Advertised Tender Enquiry Documents INDIAN INSTITUTE OF TECHNOLOGY (BHU), VARANASI (NOTICE INVITING TENDER)

On behalf of the Director, IIT (BHU) Varanasi, online tender from manufactures (or their 'authorized' dealers that they have been authorized to quote in response to this NIT) of the following items are invited:

Sl. No.	Tender No. and Last Date	Specifications & Quantity of the item
1.	Ref. No IIT-BHU/MIN/HD/2018-19/ 1382 Dated : 19-05-2018	Name of the Instrument- Hyperspectral Camera (Technical Specifications as per Annexure-I)
	Last Date: 09-06-2018, 06:00 PM	Qty.: 01 Approx. Cost: 14 Lakhs

The Tender Documents for the given items will be on Two Bid System consisting of Technical Bid and Price Bid. The Tender Documents will be submitted item-wise in online. Any firm may bid for any number of items but each offer must be item-wise in two bid cover enclosing Technical Bid and Price Bid. **Manual Bid will not be accepted.**

The Tender Document along with detailed specifications, terms and conditions may be downloaded **from the institute** website (www.iitbhu.ac.in) under Tenders (www.iitbhu.ac.in/ iitnotifications/purchase_enquiries/) &https://www.eprocure.gov.in/cppp/ by the interested supplier.

The Tender Fee for this Tender to be paid in the form of Bank Draft in favour of Registrar, IIT (BHU) payable at Varanasi before the Bid Opening Dateandnon-refundable Tender price of Rs. 1000/-. The hard copy of DD for tender fee should be reached on or before the Bid Opening Date and Time at the address: The Head, Department of Mining Engineering, Indian Institute of Technology (Banaras Hindu University), Varanasi – 221005, U.P.GST at concessional rate will be applicable as per GST Notification No. 45/2017- CENTRAL TAX (RATE) & 47/2017-INTEGRATED TAX (RATE) Dated 14-11-2017, @ 5%.

The Tender should be addressed to **The Head, Department of Mining Engineering, Indian Institute of Technology** (Banaras Hindu University), Varanasi – 221005, U.P., and should be submitted on or before the date and time of Bid opening date as mentioned in critical date sheet on e-portal.

The Institute shall not be responsible for any delay in submittingBids byonline. TheInstitute reserves the right to accept or reject any bid, cancel theTender without assigning any reason thereof. No correspondence in this regard will be entertained.

sd/-(Head) Deptt. of Mining Engineering IIT- BHU

TENDER DOCUMENT FOR: HYPERSPECTRAL CAMERA

CRITICAL DATE SHEET

Published Date	21-05-2018		
Bid Document Download Start Date	21-05-2018 (03:00 PM)		
Clarification Start Date	21-05-2018 (03:00 PM)		
Clarification End Date	02-06-2018 (05:00 PM)		
Pre bid meeting	NA		
Bid Submission Start Date	21-05-2018 (03:00 PM)		
Bid Document Download End Date	09-06-2018 (05:00 PM)		
Bid Submission End Date	09-06-2018 (06:00 PM)		
Bid Opening Date	11-06-2018 (03:30 PM)		
Address For Communication	The Head Department of Mining Engineering Indian Institute of Technology (Banaras Hindu University), Varanasi – 221 005, U.P., INDIA Phone: +91 542 2369442 Fax: +91 542 2369442 E-mail: head.min@itbhu.ac.in		

