

## भारत सरकार / GOVERNMENT OF INDIA अंतरिक्ष विभाग / DEPARTMENT OF SPACE

# भारतीय अंतरिक्ष विज्ञान एवं प्रौद्योगिकी संस्थान/INDIAN INSTITUTE OF SPACE SCIENCE & TECHNOLOGY क्रय एवं भंडार विभाग / PURCHASE & STORES DEPARTMENT

विलयमला पीओ., तिरुवनंतपुरम 695 547/ VALIAMALA P.O, THIRUVANANTHAPURAM 695 547, केरल, भारत/ KERALA, INDIA

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# निविदा आमंत्रण / INVITATION TO TENDER

Date: 24.08.2016

Tender Due on: <u>06.10.2016 at 14.00 Hrs</u> Tender opening on: <u>07.10.2016 at 10.30 Hrs</u>

Dear Sirs,

**Separate Sealed TWO PART tenders** are invited from accredited manufacturers / suppliers / agents for the supply of the following equipments:

SI. No.	Tender No.	Item Description			Cost of Tender (Rs.)
1.	IIST/PUR/ 3057/16	HYPERSPECTRAL SPECTRORADIOMETER  Specifications:		1 No.	500+VAT @5% (525/-)
		SI. No	Specifications		
		1.	SPECTRAL RANGE: 350-2500 nm SPECTRAL RESOLUTION: 3.5 nm or better @ 700 nm, 10 nm or better @ 1400/1500 & 2100 nm.		
		2.	SAMPLING INTERVAL: 2 nm or better @ 350-1000 nm, 4 nm @ 1000-2500 nm SCANNING TIME: 100 milliseconds or better, for one full spectral range scan.		
		3.	WAVELENGTH REPRODUCIBILITY & ACCURACY: 0.1 nm & 0.5 nm or better		
		4.	NOISE EQUIVALENT RADIANCE (NEdL):  VNIR: 1.0 X10-9 W/cm2/nm/sr or better @ 700 nm,  SWIR1: 1.2 X10-9 W/cm2/nm/sr or better @ 1400/1500 nm,  SWIR2: 1.9X10-9 W/cm2/nm/sr or better @ 2100 nm.		
		5.	Radiometric Calibration Accuracy (NIST Traceable): Better Than ±5% from 400 to 900 nm and ±8% at 2200 nm.		
		6.	DETECTORS: Separate detectors for VNIR, SWIR1 and SWIR2 spectral regions. Spectral response of the detectors should be smooth (without spikes) at the interface of VNIR-SWIR1 and SWIR1-SWIR2regions.		

	7	INPUT:		
	7.			
		Rugged fiber optic cable of 1.5 m length with 25deg FOV as		
		standard input.		
		Options for Narrow FOV fore optics: 1 to 5 Deg and 10 to 15 Deg		
	8.	CALIBRATION:		
		The instrument should be radiometrically calibrated and for the		
		standard (25dev FOV preferred) fore optics.		
		All calibrations should be traceable to NIST standards. Calibration		
		files & certificates should be supplied (soft copies are preferred).		
		Vendor should clearly mention the calibration strategy for the		
		instrument.		
	9	INSTRUMENT CONTROLLER:		
	9			
		If the instrument requires laptop to operate and control, IIST		
		would like to use its own laptop for this purpose. The vendor		
		should provide necessary interfacing cables to connect with the		
		spectroradiometer. Alternatively laptop can be quoted as a local		
		supply by the vendor. If the instrument can be controlled by PDA		
		device, it should be part of the standard supply.		
	10	POWER: AC: 220VAC, 50Hz,		
		DC: Portable Li-ion or NiMh batteries, AC/DC adaptor, battery		
		charger.		
		Endurance of the battery at least 3hrs.		
	11	GPS INTERFACE:		
		External is desirable (If default in-built GPS is provided the same		
		is considered equally).		
	12	OPERATING TEMPERATURE:		
	12	0 to 40 Deg C or wide;		
		•		
	13	Weight: <10 kg SOFTWARE:		
	13			
		Software tools to acquire, store & convert spectral data into		
		irradiance/radiance/reflectance factors. Software tools should be		
		compatible with the OS supplied on laptop & interface with the		
		instrument.		
	15	INSTALLATION & TRAINING:		
		Installation & testing at site for acceptance.		
		Training to be provided on operating the instrument at IIST free		
		of cost		
	16	Warranty:		
		One year free warranty with technical support, from the day of		
		acceptance.		
		Extension of warranty for two years after the completion of first		
		year warranty.		
		Services rendered (at IIST, local/Indian agent premises, OEM		
		outside India) during the warranty period must be clearly		
		mentioned. Warranty terms & conditions (including to and fro		
		shipments to outside India if any) for all the three years should be		
		stated clearly		
	17	OPTIONAL ACCESSORIES:		
	1,	fore optic lens with FOV (in 1 to 5Deg range)-Qty1,		
		Radiometric calibration for fore optic lens with FOV (in 1 to 5 Deg		
		range)-Qty1,	1	
			1	
		Reference Spectralan with wooden case (10in*10in)-Qty 2,	1	
		Remote cosine receptor-Qty1,	1	
		Radiometric calibration with remote cosine receptor-Qty1,	1	
		Total batteries (instrument) –Qty2,		
		Sighting scope/laser dot-Qty1,		
		Indoor lamp assembly & tripods (lamp & fiber cable)-Qty1,		
		Tripod (instrument) -Qty1	1	

