representatives. The time schedule of the procurement is as follows:

- a. Bid reference \_\_\_\_\_ This should be referred in all correspondence and also on the top of the envelope containing bid etc.
- b. **Price of the bidding document (nonrefundable):**
- c. Commencement of form downloading : 10 August, 2021
- d. Last date of submission of bids : 28 August, 2021
- e. Date and time of opening of technical bids : will be communicated later on
- f. Evaluation of technical bids : will be communicated later on
- g. Commercial bid opening : will be communicated later on
- h. Place of opening of bids : Department of Botany,  
DSB Campus, KU, Nainital
- i. Address of Communication : Principal Investigator  
SERB, DST Project  
Department of Botany,  
DSB Campus,  
Kumaun University,  
Nainital

  
(PI)

## GENERAL CONDITIONS

- (1) The bids are to be submitted in two parts separately-
  - (i) Technical
  - (ii) Commercialbids in separate sealed covers enclosed in a sealed packet. The envelope containing the bid should be clearly marked on the top.
- (2) The bids must be accompanied by earnest money in the form of a Demand Draft in favour of Assistant Account Officer, Kumaun University, Nainital. Unsuccessful bidder's security money will be returned as early as possible. No interest will be paid on the security money.
- (3) Bids will be opened in the presence of a committee and interested bidders may also attend the meeting at the specified date and time at their own.
- (4) Price of the goods should be quoted on CIF New Delhi, India.
- (5) Price quote shall be either in the currency of bidder's own country or in **US\$**.
- (6) If a foreign bidder has engaged an Indian agent, it will be required to give the following details in their offer-
  - (i) Name and address of the Indian agent
  - (ii) Services to be rendered by the agent
  - (iii) The amount of remuneration for the agent included in the offer
- (7) The documentary evidence of the bidder's qualification to perform the contract, if its bid is accepted regarding his financial, technical and production capabilities necessary to perform the contract should be specified properly to the purchaser's satisfaction.
- (8) Documentary evidence to the jobs and services eligibility shall consist of a statement in the price schedule on the country of origin of goods and services, which shall be confirmed by a certificate of origin at the time of shipment.
- (9) The documentary evidence of goods and services conformity to the bidding document may be in the form of literature drawing and data and shall furnish a detailed discussion of goods essential technical and performance characteristics.
- (10) The validity of bids should be for a minimum of 120 days.
- (11) The expected date of delivery of goods after the award of the contract should be mentioned in the bid.
- (12) Bids received after the deadline of submission of bids will be rejected.
- (13) Bids should be submitted with the authorized signature and stamped duly in each page of the bid document.
- (14) User's list indicating type of the equipment purchased by them and relevant certificate be enclosed.
- (15) The equipments to be procured in the project are to be installed at the department of Botany, DSB Campus Nainital and performance will have to be undertaken by the bidder.
- (16) Besides the term and conditions mentioned herein the import rules as applied by the Government of India will be applicable and in the event of



any dispute the jurisdiction shall be the High Court of Uttarakhand at Nainital.

- (17) The bidder is expected to examine all instruments, terms and specifications as given in the bidding document including those given in annexure-1. Failure to furnish all information required in the viding document of submission of a bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in rejection of its bid.
- (18) The Principal Investigator reserves the right to accept or reject any of sll the tenders without assigning any reason.

*K. Bangali*  
(PI)

**ITEMS, SPECIFICATIONS AND CONDITIONS**

**Item:** Total Nitrogen/Phosphours/Total Organic Carban Analyser

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**Other Conditions-**

Bidder should also quote any other items that are not included in the above list but is essential for the operation of the system.

Bidder should have servicing capability.

Bidder has to perform the on-site testing of all the equipments.

Bidder shall submit the list of users and the user certificate of the equipment quoted.

Bidder shall include all relevant literature of the equipment quoted.

Bidder should include the details Para-wise compliance statement along with the bid.

**Warranty-**

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### **Warranty-**

The successful bidder must own a full warranty of all hardware and software as per terms and conditions for a period of Three year after commissioning of equipments.

During the warranty period, the bidder must respond within 10 days without any cost to Kumaun University, Nainital for service and correct the problem. The warranty period will be extended proportionally if the down period is beyond 10 Days.

### **Final acceptance Test:-**

The testing should be done for all the equipments supplied. All individual components should be sufficiently tested prior to shipment and checked for completeness of the specification quoted.

The bidder should successfully demonstrate the performance of all the equipments after supply as per our tender specification.

The successful bidder must integrate, install and test all the equipment at observatories. The installation, testing and commissioning should start within two weeks after the equipments arrives at the site. The bidder will perform on-site test of all the equipments to be designated representative. One side test plan must be submitted by the bidder well in advanced and should be got approved. After satisfactory completion on-site test, the system will be operated continuously for a period of 15 days. If it functions without any hardware or software failure during this period, the system will be accepted as commissioned.

### **Procurement Details:-**

1. Tenders to be invited under two parts of the tendering system, namely Part-I: Techno-Commercial Bid and Part-II: Commercial Bid.
2. Payment Terms- Payment to be made in two parts.
  - a. The I Part of 80% payment to be made through Irrevocable Letter of Credit against shipping documents.
  - b. The II Part of 20% payment to be made on acceptance of system and on submission of Bank Guarantee for equivalent value with validity for two year from the date of acceptance of goods.
3. For any delay in delivery, liquidated damage @ 1% of contract value per week to be levied with a maximum of 10 weeks. Once maximum is reached termination of order will be considered.
4. RISK PURCHASE VALUE if the supplier fails to supply the goods within the maximum time period specified in the order, the purchase may procure upon such terms and in such manner as it deems appropriate, goods for services similar to those undelivered and the supplier shall be liable to the purchaser for any excess costs for such similar goods and services.



