University of Jammu Department of Geology, University of Jammu, Jammu -180006

Department of Geology, University of Jammu, Jammu & Kashmir is interested in the purchase of the Instrument as per specifications given in the Annexure 1. The Department invites sealed bids/tenders bids from reputed Manufacturers or their Authorized Distributors / Dealers, for Supply, Installation and Training of NIR Spectroradiometer.

Interested parties may submit their sealed bids under Two-cover system as per Technical Specifications given at Annexure I, and General Terms & Conditions given at Annexure II. The tender be sent in a sealed packet, containing two separate sealed envelopes (one each for Technical Bid and Price Bid) along duly superscripted with Tender No. and date to Department of Geology, University of Jammu, Jammu -180006 and should reach to aforementioned address **on or before 2nd Dec., 2019.**

For any query pertaining to this tender contact Professor A.S Jasrotia. Department of Geology, University of Jammu, Jammu 180006.

The technical bid will be evaluated first and price bids will be opened only in respect of those Vendors, who are found technically qualified after evaluation of Technical bids.

The Technical bids will be opened on 3rd Dec., 2019 in the Department of Geology, University of Jammu, Jammu -180006.

Professor & Head Department of Geology, University of Jammu, Jammu -180006

Ref No. PGD/Geol/19/537 Dated: 1-11-2019

<u>Annexure 1</u> <u>Technical Specifications</u>

PART I - MAIN EQUIPMENT

DESCRIPTION

Hi-Res Spectroradiometer covering spectral range 350-2500nm

Spectroradiometer that uses a combination of VNIR silicon array with fixed grating, and two SWIR InGaAS single element detectors with scanning gratings.

Spectroradiometer with built-in hard mounted (not jumpered) direct to dispersion elements fiberoptic cable (not a jumper cable). Direct to dispersion elements ensures maximum signal throughput.

Spectroradiometer with built-in Fiber Checker. Spectrometer should have 'Fiber Checker' software and built-in hardware for checking the performance of the built-in fiberoptic cable.

Spectroradiometer with Drift lock (hardware and software system) for continuous update and subtraction of systematic dark offset.

Standard Items :

Pistol grip for holding the 1.5 meter permanent fiber optic cable.

Battery to instrument power cable

Fiber Checker for checking the Fiber optic cable

Power cable to power the instrument from vehicle power port.

1.5 meter RJ45 CAT 5e UTP Crossover Cable

ASD remote trigger for remote data storage.

45 Watt 12VDC 9000 mAH NiMh high current rechargeable battery packs for about 4 hour output.

External charging/power system 90-240VAC 50/60Hz (automatic selection) input and 4A DC output, over current protection.

RS3-data collection/calibration/operating software.

TRANSPORT CASE: durable, airtight, wheeled, transport/shipping case with fold down handle.

FIELD PACK: lightweight ergonomic backpack, waist belt with battery pouches, rain protector, controller computer compartment, sample storage Compartment, and easy snap on clear PETG controller computer tray.

GPS, Position receiver with Bluetooth interface

Small, lightweight Garmin GPS/GLONASS receiver with Bluetooth interface. 3 Meter accuracy. 12 hour battery life.

Instrument controller: Dell Latitude Instrument Controller loaded with instrument operating software and configured specifically to the corresponding spectrometer calibration files. Includes current (latest) Windows OS.

PART II RECOMMENDED ACCESSORIES FOR MESUREMENT AT FIELD

DESCRIPTION

Spectralon, 5x5 inch, Calibrated, 99% Reflective

Diffuse white reference panel, includes certificate of standard deviation and reflectance factors to 3 decimal places for 50nm intervals.

Wooden case for 5x5 inch

Spectralon Wooden case with internal padding for 5x5 inch Spectralon.

Tripod, Medium-Duty, All-Purpose

Lightweight aluminium medium duty tripod for field cr lab support, Ideal for mounting and securing Field Spec fiber optic pistol grip, white reference panels and the remote cosign receptor

DESCRIPTION

Radcal 25 Degree Full range Bare Fiber Optic

Factory installed NIST traceable calibration that is required for radiance ($W/m^2/steradian/nm$) calculation

1.5 meter cable powered lighted accessories directly from the auxiliary power port of instrument.

