Sealed tenders are invited by two bid system (Technical and Commercial) from Dealers/Manufacturers/ Sole Authorized Distributors/ Sole Agents for the supply and installation of instruments/ equipment to be purchased under FIST –DST as given below:

<table>
<thead>
<tr>
<th>Tender Code</th>
<th>Name of the Equipment</th>
<th>Tender Code</th>
<th>Name of the Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>DG/FIST/1</td>
<td>Research Polarizing Microscope</td>
<td>DG/ FIST /4</td>
<td>Sediment Grab Sampler</td>
</tr>
<tr>
<td>DG/ FIST /2</td>
<td>Heating and Freezing Stage</td>
<td>DG/ FIST /5</td>
<td>Hot Air Oven</td>
</tr>
<tr>
<td></td>
<td>Assembly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DG/ FIST /3</td>
<td>TOC Analyzer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Specification of the item terms and conditions and other details are given in tender form. The tender form can be obtained from the office of the Head, Post Graduate Department of Geology, RTM Nagpur University, Nagpur, Law College Square, Nagpur 440 001 from 19 November to 26 November 2013 on working days up to 4.00pm on payment of DD of Rs. 1000/- (Rs. One Thousand only) non refundable in favour of Head, Post Graduate Department of Geology, RTM Nagpur University, Nagpur 440 001. The sealed tender should be submitted as per the two bid system i.e. envelope No. 1 (Technical Bid with details like Registration certificate of the firm, IT Certificate & its clearance, Sale tax registration certificate & its clearance, VAT registration & clearance, technical specification authorization from the manufacturers, previous experience etc.) and envelope No.2 (Price Bid/ Commercial). The envelopes 1 and 2 should be packed in envelop 3 along with EMD of 1% of the cost of the items by DD in favour of Head, Post Graduate Department of Geology, RTM Nagpur University, Nagpur 440 001 shall be accepted on or before 26 November 2013 up to 04.00pm. The tender opening will be on 27th November 2013 at 03.00 pm in the university office located at the Mahatma Jyotiba Fule Educational Campus, Amravati Road, Nagpur in presence of bidders or their authorized representatives, if present. The tender notice is also available on university website i.e. www.nagpuruniversity.org. The undersigned reserves all rights to reject any or all tenders in full or part without assigning any reason thereof.

Head
Post Graduate Department of Geology
Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur
Price Rs.1000/-

Tender Form
(Tender Notice No. 1/2013-2014, dated 17/11/2013)
(Earlier Tender Notice No. 1/2013-14, Dated 17/07/2013)

Tender Form for supply of Equipments/Instruments/Machine/Articles etc.
Under DST-FIST Program Level-I

Contact

Head
Post Graduate Department of Geology
Rashtrasant Tukadoji Maharaj Nagpur University
Rao Bahadur D. Laxminarayan Campus
Nagpur -440 001
Technical Specifications of Items to be purchased under DST-FIST Level-I

(1) RESEARCH POLARIZING MICROSCOPE

Trinocular Research Polarizing Microscope for Transmitted & Reflected Light Applications Eclipse LV100N Pol Main Body (100-240V) built-in filter cassette (NCB11, ND8), 1; Diffuser, field diaphragm, adjusting tools (2 pcs.), fine and coarse focusing, with focus stopper and torque adjustment, built-in power supply for 12V 50W, Circular graduated stage 360° rotatable, 360° rotatable polarizer, P-I Intermediate tube with 360° rotatable Analyzer (in 1° increments), lockable in any position, 45° click stop function (removable) Rotatable stage with centering mechanism; Analyzer: 360° dial-rotatable Minimum reading: 0.1; Analyzer and focusable and centerable Bertrand lens, Stage Clips (2 pcs); LH50PC Precentered Lamphouse 1 P-N quintuple centering nosepiece 1; Immersion Oil A, 8cc 1; Dust Cover H600L 1; TT3 Trinocular Tube T, (F.O.V. 22mm) (3 Way: 100/0, 20/80, 0/100), inclination: 30°; Eyepiece Lens CFI 10X With Diopter adjustment (F.O.V. 22mm), 1 Eyepiece Lens CFI 10X CM with diopter adjustment (F.O.V. 22mm) with cross lines and micrometer 1; CFI UW Eyepiece Guard 2 P Swing-out condenser, Achromat strain-free condenser, 2-100X N.A. 0.90 with iris diaphragm 1; Filter 45mm, Heat-absorbing 1