**Specifications for Potentiometric Auto-Titrator for the determination of Nitrogen, Carbon and Phosphorus in soil and plant samples along with sample preparation accessories.**

1. The potentiometric auto titrator system should be capable of doing all types of Titrations like Acid base, Non Aqueous, Redox etc.
2. The system should also have the facility to perform Karl Fischer Titration with additional accessories.
3. As a security measure the basic instrument and all the peripheral devices connected should be recognized automatically by the software as soon as it is connected to the software.
4. The equipment should have a burette accuracy of 1/20000 of the burette volume.
5. The instrument should have the facility to connect upto four burettes and out of which 2 should be titrating burettes. Burette with volumes of 5, 10, 20 and 50 ml should be available, if needed in the future. Three numbers 20 mL burette should be provided along with the instrument.
6. The instrument should be equipped with an intelligent burette capable of storing the complete information on the Titrant like the concentration history, value, and serial number. Once connected the burette volume should be recognized automatically.
7. The instrument should have the possibility to connect host of accessories for automation if the requirement is for analysis of multiple samples in future.
8. The instrument should be provided with suitable Magnetic stirrer with control on stirring speed and direction.
9. The instrument should have the facility to connect intelligent sensors with chip on board technology to capture all data related to calibration and performance of sensors.
10. The instrument should also be able to control external dosing device to manage liquid handling function.
11. Suitable electrodes and accessories required for the determination of nitrogen, carbon and phosphorus in soil and plant sample should be provided along with the instrument.
12. Latest windows based software for the complete control of the auto titrator should be provided with the system, with the following facilities.
  - a. Software should be LIMS compatible and facilitate parallel multi-tasking functions. Software should support client-server version if required.
  - b. It should allow to use the IF statements to do actions based on results.
  - c. Result monitoring, customized report and automatic data back-up should be available.
  - d. Reagent consumption monitor, a warning should be displayed when the selected limit is reached.
  - e. Automatic inquiry of sample size and/or ID number after start of titration on request.
  - f. Should be possible to do two titrations parallelly in the same window.
  - g. Result trend analysis, History about the each determination should be available.
  - h. Setting limits for results to control the process, and possibility of receiving email whenever it is violated. Quick filter, special filter functions to trace the required data quickly. Electronic signature to prevent tampering of data.
  - i. Export and import of data(s) in different formats like CSV (to excel), XML (to LIMS) etc, should be possible.
  - j. Software should be 21 CFR Part 11 compliant if required.
13. Fully automatic sample digestion system for the determination of nitrogen with the following specification should be provided along with the auto titrator system.
  - a. Twelve Place 250 ml capacity PC Compatible Block Digestion System with all essential accessories.



- b. TFT Graphic Touch Screen Display with unique wireless mouse to operate at a distance of 1-2 mtrs without connecting to PC.
  - c. Should have 2 Ports in the motherboard of digester one for PC connectivity another for direct connection to Remote Mouse/Datalogger/ Memory stick for data storage
  - d. Integrated auto sequencing time/temperature domain of 70 programs and 12 sequencing steps
  - e. Temperature Controller should be isolated separately in a control tower to protect electronics from digestion heat zone and acid reaction zone
  - f. Temperature Control Range: Room temperature to 450 ° C, Temperature Accuracy : ± 0.5 ° C
  - g. Live graphical representation of time /temperature gradient on touch screen display of digester
  - h. Data logger with real time clock with memory stick for data storage with separate port in mother board apart from PC Port
  - i. All essential accessories like Digestion Tubes, SS Insert Rack, Exhaust Manifold, Suction assembly for safe removal of acid fumes
  - j. Suction Assembly wall mounted on rear side of unit for safe & easy access to drain area
  - k. Three stage acid neutralization scrubber should be provided.
  - l. Non corrosive centrifugal inbuilt magnetic suction pump for water recirculation, Automatic Water level indicator to view water level in FRP tank externally and FRP Tank, Containers for Alkali and Water should be provided.
  - m. Auto Intelligent run of programmable steps like Addition of Boric Acid, Dilution, KMnO4 Addition for Available Nitrogen, Alkali Addition, Steam Processing, Residue Removal, and Process over indication with inbuilt delay time features should be available.
  - n. Facility to program and control distillate volume for determination of available nitrogen should be available.
  - o. Auto sensing of "NO WATER" condition in condenser & steam generator with alarm & signal to alert user
  - p. Auto reagent Level Sensor with Alarm for Reagents, Stainless steel non corrosive steam Generator should be available and Reagents Tanks should be wall mounted for easy handling.
  - q. The instrument should be integrated with the auto titrator system.
14. Suitable accessories like quartz crucibles, glass wares, muffle furnace (950 deg. C), heating plates 8" SS top for the digestion of samples for the determination of carbon and phosphorus should be provided along with the instrument. Suitable PC Core i5 with EPSON Colour Printer with scanner & Copier, 3 KVA Online UPS with 30 minute back-up.

*K. Bargali*  
(PI)