Fore optic for 1 degree field-of-view when used on the Pistol Grip and fiber optic cable of the instruments. Radcal radiometric calibration is also required for radiance (W/m^2/steradian/nm) measurements. Also, this fore optic may be used on the Pistol Grip and fiber optic cable of full range or NIR instruments.

Radcal 1 Degree Full-range Field-of-view Lens Factory installed NIST traceable calibration that is required for radiance

Fore optic for 8 degree field-of-view when used on the Pistol Grip and fiber optic cable of the instrument. Radcal radiometric calibration is also required for radiance (W/m^2/steradian/nm) measurements. Also, this fore optic may be used on the Pistol Grip and fiber optic cable of full range or NIR instruments.

Radcal 8 degree Full-range Field-of-view Lens Factory installed NIST traceable calibration that is required for radiance

DESCRIPTION

Windows version licensing GRAMS IQ Stand Alone, IQ Predict Active App and GRAMS Convert Software.

Training for up to 4 people in one group for one and a half days at the customer's site. This training includes instruction and demonstration of the basic operating features an spectrometer with emphasis on the use of the RS3 and ViewSpec Pro software to collect and post-process spectra, collection design and field methods.

<u>Annexure-II</u> General terms and conditions

- 1. Rates should be F.O.R. Jammu University Campus or in case of foreign manufacturer kindly quote F.O.R Jammu University Campus in foreign currency. Also quote tentative charges for customer Duty, Clearance charges and Transportation and Insurance upto Jammu separately.
- 2. Goods must conform to our indicated specifications. Detailed technical and other specifications/ literature must be enclosed.
- 3. Indicate concessional rates of tax for educational institutions. The GST rates must be clearly mentioned separately. Jammu University shall provide valid CDEC certificate and GST exemption certificate
- 4. The submission of the tenders shall be in two separate sealed envelopes duly marked as Part A: Technical Bid and Part B: Commercial Bid. The commercial bid of only the technically qualified firms will be opened after the evaluation of the technical bids.
- 5. Earnest Money Deposit (EMD) of 2% of quoted price to be submitted along with commercial bid. Bids without EMD will be rejected.
- 6. The warranty of the product should be atleast One year.
- 7. The rates should be valid for 120 days. Both technical bid and the commercial bid addressed to undersigned and duly sealed/signed and tapped with official stamp should reach this office latest by 2nd Dec., 2019.
- 8. Bidder should submit **Purchase orders** and /user List of the same/similar equipment supplied in past to Government organizations/Institutions.
- 9. Manufacturer Authorization Certificate to be submitted by the bidder in case of Supplier/Distributor/Indian Agent of foreign principal. Authorization certificate should be Tender specific addressed to Jammu University.
- 10. The firm/bidders should provide non blacklisting certificate mentioning it should not have criminal records/cases/activities.
- 11. Reports on Financial standing of the bidder such as profit and loss statement, balance sheet and auditor reports for the **past three years**, banker's certificate etc. should be provided by the bidders.
- 12. The bidder's firm should be established since last 50 years or more for the reputation and authenticity of the firm.
- 13. Bidder/Manufacturer should give undertaking regarding installation/Commissioning Training/Demonstration and after sales service of the instruments. The Bidder should provide at least three free trainings for the instrument.
- 14. The bidder should have enough strength of people for the after sales support with their branch offices near to Jammu/Chandigarh. The details of Service Centre and Office addresses along with Service personnel need to be shared for the verifications.
- 15. On behalf of the Principal, Indian Agent must provide Bank Guarantee equivalent to 10% of the cost of equipment from any Nationalized Bank for 12 months.
- 16. Self-attested copies of GST and PAN card to be submitted.
- 17. The bidder should have ISO or equivalent quality Certification and also their Testing Facility should be NABL accredited.

UNIVERSITY OF JAMMU DEPARTMENT OF GEOLOGY, UNIVERSITY OF JAMMU-180006

Date: 25-11-2019 No. PGD/GEOL/19/623

Corrigendum #1

Subject: Hi-Res Spectroradiometer

Following amendments are hereby made in the tender documents issued vide NIT No. PGD/Geol/19/537 Dated 1-11-2019.

"Time for submitting bid for the said tender is hereby extender till 2-12-2019".

The other contents of the tender shall remain unchanged.

Professor & Head Department of Geology University of Jammu, Jammu-180006