Universal Objectives For Transmitted & Episcopic Illumination

CFI TU Plan Fluor EPI P 5x (N.A. 0.15/W.D. 23.5mm) 1; CFI TU Plan Fluor EPI P 10x (N.A. 0.3/W.D. 17.5mm) 1
CFI TU Plan Fluor EPI P 20x (N.A. 0.45/W.D. 4.5mm) 1; CFI TU Plan Fluor EPI P 50x (N.A. 0.80/W.D. 1.0mm) 1

Extra Long Working Distance Objectives for Heating Stage

CFI TU Plan Epi ELWD 20x (NA/WD:0.40/19.0mm) ; CFI TU Plan Epi ELWD 50x (NA/WD:0.6/11.0mm); Episcopic Polarizing Illuminator; LV-UEPI Universal Epi Illuminator; LV-LH50PC Precentered Lamphouse; LV-HL50W 12V50W Halogen Lamp 3
YM-NCB 25mm Filter Slider NCB11; YM-ND 25mm Filter ND4/ND16; YM-GIF 25mm GIF; LV-PO Polarizer for LV-UEPI2

Compensators

P-CL 1/4 Lambda (1/4 λ) & Tint Plate (1) 1st Order Red Plate; P-CQ Quartz Wedge Compensator (This compensator permits retardation from 1 to 6) 1;
MBB73550 Y-TV55 TV Tube For C-0.55X Relay Lens 1; MQD42055 C-0.55x DS Relay Lens 1
Stage Compensator

MBM11100 Stage Micrometer Type A (1 mm/100 Div.)

PC
Intel Core i3 Processor, 2GB RAM, 500 GB Hard Disk, DVD R/RW, Keyboard, Mouse, Windows 7 Prof OS, 18.5" Color LED/LCD Monitor;

NK- SOC20 Condenser Extension lens for Achromat swing out condenser; Clamping Plate to fix stage on Nikon Pol table; Standard 40cm symphon and return tubing set with 2 liter Dewar; Water Cooling for cooling the body when working at temperature above 300°C, Water Circulator Pump (Stage body and Window Cooling) (220-240v)

Camera: Digital/ VUE CMOS Camera 3 Megapixel Resolution with Imaging Software

Optional:
P-CS Senarmont Compensator (for retardation from 0 to 1)
P-CB Berek Compensator (Inserted into the nosepiece slot, this compensator permits retardation measurements from 0 to 1800 nm) P-AMH Mechanical Stage (stroke x: 35mm, y: 25mm) Min. increment: 0.1mm on the vernier scale
(2) HEATING AND FREEZING STAGE ASSEMBLY

Heating Stage THMS600 with XY Sample Manipulation with Temperature range -196°C to 600°C, Up to 150°C/min heating
T95-Linksy3 PC interface and Linksys 32 system controller software
LNP95-THMS Liquid Nitrogen Cooling Systems - for automatic cooling of the sample below ambient temperature down to -196°C; Standard 40cm syphon and return tubing set with 2 litre Dewar 1; Water Cooling - for cooling the body when working at temperatures above 300°C, Water Circulator Pump (stage body and window cooling) (220-240V)
Condenser Extension lens for Achromat swing out condenser; Clamping Plate to fix Stage on Nikon Pol table Linksy3s32 DV-NC Temperature Control and Digital Video Capture System; PL-A662 Pixlink PL-A662 Camera includes 4-port firewire card and firewire cable

(3) TOC (Total Organic Carbon) ANALYZER

Variability with a compact shape
The modular system is based on a basic instrument which already includes the main functions:
Automatic dosing and distribution of liquid samples Sparger for stripping of TIC as CO2 or POC High temperature combustion for oxi.dation of TC/NPOC or POC (VOC) to CO2 Measuring gas drying and gas flow regulation CO2 detection in the carrier gas stream Power, control and regulation electronics Instrument operation, control and measuring value processing shall be done via a connected PC or laptop. In connection with the basic instrument there are a variety of modules available to achieve various applications.

Selection of liquid sample feeding
Modules shall allow the measurement of liquids either in single mode. The sample can be stirred in each of the operation modes. Air purging for stripping TIC or POC (VOC) shall be possible. All types of samplers shall be integrated in the instrument and do not require any additional footprint. Random access to selected sample positions shall be available in the TOC auto samplers.