18	TERMS & CONDITIONS:  1. Quote should cover all the above specifications necessarily. Any additional feature provided with the instrument will not add any further preference for considering the quote favorably. However if the quote is considered the vendor has to retain all the features intact as per the original quotation.  2. Other conditions are as per IIST/DOS purchase procedures & guidelines.  3. Vendors should clearly mention the list of standard deliverables & accessories along with the instrument and the optional items in separate.		
	4. Ordering of items under optional accessories and their quantity is as per our requirement at the time of procurement.		

#### Commercial terms and Conditions Tender No. IIST/PUR/3057/16 dated 24.08.2016

### 1. **General Requirements:**

- 1.1 Detailed Catalogue/ Data Sheet of the quoted item.
- 1.2 Clientele List
- 1.3 Performance Letter from the Clients.

#### 2. SPECIAL INSTRUCTIONS TO TENDERERS

- 2.1 The bidder is required to submit quotation for the entire scope in TWO PART viz, Technical and commercial bid and price bid separately. The first cover shall contain the technical and commercial details along with the format of price quotation without the price superscribing in the cover "Technical and Commercial-Tender No. IIST/PUR/3057/16 Due on 06.10.2016. The second cover shall contain the prices superscribing in the cover price bid- Tender No. IIST/PUR/3057/16 Due on 06.10.2016. All the covers to be sealed and insert in another cover super scribing the Tender No. IIST/PUR/3057/16 Due on 06.10.2016 and submit immediately but not later than the due date mentioned against each tender. If the tender is received after the due date and time, the same shall be summarily rejected.
- 2.2 The cost of tender stated against each tender shall be submitted along with Technical & Commercial bid by Demand Draft drawn in favour of the sr. Accounts Officer, IIST and payable at State Bank of India, Valiamala Trivandrum-695 547. In case the Demand Draft is not enclosed with the quotation, the bid shall be summarily rejected.
- 2.3 **Test certificate**: Wherever required, test certificates should be essential.
- 2.4 **Payment:** Our normal payment term shall be sight draft for imports by e-transfer and within 30 days after supply/installation and acceptance for indigenous.
- 2.5 The installation and commissioning of equipment to be done at our campus, Valiamala, Thiruvananthapuram-695 547. All pre-requisites such as foundation drawing, grouting and any consumables needed for carrying out the installation, if applicable, shall be separately mentioned in the technical bid.
- 2.6 Delivery terms shall be Ex-works/FOB/FCA for imports and FOR, Valiamala for indigenous.
- 2.7 For import cargoes, the purchase order shall be drawn directly to the foreign supplier through agents in India.