FORMAT OF BANK GUARANTEE FORM

- 1. This guarantee should be furnished by a Nationalized Bank / scheduled Bank, authorized by RBI to issue a Bank Guarantee.
- 2. This bank guarantee should be furnished on stamp paper of Rs. 100/-
- **3.** The stamp paper should have been purchased in the Name of the Bank executing the Guarantee.
- 4. In the case of foreign bidder the B.G may be furnished by an international reputed bank acceptable to the PURCHASER countersigned by any Nationalized / Scheduled Bank in India authorized by Reserve Bank of India. DATE: **BANK GUARANTEE NO:** Ref.: _____ To **Indian Institute of Technology** (Banaras Hindu University) Varanasi-221005 Dear Sirs, In accordance with your 'Invitation to Bid" under your Tender No: M/s: _____ herein after called the Contractor/supplier, with the following Directors on their Board of Directors / partners of the firm. Agrees for the contract/supplies: As an irrevocable Bank Guarantee for an amount of Rs. (in words and figures) valid for days from is required to be submitted by the Contractor/Supplier which amount is liable to be forfeited by the purchaser in the event of 1) the withdrawal or revision of the offer by the Bidder as a condition within the validity period. (2) non-acceptance of the Letter of Intent / purchase order by the bidder when issued within the validity period. (3) failure to furnish the valid contract performance guarantee by the bidder within one month from the receipt of the purchase order and (4) on the happening of any contingencies mentioned in the bid documents such as Bank at_____ having **We,** the _____ _____ (Local address), Guarantee and our Head office at _____ undertake to pay immediately on first demand by IIT (BHU) the amount (in figure and words) without any reservation., protest, demur and recourse. Any such demand made by the Purchaser shall be conclusive and binding on the Bank irrespective of any dispute or difference raised by the purchaser.

The guarantee shall be irrevocable and shall remain valid up to ______ (This date should be 6 months after execution of the order). If any further extension of this guarantee is required the same

shall be extended to such M/s		_	-		_			
In witness whereof the Ba	_					-	on	this at
WITNESS								
(Signature)								
Name in (Block letters)								
Designation								
(Staff Code No.)								
(Bank's common Seal)								
Official address:								
Attorney as per power of Attor	ney No.							
Date:								

DECLARATION

1.	I, Son /Daughter of Shri
	Proprietor/ Partner/ CEO /MD/ Director/ Authorized Signatory of M/s
	am competent to sign this declaration and execute this tender document.
2.	I have carefully read and understood all the terms and conditions of the tender and hereby convey my acceptance of the same.
3.	The information/ documents furnished along with the above application are true and authentic to the best of my knowledge and belief.
4.	I/ we/ am are well aware of the fact that furnishing of any false information/ fabricated document would lead to rejection of my tender at any stage besides liabilities towards prosecution under appropriate law.
5.	Each page of the tender document and papers submitted by my Company is authenticated, sealed and signed, and I take full responsibility for the entire documents submitted.
	Signature of the Authorized Person
Date:	
Place:	Full Name:
	Company Seal:

SL No.	Technical Requirement		
Hyperspectral Camera required, Quantity: 1 No.			
1.	Storage at least 32 GB		
2.	Viewfinder camera of at least 5 MPix		
3.	Weight not more than 1.5 kg		
4.	F/number 1.7		
5.	Wavelength band VNIR between 400-1000 nm		
6.	Spectral resolution FWHM of at least 7 nm		
7.	Spatial Sampling at least 512 pix		
8.	Spectral bands more than 200		
9.	Peak SNR > 400:1		
10.	Object distance between 150 – ∞ mm		
11.	FOV at least31 x 31 deg		
12.	FOV at 1 m 0.55 x 0.55 m		
13.	Temperature, operational between $+0^{\circ}\text{C} - +40^{\circ}\text{C}$		
14.	Humidity, operational 95% non-condensing		
15.	Software for data analysis		

Warranty: Comprehensive warranty for 3 years will be preferred from the date of commissioning for the main system and all accessories.

Note: Bid should include FOR IIT(BHU), Varanasi prices (Custom Clearance will be the responsibility of the supplier and IIT(BHU) will provide Custom Exemption Certificate). Transportation cost with insurance from port of destination to IIT (BHU) Varanasi should also be clearly mentioned separately.

Submit Electronic copy of the Technical specifications and bids.

OTHER TERMS:

- 1. Spares: state availability of spares for ten years.
- 2. Indian agency commission: Should be clearly stated in the financial bid in Indian currency.
- 3. Consumable & spares: List of the consumables and spares to be supplied with the system.
- **4. Penalty:** A penalty of 1% of the order value will be applied for late delivery of the goods for each week thereof subject to a maximum of 10%.
- 5. Bank Guarantee (BG): Successful bidder have to furnish 5% of the order value as a performance security in the shape of Fixed Deposit Receipt / Bank Guarantee in favour of the Registrar, Indian Institute of Technology (BHU) which will be valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including warranty obligations. Fixed Deposit Receipt / Bank Guarantee should be issued from a schedule bank in India. Bank guarantee is only