Selection of solid sample feeding
Module shall enable the measurement of samples in tin foils or capsules in single mode. It should be suitable for solid samples but can also be used for heavy particulate containing samples, viscous liquids, semi-solids or liquid samples of very small quantity.

Variable Configuration
Shall be easily and quickly reconfigure in the TOC cube between liquids or solid sampling.

Selection of the detections
Three different NDIR detectors required for the carbon determination. A standard wide range NDIR detector is suitable for almost all applications A trace version NDIR with double cuvette length for lowest detection limits. For very high carbon concentrations e.g. in solids, a special optional detector needed.
The content of bound nitrogen (TNb) can be optionally measured with 3 different detection types: Electrochemical cell (EC) as the most economic detection type Chemiluminescence detector (CLD) according to DIN 38409 H27 Non dispersive IR detector for largest concentration range from 0.05 to more than 50,000 ppm.
Analysis method: Catalytic high temperature combustion at 850°-950°C (max. 1200°C)
Oxidation from C to CO2 which is quantitatively determined with a NDIR Optional detection of the formed NO with NDIR, CLD or EC
Measuring parameters: TC, TOC, DOC, NPOC, TIC, POC, optional TNb
Norms and standards: ISO 8245, EPA 415.1, European standard acc. to EN 1484, ENV 12260, Safety standards: CE, IEC 1010, EMV; Measuring range: C 0 – 60,000 mg/l in liquids ; 0 – 100 % in solids; N 0 – 200 mg/l (CLD); 0 – > 50,000 mg/l (NDIR); Detection limits* (SD): C 6 μg/l (ppb) (3 μg/l (ppb) for trace version); N 0,02 mg/l (ppm) (NDIR); Precision* (RSD): < 1% at > 5 mg/l C; Analysis time*: 3-4 min per parameter; Sample quantity*: liquid: <50 - 2,000 μl variable solid: 1 g soil sample or 10 mg C abs. (optional up to 50 mg C); Particle size*: exceeds the requirements EN 1484 for 100 μm cellulose standard, with capsule technique no upper limit Calibration: Automatic multi point calibration; Sample feeding: • liquid samples manual, • solid sample manual
Instrument control Operation and control via P. C. under Windows-7 or 8
All instrument functions are digitally controllable, the comprehensive operation software includes e.g. automatic leak test, extensive error diagnosis, monitoring of the maintenance cycles, sleep-/wake up function, statistical evaluation and almost unlimited memory capacity for analysis data incl. graphics. Integration in data networks like LIMS and the possibility of remote control and diagnosis via the internet.

**Cylinder with Gas:** Synthetic air (hydrocarbon and CO2 free) or oxygen (4.5), 200 ml/min

Electrical connections: 100/110/200/230 VAC, 50/60 Hz, 1.8 kW

Dimensions*: 48 x 55 x 57 cm (w x d x h); Weight: approx. 60 kg

In full compliance with 21 CFR Part 11 (option)

4. **SEDIMENT GRAB SAMPLER**

Grab area 0.4 sq. M, Height-250mm, suitable for collecting sediment samples from still water e.g. lakes & ponds. Triggering shall be effected by a brass Go-Devil type messenger that comes with the equipment and 20 meters of 6mm diameter Nylon Wain Rope. All fasteners should be made up of Stainless Steel. The Grab should be made of Stainless Steel for anti corrosion. All material used in manufacturing should confirm to Indian Standard of equivalent International Slandered.

5. **HOT AIR OVEN**

Construction: Double walled construction fully made of Stainless Steel inner mirror finished and exterior matt finished. The gap between the two walls filled with glass wool insulation. A fully insulated door silicon gasket with brass locks hinges and aluminium ventilator. Supplied with stainless steel wire mesh shelves.