  We have our own freight forwarder and customs clearance at Trivandrum shall be done by us.

- 2.8 All duties and taxes, if applicable shall be quoted separately.
- 2.10 Accreditation documents such as current income tax/sales tax clearance certificate, clientele list with previous experience in the similar lines of supply must be provided with documentary evidence), Performance Certificate, authorization for import, after sales support in India etc. shall be explained in detail with proof.

#### 2.11 Guarantee & Replacement:

- a) The contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down, for material, workmanship and performance.
- b) For a period of twelve (12) months after the acceptance of the stores, if any defects are discovered therein or any defects therein found to have developed under proper use, arising from faulty stores design or workmanship, contractor shall remedy such defects at his own cost provided he is called upon to do so within a period of 14 months from the date of acceptance thereof by the Purchaser who shall state in writing in what respect the stores or any part thereof are faulty.
- 2.12 Earnest Money Deposit (EMD):- Interest free EMD to ensure the earnestness of the vendor in the participation of the procurement process to the tune of Rs.1,00,000/- (Rs. One lakh only) by Demand Draft drawn in favour of the Sr. Accounts Officer, IIST, Valiamala, Trivandrum may be enclosed with Technical & Commercial bid sealed cover. The EMD will be refunded to the unsuccessful tenderers within 30 days after placement of Purchase Order. The tender not accompanied with EMD shall be treated as invalid tender and summarily rejected. Foreign vendors (registered vendors or vendors who have already applied for renewal of registration) Central PSUs/PSEs/ Autonomous Bodies, Micro & Small Enterprises, KVIC, National Small Industries Corporation, etc. Shall be exempt from the payment of EMD.
- 2.13 **Security Deposit:** Interest free Security Deposit @ 10% of the value of Purchase Order shall be payable by successful vendor for satisfactory execution of the Purchase Order.
- 2.14 **Performance Bank Guarantee** equivalent to 10% of order value shall be submitted by the supplier for Warranty obligation after completion of supply.
- 2.15 **Liquidated Damages**: The period of completion indicated shall be the essence of the Purchase Order. In the event of delayed date of completion, the liquidated damages @ 0.5% per week or part thereof subject to a maximum of 10% of the contract value shall be recovered.
- 2.16 **Force Majeure**: During the continuance of the contract, should a part or whole of the items covered by this contract be delayed in delivery due to reasons of force majeure condition which shall include lockouts, strikes, riots, civil commotions, fire, flood, windstorm, explosion, labour disturbance, act of any Govt. or any

agency, juditional action, sabotage act of civil disobedience, act of public enemy, technical failure, accidents, acts of God and war, stoppage of deliveries by Govt. etc, each party undertakes to advise the other as soon as it becomes a way of the circumstance of such force majeure, so that action under the provisions of this contract can be mutually reviewed and agreed upon between contractor and IIST. If the force majeure condition extended over a period of six months, both the parties of the contract shall mutually discussed and arrived at an agreement for the continuation/ termination of the contract forthwith.

- 2.17 **Arbitration:** Dispute if any shall be settled mutually, failing which, it will be referred to a one-man arbitrator appointed by Director, IIST in accordance with the Arbitration and Conciliation Act, 1996 and any alteration/modifications thereof, whose decision shall be final and binding on both the parties
- 2.18 **After Sales Service Support**: The stock availability of spares and consumables for a minimum period of 5 years for up keeping the equipment shall be guaranteed to avoid obsolescence of systems.
- 2.19 **AMC:** The charges towards Annual Maintenance Contract (Comprehensive/Non- Comprehensive) beyond the normal warranty period may be quoted separately as option.
- 2.20 IIST reserves the right to either accept/reject any tender/s without assigning any reason/s whatsoever.
- 2.21 Separate quotations shall be submitted for each tender along with the tender fee by demand draft.
- 3. Terms & Conditions of Tender Form No. DOS PM:20, Form No. DOS PM:22 & Form No. DOS PM:23 as per attachment.

Sd/(M.B Subash Chandran)
Sr. Purchase & Stores Officer
For and on behalf of Director, IIST