- applicable for the Supplier who will get the Award of Contract and will submit at the time of installation of the instrument.
- **6. Payment:** The payment shall be made by LC. (Where 90% of payment against shipment and balance 10% payment at the time of satisfactory installation and submission of BG).
- 7. User List: Provide users for last 5 years with contact person name, address, phone, and email IDs.
- **8.** Manuals/Documents: 1 set of hard copy and 1 set of soft copy in English (preferred as following).
 - i. Operating manual
 - ii. Maintenance manual
 - iii. Servicing manual
 - iv. Programming manual
 - v. Spare parts list with source of supply and prices
 - vi. Description of control interface
- vii. Circuit diagrams of PLC, drive controls etc
- viii. Manuals of bought out items incorporated in the system
 - ix. Details of any custom made ICs & components & their sources
 - x. Flow charts of all resident software
 - xi. Test Chart
- xii. Pre-installation requirements of foundation plan details, electromagnetic interference and vibration.
- **9.** Details of the standard samples to be provided by the company for testing the instruments at the time of installation at site for the demonstration of the performance of equipment.
- 10. Please provide the segmented quotation for each optional measurement capability.
- **11.** The Tender document should also indicate what kind of service/maintenance is required for the system. Whether this service has to be carried out by a company engineer or it can be carried by trained service personnel within India. The frequency of visit and the charges should be mentioned.
- 12. The Tender should be enclosed with proper certifications like Authorization Certificate and Proprietary Certificate in case of Proprietary items.
- **13.** Complete computer control of operation and measurement on Windows based platform. Give the details of software for measurement and analysis.
- **14.** Pre-installation site preparation/inspection requirements to be indicated and specified along with the bid.
- 15. Installation and training should be provided free of cost otherwise clearly mentioned with justification.
- **16.** Warranty period to be clearly mentioned and should begin from the date of installation. Annual Maintenance Contract Charges should be clearly mentioned after warranty period.
- **17.** Guaranteed specifications to be demonstrated at the time of installation. Any necessary standard samples for that purpose should be brought by the Service Engineers.
- **18.** On site training of our staff in operation and maintenance is essential by factory trained personal and provision for training for one person for minimum one week at factory site.
- **19.** Bid should include FOR IIT(BHU), Varanasi prices (Custom Clearance will be the responsibility of the supplier and IIT(BHU) will provide Custom Exemption Certificate).
- **20.** Service manuals with complete circuit diagram and PCB layout for all equipment to be provided with the instrument.
- **21.** Submit Electronic copy of the Technical specifications and bids.
- **22.** The vendor to provide compliance statement with respect to each technical specification in the tender document duly supported by the manufacturer's literature. Any other claim will not be accepted and may lead to rejection of the bid.
- 23. Printed literature in support of compliance to the prescribed specifications is to be submitted.
- **24.** Compliance report needs to be submitted as a part of the technical bid.

- **25.** In case during shipment period newer versions of software/hardware is available with vendor in lieu of the existing one for which Letter of Credit was opened, then improved version should be made available without any extra cost.
- **26.** Institute reserves the right to visit installation in India of similar capabilities the details with to regard to such installation should be given as a part of technical bid.
- **27.** Technical evaluation by the Institute may include demonstration to verify functionalities and capabilities of the system quoted.

Services: Vendor must submit Factory Acceptance Test procedure supported with relevant printed literature and certificates.

sd/(Prof.Sanjay Kumar Sharma)
Head,
Department of Mining Engineering

TECHNICAL COMPLIANCE STATEMENT

(To be submitted by bidder duly filled)

SL No.	Technical Requirement	YES/NO
1.	Storage at least 32 GB	
2.	Viewfinder camera of at least 5 MPix	
3.	Weight not more than 1.5 kg	
4.	F/number 1.7	
5.	Wavelength band VNIR between 400-1000 nm	
6.	Spectral resolution FWHM of at least 7 nm	
7.	Spatial Sampling at least 512 pix	
8.	Spectral bands more than 200	
9.	Peak SNR > 400:1	
10.	Object distance between 150 – ∞ mm	
11.	FOV at least31 x 31 deg	
12.	FOV at 1 m 0.55 x 0.55 m	
13.	Temperature, operational between $+0^{\circ}\text{C} - +40^{\circ}\text{C}$	
14.	Humidity, operational 95% non-condensing	
15.	Software for data analysis	

Signature of the Authorized Official with Seal