Heating Elements: Heating is by specially designed heater made of Nichrome wire fitted at the bottom of the oven. Temperature Control: Temperature controlled by microprocessor based digital temperature controller with Pt 100 as sensor. Temp Range - 50°C to + 250°C, Temp Accuracy: ± 1°C; Temp. Resolution- 0.1°C. It should work on 230V A. C. 50Hz Single Phase. Chamber size: 24”x24”x36”, External Dimension: 30”x31”x52”, Rating: 3000 Watt, No. of shelves – 5 Nos.; A forced air circulation system with fan for better temperature uniformity fitted on the top side of the oven. Electronic Digital timer

**GENERAL TERMS AND CONDITIONS**

1. Dealers have to supply Equipments/ Machine/ Instrument/ any articles as per the Order. No alternate makes of Instruments are accepted. And if any dealer supply any alternate make of Instruments which has not been ordered these Equipments/Machine/ Instrument/ any articles will be returned to them at their cost.
2. If the Equipments/Machine/Instrument/ any articles supplied are not found satisfactory, such Instruments will be return to them at their cost.
3. The Order should be complied in totality within fifteen days from date of order or to report how the matter stands.
4. Bills in Triplicate with Pre-stamped receipt/Invoices affixing with Rs.1 revenue stamp should be sent to us within fifteen days.
5. Delivery of Equipments/Machine/Instrument/ any articles are FOR at Head, PG Department of Geology, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.
6. Please note that our Banker is Bank of India, Rashtrasant Tukadoji Maharaj Nagpur University Extension Counter, University Campus, Nagpur-440 033.
7. Outside dealers are requested to negotiate all documents through the above mentioned Bank.
8. While submitting your quotation kindly mentioned terms and condition clearly regarding i) VAT Tax ii) Sale Tax iii) Octroi iv) Excise Duty and any other tax applicable.
9. Octroi and Excise duty certificate will be provided if the Proforma Invoice and consignment are made on the name of Head of the Department of Geology Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur. In no case the University will pay the Octroi Tax/Excise Duty.
10. The rates mentioned in the quotations should be valid for six months duration.
11. A performance guarantee of the instrument / equipment is to be given with minimum validity for 12 months or more from the date of installation.
12. Blank tender form will be issued after receiving demand draft of any Nationalized/Schedule bank of Rs. 1000/- in favour of The Head, Department of Geology, R.T.M. Nagpur University, Nagpur - 440 001.
13. Earnest Money Deposit (EMD) in the form of demand draft of any Nationalised/Schedule bank of 1% per item drawn in favour of The Head, Department of Geology, R.T.M. Nagpur University, Nagpur- 440 001 should be submitted in Envelope No. 1. This money (EMD) shall be refunded to the unsuccessful dealer/bidder, within 30 days from the date of the opening of the tenders. No interest shall be paid on earnest money deposited. In case of successful dealer the EMD shall be refunded after the official order and successful installation at Department of Geology, R.T.M. Nagpur University, Nagpur- 440 001 (MS) India. Any offer received without the EMD shall stand wholly rejected. Nevertheless, Decision of the Head, Department of Geology, R.T.M. Nagpur University, Nagpur. (MS) India, on such matters shall remain final and binding.
14. **Procedure strictly to be followed for submission of Tender Form:**
   a) The sealed tender should be submitted as per the two bid system (Technical and Price/Commercial).
   b) Envelope No. 1 (Technical Bid): This envelope should contain with details like Registration certificate of the firm, IT Certificate & its clearance, Sale tax registration certificate & its clearance, VAT registration & clearance, technical specification authorization from the manufacturers, previous experience etc.) & **the Dealers/ Bidders must sign all pages of the tender form with their stamp.**
   c) Envelope No.2 (Price Bid/ Commercial): All pages by of the price bid should be signed by **the Dealers/ Bidders with their stamp.**
   d) Envelope No. 3: This envelope should contain envelops 1 and 2 along with **EMD of 1% of the cost of the items.**
15. The tender form downloaded from www.nagpuruniversity.org should be accompanied by a DD of Rs. 1000/- as the formal tender form fee.
16. The supplier shall provide both technical/onsite demonstration /service manual and operation/installation manual along with the dust cover for the equipment free of cost.
17. In case of any dispute the jurisdiction shall be Nagpur.
18. The tender for equipment/instruments must be sent in sealed envelope with the superscription “**Tender for instruments/equipment for DST-FIST Program Level-I**” Department of Geology, R.T.M. Nagpur University, Nagpur- 440 001 and addressed to the Head, Department of Geology, R.T.M. Nagpur University, Nagpur- 440 001 (MS) India.
19. No correspondence queries or reminders or personal visits regarding quotation position or ordering action will be entertained or replied. Orders when finalized will be intimated to the parties concerned only.
20. Outside dealers are requested to quote the mode of dispatch of articles, i.e. by Railway, Post Parcel, Currier or Goods Transport or Air Mail.
21. Two bid system will be followed. First technical bid (envelope no. 1) will be opened. After the fulfillment of all the necessary documents along with EMD enclosed in envelope no. 1), then commercial bid (i.e. envelope no. 2) of the required technical specifications will be only opened. It is, therefore, suggested to submit two independent envelops for technical and financial bids.
22. Kindly mention Sales Tax / Registration number of the firm.
23. Payment: Advance payment will not be made.
24. Any special discount for Educational / Research Institution should be specified.
25. Equipments / Machine / Instrument/ any articles shall be accepted on any working days up to 5-00 p.m.
26. Schedule of the date is as given below (on working days up to 04.00 pm):
   i. Sale of blank tender form: **19 November to 26 November 2013**
   ii. Submission of tender form: on or before **26 November 2013 up to 04.00pm.**

27. Opening of tender form: **27th November 2013 at 03.00 pm** at the university office located at the Mahatma Jyotiba Fule Educational campus, Amravati Road, Nagpur

28. The Head, Department of Geology, R.T.M. Nagpur University, Nagpur- 440 001 (MS) India reserves the right to reject lowest of any tender and to increase or decrease the quantity of or split of the items of the tender at any time while finalization of the order.

29. The Head, Department of Geology, R.T.M. Nagpur University, Nagpur- 440 001(MS) India reserves the right to reject any or all of the tenders without assigning any reasons thereof.

**IMPORTANT NOTE:**

i. The tender may be accompanied with an undertaking from the party/supplier that the terms and conditions of the tender are acceptable and binding on the party/ supplier.

ii. Please return this copy of terms and conditions duly signed and stamped along with the tender documents.

iii. The goods must be dispatched on CIF Nagpur basis ONLY.

iv. **Separate envelopes** (Envelope 1: Technical and Envelope 2: Price /Commercial) **must be submitted for each item.**

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Head
PG Department of Geology
Rashtrasant Tukadoji Maharaj
Nagpur University, Nagpur
Name of the Supplier / Firm : .............................................................................
.............................................................................

Whether Sole Proprietor / Partnership/ Pvt. Ltd., Public Limited under Indian Company’s Act, 1956, with copy of Partnership Public Ltd., Registration Certificate

Name of Sole Proprietor or Managing Partners or Managing Director and other Directors with Address and Telephone numbers

Details of Registered Office and other Regional Offices : .................................................................

Contact Person for the matters as regard to the present contract (legal authority may be cited)

Signature of the Supplier / Firm : .............................................................................

Office Stamp / Seal : .............................................................................

Place : .............................................................................

Date : .............................................................................
1) Name of the Equipment/Instrument: Digital Resistivity Meter with all essential accessories.
Basic unit composed of:
   a. Digital Resistivity Meter, powered by 24V rechargeable batteries, housed in sturdy
      aluminum box fixed in briefcase.
   b. Winches small (2 numbers)
   c. Winches medium (2 numbers)
   d. Current Electrodes (2 numbers)
   e. Potential Electrodes (2 numbers)
   f. Hammers (2 Numbers)
   g. Field Cable etc.
2) Name of the Equipment/Instrument: Book Almirah (two doors fitted with glass)
Basic unit composed of:
   a. Four shelf making five compartment.
   b. Size 75” x 32” x 18”,
   c. 22 SWG
3) Name of the Equipment/Instrument: Sieve Shaker with sieves
Basic unit composed of:
   a. Sieve shaker driven by 220 volts single phase AC Electric Motors
   b. Can carry 6”/ 8” dia., 7 Sieves with one set of lid Plan
4) Name of the Equipment/Instrument: Ultra Sonic Cleaner
Basic unit composed of:
   a. Standard ultra sonic cleaner
5) Name of the Equipment/Instrument: Podium with doors & lock for Computer
Basic Unit composed of:
   a. Aluminum / wooden structure
6. Name of the Equipment/Instrument: Centrifuge
Basic unit composed of:
   a. Timer
   b. RPM- 5000
   c. Rotar angle head
   d. Tube Capacity: 50 ml (6)